FINAL
CLEANUP ACTION REPORT REMEDIAL ACTION UNIT 2A SMALL ARMS RANGES

Former Camp Bonneville Military Reservation
Vancouver, Washington

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Prepared for:

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ABBREVIATIONS AND ACRONYMS

BCRRT	Bonneville Conservation Restoration and Renewal Team, LLC
bgs	below ground surface
CAP	Cleanup Action Plan
CBMR	Former Camp Bonneville Military Reservation
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
DNR	Washington State Department of Natural Resources
EPA	U.S. Environmental Protection Agency
ESCA	Environmental Services Cooperative Agreement
MEC	Munitions and Explosives of Concern
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MKM	MKM Engineers, Inc.
MTCA	Model Toxics Control Act
PPCD	Prospective Purchaser Consent Decree
RAU	Remedial Action Unit
RCRA	Resource Conservation and Recovery Act
RI/FS	Remedial Investigation/Feasibility Study
SAP	Sampling and Analysis Plan
SPLP	Synthetic Precipitation Leaching Procedure
TCLP	Toxicity Characteristic Leaching Procedure
WAC	Washington Administrative Code
WDOE	State of Washington Department of Ecology
WESTON	Weston Solutions, Inc.

1 INTRODUCTION

This Cleanup Action Report for the Small Arms Ranges, Remedial Action Unit (RAU) 2A, describes the cleanup actions completed for nine small arms ranges at the former Camp Bonneville Military Reservation (CBMR) located in Clark County, Washington (Figure 1). Weston Solutions, Inc. (WESTON) prepared the Cleanup Action Report under a Remediation Agreement with Clark County.

Clark County Washington and the State of Washington Department of Ecology (WDOE) have entered into a mutual agreement to remediate the former CBMR. As stated in the Amended Prospective Purchaser Consent Decree (PPCD) (WDOE, 2012), Clark County is responsible for the cleanup and long-term obligations; and the WDOE is responsible for oversight of the cleanup. Funding for the cleanup is provided by the U.S. Army under an Environmental Services Cooperative Agreement (ESCA) with Clark County.

1.1 PURPOSE

This Cleanup Action Report was prepared to demonstrate that the requirements under Washington Administrative Code (WAC) 173-340 have been met for a *No Further Action* determination based on onsite conditions, environmental investigation findings, and cleanup actions completed at RAU 2A. The Cleanup Action Report also satisfies applicable requirements of the Amended PPCD and the ESCA relating to documentation of cleanup actions for RAU 2A, the Small Arms Ranges.

1.2 PROPERTY LOCATION, DESCRIPTION, AND PLANNED USE

CBMR comprises approximately 3,840 acres, and is located in Clark County, Washington approximately five miles east of the city limits of Vancouver and approximately 3.5 miles north of the city limits of Camas. It is mostly undeveloped forested hillsides and creek side drainages. Former military barracks and classrooms are concentrated at the Camp Killpack and Camp Bonneville cantonment areas, which cover approximately 30 acres. Other developed areas include firing ranges, a paved two-lane road connecting the main gate with the two containment areas, and

a network of unpaved roads. The main gate to CBMR is located on the western boundary of the camp, on Northeast Pluss Road.

The Army used CBMR for a variety of infantry training exercises between 1910 and 1995 for live fire of small arms, assault weapons, mortars and artillery at firing ranges, firing points and target areas located onsite. In July of 1995, CBMR was selected for closure under the 1995 Base Realignment and Closure process. The reuse plan (Camp Bonneville Local Redevelopment Authority, 2003) called for the majority of Camp Bonneville to be transferred to Clark County, Washington for public benefit including education, law enforcement training, parks, and conservation areas.

Under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) early transfer process, the Army conveyed the CBMR Early Transfer Parcel to Clark County on September 29, 2006. The Washington State Department of Natural Resources (DNR) Parcels, which were owned by DNR and leased to the Army, were conveyed to Clark County and transferred to the Bonneville Conservation Restoration and Renewal Team, LLC (BCRRT) on June 2, 2009. Before entering into the Amended PPCD, the CBMR property was transferred from the BCRRT to Clark County. Clark County assumed responsibility for completing the remaining remedial actions required to protect human health and the environment as described in the Amended PPCD (WDOE, 2012).

Section 2.0 of the RAU 2A Cleanup Action Plan (CAP) presents information about CBMR site geology and hydrogeology, surface water, natural resources (including rare, threatened, or endangered species) and presents a summary of cultural and historic resources (BCRRT, 2008a).

1.3 GENERAL DESCRIPTION AND HISTORY OF THE RAU 2A SMALL ARMS RANGES

CBMR was established in 1909 as a drill field and rifle range. The small arms ranges were used from approximately 1910 through 1995. Approximately 25 potential small arms ranges were previously identified within the boundaries of CBMR from maps dating back to 1958. However, several of these were determined to be redundant. A final total of 17 firing ranges were confirmed and identified for investigation during the Remedial Investigation/Feasibility Study (RI/FS) of the

small arms ranges (BCRRT, 2007). The Federal Bureau of Investigation currently makes frequent use of one of the small arms ranges at CBMR and will be responsible for sampling and cleanup of that range. This range was not included in the 17 small arms ranges sampled for the RI/FS and is not addressed in this Cleanup Action Report.

1.4 HISTORY OF INVESTIGATIONS OF SMALL ARMS RANGES

After CBMR was selected for closure, investigations were conducted by the Army and its consultants in order to characterize the nature and extent of contamination at the site and to develop a plan for potentially transferring ownership. Site documents and maps were reviewed and a Site Investigation (Atlanta Environmental Management, Inc., 2005) was conducted at the lead-contaminated ranges and Demolition Areas 2 and 3. The RI/FS (BCRRT, 2007) was conducted to determine the nature and extent of contamination at the identified 17 small arms ranges and evaluate cleanup action alternatives. As previously stated, the small arms range used by the Federal Bureau of Investigation was not included in the RI/FS activities.

1.5 SUMMARY OF SOIL CONTAMINATION INFORMATION BY RANGE

During the RI/FS, samples were collected from 307 half-acre grids established at the small arms ranges. Characterization included collecting five grab samples from 0 to 6 inches below ground surface (bgs) in each of the half-acre grids. The center point of each grid was determined using a Global Positioning System unit. After a center point was determined, the field team measured approximately 40 feet north (magnetic), south, east, and west of the grid center. A soil sample was taken at the center and each of the four directions from the center. Soil samples were analyzed for total lead. The RI/FS (BCRRT, 2007) data were presented on figures and in tables in the Final RAU 2A CAP and are included in Appendix A of this Cleanup Action Report. Background samples were also collected and analyzed for total lead and other metals at several of the sample locations.

Based on results of the RI/FS sampling and comparison of the results to applicable cleanup criteria (BCRRT, 2007), it was determined that further action was required at nine of the small arms ranges (names of ranges vary in reports – RAU 2A-21 and RAU 2A-22 are identified in this report as Rifle Ranges/Field Fire Ranges No. 1 and No. 2):

- RAU 2A-4, Combat Pistol Range
- RAU 2A-15, Undocumented Pistol Range
- RAU-2A-16, 1,000-inch Rifle Range and Machine Gun Range
- RAU 2A-17, 25-meter M60 and Pistol Range
- RAU 2A-18, 25-meter Machine Gun Range
- RAU 2A-19, 25-meter Record Firing Range and Field Firing Range
- RAU 2A-20, Field Firing Ranges
- RAU 2A-21, Rifle Ranges/Field Fire Ranges No. 1 and No. 2
- RAU 2A-22, Rifle Ranges/Field Fire Ranges No. 1 and No. 2

The locations of the RAU 2A small arms ranges are shown on Figure 2.

1.6 RI/FS RECOMMENDATIONS

Based on evaluation of candidate technologies, the following five alternative cleanup actions were identified for the small arms ranges:

- Alternative 1 - No Action
- Alternative 2 - Institutional Controls
- Alternative 3 - Containment (Capping)
- Alternative 4 - Consolidation and Containment (Capping)
- Alternative 5 - Excavation and Offsite Disposal or Recycling

To evaluate Alternative 5, results from each of the grids were assigned to a category representing the degree of lead contamination:

- Category 1 – average and individual lead sample concentrations less than 50 milligrams per kilogram (mg/kg); no excavation required
- Category 2 - average lead sample concentration less than 50 mg/kg and no individual sample concentration greater than 118 mg/kg; no excavation required
- Category 3 - average lead sample concentration greater than 50 mg/kg but less than 118 mg/kg and no individual sample concentration greater than 250 mg/kg; focused excavation required in a 29 by 29-foot area surrounding locations where lead concentrations exceed 50 mg/kg to a depth of 6 inches bgs

- Category 4 - average lead sample concentration greater than 118 mg/kg but less than 250 mg/kg; focused excavation required in a 58-foot by 58-foot area surrounding locations where lead concentrations exceed 50 mg/kg to a depth of 6 inches bgs
- Category 5 - average lead sample concentration is greater than 250 mg/kg; excavation required at the entire grid to a depth of 6 inches bgs

The RI/FS recommended Alternative 5, Excavation and Offsite Disposal or Recycling for remediation at the nine identified small arms ranges.

Figures showing the RI/FS sample locations and sample results for each of the nine ranges, and tables summarizing the results, are included in Appendix A of this Cleanup Action Report (Figures 3-3 through 3-11 and Appendix A tables from the RAU 2A CAP [BCRRT, 2008a]).

2 CLEANUP ACTION PLANS

2.1 CLEANUP ACTION PLAN

The Final RAU 2A CAP (BCRRT, 2008a) presents the historical use, summary of contamination and results of the Remedial Investigation/Feasibility Study (RI/FS) (BCRRT, 2007). The Final RAU 2A CAP, recommended excavation and removal of contaminated soil for remediation of the small arms ranges (Alternative 5 of the RI/FS).

2.2 OPERATIONS PLAN FOR LEAD REMEDIATION OF SMALL ARMS RANGES

The Operations Plan for Remediation of Small Arms Ranges (BCRRT, 2008b) presents a detailed technical approach that was used in remediating each of the nine RAU 2A small arms ranges.

2.2.1 Excavation and Soil Handling Approach

For ranges with berms, excavation of the berms was conducted before excavation of the range floor. The Resource Conservation and Recovery Act (RCRA)-regulated soils were staged in each range in a designated area for further processing. Excavated soil was sifted at each excavation location to remove brush, debris, and lead bullet fragments before being subject to treatment.

The Model Toxics Control Act (MTCA)-regulated soils (total lead less than 250 mg/kg and Toxicity Characteristic Leaching Procedure [TCLP] less than 5 ppm) were staged on site. Waste characterization samples for MCTA soils were collected at a rate of one composite sample every 50 cubic yards. After waste characterization sampling results were received and reviewed, the soils were transported to sewage lagoon ponds located at CBMR for disposal. A 6-mil reinforced liner was placed at the bottom and along the northern walls of the lagoon pond prior to adding soil in the disposal area.

RCRA-regulated soils were sifted using a vibrating multi-stage screening system and treated using a proprietary stabilization process. Removed bullets and bullet fragments were staged securely in a designated location and recycled if economically feasible. The treated soil piles were sampled and analyzed for TCLP levels at the rate of one composite sample every 500 cubic yards for soil being disposal offsite.

It was assumed that the face of the berm (top 6-18 inches), which was directly impacted by the firing activity had the greatest potential to have high lead concentrations (presumably categorized as RCRA soils). The face of the berm was also typically laden with lead bullets/shots/fragments, which are all indicative of potential lead contamination. As such, it was assumed that visual observation could aid in determining the degree of contamination.

Excavation was performed along the face of the berms (upper 12 inches presumed to be RCRA soil and next 12 inches presumed to be MTCA soil). After the first 24 inches was removed; additional soil was removed as necessary in 6-inch lifts until visual observations (i.e. lead bullets or bullet fragments seen on the surface of the excavation) ruled out the need for further excavation. This was validated by the confirmatory sampling following the excavation of the contaminated material.

For ranges with pop-up targets, a 15-foot radius area around each pop-up target base was excavated to a depth of 6 inches bgs.

For all locations on the range floor, the average concentration of total lead was used to determine the size of a square grid pattern to be remediated to a depth of 6 inches bgs. The grid sizes were:

- For all grids where average lead concentration is higher than 50 mg/kg but is equal to or less than 118 mg/kg, the grid size was 29-feet by 29-feet (Category 3).
- For all grids where average lead concentration is higher than 118 mg/kg but less than 250 mg/kg, the grid size was 58-feet by 58-feet (Category 4).
- For all grids where average lead concentration is higher than 250 mg/kg, the grid size was 130-feet by 130-feet (Category 5).

Accordingly, the lead concentration in the individual samples was used to determine the sequence of excavation within each grid. Soil presumed to be RCRA-regulated soils (i.e., soils directly impacted by the firing activity) was excavated and managed first, followed by the MTCA-regulated soils.

Following excavation, samples were collected to confirm the concentration of lead. Additional excavation was performed in 6-inch lifts as vertical or lateral step-outs, and the size of the excavation based on guidelines used to determine size of the initial excavation areas. Step-outs were continued until the contamination had been delineated and removed.

2.2.2 Special Conditions Approach

As explained in Appendix C to the Operations Plan (BCRRT, 2008b), alternative actions were deemed appropriate for areas referred to as "Special Conditions," where remedial actions (comprising excavation, sifting, stabilization, confirmatory sampling, and disposal) were not viable due to one or several of the following four conditions listed below

- Standing water, presence of a creek, stream, or similar water body running through the range;
- Within to an area of potential cultural significance; and
- Location outside of firing line and/ or the historical boundary of the range.

These Special Conditions were identified after the final CAP for RAU 2A was finalized and are therefore not included in that document. The alternative action for situations identified as Special Conditions was sampling and analysis of soil samples to determine the actual concentration of lead within the Special Conditions.

For areas that fell within a creek/ stream, streambed, standing water or the area of cultural significance, the alternative cleanup action was to collect five discrete soil samples per 29-foot by 29-foot area in a square pattern to determine if they exceeded the regulatory limit (total lead not to exceed 50 mg/kg). If the area failed, further remedial actions were discussed with WDOE and other stakeholders.

For areas that fell outside the boundary of the range/ firing line, five discrete soil samples were collected per 29-foot by 29-foot area in a square pattern to establish the concentration of total lead. The samples were analyzed to determine if they exceeded the regulatory limit (total lead not to exceed 50 mg/kg). If the area failed, the area was excavated and sampled until lead removal confirmation was obtained.

2.2.3 Confirmation Sampling and Step-out Approach

Appendix E to the Operations Plan (BCRRT, 2008b) presents the confirmatory sampling methodology and planned approach to step-outs.

Range Floor. Regarding grids that were excavated on the range floor, for all hot spots classified as Category 3 (29-foot by 29-foot excavation), six confirmatory samples were collected: a surface sample from the approximate center of each of the four excavation sidewalls and two bottom samples (approximately 10 feet apart) from the excavation floor. For hot spots classified as Category 4 (58-foot by 58-foot excavation), 12 confirmatory samples were collected: a surface sample from the approximate center of each of the four excavation sidewalls, four bottom samples (approximately 10 feet apart) from the excavation floor, and four samples from the cardinal compass directions approximately 20 feet from the center of the excavation. For hot spots classified as Category 5 (excavation of the entire 130-foot by 130-foot grid), 17 confirmatory samples were collected: three samples from each of the four excavation sidewalls spaced approximately 30 feet apart, one bottom samples collected at the center of the excavation floor, and four samples from the cardinal compass directions approximately 40 feet from the center of the excavation.

In the event that any sidewall confirmatory sample was reported to have a lead concentration greater than 118 mg/kg, a step-out excavation was conducted at that sidewall location. The step-out excavation extended over the entire length of the affected sidewall, going outward from the existing excavation one-half of the width of the grid and downward to a depth of 6 inches bgs. Confirmatory sampling of the step-out excavation was conducted in accordance with the appropriate grid category rank as detailed above.

In the event that any excavation bottom confirmatory sample exceeded a lead concentration of 118 mg/kg, an additional 6-inch-deep step-down excavation was conducted across the entire excavation floor. Confirmatory sampling of the step-out excavation was conducted in accordance with the appropriate grid category rank as detailed above.

This iterative process of confirmatory sampling, step-out excavation, and resampling was repeated until all of the confirmatory sample lead analysis results for the final excavation sidewalls and floors were less than 118 mg/kg.

Impact Zones, Freestanding Berms, and Hillside Berms. A 2-foot soil lift was excavated from each berm/impact zone. The excavated impact zone, each earthen berm or hillside berm was divided into 15-foot linear sections (or panels), with the 15-foot width of the panel oriented along

the toe of the berm and extending to the top the berm. After required soil excavation, the remaining surface and near-surface soils in each panel were visually inspected for bullets. If no bullets were observed, two soil samples (0 to 6 inches deep) were collected for laboratory analysis from each berm section (one at the center of the panel and the near the base of the berm).

Pop-up Target Berms. The pop-up target berms were completely removed. In addition, a 6-inch soil lift was removed from an approximate 15-foot radius from the center of the concrete target. If no bullets were observed, two soil samples were collected for laboratory analysis at representative locations within the 15-foot radius at a depth of 0 to 6 inches.

2.3 INTERIM REMOVAL ACTION PLAN, RAU-2A-16

The Draft Interim Removal Action Work Plan, Excavation and Replacement of Lead-Impacted Fill Soils Under and Adjacent to RAU 2A-16 (Michael Baker, Jr., Inc., 2010) describes removal actions performed in 2008 and investigative trenching performed in 2009 at RAU-2A-16. The results of trenching showed the presence of lead-impacted fill soils at RAU 2A-16, and the work plan presented a planned approach to excavate and backfill the impacted area. This plan was not implemented.

2.4 ADDENDUM TO THE CLEANUP ACTION PLAN

Excavation and removal of soil was completed at the small arms ranges as described in the Final RAU 2A CAP; however, confirmatory sampling and visual observations indicated that lead-impacted fill soil remains at RAU 2A-16 within a 1.8-acre area constructed over lead-impacted fill soil, and lead slugs remained at a 6.2-acre overshoot area of RAU 2A-21. An Addendum to the RAU 2A CAP (WESTON, 2017b) was prepared to address remaining lead-impacted areas at RAU 2A-16 and RAU 2A-21 following the remediation that occurred in 2008 (cleanup actions are described in Section 3). Proposed changes to the RAU 2A CAP included partial excavation and/or covering the lead-contaminated soil with a geotextile fabric and one foot of clean soil, depending on results from lead leachability tests. These tests were to be used to determine the likelihood of lead contamination migrating from the soil into groundwater or surface water. A fact sheet was prepared by WDOE and distributed to the former CBMR stakeholder mailing list requesting public comments from August 16 through September 18, 2017 on the proposed CAP Addendum.

Both alternatives evaluated in the CAP Addendum provided protection of human health and the environment as well as protection of groundwater. Alternative 1 was excavation, tranportation and disposal of soil exceeding 3,000 mg/kg of lead, and capping of the remaining lead-contaminated soil. Alternative 2 was capping of all lead-contaminated soil with no excavation, transportation or disposal. Alternative 2 was identified as the preferred alternative. The alternative is consistent with the projected use of the CBMR for education, law enforcement training, parks, and conservation areas as well as meeting of the objective of protection of human health and the environment. Capping of the remaining lead-contaminated areas at the small arms ranges also meets the threshold requirements; although it will require maintenance of the protective cover. The addition of a geotextile layer and one-foot clean soil cap will serve to restrict contact with lead-impacted soil; therefore, direct contact to contamination was not considered in the selection of appropriate cleanup levels. Protection of groundwater is demonstrated by the results for leachable lead samples, which indicated both sites would not result in an impact to groundwater above the Method A Cleanup Level for Groundwater of 0.015 milligrams per liter (mg/L) for lead.

3 SUMMARY AND RESULTS OF CLEANUP ACTIONS

Representative photos from the cleanup actions performed at the RAU 2A small arms ranges are included in Appendix B. Appendix C includes Lab Reports associated with the sampling of lead-impacted soil areas at RAU 2A-16 and RAU 2A-21. Appendix D includes landfill documentation for soil disposed offsite in 2010 and 2017. Appendix E includes technical information regarding the geotextile used in capping the lead-impacted soil areas at RAU 2A-16 and RAU 2A-21.

3.1 2007-2010 CLEANUP ACTION ACTIVITIES

The following actions were completed at the RAU 2A small arms ranges beginning in October 2007 and continuing during the summers of 2008 and 2009, with some work continuing into 2010. Information regarding the cleanup was compiled from the following memos and reports:

- Memorandum from Clif Gray of MKM Engineers, Inc. to Mark J. Knight of MKM Engineers, Inc. with Subject: 1000-inch Range (RAU 2A-16) – Memo for the Record #1 (MKM, 2008a)
- Memorandum from Clif Gray of MKM Engineers, Inc. to Dr. Ben Amoah-Forson of Washington State Department of Ecology with Subject: HTW Lead Remediation – Memo for the Record #2 (MKM, 2008b)
- Memorandum from Kathleen Anthony of MKM Engineers, Inc. to Dr. Ben Amoah-Forson of Washington State Department of Ecology with Subject: HTW Activities Complete for 2008 – Memo for the Record #3 (MKM, 2009)
- Draft Interim Action Work Plan, RAU 2A-16 (Michael Baker, Jr., Inc., 2010)
- Memorandum from Kathleen Anthony of PIKA International, Inc. to Mark Knight of Michael Baker Jr., Inc. with Subject: Draft RAU-2A-21 Boundary Delineation After Action Report (MKM, 2010)

3.1.1 Cleanup Actions at RAU 2A-4

Excavation areas for RAU 2A-4 are shown on Figure 3. The following cleanup activities were completed between 2007 and 2010:

- Berm – Soil was excavated along the natural slopes of the hillside berm. Additional excavation was required behind targets on the berm due to deeper penetration of visible lead slugs.
- Concrete pop-up targets – Soil was excavated around 42 concrete pop-up target bases. The concrete bases were dismantled, cleaned of native soils, and disposed at a local crushing

plant. The pop up target bases for this range were arranged in an irregular pattern within close proximity of each other. Based on the density of the pop ups, the outer boundaries of all pop ups that lie along the periphery of the range floor were used as the outline for excavation. After removal of target pop up bases, the entire polygonal shaped boundary shown on Figure 3 was excavated to a depth of 6 inches.

- Range Floor – Three 29-foot by 29-foot square areas on the range floor, which had been identified for excavation, were classified as Special Conditions since these areas were located outside the firing range boundary and within the buffer zone of a cultural concern. The areas were re-sampled and analyzed for total lead.
- A trash pit (glass bottles) was found during excavation in the berm and was inspected and documented by the archeologist. No other archeological findings were identified for the range.
- All excavated materials were sifted for the removal of lead slugs.
- Estimated volume of soil excavated, based upon truckloads, was 750 cubic yards of RCRA soils and 105 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.
- MTCA soils were tested for total lead levels. Results were less than 250 mg/kg. MTCA soils were placed into the eastern lagoon pond.
- Erosion controls and grading for surface runoff were completed.
- Clark County and WDOE concurred that cleanup activities were complete for RAU 2A-4 as documented in the Amended PPCD (WDOE, 2012).

3.1.2 Cleanup Actions at RAU 2A-15

Excavation areas for RAU 2A-15 are shown on Figure 4. The following cleanup activities were completed between 2007 and 2010:

- Berm – Soil was excavated along the natural slopes of the hillside berm. Based on the results of confirmation samples, additional excavation was required on the front side of the berm (an area 6 feet wide by 70 feet in length).
- Range Floor – Two 29-foot by 29-foot square areas on the range floor, which had been identified for excavation, were initially classified as Special Conditions since these areas were located outside the firing range boundary. The areas were sampled and analyzed for total lead. One of these grids, the grid surrounding 2A-15-1-E, showed levels of lead requiring excavation. Confirmation samples identified step-out excavation required to the southwest of the grid surrounding 2A-15-1-E.
- Step-out confirmatory sample results were less than 118 mg/kg.
- No archeological findings were identified for the range.

- All excavated materials were sifted for the removal of lead slugs.
- Estimated volume of soil excavated, based upon truckloads, was 45 cubic yards of RCRA soils and 60 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.
- MTCA soils were tested for total lead levels. Results were less than 250 mg/kg. MTCA soils were placed into the eastern lagoon pond.
- Erosion controls and grading for surface runoff were completed.
- Clark County and WDOE concurred that cleanup activities were complete for RAU 2A-15 as documented in the Amended PPCD (WDOE, 2012).

3.1.3 Cleanup Actions at RAU 2A-16

Excavation areas for RAU 2A-16 are shown on Figure 5. The following cleanup activities were completed between 2007 and 2010:

- Berm – Soil was excavated along the natural slopes of the hillside berm. Additional excavation was required for the berm due to deeper penetration of visible lead slugs.
- Range Floor – Twenty 58-foot by 58-foot square areas and five 29-foot by 29-foot square areas on the range floor were identified for remedial actions. Most of these locations were within close proximity of each other and overlap. Some of these 58-foot by 58-foot square areas were identified as Special Conditions because they were located outside the firing range boundary. One of the 58-foot by 58-foot square areas was identified as a Special Condition because it included a portion of adjoining creek bed. Special Condition areas were sampled. Results confirmed elevated levels of lead reported by previous sampling efforts. The excavated areas, including lateral step-outs, are shown on Figure 5. No excavation was performed within the creek bed.
- Confirmatory sampling results showed elevated levels of lead on the range floor and berm.
- No archeological findings were identified for the range.
- 23 Munitions and Explosives of Concern (MEC) and 20 munitions debris items were identified in the berm and on the range floor during excavation. Findings required subsurface clearance of the areas to be excavated.
- All excavated materials were sifted for the removal of lead slugs.
- Estimated volume of soil excavated, based upon truckloads, was 510 cubic yards of RCRA soils and 995 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.

- MTCA soils were tested for total lead levels. Four of the fifteen MTCA soil stockpiles that were tested for total lead concentrations had results less than 250 mg/kg. The piles that exceeded 250 mg/kg were added to the RCRA soil stockpiles and stabilized. MTCA soils with total lead concentrations less than 250 mg/kg were placed into the eastern lagoon pond.
- Erosion controls and grading for surface runoff were completed.
- Clark County and WDOE concurred that additional cleanup activities were required for RAU 2A-16 as documented in the Amended PPCD (WDOE, 2012). Confirmatory soil sampling revealed that lead concentrations were increasing with depth in portions of RAU 2A-16, which was contrary to expectations and observations at the other small arms ranges. In addition, the physical appearance of the underlying soils and general appearance of the environs provided further indication that the area of RAU 2A-16 was constructed over lead-impacted fill soil. The fill soil had apparently been brought to the range from another portion of the site and used to raise the elevation of the range floor and adjacent area above the flood level of Lacamas Creek (Michael Baker Jr., Inc., 2010). The lead-impacted fill soil area is approximately 1.76 acres. Additional investigation and installation of a soil cap was completed in 2017 as is described in Section 3.2.

3.1.4 Cleanup Actions at RAU 2A-17

Excavation areas for RAU 2A-17 are shown on Figure 6. The following cleanup activities were completed between 2007 and 2010:

- Berm – Soil was excavated along the natural slopes of the hillside berm. Deep penetration of bullets was identified during excavation. Penetration depth was 6 foot into the face of the berm. Confirmatory sampling results required step-out excavation of the berm.
- Range Floor – One 29-foot by 29-foot square area on the range floor was excavated.
- Step-out confirmatory sample results were less than 118 mg/kg.
- No archeological findings were identified for the range.
- All excavated materials were sifted for the removal of lead slugs.
- Estimated volume of soil excavated, based upon truckloads, was 345 cubic yards of RCRA soils and 705 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.
- MTCA soils were tested for total lead levels. Two of the three MTCA soil stockpiles that were tested for total lead levels were less than 250 mg/kg. The one pile that exceeded 250 mg/kg was added to the RCRA soil stockpiles and stabilized. MTCA soils with total lead concentrations less than 250 mg/kg were placed into the eastern lagoon pond.
- Erosion controls and grading for surface runoff were completed.

- Clark County and WDOE concurred that cleanup activities were complete for RAU 2A-17 as documented in the Amended PPCD (WDOE, 2012).

3.1.5 Cleanup Actions at RAU 2A-18

Excavation areas for RAU 2A-18 are shown on Figure 7. Cleanup activities were completed as follows:

- Berm – Soil was excavated along the slopes of both the front and back faces of the freestanding berm (Figure 7). Results from 27 of the 36 berm confirmatory samples were greater than 118 mg/kg. The 27 panels exceeding 118 mg/kg were excavated and re-sampled. Eight panels showed lead levels greater than 118 mg/kg and were excavated and resampled. Of these, five panels showed lead levels greater than 118 mg/kg and were excavated and resampled. Two of the five panels required additional excavation.
- Range Floor – The Operations Plan (BCRRT, 2008b) identified one 130-foot by 130-foot square area, four 58-foot by 58-foot square areas, and ten 29-foot by 29-foot square areas on the range floor that were excavated. Some of these areas were overlapping and some were located underneath the berm. Vertical and lateral step-outs were performed based on confirmation sampling results. Confirmation samples could not be collected from the floor of the grid surrounding RAU 2A-18-11-W due to bedrock. Lateral step-outs expanded the excavation as shown on Figure 7.
- In early 2009, RAU 2A-18 was used as a staging site for waste from other ranges. Some excavation was delayed by the presence of stockpiles.
- No archeological findings were identified for the range.
- A total of 15 items, presumed to be MEC items (3.5-inch rockets and 37mm frag subsurface), were reportedly identified in locations east of the berm within the 3.5-inch rocket target area (MKM, 2010).
- All excavated materials were sifted for the removal of lead slugs.
- Estimated volume of soil excavated, based upon truckloads, was 225 cubic yards of RCRA soils and 60 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.
- MTCA soils were tested for total lead levels. Two of the three MTCA soil stockpiles that were tested for total lead levels were less than 250 mg/kg. The one pile that exceeded 250 mg/kg was added to the RCRA soil stockpiles and stabilized. MTCA soils with total lead concentrations less than 250 mg/kg were placed into the eastern lagoon pond.
- Erosion controls and grading for surface runoff were completed.
- Clark County and WDOE concurred that cleanup activities were complete for RAU 2A-18 as documented in the Amended PPCD (WDOE, 2012).

3.1.6 Cleanup Actions at RAU 2A-19

Excavation areas for RAU 2A-19 are shown on Figure 8. The following cleanup activities were completed between 2007 and 2010:

- Berm – No berms are associated with this firing range.
- Range Floor – Two 130-foot by 130-foot square areas and six 29-foot by 29-foot square areas on the range floor were excavated. Vertical and lateral step-outs were performed based on confirmation sampling results. Lateral step-outs expanded the excavation as shown on Figure 8.
- One confirmation sample collected from the southern sidewall step-out of the grid surrounding RAU 2A-19-34-C had a result of 156 mg/kg and was not further excavated.
- No archeological findings were identified for the range.
- All excavated materials were sifted for the removal of lead slugs.
- Estimated volume of soil excavated, based upon truckloads, was 360 cubic yards of RCRA soils and 170 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.
- MTCA soils were tested for total lead levels. All MTCA soil stockpiles from this range had sample results exceeding 250 mg/kg. These soils were added to the RCRA soil stockpiles and stabilized.
- Erosion controls and grading for surface runoff were completed.
- Clark County and WDOE concurred that cleanup activities were complete for RAU 2A-19 as documented in the Amended PPCD (WDOE, 2012).

3.1.7 Cleanup Actions at RAU 2A-20

Excavation areas for RAU 2A-20 are shown on Figure 9. The following cleanup activities were completed between 2007 and 2010:

- Berm – Soil was excavated along the front face of the U-shaped berm. Additional areas behind targets on the berm were removed.
- Range Floor – One 130-foot by 130-foot grid, one 58-foot by 58-foot grid, and one 29-foot by 29-foot grid were excavated.
- Two additional 58-foot by 58-foot range floor grids were identified as Special Conditions.
- No archeological findings were identified for the range.
- All excavated materials were sifted for the removal of lead slugs.

- Estimated volume excavated, based upon truckloads, was 480 cubic yards of RCRA soils and 175 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were transported offsite for disposal as non-hazardous soils.
- MTCA soils tested for total lead levels were less than 250 mg/kg, and were placed into the eastern lagoon pond.
- Erosion controls and grading for surface runoff were completed.
- Clark County and WDOE concurred that cleanup activities were complete for RAU 2A-20 as documented in the Amended PPCD (WDOE, 2012).

3.1.8 Cleanup Actions at RAU 2A-21 and RAU 2A-22

Excavation areas for RAU 2A-21 and RAU 2A-22 are shown on Figure 10. The following cleanup activities were completed between 2007 and 2010:

- Berm – Soil was excavated along the front face of the two berms. One panel on the RAU 2A-21 berm required additional excavation. Additional excavation was completed for the berm panel, after which results showed lead levels at 119 mg/kg. WDOE approved no further excavation.
- Concrete pop-up targets – Soil was excavated from a 15-foot radius around each of 42 concrete pop-up target bases: 14 targets associated with RAU 2A-21, and 28 targets associated with RAU 2A-22 (the locations of 26 targets are shown on Figure 10; the locations of the remaining 16 targets is not known).
- Range Floor –Two 130-foot by 130-foot grids, five 58-foot by 58-foot grids, and nine 29-foot by 29-foot grids were excavated. Vertical and lateral step-outs were performed based on confirmation sampling results. Lateral step-outs expanded the excavation as shown on Figure 10. The northern portion of the 130-foot by 130-foot grid surrounding RAU 2A-21-30-C was not excavated due to standing water. Two additional 130-foot by 130-foot grids (surrounding RAU 2A-21-31-C and RAU 2A-21-32-C) were considered Special Conditions and were not excavated due to the presence of standing water. A 58-foot by 58-foot grid surrounding RAU 2A-21-25-C was not sampled or excavated since it was located within a gravel road. The grid surrounding RAU 2A-21-15-N was bounded to the north by a road.
- Estimated volume excavated, based upon truckloads, was 2,610 cubic yards of RCRA soils and 1,450 cubic yards of MTCA soils.
- RCRA soils were treated with stabilization materials. TCLP samples were collected and analyzed. TCLP results were less than 5 mg/L. Treated soils were disposed offsite as non-hazardous soils.
- Seven of the eight MTCA soil stockpiles that were tested for total lead levels were less than 250 mg/kg. The one pile that exceeded 250 mg/kg was added to the RCRA soils.

- No archeological findings. Soil test probes were conducted for each of the berms. The archeologist completed a study of the concrete wall based upon its age (construction date marking 1928).
- Erosion controls and grading for surface runoff were completed.
- In January 2010 a boundary deliniation investigation of the RAU 2A-21 overshoot area identifed lead slugs and blank cartridges at the surface and at depth up to 18 inches. The lead-impacted soil area was estimated to be 4.25 acres in size (MKM, 2010). Clark County and WDOE concurred that additional cleanup activities were required for the overshoot area associated with RAU 2A-21 as documented in the Amended PPCD (WDOE, 2012). Additional investigation of the RAU 2A-21 overshoot area and installation of a soil cap was completed in 2017 as is described in Section 3.2.

3.1.9 Treatment and Disposal of Excavated Soil

As described in Section 2.2.1, excavated soils were staged at each range. If visible particles of lead were observed during field work or expected based on earlier documentation, the soil was sifted using a vibrating multistage screening system to remove bullet fragments or other small lead particles.

Soils anticipated to be regulated under MCTA were sampled for lead to confirm suitability for onsite disposal, i.e., total lead results less than 250 mg/kg and TCLP results less than 5 mg/L. Approved MCTA soils were transported to the Camp Bonneville sewage lagoon ponds for disposal.

Soils anticipated to be regulated under RCRA were stabilized as appropriate and sampled to confirm TCLP results less than 5 mg/L. Soil was transported to the Wasco County Landfill for offsite disposal. Documentation of landfill receipts from 2010 is included in Appendix D.

3.2 2017 CLEANUP ACTION ACTIVITES

3.2.1 Sampling at RAU 2A-16 and RAU 2A-21

In March 2017, samples were collected from areas of RAU 2A-16 and RAU 2A-21 where lead-contaminated soil had been identified following the 2010 cleanup actions. Lead concentrations from these samples were compared to the cleanup standards provided in the RI/FS (BCRRT, 2007). Lead concentrations in soil at the fill area of the RAU 2A-16 range and the overshoot area of the RAU 2A-21 range exceeded the unrestricted land use concentration of 250 mg/kg for lead.

The lead concentrations also exceeded the ecological indicator soil concentrations of 50 mg/kg for plants and 118 mg/kg for wildlife. The Washington State MTCA statute and regulations in Chapter 173-340 of the Washington Administrative Code (WAC) Table 740-1 provides the Method A Soil Cleanup Levels for unrestricted land uses and Table 749-3 provides the ecological indicator soil concentrations for protection of terrestrial plants and animals.

Because many of the lead samples at both ranges exceeded the cleanup standards, the Synthetic Precipitation Leaching Procedure (SPLP) was used to determine the mobility of lead-impacted soil remaining at the two small arms ranges. As described in WAC 173-340-747(2)(d), leaching tests may be used to establish allowable soil concentrations for certain metals. To determine the mobility of lead, each of the lead-impacted areas were divided into 40-foot grids and a random 5-point composite soil sample was collected from each grid. The 5-point composite soil sample was analyzed for total lead using U.S. Environmental Protection Agency (EPA) Methods 3050B/6010D and leachable lead by SPLP using EPA Methods 1312/3010A/6010C (WESTON, 2017a). Results for total and SPLP lead are listed in Table 1 and shown on Figures 11 and 13 for RAU 2A-16 and RAU-2A-21, respectively.

Total lead concentrations for only two sample grids at RAU 2A-21, locations 21-105 and 21-106 as shown on Figure 13, were greater than the lead cleanup value of 3,000 mg/kg.

3.2.2 Cleanup Actions at RAU 2A-16 and RAU 2A -21

In accordance with the Addendum to the RAU 2A CAP (WESTON, 2017b), the 1.76 acres of lead-impacted soil at RAU 2A-16 (Figure 12) and 6.21 acres of lead-impacted soil at RAU 2A-21 (Figure 14) were covered with geotextile and one foot of clean fill. Work was perfomed in accordance with the Work Plan (WESTON, 2017c).

The lateral extent of the soil cap areas for RAU 2A-16 and 2A-21 was marked and grade stakes installed to mark areas requiring vegetation removal and placement of the one-foot thickness soil cap. Deadfall was removed and vegetation cut in the lead-contaminated areas before covering with geotextile and import soil. Trees greater than six-inches in diameter were not removed. The deadfall was placed in nearby areas.

After vegetation was cleared from these areas, an orange colored geotextile fabric, Mirafi® 160N/O, was installed over the lead-impacted soil. Each roll was overlapped with the previously placed fabric, overlapping a minimum six inches side to side and three feet end to end. Technical information for the Mirafi®160N/O geotextile fabric is provided in Appendix E. Grade stakes were used to guide installation of the geotextile fabric and addition and compaction of the one-foot soil cover on the geotextile.

Import soil was carefully pushed out over the fabric using a low ground pressure dozer and spread evenly over the surface in a manner to avoid excessive wrinkling, folds or bunching of the fabric. Compaction was provided by track-walking with the dozer. Soil was added until the placed soil layer was a minimum of 12 inches thick. The boundary of the fill area was graded to match the existing adjacent surface at a slope of approximately 5:1 (horizontal to vertical). A water truck was used throughout soil moving activities to provide dust control.

In November 2017, as final restoration, the capped areas at RAU 2A-16 and RAU 2A-21 were hydroseeded using a seed mix of native plants approved by Clark County, broadcast over the soil cover. Erosion and sediment controls were left in place during establishment of the vegetation.

No MEC or munitions items were encountered during the capping of lead-impacted soils at RAU 2A-16 and RAU 2A-21.

3.2.3 Screening and Offsite Disposal of Stockpiled Soil

In October 2017, two stockpiles of soil remaining from 2010 cleanup activities were screened for munitions and the soil sent offsite for disposal. The soil was sampled for waste profiling, mechanically screened, and approved for disposal as non-hazardous soil. It was loaded into dump trucks and transported to the Wasco County Landfill. Disposal documentation is included in Appendix D.

No MEC or munitions items were encountered during the mechanical screening of stockpiled soil.

4 DEVIATIONS FROM THE CLEANUP ACTION PLAN

The Operations Plan (BCRRT, 2008b; described in Section 2.2), classified some grids identified in the RAU 2A CAP as Special Conditions due to the presence of standing water or a creek; due to location within an area of potential cultural significance; or due to location outside of the firing line and/or the historical boundary of the range. Additional sampling was performed for some of the Special Condition grids. With the concurrence of WDOE, some of these grids were not excavated.

Other minor deviations were documented in technical memorandums prepared by MKM and are discussed in Sections 3.1 and 3.2.

As discussed in Section 2.4, an Addendum to the RAU 2A CAP (WESTON, 2017b) was prepared to address the remaining lead-impacted areas at RAU 2A-16 and RAU 2A-21. The prefered alternative in the Addendum to the RAU 2A CAP proposed capping of the lead-contaminated soil with a geotextile demarcation layer and a one foot of clean soil. After providing public notice ,the Addendum was approved and was used as the basis for the 2017 cleanup actions at RAU 2A-16 and RAU 2A-21.

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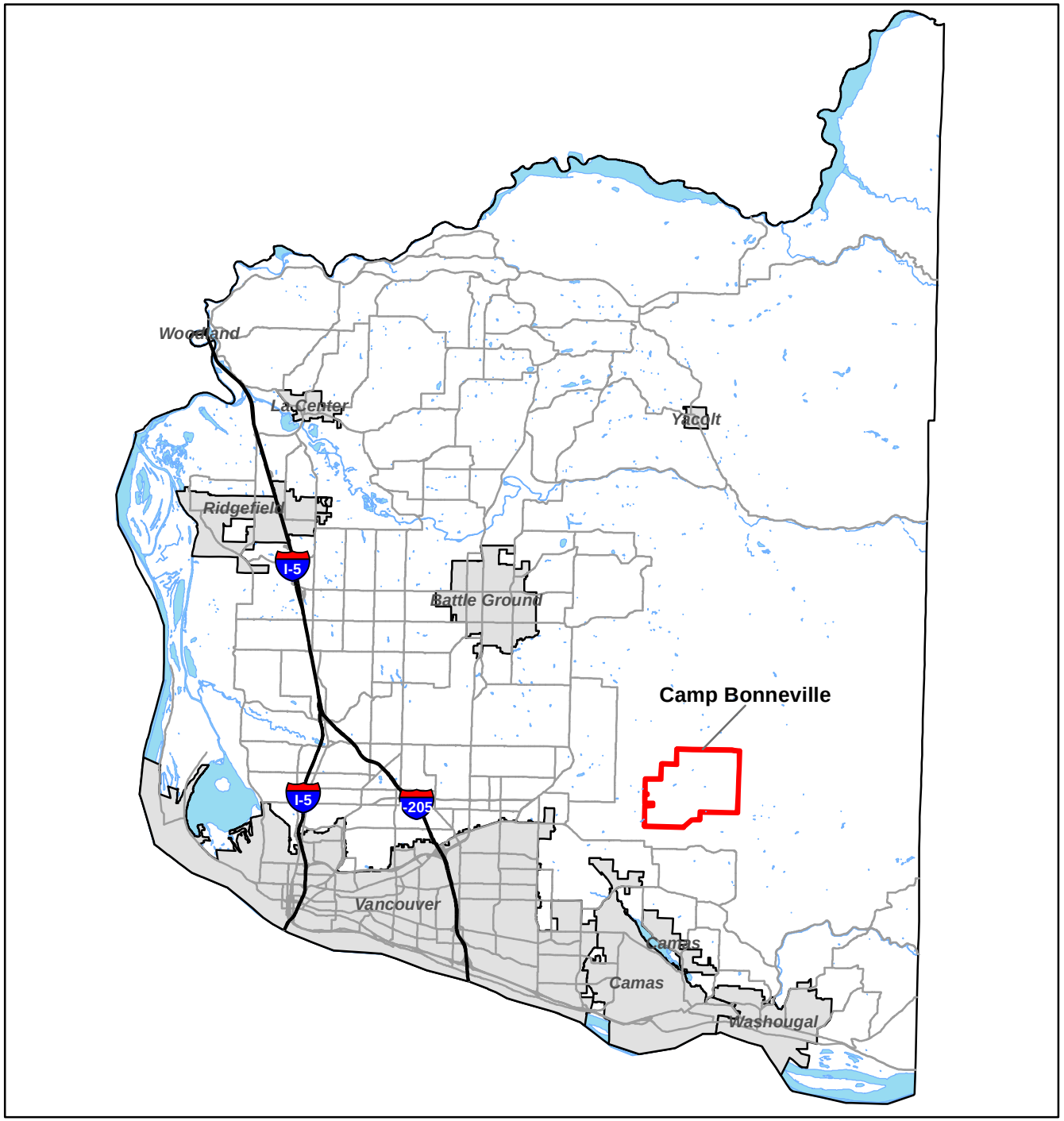
FIGURES



N

0 5 10 Miles

Clark County Public Works

FIGURE 1
FORMER CAMP BONNEVILLE
MILITARY RESERVATION LOCATION

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS

RAU 2A-17

RAU 2A-15

RAU 2A-21 and RAU 2A-22

RAU 2A-20

RAU 2A-19

RAU 2A-16

RAU 2A-4

RAU 2A-18

Main Gate

Wildlife Management Area

LEGEND

- Small Arms Range
- Berm
- Property Boundary
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River

N

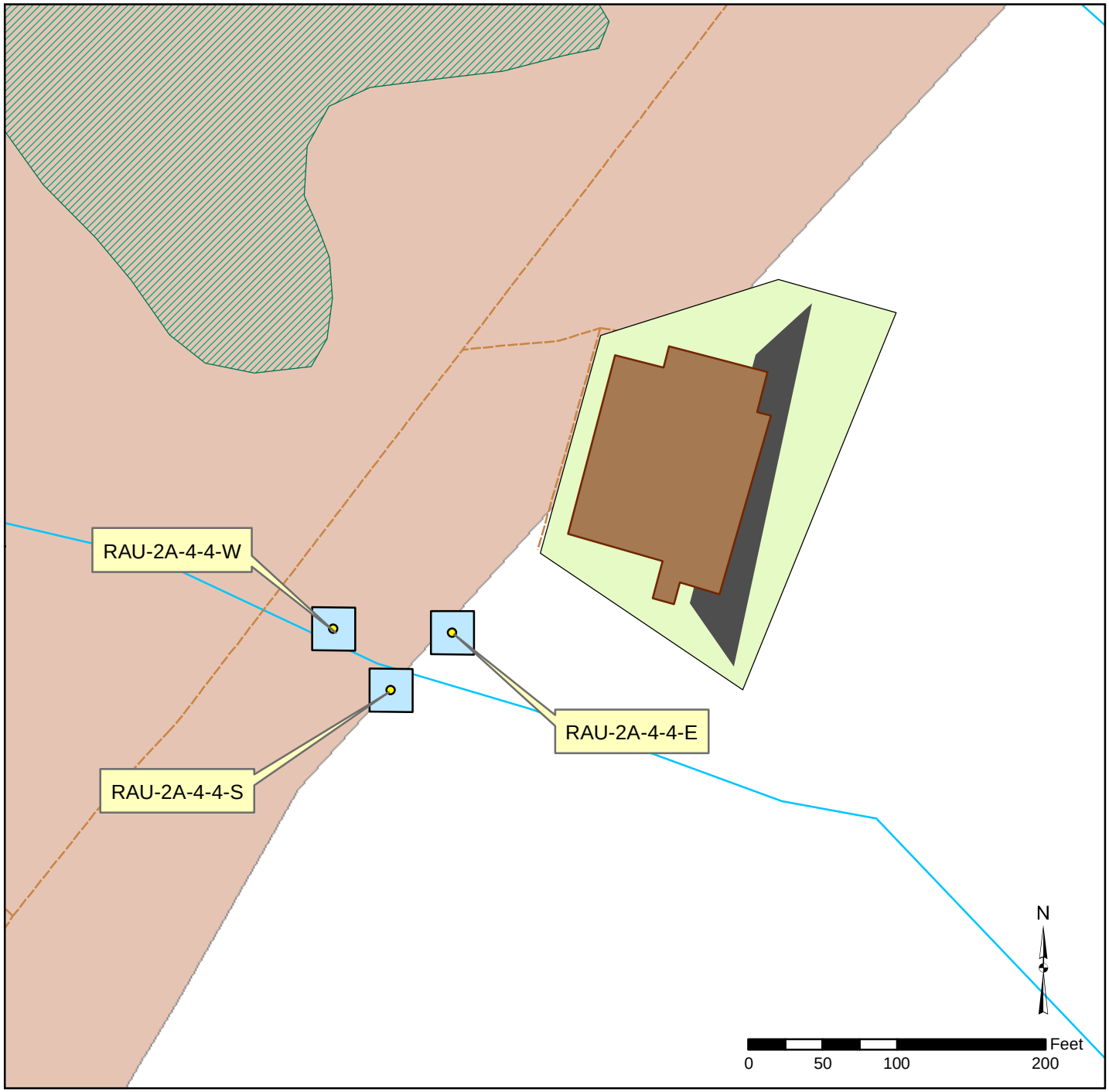
0 500 1,000 2,000 Feet

Clark County Public Works

FIGURE 2
LOCATION OF REMEDIAL ACTION UNIT 2A SMALL ARMS RANGES

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS



LEGEND

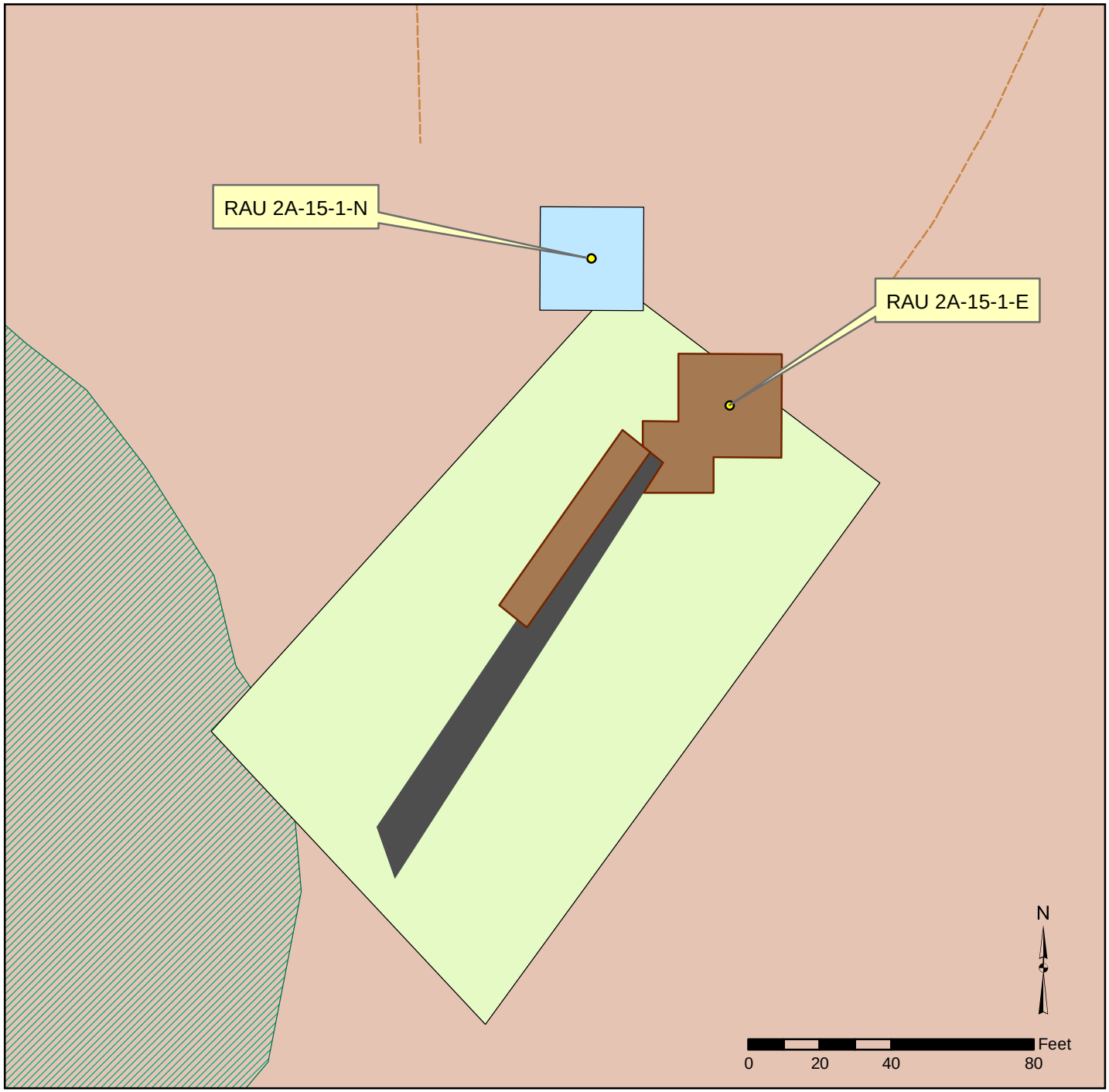
- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Special Conditions
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River

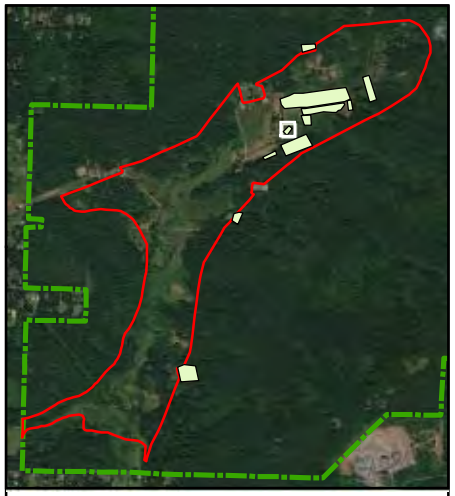
Clark County Public Works

FIGURE 3
REMOVAL ACTIONS AT
RAU 2A-4

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS





LEGEND

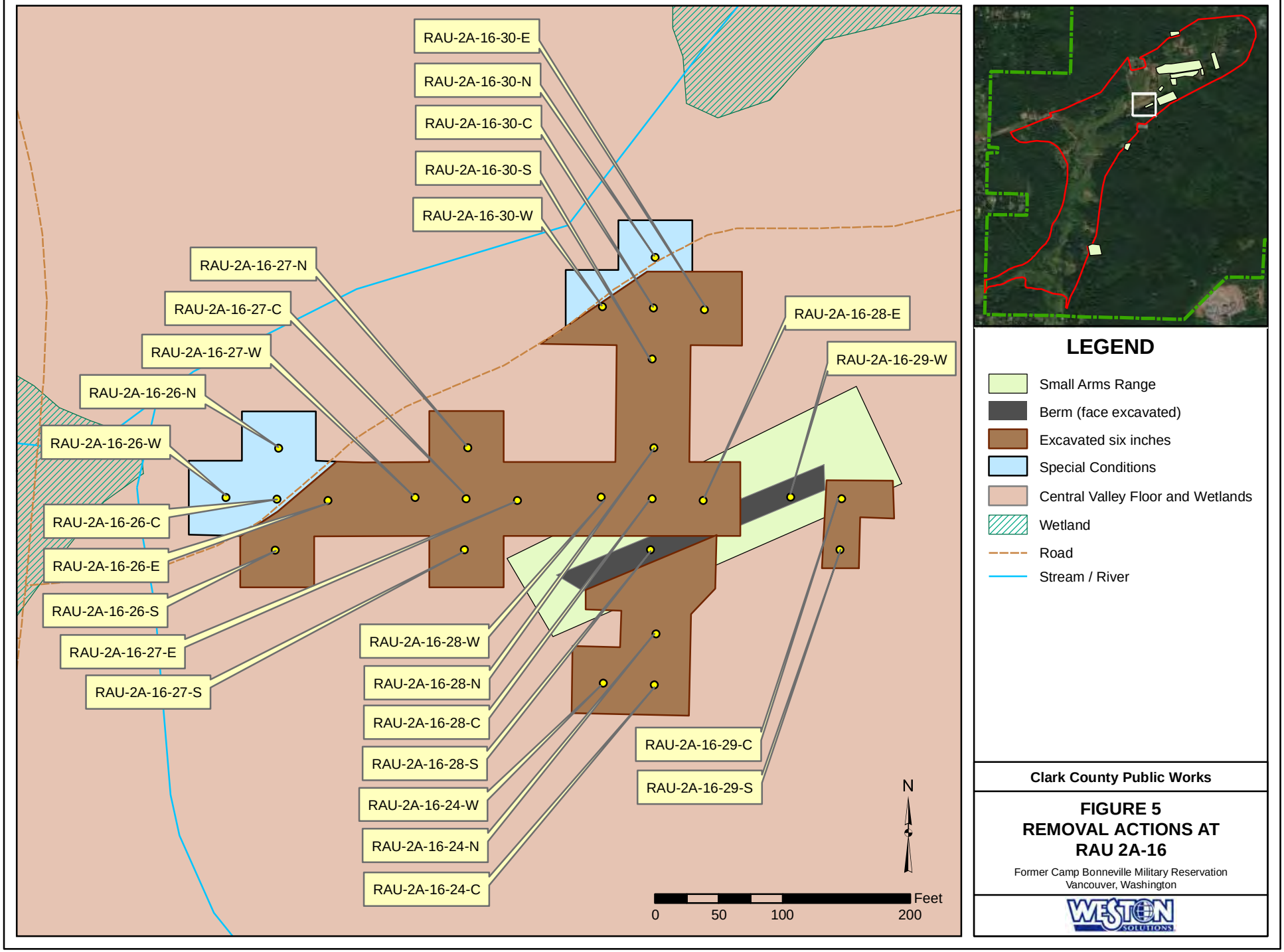
- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Special Conditions
- Central Valley Floor and Wetlands
- Wetland
- Road

Clark County Public Works

FIGURE 4
REMOVAL ACTIONS AT
RAU 2A-15

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS



LEGEND

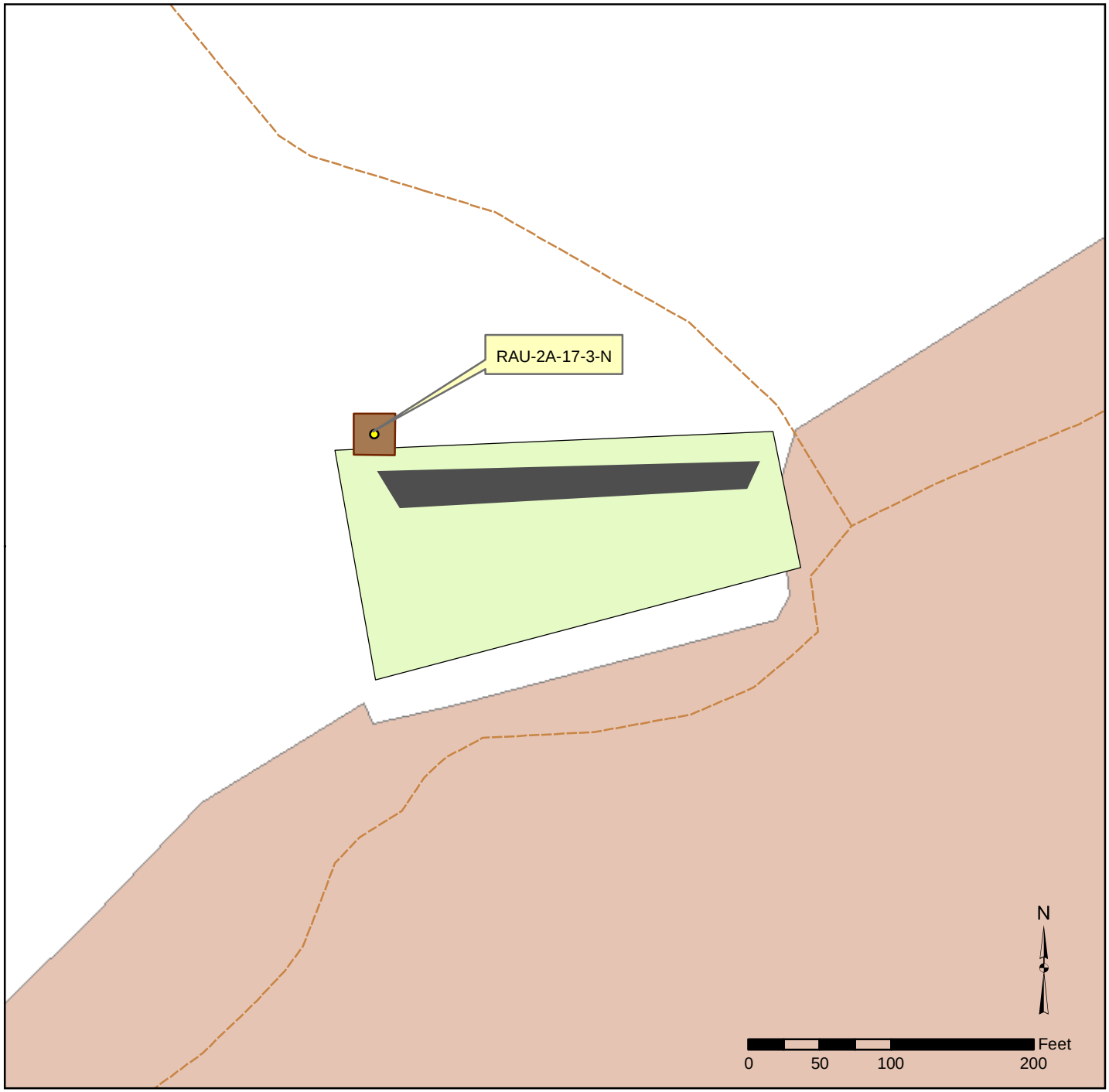
- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Special Conditions
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River

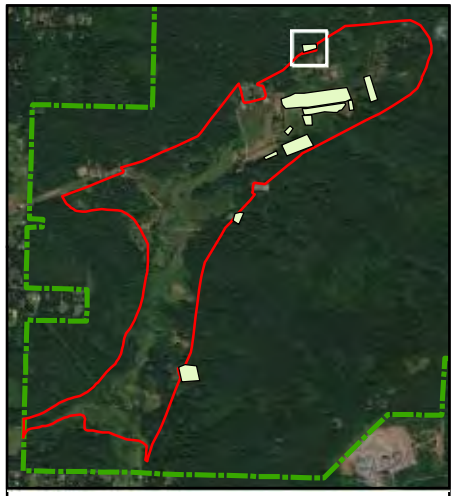
Clark County Public Works

FIGURE 5
REMOVAL ACTIONS AT
RAU 2A-16

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS





LEGEND

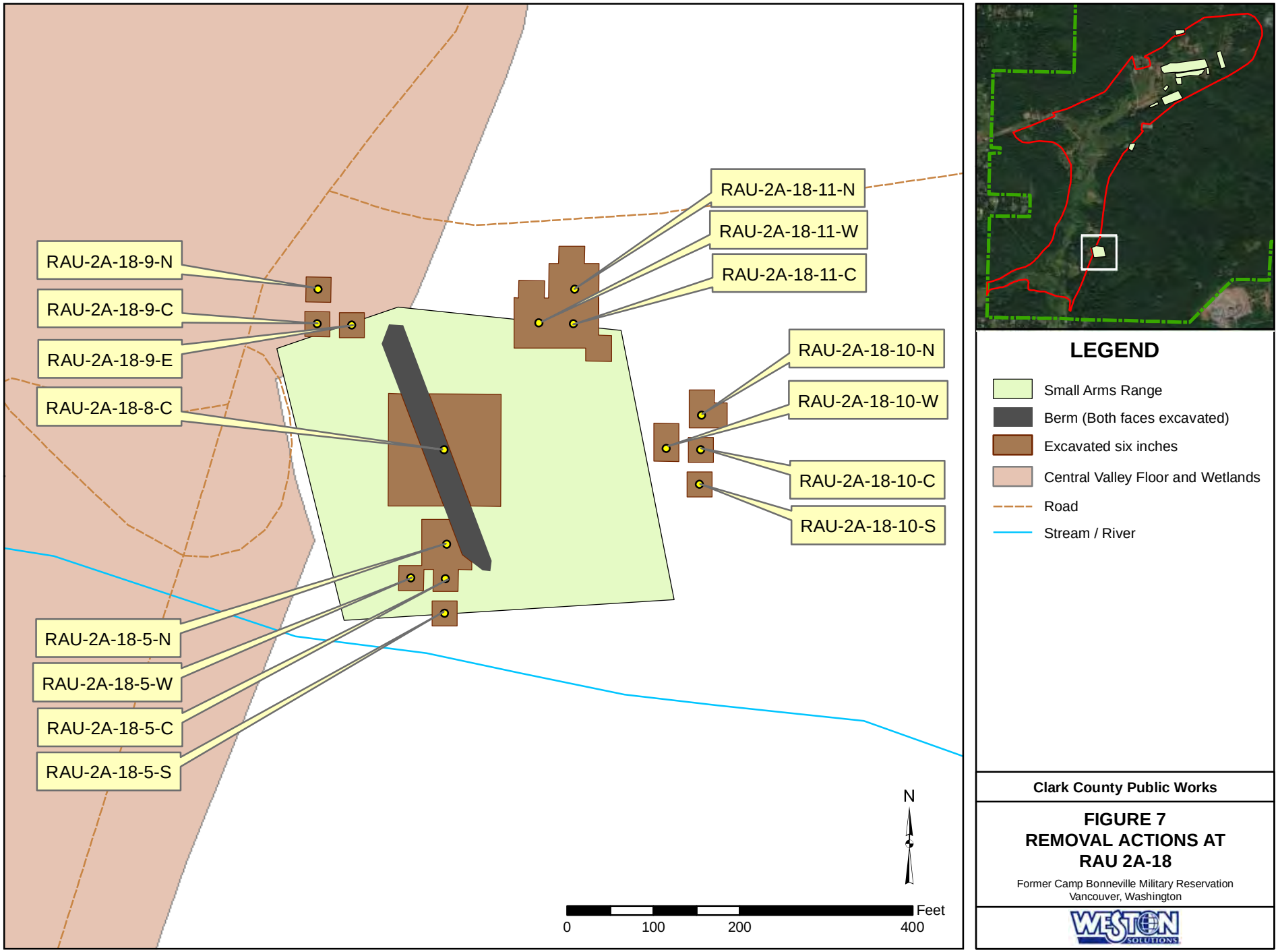
- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Central Valley Floor and Wetlands
- Road

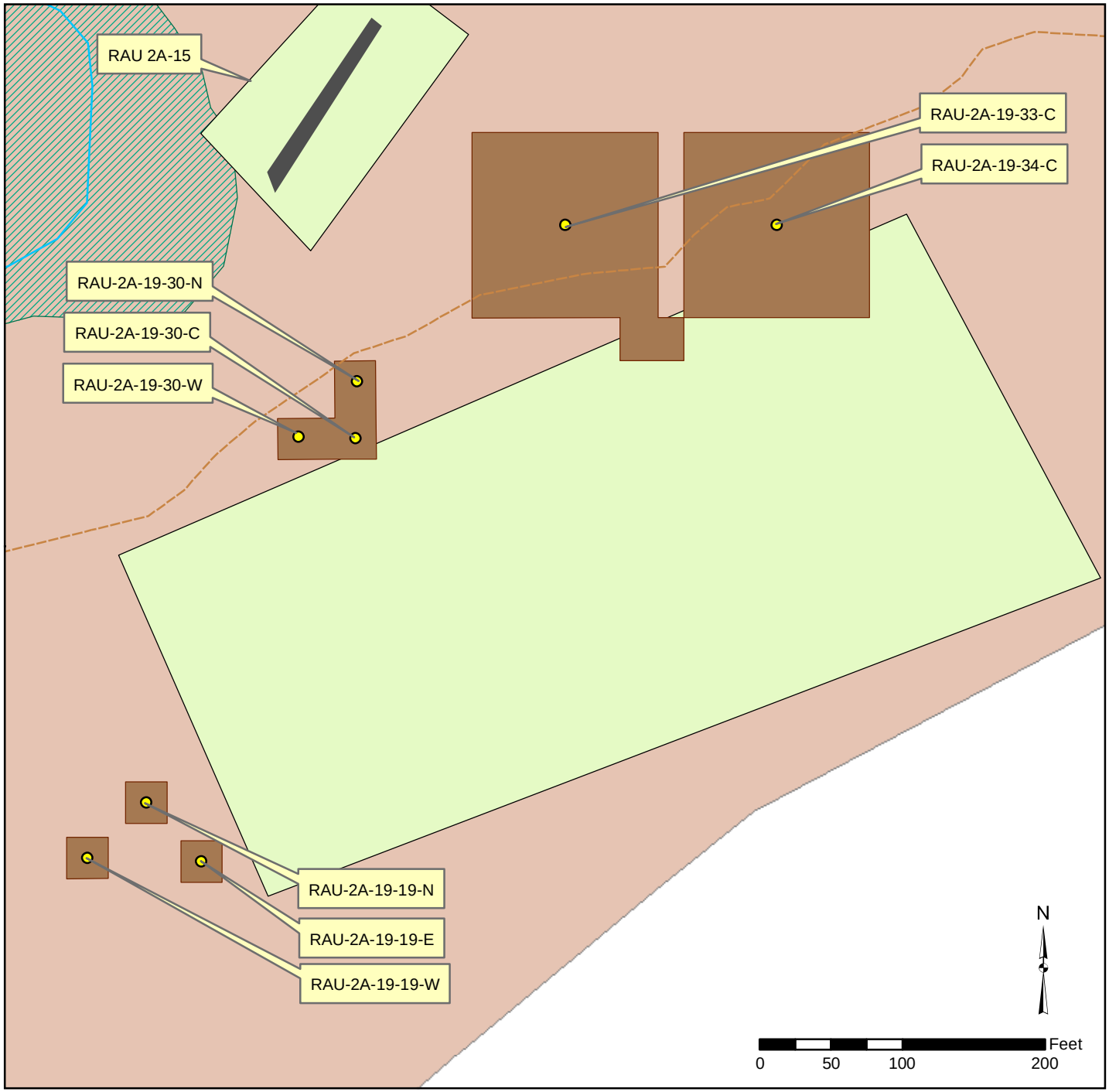
Clark County Public Works

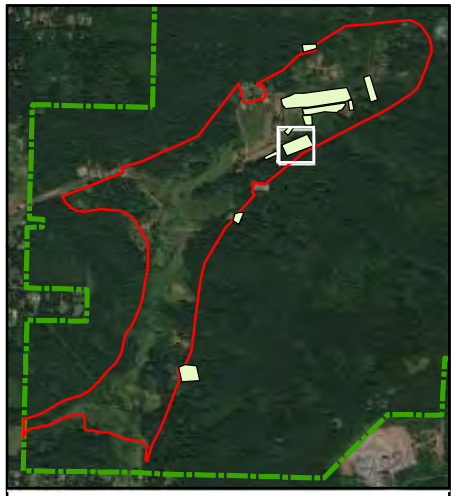
FIGURE 6
REMOVAL ACTIONS AT
RAU 2A-17

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS


RAU-2A-18-11-N
RAU-2A-18-11-W
RAU-2A-18-11-C
RAU-2A-18-9-N
RAU-2A-18-9-C
RAU-2A-18-9-E
RAU-2A-18-8-C
RAU-2A-18-10-N
RAU-2A-18-10-W
RAU-2A-18-10-C
RAU-2A-18-10-S
RAU-2A-18-5-N
RAU-2A-18-5-W
RAU-2A-18-5-C
RAU-2A-18-5-S
N
0
100
200
400
Feet
LEGEND
Small Arms Range
Berm (Both faces excavated)
Excavated six inches
Central Valley Floor and Wetlands
Road
Stream / River
Clark County Public Works
FIGURE 7
REMOVAL ACTIONS AT
RAU 2A-18
Former Camp Bonneville Military Reservation
Vancouver, Washington
WESTON SOLUTIONS





LEGEND

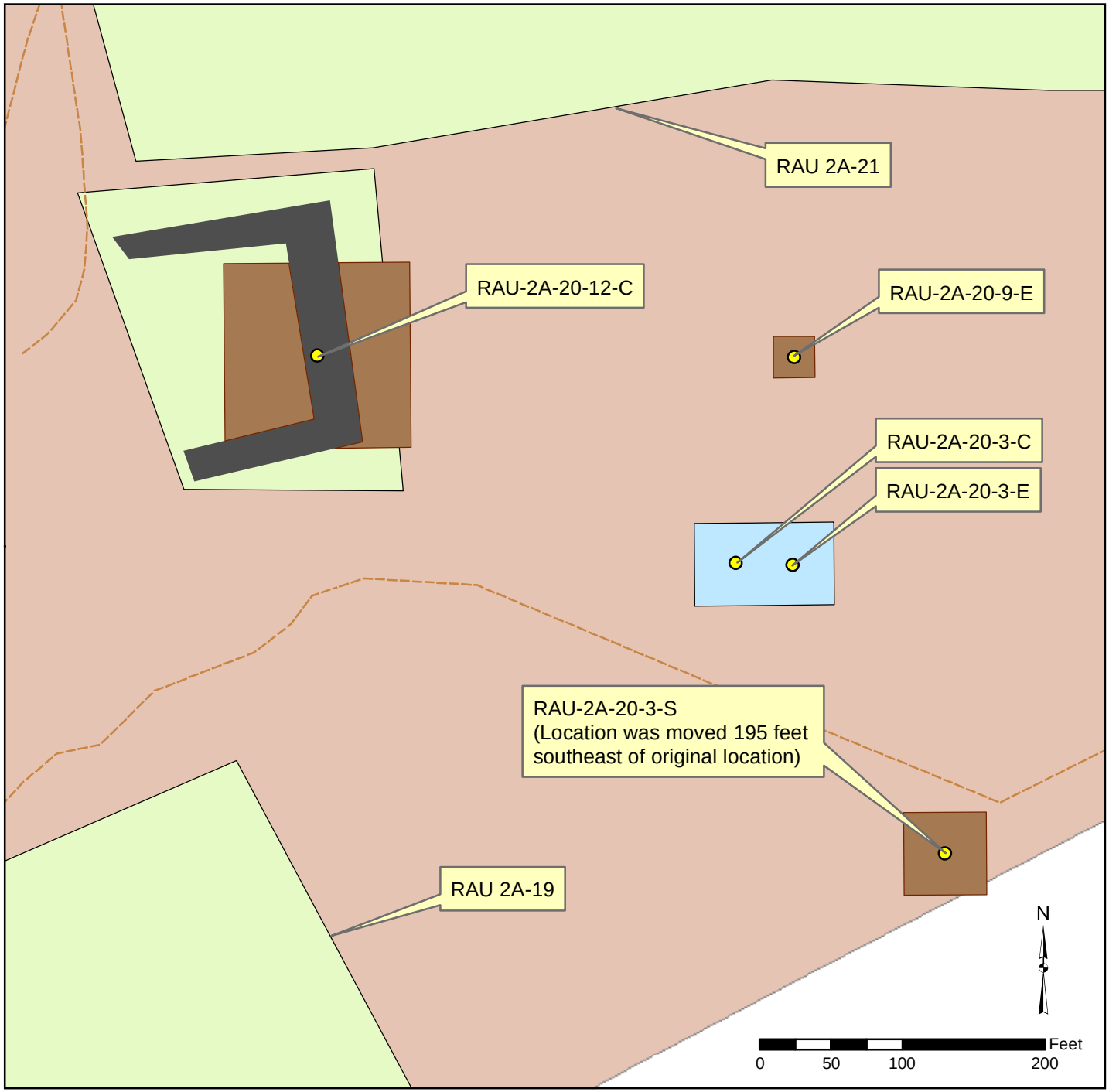
- Small Arms Range
- Berm
- Excavated six inches
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River

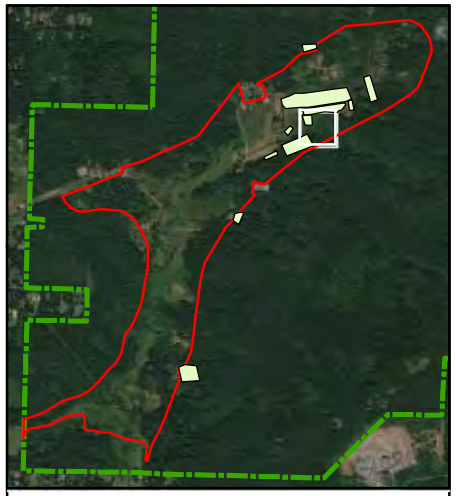
Clark County Public Works

FIGURE 8
REMOVAL ACTIONS AT
RAU 2A-19

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS





LEGEND

- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Central Valley Floor and Wetlands
- Special Conditions
- Road

Clark County Public Works

FIGURE 9
REMOVAL ACTIONS AT
RAU 2A-20

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS

RAU-2A-21-32-C
RAU-2A-21-31-C
RAU-2A-22-19-C
RAU-2A-22-19-E
RAU-2A-21-21-E
RAU-2A-22-14-E
RAU-2A-21-30-C
RAU-2A-21-29-N
RAU-2A-21-29-W
RAU-2A-21-29-C
RAU-2A-21-15-N
RAU-2A-21-15-C
RAU-2A-21-25-N
RAU-2A-21-25-C
RAU-2A-21-25-E
RAU-2A-21-25-S
RAU-2A-21-24-E
RAU-2A-21-24-C
RAU-2A-21-24-W
RAU-2A-21-23-E
RAU 2A-20

LEGEND

- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Special Conditions
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River
- Pop-up Target

N

0 100 200 400 Feet

Clark County Public Works

FIGURE 10
REMOVAL ACTIONS AT
RAU 2A-21 AND RAU 2A-22

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS

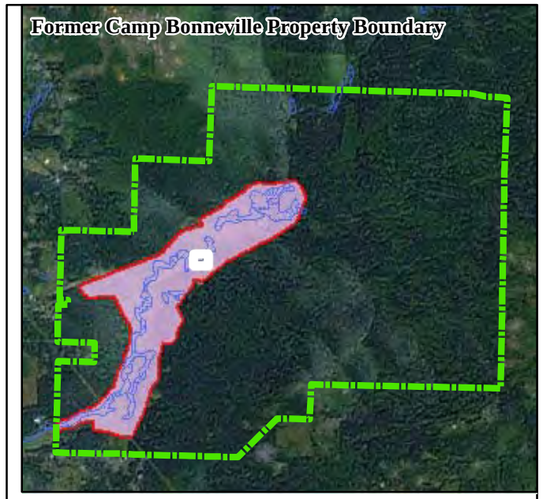
Results presented using the following convention:

16-015
(Sample Location ID)

160 mg/kg
(Total Lead in milligrams per kilogram)

0.033 mg/L
(Leachable Lead in milligrams per liter)

				16-038 75 mg/kg 0.005 U mg/L		
			16-033 100 mg/kg 0.011 mg/L	16-039 150 mg/kg 0.005 U mg/L	16-044 63 mg/kg 0.005 U mg/L	16-048 30 mg/kg 0.005 U mg/L
	16-023 200 mg/kg 0.019 mg/L	16-028 220 mg/kg 0.05 mg/L	16-034 170 mg/kg 0.035 mg/L	16-040 240 mg/kg 0.005 U mg/L	16-045 500 mg/kg 0.015 mg/L	16-049 560 mg/kg 0.0099 mg/L
16-014 170 mg/kg 0.025 mg/L	16-024 170 mg/kg 0.061 mg/L	16-029 230 mg/kg 0.066 mg/L	16-035 90 mg/kg 0.008 mg/L	16-041 340 mg/kg 0.01 mg/L	16-046 600 mg/kg 0.011 mg/L	16-050 660 mg/kg 0.012 mg/L
16-009 190 mg/kg 0.05 mg/L	16-015 160 mg/kg 0.033 mg/L	16-019 220 mg/kg 0.057 mg/L	16-025 170 mg/kg 0.029 mg/L	16-030 440 mg/kg 0.037 mg/L	16-036 620 mg/kg 0.02 mg/L	16-042 570 mg/kg 0.012 mg/L	16-047 590 mg/kg 0.023 mg/L
16-005 520 mg/kg 0.78 mg/L	16-010 400 mg/kg 0.1 mg/L	16-016 250 mg/kg 0.074 mg/L	16-020 180 mg/kg 0.084 mg/L	16-026 380 mg/kg 0.053 mg/L	16-031 610 mg/kg 0.29 mg/L	16-037 620 mg/kg 0.038 mg/L	16-043 350 mg/kg 0.0052 mg/L
16-002 510 mg/kg 0.054 mg/L	16-006 470 mg/kg 0.07 mg/L	16-011 230 mg/kg 0.07 mg/L	16-017 240 mg/kg 0.064 mg/L	16-021 320 mg/kg 0.017 mg/L	16-027 490 mg/kg 0.11 mg/L	16-032 450 mg/kg 0.23 mg/L	
16-001 430 mg/kg 0.042 mg/L	16-003 370 mg/kg 0.19 mg/L	16-007 420 mg/kg 0.12 mg/L	16-012 290 mg/kg 0.043 mg/L	16-018 270 mg/kg 0.11 mg/L	16-022 650 mg/kg 0.11 mg/L		
	16-004 280 mg/kg 0.4 mg/L	16-008 620 mg/kg 0.061 mg/L	16-013 330 mg/kg 0.071 mg/L				



LEGEND

- Lead-Impacted Fill Soil Area
- Berm
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River

Notes:
U indicates result is not detected.
Value provided is the reporting limit.

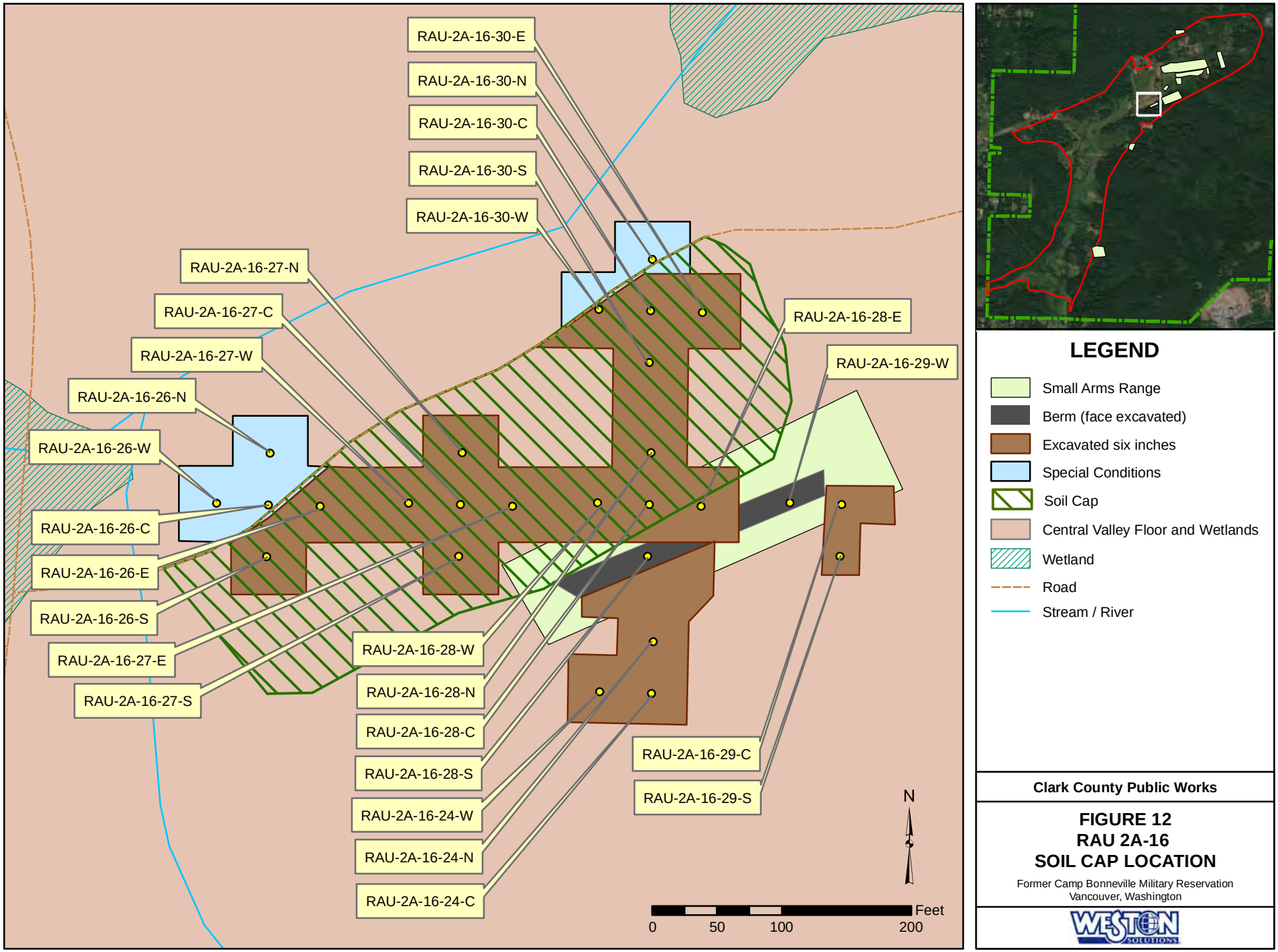
N

0 25 50 100 Feet

Clark County Public Works

FIGURE 11
RAU 2A-16
LEAD SAMPLE RESULTS
Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS



LEGEND

- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Special Conditions
- Soil Cap
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River

Clark County Public Works

FIGURE 12
RAU 2A-16
SOIL CAP LOCATION

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS

21-051
80 mg/kg
0.005 U mg/L

21-052
130 mg/kg
0.005 U mg/L

21-053
62 mg/kg
0.005 U mg/L

21-054
150 mg/kg
0.005 U mg/L

21-055
87 mg/kg
0.005 U mg/L

21-056
37 mg/kg
0.005 U mg/L

21-057
140 mg/kg
0.005 U mg/L

21-058
99 mg/kg
0.005 U mg/L

21-059
130 mg/kg
0.005 U mg/L

21-060
93 mg/kg
0.0058 mg/L

21-061
130 mg/kg
0.005 U mg/L

21-062
120 mg/kg
0.005 U mg/L

21-063
91 mg/kg
0.005 U mg/L

21-064
68 mg/kg
0.005 U mg/L

21-065
38 mg/kg
0.005 U mg/L

21-066
35 mg/kg
0.005 U mg/L

21-067
170 mg/kg
0.005 U mg/L

21-068
120 mg/kg
0.005 U mg/L

21-069
110 mg/kg
0.005 U mg/L

21-070
130 mg/kg
0.005 U mg/L

21-071
55 mg/kg
0.005 U mg/L

21-072
39 mg/kg
0.005 U mg/L

21-073
48 mg/kg
0.005 U mg/L

21-074
56 mg/kg
0.005 U mg/L

21-075
120 mg/kg
0.005 U mg/L

21-076
97 mg/kg
0.005 U mg/L

21-077
420 mg/kg
0.005 U mg/L

21-078
250 mg/kg
0.005 U mg/L

21-079
120 mg/kg
0.005 U mg/L

21-080
62 mg/kg
0.005 U mg/L

21-081
120 mg/kg
0.005 U mg/L

21-082
130 mg/kg
0.005 U mg/L

21-083
250 mg/kg
0.005 U mg/L

21-084
410 mg/kg
0.005 U mg/L

21-085
410 mg/kg
0.005 U mg/L

21-086
400 mg/kg
0.005 U mg/L

21-087
75 mg/kg
0.005 U mg/L

21-088
55 mg/kg
0.005 U mg/L

21-089
120 mg/kg
0.005 U mg/L

21-090
20 mg/kg
0.005 U mg/L

21-091
140 mg/kg
0.005 U mg/L

21-092
650 mg/kg
0.0056 mg/L

21-093
620 mg/kg
0.0068 mg/L

21-094
1700 mg/kg
0.03 mg/L

21-095
2600 mg/kg
0.011 mg/L

21-096
730 mg/kg
0.0081 mg/L

21-097
77 mg/kg
0.005 U mg/L

21-098
73 mg/kg
0.005 U mg/L

21-099
58 mg/kg
0.005 U mg/L

21-100
28 mg/kg
0.005 U mg/L

21-101
150 mg/kg
0.005 U mg/L

21-102
520 mg/kg
0.0059 mg/L

21-103
300 mg/kg
0.005 U mg/L

21-104
130 mg/kg
0.005 U mg/L

21-105
3200 mg/kg
0.01 mg/L

21-106
5400 mg/kg
0.042 mg/L

21-107
2100 mg/kg
0.03 mg/L

21-108
160 mg/kg
0.005 U mg/L

21-109
56 mg/kg
0.005 U mg/L

21-110
28 mg/kg
0.005 U mg/L

21-111
26 mg/kg
0.005 U mg/L

21-112
20 mg/kg
0.005 U mg/L

21-113
22 mg/kg
0.005 U mg/L

21-114
140 mg/kg
0.005 U mg/L

21-115
160 mg/kg
0.005 U mg/L

21-116
380 mg/kg
0.005 U mg/L

21-117
330 mg/kg
0.005 U mg/L

21-118
570 mg/kg
0.005 U mg/L

21-119
910 mg/kg
0.005 U mg/L

21-120
150 mg/kg
0.005 U mg/L

21-121
34 mg/kg
0.005 U mg/L

21-122
32 mg/kg
0.005 U mg/L

21-123
28 mg/kg
0.005 U mg/L

21-124
27 mg/kg
0.005 U mg/L

21-125
18 mg/kg
0.005 U mg/L

21-126
35 mg/kg
0.005 U mg/L

21-127
840 mg/kg
0.005 U mg/L

21-128
560 mg/kg
0.005 U mg/L

21-129
84 mg/kg
0.005 U mg/L

21-130
400 mg/kg
0.005 U mg/L

21-131
430 mg/kg
0.005 U mg/L

21-132
140 mg/kg
0.005 U mg/L

21-133
96 mg/kg
0.005 U mg/L

21-134
34 mg/kg
0.005 U mg/L

21-135
24 mg/kg
0.005 U mg/L

21-136
22 mg/kg
0.005 U mg/L

21-137
22 mg/kg
0.005 U mg/L

21-138
22 mg/kg
0.005 U mg/L

21-139
18 mg/kg
0.005 U mg/L

21-140
110 mg/kg
0.005 U mg/L

21-141
32 mg/kg
0.005 U mg/L

21-142
330 mg/kg
0.005 U mg/L

21-143
150 mg/kg
0.005 U mg/L

21-144
220 mg/kg
0.005 U mg/L

21-145
87 mg/kg
0.005 U mg/L

21-146
44 mg/kg
0.005 U mg/L

21-147
22 mg/kg
0.005 U mg/L

21-148
23 mg/kg
0.005 U mg/L

21-149
19 mg/kg
0.005 U mg/L

21-150
22 mg/kg
0.005 U mg/L

21-151
20 mg/kg
0.005 U mg/L

21-152
120 mg/kg
0.005 U mg/L

21-153
76 mg/kg
0.005 U mg/L

21-154
520 mg/kg
0.005 U mg/L

21-155
380 mg/kg
0.005 U mg/L

21-156
76 mg/kg
0.005 U mg/L

21-157
77 mg/kg
0.005 U mg/L

21-158
28 mg/kg
0.005 U mg/L

21-159
28 mg/kg
0.005 U mg/L

21-160
27 mg/kg
0.005 U mg/L

21-161
20 mg/kg
0.005 U mg/L

21-162
23 mg/kg
0.005 U mg/L

21-163
23 mg/kg
0.005 U mg/L

21-164
100 mg/kg
0.005 U mg/L

21-165
64 mg/kg
0.005 U mg/L

21-166
110 mg/kg
0.005 U mg/L

21-167
21 mg/kg
0.005 U mg/L

21-168
49 mg/kg
0.005 U mg/L

21-169
33 mg/kg
0.005 U mg/L

21-170
22 mg/kg
0.005 U mg/L

21-171
19 mg/kg
0.005 U mg/L

21-172
38 mg/kg
0.005 U mg/L

21-173
18 mg/kg
0.005 U mg/L

21-174
97 mg/kg
0.005 U mg/L

21-175
140 mg/kg
0.005 U mg/L

21-176
130 mg/kg
0.005 U mg/L

21-177
75 mg/kg
0.005 U mg/L

21-178
120 mg/kg
0.005 U mg/L

21-179
31 mg/kg
0.005 U mg/L

21-180
63 mg/kg
0.005 U mg/L

21-181
23 mg/kg
0.005 U mg/L

21-182
32 mg/kg
0.005 U mg/L

21-183
21 mg/kg
0.005 U mg/L

21-184
370 mg/kg
0.005 U mg/L

21-185
47 mg/kg
0.005 U mg/L

21-186
430 mg/kg
0.0065 U mg/L

21-187
42 mg/kg
0.005 U mg/L

21-188
61 mg/kg
0.005 U mg/L

21-189
32 mg/kg
0.005 U mg/L

21-190
22 mg/kg
0.005 U mg/L

21-191
19 mg/kg
0.005 U mg/L

21-192
21 mg/kg
0.005 U mg/L

21-193
180 mg/kg
0.005 U mg/L

21-194
37 mg/kg
0.005 U mg/L

21-195
90 mg/kg
0.005 U mg/L

21-196
220 mg/kg
0.005 U mg/L

21-197
150 mg/kg
0.005 U mg/L

21-198
31 mg/kg
0.005 U mg/L

21-199
26 mg/kg
0.005 U mg/L

21-200
26 mg/kg
0.005 U mg/L

21-201
21 mg/kg
0.005 U mg/L

21-202
120 mg/kg
0.005 U mg/L

21-203
81 mg/kg
0.005 U mg/L

21-204
76 mg/kg
0.005 U mg/L

21-205
76 mg/kg
0.005 U mg/L

21-206
58 mg/kg
0.005 U mg/L

21-207
41 mg/kg
0.005 U mg/L

21-208
26 mg/kg
0.005 U mg/L

21-209
160 mg/kg
0.005 U mg/L

21-210
95 mg/kg
0.005 U mg/L

21-211
62 mg/kg
0.005 U mg/L

21-212
100 mg/kg
0.005 U mg/L

21-213
49 mg/kg
0.005 U mg/L

21-214
38 mg/kg
0.005 U mg/L

21-215
30 mg/kg
0.005 U mg/L

21-216
150 mg/kg
0.005 U mg/L

21-217
140 mg/kg
0.005 U mg/L

21-218
100 mg/kg
0.005 U mg/L

21-219
75 mg/kg
0.005 U mg/L

21-220
29 mg/kg
0.005 U mg/L

21-221
110 mg/kg
0.005 U mg/L

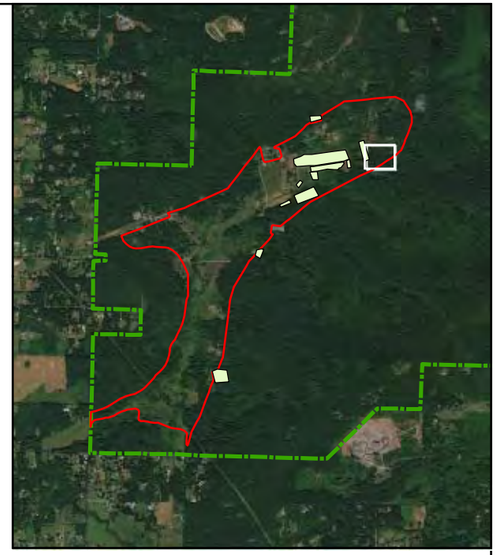
21-222
60 mg/kg
0.005 U mg/L

Results presented using the following convention:

21-098
(Sample Location ID)

73 mg/kg
(Total Lead in milligrams per kilogram)

0.005 U mg/L
(Leachable Lead in milligrams per liter)



LEGEND

- Lead-Impacted Overshoot Area
- Berm
- Central Valley Floor and Wetlands
- Wetland
- Road

Notes:
U indicates result is not detected.
Value provided is the reporting limit.

N

0 50 100 200 Feet

Clark County Public Works

FIGURE 13
RAU 2A-21
LEAD SAMPLE RESULTS

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS

RAU-2A-21-32-C
RAU-2A-21-31-C
RAU-2A-22-19-C
RAU-2A-22-19-E
RAU-2A-21-21-E
RAU-2A-22-14-E
RAU-2A-21-30-C
RAU-2A-21-29-N
RAU-2A-21-29-W
RAU-2A-21-29-C
RAU-2A-21-15-N
RAU-2A-21-15-C
RAU-2A-21-25-N
RAU-2A-21-25-C
RAU-2A-21-25-E
RAU-2A-21-25-S
RAU-2A-21-24-E
RAU-2A-21-24-C
RAU-2A-21-24-W
RAU-2A-21-23-E
RAU 2A-20

LEGEND

- Small Arms Range
- Berm (face excavated)
- Excavated six inches
- Special Conditions
- Soil Cap
- Central Valley Floor and Wetlands
- Wetland
- Road
- Stream / River
- Pop-up Target

N

0 100 200 400 Feet

Clark County Public Works

FIGURE 14
RAU 2A-21
SOIL CAP LOCATION

Former Camp Bonneville Military Reservation
Vancouver, Washington

WESTON SOLUTIONS

TABLES

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS001		16-SS002		16-SS003		16-SS004		16-SS005		16-SS006	
Location ID		16-001		16-002		16-003		16-004		16-005		16-006	
Laboratory Sample ID		287077-001		287077-002		287077-003		287077-004		287077-005		287077-006	
Sample Date		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**430**		**510**		**370**		**280**		**520**		**470**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.042**		**0.054**		**0.19**		**0.4**		**0.78**		**0.07**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS007		16-SS008		16-SS009		16-SS010		16-SS011		16-SS012	
Location ID		16-007		16-008		16-009		16-010		16-011		16-012	
Laboratory Sample ID		287077-007		287077-008		287077-009		287077-010		287077-011		287077-012	
Sample Date		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**420**		**620**		**190**		**400**		**230**		**290**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.12**		**0.061**		**0.05**		**0.1**		**0.07**		**0.043**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS013		16-SS014		16-SS015		16-SS016		16-SS017		16-SS018	
Location ID		16-013		16-014		16-015		16-016		16-017		16-018	
Laboratory Sample ID		287077-013		287077-014		287077-015		287077-016		287077-017		287077-018	
Sample Date		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**330**		**170**		**160**		**250**		**240**		**270**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.071**		**0.025**		**0.033**		**0.074**		**0.064**		**0.11**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS019		16-SS020		16-SS021		16-SS022		16-SS023		16-SS024	
Location ID		16-019		16-020		16-021		16-022		16-023		16-024	
Laboratory Sample ID		287077-019		287077-020		287077-021		287077-022		287077-023		287077-024	
Sample Date		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017		3/13/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**220**		**180**		**320**		**650**		**200**		**170**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.057**		**0.084**		**0.017**		**0.11**		**0.019**		**0.061**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS025		16-SS026		16-SS027		16-SS028		16-SS029		16-SS030	
Location ID		16-025		16-026		16-027		16-028		16-029		16-030	
Laboratory Sample ID		287077-025		287077-026		287077-027		287077-028		287077-029		287077-030	
Sample Date		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/14/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**170**		**380**		**490**		**220**		**230**		**440**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.029**		**0.053**		**0.11**		**0.05**		**0.066**		**0.037**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS031		16-SS032		16-SS033		16-SS034		16-SS035		16-SS036	
Location ID		16-031		16-032		16-033		16-034		16-035		16-036	
Laboratory Sample ID		287077-031		287077-032		287077-033		287077-034		287077-035		287077-036	
Sample Date		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/14/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**610**		**450**		**100**		**170**		**90**		**620**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.29**		**0.23**		**0.011**		**0.035**		**0.008**		**0.02**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS037		16-SS038		16-SS039		16-SS040		16-SS041		16-SS042	
Location ID		16-037		16-038		16-039		16-040		16-041		16-042	
Laboratory Sample ID		287077-037		287077-038		287077-039		287077-040		287077-041		287077-042	
Sample Date		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/14/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**620**		**75**		**150**		**240**		**340**		**570**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.038**		0.005	U	0.005	U	0.005	U	**0.01**		**0.012**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16											
Field Sample ID		16-SS043		16-SS044		16-SS045		16-SS046		16-SS047		16-SS048	
Location ID		16-043		16-044		16-045		16-046		16-047		16-048	
Laboratory Sample ID		287077-043		287077-044		287077-045		287077-046		287077-047		287077-048	
Sample Date		3/14/2017		3/14/2017		3/14/2017		3/14/2017		3/15/2017		3/15/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**350**		**63**		**500**		**600**		**590**		**30**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.0052**		0.005	U	**0.015**		**0.011**		**0.023**		0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-16				RAU 2A-21							
Field Sample ID		16-SS049		16-SS050		21-SS051		21-SS052		21-SS053		21-SS054	
Location ID		16-049		16-050		21-051		21-052		21-053		21-054	
Laboratory Sample ID		287077-049		287077-050		287252-011		287252-010		287252-009		287252-008	
Sample Date		3/15/2017		3/15/2017		3/16/2017		3/16/2017		3/16/2017		3/16/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**560**		**660**		**80**		**130**		**62**		**150**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	**0.0099**		**0.012**		0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS055		21-SS056		21-SS057		21-SS058		21-SS059		21-SS060	
Location ID		21-055		21-056		21-057		21-058		21-059		21-060	
Laboratory Sample ID		287252-007		287252-006		287252-005		287252-004		287252-003		287082-001	
Sample Date		3/16/2017		3/16/2017		3/16/2017		3/16/2017		3/16/2017		3/15/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**87**		**37**		**140**		**99**		**130**		**93**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.0058**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS061		21-SS062		21-SS063		21-SS064		21-SS065		21-SS066	
Location ID		21-061		21-062		21-063		21-064		21-065		21-066	
Laboratory Sample ID		287082-002		287082-003		287082-004		287082-005		287082-006		287082-007	
Sample Date		3/15/2017		3/15/2017		3/15/2017		3/15/2017		3/15/2017		3/15/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**130**		**120**		**91**		**68**		**38**		**35**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS067		21-SS068		21-SS069		21-SS070		21-SS071		21-SS072	
Location ID		21-067		21-068		21-069		21-070		21-071		21-072	
Laboratory Sample ID		287082-008		287082-009		287082-010		287082-011		287082-012		287252-023	
Sample Date		3/15/2017		3/15/2017		3/15/2017		3/15/2017		3/15/2017		3/15/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**170**		**120**		**110**		**130**		**55**		**39**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS073		21-SS074		21-SS075		21-SS076		21-SS077		21-SS078	
Location ID		21-073		21-074		21-075		21-076		21-077		21-078	
Laboratory Sample ID		287082-013		287252-002		287252-001		287082-014		287082-015		287082-016	
Sample Date		3/15/2017		3/15/2017		3/15/2017		3/15/2017		3/15/2017		3/15/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**48**		**56**		**120**		**97**		**420**		**250**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS079		21-SS080		21-SS081		21-SS082		21-SS083		21-SS084	
Location ID		21-079		21-080		21-081		21-082		21-083		21-084	
Laboratory Sample ID		287082-017		287082-018		287082-019		287252-016		287252-015		287252-014	
Sample Date		3/15/2017		3/15/2017		3/15/2017		3/16/2017		3/16/2017		3/16/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**120**		**62**		**120**		**130**		**250**		**410**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS085		21-SS086		21-SS087		21-SS088		21-SS089		21-SS090	
Location ID		21-085		21-086		21-087		21-088		21-089		21-090	
Laboratory Sample ID		287252-013		287252-012		287252-017		287252-018		287252-019		287252-020	
Sample Date		3/16/2017		3/16/2017		3/16/2017		3/16/2017		3/16/2017		3/16/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**410**		**400**		**75**		**55**		**120**		**20**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS091		21-SS092		21-SS093		21-SS094		21-SS095		21-SS096	
Location ID		21-091		21-092		21-093		21-094		21-095		21-096	
Laboratory Sample ID		287252-032		287252-031		287252-030		287252-029		287252-028		287252-027	
Sample Date		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**140**		**650**		**620**		**1700**		**2600**		**730**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	**0.0056**		**0.0068**		**0.030**		**0.011**		**0.0081**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS097		21-SS098		21-SS099		21-SS100		21-SS101		21-SS102	
Location ID		21-097		21-098		21-099		21-100		21-101		21-102	
Laboratory Sample ID		287252-021		287252-022		287252-024		287252-025		287252-026		287252-038	
Sample Date		3/16/2017		3/16/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**77**		**73**		**58**		**28**		**150**		**520**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	**0.0059**	

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS103		21-SS104		21-SS105		21-SS106		21-SS107		21-SS108	
Location ID		21-103		21-104		21-105		21-106		21-107		21-108	
Laboratory Sample ID		287252-037		287252-036		287252-035		287252-034		287252-033		287252-039	
Sample Date		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**300**		**130**		**3200**		**5400**		**2100**		**160**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	**0.010**		**0.042**		**0.030**		0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS109		21-SS110		21-SS111		21-SS112		21-SS113		21-SS114	
Location ID		21-109		21-110		21-111		21-112		21-113		21-114	
Laboratory Sample ID		287252-040		287252-041		287252-042		287252-043		287252-044		287362-005	
Sample Date		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**56**		**28**		**26**		**20**		**22**		**140**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS115		21-SS116		21-SS117		21-SS118		21-SS119		21-SS120	
Location ID		21-115		21-116		21-117		21-118		21-119		21-120	
Laboratory Sample ID		287362-004		287362-003		287362-002		287362-001		287252-045		287362-006	
Sample Date		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017		3/20/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**160**		**380**		**330**		**570**		**910**		**150**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

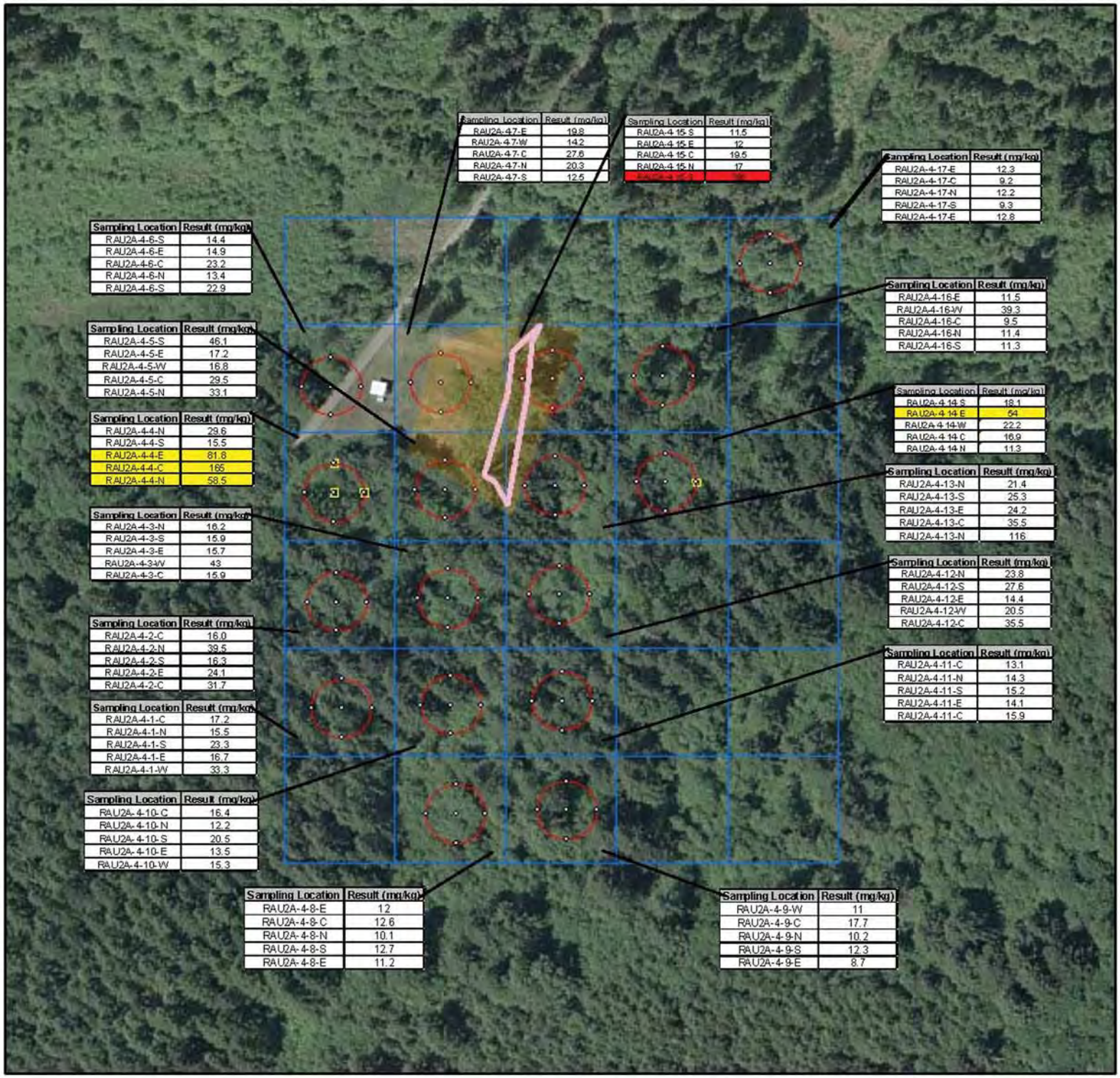
Table 1
Total and Leachable Lead Results Summary
Remedial Action Unit 2A-16 and Remedial Action Unit 2A-21

		RAU 2A-21											
Field Sample ID		21-SS121		21-SS122		21-SS123		21-SS124		21-SS125		21-SS126	
Location ID		21-121		21-122		21-123		21-124		21-125		21-126	
Laboratory Sample ID		287362-007		287362-008		287362-009		287362-010		287362-011		287362-012	
Sample Date		3/20/2017		3/21/2017		3/21/2017		3/21/2017		3/21/2017		3/21/2017	
Sample Type	**Cleanup Level**	Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate		Soil/Leachate	
			Qual		Qual		Qual		Qual		Qual		Qual
Total Lead Method 3050B/6010C	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Lead	3,000	**34**		**32**		**28**		**27**		**18**		**35**	
Leachable Lead Method 1312/3010A/6010C	mg/L	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Leachable Lead	0.15	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U	0.005	U

Notes:
mg/kg milligrams per kilogram
mg/L milligrams per liter
U not detected (result provided is the sample quantitation limit)
Bold results are detected values

Shaded results are greater than the cleanup level

APPENDIX A
REMEDIAL INVESTIGATION SAMPLE LOCATIONS AND RESULTS



Sampling Location	Result (mg/kg)
RAU2A-4-6-S	14.4
RAU2A-4-6-E	14.9
RAU2A-4-6-C	23.2
RAU2A-4-6-N	13.4
RAU2A-4-6-S	22.9

Sampling Location	Result (mg/kg)
RAU2A-4-5-S	46.1
RAU2A-4-5-E	17.2
RAU2A-4-5-W	16.8
RAU2A-4-5-C	29.5
RAU2A-4-5-N	33.1

Sampling Location	Result (mg/kg)
RAU2A-4-4-N	29.6
RAU2A-4-4-S	15.5
RAU2A-4-4-E	81.8
RAU2A-4-4-C	185
RAU2A-4-4-N	58.5

Sampling Location	Result (mg/kg)
RAU2A-4-3-N	16.2
RAU2A-4-3-S	15.9
RAU2A-4-3-E	15.7
RAU2A-4-3-W	43
RAU2A-4-3-C	15.9

Sampling Location	Result (mg/kg)
RAU2A-4-2-C	16.0
RAU2A-4-2-N	39.5
RAU2A-4-2-S	16.3
RAU2A-4-2-E	24.1
RAU2A-4-2-C	31.7

Sampling Location	Result (mg/kg)
RAU2A-4-1-C	17.2
RAU2A-4-1-N	15.5
RAU2A-4-1-S	23.3
RAU2A-4-1-E	16.7
RAU2A-4-1-W	33.3

Sampling Location	Result (mg/kg)
RAU2A-4-10-C	16.4
RAU2A-4-10-N	12.2
RAU2A-4-10-S	20.5
RAU2A-4-10-E	13.5
RAU2A-4-10-W	15.3

Sampling Location	Result (mg/kg)
RAU2A-4-8-E	12
RAU2A-4-8-C	12.6
RAU2A-4-8-N	10.1
RAU2A-4-8-S	12.7
RAU2A-4-8-E	11.2

Sampling Location	Result (mg/kg)
RAU2A-4-9-W	11
RAU2A-4-9-C	17.7
RAU2A-4-9-N	10.2
RAU2A-4-9-S	12.3
RAU2A-4-9-E	8.7

Sampling Location	Result (mg/kg)
RAU2A-4-7-E	19.8
RAU2A-4-7-W	14.2
RAU2A-4-7-C	27.6
RAU2A-4-7-N	20.3
RAU2A-4-7-S	12.5

Sampling Location	Result (mg/kg)
RAU2A-4-15-S	11.5
RAU2A-4-15-E	12
RAU2A-4-15-C	19.5
RAU2A-4-15-N	17
RAU2A-4-15-W	18

Sampling Location	Result (mg/kg)
RAU2A-4-17-E	12.3
RAU2A-4-17-C	9.2
RAU2A-4-17-N	12.2
RAU2A-4-17-S	9.3
RAU2A-4-17-E	12.8

Sampling Location	Result (mg/kg)
RAU2A-4-16-E	11.5
RAU2A-4-16-W	39.3
RAU2A-4-16-C	9.5
RAU2A-4-16-N	11.4
RAU2A-4-16-S	11.3

Sampling Location	Result (mg/kg)
RAU2A-4-14-S	18.1
RAU2A-4-14-E	54
RAU2A-4-14-W	22.2
RAU2A-4-14-C	16.9
RAU2A-4-14-N	11.3

Sampling Location	Result (mg/kg)
RAU2A-4-13-N	21.4
RAU2A-4-13-S	25.3
RAU2A-4-13-E	24.2
RAU2A-4-13-C	35.5
RAU2A-4-13-N	116

Sampling Location	Result (mg/kg)
RAU2A-4-12-N	23.8
RAU2A-4-12-S	27.6
RAU2A-4-12-E	14.4
RAU2A-4-12-W	20.5
RAU2A-4-12-C	35.5

Sampling Location	Result (mg/kg)
RAU2A-4-11-C	13.1
RAU2A-4-11-N	14.3
RAU2A-4-11-S	15.2
RAU2A-4-11-E	14.1
RAU2A-4-11-C	15.9

Figure 3-3
Range Floor Grid Sample Locations and Results - Combat Pistol Range

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-4 All Sampling Locations
- RAU-2A-4 40 ft Ring from Center Points
- Grids
- 10 ft Box for RCRA Excavation Points
- 10 ft Box for MTCA Excavation Points

Note (2018): Sampling Locations are incorrectly labeled on this figure. They should be labeled from top down: -C, -N, -S, -E, -W to match data presented in tables.

N W E S

0 40 80 160 240 320 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

Combat Pistol Range (RAU-2A-4)
Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

Figure 3-4
Range Floor Grid Sample Locations and Results - Undocumented Pistol Range

Legend
- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-15 All Sampling Locations
- RAU-2A-15 40 ft Ring from Center Points
- Grids
- 10 ft Box for MTCA Excavation Points

N
W E
S

0 12.5 25 50 75 100 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA INTERNATIONAL, INC.

Undocumented Pistol Range (RAU-2A-15)
Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

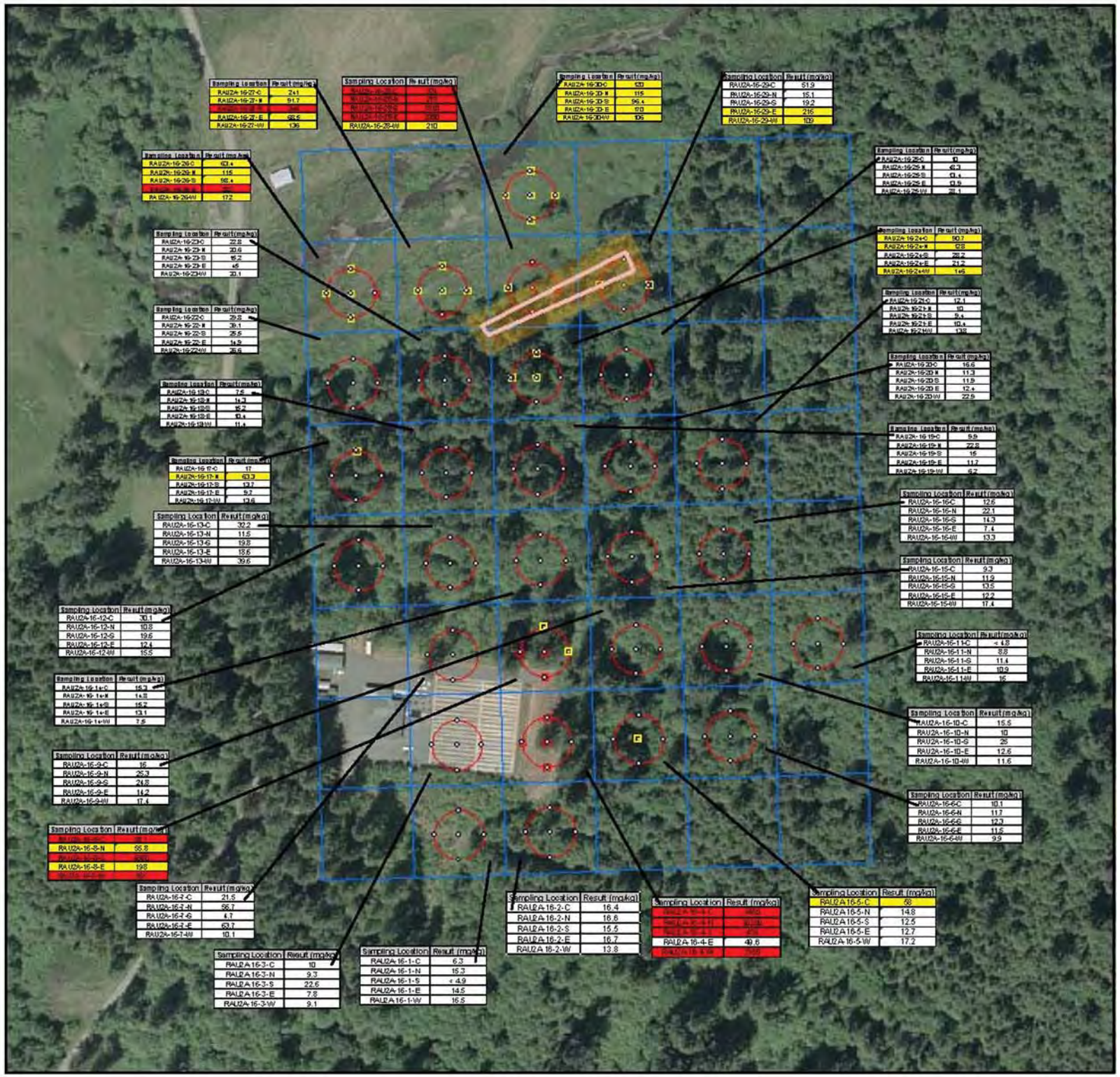


Figure 3-5
Range Floor Grid Sample Locations and Results - 1,000-inch Rifle Range & Machine Gun Range

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU_2A_16_All_Sampling_Stateplane
- RAU-2A-16 40 ft Ring from Center Points
- Grids
- 10 ft Box for RCRA Excavation Points
- 10 ft Box for MTCA Excavation Points

N
W E
S

0 50 100 200 300 400 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

1,000-ft Rifle Range/Machine Gun Range (RAU-2A-16) Sampling Locations

(This may be the 1,000 inch range)

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

Figure 3-6
Range Floor Grid Sample Locations and Results - 25-meter M60 and Pistol Range

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-17 All Sampling Locations
- RAU-2A-17 40 ft Ring from Center Points
- Grids
- 10 ft Box for MTCA Excavation Points

N
W E
S

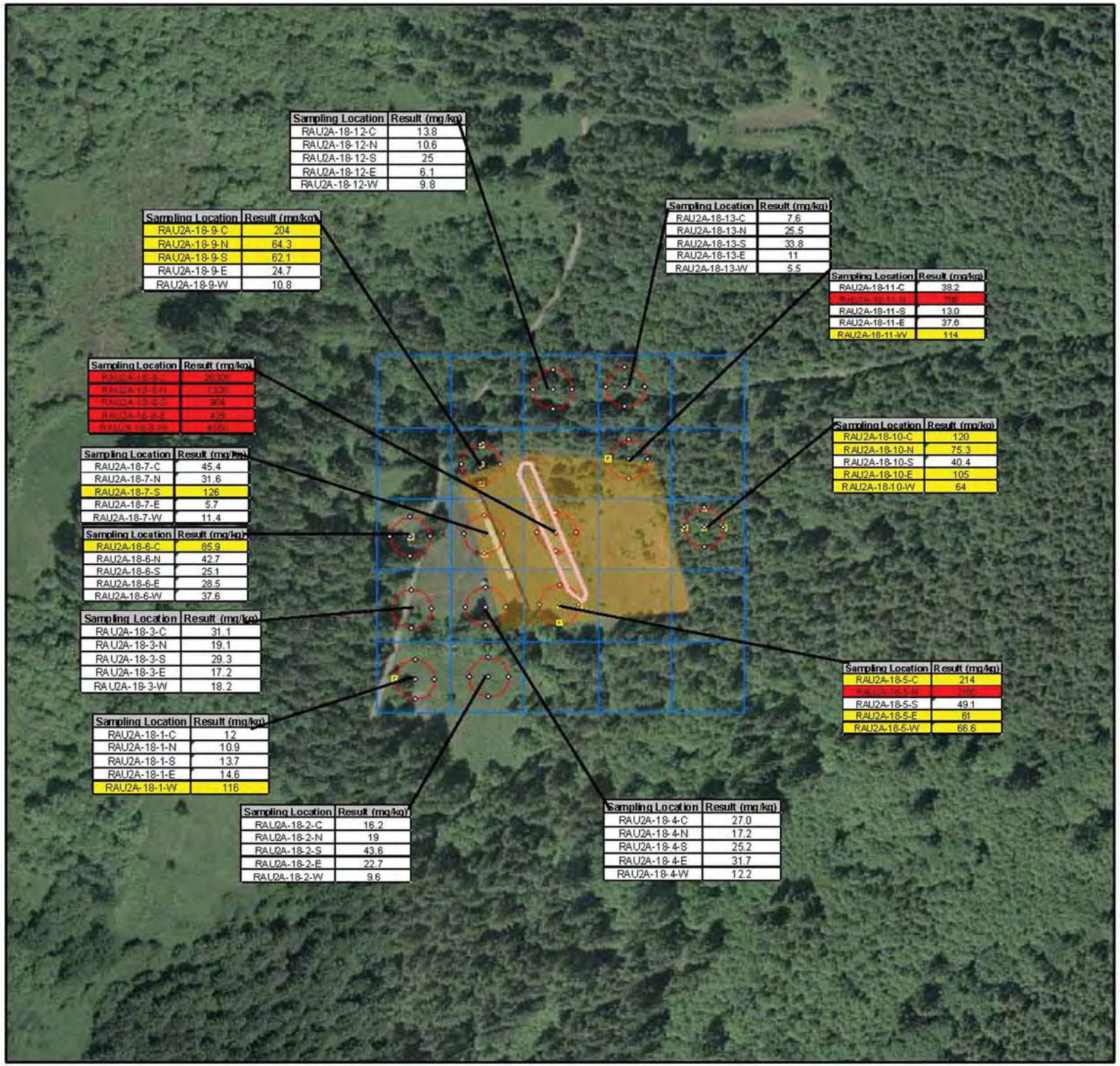
0 25 50 100 150 200 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

25-meter M60/Pistol Range (RAU-2A-17)
Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES



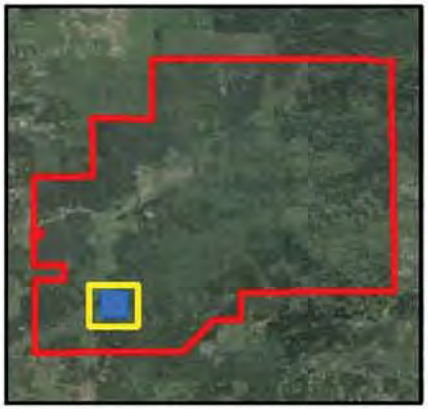


Figure 3-7
Range Floor Grid Sample Locations and Results - 25-meter Machine Gun Range

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-18 All Sampling Points
- RAU-2A-18 40 ft Ring from Center Points
- Grids
- 10 ft Box for MTCA Excavation Points
- 10 ft Box for RCRA Excavation Points

N
W E
S

0 60 120 240 360 480
Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

25 meter Machine Gun Range (RAU-2A-18)
Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

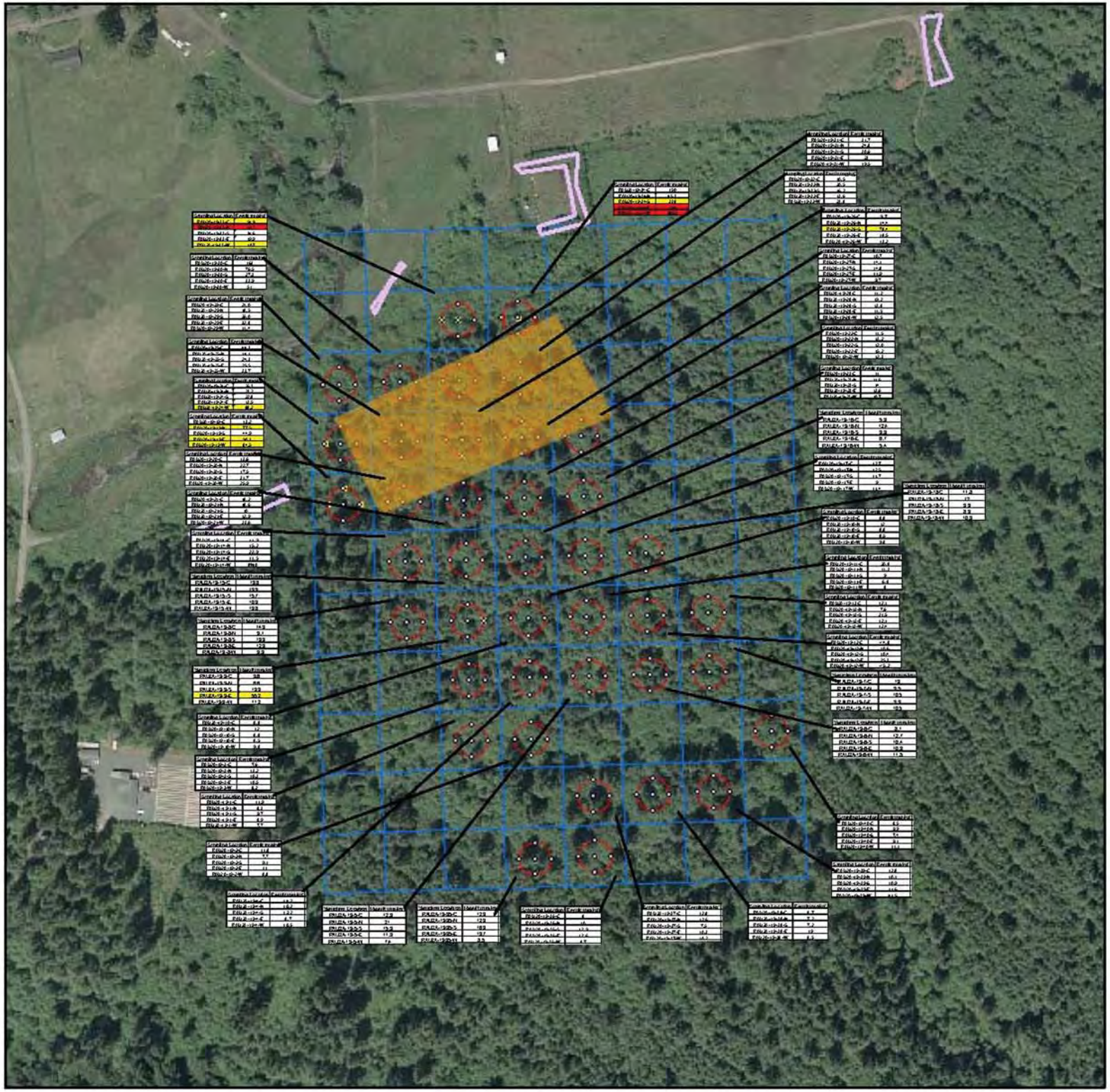


Figure 3-8
Range Floor Grid Sample Locations and Results - 25-meter Record Firing and Field Firing Range

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-19 All Sampling Locations
- RAU-2A-19 40 ft Ring from Center Points
- Grids
- 10 ft Box for MTCA Excavation Points
- 10 ft Box for RCRA Excavation Points

N
W E
S

0 70 140 280 420 560 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

25-meter Record Firing/Field Firing Range
(RAU 2A-19) Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

Figure 3-9
Range Floor Grid Sample Locations and Results - Field Firing Ranges No. 1 and No. 2

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-20 All Sampling Locations
- RAU-2A-20 40 ft Ring from Center Points
- Grids
- 10 ft Box for RCRA Excavation Points
- 10 ft Box for MTCA Excavation Points

N
W E
S

0 50 100 200 300 400 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

Field Firing Ranges No. 1 & 2
(RAU-2A-20) Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

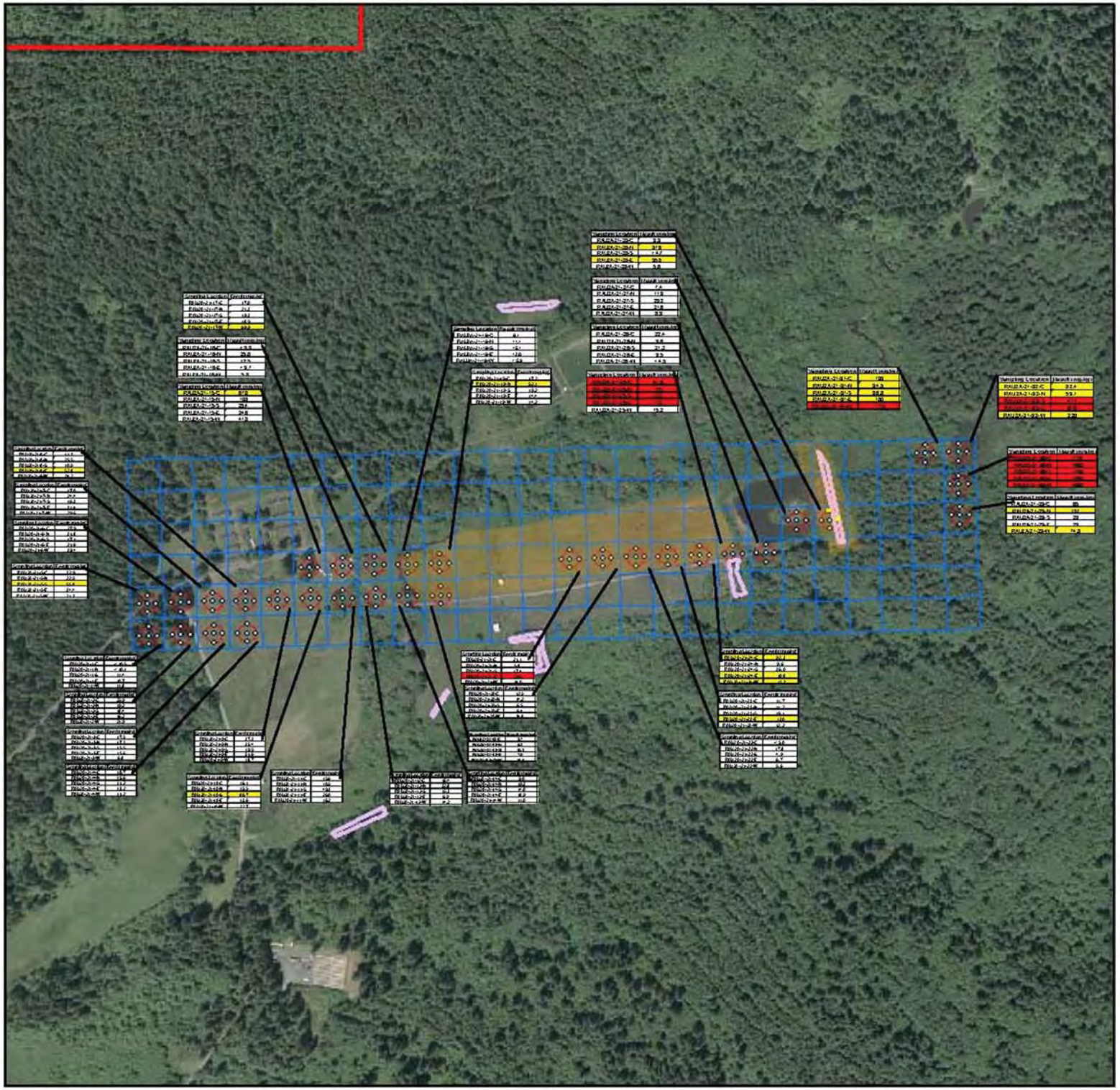


Figure 3-10
Range Floor Grid Sample Locations and Results - Rifle Ranges No. 1 and No. 2

Legend

- Camp Bonneville Property Perimeter
- Firing Ranges
- Berm
- RAU-2A-21 All Sampling Locations
- RAU-2A-21 40 ft Ring from Center Points
- Grids
- 10 ft Box for RCRA Excavation Points
- 10 ft Box for MTCA Excavation Points

N
W E
S

0 140 280 560 840 1,120
Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

Rifle Ranges No.1 and No. 2 (RAU-2A-21)
Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

Figure 3-11
Range Floor Grid Sample Locations and Results - Field Fire Ranges No. 1 and No. 2

Legend

- Camp Bonneville Property Perimeter
- Berm
- 10 ft Box for RCRA Excavation Points
- 10 ft Box for MTCA Excavation Points
- RAU-2A-22 All Sampling Locations
- RAU-2A-22 40 ft Ring from Center Points
- Grids

These samples are in the wrong locations, but are according to the RI/FS locations.

N
W E
S

0 55 110 220 330 440 Feet

MKM Engineers, Inc.
4153 Bluebonnett Drive
Stafford, TX 77477

PIKA

Field Fire Ranges No. 1 and No. 2 (RAU 2A-22) Sampling Locations

Drawn On: 5/23/2007 Drawn By: QX Reviewed By: ES

Grid Data Analysis Summary
(Volume Estimates Based on Hotspot Removal)

		Individual Sample Summary			Grid Category Summary					Waste Volume	
Range	RAU	51-118 (ppm)	119-250 (ppm)	251 and > (ppm)	Cat 1 Grids	Cat 2 Grids	Cat 3 Grids	Cat 4 Grids	Cat 5 Grids	MTCA Volume (yds^3)	RCRA Volume (yds^3)
Combat Pistol Range	2A-4	4	1	1	13	2	1	1	0	60.75	81.00
Undocumented Pistol	2A-15	1	1	0	0	0	1	0	0	40.50	0.00
1,000-inch Rifle Range/Machine Gun Range	2A-16	16	11	13	19	3	2	3	2	1,377.00	1,134.00
25-meter M60/Pistol Range	2A-17	3	2	0	1	2	1	0	0	20.25	0.00
25-meter Machine Gun Range	2A-18	9	4	7	6	2	2	1	2	546.75	567.00
25-meter Record Firing Ranges	2A-19	10	3	3	33	3	2	1	1	526.50	243.00
Field Firing Ranges	2A-20	2	4	4	10	2	1	1	1	344.25	324.00
Rifle Ranges No. 1 & No. 2	2A-21	19	9	9	16	7	4	1	3	1,073.25	729.00
Field Fire Ranges No. 1 & No. 2	2A-22	12	1	1	13	7	1	0	1	40.50	81.00
Totals		**76**	**36**	**38**	**111**	**28**	**15**	**8**	**10**	**4,029.75**	**3,159.00**

Assumptions

- *Grid size is 130-foot x 130-foot.*
- *Volumes are based upon a fluff factor of 1.3.*
- *The entire grid will be excavated for Category 5. Category 5 volume removed is 405 cubic yards.*
- *A 58-foot x 58-foot x 0.5 -foot area would be excavated around each sample location when the grid is Category 4.*
- *A 29-foot x 29-foot x 0.5 -foot area would be excavated around each sample location when the grid is Category 3*
- *Category 4 volume removed for estimate is 81 cubic yards per hot spot.*
- *Category 3 volume removed for estimate is 20.25 cubic yards per hot spot.*

Combat Pistol Range (RAU 2A-4)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Combat Pistol Range	2A-4	1	C	17.2	mg/Kg		21.20	1		
Combat Pistol Range	2A-4	1	N	15.5	mg/Kg					
Combat Pistol Range	2A-4	1	E	23.3	mg/Kg					
Combat Pistol Range	2A-4	1	S	16.7	mg/Kg					
Combat Pistol Range	2A-4	1	W	33.3	mg/Kg					
Combat Pistol Range	2A-4	2	C	16	mg/Kg		25.52	1		
Combat Pistol Range	2A-4	2	N	39.5	mg/Kg					
Combat Pistol Range	2A-4	2	E	16.3	mg/Kg					
Combat Pistol Range	2A-4	2	S	24.1	mg/Kg					
Combat Pistol Range	2A-4	2	W	31.7	mg/Kg					
Combat Pistol Range	2A-4	3	C	16.2	mg/Kg		21.34	1		
Combat Pistol Range	2A-4	3	N	15.9	mg/Kg					
Combat Pistol Range	2A-4	3	E	15.7	mg/Kg					
Combat Pistol Range	2A-4	3	S	43	mg/Kg					
Combat Pistol Range	2A-4	3	W	15.9	mg/Kg					
Combat Pistol Range	2A-4	4	C	29.6	mg/Kg		70.08	3	60.75	
Combat Pistol Range	2A-4	4	N	15.5	mg/Kg					
Combat Pistol Range	2A-4	4	E	81.8	mg/Kg					
Combat Pistol Range	2A-4	4	S	165	mg/Kg					
Combat Pistol Range	2A-4	4	W	58.5	mg/Kg					
Combat Pistol Range	2A-4	5	C	46.1	mg/Kg		28.54	1		
Combat Pistol Range	2A-4	5	N	17.2	mg/Kg					
Combat Pistol Range	2A-4	5	E	16.8	mg/Kg					
Combat Pistol Range	2A-4	5	S	29.5	mg/Kg					
Combat Pistol Range	2A-4	5	W	33.1	mg/Kg					
Combat Pistol Range	2A-4	6	C	14.4	mg/Kg		17.76	1		
Combat Pistol Range	2A-4	6	N	14.9	mg/Kg					
Combat Pistol Range	2A-4	6	E	23.2	mg/Kg					
Combat Pistol Range	2A-4	6	S	13.4	mg/Kg					
Combat Pistol Range	2A-4	6	W	22.9	mg/Kg					
Combat Pistol Range	2A-4	7	C	19.8	mg/Kg		18.88	1		
Combat Pistol Range	2A-4	7	N	14.2	mg/Kg					
Combat Pistol Range	2A-4	7	E	27.6	mg/Kg					
Combat Pistol Range	2A-4	7	S	20.3	mg/Kg					
Combat Pistol Range	2A-4	7	W	12.5	mg/Kg					
Combat Pistol Range	2A-4	8	C	12	mg/Kg		11.72	1		
Combat Pistol Range	2A-4	8	N	12.6	mg/Kg					
Combat Pistol Range	2A-4	8	E	10.1	mg/Kg					
Combat Pistol Range	2A-4	8	S	12.7	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Combat Pistol Range (RAU 2A-4)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Combat Pistol Range	2A-4	8	W	11.2	mg/Kg					
Combat Pistol Range	2A-4	9	C	11	mg/Kg		11.98	1		
Combat Pistol Range	2A-4	9	N	17.7	mg/Kg					
Combat Pistol Range	2A-4	9	E	10.2	mg/Kg					
Combat Pistol Range	2A-4	9	S	12.3	mg/Kg					
Combat Pistol Range	2A-4	9	W	8.7	mg/Kg					
Combat Pistol Range	2A-4	10	C	16.4	mg/Kg		15.58	1		
Combat Pistol Range	2A-4	10	N	12.2	mg/Kg					
Combat Pistol Range	2A-4	10	E	20.5	mg/Kg					
Combat Pistol Range	2A-4	10	S	13.5	mg/Kg					
Combat Pistol Range	2A-4	10	W	15.3	mg/Kg					
Combat Pistol Range	2A-4	11	C	13.1	mg/Kg		14.52	1		
Combat Pistol Range	2A-4	11	N	14.3	mg/Kg					
Combat Pistol Range	2A-4	11	E	15.2	mg/Kg					
Combat Pistol Range	2A-4	11	S	14.1	mg/Kg					
Combat Pistol Range	2A-4	11	W	15.9	mg/Kg					
Combat Pistol Range	2A-4	12	C	23.8	mg/Kg		24.36	1		
Combat Pistol Range	2A-4	12	N	27.6	mg/Kg					
Combat Pistol Range	2A-4	12	E	14.4	mg/Kg					
Combat Pistol Range	2A-4	12	S	20.5	mg/Kg					
Combat Pistol Range	2A-4	12	W	35.5	mg/Kg					
Combat Pistol Range	2A-4	13	C	21.4	mg/Kg		44.48	2		
Combat Pistol Range	2A-4	13	N	25.3	mg/Kg					
Combat Pistol Range	2A-4	13	E	24.2	mg/Kg					
Combat Pistol Range	2A-4	13	S	35.5	mg/Kg					
Combat Pistol Range	2A-4	13	W	116	mg/Kg					
Combat Pistol Range	2A-4	14	C	18.1	mg/Kg		24.50	2		
Combat Pistol Range	2A-4	14	N	54	mg/Kg					
Combat Pistol Range	2A-4	14	E	22.2	mg/Kg					
Combat Pistol Range	2A-4	14	S	16.9	mg/Kg					
Combat Pistol Range	2A-4	14	W	11.3	mg/Kg					
Combat Pistol Range	2A-4	15	C	11.5	mg/Kg		169.00	4		81
Combat Pistol Range	2A-4	15	N	12	mg/Kg					
Combat Pistol Range	2A-4	15	E	19.5	mg/Kg					
Combat Pistol Range	2A-4	15	S	17	mg/Kg					
Combat Pistol Range	2A-4	15	W	785	mg/Kg	*				
Combat Pistol Range	2A-4	16	C	11.5	mg/Kg		16.60	1		
Combat Pistol Range	2A-4	16	N	39.3	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Combat Pistol Range (RAU 2A-4)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Combat Pistol Range	2A-4	16	E	9.5	mg/Kg					
Combat Pistol Range	2A-4	16	S	11.4	mg/Kg					
Combat Pistol Range	2A-4	16	W	11.3	mg/Kg					
Combat Pistol Range	2A-4	17	C	12.3	mg/Kg		11.16	1		
Combat Pistol Range	2A-4	17	N	9.2	mg/Kg					
Combat Pistol Range	2A-4	17	E	12.2	mg/Kg					
Combat Pistol Range	2A-4	17	S	9.3	mg/Kg					
Combat Pistol Range	2A-4	17	W	12.8	mg/Kg					
								Totals	**60.75**	**81**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Undocumented Pistol Range (RAU 2A-15)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Undocumented Pistol Range	2A-15	1	C	34.6	mg/Kg		64.8	3	40.5	
Undocumented Pistol Range	2A-15	1	N	86	mg/Kg					
Undocumented Pistol Range	2A-15	1	S	27	mg/Kg	*				
Undocumented Pistol Range	2A-15	1	E	154	mg/Kg					
Undocumented Pistol Range	2A-15	1	W	22.6	mg/Kg					
								Totals	**40.5**	**0**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

1,000-inch Rifle Range/Machine Gun Range (RAU 2A-16)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
1,000-inch Rifle Range	2A-16	1	C	6.3	mg/Kg		10.5	1		
1,000-inch Rifle Range	2A-16	1	N	15.3	mg/Kg					
1,000-inch Rifle Range	2A-16	1	E	0.0	mg/Kg					
1,000-inch Rifle Range	2A-16	1	S	14.5	mg/Kg					
1,000-inch Rifle Range	2A-16	1	W	16.5	mg/Kg					
1,000-inch Rifle Range	2A-16	2	C	16.4	mg/Kg		15.8	1		
1,000-inch Rifle Range	2A-16	2	N	16.6	mg/Kg					
1,000-inch Rifle Range	2A-16	2	E	15.5	mg/Kg					
1,000-inch Rifle Range	2A-16	2	S	16.7	mg/Kg					
1,000-inch Rifle Range	2A-16	2	W	13.8	mg/Kg					
1,000-inch Rifle Range	2A-16	3	C	10.0	mg/Kg		11.8	1		
1,000-inch Rifle Range	2A-16	3	N	9.3	mg/Kg					
1,000-inch Rifle Range	2A-16	3	E	22.6	mg/Kg					
1,000-inch Rifle Range	2A-16	3	S	7.8	mg/Kg					
1,000-inch Rifle Range	2A-16	3	W	9.1	mg/Kg					
1,000-inch Rifle Range	2A-16	4	C	3,450.0	mg/Kg	*	3,297.5	5		405
1,000-inch Rifle Range	2A-16	4	N	10,200.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	4	E	438.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	4	S	49.6	mg/Kg	*				
1,000-inch Rifle Range	2A-16	4	W	2,350.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	5	C	58.0	mg/Kg		23.0	2		
1,000-inch Rifle Range	2A-16	5	N	14.8	mg/Kg					
1,000-inch Rifle Range	2A-16	5	E	12.5	mg/Kg					
1,000-inch Rifle Range	2A-16	5	S	12.7	mg/Kg					
1,000-inch Rifle Range	2A-16	5	W	17.2	mg/Kg					
1,000-inch Rifle Range	2A-16	6	C	10.1	mg/Kg		11.1	1		
1,000-inch Rifle Range	2A-16	6	N	11.7	mg/Kg					
1,000-inch Rifle Range	2A-16	6	E	12.3	mg/Kg					
1,000-inch Rifle Range	2A-16	6	S	11.5	mg/Kg					
1,000-inch Rifle Range	2A-16	6	W	9.9	mg/Kg					
1,000-inch Rifle Range	2A-16	7	C	21.5	mg/Kg		31.3	2		
1,000-inch Rifle Range	2A-16	7	N	56.7	mg/Kg					
1,000-inch Rifle Range	2A-16	7	E	4.7	mg/Kg					
1,000-inch Rifle Range	2A-16	7	S	63.7	mg/Kg					
1,000-inch Rifle Range	2A-16	7	W	10.1	mg/Kg					
1,000-inch Rifle Range	2A-16	8	C	871.0	mg/Kg	*	1,250.2	5	162	243
1,000-inch Rifle Range	2A-16	8	N	55.8	mg/Kg					
1,000-inch Rifle Range	2A-16	8	E	4,560.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	8	S	198.0	mg/Kg	*				

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

1,000-inch Rifle Range/Machine Gun Range (RAU 2A-16)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
1,000-inch Rifle Range	2A-16	8	W	566.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	9	C	16.0	mg/Kg		19.5	1		
1,000-inch Rifle Range	2A-16	9	N	25.3	mg/Kg					
1,000-inch Rifle Range	2A-16	9	E	24.8	mg/Kg					
1,000-inch Rifle Range	2A-16	9	S	14.2	mg/Kg					
1,000-inch Rifle Range	2A-16	9	W	17.4	mg/Kg					
1,000-inch Rifle Range	2A-16	10	C	15.5	mg/Kg		14.9	1		
1,000-inch Rifle Range	2A-16	10	N	10.0	mg/Kg					
1,000-inch Rifle Range	2A-16	10	E	25.0	mg/Kg					
1,000-inch Rifle Range	2A-16	10	S	12.6	mg/Kg					
1,000-inch Rifle Range	2A-16	10	W	11.6	mg/Kg					
1,000-inch Rifle Range	2A-16	11	C	0.0	mg/Kg		9.4	1		
1,000-inch Rifle Range	2A-16	11	N	8.8	mg/Kg					
1,000-inch Rifle Range	2A-16	11	E	11.4	mg/Kg					
1,000-inch Rifle Range	2A-16	11	S	10.9	mg/Kg					
1,000-inch Rifle Range	2A-16	11	W	16.0	mg/Kg					
1,000-inch Rifle Range	2A-16	12	C	30.1	mg/Kg		17.7	1		
1,000-inch Rifle Range	2A-16	12	N	10.8	mg/Kg					
1,000-inch Rifle Range	2A-16	12	E	19.6	mg/Kg					
1,000-inch Rifle Range	2A-16	12	S	12.4	mg/Kg					
1,000-inch Rifle Range	2A-16	12	W	15.5	mg/Kg					
1,000-inch Rifle Range	2A-16	13	C	32.2	mg/Kg		24.3	1		
1,000-inch Rifle Range	2A-16	13	N	11.5	mg/Kg					
1,000-inch Rifle Range	2A-16	13	E	19.8	mg/Kg					
1,000-inch Rifle Range	2A-16	13	S	18.6	mg/Kg					
1,000-inch Rifle Range	2A-16	13	W	39.6	mg/Kg					
1,000-inch Rifle Range	2A-16	14	C	15.3	mg/Kg		13.2	1		
1,000-inch Rifle Range	2A-16	14	N	14.8	mg/Kg					
1,000-inch Rifle Range	2A-16	14	E	15.2	mg/Kg					
1,000-inch Rifle Range	2A-16	14	S	13.1	mg/Kg					
1,000-inch Rifle Range	2A-16	14	W	7.5	mg/Kg					
1,000-inch Rifle Range	2A-16	15	C	9.3	mg/Kg		12.9	1		
1,000-inch Rifle Range	2A-16	15	N	11.9	mg/Kg					
1,000-inch Rifle Range	2A-16	15	E	13.5	mg/Kg					
1,000-inch Rifle Range	2A-16	15	S	12.2	mg/Kg					
1,000-inch Rifle Range	2A-16	15	W	17.4	mg/Kg					
1,000-inch Rifle Range	2A-16	16	C	12.6	mg/Kg		13.9	1		
1,000-inch Rifle Range	2A-16	16	N	22.1	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

1,000-inch Rifle Range/Machine Gun Range (RAU 2A-16)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
1,000-inch Rifle Range	2A-16	16	E	14.3	mg/Kg					
1,000-inch Rifle Range	2A-16	16	S	7.4	mg/Kg					
1,000-inch Rifle Range	2A-16	16	W	13.3	mg/Kg					
1,000-inch Rifle Range	2A-16	17	C	17.0	mg/Kg		23.5	2		
1,000-inch Rifle Range	2A-16	17	N	63.3	mg/Kg					
1,000-inch Rifle Range	2A-16	17	E	13.7	mg/Kg					
1,000-inch Rifle Range	2A-16	17	S	9.7	mg/Kg					
1,000-inch Rifle Range	2A-16	17	W	13.6	mg/Kg					
1,000-inch Rifle Range	2A-16	18	C	7.5	mg/Kg		11.8	1		
1,000-inch Rifle Range	2A-16	18	N	14.3	mg/Kg					
1,000-inch Rifle Range	2A-16	18	E	15.2	mg/Kg					
1,000-inch Rifle Range	2A-16	18	S	10.4	mg/Kg					
1,000-inch Rifle Range	2A-16	18	W	11.4	mg/Kg					
1,000-inch Rifle Range	2A-16	19	C	9.9	mg/Kg		13.1	1		
1,000-inch Rifle Range	2A-16	19	N	22.8	mg/Kg					
1,000-inch Rifle Range	2A-16	19	E	15.0	mg/Kg					
1,000-inch Rifle Range	2A-16	19	S	11.7	mg/Kg					
1,000-inch Rifle Range	2A-16	19	W	6.2	mg/Kg					
1,000-inch Rifle Range	2A-16	20	C	16.6	mg/Kg		15.0	1		
1,000-inch Rifle Range	2A-16	20	N	11.3	mg/Kg					
1,000-inch Rifle Range	2A-16	20	E	11.9	mg/Kg					
1,000-inch Rifle Range	2A-16	20	S	12.4	mg/Kg					
1,000-inch Rifle Range	2A-16	20	W	22.9	mg/Kg					
1,000-inch Rifle Range	2A-16	21	C	12.1	mg/Kg		11.1	1		
1,000-inch Rifle Range	2A-16	21	N	10.0	mg/Kg					
1,000-inch Rifle Range	2A-16	21	E	9.4	mg/Kg					
1,000-inch Rifle Range	2A-16	21	S	10.4	mg/Kg					
1,000-inch Rifle Range	2A-16	21	W	13.8	mg/Kg					
1,000-inch Rifle Range	2A-16	22	C	29.8	mg/Kg		27.2	1		
1,000-inch Rifle Range	2A-16	22	N	39.1	mg/Kg					
1,000-inch Rifle Range	2A-16	22	E	25.5	mg/Kg					
1,000-inch Rifle Range	2A-16	22	S	14.9	mg/Kg					
1,000-inch Rifle Range	2A-16	22	W	26.6	mg/Kg					
1,000-inch Rifle Range	2A-16	23	C	22.8	mg/Kg		24.7	1		
1,000-inch Rifle Range	2A-16	23	N	20.6	mg/Kg					
1,000-inch Rifle Range	2A-16	23	E	15.2	mg/Kg					
1,000-inch Rifle Range	2A-16	23	S	45.0	mg/Kg					
1,000-inch Rifle Range	2A-16	23	W	20.1	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

1,000-inch Rifle Range/Machine Gun Range (RAU 2A-16)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
1,000-inch Rifle Range	2A-16	24	C	90.7	mg/Kg		82.8	3	60.75	
1,000-inch Rifle Range	2A-16	24	N	128.0	mg/Kg					
1,000-inch Rifle Range	2A-16	24	E	28.2	mg/Kg					
1,000-inch Rifle Range	2A-16	24	S	21.2	mg/Kg					
1,000-inch Rifle Range	2A-16	24	W	146.0	mg/Kg					
1,000-inch Rifle Range	2A-16	25	C	10.0	mg/Kg		22.7	1		
1,000-inch Rifle Range	2A-16	25	N	48.3	mg/Kg					
1,000-inch Rifle Range	2A-16	25	E	13.4	mg/Kg					
1,000-inch Rifle Range	2A-16	25	S	13.9	mg/Kg					
1,000-inch Rifle Range	2A-16	25	W	28.1	mg/Kg					
1,000-inch Rifle Range	2A-16	26	C	63.4	mg/Kg		146.2	4	324	81
1,000-inch Rifle Range	2A-16	26	N	115.0	mg/Kg					
1,000-inch Rifle Range	2A-16	26	E	98.4	mg/Kg					
1,000-inch Rifle Range	2A-16	26	S	282.0	mg/Kg					
1,000-inch Rifle Range	2A-16	26	W	172.0	mg/Kg					
1,000-inch Rifle Range	2A-16	27	C	241.0	mg/Kg		176.6	4	324	81
1,000-inch Rifle Range	2A-16	27	N	91.7	mg/Kg					
1,000-inch Rifle Range	2A-16	27	E	346.0	mg/Kg					
1,000-inch Rifle Range	2A-16	27	S	68.5	mg/Kg					
1,000-inch Rifle Range	2A-16	27	W	136.0	mg/Kg					
1,000-inch Rifle Range	2A-16	28	C	334.0	mg/Kg	*	2,156.6	5	81	324
1,000-inch Rifle Range	2A-16	28	N	279.0	mg/Kg					
1,000-inch Rifle Range	2A-16	28	E	7,610.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	28	S	2,350.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	28	W	210.0	mg/Kg					
1,000-inch Rifle Range	2A-16	29	C	51.9	mg/Kg	*	82.2	3	20.25	
1,000-inch Rifle Range	2A-16	29	N	15.1	mg/Kg	*				
1,000-inch Rifle Range	2A-16	29	E	19.2	mg/Kg					
1,000-inch Rifle Range	2A-16	29	S	216.0	mg/Kg					
1,000-inch Rifle Range	2A-16	29	W	109.0	mg/Kg	*				
1,000-inch Rifle Range	2A-16	30	C	120.0	mg/Kg		121.5	4	405	
1,000-inch Rifle Range	2A-16	30	N	115.0	mg/Kg					
1,000-inch Rifle Range	2A-16	30	E	96.4	mg/Kg					
1,000-inch Rifle Range	2A-16	30	S	170.0	mg/Kg					
1,000-inch Rifle Range	2A-16	30	W	106.0	mg/Kg					
								Totals	**1,377.00**	**1,134.00**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter M60 Range/Pistol Range (RAU 2A-17)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter M60	2A-17	1	C	29.9	mg/Kg		49.1	2		
25-meter M60	2A-17	1	N	108	mg/Kg					
25-meter M60	2A-17	1	S	21.9	mg/Kg					
25-meter M60	2A-17	1	E	64.6	mg/Kg					
25-meter M60	2A-17	1	W	21.1	mg/Kg					
25-meter M60	2A-17	2	C	21.8	mg/Kg		20.3	1		
25-meter M60	2A-17	2	N	21.1	mg/Kg					
25-meter M60	2A-17	2	S	22.2	mg/Kg					
25-meter M60	2A-17	2	E	11.8	mg/Kg					
25-meter M60	2A-17	2	W	24.8	mg/Kg					
25-meter M60	2A-17	3	C	37.2	mg/Kg	*	92.4	3	20.25	
25-meter M60	2A-17	3	N	136	mg/Kg					
25-meter M60	2A-17	3	S	34.6	mg/Kg					
25-meter M60	2A-17	3	E	219	mg/Kg	*				
25-meter M60	2A-17	3	W	35.3	mg/Kg	*				
25-meter M60	2A-17	4	C	68.3	mg/Kg		33.9	2		
25-meter M60	2A-17	4	N	13.8	mg/Kg					
25-meter M60	2A-17	4	S	44.9	mg/Kg					
25-meter M60	2A-17	4	E	8.7	mg/Kg					
25-meter M60	2A-17	4	W	33.7	mg/Kg	*				
								Totals	**20.25**	**0**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Machine Gun Range (RAU 2A-18)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Machine Gun Range	2A-18	1	C	12.00	mg/Kg		33.44	2		
25-meter Machine Gun Range	2A-18	1	N	10.90	mg/Kg					
25-meter Machine Gun Range	2A-18	1	E	13.70	mg/Kg					
25-meter Machine Gun Range	2A-18	1	S	14.60	mg/Kg					
25-meter Machine Gun Range	2A-18	1	W	116.00	mg/Kg					
25-meter Machine Gun Range	2A-18	2	C	16.20	mg/Kg		22.22	1		
25-meter Machine Gun Range	2A-18	2	N	19.00	mg/Kg					
25-meter Machine Gun Range	2A-18	2	E	43.60	mg/Kg					
25-meter Machine Gun Range	2A-18	2	S	22.70	mg/Kg					
25-meter Machine Gun Range	2A-18	2	W	9.60	mg/Kg					
25-meter Machine Gun Range	2A-18	3	C	31.10	mg/Kg		22.98	1		
25-meter Machine Gun Range	2A-18	3	N	19.10	mg/Kg					
25-meter Machine Gun Range	2A-18	3	E	29.30	mg/Kg					
25-meter Machine Gun Range	2A-18	3	S	17.20	mg/Kg					
25-meter Machine Gun Range	2A-18	3	W	18.20	mg/Kg					
25-meter Machine Gun Range	2A-18	4	C	27.00	mg/Kg		22.66	1		
25-meter Machine Gun Range	2A-18	4	N	17.20	mg/Kg					
25-meter Machine Gun Range	2A-18	4	E	25.20	mg/Kg					
25-meter Machine Gun Range	2A-18	4	S	31.70	mg/Kg					
25-meter Machine Gun Range	2A-18	4	W	12.20	mg/Kg					
25-meter Machine Gun Range	2A-18	5	C	214.00	mg/Kg		514.14	5	324	81
25-meter Machine Gun Range	2A-18	5	N	2,180.00	mg/Kg	*				
25-meter Machine Gun Range	2A-18	5	E	49.10	mg/Kg	*				
25-meter Machine Gun Range	2A-18	5	S	61.00	mg/Kg					
25-meter Machine Gun Range	2A-18	5	W	66.60	mg/Kg					
25-meter Machine Gun Range	2A-18	6	N	42.70	mg/Kg		40.15	1		
25-meter Machine Gun Range	2A-18	6	E	25.10	mg/Kg					
25-meter Machine Gun Range	2A-18	6	S	28.50	mg/Kg					
25-meter Machine Gun Range	2A-18	6	W	37.60	mg/Kg					
25-meter Machine Gun Range	2A-18	7	C	45.40	mg/Kg		44.02	2		
25-meter Machine Gun Range	2A-18	7	N	31.60	mg/Kg					
25-meter Machine Gun Range	2A-18	7	E	126.00	mg/Kg					
25-meter Machine Gun Range	2A-18	7	S	5.70	mg/Kg					
25-meter Machine Gun Range	2A-18	8	W	11.4	mg/Kg					
25-meter Machine Gun Range	2A-18	8	C	26,300.00	mg/Kg	*	6,714.60	5		405
25-meter Machine Gun Range	2A-18	8	N	1,330.00	mg/Kg	*				
25-meter Machine Gun Range	2A-18	8	E	964.00	mg/Kg					
25-meter Machine Gun Range	2A-18	8	S	429.00	mg/Kg	*				
25-meter Machine Gun Range	2A-18	8	W	4,550.00	mg/Kg	*				

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Machine Gun Range (RAU 2A-18)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Machine Gun Range	2A-18	9	C	204.00	mg/Kg		73.18	3	60.75	
25-meter Machine Gun Range	2A-18	9	N	64.30	mg/Kg					
25-meter Machine Gun Range	2A-18	9	E	62.10	mg/Kg					
25-meter Machine Gun Range	2A-18	9	S	24.70	mg/Kg					
25-meter Machine Gun Range	2A-18	9	W	10.80	mg/Kg					
25-meter Machine Gun Range	2A-18	10	C	120.00	mg/Kg		80.94	3	81	
25-meter Machine Gun Range	2A-18	10	N	75.30	mg/Kg					
25-meter Machine Gun Range	2A-18	10	E	40.40	mg/Kg					
25-meter Machine Gun Range	2A-18	10	S	105.00	mg/Kg					
25-meter Machine Gun Range	2A-18	10	W	64.00	mg/Kg					
25-meter Machine Gun Range	2A-18	11	C	38.20	mg/Kg		182.16	4	81	81
25-meter Machine Gun Range	2A-18	11	N	708.00	mg/Kg					
25-meter Machine Gun Range	2A-18	11	E	13.00	mg/Kg					
25-meter Machine Gun Range	2A-18	11	S	37.60	mg/Kg					
25-meter Machine Gun Range	2A-18	11	W	114.00	mg/Kg					
25-meter Machine Gun Range	2A-18	12	C	13.80	mg/Kg		13.06	1		
25-meter Machine Gun Range	2A-18	12	N	10.60	mg/Kg					
25-meter Machine Gun Range	2A-18	12	E	25.00	mg/Kg					
25-meter Machine Gun Range	2A-18	12	S	6.10	mg/Kg					
25-meter Machine Gun Range	2A-18	12	W	9.80	mg/Kg					
25-meter Machine Gun Range	2A-18	13	C	7.60	mg/Kg		16.68	1		
25-meter Machine Gun Range	2A-18	13	N	25.50	mg/Kg					
25-meter Machine Gun Range	2A-18	13	E	33.80	mg/Kg					
25-meter Machine Gun Range	2A-18	13	S	11.00	mg/Kg					
25-meter Machine Gun Range	2A-18	13	W	5.50	mg/Kg					
								Totals	**546.75**	**567**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Record Firing Range (RAU 2A-19)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Record Firing Range	2A-19	1	C	11.9	mg/Kg		9.3	1		
25-meter Record Firing Range	2A-19	1	N	8.3	mg/Kg					
25-meter Record Firing Range	2A-19	1	S	9.7	mg/Kg					
25-meter Record Firing Range	2A-19	1	E	8.9	mg/Kg					
25-meter Record Firing Range	2A-19	1	W	7.7	mg/Kg					
25-meter Record Firing Range	2A-19	2	C	11.8	mg/Kg		9.7	1		
25-meter Record Firing Range	2A-19	2	N	7.7	mg/Kg					
25-meter Record Firing Range	2A-19	2	S	9.1	mg/Kg					
25-meter Record Firing Range	2A-19	2	E	11.0	mg/Kg					
25-meter Record Firing Range	2A-19	2	W	8.8	mg/Kg					
25-meter Record Firing Range	2A-19	3	C	7.6	mg/Kg		10.0	1		
25-meter Record Firing Range	2A-19	3	N	13.2	mg/Kg					
25-meter Record Firing Range	2A-19	3	S	10.3	mg/Kg					
25-meter Record Firing Range	2A-19	3	E	10.5	mg/Kg					
25-meter Record Firing Range	2A-19	3	W	8.2	mg/Kg					
25-meter Record Firing Range	2A-19	4	C	14.2	mg/Kg		11.2	1		
25-meter Record Firing Range	2A-19	4	N	10.2	mg/Kg					
25-meter Record Firing Range	2A-19	4	S	12.2	mg/Kg					
25-meter Record Firing Range	2A-19	4	E	8.7	mg/Kg					
25-meter Record Firing Range	2A-19	4	W	10.5	mg/Kg					
25-meter Record Firing Range	2A-19	5	C	12.9	mg/Kg		13.8	1		
25-meter Record Firing Range	2A-19	5	N	21.0	mg/Kg					
25-meter Record Firing Range	2A-19	5	S	15.9	mg/Kg					
25-meter Record Firing Range	2A-19	5	E	11.9	mg/Kg					
25-meter Record Firing Range	2A-19	5	W	7.4	mg/Kg					
25-meter Record Firing Range	2A-19	6	C	8.1	mg/Kg		10.7	1		
25-meter Record Firing Range	2A-19	6	N	12.7	mg/Kg					
25-meter Record Firing Range	2A-19	6	S	10.4	mg/Kg					
25-meter Record Firing Range	2A-19	6	E	10.9	mg/Kg					
25-meter Record Firing Range	2A-19	6	W	11.5	mg/Kg					
25-meter Record Firing Range	2A-19	7	C	13.0	mg/Kg		10.6	1		
25-meter Record Firing Range	2A-19	7	N	9.5	mg/Kg					
25-meter Record Firing Range	2A-19	7	S	10.5	mg/Kg					
25-meter Record Firing Range	2A-19	7	E	9.3	mg/Kg					
25-meter Record Firing Range	2A-19	7	W	10.5	mg/Kg					
25-meter Record Firing Range	2A-19	8	C	14.3	mg/Kg		13.0	1		
25-meter Record Firing Range	2A-19	8	N	9.1	mg/Kg					
25-meter Record Firing Range	2A-19	8	S	19.3	mg/Kg					
25-meter Record Firing Range	2A-19	8	E	12.9	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Record Firing Range (RAU 2A-19)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Record Firing Range	2A-19	8	W	9.3	mg/Kg					
25-meter Record Firing Range	2A-19	9	C	9.6	mg/Kg		19.3	2		
25-meter Record Firing Range	2A-19	9	N	6.6	mg/Kg					
25-meter Record Firing Range	2A-19	9	S	13.9	mg/Kg					
25-meter Record Firing Range	2A-19	9	E	55.2	mg/Kg					
25-meter Record Firing Range	2A-19	9	W	11.2	mg/Kg					
25-meter Record Firing Range	2A-19	10	C	8.8	mg/Kg		9.6	1		
25-meter Record Firing Range	2A-19	10	N	12.0	mg/Kg					
25-meter Record Firing Range	2A-19	10	S	8.8	mg/Kg					
25-meter Record Firing Range	2A-19	10	E	8.5	mg/Kg					
25-meter Record Firing Range	2A-19	10	W	9.8	mg/Kg					
25-meter Record Firing Range	2A-19	11	C	20.8	mg/Kg		11.2	1		
25-meter Record Firing Range	2A-19	11	N	11.3	mg/Kg					
25-meter Record Firing Range	2A-19	11	S	9.0	mg/Kg					
25-meter Record Firing Range	2A-19	11	E	6.8	mg/Kg					
25-meter Record Firing Range	2A-19	11	W	8.0	mg/Kg					
25-meter Record Firing Range	2A-19	12	C	0.0	mg/Kg		9.3	1		
25-meter Record Firing Range	2A-19	12	N	10.6	mg/Kg					
25-meter Record Firing Range	2A-19	12	S	10.4	mg/Kg					
25-meter Record Firing Range	2A-19	12	E	25.3	mg/Kg					
25-meter Record Firing Range	2A-19	12	W	0.0	mg/Kg					
25-meter Record Firing Range	2A-19	13	C	12.1	mg/Kg		13.1	1		
25-meter Record Firing Range	2A-19	13	N	7.6	mg/Kg					
25-meter Record Firing Range	2A-19	13	S	21.5	mg/Kg					
25-meter Record Firing Range	2A-19	13	E	12.1	mg/Kg					
25-meter Record Firing Range	2A-19	13	W	12.4	mg/Kg					
25-meter Record Firing Range	2A-19	14	C	11.9	mg/Kg		12.3	1		
25-meter Record Firing Range	2A-19	14	N	15.2	mg/Kg					
25-meter Record Firing Range	2A-19	14	S	22.9	mg/Kg					
25-meter Record Firing Range	2A-19	14	E	11.5	mg/Kg					
25-meter Record Firing Range	2A-19	14	W	0.0	mg/Kg					
25-meter Record Firing Range	2A-19	15	W	13.8	mg/Kg		14.7	1		
25-meter Record Firing Range	2A-19	15	C	19.9	mg/Kg					
25-meter Record Firing Range	2A-19	15	N	15.7	mg/Kg					
25-meter Record Firing Range	2A-19	15	S	10.3	mg/Kg					
25-meter Record Firing Range	2A-19	15	E	13.8	mg/Kg					
25-meter Record Firing Range	2A-19	16	C	5.9	mg/Kg		7.9	1		
25-meter Record Firing Range	2A-19	16	N	12.4	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Record Firing Range (RAU 2A-19)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Record Firing Range	2A-19	16	S	9.3	mg/Kg					
25-meter Record Firing Range	2A-19	16	E	6.7	mg/Kg					
25-meter Record Firing Range	2A-19	16	W	5.4	mg/Kg					
25-meter Record Firing Range	2A-19	17	C	12.7	mg/Kg		11.5	1		
25-meter Record Firing Range	2A-19	17	N	12.5	mg/Kg					
25-meter Record Firing Range	2A-19	17	S	11.7	mg/Kg					
25-meter Record Firing Range	2A-19	17	E	9.0	mg/Kg					
25-meter Record Firing Range	2A-19	17	W	11.4	mg/Kg					
25-meter Record Firing Range	2A-19	18	C	11.8	mg/Kg		10.6	1		
25-meter Record Firing Range	2A-19	18	N	12.0	mg/Kg					
25-meter Record Firing Range	2A-19	18	S	9.3	mg/Kg					
25-meter Record Firing Range	2A-19	18	E	8.9	mg/Kg					
25-meter Record Firing Range	2A-19	18	W	10.9	mg/Kg					
25-meter Record Firing Range	2A-19	19	C	13.2	mg/Kg		62.1	3	60.75	
25-meter Record Firing Range	2A-19	19	N	77.5	mg/Kg					
25-meter Record Firing Range	2A-19	19	S	44.9	mg/Kg					
25-meter Record Firing Range	2A-19	19	E	90.3	mg/Kg					
25-meter Record Firing Range	2A-19	19	W	84.5	mg/Kg					
25-meter Record Firing Range	2A-19	20	C	13.6	mg/Kg		22.3	1		
25-meter Record Firing Range	2A-19	20	N	22.7	mg/Kg					
25-meter Record Firing Range	2A-19	20	S	17.5	mg/Kg					
25-meter Record Firing Range	2A-19	20	E	31.7	mg/Kg					
25-meter Record Firing Range	2A-19	20	W	25.9	mg/Kg					
25-meter Record Firing Range	2A-19	21	C	18.2	mg/Kg		16.7	1		
25-meter Record Firing Range	2A-19	21	N	18.6	mg/Kg					
25-meter Record Firing Range	2A-19	21	S	10.0	mg/Kg					
25-meter Record Firing Range	2A-19	21	E	12.9	mg/Kg					
25-meter Record Firing Range	2A-19	21	W	23.6	mg/Kg					
25-meter Record Firing Range	2A-19	22	C	11.5	mg/Kg		12.8	1		
25-meter Record Firing Range	2A-19	22	N	13.2	mg/Kg					
25-meter Record Firing Range	2A-19	22	S	12.0	mg/Kg					
25-meter Record Firing Range	2A-19	22	E	15.2	mg/Kg					
25-meter Record Firing Range	2A-19	22	W	12.3	mg/Kg					
25-meter Record Firing Range	2A-19	23	C	11.0	mg/Kg		12.2	1		
25-meter Record Firing Range	2A-19	23	N	11.6	mg/Kg					
25-meter Record Firing Range	2A-19	23	S	14.0	mg/Kg					
25-meter Record Firing Range	2A-19	23	E	13.6	mg/Kg					
25-meter Record Firing Range	2A-19	23	W	10.7	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Record Firing Range (RAU 2A-19)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Record Firing Range	2A-19	24	C	26.3	mg/Kg		34.8	2		
25-meter Record Firing Range	2A-19	24	N	23.2	mg/Kg					
25-meter Record Firing Range	2A-19	24	S	22.8	mg/Kg					
25-meter Record Firing Range	2A-19	24	E	13.5	mg/Kg					
25-meter Record Firing Range	2A-19	24	W	88.2	mg/Kg					
25-meter Record Firing Range	2A-19	25	C	44.3	mg/Kg		28.4	1		
25-meter Record Firing Range	2A-19	25	N	14.1	mg/Kg					
25-meter Record Firing Range	2A-19	25	S	24.3	mg/Kg					
25-meter Record Firing Range	2A-19	25	E	25.5	mg/Kg					
25-meter Record Firing Range	2A-19	25	W	33.7	mg/Kg					
25-meter Record Firing Range	2A-19	26	C	9.7	mg/Kg		26.8	2		
25-meter Record Firing Range	2A-19	26	N	14.4	mg/Kg					
25-meter Record Firing Range	2A-19	26	S	78.4	mg/Kg					
25-meter Record Firing Range	2A-19	26	E	18.5	mg/Kg					
25-meter Record Firing Range	2A-19	26	W	13.2	mg/Kg					
25-meter Record Firing Range	2A-19	27	C	10.7	mg/Kg		12.2	1		
25-meter Record Firing Range	2A-19	27	N	14.1	mg/Kg					
25-meter Record Firing Range	2A-19	27	S	14.8	mg/Kg					
25-meter Record Firing Range	2A-19	27	E	11.9	mg/Kg					
25-meter Record Firing Range	2A-19	27	W	9.7	mg/Kg					
25-meter Record Firing Range	2A-19	28	C	11.2	mg/Kg		13.6	1		
25-meter Record Firing Range	2A-19	28	N	19.2	mg/Kg					
25-meter Record Firing Range	2A-19	28	S	13.8	mg/Kg					
25-meter Record Firing Range	2A-19	28	E	11.5	mg/Kg					
25-meter Record Firing Range	2A-19	28	W	12.5	mg/Kg					
25-meter Record Firing Range	2A-19	29	C	21.0	mg/Kg		21.9	1		
25-meter Record Firing Range	2A-19	29	N	18.5	mg/Kg					
25-meter Record Firing Range	2A-19	29	S	26.0	mg/Kg					
25-meter Record Firing Range	2A-19	29	E	32.8	mg/Kg					
25-meter Record Firing Range	2A-19	29	W	11.4	mg/Kg					
25-meter Record Firing Range	2A-19	30	C	163.0	mg/Kg	*	70.3	3	60.75	
25-meter Record Firing Range	2A-19	30	N	76.5	mg/Kg					
25-meter Record Firing Range	2A-19	30	S	27.3	mg/Kg					
25-meter Record Firing Range	2A-19	30	E	33.9	mg/Kg					
25-meter Record Firing Range	2A-19	30	W	51.0	mg/Kg	*				
25-meter Record Firing Range	2A-19	31	C	31.7	mg/Kg		25.9	1		
25-meter Record Firing Range	2A-19	31	N	24.8	mg/Kg					
25-meter Record Firing Range	2A-19	31	S	30.6	mg/Kg					
25-meter Record Firing Range	2A-19	31	E	23.0	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Record Firing Range (RAU 2A-19)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Record Firing Range	2A-19	31	W	19.5	mg/Kg					
25-meter Record Firing Range	2A-19	32	C	10.5	mg/Kg		16.9	1		
25-meter Record Firing Range	2A-19	32	N	20.5	mg/Kg					
25-meter Record Firing Range	2A-19	32	S	16.2	mg/Kg					
25-meter Record Firing Range	2A-19	32	E	13.6	mg/Kg					
25-meter Record Firing Range	2A-19	32	W	23.8	mg/Kg					
25-meter Record Firing Range	2A-19	33	C	94.9	mg/Kg	*	180.7	4	162	81
25-meter Record Firing Range	2A-19	33	N	647.0	mg/Kg					
25-meter Record Firing Range	2A-19	33	S	34.6	mg/Kg	*				
25-meter Record Firing Range	2A-19	33	E	19.9	mg/Kg	*				
25-meter Record Firing Range	2A-19	33	W	107.0	mg/Kg					
25-meter Record Firing Range	2A-19	34	C	150.0	mg/Kg	*	1,921.9	5	243	162
25-meter Record Firing Range	2A-19	34	N	45.3	mg/Kg					
25-meter Record Firing Range	2A-19	34	S	238.0	mg/Kg					
25-meter Record Firing Range	2A-19	34	E	296.0	mg/Kg	*				
25-meter Record Firing Range	2A-19	34	W	8,880.0	mg/Kg	*				
25-meter Record Firing Range	2A-19	35	C	12.9	mg/Kg		12.7	1		
25-meter Record Firing Range	2A-19	35	N	12.3	mg/Kg					
25-meter Record Firing Range	2A-19	35	S	16.3	mg/Kg					
25-meter Record Firing Range	2A-19	35	E	13.7	mg/Kg					
25-meter Record Firing Range	2A-19	35	W	8.5	mg/Kg					
25-meter Record Firing Range	2A-19	36	C	8.0	mg/Kg		10.4	1		
25-meter Record Firing Range	2A-19	36	N	10.0	mg/Kg					
25-meter Record Firing Range	2A-19	36	S	12.9	mg/Kg					
25-meter Record Firing Range	2A-19	36	E	12.6	mg/Kg					
25-meter Record Firing Range	2A-19	36	W	8.7	mg/Kg					
25-meter Record Firing Range	2A-19	37	C	12.8	mg/Kg		10.7	1		
25-meter Record Firing Range	2A-19	37	N	12.6	mg/Kg					
25-meter Record Firing Range	2A-19	37	S	7.5	mg/Kg					
25-meter Record Firing Range	2A-19	37	E	10.3	mg/Kg					
25-meter Record Firing Range	2A-19	37	W	10.2	mg/Kg					
25-meter Record Firing Range	2A-19	38	C	8.7	mg/Kg		10.1	1		
25-meter Record Firing Range	2A-19	38	N	7.2	mg/Kg					
25-meter Record Firing Range	2A-19	38	S	7.2	mg/Kg					
25-meter Record Firing Range	2A-19	38	E	19.0	mg/Kg					
25-meter Record Firing Range	2A-19	38	W	8.5	mg/Kg					
25-meter Record Firing Range	2A-19	39	C	12.8	mg/Kg		17.4	1		
25-meter Record Firing Range	2A-19	39	N	10.1	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

25-meter Record Firing Range (RAU 2A-19)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
25-meter Record Firing Range	2A-19	39	S	10.9	mg/Kg					
25-meter Record Firing Range	2A-19	39	E	11.6	mg/Kg					
25-meter Record Firing Range	2A-19	39	W	41.5	mg/Kg					
25-meter Record Firing Range	2A-19	40	C	8.5	mg/Kg		9.2	1		
25-meter Record Firing Range	2A-19	40	N	9.9	mg/Kg					
25-meter Record Firing Range	2A-19	40	S	7.4	mg/Kg					
25-meter Record Firing Range	2A-19	40	E	9.1	mg/Kg					
25-meter Record Firing Range	2A-19	40	W	11.1	mg/Kg					
								Totals	**526.50**	**243.00**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Field Ranges No. 1 No. 2 (RAU 2A-20)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Field Ranges No. 1 & No. 2	2A-20	1	C	9.6	mg/Kg		9.9	1		
Field Ranges No. 1 & No. 2	2A-20	1	N	8.8	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	1	S	11.2	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	1	E	9.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	1	W	10.1	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	2	C	8.6	mg/Kg		9.5	1		
Field Ranges No. 1 & No. 2	2A-20	2	N	6.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	2	S	9.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	2	E	8.1	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	2	W	13.8	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	3	C	68.1	mg/Kg		101.7	4	162	81
Field Ranges No. 1 & No. 2	2A-20	3	N	17.1	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	3	S	259.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	3	E	154.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	3	W	10.4	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	4	C	11.5	mg/Kg		13.0	1		
Field Ranges No. 1 & No. 2	2A-20	4	N	11.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	4	S	15.2	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	4	E	13.6	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	4	W	13.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	5	C	8.8	mg/Kg		10.8	1		
Field Ranges No. 1 & No. 2	2A-20	5	N	9.2	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	5	S	13.6	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	5	E	11.7	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	5	W	10.6	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	6	C	17.7	mg/Kg		22.2	2		
Field Ranges No. 1 & No. 2	2A-20	6	N	58.5	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	6	S	9.2	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	6	E	13.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	6	W	11.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	7	C	9.2	mg/Kg		8.4	1		
Field Ranges No. 1 & No. 2	2A-20	7	N	8.1	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	7	S	8.2	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	7	E	5.8	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	7	W	10.7	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	8	C	21.0	mg/Kg		17.8	1		
Field Ranges No. 1 & No. 2	2A-20	8	N	16.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	8	S	25.9	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	8	E	12.7	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Field Ranges No. 1 No. 2 (RAU 2A-20)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Field Ranges No. 1 & No. 2	2A-20	8	W	13.5	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	9	C	13.1	mg/Kg		39.5	3	20.25	
Field Ranges No. 1 & No. 2	2A-20	9	N	11.8	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	9	S	17.2	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	9	E	136.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	9	W	19.6	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	10	C	13.9	mg/Kg		17.4	1		
Field Ranges No. 1 & No. 2	2A-20	10	N	13.7	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	10	S	20.3	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	10	E	18.7	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	10	W	20.3	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	11	C	10.6	mg/Kg		14.3	1		
Field Ranges No. 1 & No. 2	2A-20	11	N	11.7	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	11	S	20.4	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	11	E	14.8	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	11	W	13.8	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	12	C	7,150.0	mg/Kg		1,691.4	5	162	243
Field Ranges No. 1 & No. 2	2A-20	12	N	125.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	12	S	267.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	12	E	728.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	12	W	187.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	13	C	15.8	mg/Kg		23.7	1		
Field Ranges No. 1 & No. 2	2A-20	13	N	49.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	13	S	13.1	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	13	E	24.6	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	13	W	16.0	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	14	C	10.0	mg/Kg		10.6	1		
Field Ranges No. 1 & No. 2	2A-20	14	N	11.4	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	14	S	10.7	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	14	E	10.5	mg/Kg					
Field Ranges No. 1 & No. 2	2A-20	14	W	10.4	mg/Kg					
								Totals	**344.25**	**324.00**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Rifle Ranges No. 1 No. 2 (RAU 2A-21)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Rifle Ranges No. 1 & No. 2	2A-21	1	C	< 10.5	mg/Kg		11.3	1		
Rifle Ranges No. 1 & No. 2	2A-21	1	N	< 10.1	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	1	S	11.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	1	E	10.7	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	1	W	11.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	2	C	25.9	mg/Kg		20.3	1		
Rifle Ranges No. 1 & No. 2	2A-21	2	N	19.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	2	S	18.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	2	E	16.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	2	W	21.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	3	C	17.5	mg/Kg		14.5	1		
Rifle Ranges No. 1 & No. 2	2A-21	3	N	17.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	3	S	15.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	3	E	15.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	3	W	6.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	4	C	10.7	mg/Kg		12.4	1		
Rifle Ranges No. 1 & No. 2	2A-21	4	N	15.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	4	S	11.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	4	E	13.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	4	W	11.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	5	C	32.9	mg/Kg		33.4	2		
Rifle Ranges No. 1 & No. 2	2A-21	5	N	22.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	5	S	55.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	5	E	34.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	5	W	21.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	6	C	27.9	mg/Kg		27.6	1		
Rifle Ranges No. 1 & No. 2	2A-21	6	N	31.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	6	S	17.1	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	6	E	21.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	6	W	39.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	7	C	17.0	mg/Kg		23.7	1		
Rifle Ranges No. 1 & No. 2	2A-21	7	N	24.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	7	S	16.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	7	E	31.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	7	W	29.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	8	C	11.3	mg/Kg		24.9	2		
Rifle Ranges No. 1 & No. 2	2A-21	8	N	25.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	8	S	10.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	8	E	52.8	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Rifle Ranges No. 1 No. 2 (RAU 2A-21)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Rifle Ranges No. 1 & No. 2	2A-21	8	W	24.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	9	C	37.3	mg/Kg		32.5	2		
Rifle Ranges No. 1 & No. 2	2A-21	9	N	35.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	9	S	19.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	9	E	51.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	9	W	18.7	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	10	C	16.1	mg/Kg		29.7	2		
Rifle Ranges No. 1 & No. 2	2A-21	10	N	15.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	10	S	80.7	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	10	E	13.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	10	W	22.7	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	11	C	15.6	mg/Kg		23.5	1		
Rifle Ranges No. 1 & No. 2	2A-21	11	N	10.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	11	S	49.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	11	E	26.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	11	W	16.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	12	C	16.4	mg/Kg		17.1	1		
Rifle Ranges No. 1 & No. 2	2A-21	12	N	32.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	12	S	15.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	12	E	6.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	12	W	14.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	13	C	8.7	mg/Kg		9.3	1		
Rifle Ranges No. 1 & No. 2	2A-21	13	N	5.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	13	S	10.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	13	E	7.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	13	W	14.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	14	C	9.0	mg/Kg		14.4	1		
Rifle Ranges No. 1 & No. 2	2A-21	14	N	19.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	14	S	14.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	14	E	18.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	14	W	11.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	15	C	67.0	mg/Kg		53.4	3	40.5	
Rifle Ranges No. 1 & No. 2	2A-21	15	N	108.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	15	S	25.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	15	E	24.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	15	W	41.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	16	C	< 3.9	mg/Kg		14.4	1		
Rifle Ranges No. 1 & No. 2	2A-21	16	N	25.0	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Rifle Ranges No. 1 No. 2 (RAU 2A-21)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Rifle Ranges No. 1 & No. 2	2A-21	16	S	12.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	16	E	< 3.7	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	16	W	5.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	17	C	17.0	mg/Kg		29.3	2		
Rifle Ranges No. 1 & No. 2	2A-21	17	N	21.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	17	S	19.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	17	E	18.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	17	W	69.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	18	C	8.1	mg/Kg		11.6	1		
Rifle Ranges No. 1 & No. 2	2A-21	18	N	11.1	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	18	S	15.1	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	18	E	12.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	18	W	< 5.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	19	C	17.2	mg/Kg		23.4	2		
Rifle Ranges No. 1 & No. 2	2A-21	19	N	52.1	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	19	S	19.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	19	E	14.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	19	W	14.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	20	C	12.5	mg/Kg		14.9	1		
Rifle Ranges No. 1 & No. 2	2A-21	20	N	14.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	20	S	6.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	20	E	6.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	20	W	34.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	21	C	21.1	mg/Kg		69.7	4		81
Rifle Ranges No. 1 & No. 2	2A-21	21	N	5.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	21	S	17.4	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	21	E	290.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	21	W	14.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	22	C	< 5.0	mg/Kg		8.8	1		
Rifle Ranges No. 1 & No. 2	2A-21	22	N	17.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	22	S	4.9	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	22	E	6.7	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	22	W	5.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	23	C	11.7	mg/Kg		36.8	3	20.25	
Rifle Ranges No. 1 & No. 2	2A-21	23	N	11.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	23	S	19.1	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	23	E	130.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	23	W	12.2	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Rifle Ranges No. 1 No. 2 (RAU 2A-21)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Rifle Ranges No. 1 & No. 2	2A-21	24	C	92.3	mg/Kg		75.6	3	60.75	
Rifle Ranges No. 1 & No. 2	2A-21	24	N	9.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	24	S	36.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	24	E	108.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	24	W	132.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	25	C	51.3	mg/Kg		119.1	4	324	
Rifle Ranges No. 1 & No. 2	2A-21	25	N	145.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	25	S	212.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	25	E	172.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	25	W	15.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	26	C	22.4	mg/Kg		14.2	1		
Rifle Ranges No. 1 & No. 2	2A-21	26	N	3.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	26	S	21.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	26	E	9.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	26	W	< 4.5	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	27	C	7.4	mg/Kg		15.6	1		
Rifle Ranges No. 1 & No. 2	2A-21	27	N	11.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	27	S	29.2	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	27	E	21.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	27	W	8.3	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	28	C	9.3	mg/Kg	*	49.6	2		
Rifle Ranges No. 1 & No. 2	2A-21	28	N	87.6	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	28	S	< 4.7	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	28	E	95.8	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	28	W	5.6	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	29	C	65.0	mg/Kg		64.6	3	60.75	
Rifle Ranges No. 1 & No. 2	2A-21	29	N	137.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	29	S	23.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	29	E	23.0	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	29	W	74.8	mg/Kg					
Rifle Ranges No. 1 & No. 2	2A-21	30	C	273.0	mg/Kg	*	1,978.6	5		405
Rifle Ranges No. 1 & No. 2	2A-21	30	N	1,690.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	30	S	1,750.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	30	E	1,850.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	30	W	4,330.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	31	C	199.0	mg/Kg	*	468.1	5	324	81
Rifle Ranges No. 1 & No. 2	2A-21	31	N	94.5	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	31	S	96.8	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	31	E	180.0	mg/Kg	*				

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Rifle Ranges No. 1 No. 2 (RAU 2A-21)
Grid Data Analysis

Range	RAU	Grid	Location	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Rifle Ranges No. 1 & No. 2	2A-21	31	W	1,770.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	32	C	82.4	mg/Kg	*	289.7	5	243	162
Rifle Ranges No. 1 & No. 2	2A-21	32	N	59.1	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	32	S	417.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	32	E	670.0	mg/Kg	*				
Rifle Ranges No. 1 & No. 2	2A-21	32	W	220.0	mg/Kg	*				
								Totals	**1,073.25**	**729.00**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Field Fire Ranges No. 1 No. 2 (RAU 2A-22)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Field Fire Ranges No. 1 & No. 2	2A-22	1	C	6.4	mg/Kg		6.7	1		
Field Fire Ranges No. 1 & No. 2	2A-22	1	N	0.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	1	S	7.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	1	E	11.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	1	W	8.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	2	C	23.6	mg/Kg		17.3	1		
Field Fire Ranges No. 1 & No. 2	2A-22	2	N	14.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	2	S	17.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	2	E	23.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	2	W	7.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	3	C	48.8	mg/Kg		21.0	1		
Field Fire Ranges No. 1 & No. 2	2A-22	3	N	16.8	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	3	S	14.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	3	E	13.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	3	W	11.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	4	C	11.0	mg/Kg		10.4	1		
Field Fire Ranges No. 1 & No. 2	2A-22	4	N	9.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	4	S	15.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	4	E	16.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	4	W	0.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	5	C	97.0	mg/Kg		41.8	2		
Field Fire Ranges No. 1 & No. 2	2A-22	5	N	7.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	5	S	23.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	5	E	69.9	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	5	W	11.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	6	C	62.4	mg/Kg		24.1	1		
Field Fire Ranges No. 1 & No. 2	2A-22	6	N	15.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	6	S	7.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	6	E	6.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	6	W	29.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	7	C	18.7	mg/Kg		17.3	1		
Field Fire Ranges No. 1 & No. 2	2A-22	7	N	15.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	7	S	20.8	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	7	E	19.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	7	W	12.3	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	8	C	10.7	mg/Kg		9.7	1		
Field Fire Ranges No. 1 & No. 2	2A-22	8	N	11.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	8	S	11.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	8	E	8.9	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.
Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Field Fire Ranges No. 1 No. 2 (RAU 2A-22)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Field Fire Ranges No. 1 & No. 2	2A-22	8	W	6.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	9	C	26.2	mg/Kg		14.0	1		
Field Fire Ranges No. 1 & No. 2	2A-22	9	N	19.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	9	S	5.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	9	E	9.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	9	W	10.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	10	C	0.0	mg/Kg		6.6	1		
Field Fire Ranges No. 1 & No. 2	2A-22	10	N	10.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	10	S	6.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	10	E	7.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	10	W	8.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	11	C	13.4	mg/Kg		19.8	2		
Field Fire Ranges No. 1 & No. 2	2A-22	11	N	10.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	11	S	61.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	11	E	6.9	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	11	W	7.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	12	C	6.8	mg/Kg		12.8	1		
Field Fire Ranges No. 1 & No. 2	2A-22	12	N	11.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	12	S	19.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	12	E	7.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	12	W	18.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	13	C	17.1	mg/Kg		19.5	1		
Field Fire Ranges No. 1 & No. 2	2A-22	13	N	8.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	13	S	28.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	13	E	5.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	13	W	38.8	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	14	C	8.0	mg/Kg		467.2	5		81
Field Fire Ranges No. 1 & No. 2	2A-22	14	N	10.8	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	14	S	7.9	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	14	E	2,300.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	14	W	9.3	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	15	C	8.4	mg/Kg		18.0	1		
Field Fire Ranges No. 1 & No. 2	2A-22	15	N	9.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	15	S	20.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	15	E	44.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	15	W	7.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	16	C	59.1	mg/Kg		40.8	2		
Field Fire Ranges No. 1 & No. 2	2A-22	16	N	23.1	mg/Kg					

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

Field Fire Ranges No. 1 No. 2 (RAU 2A-22)
Grid Data Analysis

Range	RAU	Grid	Loc	Result	Unit	Berm	Avg.	Grid Category	MTCA	RCRA
Field Fire Ranges No. 1 & No. 2	2A-22	16	S	95.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	16	E	17.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	16	W	8.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	17	C	32.3	mg/Kg		38.4	2		
Field Fire Ranges No. 1 & No. 2	2A-22	17	N	0.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	17	S	37.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	17	E	53.3	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	17	W	69.3	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	18	C	35.6	mg/Kg		41.5	2		
Field Fire Ranges No. 1 & No. 2	2A-22	18	N	23.6	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	18	S	47.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	18	E	22.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	18	W	78.5	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	19	C	114.0	mg/Kg		64.4	3	40.5	
Field Fire Ranges No. 1 & No. 2	2A-22	19	N	29.3	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	19	S	15.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	19	E	149.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	19	W	14.9	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	20	C	25.9	mg/Kg		18.2	1		
Field Fire Ranges No. 1 & No. 2	2A-22	20	N	17.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	20	S	9.4	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	20	E	8.1	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	20	W	29.8	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	21	C	52.3	mg/Kg		25.2	2		
Field Fire Ranges No. 1 & No. 2	2A-22	21	N	23.8	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	21	S	13.9	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	21	E	11.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	21	W	24.7	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	22	C	5.8	mg/Kg		24.6	2		
Field Fire Ranges No. 1 & No. 2	2A-22	22	N	47.3	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	22	S	8.2	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	22	E	9.0	mg/Kg					
Field Fire Ranges No. 1 & No. 2	2A-22	22	W	52.6	mg/Kg					
								Totals	**40.50**	**81.00**

* Sample location on the berm and not included in the average.
Yellow = 51 to 118 mg/kg
Blue = 119 to 250 mg/kg
Red = 251mg/Kg and greater
Category 1: Average and Individual Sample Concentrations < 50 mg/Kg.

Category 2: Average Concentration is < 50 mg/Kg and no individual sample concentration is >118 mg/Kg.
Category 3: Average Concentration is > 50 mg/Kg but < 118 mg/Kg and no individual sample concentration is > 250 mg/Kg
Category 4: Average Concentration is > 118 mg/Kg but < 250 mg/Kg
Category 5: Average Concentration is > 250 mg/Kg.

APPENDIX B
REPRESENTATIVE PHOTOS

View of range in summer of 2008

Removing pop-up targets from range floor

Excavating berm face

Excavating rang floor around pop-up targets

Archeological investigation of exposed surfaces

Erosion control mulching

First cut on the Westside of berm face

Sampling for special conditions on range floor

Completed range floor excavation on range floor

Hauling soil excavated from berm face

Step-outs being cut on the berm face

Erosion mulching completed at the range

First cut on the Westside of berm face

MEC clearance being performed prior to excavation

35 mm M73 Subcaliber rocket found during excavation

Excavating range floor areas uphill of berm

Completed first round of range floor excavation

Investigative trenches on range floor

View of range in summer of 2008

Excavating berm face

Exposed berm face after first round of excavation

Archeological investigation of exposed berm face

Identifying step-outs for further excavation on berm

Back-filling completed at toe of berm

Berm face in summer 2008

Excavating front face of berm

Excavating on back-side of berm face

Step-outs being cut on range floor east of berm

Step-outs being cut on the berm face

Confirmatory performance sampling on berm face

	
Excavating range floor	**Excavating step-outs on range floor**
	
Excavating range floor	**Excavating step-outs on range floor**

View of range in summer 2008

Excavating front face of berm

Archeological investigation on berm face and range floor

Excavation on range floor areas

Excavation on range floor areas

Erosion mulching completed on berm and range floor

Dismantling and excavating berm along retaining wall

Excavating berm face

Face of berm after first round of excavation

Excavation on range floor areas

Excavation around pop-up target bases on range floor

Erosion mulching completed on the range floor

View berm face and range floor in summer of 2008

Excavation on range floor areas

Erosion mulching completed around pop-up target bases

Erosion mulching completed on the berm face

Panoramic view of operations within range floor areas

View of screening unit

Screened product (fines < 0.5 inches in diameter)

Screened product (between 3.5 and 0.5 inches in diameter)

Screened product (oversized >3.5 inches diameter)

Close-up view of screening operations

Soil piles staged after screening pending treatment

Representative Photographs of RAU 2A Cleanup Action Activities – 2010
Loading Soil for Disposal

Sifted RAU 2A Soil Staged for Disposal at RAU 2A-18, September 2010

Sifted RAU 2A Soil Staged for Disposal at RAU 2A-18, September 2010

Representative Photographs of RAU 2A Cleanup Action Activities – 2010
Loading Soil for Disposal

Sifted RAU 2A Soil Staged for Disposal at RAU 2A-18, September 2010

Sifted RAU 2A Soil Staged for Disposal at RAU 2A-18, September 2010

Representative Photographs of RAU 2A Cleanup Action Activities – 2010
Loading Soil for Disposal

Loading Soil for Disposal, October 2010

Loading Soil for Disposal, October 2010

Representative Photographs of RAU 2A Cleanup Action Activities – 2010
Loading Soil for Disposal

Loading Soil for Disposal, October 2010

Loading Soil for Disposal, October 2010

Representative Photographs of RAU 2A Cleanup Action Activities – 2017
RAU 2A-16 and 2A-21 Cap Installation

Installing Silt Fence, RAU 2A-16

Installing demarcation geotextile, RAU 2A-16

Representative Photographs of RAU 2A Cleanup Action Activities – 2017
RAU 2A-16 and 2A-21 Cap Installation

Installing demarcation geotextile, RAU 2A-16

Placement of 1-foot soil cap over demarcation geotextile, RAU 2A-16

Representative Photographs of RAU 2A Cleanup Action Activities – 2017
RAU 2A-16 and 2A-21 Cap Installation

Brush Cutting, RAU 2A-21

Installing demarcation geotextile, RAU 2A-21

Representative Photographs of RAU 2A Cleanup Action Activities – 2017
RAU 2A-16 and 2A-21 Cap Installation

Placement of 1-foot soil cap over demarcation geotextile, RAU 2A-21

APPENDIX C
ANALYTICAL REPORTS – RAU 2A-16 AND RAU 2A-21 AREAS COVERED BY CAP
(Compact Disk only)


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 287077
ANALYTICAL REPORT

Weston Solutions
1340 Treat Blvd
Walnut Creek, CA 94597

Project : 15048.001.003.0005.1
Location : Camp Bonneville Military Reservation
Level : III

Sample ID	Lab ID	Sample ID	Lab ID	Sample ID	Lab ID
16-SS001	287077-001	16-SS018	287077-018	16-SS035	287077-035
16-SS002	287077-002	16-SS019	287077-019	16-SS036	287077-036
16-SS003	287077-003	16-SS020	287077-020	16-SS037	287077-037
16-SS004	287077-004	16-SS021	287077-021	16-SS038	287077-038
16-SS005	287077-005	16-SS022	287077-022	16-SS039	287077-039
16-SS006	287077-006	16-SS023	287077-023	16-SS040	287077-040
16-SS007	287077-007	16-SS024	287077-024	16-SS041	287077-041
16-SS008	287077-008	16-SS025	287077-025	16-SS042	287077-042
16-SS009	287077-009	16-SS026	287077-026	16-SS043	287077-043
16-SS010	287077-010	16-SS027	287077-027	16-SS044	287077-044
16-SS011	287077-011	16-SS028	287077-028	16-SS045	287077-045
16-SS012	287077-012	16-SS029	287077-029	16-SS046	287077-046
16-SS013	287077-013	16-SS030	287077-030	16-SS047	287077-047
16-SS014	287077-014	16-SS031	287077-031	16-SS048	287077-048
16-SS015	287077-015	16-SS032	287077-032	16-SS049	287077-049
16-SS016	287077-016	16-SS033	287077-033	16-SS050	287077-050
16-SS017	287077-017	16-SS034	287077-034		

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

Signature: _____ Date: 04/11/2017

Dina Ali
Project Manager
dina.ali@ctberk.com
(510) 204-2223 Ext 13105

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**287077**
Client:	**Weston Solutions**
Project:	**15048.001.003.0005.1**
Location:	**Camp Bonneville Military Reservation**
Request Date:	**03/17/17**
Samples Received:	**03/17/17**

This data package contains sample and QC results for fifty soil samples, requested for the above referenced project on 03/17/17. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C) Soil:
High % differences were observed for lead in the serial dilution of 16-SS002 (lab # 287077-002), the serial dilution of 16-SS021 (lab # 287077-021), and the serial dilution of 16-SS042 (lab # 287077-042).

No other analytical problems were encountered.

Metals (EPA 6010C) SPLP Leachate:
No analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

Chain of Custody

Chain-of-Custody Form for Curtis and Tompkins 287077

Project Number: 15048.001.003.0005.10			Project Name: Camp Bonneville Military Reservation				Request for Analysis										Chain of Custody No.: 1	
Sampler's Signature																	Page 1 of 7	
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements	
1	16-SS001	3/13/17	920	X		Soil	1	X	X									
2	16-SS002	3/13/17	945	X		Soil	2	X	X								MS/MSD	
3	16-SS003	3/13/17	1005	X		Soil	1	X	X									
4	16-SS004	3/13/17	1020	X		Soil	1	X	X									
5	16-SS005	3/13/17	1040	X		Soil	1	X	X									
6	16-SS006	3/13/17	1055	X		Soil	1	X	X									
7	16-SS007	3/13/17	1110	X		Soil	1	X	X									
8	16-SS008	3/13/17	1125	X		Soil	1	X	X									
9	16-SS009	3/13/17	1140	X		Soil	1	X	X									
10	16-SS010	3/13/17	1230	X		Soil	1	X	X									
11	16-SS011	3/13/17	1250	X		Soil	1	X	X									
12	16-SS012	3/13/17	1310	X		Soil	1	X	X									
13	16-SS013	3/13/17	1445	X		Soil	1	X	X									

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/16/2017 1600	Received by: (Signature and affiliation) FeEx 7786 7352 3996	Date and Time: 3/16/2017 1600
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/17/17 10:45
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

Chain-of-Custody Form for Curtis and Tompkins 287077

Project Number: 15048.001.003.0005.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 1
Sampler's Signature			Page 2 of 7

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
14	16-SS014	3/13/17	1500	X		Soil	1	X	X							
15	16-SS015	3/13/17	1510	X		Soil	1	X	X							
16	16-SS016	3/13/17	1520	X		Soil	1	X	X							
17	16-SS017	3/13/17	1530	X		Soil	1	X	X							
18	16-SS018	3/13/17	1550	X		Soil	1	X	X							
19	16-SS019	3/13/17	1600	X		Soil	1	X	X							
20	16-SS020	3/13/17	1620	X		Soil	1	X	X							
21	16-SS021	3/13/17	1630	X		Soil	1	X	X							
22	16-SS022	3/13/17	1650	X		Soil	2	X	X							MS/MSD

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/16/2017 1600	Received by: (Signature and affiliation) FeEx 7786 7352 3996
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)

Date and Time: 3/16/2017 1600	
Date and Time: 3/17/17 10:45	
Date and Time:	

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

Chain-of-Custody Form for Curtis and Tompkins

287077

Project Number: 15048.001.003.0005.10	Project Name: Camp Bonneville Military Reservation						Request for Analysis									Chain of Custody No.: 1
Sampler's Signature																Page 3 of 7
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (FPA 1312/6010D)							Additional Requirements
23	16-SS023	3/13/17	1710	X		Soil	1	X	X							
24	16-SS024	3/13/17	1720	X		Soil	1	X	X							
25	16-SS025	3/14/17	845	X		Soil	1	X	X							
26	16-SS026	3/14/17	900	X		Soil	1	X	X							
27	16-SS027	3/14/17	910	X		Soil	1	X	X							
28	16-SS028	3/14/17	920	X		Soil	1	X	X							
29	16-SS029	3/14/17	930	X		Soil	1	X	X							
30	16-SS030	3/14/17	945	X		Soil	1	X	X							
31	16-SS031	3/14/17	1010	X		Soil	1	X	X							
32	16-SS032	3/14/17	1050	X		Soil	1	X	X							
33	16-SS033	3/14/17	1110	X		Soil	1	X	X							
34	16-SS034	3/14/17	1210	X		Soil	1	X	X							
35	16-SS035	3/14/17	1230	X		Soil	1	X	X							

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/16/2017 1600	Received by: (Signature and affiliation) FeEx 7786 7352 3941 (master: 7786 7352 3996)	Date and Time: 3/16/2017 1600
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/17/17 10:45
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

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Chain-of-Custody Form for Curtis and Tompkins 297077

Project Number: 15048.001.003.0005.10	Project Name: Camp Bonneville Military Reservation						Request for Analysis									Chain of Custody No.: 1
Sampler's Signature																Page 4 of 7
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
36	16-SS036	3/14/17	1240	X		Soil	1	X	X							
37	16-SS037	3/14/17	1250	X		Soil	1	X	X							
38	16-SS038	3/14/17	1305	X		Soil	1	X	X							
39	16-SS039	3/14/17	1320	X		Soil	1	X	X							
40	16-SS040	3/14/17	1335	X		Soil	1	X	X							
41	16-SS041	3/14/17	1350	X		Soil	1	X	X							
42	16-SS042	3/14/17	1415	X		Soil	2	X	X							MS/MSD
43	16-SS043	3/14/17	1630	X		Soil	1	X	X							
44	16-SS044	3/14/17	1645	X		Soil	1	X	X							
45	16-SS045	3/14/17	1655	X		Soil	1	X	X							

Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:
Jeremy Haney, Weston Solutions	3/16/2017 1600	FeEx 7786 7352 3941 (master: 7786 7352 3996)	3/16/2017 1600
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/17/17 10:45
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

Chain-of-Custody Form for Curtis and Tompkins 287077

Project Number: 15048.001.003.0005.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 1
Sampler's Signature			Page 5 of 7

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
46	16-SS046	3/14/17	1715	X		Soil	1	X	X							
47	16-SS047	3/15/17	845	X		Soil	1	X	X							
48	16-SS048	3/15/17	905	X		Soil	1	X	X							
49	16-SS049	3/15/17	925	X		Soil	1	X	X							
50	16-SS050	3/15/17	945	X		Soil	1	X	X							

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/16/2017 1600	Received by: (Signature and affiliation) FeEx 7786 7352 4146 (master: 7786 7352 3996)	Date and Time: 3/16/2017 1600
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/17/17 10:45
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

COOLER RECEIPT CHECKLIST Curtis & Tompkins, Ltd.

Login # 287077 Date Received 3/17/17 Number of coolers 3
Client WESTON Project CAMP BONNEVILLE MILITARY RESERVATION

Date Opened 3/17/17 By (print) KPS (sign) KSBOS
Date Logged in ↓ By (print) ↓ (sign) ↓
Date Labeled ↓ By (print) OTN (sign) dugaya

1. Did cooler come with a shipping slip (airbill, etc) FEDEX YES NO
Shipping info 7736 7352 3941 / 3996 / 4146

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☑ NO
How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO (N/A)
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C
Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 6.0, 5.6, 5.9
☐ Temperature blank(s) included? ☐ Thermometer# ____ ☒ IR Gun# A
☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? (pH strip lot# ____) YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
If YES, Who was called? ____ By ____ Date: ____

COMMENTS

Curtis & Tompkins, Ltd.

Detections Summary for 287077

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

Client : Weston Solutions
Project : 15048.001.003.0005.1
Location : Camp Bonneville Military Reservation

Client Sample ID : 16-SS001 Laboratory Sample ID : 287077-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	430		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.042	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS002 Laboratory Sample ID : 287077-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	510		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.054	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS003 Laboratory Sample ID : 287077-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	370		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.19	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS004 Laboratory Sample ID : 287077-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	280		0.84	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.40	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS005 Laboratory Sample ID : 287077-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	520		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.78	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS006 Laboratory Sample ID : 287077-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	470		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.070	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Curtis & Tompkins, Ltd.

Client Sample ID : 16-SS007 Laboratory Sample ID : 287077-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	420		0.82	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.12	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS008 Laboratory Sample ID : 287077-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	620		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.061	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS009 Laboratory Sample ID : 287077-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	190		0.89	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.050	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS010 Laboratory Sample ID : 287077-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	400		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.10	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS011 Laboratory Sample ID : 287077-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	230		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.070	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS012 Laboratory Sample ID : 287077-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	290		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.043	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS013 Laboratory Sample ID : 287077-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	330		0.68	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.071	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Curtis & Tompkins, Ltd.

Client Sample ID : 16-SS014 Laboratory Sample ID : 287077-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	170		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.025	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS015 Laboratory Sample ID : 287077-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	160		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.033	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS016 Laboratory Sample ID : 287077-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	250		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.074	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS017 Laboratory Sample ID : 287077-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	240		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.064	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS018 Laboratory Sample ID : 287077-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	270		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.11	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS019 Laboratory Sample ID : 287077-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	220		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.057	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS020 Laboratory Sample ID : 287077-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	180		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.084	b	0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS021 Laboratory Sample ID : 287077-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	320		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.017		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS022 Laboratory Sample ID : 287077-022

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	650		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.11		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS023 Laboratory Sample ID : 287077-023

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	200		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.019		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS024 Laboratory Sample ID : 287077-024

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	170		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.061		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS025 Laboratory Sample ID : 287077-025

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	170		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.029		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS026 Laboratory Sample ID : 287077-026

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	380		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.053		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS027 Laboratory Sample ID : 287077-027

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	490		0.84	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.11		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS028 Laboratory Sample ID : 287077-028

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	220		0.75	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.050		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS029 Laboratory Sample ID : 287077-029

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	230		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.066		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS030 Laboratory Sample ID : 287077-030

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	440		0.94	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.037		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS031 Laboratory Sample ID : 287077-031

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	610		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.29		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS032 Laboratory Sample ID : 287077-032

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	450		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.23		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS033 Laboratory Sample ID : 287077-033

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	100		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.011		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS034 Laboratory Sample ID : 287077-034

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	170		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.035		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS035 Laboratory Sample ID : 287077-035

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	90		0.68	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0080		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS036 Laboratory Sample ID : 287077-036

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	620		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.020		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS037 Laboratory Sample ID : 287077-037

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	620		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.038		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 16-SS038 Laboratory Sample ID : 287077-038

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	75		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 16-SS039 Laboratory Sample ID : 287077-039

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.61	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 16-SS040 Laboratory Sample ID : 287077-040

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	240		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 16-SS041 Laboratory Sample ID : 287077-041

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	340		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.010		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS042 Laboratory Sample ID : 287077-042

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	570		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.012		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS043 Laboratory Sample ID : 287077-043

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	350		0.84	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0052		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS044 Laboratory Sample ID : 287077-044

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	63		0.94	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 16-SS045 Laboratory Sample ID : 287077-045

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	500		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.015		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS046 Laboratory Sample ID : 287077-046

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	600		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.011		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS047 Laboratory Sample ID : 287077-047

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	590		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.023		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS048 Laboratory Sample ID : 287077-048

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	30		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 16-SS049 Laboratory Sample ID : 287077-049

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	560		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0099		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 16-SS050 Laboratory Sample ID : 287077-050

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	660		0.89	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.012		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

b = See narrative

Laboratory Job Number 287077

ANALYTICAL REPORT

Metals

Matrix: Soil

Curtis & Tompkins, Ltd.

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Chemist:	MNA
Units:	mg/Kg	Received:	03/17/17
Basis:	dry	Prepared:	03/28/17

Field ID	Type	Lab ID	Result	RL	Moisture	Batch#	Sampled	Analyzed
16-SS001	SAMPLE	287077-001	430	0.88	39%	246003	03/13/17	03/28/17
16-SS002	SAMPLE	287077-002	510	0.73	30%	246003	03/13/17	03/28/17
16-SS003	SAMPLE	287077-003	370	0.77	39%	246003	03/13/17	03/28/17
16-SS004	SAMPLE	287077-004	280	0.84	36%	246003	03/13/17	03/28/17
16-SS005	SAMPLE	287077-005	520	0.81	34%	246003	03/13/17	03/28/17
16-SS006	SAMPLE	287077-006	470	0.74	35%	246003	03/13/17	03/28/17
16-SS007	SAMPLE	287077-007	420	0.82	36%	246003	03/13/17	03/28/17
16-SS008	SAMPLE	287077-008	620	0.78	37%	246003	03/13/17	03/28/17
16-SS009	SAMPLE	287077-009	190	0.89	41%	246003	03/13/17	03/28/17
16-SS010	SAMPLE	287077-010	400	0.73	38%	246003	03/13/17	03/28/17
16-SS011	SAMPLE	287077-011	230	0.83	34%	246003	03/13/17	03/28/17
16-SS012	SAMPLE	287077-012	290	0.73	38%	246003	03/13/17	03/28/17
16-SS013	SAMPLE	287077-013	330	0.68	33%	246003	03/13/17	03/28/17
16-SS014	SAMPLE	287077-014	170	0.73	32%	246003	03/13/17	03/28/17
16-SS015	SAMPLE	287077-015	160	0.72	31%	246003	03/13/17	03/28/17
16-SS016	SAMPLE	287077-016	250	0.70	33%	246003	03/13/17	03/28/17
16-SS017	SAMPLE	287077-017	240	0.81	36%	246003	03/13/17	03/28/17
16-SS018	SAMPLE	287077-018	270	0.83	43%	246003	03/13/17	03/28/17
16-SS019	SAMPLE	287077-019	220	0.80	43%	246003	03/13/17	03/28/17
16-SS020	SAMPLE	287077-020	180	0.73	35%	246003	03/13/17	03/28/17
16-SS021	SAMPLE	287077-021	320	0.81	36%	246004	03/13/17	03/28/17
16-SS022	SAMPLE	287077-022	650	0.78	38%	246004	03/13/17	03/28/17
16-SS023	SAMPLE	287077-023	200	0.88	44%	246004	03/13/17	03/28/17
16-SS024	SAMPLE	287077-024	170	0.74	32%	246004	03/13/17	03/28/17
16-SS025	SAMPLE	287077-025	170	0.69	34%	246004	03/14/17	03/28/17
16-SS026	SAMPLE	287077-026	380	0.69	34%	246004	03/14/17	03/28/17
16-SS027	SAMPLE	287077-027	490	0.84	35%	246004	03/14/17	03/28/17
16-SS028	SAMPLE	287077-028	220	0.75	32%	246004	03/14/17	03/28/17
16-SS029	SAMPLE	287077-029	230	0.69	32%	246004	03/14/17	03/28/17
16-SS030	SAMPLE	287077-030	440	0.94	47%	246004	03/14/17	03/28/17
16-SS031	SAMPLE	287077-031	610	0.77	33%	246004	03/14/17	03/28/17
16-SS032	SAMPLE	287077-032	450	0.70	34%	246004	03/14/17	03/28/17
16-SS033	SAMPLE	287077-033	100	0.81	34%	246004	03/14/17	03/28/17
16-SS034	SAMPLE	287077-034	170	0.77	31%	246004	03/14/17	03/28/17
16-SS035	SAMPLE	287077-035	90	0.68	31%	246004	03/14/17	03/28/17
16-SS036	SAMPLE	287077-036	620	0.76	33%	246004	03/14/17	03/28/17
16-SS037	SAMPLE	287077-037	620	0.70	34%	246004	03/14/17	03/28/17
16-SS038	SAMPLE	287077-038	75	0.83	43%	246004	03/14/17	03/28/17
16-SS039	SAMPLE	287077-039	150	0.61	26%	246004	03/14/17	03/28/17
16-SS040	SAMPLE	287077-040	240	0.71	33%	246004	03/14/17	03/28/17
16-SS041	SAMPLE	287077-041	340	0.72	33%	246036	03/14/17	03/29/17
16-SS042	SAMPLE	287077-042	570	0.88	37%	246036	03/14/17	03/29/17
16-SS043	SAMPLE	287077-043	350	0.84	37%	246036	03/14/17	03/29/17
16-SS044	SAMPLE	287077-044	63	0.94	42%	246036	03/14/17	03/29/17
16-SS045	SAMPLE	287077-045	500	0.77	41%	246036	03/14/17	03/29/17
16-SS046	SAMPLE	287077-046	600	0.81	36%	246036	03/14/17	03/29/17
16-SS047	SAMPLE	287077-047	590	0.72	36%	246036	03/15/17	03/29/17
16-SS048	SAMPLE	287077-048	30	0.88	41%	246036	03/15/17	03/29/17
16-SS049	SAMPLE	287077-049	560	0.69	32%	246036	03/15/17	03/29/17
16-SS050	SAMPLE	287077-050	660	0.89	39%	246036	03/15/17	03/29/17
	BLANK	QC878818	ND	0.49		246003		03/28/17
	BLANK	QC878829	ND	0.54		246004		03/28/17
	BLANK	QC878956	ND	0.54		246036		03/29/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Chemist:	MNA
Units:	mg/Kg	Received:	03/17/17
Basis:	dry	Prepared:	03/28/17

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim	Batch#	Sampled	Analyzed
	BS		QC878819		50.00	50.15	100	75-125				246003		03/28/17
	BSD		QC878820		46.30	45.71	99	75-125		2	35	246003		03/28/17
16-SS002	MS	287077-002	QC878821	514.9	66.14	552.4	57 NM	75-125	30%			246003	03/13/17	03/28/17
16-SS002	MSD	287077-002	QC878822		72.89	570.6	76 NM	75-125	30%	2	35	246003	03/13/17	03/28/17
	BS		QC878830		52.63	54.43	103	75-125				246004		03/28/17
	BSD		QC878831		52.08	52.98	102	75-125		2	35	246004		03/28/17
16-SS021	MS	287077-021	QC878832	323.2	73.70	428.7	143 NM	75-125	36%			246004	03/13/17	03/28/17
16-SS021	MSD	287077-021	QC878833		75.12	398.3	100 NM	75-125	36%	8	35	246004	03/13/17	03/28/17
	BS		QC878957		53.76	48.63	90	75-125				246036		03/29/17
	BSD		QC878958		52.08	48.15	92	75-125		2	35	246036		03/29/17
16-SS042	MS	287077-042	QC878959	574.2	86.27	596.0	25 NM	75-125	37%			246036	03/14/17	03/29/17
16-SS042	MSD	287077-042	QC878960		79.37	613.1	49 NM	75-125	37%	4	35	246036	03/14/17	03/29/17

NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS002	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246003
MSS Lab ID:	287077-002	Chemist:	MNA
Lab ID:	QC878823	Sampled:	03/13/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/28/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
514.9	0.7289	632.4	3.644	30%	23 *	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS002	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246003
MSS Lab ID:	287077-002	Chemist:	MNA
Lab ID:	QC878824	Sampled:	03/13/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/28/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
514.9	7.289	534.8	272 NM	75-125	30%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS021	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246004
MSS Lab ID:	287077-021	Chemist:	MNA
Lab ID:	QC878834	Sampled:	03/13/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/28/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff		Lim
323.2	0.8138	394.9	4.069	36%	22	*	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS021	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246004
MSS Lab ID:	287077-021	Chemist:	MNA
Lab ID:	QC878835	Sampled:	03/13/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/28/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
323.2	8.138	332.0	107 NM	75-125	36%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS042	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246036
MSS Lab ID:	287077-042	Chemist:	MNA
Lab ID:	QC878961	Sampled:	03/14/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/29/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
574.2	0.8818	684.1	4.409	37%	19 *	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS042	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246036
MSS Lab ID:	287077-042	Chemist:	MNA
Lab ID:	QC878962	Sampled:	03/14/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/29/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
574.2	8.818	562.5	-132 NM	75-125	37%

NM= Not Meaningful: Sample concentration > 4X spike concentration

REPORTING SUMMARY FOR 287077 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287077-001	MET10	03/28/17 16:05	1.0	+	
287077-002	MET10	03/28/17 15:50	1.0	+	
287077-003	MET10	03/28/17 16:08	1.0	+	
287077-004	MET10	03/28/17 16:11	1.0	+	
287077-005	MET10	03/28/17 16:14	1.0	+	
287077-006	MET10	03/28/17 16:17	1.0	+	
287077-007	MET10	03/28/17 16:20	1.0	+	
287077-008	MET10	03/28/17 16:23	1.0	+	
287077-009	MET10	03/28/17 16:26	1.0	+	
287077-010	MET10	03/28/17 16:34	1.0	+	
287077-011	MET10	03/28/17 16:37	1.0	+	
287077-012	MET10	03/28/17 16:40	1.0	+	
287077-013	MET10	03/28/17 16:43	1.0	+	
287077-014	MET10	03/28/17 16:46	1.0	+	
287077-015	MET10	03/28/17 16:49	1.0	+	
287077-016	MET10	03/28/17 16:52	1.0	+	
287077-017	MET10	03/28/17 16:55	1.0	+	
287077-018	MET10	03/28/17 16:58	1.0	+	
287077-019	MET10	03/28/17 17:01	1.0	+	
287077-020	MET10	03/28/17 17:13	1.0	+	
287077-021	MET10	03/28/17 17:28	1.0	+	
287077-022	MET10	03/28/17 17:51	1.0	+	
287077-023	MET10	03/28/17 17:54	1.0	+	
287077-024	MET10	03/28/17 17:57	1.0	+	
287077-025	MET10	03/28/17 18:00	1.0	+	
287077-026	MET10	03/28/17 18:03	1.0	+	
287077-027	MET10	03/28/17 18:06	1.0	+	

REPORTING SUMMARY FOR 287077 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287077-028	MET10	03/28/17 18:09	1.0	+	
287077-029	MET10	03/28/17 18:12	1.0	+	
287077-030	MET10	03/28/17 18:15	1.0	+	
287077-031	MET10	03/28/17 18:18	1.0	+	
287077-032	MET10	03/28/17 18:30	1.0	+	
287077-033	MET10	03/28/17 18:33	1.0	+	
287077-034	MET10	03/28/17 18:36	1.0	+	
287077-035	MET10	03/28/17 18:39	1.0	+	
287077-036	MET10	03/28/17 18:42	1.0	+	
287077-037	MET10	03/28/17 18:45	1.0	+	
287077-038	MET10	03/28/17 18:48	1.0	+	
287077-039	MET10	03/28/17 18:51	1.0	+	
287077-040	MET10	03/28/17 18:54	1.0	+	
287077-041	MET10	03/29/17 19:27	1.0	+	
287077-042	MET10	03/29/17 19:12	1.0	+	
287077-043	MET10	03/29/17 19:45	1.0	+	
287077-044	MET10	03/29/17 19:49	1.0	+	
287077-045	MET10	03/29/17 19:52	1.0	+	
287077-046	MET10	03/29/17 19:55	1.0	+	
287077-047	MET10	03/29/17 19:58	1.0	+	
287077-048	MET10	03/29/17 20:01	1.0	+	
287077-049	MET10	03/29/17 20:04	1.0	+	
287077-050	MET10	03/29/17 20:07	1.0	+	
QC878818	MET10	03/28/17 15:42	1.0	+	
QC878819	MET10	03/28/17 15:45	1.0	+	
QC878820	MET10	03/28/17 15:48	1.0	+	

REPORTING SUMMARY FOR 287077 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC878821	MET10	03/28/17 15:59	1.0	+	
QC878822	MET10	03/28/17 16:02	1.0	+	
QC878823	MET10	03/28/17 18:57	5.0	+	
QC878824	MET10	03/28/17 19:06	1.0	+	
QC878829	MET10	03/28/17 17:19	1.0	+	
QC878830	MET10	03/28/17 17:23	1.0	+	
QC878831	MET10	03/28/17 17:25	1.0	+	
QC878832	MET10	03/28/17 17:31	1.0	+	
QC878833	MET10	03/28/17 17:34	1.0	+	
QC878834	MET10	03/28/17 17:37	5.0	+	
QC878835	MET10	03/28/17 17:40	1.0	+	
QC878956	MET10	03/29/17 18:58	1.0	+	
QC878957	MET10	03/29/17 19:07	1.0	+	
QC878958	MET10	03/29/17 19:09	1.0	+	
QC878959	MET10	03/29/17 19:15	1.0	+	
QC878960	MET10	03/29/17 19:18	1.0	+	
QC878961	MET10	03/29/17 19:21	5.0	+	
QC878962	MET10	03/29/17 19:24	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087125975

Instrument : MET10 Begun : 03/28/17 11:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				03/28/17 11:35	1.0		
002	met10 method	ICAL	L1			03/28/17 11:38	1.0	1	
003	met10 method	ICAL	L2			03/28/17 11:42	1.0	2	
004	met10 method	ICAL	L3			03/28/17 11:44	1.0	3	
005	met10 method	ICAL	L4			03/28/17 11:46	1.0	4	
006	met10 method	ICAL	L5			03/28/17 11:49	1.0	5	
007	met10 method	ICV				03/28/17 11:51	1.0	6	
008	met10 method	CRI				03/28/17 11:59	1.0	7	
009	met10 method	ICB				03/28/17 12:04	1.0		
010	met10 method	ICSA				03/28/17 12:07	1.0	8	10:AL=540000
011	met10 method	ICSA				03/28/17 12:11	1.0	8	10:AL=530000
012	met10 method	ICSAB				03/28/17 12:23	1.0	9	5:AL=530000
013	met10 method	BLANK	QC878796	Soil	245997	03/28/17 13:07	1.0		
014	met10 method	BS	QC878797	Soil	245997	03/28/17 13:10	1.0		
015	met10 method	BSD	QC878798	Soil	245997	03/28/17 13:13	1.0		
016	met10 method	MSS	287256-002	Soil	245997	03/28/17 13:15	1.0		3:FE=440000
017	met10 method	MS	QC878799	Soil	245997	03/28/17 13:18	1.0		
018	met10 method	MSD	QC878800	Soil	245997	03/28/17 13:21	1.0		
019	met10 method	SAMPLE	287084-001	Soil	245997	03/28/17 13:24	1.0		4:AL=430000
020	met10 method	SAMPLE	287274-002	Soil	245962	03/28/17 13:27	1.0		
021	met10 method	SAMPLE	287098-001	Miscell.	245997	03/28/17 13:30	1.0		2:AL=300000
022	met10 method	SAMPLE	287256-001	Soil	245997	03/28/17 13:32	1.0		3:FE=460000
023	met10 method	CCV				03/28/17 13:35	1.0	10	
024	met10 method	CCB				03/28/17 13:38	1.0		
025	met10 method	SAMPLE	287256-003	Soil	245997	03/28/17 13:41	1.0		3:FE=450000
026	met10 method	SAMPLE	287256-004	Soil	245997	03/28/17 13:44	1.0		3:FE=410000
027	met10 method	SAMPLE	287270-001	Soil	245997	03/28/17 13:47	1.0		4:AL=560000
028	met10 method	SAMPLE	287313-001	Soil	245997	03/28/17 13:50	1.0		6:FE=820000
029	met10 method	SAMPLE	287368-001	Miscell.	245997	03/28/17 13:53	1.0		
030	met10 method	SAMPLE	287368-002	Miscell.	245997	03/28/17 13:56	1.0		
031	met10 method	SAMPLE	287368-003	Miscell.	245997	03/28/17 13:59	1.0		
032	met10 method	SAMPLE	287368-004	Miscell.	245997	03/28/17 14:02	1.0		
033	met10 method	SAMPLE	287405-001	Soil	245997	03/28/17 14:05	1.0		6:FE=500000
034	met10 method	SAMPLE	287405-002	Soil	245997	03/28/17 14:08	1.0		6:FE=580000
035	met10 method	CCV				03/28/17 14:11	1.0	10	
036	met10 method	CCB				03/28/17 14:14	1.0		
037	met10 method	SAMPLE	287405-003	Soil	245997	03/28/17 14:17	1.0		5:CA=1300000
038	met10 method	SAMPLE	287405-004	Soil	245997	03/28/17 14:20	1.0		5:FE=380000
039	met10 method	SAMPLE	287405-005	Soil	245997	03/28/17 14:23	1.0		4:FE=370000
040	met10 method	SAMPLE	287277-001	Miscell.	245962	03/28/17 14:26	25.0		
041	met10 method	SAMPLE	287277-002	Miscell.	245962	03/28/17 14:29	25.0		
042	met10 method	X	RINSE			03/28/17 14:31	1.0		
043	met10 method	BLANK	QC878347	Water	245882	03/28/17 14:34	1.0		
044	met10 method	BS	QC878348	Water	245882	03/28/17 14:38	1.0		
045	met10 method	BSD	QC878349	Water	245882	03/28/17 14:40	1.0		
046	met10 method	SAMPLE	287207-001	Water	245882	03/28/17 14:43	1.0		2:NA=160000
047	met10 method	CCV				03/28/17 14:45	1.0	10	
048	met10 method	CCB				03/28/17 14:48	1.0		
049	met10 method	MS	QC878350	Water	245882	03/28/17 14:51	1.0		
050	met10 method	MSD	QC878351	Water	245882	03/28/17 14:54	1.0		
051	met10 method	X	RINSE			03/28/17 14:57	1.0		
052	met10 method	BLANK	QC878754	Filtrate	245983	03/28/17 15:00	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087125975

Instrument : MET10 Begun : 03/28/17 11:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MSS	287273-001	Filtrate	245983	03/28/17 15:03	1.0		
054	met10 method	SAMPLE	287273-002	Filtrate	245983	03/28/17 15:06	1.0		1:NA=100000
055	met10 method	SAMPLE	287405-003	Soil	245997	03/28/17 15:08	100.0		
056	met10 method	SAMPLE	287405-003	Soil	245997	03/28/17 15:11	1.0		5:CA=1300000
057	met10 method	X	RINSE			03/28/17 15:14	1.0		
058	met10 method	BLANK	QC878611	Water	245946	03/28/17 15:17	1.0		
059	met10 method	CCV				03/28/17 15:20	1.0	10	
060	met10 method	CCB				03/28/17 15:23	1.0		
061	met10 method	BS	QC878612	Water	245946	03/28/17 15:26	1.0		
062	met10 method	BSD	QC878613	Water	245946	03/28/17 15:29	1.0		
063	met10 method	MSS	287255-004	Water	245946	03/28/17 15:31	1.0		1:NA=360000
064	met10 method	MS	QC878614	Water	245946	03/28/17 15:33	1.0		
065	met10 method	MSD	QC878615	Water	245946	03/28/17 15:36	1.0		
066	met10 method	X	RINSE			03/28/17 15:38	1.0		
067	met10 method	BLANK	QC878818	Soil	246003	03/28/17 15:42	1.0		
068	met10 method	BS	QC878819	Soil	246003	03/28/17 15:45	1.0		
069	met10 method	BSD	QC878820	Soil	246003	03/28/17 15:48	1.0		
070	met10 method	MSS	287077-002	Soil	246003	03/28/17 15:50	1.0		4:FE=650000
071	met10 method	CCV				03/28/17 15:53	1.0	10	
072	met10 method	CCB				03/28/17 15:56	1.0		
073	met10 method	MS	QC878821	Soil	246003	03/28/17 15:59	1.0		
074	met10 method	MSD	QC878822	Soil	246003	03/28/17 16:02	1.0		
075	met10 method	SAMPLE	287077-001	Soil	246003	03/28/17 16:05	1.0		4:FE=640000
076	met10 method	SAMPLE	287077-003	Soil	246003	03/28/17 16:08	1.0		4:FE=620000
077	met10 method	SAMPLE	287077-004	Soil	246003	03/28/17 16:11	1.0		4:FE=590000
078	met10 method	SAMPLE	287077-005	Soil	246003	03/28/17 16:14	1.0		4:FE=640000
079	met10 method	SAMPLE	287077-006	Soil	246003	03/28/17 16:17	1.0		4:FE=670000
080	met10 method	SAMPLE	287077-007	Soil	246003	03/28/17 16:20	1.0		4:FE=610000
081	met10 method	SAMPLE	287077-008	Soil	246003	03/28/17 16:23	1.0		4:FE=700000
082	met10 method	SAMPLE	287077-009	Soil	246003	03/28/17 16:26	1.0		4:FE=600000
083	met10 method	CCV				03/28/17 16:28	1.0	10	
084	met10 method	CCB				03/28/17 16:31	1.0		
085	met10 method	SAMPLE	287077-010	Soil	246003	03/28/17 16:34	1.0		4:FE=680000
086	met10 method	SAMPLE	287077-011	Soil	246003	03/28/17 16:37	1.0		3:FE=560000
087	met10 method	SAMPLE	287077-012	Soil	246003	03/28/17 16:40	1.0		4:FE=680000
088	met10 method	SAMPLE	287077-013	Soil	246003	03/28/17 16:43	1.0		4:FE=710000
089	met10 method	SAMPLE	287077-014	Soil	246003	03/28/17 16:46	1.0		4:FE=620000
090	met10 method	SAMPLE	287077-015	Soil	246003	03/28/17 16:49	1.0		4:AL=640000
091	met10 method	SAMPLE	287077-016	Soil	246003	03/28/17 16:52	1.0		4:FE=720000
092	met10 method	SAMPLE	287077-017	Soil	246003	03/28/17 16:55	1.0		4:FE=590000
093	met10 method	SAMPLE	287077-018	Soil	246003	03/28/17 16:58	1.0		4:FE=600000
094	met10 method	SAMPLE	287077-019	Soil	246003	03/28/17 17:01	1.0		4:AL=630000
095	met10 method	CCV				03/28/17 17:04	1.0	10	
096	met10 method	CCB				03/28/17 17:07	1.0		
097	met10 method	CCB				03/28/17 17:10	1.0		
098	met10 method	SAMPLE	287077-020	Soil	246003	03/28/17 17:13	1.0		4:FE=590000
099	met10 method	X	RINSE			03/28/17 17:16	1.0		
100	met10 method	BLANK	QC878829	Soil	246004	03/28/17 17:19	1.0		
101	met10 method	BS	QC878830	Soil	246004	03/28/17 17:23	1.0		
102	met10 method	BSD	QC878831	Soil	246004	03/28/17 17:25	1.0		
103	met10 method	MSS	287077-021	Soil	246004	03/28/17 17:28	1.0		4:FE=630000
104	met10 method	MS	QC878832	Soil	246004	03/28/17 17:31	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087125975

Instrument : MET10 Begun : 03/28/17 11:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	MSD	QC878833	Soil	246004	03/28/17 17:34	1.0		
106	met10 method	SER	QC878834	Soil	246004	03/28/17 17:37	5.0		2:FE=150000
107	met10 method	PDS	QC878835	Soil	246004	03/28/17 17:40	1.0	11 12 13	4:FE=650000
108	met10 method	CCV				03/28/17 17:43	1.0	10	
109	met10 method	CCB				03/28/17 17:45	1.0		
110	met10 method	CCB				03/28/17 17:48	1.0		
111	met10 method	SAMPLE	287077-022	Soil	246004	03/28/17 17:51	1.0		4:FE=680000
112	met10 method	SAMPLE	287077-023	Soil	246004	03/28/17 17:54	1.0		3:FE=540000
113	met10 method	SAMPLE	287077-024	Soil	246004	03/28/17 17:57	1.0		4:FE=620000
114	met10 method	SAMPLE	287077-025	Soil	246004	03/28/17 18:00	1.0		4:FE=740000
115	met10 method	SAMPLE	287077-026	Soil	246004	03/28/17 18:03	1.0		4:FE=750000
116	met10 method	SAMPLE	287077-027	Soil	246004	03/28/17 18:06	1.0		4:FE=620000
117	met10 method	SAMPLE	287077-028	Soil	246004	03/28/17 18:09	1.0		4:FE=650000
118	met10 method	SAMPLE	287077-029	Soil	246004	03/28/17 18:12	1.0		4:FE=690000
119	met10 method	SAMPLE	287077-030	Soil	246004	03/28/17 18:15	1.0		4:AL=590000
120	met10 method	SAMPLE	287077-031	Soil	246004	03/28/17 18:18	1.0		4:FE=660000
121	met10 method	CCV				03/28/17 18:21	1.0	10	
122	met10 method	CCB				03/28/17 18:24	1.0		
123	met10 method	CCB				03/28/17 18:26	1.0		
124	met10 method	SAMPLE	287077-032	Soil	246004	03/28/17 18:30	1.0		4:FE=700000
125	met10 method	SAMPLE	287077-033	Soil	246004	03/28/17 18:33	1.0		4:FE=620000
126	met10 method	SAMPLE	287077-034	Soil	246004	03/28/17 18:36	1.0		4:FE=600000
127	met10 method	SAMPLE	287077-035	Soil	246004	03/28/17 18:39	1.0		4:FE=530000
128	met10 method	SAMPLE	287077-036	Soil	246004	03/28/17 18:42	1.0		4:FE=700000
129	met10 method	SAMPLE	287077-037	Soil	246004	03/28/17 18:45	1.0		4:FE=730000
130	met10 method	SAMPLE	287077-038	Soil	246004	03/28/17 18:48	1.0		4:FE=580000
131	met10 method	SAMPLE	287077-039	Soil	246004	03/28/17 18:51	1.0		4:FE=740000
132	met10 method	SAMPLE	287077-040	Soil	246004	03/28/17 18:54	1.0		4:FE=730000
133	met10 method	SER	QC878823	Soil	246003	03/28/17 18:57	5.0		2:FE=170000
134	met10 method	CCV				03/28/17 19:00	1.0	10	
135	met10 method	CCB				03/28/17 19:02	1.0		
136	met10 method	PDS	QC878824	Soil	246003	03/28/17 19:06	1.0	11 12 13	4:FE=700000
137	met10 method	CCV				03/28/17 19:09	1.0	10	
138	met10 method	CCB				03/28/17 19:12	1.0		
139	met10 method	CCB				03/28/17 19:14	1.0		

KER 03/29/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 139.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087125975

Date : 03/28/17 Reference : met10 method
Sequence : MET10 03/28/17 Analyzed : 03/28/17 11:38

#	Type	Sample ID	Y A	Y R
		ICAL STD	9453912	1140864
		LOWER LIMIT	2836174	342259
		UPPER LIMIT	11344694	1369037
009	ICB		9342124	1146983
011	ICSA		7963757	1007036
012	ICSAB		7970089	1022221
046	SAMPLE	287207-001	8623406	1086426
059	CCV		8717558	1144417
060	CCB		9450679	1173098
067	BLANK	QC878818	9458984	1190601
068	BS	QC878819	8984568	1168899
069	BSD	QC878820	9068314	1169672
070	MSS	287077-002	8600994	1108102
071	CCV		8821517	1163979
072	CCB		9444558	1205291
073	MS	QC878821	8306242	1073032
074	MSD	QC878822	8473204	1086740
075	SAMPLE	287077-001	8435256	1118428
076	SAMPLE	287077-003	8657172	1113491
077	SAMPLE	287077-004	8661345	1104469
078	SAMPLE	287077-005	8618749	1114002
079	SAMPLE	287077-006	8670323	1125463
080	SAMPLE	287077-007	8368944	1112074
081	SAMPLE	287077-008	8416805	1100336
082	SAMPLE	287077-009	8708454	1119769
083	CCV		8969784	1161984
084	CCB		9735578	1195730
085	SAMPLE	287077-010	8660732	1114545
086	SAMPLE	287077-011	8731307	1133089
087	SAMPLE	287077-012	8646936	1123833
088	SAMPLE	287077-013	8699695	1129613
089	SAMPLE	287077-014	8727139	1126939
090	SAMPLE	287077-015	8486964	1120306
091	SAMPLE	287077-016	8658578	1115183
092	SAMPLE	287077-017	8753597	1116390
093	SAMPLE	287077-018	8779683	1126191
094	SAMPLE	287077-019	8761608	1116082
095	CCV		9378228	1186884
096	CCB		9781689	1198154
097	CCB		9769873	1202026
098	SAMPLE	287077-020	8803153	1140978
100	BLANK	QC878829	9800617	1212115
101	BS	QC878830	9295088	1202007
102	BSD	QC878831	9374975	1180068
103	MSS	287077-021	8734607	1134919
104	MS	QC878832	8592075	1113503
105	MSD	QC878833	8599059	1099995
106	SER	QC878834	9137868	1162626
107	PDS	QC878835	8431471	1113331
108	CCV		9050541	1177830
109	CCB		9731183	1195111

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087125975

Date : 03/28/17 Reference : met10 method
Sequence : MET10 03/28/17 Analyzed : 03/28/17 11:38

#	Type	Sample ID	Y A	Y R
110	CCB		9722896	1202070
111	SAMPLE	287077-022	8793894	1123440
112	SAMPLE	287077-023	8919615	1134359
113	SAMPLE	287077-024	8800626	1134650
114	SAMPLE	287077-025	8678953	1129761
115	SAMPLE	287077-026	8688624	1122515
116	SAMPLE	287077-027	8900999	1137711
117	SAMPLE	287077-028	8820580	1144855
118	SAMPLE	287077-029	8594269	1139964
119	SAMPLE	287077-030	8807895	1130156
120	SAMPLE	287077-031	8864769	1134099
121	CCV		9441457	1168166
122	CCB		9890036	1219090
123	CCB		9868344	1203204
124	SAMPLE	287077-032	8866007	1143434
125	SAMPLE	287077-033	9010352	1161703
126	SAMPLE	287077-034	8693037	1143828
127	SAMPLE	287077-035	8912934	1119848
128	SAMPLE	287077-036	8908608	1136917
129	SAMPLE	287077-037	8829541	1122533
130	SAMPLE	287077-038	9026300	1154946
131	SAMPLE	287077-039	8877115	1130839
132	SAMPLE	287077-040	8931688	1146589
133	SER	QC878823	9288933	1161185
134	CCV		9259602	1180024
135	CCB		9977332	1210542
136	PDS	QC878824	8626544	1135298
137	CCV		9237169	1176115
138	CCB		9983024	1194146

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287077 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087125975001
Units : ug/L

Date : 28-MAR-2017 11:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087125975002	L1	28-MAR-2017 11:38	S32578
L2	met10 method	1087125975003	L2	28-MAR-2017 11:42	S32571
L3	met10 method	1087125975004	L3	28-MAR-2017 11:44	S32367
L4	met10 method	1087125975005	L4	28-MAR-2017 11:46	S32368
L5	met10 method	1087125975006	L5	28-MAR-2017 11:49	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.3200	2.9320	2.8636	2.8261		LOR0	0.00000	0.35380		2.7354	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-18	100.00	4	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287077 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087125975001 Cal Date : 28-MAR-2017

ICV 1087125975007 (28-MAR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4815	ug/L	-4	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975008.1 File : met10 method Time : 28-MAR-2017 11:59
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.709	ug/L	-6	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9259222	-2.06
Yttrium	R	1140864	1140085	-0.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975009.2 File : met10 method Time : 28-MAR-2017 12:04
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9342124	-1.18
Yttrium	R	1140864	1146983	0.54

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975011.2 File : met10 method Time : 28-MAR-2017 12:11
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	5.433	5.000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18420	ug/L	92	
Copper	A	20000	20730	ug/L	104	
Manganese	A	20000	18080	ug/L	90	
Nickel	A	20000	16660	ug/L	83	
Titanium	A	20000	18070	ug/L	90	
Vanadium	A	20000	20870	ug/L	104	
Aluminum	R	500000	526800	ug/L	105	
Calcium	R	500000	504600	ug/L	101	
Iron	R	200000	199800	ug/L	100	
Magnesium	R	500000	446200	ug/L	89	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	7963757	-15.76
Yttrium	R	1140864	1007036	-11.73

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975012.2 File : met10 method Time : 28-MAR-2017 12:23
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	977.3	ug/L	-2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	7970089	-15.70
Yttrium	R	1140864	1022221	-10.40

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975059.2 File : met10 method Time : 28-MAR-2017 15:20
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.8958	5000	5123	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	8717558	-7.79
Yttrium	R	1140864	1144417	0.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975060.2 File : met10 method Time : 28-MAR-2017 15:23
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9450679	-0.03
Yttrium	R	1140864	1173098	2.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975071.2 File : met10 method Time : 28-MAR-2017 15:53
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.8755	5000	5087	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	8821517	-6.69
Yttrium	R	1140864	1163979	2.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975072.2 File : met10 method Time : 28-MAR-2017 15:56
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9444558	-0.10
Yttrium	R	1140864	1205291	5.65

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975083.1 File : met10 method Time : 28-MAR-2017 16:28
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.9936	5000	5296	ug/L	6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	8969784	-5.12
Yttrium	R	1140864	1161984	1.85

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975084.1 File : met10 method Time : 28-MAR-2017 16:31
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9735578	2.98
Yttrium	R	1140864	1195730	4.81

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975095.1 File : met10 method Time : 28-MAR-2017 17:04
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.8579	5000	5056	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9378228	-0.80
Yttrium	R	1140864	1186884	4.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975096.1 File : met10 method Time : 28-MAR-2017 17:07
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9781689	3.47
Yttrium	R	1140864	1198154	5.02

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975097.1 File : met10 method Time : 28-MAR-2017 17:10
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9769873	3.34
Yttrium	R	1140864	1202026	5.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975108.1 File : met10 method Time : 28-MAR-2017 17:43
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.9655	5000	5246	ug/L	5	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9050541	-4.27
Yttrium	R	1140864	1177830	3.24

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975109.1 File : met10 method Time : 28-MAR-2017 17:45
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9731183	2.93
Yttrium	R	1140864	1195111	4.75

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975110.1 File : met10 method Time : 28-MAR-2017 17:48
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9722896	2.85
Yttrium	R	1140864	1202070	5.36

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975121.1 File : met10 method Time : 28-MAR-2017 18:21
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.8763	5000	5088	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9441457	-0.13
Yttrium	R	1140864	1168166	2.39

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975122.1 File : met10 method Time : 28-MAR-2017 18:24
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9890036	4.61
Yttrium	R	1140864	1219090	6.86

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975123.1 File : met10 method Time : 28-MAR-2017 18:26
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9868344	4.38
Yttrium	R	1140864	1203204	5.46

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975134.1 File : met10 method Time : 28-MAR-2017 19:00
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.9444	5000	5209	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9259602	-2.06
Yttrium	R	1140864	1180024	3.43

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975135.1 File : met10 method Time : 28-MAR-2017 19:02
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9977332	5.54
Yttrium	R	1140864	1210542	6.11

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975137.1 File : met10 method Time : 28-MAR-2017 19:09
Cal : 1087125975001 Caldate : 28-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7354	2.9870	5000	5284	ug/L	6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9237169	-2.29
Yttrium	R	1140864	1176115	3.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087125975138.1 File : met10 method Time : 28-MAR-2017 19:12
Cal : 1087125975001 Caldate : 28-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[2.511]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9453912	9983024	5.60
Yttrium	R	1140864	1194146	4.67

!=warning CCB=instrument blank

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				03/29/17 09:48	1.0		
002	met10 method	ICAL	L1			03/29/17 09:51	1.0	1	
003	met10 method	ICAL	L2			03/29/17 09:54	1.0	2	
004	met10 method	ICAL	L3			03/29/17 09:56	1.0	3	
005	met10 method	ICAL	L4			03/29/17 09:59	1.0	4	
006	met10 method	ICAL	L5			03/29/17 10:01	1.0	5	
007	met10 method	ICV				03/29/17 10:04	1.0	6	
008	met10 method	CRI				03/29/17 10:07	1.0	7	
009	met10 method	CRI				03/29/17 10:11	1.0	7	
010	met10 method	ICB				03/29/17 10:15	1.0		
011	met10 method	ICSA				03/29/17 10:18	1.0	8	10:AL=530000
012	met10 method	ICSAB				03/29/17 10:22	1.0	9	5:AL=530000
013	met10 method	BLANK	QC878975	Miscell.	246039	03/29/17 10:29	1.0		
014	met10 method	BS	QC878976	Miscell.	246039	03/29/17 10:32	1.0		
015	met10 method	BSD	QC878977	Miscell.	246039	03/29/17 10:35	1.0		
016	met10 method	MSS	287447-003	Miscell.	246039	03/29/17 10:37	1.0		6:AL=930000
017	met10 method	MS	QC878978	Miscell.	246039	03/29/17 10:40	1.0		5:AL=1000000
018	met10 method	MSD	QC878979	Miscell.	246039	03/29/17 10:43	1.0		5:PB=1000000
019	met10 method	SER	QC878980	Miscell.	246039	03/29/17 10:46	5.0		
020	met10 method	PDS	QC878981	Miscell.	246039	03/29/17 10:48	1.0	10 11 12	6:AL=900000
021	met10 method	SAMPLE	287428-001	Soil	246039	03/29/17 10:51	1.0		3:FE=290000
022	met10 method	SAMPLE	287428-002	Soil	246039	03/29/17 10:54	1.0		5:FE=410000
023	met10 method	CCV				03/29/17 10:57	1.0	13	
024	met10 method	XCCB				03/29/17 11:00	1.0		
025	met10 method	CCB				03/29/17 11:03	1.0		
026	met10 method	SAMPLE	287447-001	Miscell.	246039	03/29/17 11:06	1.0		6:CA=970000
027	met10 method	SAMPLE	287447-002	Miscell.	246039	03/29/17 11:09	1.0		6:FE=1100000
028	met10 method	SAMPLE	287447-004	Miscell.	246039	03/29/17 11:12	1.0		4:PB=1000000
029	met10 method	SAMPLE	287447-005	Miscell.	246039	03/29/17 11:15	1.0		3:PB=1000000
030	met10 method	X	RINSE6			03/29/17 11:22	1.0		
031	met10 method	X	RINSE7			03/29/17 11:25	1.0		
032	met10 method	X	RINSE8			03/29/17 11:29	1.0		
033	met10 method	X	RINSE9			03/29/17 11:32	1.0		
034	met10 method	X	RINSE10			03/29/17 11:35	1.0		
035	met10 method	CCV				03/29/17 11:44	1.0	13	
036	met10 method	XCCB				03/29/17 11:47	1.0		
037	met10 method	CCB				03/29/17 11:50	1.0		
038	met10 method	X	RINSE 1			03/29/17 11:54	1.0		
039	met10 method	X	RINSE2			03/29/17 11:57	1.0		
040	met10 method	X	RINSE3			03/29/17 12:01	1.0		
041	met10 method	X	RINSE4			03/29/17 12:04	1.0		
042	met10 method	X	RINSE5			03/29/17 12:08	1.0		
043	met10 method	X	RINSE6			03/29/17 12:11	1.0		
044	met10 method	X	RINSE7			03/29/17 12:14	1.0		
045	met10 method	X	RINSE8			03/29/17 12:18	1.0		
046	met10 method	X	RINSE9			03/29/17 12:21	1.0		
047	met10 method	X	RINSE10			03/29/17 12:24	1.0		
048	met10 method	CCV				03/29/17 12:28	1.0	13	
049	met10 method	XCCB				03/29/17 12:30	1.0		
050	met10 method	XCCB				03/29/17 12:33	1.0		
051	met10 method	CCB				03/29/17 12:36	1.0		
052	met10 method	X	RINSE4			03/29/17 12:41	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	X	RINSE5			03/29/17 12:45	1.0		
054	met10 method	X	RINSE6			03/29/17 12:48	1.0		
055	met10 method	X	RINSE7			03/29/17 12:51	1.0		
056	met10 method	X	RINSE8			03/29/17 12:55	1.0		
057	met10 method	X	RINSE9			03/29/17 12:58	1.0		
058	met10 method	X	RINSE10			03/29/17 13:02	1.0		
059	met10 method	CCV				03/29/17 13:05	1.0	13	
060	met10 method	XCCB				03/29/17 13:08	1.0		
061	met10 method	CCB				03/29/17 13:11	1.0		
062	met10 method	BLANK	QC878975	Miscell.	246039	03/29/17 13:14	1.0		
063	met10 method	BS	QC878976	Miscell.	246039	03/29/17 13:17	1.0		
064	met10 method	BSD	QC878977	Miscell.	246039	03/29/17 13:20	1.0		
065	met10 method	SAMPLE	287447-001	Miscell.	246039	03/29/17 13:22	100.0		1:PB=12000
066	met10 method	SAMPLE	287447-002	Miscell.	246039	03/29/17 13:25	100.0		1:PB=12000
067	met10 method	SAMPLE	287447-003	Miscell.	246039	03/29/17 13:27	100.0		1:PB=12000
068	met10 method	SAMPLE	287447-004	Miscell.	246039	03/29/17 13:29	100.0		1:PB=14000
069	met10 method	BLANK	QC879000	WET Leachate	246046	03/29/17 13:34	10.0		1:NA=230000
070	met10 method	BS	QC879001	WET Leachate	246046	03/29/17 13:38	1.0		
071	met10 method	BSD	QC879002	WET Leachate	246046	03/29/17 13:41	1.0		
072	met10 method	CCV				03/29/17 13:43	1.0	13	
073	met10 method	XCCB				03/29/17 13:46	1.0		
074	met10 method	CCB				03/29/17 13:49	1.0		
075	met10 method	MSS	287310-001	WET Leachate	246046	03/29/17 13:52	10.0		1:NA=160000
076	met10 method	MS	QC879003	WET Leachate	246046	03/29/17 13:55	10.0		
077	met10 method	MSD	QC879004	WET Leachate	246046	03/29/17 13:57	10.0		
078	met10 method	SAMPLE	287313-001	WET Leachate	246046	03/29/17 14:00	10.0		
079	met10 method	X	RINSE			03/29/17 14:02	1.0		
080	met10 method	BLANK	QC878985	TCLP Leachate	246041	03/29/17 14:06	10.0		1:NA=160000
081	met10 method	BS	QC878986	TCLP Leachate	246041	03/29/17 14:09	1.0		
082	met10 method	BSD	QC878987	TCLP Leachate	246041	03/29/17 14:12	1.0		
083	met10 method	MSS	287391-001	TCLP Leachate	246041	03/29/17 14:14	10.0		1:NA=160000
084	met10 method	MS	QC878988	TCLP Leachate	246041	03/29/17 14:18	10.0		
085	met10 method	CCV				03/29/17 14:20	1.0	13	
086	met10 method	XCCB				03/29/17 14:23	1.0		
087	met10 method	CCB				03/29/17 14:26	1.0		
088	met10 method	MSD	QC878989	TCLP Leachate	246041	03/29/17 14:29	10.0		
089	met10 method	SER	QC878990	TCLP Leachate	246041	03/29/17 14:32	50.0		
090	met10 method	PDS	QC878991	TCLP Leachate	246041	03/29/17 14:35	10.0	10 11 12	1:NA=170000
091	met10 method	SAMPLE	287386-001	TCLP Leachate	246041	03/29/17 14:38	10.0		1:NA=160000
092	met10 method	SAMPLE	287394-001	TCLP Leachate	246041	03/29/17 14:41	10.0		1:NA=160000
093	met10 method	SAMPLE	287394-002	TCLP Leachate	246041	03/29/17 14:44	10.0		1:NA=140000
094	met10 method	SAMPLE	287394-003	TCLP Leachate	246041	03/29/17 14:47	10.0		1:NA=160000
095	met10 method	X	RINSE7			03/29/17 14:53	1.0		
096	met10 method	BLANK	QC878462	Soil	245909	03/29/17 14:56	1.0		
097	met10 method	BS	QC878463	Soil	245909	03/29/17 14:59	1.0		
098	met10 method	BSD	QC878464	Soil	245909	03/29/17 15:02	1.0		
099	met10 method	CCV				03/29/17 15:04	1.0	13	
100	met10 method	CCB				03/29/17 15:07	1.0		
101	met10 method	MSS	287262-001	Soil	245909	03/29/17 15:10	1.0		6:FE=580000
102	met10 method	MS	QC878465	Soil	245909	03/29/17 15:13	1.0		
103	met10 method	MSD	QC878466	Soil	245909	03/29/17 15:16	1.0		
104	met10 method	SAMPLE	287262-002	Soil	245909	03/29/17 15:19	1.0		6:FE=620000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287262-003	Soil	245909	03/29/17 15:22	1.0		6:CA=1600000
106	met10 method	SAMPLE	287262-004	Soil	245909	03/29/17 15:25	1.0		5:FE=580000
107	met10 method	SAMPLE	287262-005	Soil	245909	03/29/17 15:27	1.0		4:FE=470000
108	met10 method	SAMPLE	287262-006	Soil	245909	03/29/17 15:30	1.0		6:FE=600000
109	met10 method	SAMPLE	287262-007	Soil	245909	03/29/17 15:33	1.0		6:FE=540000
110	met10 method	SAMPLE	287262-008	Soil	245909	03/29/17 15:37	1.0		5:CA=570000
111	met10 method	CCV				03/29/17 15:40	1.0	13	
112	met10 method	CCB				03/29/17 15:42	1.0		
113	met10 method	SAMPLE	287262-009	Soil	245909	03/29/17 15:46	1.0		4:FE=530000
114	met10 method	SAMPLE	287262-010	Soil	245909	03/29/17 15:49	1.0		5:FE=530000
115	met10 method	SAMPLE	287262-011	Soil	245909	03/29/17 15:52	1.0		5:FE=480000
116	met10 method	SAMPLE	287262-012	Soil	245909	03/29/17 15:55	1.0		6:FE=620000
117	met10 method	BLANK	QC878342	Water	245881	03/29/17 15:58	1.0		
118	met10 method	BS	QC878343	Water	245881	03/29/17 16:01	1.0		
119	met10 method	BSD	QC878344	Water	245881	03/29/17 16:03	1.0		
120	met10 method	MSS	287197-001	Water	245881	03/29/17 16:06	1.0		
121	met10 method	MS	QC878345	Water	245881	03/29/17 16:08	1.0		
122	met10 method	MSD	QC878346	Water	245881	03/29/17 16:11	1.0		
123	met10 method	CCV				03/29/17 16:14	1.0	13	
124	met10 method	CCB				03/29/17 16:16	1.0		
125	met10 method	SAMPLE	287394-004	TCLP Leachate	246041	03/29/17 16:20	10.0		1:NA=160000
126	met10 method	SAMPLE	287394-005	TCLP Leachate	246041	03/29/17 16:22	10.0		1:NA=160000
127	met10 method	SAMPLE	287394-006	TCLP Leachate	246041	03/29/17 16:26	10.0		1:NA=160000
128	met10 method	SAMPLE	287394-007	TCLP Leachate	246041	03/29/17 16:28	10.0		1:NA=160000
129	met10 method	X	RINSE			03/29/17 16:31	1.0		
130	met10 method	SAMPLE	287447-001	Miscell.	246039	03/29/17 16:34	10000		
131	met10 method	SAMPLE	287447-002	Miscell.	246039	03/29/17 16:37	10000		
132	met10 method	MSS	287447-003	Miscell.	246039	03/29/17 16:40	10000		
133	met10 method	SAMPLE	287447-004	Miscell.	246039	03/29/17 16:44	10000		
134	met10 method	SAMPLE	287447-005	Miscell.	246039	03/29/17 16:47	10000		
135	met10 method	CCV				03/29/17 16:50	1.0	13	
136	met10 method	CCB				03/29/17 16:53	1.0		
137	met10 method	SAMPLE	287447-006	Miscell.	246039	03/29/17 16:56	10000		
138	met10 method	SAMPLE	287447-007	Miscell.	246039	03/29/17 17:00	10000		
139	met10 method	SAMPLE	287447-008	Miscell.	246039	03/29/17 17:03	10000		
140	met10 method	SAMPLE	287447-009	Miscell.	246039	03/29/17 17:06	10000		
141	met10 method	SAMPLE	287447-010	Miscell.	246039	03/29/17 17:09	10000		
142	met10 method	SAMPLE	287447-011	Miscell.	246039	03/29/17 17:13	10000		
143	met10 method	SAMPLE	287447-012	Miscell.	246039	03/29/17 17:16	10000		
144	met10 method	SAMPLE	287428-001	Soil	246039	03/29/17 17:19	1.0		2:AL=300000
145	met10 method	SAMPLE	287428-002	Soil	246039	03/29/17 17:22	1.0		5:FE=430000
146	met10 method	SAMPLE	287455-001	Miscell.	246039	03/29/17 17:25	1.0		3:FE=300000
147	met10 method	CCV				03/29/17 17:28	1.0	13	
148	met10 method	CCB				03/29/17 17:31	1.0		
149	met10 method	X	RINSE			03/29/17 17:34	1.0		
150	met10 method	X	RINSE 1			03/29/17 17:56	1.0		
151	met10 method	BLANK	QC878985	TCLP Leachate	246041	03/29/17 18:00	10.0		1:NA=160000
152	met10 method	BS	QC878986	TCLP Leachate	246041	03/29/17 18:03	1.0		
153	met10 method	BSD	QC878987	TCLP Leachate	246041	03/29/17 18:05	1.0		
154	met10 method	MSS	287391-001	TCLP Leachate	246041	03/29/17 18:08	10.0		1:NA=160000
155	met10 method	MS	QC878988	TCLP Leachate	246041	03/29/17 18:11	10.0		
156	met10 method	MSD	QC878989	TCLP Leachate	246041	03/29/17 18:14	10.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SER	QC878990	TCLP Leachate	246041	03/29/17 18:16	50.0		
158	met10 method	PDS	QC878991	TCLP Leachate	246041	03/29/17 18:20	10.0	10 11 12	1:NA=170000
159	met10 method	CCV				03/29/17 18:22	1.0	13	
160	met10 method	CCB				03/29/17 18:25	1.0		
161	met10 method	X	RINSE			03/29/17 18:28	1.0		
162	met10 method	MS	QC878978	Miscell.	246039	03/29/17 18:32	10000		
163	met10 method	MSD	QC878979	Miscell.	246039	03/29/17 18:35	10000		
164	met10 method	XSER	QC878980	Miscell.	246039	03/29/17 18:38	50000		
165	met10 method	PDS	QC878981	Miscell.	246039	03/29/17 18:42	10000	10 11 12	
166	met10 method	SAMPLE	287394-001	TCLP Leachate	246041	03/29/17 18:45	10.0		1:NA=150000
167	met10 method	SAMPLE	287394-002	TCLP Leachate	246041	03/29/17 18:48	10.0		1:NA=130000
168	met10 method	SAMPLE	287394-003	TCLP Leachate	246041	03/29/17 18:51	10.0		1:NA=150000
169	met10 method	X	RINSE			03/29/17 18:54	1.0		
170	met10 method	BLANK	QC878956	Soil	246036	03/29/17 18:58	1.0		
171	met10 method	CCV				03/29/17 19:01	1.0	13	
172	met10 method	CCB				03/29/17 19:03	1.0		
173	met10 method	BS	QC878957	Soil	246036	03/29/17 19:07	1.0		
174	met10 method	BSD	QC878958	Soil	246036	03/29/17 19:09	1.0		
175	met10 method	MSS	287077-042	Soil	246036	03/29/17 19:12	1.0		4:FE=690000
176	met10 method	MS	QC878959	Soil	246036	03/29/17 19:15	1.0		
177	met10 method	MSD	QC878960	Soil	246036	03/29/17 19:18	1.0		
178	met10 method	SER	QC878961	Soil	246036	03/29/17 19:21	5.0		
179	met10 method	PDS	QC878962	Soil	246036	03/29/17 19:24	1.0	10 11 12	4:FE=700000
180	met10 method	SAMPLE	287077-041	Soil	246036	03/29/17 19:27	1.0		4:FE=670000
181	met10 method	X	RINSE			03/29/17 19:30	1.0		
182	met10 method	SER	QC878980	Miscell.	246039	03/29/17 19:33	50000		
183	met10 method	CCV				03/29/17 19:37	1.0	13	
184	met10 method	CCB				03/29/17 19:39	1.0		
185	met10 method	CCB				03/29/17 19:42	1.0		
186	met10 method	SAMPLE	287077-043	Soil	246036	03/29/17 19:45	1.0		4:FE=680000
187	met10 method	SAMPLE	287077-044	Soil	246036	03/29/17 19:49	1.0		4:AL=680000
188	met10 method	SAMPLE	287077-045	Soil	246036	03/29/17 19:52	1.0		4:FE=790000
189	met10 method	SAMPLE	287077-046	Soil	246036	03/29/17 19:55	1.0		4:FE=720000
190	met10 method	SAMPLE	287077-047	Soil	246036	03/29/17 19:58	1.0		4:FE=820000
191	met10 method	SAMPLE	287077-048	Soil	246036	03/29/17 20:01	1.0		4:FE=710000
192	met10 method	SAMPLE	287077-049	Soil	246036	03/29/17 20:04	1.0		4:FE=750000
193	met10 method	SAMPLE	287077-050	Soil	246036	03/29/17 20:07	1.0		4:FE=690000
194	met10 method	SAMPLE	287082-001	Soil	246036	03/29/17 20:10	1.0		4:FE=520000
195	met10 method	SAMPLE	287082-002	Soil	246036	03/29/17 20:13	1.0		4:FE=440000
196	met10 method	CCV				03/29/17 20:15	1.0	13	
197	met10 method	CCB				03/29/17 20:18	1.0		
198	met10 method	CCB				03/29/17 20:21	1.0		
199	met10 method	SAMPLE	287082-003	Soil	246036	03/29/17 20:24	1.0		4:FE=470000
200	met10 method	SAMPLE	287082-004	Soil	246036	03/29/17 20:27	1.0		4:AL=480000
201	met10 method	SAMPLE	287082-005	Soil	246036	03/29/17 20:30	1.0		4:FE=470000
202	met10 method	SAMPLE	287082-006	Soil	246036	03/29/17 20:32	1.0		4:AL=680000
203	met10 method	SAMPLE	287082-007	Soil	246036	03/29/17 20:35	1.0		4:AL=480000
204	met10 method	SAMPLE	287082-008	Soil	246036	03/29/17 20:38	1.0		4:FE=430000
205	met10 method	SAMPLE	287082-009	Soil	246036	03/29/17 20:41	1.0		4:FE=410000
206	met10 method	X	RINSE			03/29/17 20:44	1.0		
207	met10 method	BLANK	QC878982	Wipe	246040	03/29/17 20:47	1.0		
208	met10 method	BS	QC878983	Wipe	246040	03/29/17 20:50	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	CCV				03/29/17 20:53	1.0	13	
210	met10 method	CCB				03/29/17 20:55	1.0		
211	met10 method	CCB				03/29/17 20:58	1.0		
212	met10 method	BSD	QC878984	Wipe	246040	03/29/17 21:02	1.0		
213	met10 method	SAMPLE	287173-001	Wipe	246040	03/29/17 21:04	1.0		
214	met10 method	SAMPLE	287173-002	Wipe	246040	03/29/17 21:07	1.0		
215	met10 method	SAMPLE	287173-003	Wipe	246040	03/29/17 21:09	1.0		
216	met10 method	SAMPLE	287173-004	Wipe	246040	03/29/17 21:11	1.0		
217	met10 method	SAMPLE	287173-005	Wipe	246040	03/29/17 21:14	1.0		
218	met10 method	SAMPLE	287173-006	Wipe	246040	03/29/17 21:16	1.0		
219	met10 method	SAMPLE	287401-001	Wipe	246040	03/29/17 21:18	1.0		
220	met10 method	X	RINSE			03/29/17 21:21	1.0		
221	met10 method	BLANK	QC878970	Soil	246038	03/29/17 21:24	1.0		
222	met10 method	CCV				03/29/17 21:27	1.0	13	
223	met10 method	CCB				03/29/17 21:30	1.0		
224	met10 method	CCB				03/29/17 21:33	1.0		
225	met10 method	BS	QC878971	Soil	246038	03/29/17 21:36	1.0		
226	met10 method	BSD	QC878972	Soil	246038	03/29/17 21:39	1.0		
227	met10 method	MSS	287321-012	Soil	246038	03/29/17 21:41	1.0		5:FE=440000
228	met10 method	MS	QC878973	Soil	246038	03/29/17 21:44	1.0		
229	met10 method	MSD	QC878974	Soil	246038	03/29/17 21:47	1.0		
230	met10 method	SAMPLE	287321-011	Soil	246038	03/29/17 21:50	1.0		6:FE=650000
231	met10 method	SAMPLE	287321-013	Soil	246038	03/29/17 21:53	1.0		5:FE=510000
232	met10 method	SAMPLE	287321-014	Soil	246038	03/29/17 21:56	1.0		5:FE=590000
233	met10 method	SAMPLE	287321-015	Soil	246038	03/29/17 21:59	1.0		5:FE=530000
234	met10 method	SAMPLE	287321-016	Soil	246038	03/29/17 22:02	1.0		5:CA=570000
235	met10 method	CCV				03/29/17 22:05	1.0	13	
236	met10 method	CCB				03/29/17 22:08	1.0		
237	met10 method	SAMPLE	287321-017	Soil	246038	03/29/17 22:11	1.0		5:FE=550000
238	met10 method	SAMPLE	287321-018	Soil	246038	03/29/17 22:15	1.0		4:FE=540000
239	met10 method	SAMPLE	287321-019	Soil	246038	03/29/17 22:17	1.0		6:FE=630000
240	met10 method	SAMPLE	287321-020	Soil	246038	03/29/17 22:20	1.0		5:FE=620000
241	met10 method	SAMPLE	287321-021	Soil	246038	03/29/17 22:23	1.0		4:FE=690000
242	met10 method	SAMPLE	287321-022	Soil	246038	03/29/17 22:26	1.0		5:CA=700000
243	met10 method	SAMPLE	287321-023	Soil	246038	03/29/17 22:30	1.0		6:FE=500000
244	met10 method	SAMPLE	287321-024	Soil	246038	03/29/17 22:32	1.0		5:FE=630000
245	met10 method	SAMPLE	287321-025	Soil	246038	03/29/17 22:35	1.0		5:CA=550000
246	met10 method	SAMPLE	287321-026	Soil	246038	03/29/17 22:38	1.0		5:CA=550000
247	met10 method	SAMPLE	287321-027	Soil	246038	03/29/17 22:41	1.0		3:CA=3300000
248	met10 method	CCV				03/29/17 22:44	1.0	13	
249	met10 method	CCB				03/29/17 22:47	1.0		
250	met10 method	CCB				03/29/17 22:51	1.0		

KER 03/29/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 87.

MNA 03/29/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 88 through 211.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S29983 11=S29984 12=S30560 13=S32522

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087127308

Date : 03/29/17 Reference : met10 method
Sequence : MET10 03/29/17 Analyzed : 03/29/17 09:51

#	Type	Sample ID	Y A	Y R
		ICAL STD	8877304	1043098
		LOWER LIMIT	2663191	312930
		UPPER LIMIT	10652765	1251718
010	ICB		9227062	1048431
011	ICSA		7444451	925473
012	ICSAB		7495984	925480
083	MSS	287391-001	8405416	1065871
154	MSS	287391-001	8490214	1061777
159	CCV		8708593	1070449
160	CCB		9235111	1094415
170	BLANK	QC878956	9319767	1117183
171	CCV		8718689	1062255
172	CCB		9360503	1094348
173	BS	QC878957	8938763	1096128
174	BSD	QC878958	8632321	1091097
175	MSS	287077-042	8171004	1030848
176	MS	QC878959	8057611	1013891
177	MSD	QC878960	8007931	1047220
178	SER	QC878961	8588341	1065379
179	PDS	QC878962	8173530	1043888
180	SAMPLE	287077-041	8244763	1047013
183	CCV		8771343	1073287
184	CCB		9183527	1114424
185	CCB		9245219	1112355
186	SAMPLE	287077-043	8229221	1030830
187	SAMPLE	287077-044	8228595	1042249
188	SAMPLE	287077-045	8123576	1030041
189	SAMPLE	287077-046	8260042	1032800
190	SAMPLE	287077-047	8121439	1034271
191	SAMPLE	287077-048	8313248	1055340
192	SAMPLE	287077-049	8237914	1039519
193	SAMPLE	287077-050	8243283	1042348
194	SAMPLE	287082-001	8397271	1039703
195	SAMPLE	287082-002	8469730	1050048
196	CCV		8601703	1072178
197	CCB		9238656	1093179
199	SAMPLE	287082-003	8490227	1047754
200	SAMPLE	287082-004	8439588	1042367
201	SAMPLE	287082-005	8440386	1047318
202	SAMPLE	287082-006	8199275	1026216
203	SAMPLE	287082-007	8364057	1037727
204	SAMPLE	287082-008	8301098	1043624
205	SAMPLE	287082-009	8550616	1042889

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287077 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087127308001
Units : ug/L

Date : 29-MAR-2017 09:48
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087127308002	L1	29-MAR-2017 09:51	S32578
L2	met10 method	1087127308003	L2	29-MAR-2017 09:54	S32571
L3	met10 method	1087127308004	L3	29-MAR-2017 09:56	S32367
L4	met10 method	1087127308005	L4	29-MAR-2017 09:59	S32368
L5	met10 method	1087127308006	L5	29-MAR-2017 10:01	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	3.1200	3.2950	3.2750	3.2032		LOR0	0.00000	0.31211		3.2233	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-3	100.00	3	1000.0	2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087127308001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287077 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087127308001 Cal Date : 29-MAR-2017

ICV 1087127308007 (29-MAR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4838	ug/L	-3	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308009.2 File : met10 method Time : 29-MAR-2017 10:11
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.575	ug/L	12	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8999776	1.38
Yttrium	R	1043098	1040231	-0.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308010.2 File : met10 method Time : 29-MAR-2017 10:15
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9227062	3.94
Yttrium	R	1043098	1048431	0.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308011.2 File : met10 method Time : 29-MAR-2017 10:18
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[0.4148]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	17880	ug/L	89	
Copper	A	20000	20750	ug/L	104	
Manganese	A	20000	17610	ug/L	88	
Nickel	A	20000	16340	ug/L	82	
Titanium	A	20000	17800	ug/L	89	
Vanadium	A	20000	20570	ug/L	103	
Aluminum	R	500000	533100	ug/L	107	
Calcium	R	500000	499700	ug/L	100	
Iron	R	200000	199000	ug/L	99	
Magnesium	R	500000	440700	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	7444451	-16.14
Yttrium	R	1043098	925473	-11.28

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308012.2 File : met10 method Time : 29-MAR-2017 10:22
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	936.4	ug/L	-6	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	7495984	-15.56
Yttrium	R	1043098	925480	-11.28

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308159.1 File : met10 method Time : 29-MAR-2017 18:22
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9124	5000	4545	ug/L	-9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8708593	-1.90
Yttrium	R	1043098	1070449	2.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308160.1 File : met10 method Time : 29-MAR-2017 18:25
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9235111	4.03
Yttrium	R	1043098	1094415	4.92

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308171.1 File : met10 method Time : 29-MAR-2017 19:01
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9263	5000	4567	ug/L	-9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8718689	-1.79
Yttrium	R	1043098	1062255	1.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308172.1 File : met10 method Time : 29-MAR-2017 19:03
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9360503	5.44
Yttrium	R	1043098	1094348	4.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308183.1 File : met10 method Time : 29-MAR-2017 19:37
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9155	5000	4550	ug/L	-9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8771343	-1.19
Yttrium	R	1043098	1073287	2.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308184.1 File : met10 method Time : 29-MAR-2017 19:39
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9183527	3.45
Yttrium	R	1043098	1114424	6.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308185.1 File : met10 method Time : 29-MAR-2017 19:42
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9245219	4.14
Yttrium	R	1043098	1112355	6.64

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308196.1 File : met10 method Time : 29-MAR-2017 20:15
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	3.0754	5000	4799	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8601703	-3.10
Yttrium	R	1043098	1072178	2.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308197.1 File : met10 method Time : 29-MAR-2017 20:18
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[2.945]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9238656	4.07
Yttrium	R	1043098	1093179	4.80

!=warning CCB=instrument blank

SAMPLE PREPARATION SUMMARY

Batch # : 246003 Analysis : ICP
Started By : SL Prep Date : 28-MAR-2017 09:35 Finished By : SL
Method : 3050B Units : g
Spike #1 ID : S30743 Spike #2 ID : S32291 Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-001		Soil	.93	50	1	53.76						6010	
287077-002		Soil	.98	50	1	51.02						6010	
287077-003		Soil	1.06	50	1	47.17						6010	
287077-004		Soil	.93	50	1	53.76						6010	
287077-005		Soil	.94	50	1	53.19						6010	
287077-006		Soil	1.04	50	1	48.08						6010	
287077-007		Soil	.95	50	1	52.63						6010	
287077-008		Soil	1.02	50	1	49.02						6010	
287077-009		Soil	.95	50	1	52.63						6010	
287077-010		Soil	1.1	50	1	45.45						6010	
287077-011		Soil	.91	50	1	54.95						6010	
287077-012		Soil	1.1	50	1	45.45						6010	
287077-013		Soil	1.1	50	1	45.45						6010	
287077-014		Soil	1.01	50	1	49.50						6010	
287077-015		Soil	1	50	1	50.0						6010	
287077-016		Soil	1.07	50	1	46.73						6010	
287077-017		Soil	.96	50	1	52.08						6010	
287077-018		Soil	1.06	50	1	47.17						6010	
287077-019		Soil	1.1	50	1	45.45						6010	
287077-020		Soil	1.05	50	1	47.62						6010	
QC878818	BLANK	Soil	1.03	50	1	48.54							
QC878819	BS	Soil	1	50	1	50.0		.5	.5	.5			
QC878820	BSD	Soil	1.08	50	1	46.30		.5	.5	.5			
QC878821	MS	Soil	1.08	50	1	46.30		.5	.5	.5			
QC878822	MSD	Soil	.98	50	1	51.02		.5	.5	.5			
QC878823	SER	Soil	.98	50	1	51.02							
QC878824	PDS	Soil	.98	50	1	51.02							

Analyst: MNA Date: 03/29/17 Reviewer: PRW Date: 03/30/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246003 Digestion Method: Time ON: 0935 **BK 4043**

Date Digested: 3-28-17 ☒ EPA 3050b Time OFF: 1210 Page 40

Digested by: SL ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		1.03	☒ 50 ☐	Y	✓	QC 588818
BS		1.00	☒ 50 ☐		✓	19
BSD		1.08	☒ 50 ☐		✓	20
287077-002 MS		1.08	☒ 50 ☐		✓	21
- 002 MSD		0.98	☒ 50 ☐		✓	22
- 001	A	0.93	☒ 50 ☐		✓	
- 002		0.98	☒ 50 ☐		✓	MSS
- 003		1.06	☒ 50 ☐		✓	
- 004		0.93	☒ 50 ☐		✓	
- 005		0.94	☒ 50 ☐		✓	
- 006		1.04	☒ 50 ☐		✓	
- 007		0.95	☒ 50 ☐		✓	
- 008		1.02	☒ 50 ☐		✓	
- 009		0.95	☒ 50 ☐		✓	
- 010		1.10	☒ 50 ☐		✓	
- 011		0.91	☒ 50 ☐		✓	
- 012		1.10	☒ 50 ☐		✓	
- 013		1.10	☒ 50 ☐		✓	
- 014		1.01	☒ 50 ☐		✓	
- 015		1.00	☒ 50 ☐		✓	
- 016		1.07	☒ 50 ☐		✓	
- 017		0.96	☒ 50 ☐		✓	
- 018		1.06	☒ 50 ☐		✓	
- 019		1.10	☒ 50 ☐		✓	
- 020		1.05	☒ 50 ☐		✓	

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259935-205	16/0138-2030-165	SL 3-28-17
Blank 'matrix' lot#	T458-7A007		
.5 mL of spike solution (Std1) was added to all spikes	530743		
.5 mL of spike solution (Std2) was added to all spikes	52291		
.5 mL of spike solution (Std3) was added to all spikes	530560		
Digestion Block ID, Probe Location	TETON	35	
Temperature (°C) , Thermometer ID	95°	MH4581	
1:1 HNO3 Reagent ID	BDH 20170119887		
concentrated HNO3 lot#	BDH 20170119887		
3mL 30% hydrogen peroxide lot#	EMD 56258639		
concentrated HCl lot#	JTB 162118		
☐ filtered thru' Whatman 541, lot#	9769444		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
.5	N271500
5	24444262
1.5	24444262

3-28-17

Digestion Chemist / Date

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246004
Started By : SL
Method : 3050B
Spike #1 ID : S30743
Prep Date : 28-MAR-2017 10:15
Spike #2 ID : S32291
Analysis : ICP
Finished By : SL
Units : g
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-021		Soil	.96	50	1	52.08						6010	
287077-022		Soil	1.03	50	1	48.54						6010	
287077-023		Soil	1.01	50	1	49.50						6010	
287077-024		Soil	1	50	1	50.0						6010	
287077-025		Soil	1.1	50	1	45.45						6010	
287077-026		Soil	1.1	50	1	45.45						6010	
287077-027		Soil	.92	50	1	54.35						6010	
287077-028		Soil	.98	50	1	51.02						6010	
287077-029		Soil	1.07	50	1	46.73						6010	
287077-030		Soil	1	50	1	50.0						6010	
287077-031		Soil	.97	50	1	51.55						6010	
287077-032		Soil	1.09	50	1	45.87						6010	
287077-033		Soil	.93	50	1	53.76						6010	
287077-034		Soil	.94	50	1	53.19						6010	
287077-035		Soil	1.06	50	1	47.17						6010	
287077-036		Soil	.98	50	1	51.02						6010	
287077-037		Soil	1.08	50	1	46.30						6010	
287077-038		Soil	1.06	50	1	47.17						6010	
287077-039		Soil	1.1	50	1	45.45						6010	
287077-040		Soil	1.05	50	1	47.62						6010	
QC878829	BLANK	Soil	.92	50	1	54.35							
QC878830	BS	Soil	.95	50	1	52.63		.5	.5	.5			
QC878831	BSD	Soil	.96	50	1	52.08		.5	.5	.5			
QC878832	MS	Soil	1.06	50	1	47.17		.5	.5	.5			
QC878833	MSD	Soil	1.04	50	1	48.08		.5	.5	.5			
QC878834	SER	Soil	.96	50	1	52.08							
QC878835	PDS	Soil	.96	50	1	52.08							

Analyst: MNA Date: 03/29/17 Reviewer: PRW Date: 03/30/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246004 Digestion Method: Time ON: 1015 BK 4043
Date Digested: 3-28-17 ☒ EPA 3050b Time OFF: 1240 Page 41
Digested by: SC ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		0.92	☒50 ☐___	Y	✓	QC 878829
BS		0.95	☒50 ☐___		✓	30
BSD		0.96	☒50 ☐___		✓	31
287077-021 MS		1.06	☒50 ☐___		✓	32
- 021 MSD		1.04	☒50 ☐___		✓	33
- 021	A	0.96	☒50 ☐___		✓	MSS
- 022		1.03	☒50 ☐___		✓	
- 023		1.01	☒50 ☐___		✓	
- 024		1.00	☒50 ☐___		✓	
- 025		1.10	☒50 ☐___		✓	
- 026		1.10	☒50 ☐___		✓	
- 027		0.92	☒50 ☐___		✓	
- 028		0.98	☒50 ☐___		✓	
- 029		1.07	☒50 ☐___		✓	
- 030		1.00	☒50 ☐___		✓	
- 031		0.97	☒50 ☐___		✓	
- 032		1.09	☒50 ☐___		✓	
- 033		0.93	☒50 ☐___		✓	
- 034		0.94	☒50 ☐___		✓	
- 035		1.06	☒50 ☐___		✓	
- 036		0.98	☒50 ☐___		✓	
- 037		1.08	☒50 ☐___		✓	
- 038		1.06	☒50 ☐___		✓	
- 039		1.10	☒50 ☐___		✓	
- 040		1.05	☒50 ☐___		✓	

Balance ID: B-10 calibration has been checked? ☒Yes ☐No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	279935-2005	161013B-7030-KE	SC 3-28-17
Blank 'matrix' lot#	T458-7A007		
.5 mL of spike solution (Std1) was added to all spikes	S30743		
.5 mL of spike solution (Std2) was added to all spikes	S32291		
.5 mL of spike solution (Std3) was added to all spikes	S30560		
Digestion Block ID, Probe Location	RAINIER	35	
Temperature (°C), Thermometer ID	95°, AC4730		
1:1 HNO3 Reagent ID	BDH 20170119882		
concentrated HNO3 lot#	BDH 20170119882		
3mL 30% hydrogen peroxide lot#	EMD 56258639		
concentrated HCl lot#	JTB 162118		
☐ filtered thru' Whatman 541, lot#	97694411		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
.5	N2715OD
5	24442672
1.5	24442672

3-28-17
Digestion Chemist / Date

Continued from page Ø
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Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246036 Analysis : ICP
Started By : MB4 Prep Date : 28-MAR-2017 20:00 Finished By : MB4
Method : 3050B Units : g
Spike #1 ID : S30560 Spike #2 ID : S30743 Spike #3 ID : S32291

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-041		Soil	1.04	50	1	48.08						6010	
287077-042		Soil	.9	50	1	55.56						6010	
287077-043		Soil	.95	50	1	52.63						6010	
287077-044		Soil	.92	50	1	54.35						6010	
287077-045		Soil	1.1	50	1	45.45						6010	
287077-046		Soil	.96	50	1	52.08						6010	
287077-047		Soil	1.09	50	1	45.87						6010	
287077-048		Soil	.96	50	1	52.08						6010	
287077-049		Soil	1.06	50	1	47.17						6010	
287077-050		Soil	.92	50	1	54.35						6010	
287082-001		Soil	1.05	50	1	47.62						6010	
287082-002		Soil	1.06	50	1	47.17						6010	
287082-003		Soil	1.03	50	1	48.54						6010	
287082-004		Soil	1	50	1	50.0						6010	
287082-005		Soil	.91	50	1	54.95						6010	
287082-006		Soil	1.07	50	1	46.73						6010	
287082-007		Soil	.95	50	1	52.63						6010	
287082-008		Soil	1.01	50	1	49.50						6010	
287082-009		Soil	1.01	50	1	49.50						6010	
QC878956	BLANK	Soil	.92	50	1	54.35							
QC878957	BS	Soil	.93	50	1	53.76		.5	.5	.5			
QC878958	BSD	Soil	.96	50	1	52.08		.5	.5	.5			
QC878959	MS	Soil	.92	50	1	54.35		.5	.5	.5			
QC878960	MSD	Soil	1	50	1	50.0		.5	.5	.5			
QC878961	SER	Soil	.9	50	1	55.56							
QC878962	PDS	Soil	.9	50	1	55.56							

Analyst: MNA Date: 03/29/17 Reviewer: PRW Date: 03/30/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 2460360 Digestion Method: Time ON: 20:00 **BK 4043**

Date Digested: 3-28-2017 ☒ EPA 3050b Time OFF: 22:55 Page 42

Digested by: MBH ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		0.92	☒ 50 ☐	Yes	✓	QC#878956
BS		0.93	☒ 50 ☐		✓	57
BSD		0.96	☒ 50 ☐		✓	58
287077-042 MS		0.92	☒ 50 ☐		✓	59
- 042 MSD		1.00	☒ 50 ☐		✓	60
- 041	A	1.04	☐ 50 ☐		✓	
- 042		0.90	☐ 50 ☐		✓	
- 043		0.95	☐ 50 ☐		✓	
- 044		0.92	☒ 50 ☐		✓	
- 045		1.10	☐ 50 ☐		✓	
- 046		0.96	☒ 50 ☐		✓	
- 047		1.09	☒ 50 ☐		✓	
- 048		0.96	☐ 50 ☐		✓	
- 049		1.06	☒ 50 ☐		✓	
- 050		0.92	☒ 50 ☐		✓	
287082 - 001	A	1.05	☐ 50 ☐		✓	
- 002		1.06	☐ 50 ☐		✓	
- 003		1.03	☒ 50 ☐		✓	
- 004		1.00	☒ 50 ☐		✓	
- 005		0.91	☐ 50 ☐		✓	
- 006		1.07	☐ 50 ☐		✓	
- 007		0.95	☒ 50 ☐		✓	
- 008		1.01	☒ 50 ☐		✓	
- 009		1.01	☒ 50 ☐		✓	
			☐ 50 ☐			

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259935-2005	1610138-7030-KE	MBH 3-28-17
Blank 'matrix' lot#	T458-7A007		
.5 mL of spike solution (Std1) was added to all spikes	S307243		
.5 mL of spike solution (Std2) was added to all spikes	S32291		
.5 mL of spike solution (Std3) was added to all spikes	S30568		
Digestion Block ID, Probe Location	Teflon	35	
Temperature (°C), Thermometer ID	95°C	M14581	
1:1 HNO3 Reagent ID	BDH 2016110955S		
concentrated HNO3 lot#	BDH 20170119882		
3mL 30% hydrogen peroxide lot#	EMD 562586039		
concentrated HCl lot#	JTB162118		
☒ filtered thru' Whatman 541, lot#	9746447		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N2715OD
5	24442267
1-5	24442267

3-28-2017

Digestion Chemist / Date

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

Laboratory Job Number 287077

ANALYTICAL REPORT

Metals

Matrix: SPLP Leachate

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Analysis:	EPA 6010C
Project#:	15048.001.003.0005.1		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/17/17
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Chemist	Sampled	Prepared	Analyzed	Prep
16-SS001	SAMPLE	287077-001	0.042 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS002	SAMPLE	287077-002	0.054 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS003	SAMPLE	287077-003	0.19 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS004	SAMPLE	287077-004	0.40 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS005	SAMPLE	287077-005	0.78 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS006	SAMPLE	287077-006	0.070 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS007	SAMPLE	287077-007	0.12 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS008	SAMPLE	287077-008	0.061 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS009	SAMPLE	287077-009	0.050 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS010	SAMPLE	287077-010	0.10 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS011	SAMPLE	287077-011	0.070 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS012	SAMPLE	287077-012	0.043 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS013	SAMPLE	287077-013	0.071 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS014	SAMPLE	287077-014	0.025 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS015	SAMPLE	287077-015	0.033 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS016	SAMPLE	287077-016	0.074 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS017	SAMPLE	287077-017	0.064 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS018	SAMPLE	287077-018	0.11 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS019	SAMPLE	287077-019	0.057 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS020	SAMPLE	287077-020	0.084 b	0.0050	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS021	SAMPLE	287077-021	0.017	0.0050	246105	MNA	03/13/17	03/30/17	04/08/17	SPLP
16-SS022	SAMPLE	287077-022	0.11	0.0050	246105	MNA	03/13/17	03/30/17	04/08/17	SPLP
16-SS023	SAMPLE	287077-023	0.019	0.0050	246105	MNA	03/13/17	03/30/17	04/08/17	SPLP
16-SS024	SAMPLE	287077-024	0.061	0.0050	246105	MNA	03/13/17	03/30/17	04/08/17	SPLP
16-SS025	SAMPLE	287077-025	0.029	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS026	SAMPLE	287077-026	0.053	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS027	SAMPLE	287077-027	0.11	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP

b= See narrative
ND= Not Detected
RL= Reporting Limit

14.1

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Analysis:	EPA 6010C
Project#:	15048.001.003.0005.1		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/17/17
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Chemist	Sampled	Prepared	Analyzed	Prep
16-SS028	SAMPLE	287077-028	0.050	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS029	SAMPLE	287077-029	0.066	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS030	SAMPLE	287077-030	0.037	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS031	SAMPLE	287077-031	0.29	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS032	SAMPLE	287077-032	0.23	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS033	SAMPLE	287077-033	0.011	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS034	SAMPLE	287077-034	0.035	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS035	SAMPLE	287077-035	0.0080	0.0050	246105	MNA	03/14/17	03/30/17	04/10/17	SPLP
16-SS036	SAMPLE	287077-036	0.020	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS037	SAMPLE	287077-037	0.038	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS038	SAMPLE	287077-038	ND	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS039	SAMPLE	287077-039	ND	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS040	SAMPLE	287077-040	ND	0.0050	246105	MNA	03/14/17	03/30/17	04/08/17	SPLP
16-SS041	SAMPLE	287077-041	0.010	0.0050	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS042	SAMPLE	287077-042	0.012	0.0050	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS043	SAMPLE	287077-043	0.0052	0.0050	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS044	SAMPLE	287077-044	ND	0.0050	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS045	SAMPLE	287077-045	0.015	0.0050	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS046	SAMPLE	287077-046	0.011	0.0050	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS047	SAMPLE	287077-047	0.023	0.0050	246147	TLO	03/15/17	03/31/17	04/11/17	EPA 3010A
16-SS048	SAMPLE	287077-048	ND	0.0050	246147	TLO	03/15/17	03/31/17	04/11/17	EPA 3010A
16-SS049	SAMPLE	287077-049	0.0099	0.0050	246147	TLO	03/15/17	03/31/17	04/11/17	EPA 3010A
16-SS050	SAMPLE	287077-050	0.012	0.0050	246147	TLO	03/15/17	03/31/17	04/11/17	EPA 3010A
	BLANK	QC878995	ND b	0.0050	246045	MNA		03/29/17	03/31/17	SPLP
	BLANK	QC879237	ND	0.0050	246105	MNA		03/30/17	04/08/17	SPLP
	BLANK	QC879419	ND	0.0050	246147	TLO		03/31/17	04/11/17	EPA 3010A

b= See narrative
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military
Client:	Weston Solutions	Analysis:	EPA 6010C
Project#:	15048.001.003.0005.1		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/17/17
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Chemist	Sampled	Prepared	Analyzed	Prep
	BS		QC878996		0.1000	0.1026 b	103	77-120			246045	MNA		03/29/17	03/31/17	SPLP
	BSD		QC878997		0.1000	0.1032 b	103	77-120	1	20	246045	MNA		03/29/17	03/31/17	SPLP
16-SS002	MS	287077-002	QC878998	0.05386	0.1000	0.1573 b	103	56-127			246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
16-SS002	MSD	287077-002	QC878999		0.1000	0.1573 b	103	56-127	0	33	246045	MNA	03/13/17	03/29/17	03/31/17	SPLP
	BS		QC879238		0.1000	0.1003	100	77-120			246105	MNA		03/30/17	04/08/17	SPLP
	BSD		QC879239		0.1000	0.1039	104	77-120	4	20	246105	MNA		03/30/17	04/08/17	SPLP
16-SS021	MS	287077-021	QC879240	0.01700	0.1000	0.1209	104	56-127			246105	MNA	03/13/17	03/30/17	04/08/17	SPLP
16-SS021	MSD	287077-021	QC879241		0.1000	0.1214	104	56-127	0	33	246105	MNA	03/13/17	03/30/17	04/08/17	SPLP
	BS		QC879420		0.1000	0.1060	106	77-120			246147	TLO		03/31/17	04/11/17	EPA 3010A
	BSD		QC879421		0.1000	0.1044	104	77-120	2	20	246147	TLO		03/31/17	04/11/17	EPA 3010A
16-SS042	MS	287077-042	QC879422	0.01166	0.1000	0.1141	102	56-127			246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A
16-SS042	MSD	287077-042	QC879423		0.1000	0.1148	103	56-127	1	33	246147	TLO	03/14/17	03/31/17	04/11/17	EPA 3010A

b= See narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	16-SS021	Batch#:	246105
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287077-021	Sampled:	03/13/17
Lab ID:	QC879242	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	04/08/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.01700	0.005000	0.01407 J	0.02500	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	16-SS021	Batch#:	246105
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287077-021	Sampled:	03/13/17
Lab ID:	QC879243	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	04/08/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
0.01700	0.1000	0.1171	100	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	16-SS002	Batch#:	246045
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287077-002	Sampled:	03/13/17
Lab ID:	QC879244	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	03/31/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.05386	0.005000	0.05323 b	0.02500	1	10

b= See narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	16-SS002	Batch#:	246045
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287077-002	Sampled:	03/13/17
Lab ID:	QC879245	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	03/31/17
Units:	mg/L		

MSS Result	Spiked	Result		%REC	Limits
0.05386	0.1000	0.1647	b	111	75-125

b= See narrative

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	16-SS042	Batch#:	246147
Type:	Serial Dilution	Chemist:	TLO
MSS Lab ID:	287077-042	Sampled:	03/14/17
Lab ID:	QC879424	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.01166	0.005000	0.01333 J	0.02500	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287077	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	16-SS042	Batch#:	246147
Type:	Post Digest Spike	Chemist:	TLO
MSS Lab ID:	287077-042	Sampled:	03/14/17
Lab ID:	QC879425	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
0.01166	0.1000	0.1274	116	75-125

REPORTING SUMMARY FOR 287077 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287077-001	MET10	03/31/17 00:19	1.0	+	
287077-002	MET10	03/31/17 00:08	1.0	+	
287077-003	MET10	03/31/17 00:31	1.0	+	
287077-004	MET10	03/31/17 00:33	1.0	+	
287077-005	MET10	03/31/17 00:36	1.0	+	
287077-006	MET10	03/31/17 00:38	1.0	+	
287077-007	MET10	03/31/17 00:41	1.0	+	
287077-008	MET10	03/31/17 00:43	1.0	+	
287077-009	MET10	03/31/17 00:46	1.0	+	
287077-010	MET10	03/31/17 00:48	1.0	+	
287077-011	MET10	03/31/17 00:51	1.0	+	
287077-012	MET10	03/31/17 00:53	1.0	+	
287077-013	MET10	03/31/17 01:05	1.0	+	
287077-014	MET10	03/31/17 01:07	1.0	+	
287077-015	MET10	03/31/17 01:10	1.0	+	
287077-016	MET10	03/31/17 01:12	1.0	+	
287077-017	MET10	03/31/17 01:15	1.0	+	
287077-018	MET10	03/31/17 01:17	1.0	+	
287077-019	MET10	03/31/17 01:20	1.0	+	
287077-020	MET10	03/31/17 01:22	1.0	+	
287077-021	MET10	04/05/17 05:29	1.0		
287077-021	MET10	04/08/17 04:00	1.0	+	
287077-022	MET10	04/05/17 05:43	1.0		
287077-022	MET10	04/08/17 04:21	1.0	+	
287077-023	MET10	04/05/17 05:45	1.0		
287077-023	MET10	04/08/17 04:24	1.0	+	
287077-024	MET10	04/05/17 05:48	1.0		
287077-024	MET10	04/08/17 04:26	1.0	+	
287077-025	MET10	04/05/17 05:56	1.0		

REPORTING SUMMARY FOR 287077 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287077-025	MET10	04/08/17 04:29	1.0	+
287077-026	MET10	04/05/17 05:59	1.0	
287077-026	MET10	04/08/17 04:31	1.0	+
287077-027	MET10	04/05/17 06:01	1.0	
287077-027	MET10	04/08/17 04:33	1.0	+
287077-028	MET10	04/05/17 06:04	1.0	
287077-028	MET10	04/08/17 04:36	1.0	+
287077-029	MET10	04/05/17 06:06	1.0	
287077-029	MET10	04/08/17 04:38	1.0	+
287077-030	MET10	04/05/17 06:08	1.0	
287077-030	MET10	04/08/17 04:41	1.0	+
287077-031	MET10	04/05/17 06:11	1.0	
287077-031	MET10	04/08/17 04:52	1.0	+
287077-032	MET10	04/05/17 06:13	1.0	
287077-032	MET10	04/08/17 04:55	1.0	+
287077-033	MET10	04/05/17 06:16	1.0	
287077-033	MET10	04/08/17 04:57	1.0	+
287077-034	MET10	04/05/17 06:18	1.0	
287077-034	MET10	04/08/17 05:00	1.0	+
287077-035	MET10	04/05/17 06:27	1.0	
287077-035	MET10	04/08/17 05:02	1.0	
287077-035	MET10	04/10/17 17:59	1.0	+
287077-036	MET10	04/05/17 06:29	1.0	
287077-036	MET10	04/08/17 05:05	1.0	+
287077-037	MET10	04/05/17 06:32	1.0	
287077-037	MET10	04/08/17 05:07	1.0	+
287077-038	MET10	04/05/17 06:34	1.0	
287077-038	MET10	04/08/17 05:09	1.0	+
287077-039	MET10	04/05/17 06:36	1.0	
287077-039	MET10	04/08/17 05:12	1.0	+
287077-040	MET10	04/05/17 06:39	1.0	
287077-040	MET10	04/08/17 05:14	1.0	+
287077-041	MET10	04/11/17 05:40	1.0	+
287077-042	MET10	04/11/17 05:27	1.0	+
287077-043	MET10	04/11/17 05:42	1.0	+

REPORTING SUMMARY FOR 287077 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287077-044	MET10	04/11/17 05:45	1.0	+	
287077-045	MET10	04/11/17 05:48	1.0	+	
287077-046	MET10	04/11/17 05:51	1.0	+	
287077-047	MET10	04/11/17 06:02	1.0	+	
287077-048	MET10	04/11/17 06:04	1.0	+	
287077-049	MET10	04/11/17 06:07	1.0	+	
287077-050	MET10	04/11/17 06:11	1.0	+	
QC878995	MET10	03/31/17 00:00	1.0	+	
QC878996	MET10	03/31/17 00:03	1.0	+	
QC878997	MET10	03/31/17 00:05	1.0	+	
QC878998	MET10	03/31/17 00:10	1.0	+	
QC878999	MET10	03/31/17 00:12	1.0	+	
QC879244	MET10	03/31/17 00:15	5.0	+	
QC879245	MET10	03/31/17 00:17	1.0	+	
QC879237	MET10	04/05/17 05:15	1.0		
QC879237	MET10	04/08/17 03:51	1.0	+	
QC879238	MET10	04/05/17 05:24	1.0		
QC879238	MET10	04/08/17 03:55	1.0	+	
QC879239	MET10	04/05/17 05:27	1.0		
QC879239	MET10	04/08/17 03:57	1.0	+	
QC879240	MET10	04/05/17 05:32	1.0		
QC879240	MET10	04/08/17 04:02	1.0	+	
QC879241	MET10	04/05/17 05:34	1.0		
QC879241	MET10	04/08/17 04:04	1.0	+	
QC879242	MET10	04/05/17 05:37	1.0		
QC879242	MET10	04/08/17 04:07	5.0	+	
QC879243	MET10	04/05/17 05:40	1.0		
QC879243	MET10	04/08/17 04:19	1.0	+	
QC879419	MET10	04/11/17 05:09	1.0	+	
QC879420	MET10	04/11/17 05:13	1.0	+	

REPORTING SUMMARY FOR 287077 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC879421	MET10	04/11/17 05:15	1.0	+	
QC879422	MET10	04/11/17 05:29	1.0	+	
QC879423	MET10	04/11/17 05:31	1.0	+	
QC879424	MET10	04/11/17 05:34	5.0	+	
QC879425	MET10	04/11/17 05:37	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				03/30/17 09:06	1.0		
002	met10 method	ICAL	L1			03/30/17 09:09	1.0	1	
003	met10 method	ICAL	L2			03/30/17 09:12	1.0	2	
004	met10 method	ICAL	L3			03/30/17 09:15	1.0	3	
005	met10 method	ICAL	L4			03/30/17 09:17	1.0	4	
006	met10 method	ICAL	L5			03/30/17 09:20	1.0	5	
007	met10 method	ICV				03/30/17 09:22	1.0	6	
008	met10 method	CRI				03/30/17 09:25	1.0	7	
009	met10 method	CRI				03/30/17 09:41	1.0	7	
010	met10 method	ICB				03/30/17 09:46	1.0		
011	met10 method	ICSA				03/30/17 09:50	1.0	8	10:AL=540000
012	met10 method	ICSAB				03/30/17 09:55	1.0	9	5:AL=530000
013	met10 method	SAMPLE	287447-009	Miscell.	246039	03/30/17 10:26	100.0		
014	met10 method	SAMPLE	287447-010	Miscell.	246039	03/30/17 10:29	100.0		
015	met10 method	SAMPLE	287447-011	Miscell.	246039	03/30/17 10:32	100.0		
016	met10 method	SAMPLE	287447-012	Miscell.	246039	03/30/17 10:34	100.0		
017	met10 method	BLANK	QC878342	Water	245881	03/30/17 10:36	1.0		
018	met10 method	BS	QC878343	Water	245881	03/30/17 10:40	1.0		
019	met10 method	BSD	QC878344	Water	245881	03/30/17 10:42	1.0		
020	met10 method	MSS	287197-001	Water	245881	03/30/17 10:44	1.0		
021	met10 method	MS	QC878345	Water	245881	03/30/17 10:47	1.0		
022	met10 method	MSD	QC878346	Water	245881	03/30/17 10:50	1.0		
023	met10 method	CCV				03/30/17 10:52	1.0	10	
024	met10 method	XCCB				03/30/17 10:55	1.0		
025	met10 method	CCB				03/30/17 10:58	1.0		
026	met10 method	BLANK	QC878462	Soil	245909	03/30/17 11:01	1.0		
027	met10 method	BS	QC878463	Soil	245909	03/30/17 11:05	1.0		
028	met10 method	BSD	QC878464	Soil	245909	03/30/17 11:07	1.0		
029	met10 method	MSS	287262-001	Soil	245909	03/30/17 11:09	1.0		6:FE=550000
030	met10 method	SAMPLE	287262-002	Soil	245909	03/30/17 11:12	1.0		6:FE=590000
031	met10 method	SAMPLE	287262-003	Soil	245909	03/30/17 11:15	1.0		6:CA=1600000
032	met10 method	SAMPLE	287262-004	Soil	245909	03/30/17 11:18	1.0		5:FE=550000
033	met10 method	SAMPLE	287262-005	Soil	245909	03/30/17 11:21	1.0		4:FE=450000
034	met10 method	SAMPLE	287262-006	Soil	245909	03/30/17 11:24	1.0		6:FE=570000
035	met10 method	SAMPLE	287262-007	Soil	245909	03/30/17 11:27	1.0		6:FE=510000
036	met10 method	CCV				03/30/17 11:30	1.0	10	
037	met10 method	XCCB				03/30/17 11:33	1.0		
038	met10 method	CCB				03/30/17 11:35	1.0		
039	met10 method	SAMPLE	287262-008	Soil	245909	03/30/17 11:39	1.0		5:CA=560000
040	met10 method	SAMPLE	287262-009	Soil	245909	03/30/17 11:42	1.0		4:FE=490000
041	met10 method	SAMPLE	287262-010	Soil	245909	03/30/17 11:45	1.0		5:FE=500000
042	met10 method	SAMPLE	287262-011	Soil	245909	03/30/17 11:48	1.0		5:FE=460000
043	met10 method	SAMPLE	287262-012	Soil	245909	03/30/17 11:51	1.0		6:FE=580000
044	met10 method	BLANK	QC878975	Miscell.	246039	03/30/17 11:54	1.0		
045	met10 method	SAMPLE	287455-001	Miscell.	246039	03/30/17 11:57	1.0		3:FE=280000
046	met10 method	BLANK	QC879203	Soil	246096	03/30/17 11:59	1.0		
047	met10 method	BS	QC879204	Soil	246096	03/30/17 12:02	1.0		
048	met10 method	BSD	QC879205	Soil	246096	03/30/17 12:05	1.0		
049	met10 method	CCV				03/30/17 12:07	1.0	10	
050	met10 method	XCCB				03/30/17 12:10	1.0		
051	met10 method	CCB				03/30/17 12:13	1.0		
052	met10 method	MSS	287492-002	Soil	246096	03/30/17 12:16	1.0		4:AL=370000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MS	QC879206	Soil	246096	03/30/17 12:19	1.0		
054	met10 method	MSD	QC879207	Soil	246096	03/30/17 12:22	1.0		1:AL=490000
055	met10 method	SAMPLE	287480-001	Soil	246096	03/30/17 12:25	1.0		2:AL=420000
056	met10 method	SAMPLE	287488-001	Soil	246096	03/30/17 12:28	1.0		5:FE=470000
057	met10 method	SAMPLE	287488-002	Soil	246096	03/30/17 12:31	1.0		2:FE=280000
058	met10 method	SAMPLE	287492-001	Soil	246096	03/30/17 12:33	1.0		4:FE=430000
059	met10 method	SAMPLE	287492-003	Soil	246096	03/30/17 12:36	1.0		5:CA=640000
060	met10 method	BLANK	QC879191	Miscell.	246094	03/30/17 12:39	1.0		
061	met10 method	BS	QC879192	Miscell.	246094	03/30/17 12:42	1.0		
062	met10 method	CCV				03/30/17 12:45	1.0	10	
063	met10 method	XCCB				03/30/17 12:48	1.0		
064	met10 method	CCB				03/30/17 12:51	1.0		
065	met10 method	BSD	QC879193	Miscell.	246094	03/30/17 12:54	1.0		
066	met10 method	MSS	287373-001	Miscell.	246094	03/30/17 12:56	1.0		3:FE=340000
067	met10 method	MS	QC879194	Miscell.	246094	03/30/17 12:59	1.0		1:FE=370000
068	met10 method	MSD	QC879195	Miscell.	246094	03/30/17 13:02	1.0		2:FE=350000
069	met10 method	SER	QC879196	Miscell.	246094	03/30/17 13:05	5.0		
070	met10 method	PDS	QC879197	Miscell.	246094	03/30/17 13:07	1.0	11 12 13	4:FE=350000
071	met10 method	SAMPLE	287026-001	Soil	246094	03/30/17 13:10	1.0		2:FE=260000
072	met10 method	SAMPLE	287026-002	Soil	246094	03/30/17 13:13	1.0		2:FE=230000
073	met10 method	SAMPLE	287026-003	Soil	246094	03/30/17 13:15	1.0		2:FE=240000
074	met10 method	SAMPLE	287026-004	Soil	246094	03/30/17 13:18	1.0		2:FE=230000
075	met10 method	CCV				03/30/17 13:20	1.0	10	
076	met10 method	XCCB				03/30/17 13:23	1.0		
077	met10 method	CCB				03/30/17 13:26	1.0		
078	met10 method	SAMPLE	287026-005	Soil	246094	03/30/17 13:29	1.0		2:FE=250000
079	met10 method	SAMPLE	287026-006	Soil	246094	03/30/17 13:32	1.0		3:FE=310000
080	met10 method	SAMPLE	287026-007	Soil	246094	03/30/17 13:34	1.0		2:FE=210000
081	met10 method	SAMPLE	287026-008	Soil	246094	03/30/17 13:37	1.0		3:FE=270000
082	met10 method	SAMPLE	287026-009	Soil	246094	03/30/17 13:39	1.0		1:FE=190000
083	met10 method	SAMPLE	287305-001	Soil	246094	03/30/17 13:42	1.0		6:FE=580000
084	met10 method	SAMPLE	287305-002	Soil	246094	03/30/17 13:45	1.0		5:FE=570000
085	met10 method	SAMPLE	287305-003	Soil	246094	03/30/17 13:48	1.0		6:FE=520000
086	met10 method	SAMPLE	287373-002	Miscell.	246094	03/30/17 13:51	1.0		5:FE=470000
087	met10 method	SAMPLE	287373-003	Miscell.	246094	03/30/17 13:54	1.0		5:FE=440000
088	met10 method	CCV				03/30/17 13:57	1.0	10	
089	met10 method	XCCB				03/30/17 13:59	1.0		
090	met10 method	CCB				03/30/17 14:02	1.0		
091	met10 method	BLANK	QC879224	Wipe	246101	03/30/17 14:06	1.0		
092	met10 method	BS	QC879225	Wipe	246101	03/30/17 14:09	1.0		
093	met10 method	BSD	QC879226	Wipe	246101	03/30/17 14:11	1.0		
094	met10 method	SAMPLE	287494-001	Wipe	246101	03/30/17 14:14	1.0		
095	met10 method	SAMPLE	287494-002	Wipe	246101	03/30/17 14:16	1.0		
096	met10 method	SAMPLE	287494-003	Wipe	246101	03/30/17 14:19	1.0		
097	met10 method	SAMPLE	287488-001	Soil	246096	03/30/17 14:21	100.0		
098	met10 method	SAMPLE	287488-002	Soil	246096	03/30/17 14:24	1.0		2:FE=280000
099	met10 method	BLANK	QC879198	Miscell.	246095	03/30/17 14:26	1.0		
100	met10 method	BS	QC879199	Miscell.	246095	03/30/17 14:30	1.0		
101	met10 method	CCV				03/30/17 14:32	1.0	10	
102	met10 method	XCCB				03/30/17 14:35	1.0		
103	met10 method	CCB				03/30/17 14:38	1.0		
104	met10 method	BSD	QC879200	Miscell.	246095	03/30/17 14:41	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287496-001	Miscell.	246095	03/30/17 14:43	100.0		
106	met10 method	SAMPLE	287496-002	Miscell.	246095	03/30/17 14:46	100.0		
107	met10 method	SAMPLE	287496-003	Miscell.	246095	03/30/17 14:48	100.0		
108	met10 method	SAMPLE	287496-004	Miscell.	246095	03/30/17 14:51	100.0		
109	met10 method	SAMPLE	287496-005	Miscell.	246095	03/30/17 14:53	100.0		2:PB=16000
110	met10 method	SAMPLE	287496-006	Miscell.	246095	03/30/17 14:56	100.0		2:ZN=22000
111	met10 method	SAMPLE	287496-007	Miscell.	246095	03/30/17 14:59	100.0		2:ZN=35000
112	met10 method	SAMPLE	287496-008	Miscell.	246095	03/30/17 15:03	100.0		1:PB=16000
113	met10 method	CCV				03/30/17 15:06	1.0	10	
114	met10 method	XCCB				03/30/17 15:09	1.0		
115	met10 method	CCB				03/30/17 15:11	1.0		
116	met10 method	BLANK	QC879027	Water	246054	03/30/17 15:46	1.0		
117	met10 method	BS	QC879028	Water	246054	03/30/17 15:49	1.0		
118	met10 method	BSD	QC879029	Water	246054	03/30/17 15:51	1.0		
119	met10 method	SAMPLE	287435-001	Water	246054	03/30/17 15:54	1.0		5:FE=550000
120	met10 method	MSS	287314-001	Water	246054	03/30/17 15:57	1.0		
121	met10 method	MS	QC879030	Water	246054	03/30/17 16:00	1.0		
122	met10 method	MSD	QC879031	Water	246054	03/30/17 16:02	1.0		
123	met10 method	CCV				03/30/17 16:05	1.0	10	
124	met10 method	XCCB				03/30/17 16:08	1.0		
125	met10 method	CCB				03/30/17 16:10	1.0		
126	met10 method	SAMPLE	287496-001	Miscell.	246095	03/30/17 16:18	1.0		1:TI=28000
127	met10 method	SAMPLE	287496-002	Miscell.	246095	03/30/17 16:22	1.0		6:CA=1700000
128	met10 method	SAMPLE	287496-003	Miscell.	246095	03/30/17 16:25	1.0		6:CA=1700000
129	met10 method	SAMPLE	287496-004	Miscell.	246095	03/30/17 16:28	1.0		5:CA=1500000
130	met10 method	SAMPLE	287496-005	Miscell.	246095	03/30/17 16:31	10000		
131	met10 method	SAMPLE	287496-006	Miscell.	246095	03/30/17 16:34	10000		
132	met10 method	SAMPLE	287496-007	Miscell.	246095	03/30/17 16:38	10000		
133	met10 method	SAMPLE	287496-008	Miscell.	246095	03/30/17 16:41	10000		
134	met10 method	SAMPLE	287496-001	Miscell.	246095	03/30/17 16:44	1.0		5:CA=1600000
135	met10 method	CCV				03/30/17 16:47	1.0	10	
136	met10 method	CCB				03/30/17 16:50	1.0		
137	met10 method	CCB				03/30/17 16:53	1.0		
138	met10 method	BLANK	QC879032	Water	246055	03/30/17 17:06	1.0		
139	met10 method	BS	QC879033	Water	246055	03/30/17 17:09	1.0		
140	met10 method	BSD	QC879034	Water	246055	03/30/17 17:12	1.0		
141	met10 method	MSS	287346-001	Water	246055	03/30/17 17:14	1.0		
142	met10 method	MS	QC879035	Water	246055	03/30/17 17:16	1.0		
143	met10 method	MSD	QC879036	Water	246055	03/30/17 17:19	1.0		
144	met10 method	SAMPLE	287352-001	Water	246055	03/30/17 17:21	1.0		
145	met10 method	SAMPLE	287352-002	Water	246055	03/30/17 17:24	1.0		
146	met10 method	SAMPLE	287352-005	Water	246055	03/30/17 17:26	1.0		
147	met10 method	SAMPLE	287352-006	Water	246055	03/30/17 17:28	1.0		
148	met10 method	CCV				03/30/17 17:31	1.0	10	
149	met10 method	XCCB				03/30/17 17:33	1.0		
150	met10 method	CCB				03/30/17 17:36	1.0		
151	met10 method	X	RINSE			03/30/17 17:40	1.0		
152	met10 method	SAMPLE	287386-001	TCLP Leachate	246041	03/30/17 17:43	10.0		1:NA=160000
153	met10 method	SAMPLE	287353-001	Water	246055	03/30/17 17:46	1.0		
154	met10 method	SAMPLE	287353-002	Water	246055	03/30/17 17:49	1.0		
155	met10 method	SAMPLE	287354-001	Water	246055	03/30/17 17:51	1.0		
156	met10 method	SAMPLE	287355-001	Water	246055	03/30/17 17:54	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287356-003	Water	246055	03/30/17 17:56	1.0		
158	met10 method	SAMPLE	287326-003	Soil	246096	03/30/17 17:58	1.0		2:FE=280000
159	met10 method	SAMPLE	287344-001	Soil	246096	03/30/17 18:01	1.0		10:FE=1300000
160	met10 method	SAMPLE	287315-001	Miscell.	246094	03/30/17 18:04	1.0		1:K=250000
161	met10 method	CCV				03/30/17 18:07	1.0	10	
162	met10 method	CCB				03/30/17 18:10	1.0		
163	met10 method	CCB				03/30/17 18:13	1.0		
164	met10 method	SAMPLE	287318-001	Miscell.	246094	03/30/17 18:16	1.0		1:K=170000
165	met10 method	SAMPLE	287322-021	Soil	246094	03/30/17 18:18	1.0		5:FE=590000
166	met10 method	SAMPLE	287325-001	Soil	246094	03/30/17 18:21	1.0		8:CA=1700000
167	met10 method	SAMPLE	287325-002	Soil	246094	03/30/17 18:24	1.0		5:CA=400000
168	met10 method	BLANK	QC879046	Soil	246058	03/30/17 18:27	1.0		
169	met10 method	BS	QC879047	Soil	246058	03/30/17 18:31	1.0		
170	met10 method	BSD	QC879048	Soil	246058	03/30/17 18:33	1.0		
171	met10 method	MSS	287322-001	Soil	246058	03/30/17 18:35	1.0		6:FE=590000
172	met10 method	MS	QC879049	Soil	246058	03/30/17 18:38	1.0		1:FE=610000
173	met10 method	MSD	QC879050	Soil	246058	03/30/17 18:42	1.0		1:FE=620000
174	met10 method	CCV				03/30/17 18:45	1.0	10	
175	met10 method	CCB				03/30/17 18:47	1.0		
176	met10 method	CCB				03/30/17 18:50	1.0		
177	met10 method	SAMPLE	287322-002	Soil	246058	03/30/17 18:53	1.0		6:FE=670000
178	met10 method	SAMPLE	287322-003	Soil	246058	03/30/17 18:56	1.0		6:CA=840000
179	met10 method	SAMPLE	287322-004	Soil	246058	03/30/17 18:59	1.0		5:FE=520000
180	met10 method	SAMPLE	287322-005	Soil	246058	03/30/17 19:03	1.0		5:FE=510000
181	met10 method	SAMPLE	287322-006	Soil	246058	03/30/17 19:06	1.0		4:CA=1200000
182	met10 method	SAMPLE	287322-007	Soil	246058	03/30/17 19:09	1.0		5:FE=580000
183	met10 method	SAMPLE	287322-008	Soil	246058	03/30/17 19:12	1.0		5:FE=570000
184	met10 method	SAMPLE	287322-009	Soil	246058	03/30/17 19:14	1.0		6:FE=660000
185	met10 method	SAMPLE	287322-010	Soil	246058	03/30/17 19:17	1.0		5:FE=600000
186	met10 method	SAMPLE	287322-011	Soil	246058	03/30/17 19:20	1.0		6:FE=680000
187	met10 method	CCV				03/30/17 19:23	1.0	10	
188	met10 method	CCB				03/30/17 19:26	1.0		
189	met10 method	CCB				03/30/17 19:29	1.0		
190	met10 method	SAMPLE	287322-012	Soil	246058	03/30/17 19:32	1.0		5:FE=540000
191	met10 method	SAMPLE	287322-013	Soil	246058	03/30/17 19:35	1.0		5:FE=520000
192	met10 method	SAMPLE	287322-014	Soil	246058	03/30/17 19:38	1.0		5:FE=560000
193	met10 method	SAMPLE	287322-015	Soil	246058	03/30/17 19:41	1.0		5:FE=530000
194	met10 method	SAMPLE	287322-016	Soil	246058	03/30/17 19:44	1.0		4:FE=620000
195	met10 method	SAMPLE	287322-017	Soil	246058	03/30/17 19:47	1.0		5:FE=640000
196	met10 method	SAMPLE	287322-018	Soil	246058	03/30/17 19:50	1.0		5:CA=810000
197	met10 method	SAMPLE	287322-019	Soil	246058	03/30/17 19:53	1.0		5:FE=440000
198	met10 method	SAMPLE	287322-020	Soil	246058	03/30/17 19:56	1.0		5:FE=600000
199	met10 method	X	RINSE			03/30/17 19:59	1.0		
200	met10 method	CCV				03/30/17 20:02	1.0	10	
201	met10 method	CCB				03/30/17 20:05	1.0		
202	met10 method	CCB				03/30/17 20:08	1.0		
203	met10 method	BLANK	QC878963	Soil	246037	03/30/17 20:11	1.0		
204	met10 method	BS	QC878964	Soil	246037	03/30/17 20:14	1.0		
205	met10 method	BSD	QC878965	Soil	246037	03/30/17 20:17	1.0		
206	met10 method	MSS	287082-010	Soil	246037	03/30/17 20:19	1.0		4:FE=450000
207	met10 method	MS	QC878966	Soil	246037	03/30/17 20:22	1.0		
208	met10 method	MSD	QC878967	Soil	246037	03/30/17 20:25	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SER	QC878968	Soil	246037	03/30/17 20:28	5.0		
210	met10 method	PDS	QC878969	Soil	246037	03/30/17 20:30	1.0	11 12 13	4:FE=440000
211	met10 method	SAMPLE	287082-011	Soil	246037	03/30/17 20:33	1.0		4:AL=650000
212	met10 method	SAMPLE	287082-012	Soil	246037	03/30/17 20:36	1.0		4:AL=570000
213	met10 method	CCV				03/30/17 20:39	1.0	10	
214	met10 method	CCB				03/30/17 20:42	1.0		
215	met10 method	CCB				03/30/17 20:45	1.0		
216	met10 method	SAMPLE	287082-013	Soil	246037	03/30/17 20:48	1.0		4:AL=630000
217	met10 method	SAMPLE	287082-014	Soil	246037	03/30/17 20:51	1.0		4:AL=510000
218	met10 method	SAMPLE	287082-015	Soil	246037	03/30/17 20:54	1.0		4:FE=530000
219	met10 method	SAMPLE	287082-016	Soil	246037	03/30/17 20:56	1.0		4:FE=460000
220	met10 method	SAMPLE	287082-017	Soil	246037	03/30/17 20:59	1.0		4:AL=600000
221	met10 method	SAMPLE	287082-018	Soil	246037	03/30/17 21:01	1.0		4:AL=410000
222	met10 method	SAMPLE	287082-019	Soil	246037	03/30/17 21:04	1.0		4:FE=490000
223	met10 method	SAMPLE	287321-001	Soil	246037	03/30/17 21:07	1.0		6:FE=560000
224	met10 method	SAMPLE	287321-002	Soil	246037	03/30/17 21:10	1.0		6:FE=510000
225	met10 method	SAMPLE	287321-003	Soil	246037	03/30/17 21:13	1.0		6:FE=630000
226	met10 method	CCV				03/30/17 21:16	1.0	10	
227	met10 method	CCB				03/30/17 21:19	1.0		
228	met10 method	CCB				03/30/17 21:22	1.0		
229	met10 method	SAMPLE	287321-004	Soil	246037	03/30/17 21:25	1.0		5:FE=550000
230	met10 method	SAMPLE	287321-005	Soil	246037	03/30/17 21:28	1.0		5:FE=530000
231	met10 method	SAMPLE	287321-006	Soil	246037	03/30/17 21:31	1.0		6:FE=490000
232	met10 method	SAMPLE	287321-007	Soil	246037	03/30/17 21:34	1.0		5:FE=550000
233	met10 method	SAMPLE	287321-008	Soil	246037	03/30/17 21:37	1.0		5:FE=560000
234	met10 method	SAMPLE	287321-009	Soil	246037	03/30/17 21:40	1.0		6:FE=680000
235	met10 method	SAMPLE	287321-010	Soil	246037	03/30/17 21:43	1.0		5:FE=490000
236	met10 method	BLANK	QC878970	Soil	246038	03/30/17 21:45	1.0		
237	met10 method	BS	QC878971	Soil	246038	03/30/17 21:49	1.0		
238	met10 method	BSD	QC878972	Soil	246038	03/30/17 21:51	1.0		
239	met10 method	CCV				03/30/17 21:54	1.0	10	
240	met10 method	CCB				03/30/17 21:56	1.0		
241	met10 method	CCB				03/30/17 21:59	1.0		
242	met10 method	MSS	287321-012	Soil	246038	03/30/17 22:03	1.0		5:FE=430000
243	met10 method	MS	QC878973	Soil	246038	03/30/17 22:05	1.0		
244	met10 method	MSD	QC878974	Soil	246038	03/30/17 22:08	1.0		
245	met10 method	SAMPLE	287321-011	Soil	246038	03/30/17 22:11	1.0		6:FE=640000
246	met10 method	SAMPLE	287321-013	Soil	246038	03/30/17 22:14	1.0		5:FE=500000
247	met10 method	SAMPLE	287321-014	Soil	246038	03/30/17 22:17	1.0		6:FE=590000
248	met10 method	SAMPLE	287321-015	Soil	246038	03/30/17 22:20	1.0		5:FE=530000
249	met10 method	SAMPLE	287321-016	Soil	246038	03/30/17 22:23	1.0		5:CA=600000
250	met10 method	SAMPLE	287321-017	Soil	246038	03/30/17 22:26	1.0		5:FE=570000
251	met10 method	SAMPLE	287321-018	Soil	246038	03/30/17 22:29	1.0		4:FE=550000
252	met10 method	CCV				03/30/17 22:32	1.0	10	
253	met10 method	CCB				03/30/17 22:35	1.0		
254	met10 method	CCB				03/30/17 22:38	1.0		
255	met10 method	SAMPLE	287321-019	Soil	246038	03/30/17 22:41	1.0		6:FE=620000
256	met10 method	SAMPLE	287321-020	Soil	246038	03/30/17 22:44	1.0		5:FE=600000
257	met10 method	SAMPLE	287321-021	Soil	246038	03/30/17 22:47	1.0		5:FE=670000
258	met10 method	SAMPLE	287321-022	Soil	246038	03/30/17 22:50	1.0		6:CA=710000
259	met10 method	SAMPLE	287321-023	Soil	246038	03/30/17 22:53	1.0		6:FE=490000
260	met10 method	SAMPLE	287321-024	Soil	246038	03/30/17 22:56	1.0		5:FE=610000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287321-025	Soil	246038	03/30/17 22:59	1.0		5:CA=560000
262	met10 method	SAMPLE	287321-026	Soil	246038	03/30/17 23:02	1.0		5:CA=560000
263	met10 method	SAMPLE	287321-027	Soil	246038	03/30/17 23:05	1.0		3:CA=3400000
264	met10 method	SAMPLE	287321-028	Soil	246038	03/30/17 23:08	1.0		5:CA=580000
265	met10 method	CCV				03/30/17 23:11	1.0	10	
266	met10 method	CCB				03/30/17 23:13	1.0		
267	met10 method	CCB				03/30/17 23:16	1.0		
268	met10 method	SAMPLE	287321-029	Soil	246038	03/30/17 23:19	1.0		6:FE=660000
269	met10 method	SAMPLE	287321-030	Soil	246038	03/30/17 23:22	1.0		4:FE=490000
270	met10 method	SAMPLE	287314-002	Water	246054	03/30/17 23:25	1.0		
271	met10 method	SAMPLE	287338-002	Water	246054	03/30/17 23:29	1.0		
272	met10 method	SAMPLE	287338-006	Water	246054	03/30/17 23:31	1.0		
273	met10 method	SAMPLE	287338-010	Water	246054	03/30/17 23:33	1.0		
274	met10 method	SAMPLE	287338-014	Water	246054	03/30/17 23:36	1.0		
275	met10 method	SAMPLE	287338-018	Water	246054	03/30/17 23:39	1.0		
276	met10 method	SAMPLE	287338-022	Water	246054	03/30/17 23:42	1.0		
277	met10 method	SAMPLE	287284-004	Water	246054	03/30/17 23:44	1.0		
278	met10 method	CCV				03/30/17 23:47	1.0	10	
279	met10 method	CCB				03/30/17 23:50	1.0		
280	met10 method	CCB				03/30/17 23:53	1.0		
281	met10 method	X	RINSE			03/30/17 23:56	1.0		
282	met10 method	BLANK	QC878995	SPLP Leachate	246045	03/31/17 00:00	1.0		
283	met10 method	BS	QC878996	SPLP Leachate	246045	03/31/17 00:03	1.0		
284	met10 method	BSD	QC878997	SPLP Leachate	246045	03/31/17 00:05	1.0		
285	met10 method	MSS	287077-002	SPLP Leachate	246045	03/31/17 00:08	1.0		
286	met10 method	MS	QC878998	SPLP Leachate	246045	03/31/17 00:10	1.0		
287	met10 method	MSD	QC878999	SPLP Leachate	246045	03/31/17 00:12	1.0		
288	met10 method	SER	QC879244	SPLP Leachate	246045	03/31/17 00:15	5.0		
289	met10 method	PDS	QC879245	SPLP Leachate	246045	03/31/17 00:17	1.0	11 12 13	
290	met10 method	SAMPLE	287077-001	SPLP Leachate	246045	03/31/17 00:19	1.0		
291	met10 method	CCV				03/31/17 00:22	1.0	10	
292	met10 method	CCB				03/31/17 00:25	1.0		
293	met10 method	CCB				03/31/17 00:27	1.0		
294	met10 method	SAMPLE	287077-003	SPLP Leachate	246045	03/31/17 00:31	1.0		
295	met10 method	SAMPLE	287077-004	SPLP Leachate	246045	03/31/17 00:33	1.0		2:AL=190000
296	met10 method	SAMPLE	287077-005	SPLP Leachate	246045	03/31/17 00:36	1.0		2:AL=200000
297	met10 method	SAMPLE	287077-006	SPLP Leachate	246045	03/31/17 00:38	1.0		
298	met10 method	SAMPLE	287077-007	SPLP Leachate	246045	03/31/17 00:41	1.0		
299	met10 method	SAMPLE	287077-008	SPLP Leachate	246045	03/31/17 00:43	1.0		
300	met10 method	SAMPLE	287077-009	SPLP Leachate	246045	03/31/17 00:46	1.0		
301	met10 method	SAMPLE	287077-010	SPLP Leachate	246045	03/31/17 00:48	1.0		
302	met10 method	SAMPLE	287077-011	SPLP Leachate	246045	03/31/17 00:51	1.0		
303	met10 method	SAMPLE	287077-012	SPLP Leachate	246045	03/31/17 00:53	1.0		
304	met10 method	CCV				03/31/17 00:56	1.0	10	
305	met10 method	CCB				03/31/17 00:58	1.0		
306	met10 method	CCB				03/31/17 01:01	1.0		
307	met10 method	SAMPLE	287077-013	SPLP Leachate	246045	03/31/17 01:05	1.0		
308	met10 method	SAMPLE	287077-014	SPLP Leachate	246045	03/31/17 01:07	1.0		
309	met10 method	SAMPLE	287077-015	SPLP Leachate	246045	03/31/17 01:10	1.0		
310	met10 method	SAMPLE	287077-016	SPLP Leachate	246045	03/31/17 01:12	1.0		
311	met10 method	SAMPLE	287077-017	SPLP Leachate	246045	03/31/17 01:15	1.0		
312	met10 method	SAMPLE	287077-018	SPLP Leachate	246045	03/31/17 01:17	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	SAMPLE	287077-019	SPLP Leachate	246045	03/31/17 01:20	1.0		
314	met10 method	SAMPLE	287077-020	SPLP Leachate	246045	03/31/17 01:22	1.0		
315	met10 method	X	RINSE			03/31/17 01:25	1.0		
316	met10 method	BLANK	QC879324	Soil	246123	03/31/17 01:28	1.0		
317	met10 method	CCV				03/31/17 01:31	1.0	10	
318	met10 method	CCB				03/31/17 01:34	1.0		
319	met10 method	CCB				03/31/17 01:37	1.0		
320	met10 method	LCS	QC879325	Soil	246123	03/31/17 01:40	1.0		
321	met10 method	MSS	286962-006	Soil	246123	03/31/17 01:42	1.0		5:CA=4000000
322	met10 method	MS	QC879326	Soil	246123	03/31/17 01:45	1.0		
323	met10 method	MSD	QC879327	Soil	246123	03/31/17 01:48	1.0		
324	met10 method	SAMPLE	286962-001	Soil	246123	03/31/17 01:51	1.0		8:FE=1000000
325	met10 method	SAMPLE	286962-002	Soil	246123	03/31/17 01:55	1.0		5:CA=4400000
326	met10 method	SAMPLE	286962-003	Soil	246123	03/31/17 01:57	1.0		7:CA=2200000
327	met10 method	SAMPLE	286962-004	Soil	246123	03/31/17 02:01	1.0		5:CA=4800000
328	met10 method	SAMPLE	286962-005	Soil	246123	03/31/17 02:04	1.0		3:CA=5500000
329	met10 method	SAMPLE	286962-007	Soil	246123	03/31/17 02:07	1.0		10:CA=2800000
330	met10 method	CCV				03/31/17 02:10	1.0	10	
331	met10 method	CCB				03/31/17 02:13	1.0		
332	met10 method	CCB				03/31/17 02:16	1.0		
333	met10 method	X	RINSE			03/31/17 02:19	1.0		
334	met10 method	BLANK	QC879000	WET Leachate	246046	03/31/17 02:22	10.0		1:NA=170000
335	met10 method	BS	QC879001	WET Leachate	246046	03/31/17 02:26	1.0		
336	met10 method	BSD	QC879002	WET Leachate	246046	03/31/17 02:28	1.0		
337	met10 method	MSS	287310-001	WET Leachate	246046	03/31/17 02:30	10.0		1:NA=160000
338	met10 method	MS	QC879003	WET Leachate	246046	03/31/17 02:33	10.0		
339	met10 method	MSD	QC879004	WET Leachate	246046	03/31/17 02:36	10.0		
340	met10 method	SAMPLE	287325-001	WET Leachate	246046	03/31/17 02:38	10.0		
341	met10 method	SAMPLE	287325-002	WET Leachate	246046	03/31/17 02:42	10.0		
342	met10 method	SAMPLE	287331-001	WET Leachate	246046	03/31/17 02:45	10.0		
343	met10 method	CCV				03/31/17 02:50	1.0	10	
344	met10 method	CCB				03/31/17 02:55	1.0		
345	met10 method	CCB				03/31/17 02:59	1.0		
346	met10 method	SAMPLE	287349-001	WET Leachate	246046	03/31/17 03:05	10.0		
347	met10 method	SAMPLE	287349-002	WET Leachate	246046	03/31/17 03:09	10.0		
348	met10 method	SAMPLE	287349-003	WET Leachate	246046	03/31/17 03:13	10.0		
349	met10 method	SAMPLE	287349-004	WET Leachate	246046	03/31/17 03:18	10.0		
350	met10 method	X	RINSE			03/31/17 03:23	1.0		
351	met10 method	SAMPLE	287167-001	Air	246062	03/31/17 03:28	1.0		
352	met10 method	SAMPLE	287167-002	Air	246062	03/31/17 03:33	1.0		
353	met10 method	SAMPLE	287167-003	Air	246062	03/31/17 03:37	1.0		
354	met10 method	SAMPLE	287168-001	Air	246062	03/31/17 03:42	1.0		
355	met10 method	SAMPLE	287168-002	Air	246062	03/31/17 03:47	1.0		
356	met10 method	CCV				03/31/17 03:52	1.0	10	
357	met10 method	CCB				03/31/17 03:57	1.0		
358	met10 method	CCB				03/31/17 04:00	1.0		
359	met10 method	SAMPLE	287168-003	Air	246062	03/31/17 04:04	1.0		
360	met10 method	SAMPLE	287169-001	Air	246062	03/31/17 04:09	1.0		
361	met10 method	SAMPLE	287169-002	Air	246062	03/31/17 04:14	1.0		
362	met10 method	SAMPLE	287169-003	Air	246062	03/31/17 04:19	1.0		
363	met10 method	SAMPLE	287170-001	Air	246062	03/31/17 04:23	1.0		
364	met10 method	SAMPLE	287170-002	Air	246062	03/31/17 04:28	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	SAMPLE	287170-003	Air	246062	03/31/17 04:33	1.0		
366	met10 method	SAMPLE	287171-001	Air	246062	03/31/17 04:38	1.0		
367	met10 method	SAMPLE	287171-002	Air	246062	03/31/17 04:42	1.0		
368	met10 method	X	RINSE			03/31/17 04:47	1.0		
369	met10 method	CCV				03/31/17 04:52	1.0	10	
370	met10 method	CCB				03/31/17 04:57	1.0		
371	met10 method	CCB				03/31/17 05:01	1.0		
372	met10 method	BLANK	QC878970	Soil	246038	03/31/17 05:05	1.0		
373	met10 method	CCV				03/31/17 05:10	1.0	10	
374	met10 method	CCB				03/31/17 05:15	1.0		
375	met10 method	CCB				03/31/17 05:19	1.0		

KER 03/30/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

MNA 03/30/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 26 through 280.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087128706

Date : 03/30/17 Reference : met10 method
Sequence : MET10 03/30/17 Analyzed : 03/30/17 09:09

#	Type	Sample ID	Y A	Y R
		ICAL STD	8417582	1042460
		LOWER LIMIT	2525274	312738
		UPPER LIMIT	10101098	1250952
010	ICB		8674731	1022390
011	ICSA		6946042	899519
012	ICSAB		6914140	903803
200	CCV		8288273	1033753
202	CCB		8853104	1070793
206	MSS	287082-010	7881670	994763
211	SAMPLE	287082-011	7726448	996132
212	SAMPLE	287082-012	7757024	1000058
213	CCV		8376214	1040432
214	CCB		8717383	1065649
215	CCB		8692802	1071252
216	SAMPLE	287082-013	7711123	995042
217	SAMPLE	287082-014	7923427	1004408
218	SAMPLE	287082-015	7896603	992520
219	SAMPLE	287082-016	7958036	997105
220	SAMPLE	287082-017	7791625	987168
221	SAMPLE	287082-018	7960274	1007035
222	SAMPLE	287082-019	7859191	997455
226	CCV		8429113	1047873
227	CCB		8870877	1071012
278	CCV		8441059	1056137
280	CCB		9005854	1079961
282	BLANK	QC878995	8819644	1091042
283	BS	QC878996	8495168	1073684
284	BSD	QC878997	8442147	1077197
285	MSS	287077-002	8605092	1064653
286	MS	QC878998	8376000	1061406
287	MSD	QC878999	8343887	1056398
288	SER	QC879244	8783279	1078058
289	PDS	QC879245	8361456	1065037
290	SAMPLE	287077-001	8760852	1077014
291	CCV		8414319	1060911
292	CCB		8814503	1077623
293	CCB		8802470	1086590
294	SAMPLE	287077-003	8617169	1074386
295	SAMPLE	287077-004	8374346	1039171
296	SAMPLE	287077-005	8287519	1041975
297	SAMPLE	287077-006	8465767	1080877
298	SAMPLE	287077-007	8584645	1074781
299	SAMPLE	287077-008	8655405	1069873
300	SAMPLE	287077-009	8565291	1079778
301	SAMPLE	287077-010	8343066	1078829
302	SAMPLE	287077-011	8631551	1070678
303	SAMPLE	287077-012	8770993	1090646
304	CCV		8376870	1057222
305	CCB		8774138	1067539
306	CCB		8821198	1075281
307	SAMPLE	287077-013	8373425	1081557

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087128706

Date : 03/30/17 Reference : met10 method
Sequence : MET10 03/30/17 Analyzed : 03/30/17 09:09

#	Type	Sample ID	Y A	Y R
308	SAMPLE	287077-014	8654967	1072180
309	SAMPLE	287077-015	8660846	1084940
310	SAMPLE	287077-016	8584976	1081453
311	SAMPLE	287077-017	8537258	1051155
312	SAMPLE	287077-018	8552325	1065769
313	SAMPLE	287077-019	8560354	1078019
314	SAMPLE	287077-020	8550082	1074098
317	CCV		8366670	1052480
318	CCB		8813105	1093911
342	SAMPLE	287331-001	16599787 *	82761 *

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287077 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087128706001
Units : ug/L

Date : 30-MAR-2017 09:06
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087128706002	L1	30-MAR-2017 09:09	S32578
L2	met10 method	1087128706003	L2	30-MAR-2017 09:12	S32571
L3	met10 method	1087128706004	L3	30-MAR-2017 09:15	S32367
L4	met10 method	1087128706005	L4	30-MAR-2017 09:17	S32368
L5	met10 method	1087128706006	L5	30-MAR-2017 09:20	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.5200	2.7580	2.6556	2.6022		LOR0	0.00000	0.38420		2.6340	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-3	100.00	6	1000.0	2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287077 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087128706001 Cal Date : 30-MAR-2017

ICV 1087128706007 (30-MAR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4943	ug/L	-1	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706009.1 File : met10 method Time : 30-MAR-2017 09:41
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.562	ug/L	**31**	30	cri+ ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8415274	-0.03
Yttrium	R	1042460	1019554	-2.20

+=high bias

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706010.1 File : met10 method Time : 30-MAR-2017 09:46
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8674731	3.05
Yttrium	R	1042460	1022390	-1.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706011.1 File : met10 method Time : 30-MAR-2017 09:50
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	5.177	5.000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18600	ug/L	93	
Copper	A	20000	21970	ug/L	110	
Manganese	A	20000	18300	ug/L	91	
Nickel	A	20000	16540	ug/L	83	
Titanium	A	20000	18520	ug/L	93	
Vanadium	A	20000	21370	ug/L	107	
Aluminum	R	500000	537900	ug/L	108	
Calcium	R	500000	502600	ug/L	101	
Iron	R	200000	193300	ug/L	97	
Magnesium	R	500000	451700	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	6946042	-17.48
Yttrium	R	1042460	899519	-13.71

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706012.1 File : met10 method Time : 30-MAR-2017 09:55
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	954.7	ug/L	-5	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	6914140	-17.86
Yttrium	R	1042460	903803	-13.30

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706278.1 File : met10 method Time : 30-MAR-2017 23:47
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.5146	5000	4831	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8441059	0.28
Yttrium	R	1042460	1056137	1.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706280.1 File : met10 method Time : 30-MAR-2017 23:53
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	9005854	6.99
Yttrium	R	1042460	1079961	3.60

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706291.1 File : met10 method Time : 31-MAR-2017 00:22
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.5156	5000	4833	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8414319	-0.04
Yttrium	R	1042460	1060911	1.77

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706292.1 File : met10 method Time : 31-MAR-2017 00:25
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8814503	4.72
Yttrium	R	1042460	1077623	3.37

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706293.1 File : met10 method Time : 31-MAR-2017 00:27
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8802470	4.57
Yttrium	R	1042460	1086590	4.23

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706304.1 File : met10 method Time : 31-MAR-2017 00:56
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.4835	5000	4771	ug/L	-5	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8376870	-0.48
Yttrium	R	1042460	1057222	1.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706305.1 File : met10 method Time : 31-MAR-2017 00:58
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8774138	4.24
Yttrium	R	1042460	1067539	2.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706306.1 File : met10 method Time : 31-MAR-2017 01:01
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8821198	4.79
Yttrium	R	1042460	1075281	3.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706317.1 File : met10 method Time : 31-MAR-2017 01:31
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.5020	5000	4806	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8366670	-0.60
Yttrium	R	1042460	1052480	0.96

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706318.1 File : met10 method Time : 31-MAR-2017 01:34
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8813105	4.70
Yttrium	R	1042460	1093911	4.94

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10
Method : EPA 6010C

Begun : 04/07/17 20:04
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/07/17 20:04	1.0		
002	met10 method	ICAL	L1			04/07/17 20:07	1.0	1	
003	met10 method	ICAL	L2			04/07/17 20:10	1.0	2	
004	met10 method	ICAL	L3			04/07/17 20:12	1.0	3	
005	met10 method	ICAL	L4			04/07/17 20:15	1.0	4	
006	met10 method	ICAL	L5			04/07/17 20:17	1.0	5	
007	met10 method	XICV				04/07/17 20:20	1.0	6	
008	met10 method	ICV				04/07/17 20:22	1.0	6	1:SR=4400000
009	met10 method	XCRI				04/07/17 20:25	1.0	7	
010	met10 method	CRI				04/07/17 20:28	1.0	7	1:SR=45000
011	met10 method	ICB				04/07/17 20:32	1.0		
012	met10 method	ICSA				04/07/17 20:36	1.0	8	11:AL=580000
013	met10 method	ICSAB				04/07/17 20:38	1.0	9	6:SR=4700000
014	met10 method	X	RINSE			04/07/17 20:56	1.0		
015	met10 method	BLANK	QC880563	Soil	246424	04/07/17 20:59	1.0		1:SR=1500
016	met10 method	BS	QC880564	Soil	246424	04/07/17 21:03	1.0		1:SR=88000000
017	met10 method	BSD	QC880565	Soil	246424	04/07/17 21:05	1.0		1:SR=88000000
018	met10 method	MSS	287640-001	Soil	246424	04/07/17 21:08	1.0		2:SR=1800000
019	met10 method	MS	QC880566	Soil	246424	04/07/17 21:10	1.0		1:SR=89000000
020	met10 method	MSD	QC880567	Soil	246424	04/07/17 21:13	1.0		1:SR=88000000
021	met10 method	SAMPLE	287640-002	Soil	246424	04/07/17 21:16	1.0		7:SR=13000000
022	met10 method	SAMPLE	287640-003	Soil	246424	04/07/17 21:19	1.0		5:SR=4800000
023	met10 method	SAMPLE	287640-004	Soil	246424	04/07/17 21:21	1.0		5:SR=4500000
024	met10 method	CCV				04/07/17 21:24	1.0	10	1:SR=4400000
025	met10 method	XCCB				04/07/17 21:27	1.0		
026	met10 method	CCB				04/07/17 21:30	1.0		
027	met10 method	SAMPLE	287640-005	Soil	246424	04/07/17 21:33	1.0		5:SR=4900000
028	met10 method	SAMPLE	287640-006	Soil	246424	04/07/17 21:36	1.0		5:SR=4500000
029	met10 method	SAMPLE	287667-001	Soil	246424	04/07/17 21:39	1.0		3:SR=4500000
030	met10 method	SAMPLE	287667-002	Soil	246424	04/07/17 21:41	1.0		3:SR=8500000
031	met10 method	SAMPLE	287667-003	Soil	246424	04/07/17 21:44	1.0		3:SR=2000000
032	met10 method	SAMPLE	287667-004	Soil	246424	04/07/17 21:47	1.0		3:SR=5000000
033	met10 method	SAMPLE	287668-001	Soil	246424	04/07/17 21:50	1.0		5:SR=1400000
034	met10 method	SAMPLE	287668-002	Soil	246424	04/07/17 21:53	1.0		6:SR=1300000
035	met10 method	SAMPLE	287668-003	Soil	246424	04/07/17 21:56	1.0		6:SR=1500000
036	met10 method	SAMPLE	287668-004	Soil	246424	04/07/17 21:59	1.0		7:SR=1600000
037	met10 method	CCV				04/07/17 22:02	1.0	10	1:SR=4400000
038	met10 method	XCCB				04/07/17 22:05	1.0		1:SR=1100
039	met10 method	CCB				04/07/17 22:08	1.0		1:SR=1200
040	met10 method	SAMPLE	287668-005	Soil	246424	04/07/17 22:11	1.0		6:SR=1300000
041	met10 method	SAMPLE	287668-006	Soil	246424	04/07/17 22:14	1.0		5:SR=1000000
042	met10 method	SAMPLE	287759-001	Soil	246424	04/07/17 22:17	1.0		4:SR=8800000
043	met10 method	SAMPLE	287759-002	Soil	246424	04/07/17 22:20	1.0		4:SR=6200000
044	met10 method	X	RINSE			04/07/17 22:22	1.0		
045	met10 method	BLANK	QC880555	Soil	246422	04/07/17 22:26	1.0		1:SR=2200
046	met10 method	BS	QC880556	Soil	246422	04/07/17 22:29	1.0		1:SR=88000000
047	met10 method	BSD	QC880557	Soil	246422	04/07/17 22:31	1.0		1:SR=89000000
048	met10 method	MSS	287500-014	Soil	246422	04/07/17 22:34	1.0		5:SR=5300000
049	met10 method	MS	QC880558	Soil	246422	04/07/17 22:37	1.0		
050	met10 method	CCV				04/07/17 22:40	1.0	10	1:SR=4500000
051	met10 method	XCCB				04/07/17 22:43	1.0		1:SR=2200
052	met10 method	CCB				04/07/17 22:46	1.0		1:SR=1600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MSD	QC880559	Soil	246422	04/07/17 22:49	1.0		
054	met10 method	SAMPLE	287500-019	Soil	246422	04/07/17 22:52	1.0		5:SR=3400000
055	met10 method	SAMPLE	287500-020	Soil	246422	04/07/17 22:54	1.0		5:SR=3400000
056	met10 method	SAMPLE	287500-021	Soil	246422	04/07/17 22:57	1.0		5:SR=3500000
057	met10 method	SAMPLE	287500-022	Soil	246422	04/07/17 23:00	1.0		5:SR=3500000
058	met10 method	SAMPLE	287505-005	Soil	246422	04/07/17 23:02	1.0		3:SR=8400000
059	met10 method	SAMPLE	287505-010	Soil	246422	04/07/17 23:05	1.0		3:SR=10000000
060	met10 method	SAMPLE	287617-001	Soil	246422	04/07/17 23:07	1.0		4:SR=6500000
061	met10 method	SAMPLE	287750-001	Soil	246422	04/07/17 23:10	1.0		6:SR=5400000
062	met10 method	SAMPLE	287750-002	Soil	246422	04/07/17 23:13	1.0		6:SR=4200000
063	met10 method	CCV				04/07/17 23:15	1.0	10	1:SR=4400000
064	met10 method	XCCB				04/07/17 23:18	1.0		1:SR=1800
065	met10 method	CCB				04/07/17 23:21	1.0		1:SR=1100
066	met10 method	SAMPLE	287750-003	Soil	246422	04/07/17 23:24	1.0		3:SR=4100000
067	met10 method	SAMPLE	287750-004	Soil	246422	04/07/17 23:27	1.0		4:SR=3900000
068	met10 method	SAMPLE	287750-005	Soil	246422	04/07/17 23:30	1.0		5:SR=2600000
069	met10 method	SAMPLE	287750-006	Soil	246422	04/07/17 23:33	1.0		7:SR=2600000
070	met10 method	SAMPLE	287750-007	Soil	246422	04/07/17 23:36	1.0		5:SR=4400000
071	met10 method	SAMPLE	287750-008	Soil	246422	04/07/17 23:38	1.0		3:SR=1600000
072	met10 method	SAMPLE	287750-009	Soil	246422	04/07/17 23:41	1.0		6:SR=5800000
073	met10 method	SAMPLE	287750-010	Soil	246422	04/07/17 23:44	1.0		6:SR=5300000
074	met10 method	SAMPLE	287750-011	Soil	246422	04/07/17 23:47	1.0		6:SR=5400000
075	met10 method	SAMPLE	287750-012	Soil	246422	04/07/17 23:49	1.0		7:SR=3400000
076	met10 method	CCV				04/07/17 23:52	1.0	10	1:SR=4500000
077	met10 method	XCCB				04/07/17 23:55	1.0		1:SR=1400
078	met10 method	CCB				04/07/17 23:58	1.0		1:SR=1200
079	met10 method	X	RINSE			04/08/17 00:01	1.0		
080	met10 method	BLANK	QC880589	Soil	246432	04/08/17 00:04	1.0		
081	met10 method	BS	QC880590	Soil	246432	04/08/17 00:08	1.0		2:SR=91000000
082	met10 method	BSD	QC880591	Soil	246432	04/08/17 00:10	1.0		2:SR=89000000
083	met10 method	MSS	287760-006	Soil	246432	04/08/17 00:12	1.0		7:SR=19000000
084	met10 method	MS	QC880592	Soil	246432	04/08/17 00:15	1.0		1:SR=100000000
085	met10 method	MSD	QC880593	Soil	246432	04/08/17 00:18	1.0		1:SR=110000000
086	met10 method	SAMPLE	287326-003	Soil	246432	04/08/17 00:21	1.0		3:SR=3300000
087	met10 method	SAMPLE	287744-004	Soil	246432	04/08/17 00:24	1.0		5:SR=7400000
088	met10 method	SAMPLE	287760-007	Soil	246432	04/08/17 00:27	1.0		5:SR=14000000
089	met10 method	CCV				04/08/17 00:30	1.0	10	1:SR=4500000
090	met10 method	XCCB				04/08/17 00:32	1.0		
091	met10 method	CCB				04/08/17 00:35	1.0		1:SR=1600
092	met10 method	X	RINSE			04/08/17 00:39	1.0		
093	met10 method	BLANK	QC879918	Water	246267	04/08/17 00:42	1.0		1:SR=1900
094	met10 method	BS	QC879919	Water	246267	04/08/17 00:45	1.0		2:SR=920000
095	met10 method	BSD	QC879920	Water	246267	04/08/17 00:48	1.0		2:SR=920000
096	met10 method	MSS	287440-001	Water	246267	04/08/17 00:50	1.0		1:SR=1300000
097	met10 method	MS	QC879921	Water	246267	04/08/17 00:53	1.0		
098	met10 method	MSD	QC879922	Water	246267	04/08/17 00:56	1.0		
099	met10 method	SAMPLE	287516-001	Water	246267	04/08/17 00:58	1.0		2:SR=400000
100	met10 method	X	RINSE			04/08/17 01:00	1.0		
101	met10 method	BLANK	QC879456	Water	246155	04/08/17 01:04	1.0		
102	met10 method	CCV				04/08/17 01:07	1.0	10	1:SR=4400000
103	met10 method	XCCB				04/08/17 01:10	1.0		1:SR=1300
104	met10 method	CCB				04/08/17 01:13	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BS	QC879457	Water	246155	04/08/17 01:16	1.0		2:SR=910000
106	met10 method	BSD	QC879458	Water	246155	04/08/17 01:18	1.0		2:SR=920000
107	met10 method	MSS	287365-001	Water	246155	04/08/17 01:21	1.0		1:SR=530000
108	met10 method	MS	QC879459	Water	246155	04/08/17 01:23	1.0		
109	met10 method	MSD	QC879460	Water	246155	04/08/17 01:26	1.0		
110	met10 method	SAMPLE	287246-009	Water	246155	04/08/17 01:28	1.0		5:SR=42000000
111	met10 method	SAMPLE	287348-001	Water	246155	04/08/17 01:31	1.0		1:SR=980000
112	met10 method	SAMPLE	287348-002	Water	246155	04/08/17 01:33	1.0		1:SR=4000000
113	met10 method	SAMPLE	287365-002	Water	246155	04/08/17 01:36	1.0		1:SR=57000
114	met10 method	SAMPLE	287365-003	Water	246155	04/08/17 01:39	1.0		1:SR=140000
115	met10 method	CCV				04/08/17 01:42	1.0	10	1:SR=4500000
116	met10 method	XCCB				04/08/17 01:45	1.0		
117	met10 method	CCB				04/08/17 01:48	1.0		
118	met10 method	SAMPLE	287365-004	Water	246155	04/08/17 01:51	1.0		1:SR=150000
119	met10 method	SAMPLE	287365-005	Water	246155	04/08/17 01:54	1.0		1:SR=69000
120	met10 method	SAMPLE	287365-006	Water	246155	04/08/17 01:56	1.0		1:SR=110000
121	met10 method	SAMPLE	287365-007	Water	246155	04/08/17 01:59	1.0		1:SR=170000
122	met10 method	SAMPLE	287365-008	Water	246155	04/08/17 02:01	1.0		1:SR=130000
123	met10 method	SAMPLE	287365-009	Water	246155	04/08/17 02:03	1.0		1:SR=85000
124	met10 method	SAMPLE	287365-010	Water	246155	04/08/17 02:06	1.0		1:SR=150000
125	met10 method	SAMPLE	287365-011	Water	246155	04/08/17 02:08	1.0		1:SR=65000
126	met10 method	SAMPLE	287365-012	Water	246155	04/08/17 02:11	1.0		1:SR=110000
127	met10 method	SAMPLE	287365-013	Water	246155	04/08/17 02:13	1.0		1:SR=18000
128	met10 method	CCV				04/08/17 02:16	1.0	10	1:SR=4500000
129	met10 method	XCCB				04/08/17 02:19	1.0		1:SR=1100
130	met10 method	CCB				04/08/17 02:22	1.0		
131	met10 method	SAMPLE	287365-014	Water	246155	04/08/17 02:25	1.0		1:SR=14000
132	met10 method	SAMPLE	287365-015	Water	246155	04/08/17 02:29	1.0		1:SR=10000
133	met10 method	SAMPLE	287365-019	Water	246155	04/08/17 02:32	1.0		
134	met10 method	X	RINSE			04/08/17 02:35	1.0		
135	met10 method	MS	QC880060	Soil	246299	04/08/17 02:39	1.0		4:SR=90000000
136	met10 method	MSD	QC880061	Soil	246299	04/08/17 02:41	1.0		4:SR=93000000
137	met10 method	X	RINSE			04/08/17 02:44	1.0		
138	met10 method	BLANK	QC878606	Water	245945	04/08/17 02:48	1.0		
139	met10 method	BS	QC878607	Water	245945	04/08/17 02:51	1.0		2:SR=940000
140	met10 method	BSD	QC878608	Water	245945	04/08/17 02:53	1.0		2:SR=930000
141	met10 method	CCV				04/08/17 02:56	1.0	10	1:SR=4500000
142	met10 method	XCCB				04/08/17 02:58	1.0		1:SR=1600
143	met10 method	CCB				04/08/17 03:01	1.0		1:SR=1300
144	met10 method	SAMPLE	287283-001	Water	245945	04/08/17 03:05	1.0		5:SR=52000000
145	met10 method	SAMPLE	287283-002	Water	245945	04/08/17 03:07	1.0		5:SR=35000000
146	met10 method	SAMPLE	287283-004	Water	245945	04/08/17 03:11	1.0		7:SR=88000000
147	met10 method	SAMPLE	287283-005	Water	245945	04/08/17 03:13	1.0		5:SR=73000000
148	met10 method	SAMPLE	287343-001	Water	245945	04/08/17 03:16	1.0		5:SR=70000000
149	met10 method	SAMPLE	287343-002	Water	245945	04/08/17 03:19	1.0		2:SR=6700000
150	met10 method	X	RINSE			04/08/17 03:21	1.0		
151	met10 method	MS	QC880474	Soil	246401	04/08/17 03:24	1.0		
152	met10 method	MSD	QC880475	Soil	246401	04/08/17 03:27	1.0		
153	met10 method	X	RINSE			04/08/17 03:30	1.0		
154	met10 method	CCV				04/08/17 03:34	1.0	10	1:SR=4500000
155	met10 method	XCCB				04/08/17 03:36	1.0		
156	met10 method	CCB				04/08/17 03:39	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SER	QC880476	Soil	246272	04/08/17 03:43	500.0		
158	met10 method	PDS	QC880477	Soil	246272	04/08/17 03:46	100.0	11 12 13	2:SR=1100000
159	met10 method	X	RINSE			04/08/17 03:48	1.0		
160	met10 method	BLANK	QC879237	SPLP Leachate	246105	04/08/17 03:51	1.0		1:SR=9800
161	met10 method	BS	QC879238	SPLP Leachate	246105	04/08/17 03:55	1.0		2:SR=930000
162	met10 method	BSD	QC879239	SPLP Leachate	246105	04/08/17 03:57	1.0		2:SR=910000
163	met10 method	MSS	287077-021	SPLP Leachate	246105	04/08/17 04:00	1.0		1:SR=13000
164	met10 method	MS	QC879240	SPLP Leachate	246105	04/08/17 04:02	1.0		
165	met10 method	MSD	QC879241	SPLP Leachate	246105	04/08/17 04:04	1.0		
166	met10 method	SER	QC879242	SPLP Leachate	246105	04/08/17 04:07	5.0		
167	met10 method	CCV				04/08/17 04:10	1.0	10	1:SR=4400000
168	met10 method	XCCB				04/08/17 04:13	1.0		1:SR=1300
169	met10 method	CCB				04/08/17 04:16	1.0		
170	met10 method	PDS	QC879243	SPLP Leachate	246105	04/08/17 04:19	1.0	11 12 13	2:SR=1000000
171	met10 method	SAMPLE	287077-022	SPLP Leachate	246105	04/08/17 04:21	1.0		1:SR=79000
172	met10 method	SAMPLE	287077-023	SPLP Leachate	246105	04/08/17 04:24	1.0		1:SR=43000
173	met10 method	SAMPLE	287077-024	SPLP Leachate	246105	04/08/17 04:26	1.0		1:SR=95000
174	met10 method	SAMPLE	287077-025	SPLP Leachate	246105	04/08/17 04:29	1.0		1:SR=49000
175	met10 method	SAMPLE	287077-026	SPLP Leachate	246105	04/08/17 04:31	1.0		1:SR=45000
176	met10 method	SAMPLE	287077-027	SPLP Leachate	246105	04/08/17 04:33	1.0		1:SR=91000
177	met10 method	SAMPLE	287077-028	SPLP Leachate	246105	04/08/17 04:36	1.0		1:SR=77000
178	met10 method	SAMPLE	287077-029	SPLP Leachate	246105	04/08/17 04:38	1.0		1:SR=110000
179	met10 method	SAMPLE	287077-030	SPLP Leachate	246105	04/08/17 04:41	1.0		1:SR=35000
180	met10 method	CCV				04/08/17 04:43	1.0	10	1:SR=4500000
181	met10 method	XCCB				04/08/17 04:46	1.0		
182	met10 method	CCB				04/08/17 04:49	1.0		1:SR=4200
183	met10 method	SAMPLE	287077-031	SPLP Leachate	246105	04/08/17 04:52	1.0		1:SR=190000
184	met10 method	SAMPLE	287077-032	SPLP Leachate	246105	04/08/17 04:55	1.0		1:SR=170000
185	met10 method	SAMPLE	287077-033	SPLP Leachate	246105	04/08/17 04:57	1.0		1:SR=44000
186	met10 method	SAMPLE	287077-034	SPLP Leachate	246105	04/08/17 05:00	1.0		1:SR=87000
187	met10 method	SAMPLE	287077-035	SPLP Leachate	246105	04/08/17 05:02	1.0		1:SR=29000
188	met10 method	SAMPLE	287077-036	SPLP Leachate	246105	04/08/17 05:05	1.0		1:SR=14000
189	met10 method	SAMPLE	287077-037	SPLP Leachate	246105	04/08/17 05:07	1.0		1:SR=22000
190	met10 method	SAMPLE	287077-038	SPLP Leachate	246105	04/08/17 05:09	1.0		1:SR=11000
191	met10 method	SAMPLE	287077-039	SPLP Leachate	246105	04/08/17 05:12	1.0		1:SR=13000
192	met10 method	SAMPLE	287077-040	SPLP Leachate	246105	04/08/17 05:14	1.0		1:SR=9600
193	met10 method	CCV				04/08/17 05:16	1.0	10	1:SR=4500000
194	met10 method	CCB				04/08/17 05:19	1.0		

MNA 04/07/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 76.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140884

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 20:07

#	Type	Sample ID	Y A	Y R	
		ICAL STD	8585389	1044978	
		LOWER LIMIT	2575617	313493	
		UPPER LIMIT	10302467	1253973	
011	ICB		8658756	1034440	
012	ICSA		7081496	909784	
013	ICSAB		7125714	912794	
037	CCV		8379998	1030830	
039	CCB		8929805	1056878	
048	MSS	287500-014	7801307	981755	
050	CCV		8379884	1025954	
052	CCB		8755874	1038796	
054	SAMPLE	287500-019	7944572	975026	
055	SAMPLE	287500-020	7915547	986242	
056	SAMPLE	287500-021	7935244	989477	
057	SAMPLE	287500-022	7782745	976886	
063	CCV		8419254	1024746	
065	CCB		8801304	1059343	
128	CCV		8313724	1009722	
130	CCB		8731788	401617	
141	CCV		8353738	1022211	
143	CCB		8761046	1622921	*
144	SAMPLE	287283-001	5196539	788638	
145	SAMPLE	287283-002	5598212	834155	
146	SAMPLE	287283-004	4040833	664697	
147	SAMPLE	287283-005	4570687	715572	
148	SAMPLE	287343-001	4605626	722838	
149	SAMPLE	287343-002	7249390	944783	
154	CCV		8368437	1018668	
156	CCB		8939150	1445516	*
160	BLANK	QC879237	8801317	1069906	
161	BS	QC879238	8577825	1040633	
162	BSD	QC879239	8409082	1055404	
163	MSS	287077-021	8651424	1045379	
164	MS	QC879240	8470606	1032477	
165	MSD	QC879241	8400913	1049808	
166	SER	QC879242	8886277	1042280	
167	CCV		8364659	1026001	
169	CCB		8994076	1553047	*
170	PDS	QC879243	8395390	1035263	
171	SAMPLE	287077-022	8380660	1036402	
172	SAMPLE	287077-023	8756324	1044858	
173	SAMPLE	287077-024	8618097	1052012	
174	SAMPLE	287077-025	8678066	1051976	
175	SAMPLE	287077-026	8669898	1064566	
176	SAMPLE	287077-027	8623326	1054968	
177	SAMPLE	287077-028	8374184	1054631	
178	SAMPLE	287077-029	8595597	1046987	
179	SAMPLE	287077-030	8775924	1051601	
180	CCV		8345615	1011194	
182	CCB		8935946	1530960	*
183	SAMPLE	287077-031	8516942	1044063	

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140884

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 20:07

#	Type	Sample ID	Y A	Y R
184	SAMPLE	287077-032	8305645	1049910
185	SAMPLE	287077-033	8450227	1054863
186	SAMPLE	287077-034	8342485	1054267
187	SAMPLE	287077-035	8707479	1054052
188	SAMPLE	287077-036	8609514	1069285
189	SAMPLE	287077-037	8762748	1057267
190	SAMPLE	287077-038	8598675	1067035
191	SAMPLE	287077-039	8550280	1056471
192	SAMPLE	287077-040	8623642	1053081
193	CCV		8356783	1023808
194	CCB		8908204	1050923

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287077 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087140884001
Units : ug/L

Date : 07-APR-2017 20:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087140884002	L1	07-APR-2017 20:07	S32578
L2	met10 method	1087140884003	L2	07-APR-2017 20:10	S32571
L3	met10 method	1087140884004	L3	07-APR-2017 20:12	S32367
L4	met10 method	1087140884005	L4	07-APR-2017 20:15	S32368
L5	met10 method	1087140884006	L5	07-APR-2017 20:17	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8400	2.5480	2.5675	2.4055		LOR0	0.00000	0.41544		2.5902	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	18	100.00	6	1000.0	7	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287077 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087140884001 Cal Date : 07-APR-2017

ICV 1087140884008 (07-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5017	ug/L	0	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884010.1 File : met10 method Time : 07-APR-2017 20:28
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.602	ug/L	-8	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8586854	0.02
Yttrium	R	1044978	1039744	-0.50

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884011.1 File : met10 method Time : 07-APR-2017 20:32
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8658756	0.85
Yttrium	R	1044978	1034440	-1.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884012.1 File : met10 method Time : 07-APR-2017 20:36
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-1.501]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18290	ug/L	91	
Copper	A	20000	22890	ug/L	114	
Manganese	A	20000	18890	ug/L	94	
Nickel	A	20000	17360	ug/L	87	
Titanium	A	20000	19320	ug/L	97	
Vanadium	A	20000	22140	ug/L	111	
Aluminum	R	500000	576000	ug/L	115	
Calcium	R	500000	533000	ug/L	107	
Iron	R	200000	211000	ug/L	106	
Magnesium	R	500000	472900	ug/L	95	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	7081496	-17.52
Yttrium	R	1044978	909784	-12.94

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884013.1 File : met10 method Time : 07-APR-2017 20:38
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	1002	ug/L	0	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	7125714	-17.00
Yttrium	R	1044978	912794	-12.65

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884154.2 File : met10 method Time : 08-APR-2017 03:34
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4807	5000	5153	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8368437	-2.53
Yttrium	R	1044978	1018668	-2.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884156.2 File : met10 method Time : 08-APR-2017 03:39
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8939150	4.12
Yttrium	R	1044978	1445516	**38.33 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884167.1 File : met10 method Time : 08-APR-2017 04:10
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4926	5000	5178	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8364659	-2.57
Yttrium	R	1044978	1026001	-1.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884169.1 File : met10 method Time : 08-APR-2017 04:16
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8994076	4.76
Yttrium	R	1044978	1553047	**48.62 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884180.1 File : met10 method Time : 08-APR-2017 04:43
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4909	5000	5174	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8345615	-2.79
Yttrium	R	1044978	1011194	-3.23

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884182.1 File : met10 method Time : 08-APR-2017 04:49
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8935946	4.08
Yttrium	R	1044978	1530960	**46.51 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884193.1 File : met10 method Time : 08-APR-2017 05:16
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4762	5000	5144	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8356783	-2.66
Yttrium	R	1044978	1023808	-2.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884194.1 File : met10 method Time : 08-APR-2017 05:19
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8908204	3.76
Yttrium	R	1044978	1050923	0.57

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/10/17 10:43	1.0		
002	met10 method	ICAL	L1			04/10/17 10:46	1.0	1	
003	met10 method	ICAL	L2			04/10/17 10:50	1.0	2	
004	met10 method	ICAL	L3			04/10/17 10:52	1.0	3	
005	met10 method	ICAL	L4			04/10/17 10:54	1.0	4	
006	met10 method	ICAL	L5			04/10/17 10:57	1.0	5	
007	met10 method	ICV				04/10/17 10:59	1.0	6	1:SR=4200000
008	met10 method	XCRI				04/10/17 11:02	1.0	7	
009	met10 method	CRI				04/10/17 11:06	1.0	7	1:SR=43000
010	met10 method	ICB				04/10/17 11:10	1.0		1:SR=1500
011	met10 method	ICSA				04/10/17 11:13	1.0	8	11:CA=550000
012	met10 method	XICSAB				04/10/17 11:29	1.0	9	6:SR=4500000
013	met10 method	XICSAB				04/10/17 11:37	1.0	9	6:SR=4500000
014	met10 method	ICSAB				04/10/17 11:41	1.0	9	6:SR=4100000
015	met10 method	CCV				04/10/17 11:44	1.0	10	1:SR=3000000
016	met10 method	CCB				04/10/17 11:47	1.0		1:SR=2900
017	met10 method	CCB				04/10/17 11:50	1.0		
018	met10 method	CCV				04/10/17 11:57	1.0	10	1:SR=4000000
019	met10 method	CCB				04/10/17 12:00	1.0		1:SR=2500
020	met10 method	CCB				04/10/17 12:03	1.0		1:SR=1700
021	met10 method	CCB				04/10/17 12:05	1.0		1:SR=1400
022	met10 method	X	RINSE			04/10/17 12:13	1.0		
023	met10 method	BLANK	QC880555	Soil	246422	04/10/17 12:16	1.0		1:SR=2200
024	met10 method	BS	QC880556	Soil	246422	04/10/17 12:20	1.0		1:SR=81000000
025	met10 method	BSD	QC880557	Soil	246422	04/10/17 12:22	1.0		1:SR=80000000
026	met10 method	MSS	287500-014	Soil	246422	04/10/17 12:25	1.0		5:SR=4900000
027	met10 method	MS	QC880558	Soil	246422	04/10/17 12:27	1.0		
028	met10 method	MSD	QC880559	Soil	246422	04/10/17 12:30	1.0		
029	met10 method	SAMPLE	287505-005	Soil	246422	04/10/17 12:33	1.0		3:SR=7800000
030	met10 method	SAMPLE	287505-010	Soil	246422	04/10/17 12:36	1.0		3:SR=9200000
031	met10 method	SAMPLE	287750-001	Soil	246422	04/10/17 12:38	1.0		6:SR=4800000
032	met10 method	CCV				04/10/17 12:41	1.0	10	1:SR=3900000
033	met10 method	XCCB				04/10/17 12:43	1.0		1:SR=3900
034	met10 method	CCB				04/10/17 12:46	1.0		1:SR=2400
035	met10 method	SAMPLE	287750-002	Soil	246422	04/10/17 12:49	1.0		6:SR=3800000
036	met10 method	SAMPLE	287750-003	Soil	246422	04/10/17 12:52	1.0		3:SR=3700000
037	met10 method	SAMPLE	287750-004	Soil	246422	04/10/17 12:55	1.0		4:SR=3600000
038	met10 method	SAMPLE	287750-005	Soil	246422	04/10/17 12:57	1.0		4:SR=2500000
039	met10 method	SAMPLE	287750-006	Soil	246422	04/10/17 13:00	1.0		7:SR=2400000
040	met10 method	SAMPLE	287750-007	Soil	246422	04/10/17 13:02	1.0		4:SR=4100000
041	met10 method	SAMPLE	287750-008	Soil	246422	04/10/17 13:05	1.0		3:SR=1500000
042	met10 method	SAMPLE	287750-009	Soil	246422	04/10/17 13:08	1.0		5:SR=5400000
043	met10 method	SAMPLE	287750-010	Soil	246422	04/10/17 13:10	1.0		6:SR=4800000
044	met10 method	SAMPLE	287750-011	Soil	246422	04/10/17 13:13	1.0		6:SR=4800000
045	met10 method	CCV				04/10/17 13:16	1.0	10	1:SR=4100000
046	met10 method	XCCB				04/10/17 13:18	1.0		1:SR=2500
047	met10 method	CCB				04/10/17 13:21	1.0		1:SR=1900
048	met10 method	SAMPLE	287750-012	Soil	246422	04/10/17 13:24	1.0		6:SR=3200000
049	met10 method	SER	QC880744	Soil	246422	04/10/17 13:27	5.0		
050	met10 method	PDS	QC880745	Soil	246422	04/10/17 13:29	1.0	11 12 13	6:SR=5500000
051	met10 method	X	RINSE			04/10/17 13:32	1.0		
052	met10 method	BLANK	QC880681	WET Leachate	246460	04/10/17 13:35	10.0		2:NA=170000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	BS	QC880682	WET Leachate	246460	04/10/17 13:39	1.0		1:SR=840000
054	met10 method	BSD	QC880683	WET Leachate	246460	04/10/17 13:41	1.0		1:SR=830000
055	met10 method	MSS	287505-005	WET Leachate	246460	04/10/17 13:44	10.0		2:SR=1100000
056	met10 method	MS	QC880684	WET Leachate	246460	04/10/17 13:46	10.0		
057	met10 method	MSD	QC880685	WET Leachate	246460	04/10/17 13:49	10.0		
058	met10 method	CCV				04/10/17 13:51	1.0	10	1:SR=4100000
059	met10 method	XCCB				04/10/17 13:54	1.0		1:SR=3000
060	met10 method	CCB				04/10/17 13:56	1.0		1:SR=1900
061	met10 method	SER	QC880686	WET Leachate	246460	04/10/17 14:00	50.0		
062	met10 method	PDS	QC880687	WET Leachate	246460	04/10/17 14:03	10.0	11 12 13	3:SR=2100000
063	met10 method	SAMPLE	287505-010	WET Leachate	246460	04/10/17 14:06	10.0		2:SR=1300000
064	met10 method	SAMPLE	287617-001	WET Leachate	246460	04/10/17 14:08	10.0		2:SR=450000
065	met10 method	SAMPLE	287625-001	WET Leachate	246460	04/10/17 14:11	10.0		2:SR=410000
066	met10 method	SAMPLE	287627-001	WET Leachate	246460	04/10/17 14:13	10.0		2:SR=380000
067	met10 method	SAMPLE	287627-002	WET Leachate	246460	04/10/17 14:16	10.0		2:SR=370000
068	met10 method	SAMPLE	287627-003	WET Leachate	246460	04/10/17 14:18	10.0		2:SR=430000
069	met10 method	SAMPLE	287627-004	WET Leachate	246460	04/10/17 14:20	10.0		2:SR=450000
070	met10 method	SAMPLE	287627-005	WET Leachate	246460	04/10/17 14:23	10.0		2:SR=420000
071	met10 method	CCV				04/10/17 14:25	1.0	10	1:SR=4100000
072	met10 method	XCCB				04/10/17 14:28	1.0		1:SR=1600
073	met10 method	CCB				04/10/17 14:31	1.0		
074	met10 method	SAMPLE	287627-006	WET Leachate	246460	04/10/17 14:34	10.0		2:SR=360000
075	met10 method	SAMPLE	287627-007	WET Leachate	246460	04/10/17 14:37	10.0		2:SR=460000
076	met10 method	SAMPLE	287627-008	WET Leachate	246460	04/10/17 14:39	10.0		2:SR=410000
077	met10 method	SAMPLE	287627-009	WET Leachate	246460	04/10/17 14:42	10.0		2:SR=430000
078	met10 method	SAMPLE	287627-010	WET Leachate	246460	04/10/17 14:44	10.0		2:SR=430000
079	met10 method	SAMPLE	287627-011	WET Leachate	246460	04/10/17 14:47	10.0		2:SR=440000
080	met10 method	SAMPLE	287627-012	WET Leachate	246460	04/10/17 14:49	10.0		2:SR=360000
081	met10 method	SAMPLE	287627-013	WET Leachate	246460	04/10/17 14:52	10.0		2:SR=390000
082	met10 method	SAMPLE	287627-014	WET Leachate	246460	04/10/17 14:54	10.0		2:SR=420000
083	met10 method	SAMPLE	287627-015	WET Leachate	246460	04/10/17 14:56	10.0		2:SR=440000
084	met10 method	CCV				04/10/17 14:59	1.0	10	1:SR=4100000
085	met10 method	XCCB				04/10/17 15:02	1.0		1:SR=1500
086	met10 method	CCB				04/10/17 15:04	1.0		1:SR=1700
087	met10 method	SAMPLE	287627-016	WET Leachate	246460	04/10/17 15:08	10.0		2:SR=450000
088	met10 method	X	RINSE			04/10/17 15:10	1.0		
089	met10 method	BLANK	QC880563	Soil	246424	04/10/17 15:14	1.0		1:SR=2300
090	met10 method	BS	QC880564	Soil	246424	04/10/17 15:17	1.0		1:SR=82000000
091	met10 method	BSD	QC880565	Soil	246424	04/10/17 15:19	1.0		1:SR=81000000
092	met10 method	MSS	287640-001	Soil	246424	04/10/17 15:22	1.0		2:SR=1600000
093	met10 method	MS	QC880566	Soil	246424	04/10/17 15:24	1.0		1:SR=84000000
094	met10 method	MSD	QC880567	Soil	246424	04/10/17 15:27	1.0		1:SR=82000000
095	met10 method	SER	QC880719	Soil	246424	04/10/17 15:29	5.0		
096	met10 method	PDS	QC880720	Soil	246424	04/10/17 15:32	1.0	11 12 13	4:SR=2600000
097	met10 method	CCV				04/10/17 15:34	1.0	10	1:SR=4100000
098	met10 method	XCCB				04/10/17 15:37	1.0		
099	met10 method	CCB				04/10/17 15:40	1.0		1:SR=1800
100	met10 method	SAMPLE	287759-001	Soil	246424	04/10/17 15:43	1.0		4:SR=8300000
101	met10 method	SAMPLE	287759-002	Soil	246424	04/10/17 15:46	1.0		4:SR=5800000
102	met10 method	X	RINSE			04/10/17 15:48	1.0		
103	met10 method	BLANK	QC880641	Soil	246450	04/10/17 15:51	1.0		1:SR=1800
104	met10 method	BS	QC880642	Soil	246450	04/10/17 15:55	1.0		1:SR=82000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BSD	QC880643	Soil	246450	04/10/17 15:57	1.0		1:SR=84000000
106	met10 method	MSS	287739-001	Soil	246450	04/10/17 16:00	1.0		6:SR=9300000
107	met10 method	MS	QC880644	Soil	246450	04/10/17 16:02	1.0		1:SR=86000000
108	met10 method	MSD	QC880645	Soil	246450	04/10/17 16:05	1.0		1:SR=87000000
109	met10 method	SER	QC880646	Soil	246450	04/10/17 16:07	5.0		
110	met10 method	CCV				04/10/17 16:10	1.0	10	1:SR=4100000
111	met10 method	XCCB				04/10/17 16:13	1.0		
112	met10 method	CCB				04/10/17 16:15	1.0		1:SR=1300
113	met10 method	PDS	QC880647	Soil	246450	04/10/17 16:19	1.0	11 12 13	7:SR=9500000
114	met10 method	SAMPLE	287805-001	Soil	246450	04/10/17 16:21	1.0		4:SR=2100000
115	met10 method	SAMPLE	287805-002	Soil	246450	04/10/17 16:24	1.0		4:SR=1900000
116	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 16:26	1.0		6:SR=1900000
117	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 16:29	1.0		4:SR=2500000
118	met10 method	SAMPLE	287805-005	Soil	246450	04/10/17 16:32	1.0		4:SR=3000000
119	met10 method	SAMPLE	287805-006	Soil	246450	04/10/17 16:34	1.0		3:SR=3100000
120	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 16:37	1.0		5:SR=2100000
121	met10 method	X	RINSE			04/10/17 16:39	1.0		
122	met10 method	BLANK	QC880688	WET Leachate	246461	04/10/17 16:43	10.0		2:NA=170000
123	met10 method	CCV				04/10/17 16:46	1.0	10	1:SR=4100000
124	met10 method	XCCB				04/10/17 16:50	1.0		1:SR=1600
125	met10 method	CCB				04/10/17 16:53	1.0		1:SR=1600
126	met10 method	X	RINSE			04/10/17 17:00	1.0		
127	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 17:03	100.0		1:SR=18000
128	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 17:05	100.0		1:SR=22000
129	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 17:08	1.0		4:SR=2600000
130	met10 method	BS	QC880689	WET Leachate	246461	04/10/17 17:11	1.0		1:SR=840000
131	met10 method	BSD	QC880690	WET Leachate	246461	04/10/17 17:13	1.0		1:SR=860000
132	met10 method	MSS	287762-001	WET Leachate	246461	04/10/17 17:15	10.0		2:SR=300000
133	met10 method	MS	QC880691	WET Leachate	246461	04/10/17 17:18	10.0		
134	met10 method	MSD	QC880692	WET Leachate	246461	04/10/17 17:21	10.0		
135	met10 method	SER	QC880745	Soil	246422	04/10/17 17:23	1.0	11 12 13	
136	met10 method	CCV				04/10/17 17:26	1.0	10	1:SR=4200000
137	met10 method	CCB				04/10/17 17:29	1.0		1:SR=2800
138	met10 method	CCB				04/10/17 17:31	1.0		
139	met10 method	BLANK	QC878606	Water	245945	04/10/17 17:35	1.0		
140	met10 method	BS	QC878607	Water	245945	04/10/17 17:38	1.0		1:SR=900000
141	met10 method	BSD	QC878608	Water	245945	04/10/17 17:40	1.0		1:SR=900000
142	met10 method	SAMPLE	287283-001	Water	245945	04/10/17 17:43	1.0		5:SR=49000000
143	met10 method	SAMPLE	287283-002	Water	245945	04/10/17 17:45	1.0		5:SR=32000000
144	met10 method	SAMPLE	287283-004	Water	245945	04/10/17 17:49	1.0		7:SR=79000000
145	met10 method	SAMPLE	287283-005	Water	245945	04/10/17 17:51	1.0		5:SR=66000000
146	met10 method	SAMPLE	287343-001	Water	245945	04/10/17 17:54	1.0		5:SR=63000000
147	met10 method	SAMPLE	287343-002	Water	245945	04/10/17 17:56	1.0		2:SR=6100000
148	met10 method	SAMPLE	287077-035	SPLP Leachate	246105	04/10/17 17:59	1.0		1:SR=31000
149	met10 method	CCV				04/10/17 18:01	1.0	10	1:SR=4100000
150	met10 method	XCCB				04/10/17 18:04	1.0		1:SR=2900
151	met10 method	CCB				04/10/17 18:07	1.0		1:SR=3800
152	met10 method	X	RINSE			04/10/17 18:10	1.0		
153	met10 method	BLANK	QC879918	Water	246267	04/10/17 18:13	1.0		1:SR=3800
154	met10 method	BS	QC879919	Water	246267	04/10/17 18:17	1.0		1:SR=870000
155	met10 method	BSD	QC879920	Water	246267	04/10/17 18:19	1.0		1:SR=870000
156	met10 method	MSS	287440-001	Water	246267	04/10/17 18:21	1.0		1:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	MS	QC879921	Water	246267	04/10/17 18:25	1.0		
158	met10 method	MSD	QC879922	Water	246267	04/10/17 18:27	1.0		
159	met10 method	MSS	287440-001	Water	246267	04/10/17 18:29	1.0		2:SR=370000
160	met10 method	BS	QC879457	Water	246155	04/10/17 18:32	1.0		1:SR=850000
161	met10 method	BSD	QC879458	Water	246155	04/10/17 18:34	1.0		1:SR=840000
162	met10 method	CCV				04/10/17 18:37	1.0	10	1:SR=4100000
163	met10 method	XCCB				04/10/17 18:39	1.0		1:SR=3400
164	met10 method	CCB				04/10/17 18:42	1.0		1:SR=4000
165	met10 method	MSS	287365-001	Water	246155	04/10/17 18:45	1.0		1:SR=510000
166	met10 method	MS	QC879459	Water	246155	04/10/17 18:48	1.0		
167	met10 method	MSD	QC879460	Water	246155	04/10/17 18:50	1.0		
168	met10 method	SAMPLE	287348-001	Water	246155	04/10/17 18:53	1.0		1:SR=900000
169	met10 method	SAMPLE	287365-002	Water	246155	04/10/17 18:55	1.0		1:SR=55000
170	met10 method	SAMPLE	287365-003	Water	246155	04/10/17 18:58	1.0		1:SR=130000
171	met10 method	SAMPLE	287365-005	Water	246155	04/10/17 19:02	1.0		1:SR=68000
172	met10 method	SAMPLE	287365-006	Water	246155	04/10/17 19:04	1.0		1:SR=100000
173	met10 method	SAMPLE	287365-007	Water	246155	04/10/17 19:07	1.0		1:SR=160000
174	met10 method	SAMPLE	287365-008	Water	246155	04/10/17 19:09	1.0		1:SR=120000
175	met10 method	CCV				04/10/17 19:11	1.0	10	1:SR=4100000
176	met10 method	CCB				04/10/17 19:14	1.0		1:SR=3700
177	met10 method	CCB				04/10/17 19:17	1.0		
178	met10 method	SAMPLE	287365-009	Water	246155	04/10/17 19:21	1.0		1:SR=82000
179	met10 method	SAMPLE	287365-010	Water	246155	04/10/17 19:24	1.0		1:SR=140000
180	met10 method	SAMPLE	287365-011	Water	246155	04/10/17 19:26	1.0		1:SR=62000
181	met10 method	SAMPLE	287365-012	Water	246155	04/10/17 19:28	1.0		1:SR=110000
182	met10 method	MSS	287252-028	Soil	246272	04/10/17 19:31	1.0		6:SR=4400000
183	met10 method	SAMPLE	287252-029	Soil	246272	04/10/17 19:34	1.0		6:SR=5500000
184	met10 method	SAMPLE	287675-003	Soil	246450	04/10/17 19:36	1.0		4:SR=2900000
185	met10 method	SAMPLE	287675-004	Soil	246450	04/10/17 19:39	1.0		3:SR=3500000
186	met10 method	SAMPLE	287676-001	Soil	246450	04/10/17 19:42	1.0		3:SR=2200000
187	met10 method	SAMPLE	287713-001	Soil	246450	04/10/17 19:44	1.0		5:SR=5500000
188	met10 method	CCV				04/10/17 19:47	1.0	10	1:SR=4100000
189	met10 method	CCB				04/10/17 19:50	1.0		1:SR=3600
190	met10 method	CCB				04/10/17 19:52	1.0		1:SR=3100
191	met10 method	SAMPLE	287739-002	Soil	246450	04/10/17 19:56	1.0		7:SR=9600000
192	met10 method	SAMPLE	287753-001	Soil	246450	04/10/17 19:58	1.0		4:SR=9700000
193	met10 method	SAMPLE	287761-005	Soil	246450	04/10/17 20:01	1.0		5:SR=7500000
194	met10 method	SAMPLE	287761-010	Soil	246450	04/10/17 20:04	1.0		4:SR=3200000
195	met10 method	SAMPLE	287761-015	Soil	246450	04/10/17 20:07	1.0		5:SR=6200000
196	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/10/17 20:09	10.0		2:NA=180000
197	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/10/17 20:12	10.0		2:NA=170000
198	met10 method	SAMPLE	287634-001	WET Leachate	246461	04/10/17 20:15	10.0		2:SR=3000000
199	met10 method	SAMPLE	287634-002	WET Leachate	246461	04/10/17 20:17	10.0		2:SR=750000
200	met10 method	SAMPLE	287634-003	WET Leachate	246461	04/10/17 20:20	10.0		2:SR=950000
201	met10 method	CCV				04/10/17 20:22	1.0	10	1:SR=4100000
202	met10 method	CCB				04/10/17 20:25	1.0		1:SR=3200
203	met10 method	CCB				04/10/17 20:30	1.0		1:SR=3500
204	met10 method	SAMPLE	287634-004	WET Leachate	246461	04/10/17 20:33	10.0		2:SR=390000
205	met10 method	SAMPLE	287634-005	WET Leachate	246461	04/10/17 20:36	10.0		2:SR=730000
206	met10 method	SAMPLE	287634-006	WET Leachate	246461	04/10/17 20:38	10.0		2:SR=400000
207	met10 method	SAMPLE	287634-007	WET Leachate	246461	04/10/17 20:41	10.0		2:SR=630000
208	met10 method	SAMPLE	287634-008	WET Leachate	246461	04/10/17 20:43	10.0		2:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287634-009	WET Leachate	246461	04/10/17 20:46	10.0		2:SR=2100000
210	met10 method	SAMPLE	287634-010	WET Leachate	246461	04/10/17 20:48	10.0		2:SR=600000
211	met10 method	SAMPLE	287634-011	WET Leachate	246461	04/10/17 20:51	10.0		2:SR=1100000
212	met10 method	SAMPLE	287634-012	WET Leachate	246461	04/10/17 20:53	10.0		2:SR=560000
213	met10 method	SAMPLE	287634-013	WET Leachate	246461	04/10/17 20:56	10.0		2:SR=1100000
214	met10 method	CCV				04/10/17 20:58	1.0	10	1:SR=4100000
215	met10 method	CCB				04/10/17 21:01	1.0		1:SR=3900
216	met10 method	CCB				04/10/17 21:04	1.0		1:SR=3000
217	met10 method	SAMPLE	287753-001	WET Leachate	246461	04/10/17 21:07	10.0		2:SR=690000
218	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:10	100.0		1:SR=120000
219	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:12	1.0		7:SR=12000000
220	met10 method	X	RINSE			04/10/17 21:15	1.0		
221	met10 method	SAMPLE	287640-003	Soil	246424	04/10/17 21:18	1.0		5:SR=4200000
222	met10 method	SAMPLE	287640-004	Soil	246424	04/10/17 21:21	1.0		5:SR=4100000
223	met10 method	SAMPLE	287640-005	Soil	246424	04/10/17 21:24	1.0		5:SR=4200000
224	met10 method	SAMPLE	287640-006	Soil	246424	04/10/17 21:27	1.0		5:SR=4000000
225	met10 method	CCV				04/10/17 21:29	1.0	10	1:SR=4000000
226	met10 method	CCB				04/10/17 21:32	1.0		1:SR=3600
227	met10 method	CCB				04/10/17 21:35	1.0		1:SR=3600
228	met10 method	X	RINSE			04/10/17 21:40	1.0		
229	met10 method	BLANK	QC880768	Soil	246479	04/10/17 21:44	1.0		1:SR=3600
230	met10 method	BS	QC880769	Soil	246479	04/10/17 21:47	1.0		1:SR=81000000
231	met10 method	BSD	QC880770	Soil	246479	04/10/17 21:50	1.0		1:SR=80000000
232	met10 method	MSS	287740-001	Soil	246479	04/10/17 21:52	1.0		6:SR=7400000
233	met10 method	MS	QC880771	Soil	246479	04/10/17 21:55	1.0		1:SR=83000000
234	met10 method	MSD	QC880772	Soil	246479	04/10/17 21:57	1.0		1:SR=89000000
235	met10 method	SAMPLE	287525-001	Miscell.	246479	04/10/17 22:00	1.0		1:SR=180000
236	met10 method	SAMPLE	287526-001	Miscell.	246479	04/10/17 22:02	1.0		2:SR=1800000
237	met10 method	SAMPLE	287683-005	Soil	246479	04/10/17 22:06	1.0		3:SR=2900000
238	met10 method	CCV				04/10/17 22:08	1.0	10	1:SR=4000000
239	met10 method	CCB				04/10/17 22:11	1.0		1:SR=4000
240	met10 method	CCB				04/10/17 22:14	1.0		1:SR=3400
241	met10 method	SAMPLE	287756-001	Soil	246479	04/10/17 22:17	1.0		4:SR=1400000
242	met10 method	SAMPLE	287756-002	Soil	246479	04/10/17 22:20	1.0		6:SR=2900000
243	met10 method	SAMPLE	287756-003	Soil	246479	04/10/17 22:22	1.0		4:SR=1700000
244	met10 method	SAMPLE	287756-004	Soil	246479	04/10/17 22:25	1.0		4:SR=1200000
245	met10 method	SAMPLE	287756-005	Soil	246479	04/10/17 22:28	1.0		6:SR=3200000
246	met10 method	SAMPLE	287756-006	Soil	246479	04/10/17 22:30	1.0		5:SR=2300000
247	met10 method	SAMPLE	287756-007	Soil	246479	04/10/17 22:33	1.0		6:SR=3500000
248	met10 method	SAMPLE	287756-008	Soil	246479	04/10/17 22:36	1.0		5:SR=6600000
249	met10 method	SAMPLE	287795-001	Soil	246479	04/10/17 22:38	1.0		4:SR=2900000
250	met10 method	SAMPLE	287795-002	Soil	246479	04/10/17 22:41	1.0		4:SR=3100000
251	met10 method	CCV				04/10/17 22:43	1.0	10	1:SR=4000000
252	met10 method	CCB				04/10/17 22:46	1.0		1:SR=3800
253	met10 method	CCB				04/10/17 22:49	1.0		1:SR=4000
254	met10 method	X	RINSE			04/10/17 22:52	1.0		
255	met10 method	BLANK	QC880498	Water	246408	04/10/17 22:56	1.0		1:SR=3800
256	met10 method	BS	QC880499	Water	246408	04/10/17 22:59	1.0		1:SR=840000
257	met10 method	BSD	QC880500	Water	246408	04/10/17 23:01	1.0		1:SR=830000
258	met10 method	MSS	287612-001	Water	246408	04/10/17 23:04	1.0		1:SR=1400000
259	met10 method	MS	QC880501	Water	246408	04/10/17 23:07	1.0		
260	met10 method	MSD	QC880502	Water	246408	04/10/17 23:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287612-002	Water	246408	04/10/17 23:12	1.0		1:SR=1400000
262	met10 method	SAMPLE	287648-001	Water	246408	04/10/17 23:15	1.0		5:SR=8000000
263	met10 method	SAMPLE	287648-002	Water	246408	04/10/17 23:18	1.0		4:SR=11000000
264	met10 method	CCV				04/10/17 23:21	1.0	10	1:SR=4100000
265	met10 method	CCB				04/10/17 23:24	1.0		1:SR=3100
266	met10 method	CCB				04/10/17 23:27	1.0		1:SR=2600
267	met10 method	SAMPLE	287648-003	Water	246408	04/10/17 23:30	1.0		4:SR=18000000
268	met10 method	SAMPLE	287648-004	Water	246408	04/10/17 23:34	1.0		5:SR=13000000
269	met10 method	SAMPLE	287648-005	Water	246408	04/10/17 23:37	1.0		5:SR=12000000
270	met10 method	SAMPLE	287648-006	Water	246408	04/10/17 23:40	1.0		4:SR=18000000
271	met10 method	SAMPLE	287654-001	Water	246408	04/10/17 23:44	1.0		4:SR=3800000
272	met10 method	SAMPLE	287662-001	Water	246408	04/10/17 23:47	1.0		4:SR=27000000
273	met10 method	SAMPLE	287662-002	Water	246408	04/10/17 23:50	1.0		5:SR=17000000
274	met10 method	SAMPLE	287662-003	Water	246408	04/10/17 23:53	1.0		4:SR=19000000
275	met10 method	SAMPLE	287662-004	Water	246408	04/10/17 23:57	1.0		4:SR=23000000
276	met10 method	SAMPLE	287662-006	Water	246408	04/10/17 23:59	1.0		1:SR=4500
277	met10 method	CCV				04/11/17 00:02	1.0	10	1:SR=4100000
278	met10 method	CCB				04/11/17 00:05	1.0		1:SR=3200
279	met10 method	CCB				04/11/17 00:08	1.0		1:SR=3000
280	met10 method	X	RINSE			04/11/17 00:11	1.0		
281	met10 method	BLANK	QC880630	Water	246447	04/11/17 00:15	1.0		1:SR=1500
282	met10 method	BS	QC880631	Water	246447	04/11/17 00:18	1.0		1:SR=830000
283	met10 method	BSD	QC880632	Water	246447	04/11/17 00:20	1.0		1:SR=820000
284	met10 method	MSS	287646-001	Water	246447	04/11/17 00:23	1.0		1:SR=1500000
285	met10 method	MS	QC880633	Water	246447	04/11/17 00:25	1.0		
286	met10 method	MSD	QC880634	Water	246447	04/11/17 00:28	1.0		
287	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 00:30	1.0		1:SR=13000
288	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 00:33	1.0		1:SR=22000
289	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 00:37	1.0		1:SR=36000
290	met10 method	CCV				04/11/17 00:40	1.0	10	1:SR=4200000
291	met10 method	XCCB				04/11/17 00:43	1.0		1:SR=2800
292	met10 method	CCB				04/11/17 00:46	1.0		1:SR=3200
293	met10 method	XSAMPLE	275868-047	Water	246447	04/11/17 00:49	1.0		
294	met10 method	XSAMPLE	287717-004	Water	246447	04/11/17 00:52	1.0		
295	met10 method	XSAMPLE	287786-001	Water	246447	04/11/17 00:55	1.0		
296	met10 method	XSAMPLE	287789-001	Water	246447	04/11/17 00:59	1.0		
297	met10 method	XSAMPLE	287791-002	Water	246447	04/11/17 01:02	1.0		
298	met10 method	XSAMPLE	287791-003	Water	246447	04/11/17 01:05	1.0		
299	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 01:18	1.0		1:SR=83000
300	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 01:21	1.0		2:SR=3200000
301	met10 method	SAMPLE	287786-001	Water	246447	04/11/17 01:24	1.0		1:SR=310000
302	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 01:26	1.0		4:SR=10000000
303	met10 method	CCV				04/11/17 01:30	1.0	10	1:SR=4100000
304	met10 method	XCCB				04/11/17 01:32	1.0		1:SR=3000
305	met10 method	CCB				04/11/17 01:35	1.0		1:SR=2900
306	met10 method	SAMPLE	287791-002	Water	246447	04/11/17 01:38	1.0		1:SR=680000
307	met10 method	SAMPLE	287791-003	Water	246447	04/11/17 01:41	1.0		1:SR=670000
308	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 01:43	1.0		1:SR=280000
309	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 01:47	1.0		1:SR=1200000
310	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 01:50	1.0		2:SR=550000
311	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 01:53	1.0		2:SR=7500000
312	met10 method	X	RINSE			04/11/17 01:56	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	BLANK	QC880667	SPLP Leachate	246458	04/11/17 01:59	1.0		1:SR=3300
314	met10 method	BS	QC880668	SPLP Leachate	246458	04/11/17 02:02	1.0		1:SR=860000
315	met10 method	BSD	QC880669	SPLP Leachate	246458	04/11/17 02:05	1.0		1:SR=850000
316	met10 method	CCV				04/11/17 02:07	1.0	10	1:SR=4100000
317	met10 method	XCCB				04/11/17 02:10	1.0		1:SR=3100
318	met10 method	CCB				04/11/17 02:13	1.0		1:SR=3200
319	met10 method	MSS	287252-028	SPLP Leachate	246458	04/11/17 02:16	1.0		1:SR=8100
320	met10 method	MS	QC880670	SPLP Leachate	246458	04/11/17 02:20	1.0		
321	met10 method	MSD	QC880671	SPLP Leachate	246458	04/11/17 02:22	1.0		
322	met10 method	SER	QC880672	SPLP Leachate	246458	04/11/17 02:24	5.0		
323	met10 method	PDS	QC880673	SPLP Leachate	246458	04/11/17 02:28	1.0	11 14 13	2:SR=970000
324	met10 method	SAMPLE	287252-012	SPLP Leachate	246458	04/11/17 02:30	1.0		1:SR=8400
325	met10 method	SAMPLE	287252-013	SPLP Leachate	246458	04/11/17 02:33	1.0		1:SR=7100
326	met10 method	SAMPLE	287252-014	SPLP Leachate	246458	04/11/17 02:37	1.0		1:SR=2500
327	met10 method	SAMPLE	287252-015	SPLP Leachate	246458	04/11/17 02:40	1.0		1:SR=4000
328	met10 method	SAMPLE	287252-016	SPLP Leachate	246458	04/11/17 02:43	1.0		1:SR=3700
329	met10 method	CCV				04/11/17 02:46	1.0	10	1:SR=4100000
330	met10 method	XCCB				04/11/17 02:49	1.0		1:SR=2300
331	met10 method	CCB				04/11/17 02:52	1.0		1:SR=2600
332	met10 method	SAMPLE	287252-017	SPLP Leachate	246458	04/11/17 02:55	1.0		1:SR=1600
333	met10 method	SAMPLE	287252-018	SPLP Leachate	246458	04/11/17 02:59	1.0		1:SR=2000
334	met10 method	SAMPLE	287252-019	SPLP Leachate	246458	04/11/17 03:02	1.0		1:SR=4300
335	met10 method	SAMPLE	287252-020	SPLP Leachate	246458	04/11/17 03:05	1.0		1:SR=5200
336	met10 method	SAMPLE	287252-021	SPLP Leachate	246458	04/11/17 03:08	1.0		1:SR=2800
337	met10 method	SAMPLE	287252-022	SPLP Leachate	246458	04/11/17 03:12	1.0		1:SR=2300
338	met10 method	SAMPLE	287252-023	SPLP Leachate	246458	04/11/17 03:15	1.0		1:SR=3200
339	met10 method	SAMPLE	287252-024	SPLP Leachate	246458	04/11/17 03:18	1.0		1:SR=11000
340	met10 method	SAMPLE	287252-025	SPLP Leachate	246458	04/11/17 03:21	1.0		1:SR=6100
341	met10 method	SAMPLE	287252-026	SPLP Leachate	246458	04/11/17 03:24	1.0		1:SR=15000
342	met10 method	CCV				04/11/17 03:26	1.0	10	1:SR=4200000
343	met10 method	XCCB				04/11/17 03:29	1.0		1:SR=2700
344	met10 method	CCB				04/11/17 03:32	1.0		1:SR=2300
345	met10 method	SAMPLE	287252-027	SPLP Leachate	246458	04/11/17 03:35	1.0		1:SR=9300
346	met10 method	SAMPLE	287252-029	SPLP Leachate	246458	04/11/17 03:37	1.0		1:SR=18000
347	met10 method	SAMPLE	287252-030	SPLP Leachate	246458	04/11/17 03:40	1.0		1:SR=16000
348	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 03:42	1.0		1:SR=18000
349	met10 method	X	RINSE			04/11/17 03:45	1.0		
350	met10 method	BLANK	QC880674	SPLP Leachate	246459	04/11/17 03:48	1.0		1:SR=2800
351	met10 method	BS	QC880675	SPLP Leachate	246459	04/11/17 03:51	1.0		1:SR=850000
352	met10 method	BSD	QC880676	SPLP Leachate	246459	04/11/17 03:54	1.0		1:SR=860000
353	met10 method	MSS	287252-032	SPLP Leachate	246459	04/11/17 03:56	1.0		1:SR=8700
354	met10 method	MS	QC880677	SPLP Leachate	246459	04/11/17 03:59	1.0		
355	met10 method	CCV				04/11/17 04:01	1.0	10	1:SR=4100000
356	met10 method	XCCB				04/11/17 04:04	1.0		1:SR=2500
357	met10 method	CCB				04/11/17 04:07	1.0		1:SR=2700
358	met10 method	MSD	QC880678	SPLP Leachate	246459	04/11/17 04:10	1.0		
359	met10 method	SER	QC880679	SPLP Leachate	246459	04/11/17 04:12	5.0		
360	met10 method	PDS	QC880680	SPLP Leachate	246459	04/11/17 04:16	1.0	11 12 13	1:SR=980000
361	met10 method	SAMPLE	287252-033	SPLP Leachate	246459	04/11/17 04:18	1.0		1:SR=13000
362	met10 method	SAMPLE	287252-034	SPLP Leachate	246459	04/11/17 04:20	1.0		1:SR=12000
363	met10 method	SAMPLE	287252-035	SPLP Leachate	246459	04/11/17 04:23	1.0		1:SR=4200
364	met10 method	SAMPLE	287252-036	SPLP Leachate	246459	04/11/17 04:26	1.0		1:SR=2200

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	SAMPLE	287252-037	SPLP Leachate	246459	04/11/17 04:29	1.0		1:SR=3200
366	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 04:33	1.0		1:SR=8200
367	met10 method	SAMPLE	287252-039	SPLP Leachate	246459	04/11/17 04:35	1.0		1:SR=7800
368	met10 method	CCV				04/11/17 04:38	1.0	10	1:SR=4100000
369	met10 method	XCCB				04/11/17 04:41	1.0		1:SR=2400
370	met10 method	CCB				04/11/17 04:44	1.0		1:SR=1500
371	met10 method	SAMPLE	287252-040	SPLP Leachate	246459	04/11/17 04:47	1.0		1:SR=3100
372	met10 method	SAMPLE	287252-041	SPLP Leachate	246459	04/11/17 04:50	1.0		1:SR=7700
373	met10 method	SAMPLE	287252-042	SPLP Leachate	246459	04/11/17 04:53	1.0		1:SR=5100
374	met10 method	SAMPLE	287252-043	SPLP Leachate	246459	04/11/17 04:56	1.0		1:SR=7100
375	met10 method	SAMPLE	287252-044	SPLP Leachate	246459	04/11/17 04:59	1.0		1:SR=3600
376	met10 method	SAMPLE	287252-045	SPLP Leachate	246459	04/11/17 05:03	1.0		1:SR=7300
377	met10 method	X	RINSE			04/11/17 05:06	1.0		
378	met10 method	BLANK	QC879419	SPLP Leachate	246147	04/11/17 05:09	1.0		
379	met10 method	BS	QC879420	SPLP Leachate	246147	04/11/17 05:13	1.0		1:SR=860000
380	met10 method	BSD	QC879421	SPLP Leachate	246147	04/11/17 05:15	1.0		1:SR=860000
381	met10 method	CCV				04/11/17 05:17	1.0	10	1:SR=4100000
382	met10 method	XCCB				04/11/17 05:20	1.0		1:SR=2100
383	met10 method	CCB				04/11/17 05:23	1.0		1:SR=1600
384	met10 method	MSS	287077-042	SPLP Leachate	246147	04/11/17 05:27	1.0		1:SR=5200
385	met10 method	MS	QC879422	SPLP Leachate	246147	04/11/17 05:29	1.0		
386	met10 method	MSD	QC879423	SPLP Leachate	246147	04/11/17 05:31	1.0		
387	met10 method	SER	QC879424	SPLP Leachate	246147	04/11/17 05:34	5.0		
388	met10 method	PDS	QC879425	SPLP Leachate	246147	04/11/17 05:37	1.0	11 12 13	2:SR=960000
389	met10 method	SAMPLE	287077-041	SPLP Leachate	246147	04/11/17 05:40	1.0		1:SR=11000
390	met10 method	SAMPLE	287077-043	SPLP Leachate	246147	04/11/17 05:42	1.0		1:SR=4100
391	met10 method	SAMPLE	287077-044	SPLP Leachate	246147	04/11/17 05:45	1.0		1:SR=2200
392	met10 method	SAMPLE	287077-045	SPLP Leachate	246147	04/11/17 05:48	1.0		1:SR=8400
393	met10 method	SAMPLE	287077-046	SPLP Leachate	246147	04/11/17 05:51	1.0		1:SR=4400
394	met10 method	CCV				04/11/17 05:53	1.0	10	1:SR=4100000
395	met10 method	CCB				04/11/17 05:56	1.0		1:SR=2100
396	met10 method	CCB				04/11/17 05:59	1.0		1:SR=1600
397	met10 method	SAMPLE	287077-047	SPLP Leachate	246147	04/11/17 06:02	1.0		1:SR=15000
398	met10 method	SAMPLE	287077-048	SPLP Leachate	246147	04/11/17 06:04	1.0		1:SR=1900
399	met10 method	SAMPLE	287077-049	SPLP Leachate	246147	04/11/17 06:07	1.0		1:SR=3900
400	met10 method	SAMPLE	287077-050	SPLP Leachate	246147	04/11/17 06:11	1.0		1:SR=6900
401	met10 method	SAMPLE	287082-001	SPLP Leachate	246147	04/11/17 06:14	1.0		1:SR=11000
402	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 06:16	1.0		1:SR=16000
403	met10 method	SAMPLE	287082-003	SPLP Leachate	246147	04/11/17 06:19	1.0		1:SR=11000
404	met10 method	SAMPLE	287082-004	SPLP Leachate	246147	04/11/17 06:21	1.0		1:SR=15000
405	met10 method	SAMPLE	287082-005	SPLP Leachate	246147	04/11/17 06:23	1.0		1:SR=2600
406	met10 method	SAMPLE	287082-006	SPLP Leachate	246147	04/11/17 06:27	1.0		1:SR=4100
407	met10 method	CCV				04/11/17 06:30	1.0	10	1:SR=4200000
408	met10 method	CCB				04/11/17 06:33	1.0		1:SR=1400
409	met10 method	CCB				04/11/17 06:35	1.0		1:SR=4100
410	met10 method	SAMPLE	287082-007	SPLP Leachate	246147	04/11/17 06:39	1.0		1:SR=4600
411	met10 method	SAMPLE	287082-008	SPLP Leachate	246147	04/11/17 06:42	1.0		1:SR=13000
412	met10 method	SAMPLE	287082-009	SPLP Leachate	246147	04/11/17 06:44	1.0		1:SR=6800
413	met10 method	SAMPLE	287082-010	SPLP Leachate	246147	04/11/17 06:48	1.0		1:SR=2700
414	met10 method	CCV				04/11/17 06:51	1.0	10	1:SR=4100000
415	met10 method	CCB				04/11/17 06:54	1.0		1:SR=3600
416	met10 method	CCB				04/11/17 06:57	1.0		1:SR=2000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

TLO 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

MNA 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 39 through 179.

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 180 through 416.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S2984

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
		ICAL STD	6893796	894629
		LOWER LIMIT	2068139	268389
		UPPER LIMIT	8272555	1073554
010	ICB		7043252	902935
011	ICSA		5743386	790346
014	ICSAB		5730121	787134
026	MSS	287500-014	6222165	827217
136	CCV		6608958	875081
138	CCB		7089613	906239
142	SAMPLE	287283-001	4070897	666319
143	SAMPLE	287283-002	4408531	718213
144	SAMPLE	287283-004	3275466	580533
145	SAMPLE	287283-005	3704856	627479
146	SAMPLE	287343-001	3785585	644515
147	SAMPLE	287343-002	5926080	841314
148	SAMPLE	287077-035	7064849	940445
149	CCV		6760096	901935
151	CCB		7260707	929185
182	MSS	287252-028	6391232	849181
183	SAMPLE	287252-029	6498493	866630
258	MSS	287612-001	6929197	919197
261	SAMPLE	287612-002	6976654	893243
319	MSS	287252-028	7161428	916775
324	SAMPLE	287252-012	7135749	914940
325	SAMPLE	287252-013	7111697	934358
326	SAMPLE	287252-014	7185108	907684
327	SAMPLE	287252-015	7046711	912503
328	SAMPLE	287252-016	7095052	913710
332	SAMPLE	287252-017	7181880	909689
333	SAMPLE	287252-018	7198298	914174
334	SAMPLE	287252-019	7064917	910020
335	SAMPLE	287252-020	7028486	898766
336	SAMPLE	287252-021	7032263	917271
337	SAMPLE	287252-022	7193492	916449
338	SAMPLE	287252-023	7166386	913195
339	SAMPLE	287252-024	7060885	907734
340	SAMPLE	287252-025	6973892	898952
341	SAMPLE	287252-026	7037041	915699
345	SAMPLE	287252-027	7038991	896336
346	SAMPLE	287252-029	6905896	906263
347	SAMPLE	287252-030	6901632	900753
348	SAMPLE	287252-031	7011126	918215
353	MSS	287252-032	7046126	897140
361	SAMPLE	287252-033	7053441	903655
362	SAMPLE	287252-034	7113006	911191
363	SAMPLE	287252-035	7025231	906081
364	SAMPLE	287252-036	7132409	906791
365	SAMPLE	287252-037	7039334	907372
366	SAMPLE	287252-038	7019741	906154
367	SAMPLE	287252-039	7022379	929128
368	CCV		6713915	885954

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
370	CCB		7261927	909081
371	SAMPLE	287252-040	7070499	916369
372	SAMPLE	287252-041	6982779	910174
373	SAMPLE	287252-042	7063940	913724
374	SAMPLE	287252-043	7090356	917091
375	SAMPLE	287252-044	7064037	912598
376	SAMPLE	287252-045	7026920	906171
378	BLANK	QC879419	7200002	900389
379	BS	QC879420	6822357	898277
380	BSD	QC879421	6840156	893266
381	CCV		6692776	881951
383	CCB		7211687	917171
384	MSS	287077-042	6945336	899941
385	MS	QC879422	6810328	899139
386	MSD	QC879423	6823435	894533
387	SER	QC879424	7115946	902111
388	PDS	QC879425	6803293	887555
389	SAMPLE	287077-041	6893137	902582
390	SAMPLE	287077-043	7038623	908955
391	SAMPLE	287077-044	7049050	916748
392	SAMPLE	287077-045	6917071	901614
393	SAMPLE	287077-046	7009637	907650
394	CCV		6700561	880033
395	CCB		7180352	904417
396	CCB		7177217	910965
397	SAMPLE	287077-047	6948027	907765
398	SAMPLE	287077-048	7033836	896098
399	SAMPLE	287077-049	7109813	912783
400	SAMPLE	287077-050	7040727	899845
401	SAMPLE	287082-001	7008624	905926
402	SAMPLE	287082-002	6842413	898506
403	SAMPLE	287082-003	6883302	904317
404	SAMPLE	287082-004	6855780	900188
405	SAMPLE	287082-005	7066526	907352
406	SAMPLE	287082-006	7048392	920676
407	CCV		6637853	874780
408	CCB		7171323	909012
410	SAMPLE	287082-007	6899545	898826
411	SAMPLE	287082-008	6997736	907867
412	SAMPLE	287082-009	6916676	906767
413	SAMPLE	287082-010	6949148	905579

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287077 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087144643001
Units : ug/L

Date : 10-APR-2017 10:43
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087144643002	L1	10-APR-2017 10:46	S32578
L2	met10 method	1087144643003	L2	10-APR-2017 10:50	S32571
L3	met10 method	1087144643004	L3	10-APR-2017 10:52	S32367
L4	met10 method	1087144643005	L4	10-APR-2017 10:54	S32368
L5	met10 method	1087144643006	L5	10-APR-2017 10:57	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	1.9600	2.0120	2.1588	1.9567		LOR0	0.00000	0.51054		2.0219	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	0	100.00	3	1000.0	10	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287077 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087144643001 Cal Date : 10-APR-2017

ICV 1087144643007 (10-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4912	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643009.2 File : met10 method Time : 10-APR-2017 11:06
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.664	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6971685	1.13
Yttrium	R	894629	898388	0.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643010.2 File : met10 method Time : 10-APR-2017 11:10
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7043252	2.17
Yttrium	R	894629	902935	0.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643011.2 File : met10 method Time : 10-APR-2017 11:13
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[4.390]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19420	ug/L	97	
Copper	A	20000	23100	ug/L	115	
Manganese	A	20000	18930	ug/L	95	
Nickel	A	20000	17170	ug/L	86	
Titanium	A	20000	19750	ug/L	99	
Vanadium	A	20000	22020	ug/L	110	
Aluminum	R	500000	547000	ug/L	109	
Calcium	R	500000	549300	ug/L	110	
Iron	R	200000	209000	ug/L	105	
Magnesium	R	500000	459900	ug/L	92	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5743386	-16.69
Yttrium	R	894629	790346	-11.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643014.2 File : met10 method Time : 10-APR-2017 11:41
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	919.9	ug/L	-8	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5730121	-16.88
Yttrium	R	894629	787134	-12.02

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643136.2 File : met10 method Time : 10-APR-2017 17:26
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9050	5000	4863	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6608958	-4.13
Yttrium	R	894629	875081	-2.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643138.2 File : met10 method Time : 10-APR-2017 17:31
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7089613	2.84
Yttrium	R	894629	906239	1.30

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643149.2 File : met10 method Time : 10-APR-2017 18:01
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9129	5000	4883	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6760096	-1.94
Yttrium	R	894629	901935	0.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643151.2 File : met10 method Time : 10-APR-2017 18:07
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7260707	5.32
Yttrium	R	894629	929185	3.86

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643368.1 File : met10 method Time : 11-APR-2017 04:38
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9035	5000	4859	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6713915	-2.61
Yttrium	R	894629	885954	-0.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643370.1 File : met10 method Time : 11-APR-2017 04:44
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7261927	5.34
Yttrium	R	894629	909081	1.62

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643381.1 File : met10 method Time : 11-APR-2017 05:17
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9029	5000	4858	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6692776	-2.92
Yttrium	R	894629	881951	-1.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643383.1 File : met10 method Time : 11-APR-2017 05:23
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7211687	4.61
Yttrium	R	894629	917171	2.52

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643394.1 File : met10 method Time : 11-APR-2017 05:53
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.8801	5000	4799	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6700561	-2.80
Yttrium	R	894629	880033	-1.63

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643395.1 File : met10 method Time : 11-APR-2017 05:56
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7180352	4.16
Yttrium	R	894629	904417	1.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643396.1 File : met10 method Time : 11-APR-2017 05:59
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7177217	4.11
Yttrium	R	894629	910965	1.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643407.1 File : met10 method Time : 11-APR-2017 06:30
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9100	5000	4876	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6637853	-3.71
Yttrium	R	894629	874780	-2.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287077 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643408.1 File : met10 method Time : 11-APR-2017 06:33
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7171323	4.03
Yttrium	R	894629	909012	1.61

SAMPLE PREPARATION SUMMARY

Batch # : 246045
Started By : VV
Method : SPLP
Spike #1 ID : S29983
Prep Date : 29-MAR-2017 03:30
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-001		SPLP Leachate	50	50	1	1.0						6010	
287077-002		SPLP Leachate	50	50	1	1.0						6010	
287077-003		SPLP Leachate	50	50	1	1.0						6010	
287077-004		SPLP Leachate	50	50	1	1.0						6010	
287077-005		SPLP Leachate	50	50	1	1.0						6010	
287077-006		SPLP Leachate	50	50	1	1.0						6010	
287077-007		SPLP Leachate	50	50	1	1.0						6010	
287077-008		SPLP Leachate	50	50	1	1.0						6010	
287077-009		SPLP Leachate	50	50	1	1.0						6010	
287077-010		SPLP Leachate	50	50	1	1.0						6010	
287077-011		SPLP Leachate	50	50	1	1.0						6010	
287077-012		SPLP Leachate	50	50	1	1.0						6010	
287077-013		SPLP Leachate	50	50	1	1.0						6010	
287077-014		SPLP Leachate	50	50	1	1.0						6010	
287077-015		SPLP Leachate	50	50	1	1.0						6010	
287077-016		SPLP Leachate	50	50	1	1.0						6010	
287077-017		SPLP Leachate	50	50	1	1.0						6010	
287077-018		SPLP Leachate	50	50	1	1.0						6010	
287077-019		SPLP Leachate	50	50	1	1.0						6010	
287077-020		SPLP Leachate	50	50	1	1.0						6010	
QC878995	BLANK	SPLP Leachate	50	50	1	1.0							
QC878996	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC878997	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC878998	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC878999	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879244	SER	SPLP Leachate	50	50	1	1.0							
QC879245	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 04/01/17 Reviewer: PRW Date: 04/03/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246045
Date Digested: 3-29-17
Digested by: VV
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
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Continued on p: Ø

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC# 878995	☒ 50 ☐	☒ 50 ☐	Yes	
*	BS 878996	☒ 50 ☐	☒ 50 ☐	Yes	
*	BSD 878997	☒ 50 ☐	☒ 50 ☐	Yes	
*	287077-002 MS	☒ 50 ☐	☒ 50 ☐	Yes	
5 *	- 002 MSD	☒ 50 ☐	☒ 50 ☐	Yes	
	- 001	☒ 50 ☐	☒ 50 ☐	Yes	
	- 002	☒ 50 ☐	☒ 50 ☐	Yes	
	- 003	☒ 50 ☐	☒ 50 ☐	Yes	
	- 004	☒ 50 ☐	☒ 50 ☐	Yes	
10	- 005	☒ 50 ☐	☒ 50 ☐	Yes	
	- 006	☒ 50 ☐	☒ 50 ☐	Yes	
	- 007	☒ 50 ☐	☒ 50 ☐	Yes	
	- 008	☒ 50 ☐	☒ 50 ☐	Yes	
	- 009	☒ 50 ☐	☒ 50 ☐	Yes	
15	- 010	☒ 50 ☐	☒ 50 ☐	Yes	
	- 011	☒ 50 ☐	☒ 50 ☐	Yes	
	- 012	☒ 50 ☐	☒ 50 ☐	Yes	
	- 013	☒ 50 ☐	☒ 50 ☐	Yes	
	- 014	☒ 50 ☐	☒ 50 ☐	Yes	
20	- 015	☒ 50 ☐	☒ 50 ☐	Yes	
	- 016	☒ 50 ☐	☒ 50 ☐	Yes	
	- 017	☒ 50 ☐	☒ 50 ☐	Yes	
	- 018	☒ 50 ☐	☒ 50 ☐	Yes	
	- 019	☒ 50 ☐	☒ 50 ☐	Yes	
	- 020	☒ 50 ☐	☒ 50 ☐	Yes	

3-30-17

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	259935-2005		VV 3-29-17
Digestion Block ID/ Probe Location	TETON	36#	
Thermometer ID/ Digestion Temperature (°C)	SN M14581	95°	
0.5 mL of spike solution (Std1) was added to all spikes	529983 *		
0.5 mL of spike solution (Std1) was added to all spikes	529984 *		
0.5 mL of spike solution (Std3) was added to all spikes	530560 *		
Digestion started at (time)	03:30		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170119 88-BDH		
1:1 HCl reagent ID	162118-053017		VV 3-30-17
Digestion ended at (time)	07:30		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICAP		

Pipettes

Vol.(mL)	ID
0.5	N27150D

3-29-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246002
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: 1-4-3

Date/ Time ON: 3-28-17 08:45
Temp (°C) ON: 22°C
Date/ Time OFF: 3-29-17 01:00
Temp (°C) ON: 21°C - 24°C

Page: 38 BK 3994

Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

	Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
	BLK 878817		Ø	Ø	Ø	Ø	Ø	2	☒ 2000 ☐	5.07	
	287077-001	A	100.10	NO	NO	N/A	N/A		☒ 2000 ☐	5.65	
	-002		100.22						☒ 2000 ☐	5.62	
	-003		100.09						☒ 2000 ☐	5.63	
5	-004		100.18						☒ 2000 ☐	5.66	
	-005		100.20						☒ 2000 ☐	5.64	
	-006		100.23						☒ 2000 ☐	5.59	
	-007		100.25						☒ 2000 ☐	5.62	
	-008		100.16						☒ 2000 ☐	5.66	
10	-009		100.11						☒ 2000 ☐	5.74	
	-010		100.27						☒ 2000 ☐	5.65	
	-011		100.14						☒ 2000 ☐	5.62	
	-012		100.11						☒ 2000 ☐	5.67	
	-013		100.14						☒ 2000 ☐	5.62	
15	-014		100.15						☒ 2000 ☐	5.64	
	-015		100.12						☒ 2000 ☐	5.66	
	-016		100.17						☒ 2000 ☐	5.68	
	-017		100.21						☒ 2000 ☐	5.63	
	-018		100.13						☒ 2000 ☐	5.70	
20	-019		100.05						☒ 2000 ☐	5.65	
	-020		100.10						☒ 2000 ☐	5.69	
									☐ 2000 ☐		
				VV 3-29-17					☐ 2000 ☐		
									☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No
pH Meter ID: 013861 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Init
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	NA	VV 3-28-
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	~ 5.01	-
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	5.00/5.02	3-28-17
Hot Plate Thermometer (Temperature, Serial #)	N/A °C	ID: -
filtered thru TCLP filter paper, lot#	EE-400121	VV 3-29-17
acidified to pH <2 with 1 mL HNO3	20170111988-BDH	
pH paper strips, lot#	10BDH1061	

Extraction Chemist 3-28-17 Date

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246105
Started By : VV
Method : SPLP
Spike #1 ID : S29983
Prep Date : 30-MAR-2017 08:00
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-021		SPLP Leachate	50	50	1	1.0						6010	
287077-022		SPLP Leachate	50	50	1	1.0						6010	
287077-023		SPLP Leachate	50	50	1	1.0						6010	
287077-024		SPLP Leachate	50	50	1	1.0						6010	
287077-025		SPLP Leachate	50	50	1	1.0						6010	
287077-026		SPLP Leachate	50	50	1	1.0						6010	
287077-027		SPLP Leachate	50	50	1	1.0						6010	
287077-028		SPLP Leachate	50	50	1	1.0						6010	
287077-029		SPLP Leachate	50	50	1	1.0						6010	
287077-030		SPLP Leachate	50	50	1	1.0						6010	
287077-031		SPLP Leachate	50	50	1	1.0						6010	
287077-032		SPLP Leachate	50	50	1	1.0						6010	
287077-033		SPLP Leachate	50	50	1	1.0						6010	
287077-034		SPLP Leachate	50	50	1	1.0						6010	
287077-035		SPLP Leachate	50	50	1	1.0						6010	
287077-036		SPLP Leachate	50	50	1	1.0						6010	
287077-037		SPLP Leachate	50	50	1	1.0						6010	
287077-038		SPLP Leachate	50	50	1	1.0						6010	
287077-039		SPLP Leachate	50	50	1	1.0						6010	
287077-040		SPLP Leachate	50	50	1	1.0						6010	
QC879237	BLANK	SPLP Leachate	50	50	1	1.0							
QC879238	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879239	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879240	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879241	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879242	SER	SPLP Leachate	50	50	1	1.0							
QC879243	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 04/11/17 Reviewer: PRW Date: 04/11/17

TCLP/SPLP Extract Digestion for ICP — Curtis & Tompkins, Ltd.

LIMS Batch #: 246105
Date Digested: 3-30-17
Digested by: VV
Matrix: ☐ TCLP Extract ☒ SPLP Extract

Digestion Method: ☒ EPA 3010a for ICP ☐ _____

BK 3999 Page 35 Continued on p: 36

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK # 879237	☒ 50 ☐	☒ 50 ☐	NO	
*	BS 879238	☒ 50 ☐	☒ 50 ☐		
*	BSD 879239	☒ 50 ☐	☒ 50 ☐		
*	287077-021 MS	☒ 50 ☐	☒ 50 ☐		
5 *	- 021 MSD	☒ 50 ☐	☒ 50 ☐		
	- 021	☒ 50 ☐	☒ 50 ☐		
	- 022	☒ 50 ☐	☒ 50 ☐		
	- 023	☒ 50 ☐	☒ 50 ☐		
	- 024	☒ 50 ☐	☒ 50 ☐		
10	- 025	☒ 50 ☐	☒ 50 ☐		
	- 026	☒ 50 ☐	☒ 50 ☐		
	- 027	☒ 50 ☐	☒ 50 ☐		
	- 028	☒ 50 ☐	☒ 50 ☐		
	- 029	☒ 50 ☐	☒ 50 ☐		
15	- 030	☒ 50 ☐	☒ 50 ☐		
	- 031	☒ 50 ☐	☒ 50 ☐		
	- 032	☒ 50 ☐	☒ 50 ☐		
	- 033	☒ 50 ☐	☒ 50 ☐		
	- 034	☒ 50 ☐	☒ 50 ☐		
20	- 035	☒ 50 ☐	☒ 50 ☐		
	- 036	☒ 50 ☐	☒ 50 ☐		
	- 037	☒ 50 ☐	☒ 50 ☐		
	- 038	☒ 50 ☐	☒ 50 ☐		
	- 039	☒ 50 ☐	☒ 50 ☐		
	✓ - 040	☒ 50 ☐	☒ 50 ☐		

	Reagent ID or LIMS #	Initials / Date
Digestion Tubes / Watch Glasses, Lot #	259935-2005	VV 3-30-17
Digestion Block ID/ Probe Location	JUSTICE 37#	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	
0.5 mL of spike solution (Std1) was added to all spikes	529983 *	
0.5 mL of spike solution (Std1) was added to all spikes	529984 *	
0.5 mL of spike solution (Std3) was added to all spikes	532782 *	
Digestion started at (time)	08:00	
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170111988-BDH	
1:1 HCl reagent ID	162118-033117	VV 3-31-17
Digestion ended at (time)	01:20	
☐ filtered thru' Whatman # 541		
Relinquished to ICP group	ICAP	

Pipettes

Vol.(mL)	ID
0.5	N27150D

3-30-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246048
Extraction Method: ☐ EPA 1311: TCLP ☒ EPA 1312: SPLP
Rotator #'s: 1-4-3

Date/ Time ON: 3-29-17 07:30
Temp (°C) ON: 22°C
Date/ Time OFF: 3-30-17 01:30
Temp (°C) ON: 21°C - 24°C

Page: 39 **BK 3994**
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK #246048	QC	Ø	Ø	Ø	Ø	Ø	2	☒ 2000 ☐	4.96	
287077-021	A	100.13	NO	NO	NA	NA		☒ 2000 ☐	5.56	
-022		100.11						☒ 2000 ☐	5.65	
-023		100.02						☒ 2000 ☐	5.64	
-024		100.23						☒ 2000 ☐	5.69	
-025		100.16						☒ 2000 ☐	5.72	
-026		100.09						☒ 2000 ☐	5.67	
-027		100.16						☒ 2000 ☐	5.74	
-028		100.05						☒ 2000 ☐	5.72	
-029		100.13						☒ 2000 ☐	5.70	
-030		100.12						☒ 2000 ☐	5.72	
-031		100.02						☒ 2000 ☐	5.64	
-032		100.14						☒ 2000 ☐	5.76	
-033		100.07						☒ 2000 ☐	5.84	
-034		100.03						☒ 2000 ☐	5.75	
-035		100.08						☒ 2000 ☐	5.80	
-036		100.17						☒ 2000 ☐	5.67	
-037		100.16						☒ 2000 ☐	5.64	
-038		100.19						☒ 2000 ☐	5.71	-038
-039		100.01						☒ 2000 ☐	5.78	
-040		100.09						☒ 2000 ☐	5.83	
								☐ 2000 ☐		
			VV 3-30-17					☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No
pH Meter ID: 103869 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	VV 3-29-17
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
LP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
LP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
LP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	5.01/5.05/5.04 3-28-17 / 3-29-17	
LP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date		
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	EE ~~400121~~ VV 3-30-17 400121	VV 3-30-17
acidified to pH <2 with 1 mL HNO3	2017011988- BDH	
pH paper strips, lot#	10BDH1061	

VV 3-29-17
Extraction Chemist **Date**

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246147
Started By : VV
Method : 3010A
Spike #1 ID : S29983
Prep Date : 31-MAR-2017 06:25
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-041		SPLP Leachate	50	50	1	1.0						6010	
287077-042		SPLP Leachate	50	50	1	1.0						6010	
287077-043		SPLP Leachate	50	50	1	1.0						6010	
287077-044		SPLP Leachate	50	50	1	1.0						6010	
287077-045		SPLP Leachate	50	50	1	1.0						6010	
287077-046		SPLP Leachate	50	50	1	1.0						6010	
287077-047		SPLP Leachate	50	50	1	1.0						6010	
287077-048		SPLP Leachate	50	50	1	1.0						6010	
287077-049		SPLP Leachate	50	50	1	1.0						6010	
287077-050		SPLP Leachate	50	50	1	1.0						6010	
287082-001		SPLP Leachate	50	50	1	1.0						6010	
287082-002		SPLP Leachate	50	50	1	1.0						6010	
287082-003		SPLP Leachate	50	50	1	1.0						6010	
287082-004		SPLP Leachate	50	50	1	1.0						6010	
287082-005		SPLP Leachate	50	50	1	1.0						6010	
287082-006		SPLP Leachate	50	50	1	1.0						6010	
287082-007		SPLP Leachate	50	50	1	1.0						6010	
287082-008		SPLP Leachate	50	50	1	1.0						6010	
287082-009		SPLP Leachate	50	50	1	1.0						6010	
287082-010		SPLP Leachate	50	50	1	1.0						6010	
QC879419	BLANK	SPLP Leachate	50	50	1	1.0							
QC879420	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879421	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879422	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879423	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879424	SER	SPLP Leachate	50	50	1	1.0							
QC879425	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: TLO Date: 04/11/17 Reviewer: PRW Date: 04/11/17

TCLP/SPLP Extract Digestion for ICP — Curtis & Tompkins, Ltd.

LIMS Batch #: 246147
Date Digested: 3-31-17
Digested by: VV
Matrix: ☐ TCLP Extract ☒ SPLP Extract

Digestion Method: ☒ EPA 3010a for ICP ☐ _____ — BK 3999 Page 36 Continued on p: _____

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BIK QC#	☒ 50 ☐	☒ 50 ☐	NO	
*	BS	☒ 50 ☐	☒ 50 ☐		
*	BSD	☒ 50 ☐	☒ 50 ☐		
*	287077-042 MS	☒ 50 ☐	☒ 50 ☐		
5 *	042 MSD	☒ 50 ☐	☒ 50 ☐		
	042	☒ 50 ☐	☒ 50 ☐		
	041	☒ 50 ☐	☒ 50 ☐		
	043	☒ 50 ☐	☒ 50 ☐		
	044	☒ 50 ☐	☒ 50 ☐		
10	045	☒ 50 ☐	☒ 50 ☐		
	046	☒ 50 ☐	☒ 50 ☐		
	047	☒ 50 ☐	☒ 50 ☐		
	048	☒ 50 ☐	☒ 50 ☐		
	049	☒ 50 ☐	☒ 50 ☐		
15	050	☒ 50 ☐	☒ 50 ☐		
	VV 3-31-17 051-001	☒ 50 ☐	☒ 50 ☐		
	287082- 052-002	☒ 50 ☐	☒ 50 ☐		
	053-003	☒ 50 ☐	☒ 50 ☐		
	054-004	☒ 50 ☐	☒ 50 ☐		
20	055-005	☒ 50 ☐	☒ 50 ☐		
	056-006	☒ 50 ☐	☒ 50 ☐		
	057-007	☒ 50 ☐	☒ 50 ☐		
	058-008	☒ 50 ☐	☒ 50 ☐		
	059-009	☒ 50 ☐	☒ 50 ☐		
	-010	☒ 50 ☐	☒ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	1597886-2005		VV 3-31-17
Digestion Block ID/ Probe Location	JUSTICE	37	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983 *		
0.5 mL of spike solution (Std1) was added to all spikes	S29984 *		
0.5 mL of spike solution (Std3) was added to all spikes	S32702 *		
Digestion started at (time)	0625		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170111988-BDH		VV 3-31-17
1:1 HCl reagent ID	162118-040217 VV 3-31-17	040317	VV 040217
Digestion ended at (time)	0720		VV 040317
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	IOAP		

Pipettes

Vol.(mL)	ID
0.5	N27150D

3-31-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246102
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: 1-4-3

Date/ Time ON: 3-30-17 09:00
Temp (°C) ON: 23°C
Date/ Time OFF: 3-31-17 01:30
Temp (°C) ON: 21°C-24°C

Page: 40 BK 3994
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK 899227	QC	Ø	Ø	Ø	Ø	Ø	2	☒ 2000 ☐	5.08	
287077-041	A	100.13	NO	NO	N/A	N/A		☒ 2000 ☐	5.28	
-042		100.11						☒ 2000 ☐	5.22	
-043		100.23						☒ 2000 ☐	5.35	
-044		100.04						☒ 2000 ☐	5.51	
-045		100.26						☒ 2000 ☐	5.45	
-046		100.09						☒ 2000 ☐	5.47	
-047		100.03						☒ 2000 ☐	5.41	
-048		100.01						☒ 2000 ☐	5.54	
-049		100.03						☒ 2000 ☐	5.49	
-050		100.01						☒ 2000 ☐	5.48	
287082-001		100.25						☒ 2000 ☐	5.79	
-002		100.28						☒ 2000 ☐	5.59	
-003		100.10						☒ 2000 ☐	5.63	
-004		100.13						☒ 2000 ☐	5.60	
-005		100.01						☒ 2000 ☐	5.69	
-006		100.09						☒ 2000 ☐	5.52	
-007		100.01						☒ 2000 ☐	5.59	
-008		100.02						☒ 2000 ☐	5.77	
-009		100.07						☒ 2000 ☐	5.75	
-010		100.06						☒ 2000 ☐	5.91	
								☐ 2000 ☐		
		VV 3-31-17						☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☑ Yes ☐ No
pH Meter ID: 013869 has been calibrated? ☑ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initial
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	NA	3-30-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	—
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	5.05/5.00	3-29-17/3-30-17
Hot Plate Thermometer (Temperature, Serial #)	NA °C ID: —	
filtered thru TCLP filter paper, lot#	E-E 400121	3-31-17 VV
acidified to pH <2 with 1 mL HNO3	20170111988-BDH	
pH paper strips, lot#	10BDH1061	

3-30-17
Extraction Chemist Date

Reviewed Online / See LIMS

Laboratory Job Number 287077

ANALYTICAL REPORT

Wet Chemistry

Matrix: Soil

Percent Moisture Summary Report

Batch: 245994
Date: 03/28/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287077-021	11.3411	18.2349	15.7545	64	36
287077-022	11.2678	18.3404	15.6237	62	38
287077-023	10.8841	17.3021	14.4603	56	44
287077-024	10.9119	16.9949	15.0482	68	32
287077-025	11.1918	19.4194	16.6269	66	34
287077-026	10.8544	18.4756	15.8836	66	34
287077-027	11.3951	19.3591	16.5781	65	35
287077-028	11.2489	18.1832	15.9596	68	32
287077-029	11.0532	17.4529	15.3776	68	32
287077-030	11.3607	17.2491	14.4524	53	47
287077-031	11.1367	16.8495	14.9847	67	33
287077-032	11.0169	18.2929	15.7896	66	34
287077-033	11.2630	17.6421	15.4931	66	34
287077-034	11.0484	18.5175	16.1951	69	31
287077-035	11.6048	17.3415	15.5746	69	31
287077-036	11.3625	17.2398	15.3291	67	33
287077-037	11.3688	17.1449	15.1825	66	34
287077-038	11.3311	18.0489	15.1376	57	43
287077-039	11.3159	19.6098	17.4637	74	26
287077-040	11.3066	16.4593	14.7343	67	33
QC878791	11.3468	18.9860	16.3203	65	35
of 287077-021			RPD:	1.7%	3.1%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 245994
Date: 3-28-17

Page: **21**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	18	11.2040	Ø	11.1977	
287077-021 A	50	11.3411	18.2349	15.7545	
-022	58	11.2678	18.3404	15.6237	
-023	72	10.8841	17.3021	14.4603	
-024	21	10.9119	16.9949	15.0482	
-025	6	11.1918	19.4194	16.6269	
-026	76	10.8544	18.4756	15.8836	
-027	29	11.3951	19.3591	16.5781	
-028	83	11.2489	18.1832	15.9596	
-029	38	11.0532	17.4529	~~16.5781~~	weight = 15.3776
-030	94	11.3607	17.2491	14.4524	
-031	47	11.1367	16.8495	14.9847	
-032	73	11.0169	18.2929	15.7896	
-033	27	11.2630	17.6421	15.4931	
-034	80	11.0484	18.5175	16.195)	
-035	15	11.6048	17.3415	15.5746	
-036	86	11.3625	17.2398	~~15.3290~~	weight = 15.3291
-037	56	11.3688	17.1449	~~15.1825~~	weight = 15.1825
-038	82	11.3311	18.0489	15.1376	
-039	57	11.3159	19.6098	17.4637	
-040	26	11.3066	16.4593	14.7343	
SOUP -021	39	11.3468	18.9860	16.3203	

	In	Out	In-2	Out-2
Date:	3-28-17	3-28-17		
Time:	0040	15:50		
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:	MV	MB4		

MV 3-28-17
Analyst Initials / Date

Reviewed Online / See LIMS

PROJECT AE163 METTLER (BALANCE ID# B-3) Notebook No. BK2394 77

Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	[illegible]	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	[illegible]	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	MBH 3-23-17 ~~0.1997~~ 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417
3-28-17	MN	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 245993
Date: 03/28/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287077-001	11.2323	18.6225	15.7742	61	39
287077-002	11.3434	16.8530	15.2073	70	30
287077-003	11.3125	17.3924	15.0107	61	39
287077-004	11.2909	16.4375	14.6073	64	36
287077-005	11.3552	18.1401	15.8204	66	34
287077-006	11.0723	16.6572	14.7210	65	35
287077-007	11.2584	18.8213	16.1349	64	36
287077-008	11.2875	18.7787	15.9950	63	37
287077-009	11.6116	19.5371	16.2971	59	41
287077-010	11.2399	17.5457	15.1199	62	38
287077-011	11.2961	17.2776	15.2180	66	34
287077-012	11.0419	16.1761	14.2046	62	38
287077-013	11.2344	17.1912	15.2124	67	33
287077-014	11.3548	16.5309	14.8554	68	32
287077-015	11.2981	19.2499	16.7597	69	31
287077-016	11.3372	17.4475	15.4133	67	33
287077-017	11.3351	17.1303	15.0249	64	36
287077-018	10.9959	17.1950	14.5354	57	43
287077-019	11.2928	16.3416	14.1729	57	43
287077-020	11.3628	17.4878	15.3399	65	35
QC878790	11.1214	16.8521	15.0959	69	31
of 287077-002			RPD:	1.1%	2.6%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 245993
Date: 3-28-17

Page: **20**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	8	10.9465	∅	10.9416	
287077-001 A	59	11.2323	18.6225	15.7742	
-002	41	11.3434	16.8530	15.2073	
-003	17	11.3125	17.3924	15.0107	
-004	36	11.2909	16.4375	14.6073	
-005	74	11.3552	18.1401	15.8204	
-006	10	11.0723	16.6572	14.7210	
-007	22	11.2584	18.8213	16.1349	
-008	9	11.2875	18.7787	15.9950	
-009	66	11.6116	19.5371	16.2971	
-010	51	11.2399	17.5457	15.1199	
-011	12	11.2961	17.2776	15.2180	
-012	14	11.0419	16.1761	14.2046	
-013	44	11.2344	17.1912	15.2124	
-014	30	11.3548	16.5309	14.8554	
-015	32	11.2981	19.2499	16.7597	
-016	93	11.3372	17.4475	15.4133	
-017	19	11.3351	17.1303	15.0249	
-018	3	10.9959	17.1950	14.5354	
-019	91	11.2928	16.3416	14.1729	
-020	5	11.3628	17.4878	15.3399	
SDUP -002	78	11.1214	16.8521	15.0959	

	In	Out	In-2	Out-2
Date:	3-28-17	3-28-17	—	—
Time:	0020	15:40	—	—
Min/Max Range (°C)	104	104	—	—
Thermometer ID:	P49096	P49096	—	—
Weighed by:	MV	MB4	—	—

MV 3-28-17
Analyst Initials / Date

Reviewed Online / See LIMS

DATE	ANALYST	0.2000	100.0000	LEVEL	SET #
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	[illegible]	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	KBR	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	MBH 3-23-17 ~~0.1997~~ 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417
3-28-17	MN	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 245920
Date: 03/25/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287077-041	10.8772	17.3922	15.2525	67	33
287077-042	11.3307	17.3107	15.1255	63	37
287077-043	11.4395	16.9047	14.8906	63	37
287077-044	11.3510	17.1058	14.6889	58	42
287077-045	11.1222	18.8882	15.6955	59	41
287077-046	11.2914	19.2251	16.4037	64	36
287077-047	11.2779	17.6471	15.3809	64	36
287077-048	11.0685	17.1452	14.6556	59	41
287077-049	11.3117	17.6454	15.6064	68	32
287077-050	11.0296	18.0606	15.2965	61	39
287106-001	10.9173	17.9086	16.2662	77	23
287106-002	11.1228	17.1209	15.7723	78	22
287106-003	11.2703	17.5616	16.0477	76	24
287106-004	11.0513	17.3932	15.8661	76	24
QC878509	11.3177	18.3952	15.8852	65	35
of 287077-042			RPD:	1.7%	3.0%
QC878510	10.9440	18.1091	16.5365	78	22
of 287106-001			RPD:	2.0%	6.8%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 245920
Date: 3-25-17

Page: **18**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

	Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
	Blank	28	11.0570	Ø	11.0478	
	287077-041 A	42	10.8772	17.3922	15.2525	
	-042	2	11.3307	17.3107	15.1255	SDUP
	-043	77	11.4395	16.9047	14.8906	
5	-044	81	11.3510	17.1058	14.6889	
	-045	79	11.1222	18.8882	15.6955	
	-046	84	11.2914	19.2251	16.4637	
	-047	43	11.2779	17.6471	15.3809	
	-048	55	11.0685	17.1452	14.6557	
10	-049	54	11.3117	17.6454	15.6064	
	-050	49	11.0296	18.0606	15.2965	
	287106-001	20	10.9173	17.9086	16.2682	SDUP
	-002	13	11.1228	17.1209	15.7723	
	-003	70	11.2703	17.5016	16.0477	
15	-004	60	11.0513	17.3932	15.8681	
	SDUP 287077-042	87	11.3177	18.3952	15.8852	QC ~~878~~ 878509
	SDUP 287106-001	53	10.9440	18.1091	16.5365	QC 878510
20						

	In	Out	In-2	Out-2
Date:	3-25-17	22:00		
Time:	00:20	3-25-17		
Min/Max Range (°C)	104°C	104°C		
Thermometer ID:	P49096	P49096		
Weighed by:	MBH	MBH		

MBH 3.25.17
Analyst Initials / Date

Reviewed Online / See LIMS

PROJECT AE163 METTLER (BALANCE ID# B-3) Notebook No. BK2594 77

Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	///	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	KBR	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	3-23-17 MBH ~~0.1997~~ 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417

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Signed Date Signed Date


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 287082
ANALYTICAL REPORT

Weston Solutions	Project : 15048.001.003.0005.1
1340 Treat Blvd	Location : Camp Bonneville Military Reservation
Walnut Creek, CA 94597	Level : III

Sample ID	Lab ID
21-SS060	287082-001
21-SS061	287082-002
21-SS062	287082-003
21-SS063	287082-004
21-SS064	287082-005
21-SS065	287082-006
21-SS066	287082-007
21-SS067	287082-008
21-SS068	287082-009
21-SS069	287082-010
21-SS070	287082-011
21-SS071	287082-012
21-SS073	287082-013
21-SS076	287082-014
21-SS077	287082-015
21-SS078	287082-016
21-SS079	287082-017
21-SS080	287082-018
21-SS081	287082-019

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

Signature: _____ Date: 04/12/2017

Dina Ali
Project Manager
dina.ali@ctberk.com
(510) 204-2223 Ext 13105

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**287082**
Client:	**Weston Solutions**
Project:	**15048.001.003.0005.1**
Location:	**Camp Bonneville Military Reservation**
Request Date:	**03/17/17**
Samples Received:	**03/17/17**

This data package contains sample and QC results for nineteen soil samples, requested for the above referenced project on 03/17/17. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C) Soil:

Low recovery was observed for lead in the MSD of 21-SS069 (lab # 287082-010); the BS/BSD were within limits, and the associated RPD was within limits.

High % differences were observed for lead in the serial dilution of 16-SS042 (lab # 287077-042) and the serial dilution of 21-SS069 (lab # 287082-010).

No other analytical problems were encountered.

Metals (EPA 6010C) SPLP Leachate:

No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.

Chain of Custody

287082

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 1
Sampler's *(Signature)*			Page 6 of 7

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
1	21-SS060	3/15/17	1725	X		Soil	1	X	X								
2	21-SS061	3/15/17	1710	X		Soil	1	X	X								
3	21-SS062	3/15/17	1655	X		Soil	1	X	X								
4	21-SS063	3/15/17	1640	X		Soil	1	X	X								
5	21-SS064	3/15/17	1620	X		Soil	1	X	X								
6	21-SS065	3/15/17	1605	X		Soil	1	X	X								
7	21-SS066	3/15/17	1550	X		Soil	1	X	X								
8	21-SS067	3/15/17	1535	X		Soil	1	X	X								
9	21-SS068	3/15/17	1510	X		Soil	1	X	X								
10	21-SS069	3/15/17	1445	X		Soil	1	X	X								
11	21-SS070	3/15/17	1420	X		Soil	1	X	X								
12	21-SS071	3/15/17	1355	X		Soil	1	X	X								
13	21-SS073	3/15/17	1315	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/16/2017 1600	Received by: (Signature and affiliation) FeEx 7786 7352 4146 (master: 7786 7352 3996)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)

Date and Time: 3/16/2017 1600	
Date and Time: 3/17/17 10:45	
Date and Time:	

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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287082

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation															Chain of Custody No.: 1
Sampler's *(Signature)*																Page 7 of 7
Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
14 21-SS076	3/15/17	1140	X		Soil	1	X	X								
15 21-SS077	3/15/17	1125	X		Soil	1	X	X								
16 21-SS078	3/15/17	1110	X		Soil	1	X	X								
17 21-SS079	3/15/17	1100	X		Soil	1	X	X								
18 21-SS080	3/15/17	1045	X		Soil	1	X	X								
19 21-SS081	3/15/17	1020	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:
Jeremy Haney, Weston Solutions	3/16/2017 1600	FeEx 7786 7352 4146 (master: 7786 7352 3996)	3/16/2017 1600
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/17/17 10:45
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 287082 Date Received 3/17/17 Number of coolers 3

Client WESTON Project CAMP BONNEVILLE MILITARY RESERVATION

Date Opened 3/17/17 By (print) KPS (sign) KSBOS

Date Logged in ↓ By (print) ↓ (sign) ↓

Date Labeled ↓ By (print) DJN (sign) dnguyen

1. Did cooler come with a shipping slip (airbill, etc) FEDEX YES NO

Shipping info 7736 7352 3941 / 3996 / 4140

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO

How many _____ Name _____ Date _____

2B. Were custody seals intact upon arrival? _____ YES NO (N/A)

3. Were custody papers dry and intact when received? _____ (YES) NO

4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO

5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO

6. Indicate the packing in cooler: (if other, describe) _____

☒ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None

☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 6.0, 5.6, 5.9

☐ Temperature blank(s) included? ☐ Thermometer# _____ ☒ IR Gun# A

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)

If YES, what time were they transferred to freezer? _____

9. Did all bottles arrive unbroken/unopened? _____ (YES) NO

10. Are there any missing / extra samples? _____ YES (NO)

11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO

12. Are sample labels present, in good condition and complete? _____ (YES) NO

13. Do the sample labels agree with custody papers? _____ (YES) NO

14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO

15. Are the samples appropriately preserved? _____ (YES) NO N/A

16. Did you check preservatives for all bottles for each sample? _____ (YES) NO N/A

17. Did you document your preservative check? (pH strip lot# _____) (YES) NO N/A

18. Did you change the hold time in LIMS for unpreserved VOAs? _____ (YES) NO N/A

19. Did you change the hold time in LIMS for preserved terracores? _____ (YES) NO N/A

20. Are bubbles > 6mm absent in VOA samples? _____ (YES) NO N/A

21. Was the client contacted concerning this sample delivery? _____ YES (NO)

If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____

_____

_____

_____

_____

_____

Curtis & Tompkins, Ltd.

Detections Summary for 287082

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

Client : Weston Solutions
Project : 15048.001.003.0005.1
Location : Camp Bonneville Military Reservation

Client Sample ID : 21-SS060 Laboratory Sample ID : 287082-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	93		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0058		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 21-SS061 Laboratory Sample ID : 287082-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130		0.86	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS062 Laboratory Sample ID : 287082-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS063 Laboratory Sample ID : 287082-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	91		0.86	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS064 Laboratory Sample ID : 287082-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	68		0.89	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS065 Laboratory Sample ID : 287082-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	38		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS066 Laboratory Sample ID : 287082-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	35		0.86	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS067 Laboratory Sample ID : 287082-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	170		0.90	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS068 Laboratory Sample ID : 287082-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS069 Laboratory Sample ID : 287082-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	110	b	0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS070 Laboratory Sample ID : 287082-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130	b	0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS071 Laboratory Sample ID : 287082-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	55	b	0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS073 Laboratory Sample ID : 287082-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	48	b	0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS076 Laboratory Sample ID : 287082-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	97	b	0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS077 Laboratory Sample ID : 287082-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	420	b	0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS078 Laboratory Sample ID : 287082-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	250	b	0.91	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS079 Laboratory Sample ID : 287082-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120	b	0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS080 Laboratory Sample ID : 287082-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	62	b	0.90	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS081 Laboratory Sample ID : 287082-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120	b	0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

b = See narrative

Laboratory Job Number 287082

ANALYTICAL REPORT

Metals

Matrix: Soil

Curtis & Tompkins, Ltd.

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Chemist:	MNA
Matrix:	Soil	Sampled:	03/15/17
Units:	mg/Kg	Received:	03/17/17
Basis:	dry	Prepared:	03/28/17
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Moisture	Batch#	Analyzed
21-SS060	SAMPLE	287082-001	93	0.71	33%	246036	03/29/17
21-SS061	SAMPLE	287082-002	130	0.86	45%	246036	03/29/17
21-SS062	SAMPLE	287082-003	120	0.88	45%	246036	03/29/17
21-SS063	SAMPLE	287082-004	91	0.86	42%	246036	03/29/17
21-SS064	SAMPLE	287082-005	68	0.89	38%	246036	03/29/17
21-SS065	SAMPLE	287082-006	38	0.71	34%	246036	03/29/17
21-SS066	SAMPLE	287082-007	35	0.86	39%	246036	03/29/17
21-SS067	SAMPLE	287082-008	170	0.90	45%	246036	03/29/17
21-SS068	SAMPLE	287082-009	120	0.85	42%	246036	03/29/17
21-SS069	SAMPLE	287082-010	110 b	0.79	37%	246037	03/30/17
21-SS070	SAMPLE	287082-011	130 b	0.76	37%	246037	03/30/17
21-SS071	SAMPLE	287082-012	55 b	0.79	40%	246037	03/30/17
21-SS073	SAMPLE	287082-013	48 b	0.72	33%	246037	03/30/17
21-SS076	SAMPLE	287082-014	97 b	0.81	41%	246037	03/30/17
21-SS077	SAMPLE	287082-015	420 b	0.79	42%	246037	03/30/17
21-SS078	SAMPLE	287082-016	250 b	0.91	39%	246037	03/30/17
21-SS079	SAMPLE	287082-017	120 b	0.81	36%	246037	03/30/17
21-SS080	SAMPLE	287082-018	62 b	0.90	39%	246037	03/30/17
21-SS081	SAMPLE	287082-019	120 b	0.85	39%	246037	03/30/17
	BLANK	QC878956	ND	0.54		246036	03/29/17
	BLANK	QC878963	ND b	0.52		246037	03/30/17

b= See narrative
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Chemist:	MNA
Units:	mg/Kg	Received:	03/17/17
Basis:	dry	Prepared:	03/28/17

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim	Batch#	Sampled	Analyzed
	BS		QC878957		53.76	48.63	90	75-125				246036		03/29/17
	BSD		QC878958		52.08	48.15	92	75-125		2	35	246036		03/29/17
16-SS042	MS	287077-042	QC878959	574.2	86.27	596.0	25 NM	75-125	37%			246036	03/14/17	03/29/17
16-SS042	MSD	287077-042	QC878960		79.37	613.1	49 NM	75-125	37%	4	35	246036	03/14/17	03/29/17
	BS		QC878964		46.30	45.69 b	99	75-125				246037		03/30/17
	BSD		QC878965		52.63	51.19 b	97	75-125		1	35	246037		03/30/17
21-SS069	MS	287082-010	QC878966	107.8	77.05	167.0 b	77	75-125	37%			246037	03/15/17	03/30/17
21-SS069	MSD	287082-010	QC878967		72.81	158.2 b	69 *	75-125	37%	3	35	246037	03/15/17	03/30/17

*= Value outside of QC limits; see narrative
b= See narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS042	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246036
MSS Lab ID:	287077-042	Chemist:	MNA
Lab ID:	QC878961	Sampled:	03/14/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/29/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
574.2	0.8818	684.1	4.409	37%	19 *	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	16-SS042	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246036
MSS Lab ID:	287077-042	Chemist:	MNA
Lab ID:	QC878962	Sampled:	03/14/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/29/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
574.2	8.818	562.5	-132 NM	75-125	37%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS069	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246037
MSS Lab ID:	287082-010	Chemist:	MNA
Lab ID:	QC878968	Sampled:	03/15/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/30/17

MSS Result	MSS RL	Result	RL	Moisture	% Diff	Lim
107.8	0.7937	119.8 b	3.968	37%	11 *	10

*= Value outside of QC limits; see narrative
b= See narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS069	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246037
MSS Lab ID:	287082-010	Chemist:	MNA
Lab ID:	QC878969	Sampled:	03/15/17
Matrix:	Soil	Received:	03/17/17
Units:	mg/Kg	Analyzed:	03/30/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
107.8	7.937	111.5 b	47 NM	75-125	37%

b= See narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration

REPORTING SUMMARY FOR 287082 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287082-001	MET10	03/29/17 20:10	1.0	+	
287082-002	MET10	03/29/17 20:13	1.0	+	
287082-003	MET10	03/29/17 20:24	1.0	+	
287082-004	MET10	03/29/17 20:27	1.0	+	
287082-005	MET10	03/29/17 20:30	1.0	+	
287082-006	MET10	03/29/17 20:32	1.0	+	
287082-007	MET10	03/29/17 20:35	1.0	+	
287082-008	MET10	03/29/17 20:38	1.0	+	
287082-009	MET10	03/29/17 20:41	1.0	+	
287082-010	MET10	03/30/17 20:19	1.0	+	
287082-011	MET10	03/30/17 20:33	1.0	+	
287082-012	MET10	03/30/17 20:36	1.0	+	
287082-013	MET10	03/30/17 20:48	1.0	+	
287082-014	MET10	03/30/17 20:51	1.0	+	
287082-015	MET10	03/30/17 20:54	1.0	+	
287082-016	MET10	03/30/17 20:56	1.0	+	
287082-017	MET10	03/30/17 20:59	1.0	+	
287082-018	MET10	03/30/17 21:01	1.0	+	
287082-019	MET10	03/30/17 21:04	1.0	+	
QC878956	MET10	03/29/17 18:58	1.0	+	
QC878957	MET10	03/29/17 19:07	1.0	+	
QC878958	MET10	03/29/17 19:09	1.0	+	
QC878959	MET10	03/29/17 19:15	1.0	+	
QC878960	MET10	03/29/17 19:18	1.0	+	
QC878961	MET10	03/29/17 19:21	5.0	+	
QC878962	MET10	03/29/17 19:24	1.0	+	
QC878963	MET10	03/30/17 20:11	1.0	+	

REPORTING SUMMARY FOR 287082 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC878964	MET10	03/30/17 20:14	1.0	+	
QC878965	MET10	03/30/17 20:17	1.0	+	
QC878966	MET10	03/30/17 20:22	1.0	+	
QC878967	MET10	03/30/17 20:25	1.0	+	
QC878968	MET10	03/30/17 20:28	5.0	+	
QC878969	MET10	03/30/17 20:30	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				03/29/17 09:48	1.0		
002	met10 method	ICAL	L1			03/29/17 09:51	1.0	1	
003	met10 method	ICAL	L2			03/29/17 09:54	1.0	2	
004	met10 method	ICAL	L3			03/29/17 09:56	1.0	3	
005	met10 method	ICAL	L4			03/29/17 09:59	1.0	4	
006	met10 method	ICAL	L5			03/29/17 10:01	1.0	5	
007	met10 method	ICV				03/29/17 10:04	1.0	6	
008	met10 method	CRI				03/29/17 10:07	1.0	7	
009	met10 method	CRI				03/29/17 10:11	1.0	7	
010	met10 method	ICB				03/29/17 10:15	1.0		
011	met10 method	ICSA				03/29/17 10:18	1.0	8	10:AL=530000
012	met10 method	ICSAB				03/29/17 10:22	1.0	9	5:AL=530000
013	met10 method	BLANK	QC878975	Miscell.	246039	03/29/17 10:29	1.0		
014	met10 method	BS	QC878976	Miscell.	246039	03/29/17 10:32	1.0		
015	met10 method	BSD	QC878977	Miscell.	246039	03/29/17 10:35	1.0		
016	met10 method	MSS	287447-003	Miscell.	246039	03/29/17 10:37	1.0		6:AL=930000
017	met10 method	MS	QC878978	Miscell.	246039	03/29/17 10:40	1.0		5:AL=1000000
018	met10 method	MSD	QC878979	Miscell.	246039	03/29/17 10:43	1.0		5:PB=1000000
019	met10 method	SER	QC878980	Miscell.	246039	03/29/17 10:46	5.0		
020	met10 method	PDS	QC878981	Miscell.	246039	03/29/17 10:48	1.0	10 11 12	6:AL=900000
021	met10 method	SAMPLE	287428-001	Soil	246039	03/29/17 10:51	1.0		3:FE=290000
022	met10 method	SAMPLE	287428-002	Soil	246039	03/29/17 10:54	1.0		5:FE=410000
023	met10 method	CCV				03/29/17 10:57	1.0	13	
024	met10 method	XCCB				03/29/17 11:00	1.0		
025	met10 method	CCB				03/29/17 11:03	1.0		
026	met10 method	SAMPLE	287447-001	Miscell.	246039	03/29/17 11:06	1.0		6:CA=970000
027	met10 method	SAMPLE	287447-002	Miscell.	246039	03/29/17 11:09	1.0		6:FE=1100000
028	met10 method	SAMPLE	287447-004	Miscell.	246039	03/29/17 11:12	1.0		4:PB=1000000
029	met10 method	SAMPLE	287447-005	Miscell.	246039	03/29/17 11:15	1.0		3:PB=1000000
030	met10 method	X	RINSE6			03/29/17 11:22	1.0		
031	met10 method	X	RINSE7			03/29/17 11:25	1.0		
032	met10 method	X	RINSE8			03/29/17 11:29	1.0		
033	met10 method	X	RINSE9			03/29/17 11:32	1.0		
034	met10 method	X	RINSE10			03/29/17 11:35	1.0		
035	met10 method	CCV				03/29/17 11:44	1.0	13	
036	met10 method	XCCB				03/29/17 11:47	1.0		
037	met10 method	CCB				03/29/17 11:50	1.0		
038	met10 method	X	RINSE 1			03/29/17 11:54	1.0		
039	met10 method	X	RINSE2			03/29/17 11:57	1.0		
040	met10 method	X	RINSE3			03/29/17 12:01	1.0		
041	met10 method	X	RINSE4			03/29/17 12:04	1.0		
042	met10 method	X	RINSE5			03/29/17 12:08	1.0		
043	met10 method	X	RINSE6			03/29/17 12:11	1.0		
044	met10 method	X	RINSE7			03/29/17 12:14	1.0		
045	met10 method	X	RINSE8			03/29/17 12:18	1.0		
046	met10 method	X	RINSE9			03/29/17 12:21	1.0		
047	met10 method	X	RINSE10			03/29/17 12:24	1.0		
048	met10 method	CCV				03/29/17 12:28	1.0	13	
049	met10 method	XCCB				03/29/17 12:30	1.0		
050	met10 method	XCCB				03/29/17 12:33	1.0		
051	met10 method	CCB				03/29/17 12:36	1.0		
052	met10 method	X	RINSE4			03/29/17 12:41	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	X	RINSE5			03/29/17 12:45	1.0		
054	met10 method	X	RINSE6			03/29/17 12:48	1.0		
055	met10 method	X	RINSE7			03/29/17 12:51	1.0		
056	met10 method	X	RINSE8			03/29/17 12:55	1.0		
057	met10 method	X	RINSE9			03/29/17 12:58	1.0		
058	met10 method	X	RINSE10			03/29/17 13:02	1.0		
059	met10 method	CCV				03/29/17 13:05	1.0	13	
060	met10 method	XCCB				03/29/17 13:08	1.0		
061	met10 method	CCB				03/29/17 13:11	1.0		
062	met10 method	BLANK	QC878975	Miscell.	246039	03/29/17 13:14	1.0		
063	met10 method	BS	QC878976	Miscell.	246039	03/29/17 13:17	1.0		
064	met10 method	BSD	QC878977	Miscell.	246039	03/29/17 13:20	1.0		
065	met10 method	SAMPLE	287447-001	Miscell.	246039	03/29/17 13:22	100.0		1:PB=12000
066	met10 method	SAMPLE	287447-002	Miscell.	246039	03/29/17 13:25	100.0		1:PB=12000
067	met10 method	SAMPLE	287447-003	Miscell.	246039	03/29/17 13:27	100.0		1:PB=12000
068	met10 method	SAMPLE	287447-004	Miscell.	246039	03/29/17 13:29	100.0		1:PB=14000
069	met10 method	BLANK	QC879000	WET Leachate	246046	03/29/17 13:34	10.0		1:NA=230000
070	met10 method	BS	QC879001	WET Leachate	246046	03/29/17 13:38	1.0		
071	met10 method	BSD	QC879002	WET Leachate	246046	03/29/17 13:41	1.0		
072	met10 method	CCV				03/29/17 13:43	1.0	13	
073	met10 method	XCCB				03/29/17 13:46	1.0		
074	met10 method	CCB				03/29/17 13:49	1.0		
075	met10 method	MSS	287310-001	WET Leachate	246046	03/29/17 13:52	10.0		1:NA=160000
076	met10 method	MS	QC879003	WET Leachate	246046	03/29/17 13:55	10.0		
077	met10 method	MSD	QC879004	WET Leachate	246046	03/29/17 13:57	10.0		
078	met10 method	SAMPLE	287313-001	WET Leachate	246046	03/29/17 14:00	10.0		
079	met10 method	X	RINSE			03/29/17 14:02	1.0		
080	met10 method	BLANK	QC878985	TCLP Leachate	246041	03/29/17 14:06	10.0		1:NA=160000
081	met10 method	BS	QC878986	TCLP Leachate	246041	03/29/17 14:09	1.0		
082	met10 method	BSD	QC878987	TCLP Leachate	246041	03/29/17 14:12	1.0		
083	met10 method	MSS	287391-001	TCLP Leachate	246041	03/29/17 14:14	10.0		1:NA=160000
084	met10 method	MS	QC878988	TCLP Leachate	246041	03/29/17 14:18	10.0		
085	met10 method	CCV				03/29/17 14:20	1.0	13	
086	met10 method	XCCB				03/29/17 14:23	1.0		
087	met10 method	CCB				03/29/17 14:26	1.0		
088	met10 method	MSD	QC878989	TCLP Leachate	246041	03/29/17 14:29	10.0		
089	met10 method	SER	QC878990	TCLP Leachate	246041	03/29/17 14:32	50.0		
090	met10 method	PDS	QC878991	TCLP Leachate	246041	03/29/17 14:35	10.0	10 11 12	1:NA=170000
091	met10 method	SAMPLE	287386-001	TCLP Leachate	246041	03/29/17 14:38	10.0		1:NA=160000
092	met10 method	SAMPLE	287394-001	TCLP Leachate	246041	03/29/17 14:41	10.0		1:NA=160000
093	met10 method	SAMPLE	287394-002	TCLP Leachate	246041	03/29/17 14:44	10.0		1:NA=140000
094	met10 method	SAMPLE	287394-003	TCLP Leachate	246041	03/29/17 14:47	10.0		1:NA=160000
095	met10 method	X	RINSE7			03/29/17 14:53	1.0		
096	met10 method	BLANK	QC878462	Soil	245909	03/29/17 14:56	1.0		
097	met10 method	BS	QC878463	Soil	245909	03/29/17 14:59	1.0		
098	met10 method	BSD	QC878464	Soil	245909	03/29/17 15:02	1.0		
099	met10 method	CCV				03/29/17 15:04	1.0	13	
100	met10 method	CCB				03/29/17 15:07	1.0		
101	met10 method	MSS	287262-001	Soil	245909	03/29/17 15:10	1.0		6:FE=580000
102	met10 method	MS	QC878465	Soil	245909	03/29/17 15:13	1.0		
103	met10 method	MSD	QC878466	Soil	245909	03/29/17 15:16	1.0		
104	met10 method	SAMPLE	287262-002	Soil	245909	03/29/17 15:19	1.0		6:FE=620000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287262-003	Soil	245909	03/29/17 15:22	1.0		6:CA=1600000
106	met10 method	SAMPLE	287262-004	Soil	245909	03/29/17 15:25	1.0		5:FE=580000
107	met10 method	SAMPLE	287262-005	Soil	245909	03/29/17 15:27	1.0		4:FE=470000
108	met10 method	SAMPLE	287262-006	Soil	245909	03/29/17 15:30	1.0		6:FE=600000
109	met10 method	SAMPLE	287262-007	Soil	245909	03/29/17 15:33	1.0		6:FE=540000
110	met10 method	SAMPLE	287262-008	Soil	245909	03/29/17 15:37	1.0		5:CA=570000
111	met10 method	CCV				03/29/17 15:40	1.0	13	
112	met10 method	CCB				03/29/17 15:42	1.0		
113	met10 method	SAMPLE	287262-009	Soil	245909	03/29/17 15:46	1.0		4:FE=530000
114	met10 method	SAMPLE	287262-010	Soil	245909	03/29/17 15:49	1.0		5:FE=530000
115	met10 method	SAMPLE	287262-011	Soil	245909	03/29/17 15:52	1.0		5:FE=480000
116	met10 method	SAMPLE	287262-012	Soil	245909	03/29/17 15:55	1.0		6:FE=620000
117	met10 method	BLANK	QC878342	Water	245881	03/29/17 15:58	1.0		
118	met10 method	BS	QC878343	Water	245881	03/29/17 16:01	1.0		
119	met10 method	BSD	QC878344	Water	245881	03/29/17 16:03	1.0		
120	met10 method	MSS	287197-001	Water	245881	03/29/17 16:06	1.0		
121	met10 method	MS	QC878345	Water	245881	03/29/17 16:08	1.0		
122	met10 method	MSD	QC878346	Water	245881	03/29/17 16:11	1.0		
123	met10 method	CCV				03/29/17 16:14	1.0	13	
124	met10 method	CCB				03/29/17 16:16	1.0		
125	met10 method	SAMPLE	287394-004	TCLP Leachate	246041	03/29/17 16:20	10.0		1:NA=160000
126	met10 method	SAMPLE	287394-005	TCLP Leachate	246041	03/29/17 16:22	10.0		1:NA=160000
127	met10 method	SAMPLE	287394-006	TCLP Leachate	246041	03/29/17 16:26	10.0		1:NA=160000
128	met10 method	SAMPLE	287394-007	TCLP Leachate	246041	03/29/17 16:28	10.0		1:NA=160000
129	met10 method	X	RINSE			03/29/17 16:31	1.0		
130	met10 method	SAMPLE	287447-001	Miscell.	246039	03/29/17 16:34	10000		
131	met10 method	SAMPLE	287447-002	Miscell.	246039	03/29/17 16:37	10000		
132	met10 method	MSS	287447-003	Miscell.	246039	03/29/17 16:40	10000		
133	met10 method	SAMPLE	287447-004	Miscell.	246039	03/29/17 16:44	10000		
134	met10 method	SAMPLE	287447-005	Miscell.	246039	03/29/17 16:47	10000		
135	met10 method	CCV				03/29/17 16:50	1.0	13	
136	met10 method	CCB				03/29/17 16:53	1.0		
137	met10 method	SAMPLE	287447-006	Miscell.	246039	03/29/17 16:56	10000		
138	met10 method	SAMPLE	287447-007	Miscell.	246039	03/29/17 17:00	10000		
139	met10 method	SAMPLE	287447-008	Miscell.	246039	03/29/17 17:03	10000		
140	met10 method	SAMPLE	287447-009	Miscell.	246039	03/29/17 17:06	10000		
141	met10 method	SAMPLE	287447-010	Miscell.	246039	03/29/17 17:09	10000		
142	met10 method	SAMPLE	287447-011	Miscell.	246039	03/29/17 17:13	10000		
143	met10 method	SAMPLE	287447-012	Miscell.	246039	03/29/17 17:16	10000		
144	met10 method	SAMPLE	287428-001	Soil	246039	03/29/17 17:19	1.0		2:AL=300000
145	met10 method	SAMPLE	287428-002	Soil	246039	03/29/17 17:22	1.0		5:FE=430000
146	met10 method	SAMPLE	287455-001	Miscell.	246039	03/29/17 17:25	1.0		3:FE=300000
147	met10 method	CCV				03/29/17 17:28	1.0	13	
148	met10 method	CCB				03/29/17 17:31	1.0		
149	met10 method	X	RINSE			03/29/17 17:34	1.0		
150	met10 method	X	RINSE 1			03/29/17 17:56	1.0		
151	met10 method	BLANK	QC878985	TCLP Leachate	246041	03/29/17 18:00	10.0		1:NA=160000
152	met10 method	BS	QC878986	TCLP Leachate	246041	03/29/17 18:03	1.0		
153	met10 method	BSD	QC878987	TCLP Leachate	246041	03/29/17 18:05	1.0		
154	met10 method	MSS	287391-001	TCLP Leachate	246041	03/29/17 18:08	10.0		1:NA=160000
155	met10 method	MS	QC878988	TCLP Leachate	246041	03/29/17 18:11	10.0		
156	met10 method	MSD	QC878989	TCLP Leachate	246041	03/29/17 18:14	10.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SER	QC878990	TCLP Leachate	246041	03/29/17 18:16	50.0		
158	met10 method	PDS	QC878991	TCLP Leachate	246041	03/29/17 18:20	10.0	10 11 12	1:NA=170000
159	met10 method	CCV				03/29/17 18:22	1.0	13	
160	met10 method	CCB				03/29/17 18:25	1.0		
161	met10 method	X	RINSE			03/29/17 18:28	1.0		
162	met10 method	MS	QC878978	Miscell.	246039	03/29/17 18:32	10000		
163	met10 method	MSD	QC878979	Miscell.	246039	03/29/17 18:35	10000		
164	met10 method	XSER	QC878980	Miscell.	246039	03/29/17 18:38	50000		
165	met10 method	PDS	QC878981	Miscell.	246039	03/29/17 18:42	10000	10 11 12	
166	met10 method	SAMPLE	287394-001	TCLP Leachate	246041	03/29/17 18:45	10.0		1:NA=150000
167	met10 method	SAMPLE	287394-002	TCLP Leachate	246041	03/29/17 18:48	10.0		1:NA=130000
168	met10 method	SAMPLE	287394-003	TCLP Leachate	246041	03/29/17 18:51	10.0		1:NA=150000
169	met10 method	X	RINSE			03/29/17 18:54	1.0		
170	met10 method	BLANK	QC878956	Soil	246036	03/29/17 18:58	1.0		
171	met10 method	CCV				03/29/17 19:01	1.0	13	
172	met10 method	CCB				03/29/17 19:03	1.0		
173	met10 method	BS	QC878957	Soil	246036	03/29/17 19:07	1.0		
174	met10 method	BSD	QC878958	Soil	246036	03/29/17 19:09	1.0		
175	met10 method	MSS	287077-042	Soil	246036	03/29/17 19:12	1.0		4:FE=690000
176	met10 method	MS	QC878959	Soil	246036	03/29/17 19:15	1.0		
177	met10 method	MSD	QC878960	Soil	246036	03/29/17 19:18	1.0		
178	met10 method	SER	QC878961	Soil	246036	03/29/17 19:21	5.0		
179	met10 method	PDS	QC878962	Soil	246036	03/29/17 19:24	1.0	10 11 12	4:FE=700000
180	met10 method	SAMPLE	287077-041	Soil	246036	03/29/17 19:27	1.0		4:FE=670000
181	met10 method	X	RINSE			03/29/17 19:30	1.0		
182	met10 method	SER	QC878980	Miscell.	246039	03/29/17 19:33	50000		
183	met10 method	CCV				03/29/17 19:37	1.0	13	
184	met10 method	CCB				03/29/17 19:39	1.0		
185	met10 method	CCB				03/29/17 19:42	1.0		
186	met10 method	SAMPLE	287077-043	Soil	246036	03/29/17 19:45	1.0		4:FE=680000
187	met10 method	SAMPLE	287077-044	Soil	246036	03/29/17 19:49	1.0		4:AL=680000
188	met10 method	SAMPLE	287077-045	Soil	246036	03/29/17 19:52	1.0		4:FE=790000
189	met10 method	SAMPLE	287077-046	Soil	246036	03/29/17 19:55	1.0		4:FE=720000
190	met10 method	SAMPLE	287077-047	Soil	246036	03/29/17 19:58	1.0		4:FE=820000
191	met10 method	SAMPLE	287077-048	Soil	246036	03/29/17 20:01	1.0		4:FE=710000
192	met10 method	SAMPLE	287077-049	Soil	246036	03/29/17 20:04	1.0		4:FE=750000
193	met10 method	SAMPLE	287077-050	Soil	246036	03/29/17 20:07	1.0		4:FE=690000
194	met10 method	SAMPLE	287082-001	Soil	246036	03/29/17 20:10	1.0		4:FE=520000
195	met10 method	SAMPLE	287082-002	Soil	246036	03/29/17 20:13	1.0		4:FE=440000
196	met10 method	CCV				03/29/17 20:15	1.0	13	
197	met10 method	CCB				03/29/17 20:18	1.0		
198	met10 method	CCB				03/29/17 20:21	1.0		
199	met10 method	SAMPLE	287082-003	Soil	246036	03/29/17 20:24	1.0		4:FE=470000
200	met10 method	SAMPLE	287082-004	Soil	246036	03/29/17 20:27	1.0		4:AL=480000
201	met10 method	SAMPLE	287082-005	Soil	246036	03/29/17 20:30	1.0		4:FE=470000
202	met10 method	SAMPLE	287082-006	Soil	246036	03/29/17 20:32	1.0		4:AL=680000
203	met10 method	SAMPLE	287082-007	Soil	246036	03/29/17 20:35	1.0		4:AL=480000
204	met10 method	SAMPLE	287082-008	Soil	246036	03/29/17 20:38	1.0		4:FE=430000
205	met10 method	SAMPLE	287082-009	Soil	246036	03/29/17 20:41	1.0		4:FE=410000
206	met10 method	X	RINSE			03/29/17 20:44	1.0		
207	met10 method	BLANK	QC878982	Wipe	246040	03/29/17 20:47	1.0		
208	met10 method	BS	QC878983	Wipe	246040	03/29/17 20:50	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087127308

Instrument : MET10 Begun : 03/29/17 09:48
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	CCV				03/29/17 20:53	1.0	13	
210	met10 method	CCB				03/29/17 20:55	1.0		
211	met10 method	CCB				03/29/17 20:58	1.0		
212	met10 method	BSD	QC878984	Wipe	246040	03/29/17 21:02	1.0		
213	met10 method	SAMPLE	287173-001	Wipe	246040	03/29/17 21:04	1.0		
214	met10 method	SAMPLE	287173-002	Wipe	246040	03/29/17 21:07	1.0		
215	met10 method	SAMPLE	287173-003	Wipe	246040	03/29/17 21:09	1.0		
216	met10 method	SAMPLE	287173-004	Wipe	246040	03/29/17 21:11	1.0		
217	met10 method	SAMPLE	287173-005	Wipe	246040	03/29/17 21:14	1.0		
218	met10 method	SAMPLE	287173-006	Wipe	246040	03/29/17 21:16	1.0		
219	met10 method	SAMPLE	287401-001	Wipe	246040	03/29/17 21:18	1.0		
220	met10 method	X	RINSE			03/29/17 21:21	1.0		
221	met10 method	BLANK	QC878970	Soil	246038	03/29/17 21:24	1.0		
222	met10 method	CCV				03/29/17 21:27	1.0	13	
223	met10 method	CCB				03/29/17 21:30	1.0		
224	met10 method	CCB				03/29/17 21:33	1.0		
225	met10 method	BS	QC878971	Soil	246038	03/29/17 21:36	1.0		
226	met10 method	BSD	QC878972	Soil	246038	03/29/17 21:39	1.0		
227	met10 method	MSS	287321-012	Soil	246038	03/29/17 21:41	1.0		5:FE=440000
228	met10 method	MS	QC878973	Soil	246038	03/29/17 21:44	1.0		
229	met10 method	MSD	QC878974	Soil	246038	03/29/17 21:47	1.0		
230	met10 method	SAMPLE	287321-011	Soil	246038	03/29/17 21:50	1.0		6:FE=650000
231	met10 method	SAMPLE	287321-013	Soil	246038	03/29/17 21:53	1.0		5:FE=510000
232	met10 method	SAMPLE	287321-014	Soil	246038	03/29/17 21:56	1.0		5:FE=590000
233	met10 method	SAMPLE	287321-015	Soil	246038	03/29/17 21:59	1.0		5:FE=530000
234	met10 method	SAMPLE	287321-016	Soil	246038	03/29/17 22:02	1.0		5:CA=570000
235	met10 method	CCV				03/29/17 22:05	1.0	13	
236	met10 method	CCB				03/29/17 22:08	1.0		
237	met10 method	SAMPLE	287321-017	Soil	246038	03/29/17 22:11	1.0		5:FE=550000
238	met10 method	SAMPLE	287321-018	Soil	246038	03/29/17 22:15	1.0		4:FE=540000
239	met10 method	SAMPLE	287321-019	Soil	246038	03/29/17 22:17	1.0		6:FE=630000
240	met10 method	SAMPLE	287321-020	Soil	246038	03/29/17 22:20	1.0		5:FE=620000
241	met10 method	SAMPLE	287321-021	Soil	246038	03/29/17 22:23	1.0		4:FE=690000
242	met10 method	SAMPLE	287321-022	Soil	246038	03/29/17 22:26	1.0		5:CA=700000
243	met10 method	SAMPLE	287321-023	Soil	246038	03/29/17 22:30	1.0		6:FE=500000
244	met10 method	SAMPLE	287321-024	Soil	246038	03/29/17 22:32	1.0		5:FE=630000
245	met10 method	SAMPLE	287321-025	Soil	246038	03/29/17 22:35	1.0		5:CA=550000
246	met10 method	SAMPLE	287321-026	Soil	246038	03/29/17 22:38	1.0		5:CA=550000
247	met10 method	SAMPLE	287321-027	Soil	246038	03/29/17 22:41	1.0		3:CA=3300000
248	met10 method	CCV				03/29/17 22:44	1.0	13	
249	met10 method	CCB				03/29/17 22:47	1.0		
250	met10 method	CCB				03/29/17 22:51	1.0		

KER 03/29/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 87.

MNA 03/29/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 88 through 211.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S29983 11=S29984 12=S30560 13=S32522

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087127308

Date : 03/29/17 Reference : met10 method
Sequence : MET10 03/29/17 Analyzed : 03/29/17 09:51

#	Type	Sample ID	Y A	Y R
		ICAL STD	8877304	1043098
		LOWER LIMIT	2663191	312930
		UPPER LIMIT	10652765	1251718
010	ICB		9227062	1048431
011	ICSA		7444451	925473
012	ICSAB		7495984	925480
083	MSS	287391-001	8405416	1065871
154	MSS	287391-001	8490214	1061777
159	CCV		8708593	1070449
160	CCB		9235111	1094415
170	BLANK	QC878956	9319767	1117183
171	CCV		8718689	1062255
172	CCB		9360503	1094348
173	BS	QC878957	8938763	1096128
174	BSD	QC878958	8632321	1091097
175	MSS	287077-042	8171004	1030848
176	MS	QC878959	8057611	1013891
177	MSD	QC878960	8007931	1047220
178	SER	QC878961	8588341	1065379
179	PDS	QC878962	8173530	1043888
180	SAMPLE	287077-041	8244763	1047013
183	CCV		8771343	1073287
184	CCB		9183527	1114424
185	CCB		9245219	1112355
186	SAMPLE	287077-043	8229221	1030830
187	SAMPLE	287077-044	8228595	1042249
188	SAMPLE	287077-045	8123576	1030041
189	SAMPLE	287077-046	8260042	1032800
190	SAMPLE	287077-047	8121439	1034271
191	SAMPLE	287077-048	8313248	1055340
192	SAMPLE	287077-049	8237914	1039519
193	SAMPLE	287077-050	8243283	1042348
194	SAMPLE	287082-001	8397271	1039703
195	SAMPLE	287082-002	8469730	1050048
196	CCV		8601703	1072178
197	CCB		9238656	1093179
198	CCB		9217919	1110790
199	SAMPLE	287082-003	8490227	1047754
200	SAMPLE	287082-004	8439588	1042367
201	SAMPLE	287082-005	8440386	1047318
202	SAMPLE	287082-006	8199275	1026216
203	SAMPLE	287082-007	8364057	1037727
204	SAMPLE	287082-008	8301098	1043624
205	SAMPLE	287082-009	8550616	1042889
209	CCV		8923444	1070074
210	CCB		9247095	1089389

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287082 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087127308001
Units : ug/L

Date : 29-MAR-2017 09:48
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087127308002	L1	29-MAR-2017 09:51	S32578
L2	met10 method	1087127308003	L2	29-MAR-2017 09:54	S32571
L3	met10 method	1087127308004	L3	29-MAR-2017 09:56	S32367
L4	met10 method	1087127308005	L4	29-MAR-2017 09:59	S32368
L5	met10 method	1087127308006	L5	29-MAR-2017 10:01	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	3.1200	3.2950	3.2750	3.2032		LOR0	0.00000	0.31211		3.2233	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-3	100.00	3	1000.0	2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087127308001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287082 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087127308001 Cal Date : 29-MAR-2017

ICV 1087127308007 (29-MAR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4838	ug/L	-3	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308009.2 File : met10 method Time : 29-MAR-2017 10:11
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.575	ug/L	12	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8999776	1.38
Yttrium	R	1043098	1040231	-0.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308010.2 File : met10 method Time : 29-MAR-2017 10:15
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9227062	3.94
Yttrium	R	1043098	1048431	0.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308011.2 File : met10 method Time : 29-MAR-2017 10:18
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[0.4148]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	17880	ug/L	89	
Copper	A	20000	20750	ug/L	104	
Manganese	A	20000	17610	ug/L	88	
Nickel	A	20000	16340	ug/L	82	
Titanium	A	20000	17800	ug/L	89	
Vanadium	A	20000	20570	ug/L	103	
Aluminum	R	500000	533100	ug/L	107	
Calcium	R	500000	499700	ug/L	100	
Iron	R	200000	199000	ug/L	99	
Magnesium	R	500000	440700	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	7444451	-16.14
Yttrium	R	1043098	925473	-11.28

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308012.2 File : met10 method Time : 29-MAR-2017 10:22
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	936.4	ug/L	-6	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	7495984	-15.56
Yttrium	R	1043098	925480	-11.28

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308159.1 File : met10 method Time : 29-MAR-2017 18:22
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9124	5000	4545	ug/L	-9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8708593	-1.90
Yttrium	R	1043098	1070449	2.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308160.1 File : met10 method Time : 29-MAR-2017 18:25
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9235111	4.03
Yttrium	R	1043098	1094415	4.92

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308171.1 File : met10 method Time : 29-MAR-2017 19:01
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9263	5000	4567	ug/L	-9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8718689	-1.79
Yttrium	R	1043098	1062255	1.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308172.1 File : met10 method Time : 29-MAR-2017 19:03
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9360503	5.44
Yttrium	R	1043098	1094348	4.91

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308183.1 File : met10 method Time : 29-MAR-2017 19:37
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9155	5000	4550	ug/L	-9	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8771343	-1.19
Yttrium	R	1043098	1073287	2.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308184.1 File : met10 method Time : 29-MAR-2017 19:39
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9183527	3.45
Yttrium	R	1043098	1114424	6.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308185.1 File : met10 method Time : 29-MAR-2017 19:42
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9245219	4.14
Yttrium	R	1043098	1112355	6.64

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308196.1 File : met10 method Time : 29-MAR-2017 20:15
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	3.0754	5000	4799	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8601703	-3.10
Yttrium	R	1043098	1072178	2.79

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308197.1 File : met10 method Time : 29-MAR-2017 20:18
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[2.945]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9238656	4.07
Yttrium	R	1043098	1093179	4.80

!=warning CCB=instrument blank

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308198.1 File : met10 method Time : 29-MAR-2017 20:21
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9217919	3.84
Yttrium	R	1043098	1110790	6.49

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308209.2 File : met10 method Time : 29-MAR-2017 20:53
Cal : 1087127308001 Caldate : 29-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.2233	2.9430	5000	4593	ug/L	-8	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	8923444	0.52
Yttrium	R	1043098	1070074	2.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087127308210.2 File : met10 method Time : 29-MAR-2017 20:55
Cal : 1087127308001 Caldate : 29-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[2.718]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8877304	9247095	4.17
Yttrium	R	1043098	1089389	4.44

!=warning CCB=instrument blank

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				03/30/17 09:06	1.0		
002	met10 method	ICAL	L1			03/30/17 09:09	1.0	1	
003	met10 method	ICAL	L2			03/30/17 09:12	1.0	2	
004	met10 method	ICAL	L3			03/30/17 09:15	1.0	3	
005	met10 method	ICAL	L4			03/30/17 09:17	1.0	4	
006	met10 method	ICAL	L5			03/30/17 09:20	1.0	5	
007	met10 method	ICV				03/30/17 09:22	1.0	6	
008	met10 method	CRI				03/30/17 09:25	1.0	7	
009	met10 method	CRI				03/30/17 09:41	1.0	7	
010	met10 method	ICB				03/30/17 09:46	1.0		
011	met10 method	ICSA				03/30/17 09:50	1.0	8	10:AL=540000
012	met10 method	ICSAB				03/30/17 09:55	1.0	9	5:AL=530000
013	met10 method	SAMPLE	287447-009	Miscell.	246039	03/30/17 10:26	100.0		
014	met10 method	SAMPLE	287447-010	Miscell.	246039	03/30/17 10:29	100.0		
015	met10 method	SAMPLE	287447-011	Miscell.	246039	03/30/17 10:32	100.0		
016	met10 method	SAMPLE	287447-012	Miscell.	246039	03/30/17 10:34	100.0		
017	met10 method	BLANK	QC878342	Water	245881	03/30/17 10:36	1.0		
018	met10 method	BS	QC878343	Water	245881	03/30/17 10:40	1.0		
019	met10 method	BSD	QC878344	Water	245881	03/30/17 10:42	1.0		
020	met10 method	MSS	287197-001	Water	245881	03/30/17 10:44	1.0		
021	met10 method	MS	QC878345	Water	245881	03/30/17 10:47	1.0		
022	met10 method	MSD	QC878346	Water	245881	03/30/17 10:50	1.0		
023	met10 method	CCV				03/30/17 10:52	1.0	10	
024	met10 method	XCCB				03/30/17 10:55	1.0		
025	met10 method	CCB				03/30/17 10:58	1.0		
026	met10 method	BLANK	QC878462	Soil	245909	03/30/17 11:01	1.0		
027	met10 method	BS	QC878463	Soil	245909	03/30/17 11:05	1.0		
028	met10 method	BSD	QC878464	Soil	245909	03/30/17 11:07	1.0		
029	met10 method	MSS	287262-001	Soil	245909	03/30/17 11:09	1.0		6:FE=550000
030	met10 method	SAMPLE	287262-002	Soil	245909	03/30/17 11:12	1.0		6:FE=590000
031	met10 method	SAMPLE	287262-003	Soil	245909	03/30/17 11:15	1.0		6:CA=1600000
032	met10 method	SAMPLE	287262-004	Soil	245909	03/30/17 11:18	1.0		5:FE=550000
033	met10 method	SAMPLE	287262-005	Soil	245909	03/30/17 11:21	1.0		4:FE=450000
034	met10 method	SAMPLE	287262-006	Soil	245909	03/30/17 11:24	1.0		6:FE=570000
035	met10 method	SAMPLE	287262-007	Soil	245909	03/30/17 11:27	1.0		6:FE=510000
036	met10 method	CCV				03/30/17 11:30	1.0	10	
037	met10 method	XCCB				03/30/17 11:33	1.0		
038	met10 method	CCB				03/30/17 11:35	1.0		
039	met10 method	SAMPLE	287262-008	Soil	245909	03/30/17 11:39	1.0		5:CA=560000
040	met10 method	SAMPLE	287262-009	Soil	245909	03/30/17 11:42	1.0		4:FE=490000
041	met10 method	SAMPLE	287262-010	Soil	245909	03/30/17 11:45	1.0		5:FE=500000
042	met10 method	SAMPLE	287262-011	Soil	245909	03/30/17 11:48	1.0		5:FE=460000
043	met10 method	SAMPLE	287262-012	Soil	245909	03/30/17 11:51	1.0		6:FE=580000
044	met10 method	BLANK	QC878975	Miscell.	246039	03/30/17 11:54	1.0		
045	met10 method	SAMPLE	287455-001	Miscell.	246039	03/30/17 11:57	1.0		3:FE=280000
046	met10 method	BLANK	QC879203	Soil	246096	03/30/17 11:59	1.0		
047	met10 method	BS	QC879204	Soil	246096	03/30/17 12:02	1.0		
048	met10 method	BSD	QC879205	Soil	246096	03/30/17 12:05	1.0		
049	met10 method	CCV				03/30/17 12:07	1.0	10	
050	met10 method	XCCB				03/30/17 12:10	1.0		
051	met10 method	CCB				03/30/17 12:13	1.0		
052	met10 method	MSS	287492-002	Soil	246096	03/30/17 12:16	1.0		4:AL=370000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10
Method : EPA 6010C
Begun : 03/30/17 09:06
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MS	QC879206	Soil	246096	03/30/17 12:19	1.0		
054	met10 method	MSD	QC879207	Soil	246096	03/30/17 12:22	1.0		1:AL=490000
055	met10 method	SAMPLE	287480-001	Soil	246096	03/30/17 12:25	1.0		2:AL=420000
056	met10 method	SAMPLE	287488-001	Soil	246096	03/30/17 12:28	1.0		5:FE=470000
057	met10 method	SAMPLE	287488-002	Soil	246096	03/30/17 12:31	1.0		2:FE=280000
058	met10 method	SAMPLE	287492-001	Soil	246096	03/30/17 12:33	1.0		4:FE=430000
059	met10 method	SAMPLE	287492-003	Soil	246096	03/30/17 12:36	1.0		5:CA=640000
060	met10 method	BLANK	QC879191	Miscell.	246094	03/30/17 12:39	1.0		
061	met10 method	BS	QC879192	Miscell.	246094	03/30/17 12:42	1.0		
062	met10 method	CCV				03/30/17 12:45	1.0	10	
063	met10 method	XCCB				03/30/17 12:48	1.0		
064	met10 method	CCB				03/30/17 12:51	1.0		
065	met10 method	BSD	QC879193	Miscell.	246094	03/30/17 12:54	1.0		
066	met10 method	MSS	287373-001	Miscell.	246094	03/30/17 12:56	1.0		3:FE=340000
067	met10 method	MS	QC879194	Miscell.	246094	03/30/17 12:59	1.0		1:FE=370000
068	met10 method	MSD	QC879195	Miscell.	246094	03/30/17 13:02	1.0		2:FE=350000
069	met10 method	SER	QC879196	Miscell.	246094	03/30/17 13:05	5.0		
070	met10 method	PDS	QC879197	Miscell.	246094	03/30/17 13:07	1.0	11 12 13	4:FE=350000
071	met10 method	SAMPLE	287026-001	Soil	246094	03/30/17 13:10	1.0		2:FE=260000
072	met10 method	SAMPLE	287026-002	Soil	246094	03/30/17 13:13	1.0		2:FE=230000
073	met10 method	SAMPLE	287026-003	Soil	246094	03/30/17 13:15	1.0		2:FE=240000
074	met10 method	SAMPLE	287026-004	Soil	246094	03/30/17 13:18	1.0		2:FE=230000
075	met10 method	CCV				03/30/17 13:20	1.0	10	
076	met10 method	XCCB				03/30/17 13:23	1.0		
077	met10 method	CCB				03/30/17 13:26	1.0		
078	met10 method	SAMPLE	287026-005	Soil	246094	03/30/17 13:29	1.0		2:FE=250000
079	met10 method	SAMPLE	287026-006	Soil	246094	03/30/17 13:32	1.0		3:FE=310000
080	met10 method	SAMPLE	287026-007	Soil	246094	03/30/17 13:34	1.0		2:FE=210000
081	met10 method	SAMPLE	287026-008	Soil	246094	03/30/17 13:37	1.0		3:FE=270000
082	met10 method	SAMPLE	287026-009	Soil	246094	03/30/17 13:39	1.0		1:FE=190000
083	met10 method	SAMPLE	287305-001	Soil	246094	03/30/17 13:42	1.0		6:FE=580000
084	met10 method	SAMPLE	287305-002	Soil	246094	03/30/17 13:45	1.0		5:FE=570000
085	met10 method	SAMPLE	287305-003	Soil	246094	03/30/17 13:48	1.0		6:FE=520000
086	met10 method	SAMPLE	287373-002	Miscell.	246094	03/30/17 13:51	1.0		5:FE=470000
087	met10 method	SAMPLE	287373-003	Miscell.	246094	03/30/17 13:54	1.0		5:FE=440000
088	met10 method	CCV				03/30/17 13:57	1.0	10	
089	met10 method	XCCB				03/30/17 13:59	1.0		
090	met10 method	CCB				03/30/17 14:02	1.0		
091	met10 method	BLANK	QC879224	Wipe	246101	03/30/17 14:06	1.0		
092	met10 method	BS	QC879225	Wipe	246101	03/30/17 14:09	1.0		
093	met10 method	BSD	QC879226	Wipe	246101	03/30/17 14:11	1.0		
094	met10 method	SAMPLE	287494-001	Wipe	246101	03/30/17 14:14	1.0		
095	met10 method	SAMPLE	287494-002	Wipe	246101	03/30/17 14:16	1.0		
096	met10 method	SAMPLE	287494-003	Wipe	246101	03/30/17 14:19	1.0		
097	met10 method	SAMPLE	287488-001	Soil	246096	03/30/17 14:21	100.0		
098	met10 method	SAMPLE	287488-002	Soil	246096	03/30/17 14:24	1.0		2:FE=280000
099	met10 method	BLANK	QC879198	Miscell.	246095	03/30/17 14:26	1.0		
100	met10 method	BS	QC879199	Miscell.	246095	03/30/17 14:30	1.0		
101	met10 method	CCV				03/30/17 14:32	1.0	10	
102	met10 method	XCCB				03/30/17 14:35	1.0		
103	met10 method	CCB				03/30/17 14:38	1.0		
104	met10 method	BSD	QC879200	Miscell.	246095	03/30/17 14:41	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287496-001	Miscell.	246095	03/30/17 14:43	100.0		
106	met10 method	SAMPLE	287496-002	Miscell.	246095	03/30/17 14:46	100.0		
107	met10 method	SAMPLE	287496-003	Miscell.	246095	03/30/17 14:48	100.0		
108	met10 method	SAMPLE	287496-004	Miscell.	246095	03/30/17 14:51	100.0		
109	met10 method	SAMPLE	287496-005	Miscell.	246095	03/30/17 14:53	100.0		2:PB=16000
110	met10 method	SAMPLE	287496-006	Miscell.	246095	03/30/17 14:56	100.0		2:ZN=22000
111	met10 method	SAMPLE	287496-007	Miscell.	246095	03/30/17 14:59	100.0		2:ZN=35000
112	met10 method	SAMPLE	287496-008	Miscell.	246095	03/30/17 15:03	100.0		1:PB=16000
113	met10 method	CCV				03/30/17 15:06	1.0	10	
114	met10 method	XCCB				03/30/17 15:09	1.0		
115	met10 method	CCB				03/30/17 15:11	1.0		
116	met10 method	BLANK	QC879027	Water	246054	03/30/17 15:46	1.0		
117	met10 method	BS	QC879028	Water	246054	03/30/17 15:49	1.0		
118	met10 method	BSD	QC879029	Water	246054	03/30/17 15:51	1.0		
119	met10 method	SAMPLE	287435-001	Water	246054	03/30/17 15:54	1.0		5:FE=550000
120	met10 method	MSS	287314-001	Water	246054	03/30/17 15:57	1.0		
121	met10 method	MS	QC879030	Water	246054	03/30/17 16:00	1.0		
122	met10 method	MSD	QC879031	Water	246054	03/30/17 16:02	1.0		
123	met10 method	CCV				03/30/17 16:05	1.0	10	
124	met10 method	XCCB				03/30/17 16:08	1.0		
125	met10 method	CCB				03/30/17 16:10	1.0		
126	met10 method	SAMPLE	287496-001	Miscell.	246095	03/30/17 16:18	1.0		1:TI=28000
127	met10 method	SAMPLE	287496-002	Miscell.	246095	03/30/17 16:22	1.0		6:CA=1700000
128	met10 method	SAMPLE	287496-003	Miscell.	246095	03/30/17 16:25	1.0		6:CA=1700000
129	met10 method	SAMPLE	287496-004	Miscell.	246095	03/30/17 16:28	1.0		5:CA=1500000
130	met10 method	SAMPLE	287496-005	Miscell.	246095	03/30/17 16:31	10000		
131	met10 method	SAMPLE	287496-006	Miscell.	246095	03/30/17 16:34	10000		
132	met10 method	SAMPLE	287496-007	Miscell.	246095	03/30/17 16:38	10000		
133	met10 method	SAMPLE	287496-008	Miscell.	246095	03/30/17 16:41	10000		
134	met10 method	SAMPLE	287496-001	Miscell.	246095	03/30/17 16:44	1.0		5:CA=1600000
135	met10 method	CCV				03/30/17 16:47	1.0	10	
136	met10 method	CCB				03/30/17 16:50	1.0		
137	met10 method	CCB				03/30/17 16:53	1.0		
138	met10 method	BLANK	QC879032	Water	246055	03/30/17 17:06	1.0		
139	met10 method	BS	QC879033	Water	246055	03/30/17 17:09	1.0		
140	met10 method	BSD	QC879034	Water	246055	03/30/17 17:12	1.0		
141	met10 method	MSS	287346-001	Water	246055	03/30/17 17:14	1.0		
142	met10 method	MS	QC879035	Water	246055	03/30/17 17:16	1.0		
143	met10 method	MSD	QC879036	Water	246055	03/30/17 17:19	1.0		
144	met10 method	SAMPLE	287352-001	Water	246055	03/30/17 17:21	1.0		
145	met10 method	SAMPLE	287352-002	Water	246055	03/30/17 17:24	1.0		
146	met10 method	SAMPLE	287352-005	Water	246055	03/30/17 17:26	1.0		
147	met10 method	SAMPLE	287352-006	Water	246055	03/30/17 17:28	1.0		
148	met10 method	CCV				03/30/17 17:31	1.0	10	
149	met10 method	XCCB				03/30/17 17:33	1.0		
150	met10 method	CCB				03/30/17 17:36	1.0		
151	met10 method	X	RINSE			03/30/17 17:40	1.0		
152	met10 method	SAMPLE	287386-001	TCLP Leachate	246041	03/30/17 17:43	10.0		1:NA=160000
153	met10 method	SAMPLE	287353-001	Water	246055	03/30/17 17:46	1.0		
154	met10 method	SAMPLE	287353-002	Water	246055	03/30/17 17:49	1.0		
155	met10 method	SAMPLE	287354-001	Water	246055	03/30/17 17:51	1.0		
156	met10 method	SAMPLE	287355-001	Water	246055	03/30/17 17:54	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287356-003	Water	246055	03/30/17 17:56	1.0		
158	met10 method	SAMPLE	287326-003	Soil	246096	03/30/17 17:58	1.0		2:FE=280000
159	met10 method	SAMPLE	287344-001	Soil	246096	03/30/17 18:01	1.0		10:FE=1300000
160	met10 method	SAMPLE	287315-001	Miscell.	246094	03/30/17 18:04	1.0		1:K=250000
161	met10 method	CCV				03/30/17 18:07	1.0	10	
162	met10 method	CCB				03/30/17 18:10	1.0		
163	met10 method	CCB				03/30/17 18:13	1.0		
164	met10 method	SAMPLE	287318-001	Miscell.	246094	03/30/17 18:16	1.0		1:K=170000
165	met10 method	SAMPLE	287322-021	Soil	246094	03/30/17 18:18	1.0		5:FE=590000
166	met10 method	SAMPLE	287325-001	Soil	246094	03/30/17 18:21	1.0		8:CA=1700000
167	met10 method	SAMPLE	287325-002	Soil	246094	03/30/17 18:24	1.0		5:CA=400000
168	met10 method	BLANK	QC879046	Soil	246058	03/30/17 18:27	1.0		
169	met10 method	BS	QC879047	Soil	246058	03/30/17 18:31	1.0		
170	met10 method	BSD	QC879048	Soil	246058	03/30/17 18:33	1.0		
171	met10 method	MSS	287322-001	Soil	246058	03/30/17 18:35	1.0		6:FE=590000
172	met10 method	MS	QC879049	Soil	246058	03/30/17 18:38	1.0		1:FE=610000
173	met10 method	MSD	QC879050	Soil	246058	03/30/17 18:42	1.0		1:FE=620000
174	met10 method	CCV				03/30/17 18:45	1.0	10	
175	met10 method	CCB				03/30/17 18:47	1.0		
176	met10 method	CCB				03/30/17 18:50	1.0		
177	met10 method	SAMPLE	287322-002	Soil	246058	03/30/17 18:53	1.0		6:FE=670000
178	met10 method	SAMPLE	287322-003	Soil	246058	03/30/17 18:56	1.0		6:CA=840000
179	met10 method	SAMPLE	287322-004	Soil	246058	03/30/17 18:59	1.0		5:FE=520000
180	met10 method	SAMPLE	287322-005	Soil	246058	03/30/17 19:03	1.0		5:FE=510000
181	met10 method	SAMPLE	287322-006	Soil	246058	03/30/17 19:06	1.0		4:CA=1200000
182	met10 method	SAMPLE	287322-007	Soil	246058	03/30/17 19:09	1.0		5:FE=580000
183	met10 method	SAMPLE	287322-008	Soil	246058	03/30/17 19:12	1.0		5:FE=570000
184	met10 method	SAMPLE	287322-009	Soil	246058	03/30/17 19:14	1.0		6:FE=660000
185	met10 method	SAMPLE	287322-010	Soil	246058	03/30/17 19:17	1.0		5:FE=600000
186	met10 method	SAMPLE	287322-011	Soil	246058	03/30/17 19:20	1.0		6:FE=680000
187	met10 method	CCV				03/30/17 19:23	1.0	10	
188	met10 method	CCB				03/30/17 19:26	1.0		
189	met10 method	CCB				03/30/17 19:29	1.0		
190	met10 method	SAMPLE	287322-012	Soil	246058	03/30/17 19:32	1.0		5:FE=540000
191	met10 method	SAMPLE	287322-013	Soil	246058	03/30/17 19:35	1.0		5:FE=520000
192	met10 method	SAMPLE	287322-014	Soil	246058	03/30/17 19:38	1.0		5:FE=560000
193	met10 method	SAMPLE	287322-015	Soil	246058	03/30/17 19:41	1.0		5:FE=530000
194	met10 method	SAMPLE	287322-016	Soil	246058	03/30/17 19:44	1.0		4:FE=620000
195	met10 method	SAMPLE	287322-017	Soil	246058	03/30/17 19:47	1.0		5:FE=640000
196	met10 method	SAMPLE	287322-018	Soil	246058	03/30/17 19:50	1.0		5:CA=810000
197	met10 method	SAMPLE	287322-019	Soil	246058	03/30/17 19:53	1.0		5:FE=440000
198	met10 method	SAMPLE	287322-020	Soil	246058	03/30/17 19:56	1.0		5:FE=600000
199	met10 method	X	RINSE			03/30/17 19:59	1.0		
200	met10 method	CCV				03/30/17 20:02	1.0	10	
201	met10 method	CCB				03/30/17 20:05	1.0		
202	met10 method	CCB				03/30/17 20:08	1.0		
203	met10 method	BLANK	QC878963	Soil	246037	03/30/17 20:11	1.0		
204	met10 method	BS	QC878964	Soil	246037	03/30/17 20:14	1.0		
205	met10 method	BSD	QC878965	Soil	246037	03/30/17 20:17	1.0		
206	met10 method	MSS	287082-010	Soil	246037	03/30/17 20:19	1.0		4:FE=450000
207	met10 method	MS	QC878966	Soil	246037	03/30/17 20:22	1.0		4:FE=520000
208	met10 method	MSD	QC878967	Soil	246037	03/30/17 20:25	1.0		4:FE=530000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SER	QC878968	Soil	246037	03/30/17 20:28	5.0		1:FE=100000
210	met10 method	PDS	QC878969	Soil	246037	03/30/17 20:30	1.0	11 12 13	4:FE=440000
211	met10 method	SAMPLE	287082-011	Soil	246037	03/30/17 20:33	1.0		4:AL=650000
212	met10 method	SAMPLE	287082-012	Soil	246037	03/30/17 20:36	1.0		4:AL=570000
213	met10 method	CCV				03/30/17 20:39	1.0	10	
214	met10 method	CCB				03/30/17 20:42	1.0		
215	met10 method	CCB				03/30/17 20:45	1.0		
216	met10 method	SAMPLE	287082-013	Soil	246037	03/30/17 20:48	1.0		4:AL=630000
217	met10 method	SAMPLE	287082-014	Soil	246037	03/30/17 20:51	1.0		4:AL=510000
218	met10 method	SAMPLE	287082-015	Soil	246037	03/30/17 20:54	1.0		4:FE=530000
219	met10 method	SAMPLE	287082-016	Soil	246037	03/30/17 20:56	1.0		4:FE=460000
220	met10 method	SAMPLE	287082-017	Soil	246037	03/30/17 20:59	1.0		4:AL=600000
221	met10 method	SAMPLE	287082-018	Soil	246037	03/30/17 21:01	1.0		4:AL=410000
222	met10 method	SAMPLE	287082-019	Soil	246037	03/30/17 21:04	1.0		4:FE=490000
223	met10 method	SAMPLE	287321-001	Soil	246037	03/30/17 21:07	1.0		6:FE=560000
224	met10 method	SAMPLE	287321-002	Soil	246037	03/30/17 21:10	1.0		6:FE=510000
225	met10 method	SAMPLE	287321-003	Soil	246037	03/30/17 21:13	1.0		6:FE=630000
226	met10 method	CCV				03/30/17 21:16	1.0	10	
227	met10 method	CCB				03/30/17 21:19	1.0		
228	met10 method	CCB				03/30/17 21:22	1.0		
229	met10 method	SAMPLE	287321-004	Soil	246037	03/30/17 21:25	1.0		5:FE=550000
230	met10 method	SAMPLE	287321-005	Soil	246037	03/30/17 21:28	1.0		5:FE=530000
231	met10 method	SAMPLE	287321-006	Soil	246037	03/30/17 21:31	1.0		6:FE=490000
232	met10 method	SAMPLE	287321-007	Soil	246037	03/30/17 21:34	1.0		5:FE=550000
233	met10 method	SAMPLE	287321-008	Soil	246037	03/30/17 21:37	1.0		5:FE=560000
234	met10 method	SAMPLE	287321-009	Soil	246037	03/30/17 21:40	1.0		6:FE=680000
235	met10 method	SAMPLE	287321-010	Soil	246037	03/30/17 21:43	1.0		5:FE=490000
236	met10 method	BLANK	QC878970	Soil	246038	03/30/17 21:45	1.0		
237	met10 method	BS	QC878971	Soil	246038	03/30/17 21:49	1.0		
238	met10 method	BSD	QC878972	Soil	246038	03/30/17 21:51	1.0		
239	met10 method	CCV				03/30/17 21:54	1.0	10	
240	met10 method	CCB				03/30/17 21:56	1.0		
241	met10 method	CCB				03/30/17 21:59	1.0		
242	met10 method	MSS	287321-012	Soil	246038	03/30/17 22:03	1.0		5:FE=430000
243	met10 method	MS	QC878973	Soil	246038	03/30/17 22:05	1.0		
244	met10 method	MSD	QC878974	Soil	246038	03/30/17 22:08	1.0		
245	met10 method	SAMPLE	287321-011	Soil	246038	03/30/17 22:11	1.0		6:FE=640000
246	met10 method	SAMPLE	287321-013	Soil	246038	03/30/17 22:14	1.0		5:FE=500000
247	met10 method	SAMPLE	287321-014	Soil	246038	03/30/17 22:17	1.0		6:FE=590000
248	met10 method	SAMPLE	287321-015	Soil	246038	03/30/17 22:20	1.0		5:FE=530000
249	met10 method	SAMPLE	287321-016	Soil	246038	03/30/17 22:23	1.0		5:CA=600000
250	met10 method	SAMPLE	287321-017	Soil	246038	03/30/17 22:26	1.0		5:FE=570000
251	met10 method	SAMPLE	287321-018	Soil	246038	03/30/17 22:29	1.0		4:FE=550000
252	met10 method	CCV				03/30/17 22:32	1.0	10	
253	met10 method	CCB				03/30/17 22:35	1.0		
254	met10 method	CCB				03/30/17 22:38	1.0		
255	met10 method	SAMPLE	287321-019	Soil	246038	03/30/17 22:41	1.0		6:FE=620000
256	met10 method	SAMPLE	287321-020	Soil	246038	03/30/17 22:44	1.0		5:FE=600000
257	met10 method	SAMPLE	287321-021	Soil	246038	03/30/17 22:47	1.0		5:FE=670000
258	met10 method	SAMPLE	287321-022	Soil	246038	03/30/17 22:50	1.0		6:CA=710000
259	met10 method	SAMPLE	287321-023	Soil	246038	03/30/17 22:53	1.0		6:FE=490000
260	met10 method	SAMPLE	287321-024	Soil	246038	03/30/17 22:56	1.0		5:FE=610000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287321-025	Soil	246038	03/30/17 22:59	1.0		5:CA=560000
262	met10 method	SAMPLE	287321-026	Soil	246038	03/30/17 23:02	1.0		5:CA=560000
263	met10 method	SAMPLE	287321-027	Soil	246038	03/30/17 23:05	1.0		3:CA=3400000
264	met10 method	SAMPLE	287321-028	Soil	246038	03/30/17 23:08	1.0		5:CA=580000
265	met10 method	CCV				03/30/17 23:11	1.0	10	
266	met10 method	CCB				03/30/17 23:13	1.0		
267	met10 method	CCB				03/30/17 23:16	1.0		
268	met10 method	SAMPLE	287321-029	Soil	246038	03/30/17 23:19	1.0		6:FE=660000
269	met10 method	SAMPLE	287321-030	Soil	246038	03/30/17 23:22	1.0		4:FE=490000
270	met10 method	SAMPLE	287314-002	Water	246054	03/30/17 23:25	1.0		
271	met10 method	SAMPLE	287338-002	Water	246054	03/30/17 23:29	1.0		
272	met10 method	SAMPLE	287338-006	Water	246054	03/30/17 23:31	1.0		
273	met10 method	SAMPLE	287338-010	Water	246054	03/30/17 23:33	1.0		
274	met10 method	SAMPLE	287338-014	Water	246054	03/30/17 23:36	1.0		
275	met10 method	SAMPLE	287338-018	Water	246054	03/30/17 23:39	1.0		
276	met10 method	SAMPLE	287338-022	Water	246054	03/30/17 23:42	1.0		
277	met10 method	SAMPLE	287284-004	Water	246054	03/30/17 23:44	1.0		
278	met10 method	CCV				03/30/17 23:47	1.0	10	
279	met10 method	CCB				03/30/17 23:50	1.0		
280	met10 method	CCB				03/30/17 23:53	1.0		
281	met10 method	X	RINSE			03/30/17 23:56	1.0		
282	met10 method	BLANK	QC878995	SPLP Leachate	246045	03/31/17 00:00	1.0		
283	met10 method	BS	QC878996	SPLP Leachate	246045	03/31/17 00:03	1.0		
284	met10 method	BSD	QC878997	SPLP Leachate	246045	03/31/17 00:05	1.0		
285	met10 method	MSS	287077-002	SPLP Leachate	246045	03/31/17 00:08	1.0		
286	met10 method	MS	QC878998	SPLP Leachate	246045	03/31/17 00:10	1.0		
287	met10 method	MSD	QC878999	SPLP Leachate	246045	03/31/17 00:12	1.0		
288	met10 method	SER	QC879244	SPLP Leachate	246045	03/31/17 00:15	5.0		
289	met10 method	PDS	QC879245	SPLP Leachate	246045	03/31/17 00:17	1.0	14 12 13	
290	met10 method	SAMPLE	287077-001	SPLP Leachate	246045	03/31/17 00:19	1.0		
291	met10 method	CCV				03/31/17 00:22	1.0	10	
292	met10 method	CCB				03/31/17 00:25	1.0		
293	met10 method	CCB				03/31/17 00:27	1.0		
294	met10 method	SAMPLE	287077-003	SPLP Leachate	246045	03/31/17 00:31	1.0		
295	met10 method	SAMPLE	287077-004	SPLP Leachate	246045	03/31/17 00:33	1.0		2:AL=190000
296	met10 method	SAMPLE	287077-005	SPLP Leachate	246045	03/31/17 00:36	1.0		2:AL=200000
297	met10 method	SAMPLE	287077-006	SPLP Leachate	246045	03/31/17 00:38	1.0		
298	met10 method	SAMPLE	287077-007	SPLP Leachate	246045	03/31/17 00:41	1.0		
299	met10 method	SAMPLE	287077-008	SPLP Leachate	246045	03/31/17 00:43	1.0		
300	met10 method	SAMPLE	287077-009	SPLP Leachate	246045	03/31/17 00:46	1.0		
301	met10 method	SAMPLE	287077-010	SPLP Leachate	246045	03/31/17 00:48	1.0		
302	met10 method	SAMPLE	287077-011	SPLP Leachate	246045	03/31/17 00:51	1.0		
303	met10 method	SAMPLE	287077-012	SPLP Leachate	246045	03/31/17 00:53	1.0		
304	met10 method	CCV				03/31/17 00:56	1.0	10	
305	met10 method	CCB				03/31/17 00:58	1.0		
306	met10 method	CCB				03/31/17 01:01	1.0		
307	met10 method	SAMPLE	287077-013	SPLP Leachate	246045	03/31/17 01:05	1.0		
308	met10 method	SAMPLE	287077-014	SPLP Leachate	246045	03/31/17 01:07	1.0		
309	met10 method	SAMPLE	287077-015	SPLP Leachate	246045	03/31/17 01:10	1.0		
310	met10 method	SAMPLE	287077-016	SPLP Leachate	246045	03/31/17 01:12	1.0		
311	met10 method	SAMPLE	287077-017	SPLP Leachate	246045	03/31/17 01:15	1.0		
312	met10 method	SAMPLE	287077-018	SPLP Leachate	246045	03/31/17 01:17	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	SAMPLE	287077-019	SPLP Leachate	246045	03/31/17 01:20	1.0		
314	met10 method	SAMPLE	287077-020	SPLP Leachate	246045	03/31/17 01:22	1.0		
315	met10 method	X	RINSE			03/31/17 01:25	1.0		
316	met10 method	BLANK	QC879324	Soil	246123	03/31/17 01:28	1.0		
317	met10 method	CCV				03/31/17 01:31	1.0	10	
318	met10 method	CCB				03/31/17 01:34	1.0		
319	met10 method	CCB				03/31/17 01:37	1.0		
320	met10 method	LCS	QC879325	Soil	246123	03/31/17 01:40	1.0		
321	met10 method	MSS	286962-006	Soil	246123	03/31/17 01:42	1.0		5:CA=4000000
322	met10 method	MS	QC879326	Soil	246123	03/31/17 01:45	1.0		
323	met10 method	MSD	QC879327	Soil	246123	03/31/17 01:48	1.0		
324	met10 method	SAMPLE	286962-001	Soil	246123	03/31/17 01:51	1.0		8:FE=1000000
325	met10 method	SAMPLE	286962-002	Soil	246123	03/31/17 01:55	1.0		5:CA=4400000
326	met10 method	SAMPLE	286962-003	Soil	246123	03/31/17 01:57	1.0		7:CA=2200000
327	met10 method	SAMPLE	286962-004	Soil	246123	03/31/17 02:01	1.0		5:CA=4800000
328	met10 method	SAMPLE	286962-005	Soil	246123	03/31/17 02:04	1.0		3:CA=5500000
329	met10 method	SAMPLE	286962-007	Soil	246123	03/31/17 02:07	1.0		10:CA=2800000
330	met10 method	CCV				03/31/17 02:10	1.0	10	
331	met10 method	CCB				03/31/17 02:13	1.0		
332	met10 method	CCB				03/31/17 02:16	1.0		
333	met10 method	X	RINSE			03/31/17 02:19	1.0		
334	met10 method	BLANK	QC879000	WET Leachate	246046	03/31/17 02:22	10.0		1:NA=170000
335	met10 method	BS	QC879001	WET Leachate	246046	03/31/17 02:26	1.0		
336	met10 method	BSD	QC879002	WET Leachate	246046	03/31/17 02:28	1.0		
337	met10 method	MSS	287310-001	WET Leachate	246046	03/31/17 02:30	10.0		1:NA=160000
338	met10 method	MS	QC879003	WET Leachate	246046	03/31/17 02:33	10.0		
339	met10 method	MSD	QC879004	WET Leachate	246046	03/31/17 02:36	10.0		
340	met10 method	SAMPLE	287325-001	WET Leachate	246046	03/31/17 02:38	10.0		
341	met10 method	SAMPLE	287325-002	WET Leachate	246046	03/31/17 02:42	10.0		
342	met10 method	SAMPLE	287331-001	WET Leachate	246046	03/31/17 02:45	10.0		
343	met10 method	CCV				03/31/17 02:50	1.0	10	
344	met10 method	CCB				03/31/17 02:55	1.0		
345	met10 method	CCB				03/31/17 02:59	1.0		
346	met10 method	SAMPLE	287349-001	WET Leachate	246046	03/31/17 03:05	10.0		
347	met10 method	SAMPLE	287349-002	WET Leachate	246046	03/31/17 03:09	10.0		
348	met10 method	SAMPLE	287349-003	WET Leachate	246046	03/31/17 03:13	10.0		
349	met10 method	SAMPLE	287349-004	WET Leachate	246046	03/31/17 03:18	10.0		
350	met10 method	X	RINSE			03/31/17 03:23	1.0		
351	met10 method	SAMPLE	287167-001	Air	246062	03/31/17 03:28	1.0		
352	met10 method	SAMPLE	287167-002	Air	246062	03/31/17 03:33	1.0		
353	met10 method	SAMPLE	287167-003	Air	246062	03/31/17 03:37	1.0		
354	met10 method	SAMPLE	287168-001	Air	246062	03/31/17 03:42	1.0		
355	met10 method	SAMPLE	287168-002	Air	246062	03/31/17 03:47	1.0		
356	met10 method	CCV				03/31/17 03:52	1.0	10	
357	met10 method	CCB				03/31/17 03:57	1.0		
358	met10 method	CCB				03/31/17 04:00	1.0		
359	met10 method	SAMPLE	287168-003	Air	246062	03/31/17 04:04	1.0		
360	met10 method	SAMPLE	287169-001	Air	246062	03/31/17 04:09	1.0		
361	met10 method	SAMPLE	287169-002	Air	246062	03/31/17 04:14	1.0		
362	met10 method	SAMPLE	287169-003	Air	246062	03/31/17 04:19	1.0		
363	met10 method	SAMPLE	287170-001	Air	246062	03/31/17 04:23	1.0		
364	met10 method	SAMPLE	287170-002	Air	246062	03/31/17 04:28	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087128706

Instrument : MET10 Begun : 03/30/17 09:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	SAMPLE	287170-003	Air	246062	03/31/17 04:33	1.0		
366	met10 method	SAMPLE	287171-001	Air	246062	03/31/17 04:38	1.0		
367	met10 method	SAMPLE	287171-002	Air	246062	03/31/17 04:42	1.0		
368	met10 method	X	RINSE			03/31/17 04:47	1.0		
369	met10 method	CCV				03/31/17 04:52	1.0	10	
370	met10 method	CCB				03/31/17 04:57	1.0		
371	met10 method	CCB				03/31/17 05:01	1.0		
372	met10 method	BLANK	QC878970	Soil	246038	03/31/17 05:05	1.0		
373	met10 method	CCV				03/31/17 05:10	1.0	10	
374	met10 method	CCB				03/31/17 05:15	1.0		
375	met10 method	CCB				03/31/17 05:19	1.0		

KER 03/30/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 25.

MNA 03/30/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 26 through 280.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S29883

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087128706

Date : 03/30/17 Reference : met10 method
Sequence : MET10 03/30/17 Analyzed : 03/30/17 09:09

#	Type	Sample ID	Y A	Y R
		ICAL STD	8417582	1042460
		LOWER LIMIT	2525274	312738
		UPPER LIMIT	10101098	1250952
010	ICB		8674731	1022390
011	ICSA		6946042	899519
012	ICSAB		6914140	903803
200	CCV		8288273	1033753
202	CCB		8853104	1070793
203	BLANK	QC878963	8923063	1070344
204	BS	QC878964	8282045	1051183
205	BSD	QC878965	8278644	1053994
206	MSS	287082-010	7881670	994763
207	MS	QC878966	7720674	1014966
208	MSD	QC878967	7722997	1007601
209	SER	QC878968	8277127	1054183
210	PDS	QC878969	7876035	1007530
211	SAMPLE	287082-011	7726448	996132
212	SAMPLE	287082-012	7757024	1000058
213	CCV		8376214	1040432
214	CCB		8717383	1065649
215	CCB		8692802	1071252
216	SAMPLE	287082-013	7711123	995042
217	SAMPLE	287082-014	7923427	1004408
218	SAMPLE	287082-015	7896603	992520
219	SAMPLE	287082-016	7958036	997105
220	SAMPLE	287082-017	7791625	987168
221	SAMPLE	287082-018	7960274	1007035
222	SAMPLE	287082-019	7859191	997455
226	CCV		8429113	1047873
227	CCB		8870877	1071012
285	MSS	287077-002	8605092	1064653
290	SAMPLE	287077-001	8760852	1077014
294	SAMPLE	287077-003	8617169	1074386
295	SAMPLE	287077-004	8374346	1039171
296	SAMPLE	287077-005	8287519	1041975
297	SAMPLE	287077-006	8465767	1080877
298	SAMPLE	287077-007	8584645	1074781
299	SAMPLE	287077-008	8655405	1069873
300	SAMPLE	287077-009	8565291	1079778
301	SAMPLE	287077-010	8343066	1078829
302	SAMPLE	287077-011	8631551	1070678
303	SAMPLE	287077-012	8770993	1090646
307	SAMPLE	287077-013	8373425	1081557
308	SAMPLE	287077-014	8654967	1072180
309	SAMPLE	287077-015	8660846	1084940
310	SAMPLE	287077-016	8584976	1081453
311	SAMPLE	287077-017	8537258	1051155
312	SAMPLE	287077-018	8552325	1065769
313	SAMPLE	287077-019	8560354	1078019
314	SAMPLE	287077-020	8550082	1074098
342	SAMPLE	287331-001	16599787 *	82761 *

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287082 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087128706001
Units : ug/L

Date : 30-MAR-2017 09:06
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087128706002	L1	30-MAR-2017 09:09	S32578
L2	met10 method	1087128706003	L2	30-MAR-2017 09:12	S32571
L3	met10 method	1087128706004	L3	30-MAR-2017 09:15	S32367
L4	met10 method	1087128706005	L4	30-MAR-2017 09:17	S32368
L5	met10 method	1087128706006	L5	30-MAR-2017 09:20	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.5200	2.7580	2.6556	2.6022		LOR0	0.00000	0.38420		2.6340	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-3	100.00	6	1000.0	2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087128706001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287082 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087128706001 Cal Date : 30-MAR-2017

ICV 1087128706007 (30-MAR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4943	ug/L	-1	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706009.1 File : met10 method Time : 30-MAR-2017 09:41
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.562	ug/L	**31**	30	cri+ ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8415274	-0.03
Yttrium	R	1042460	1019554	-2.20

+=high bias

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706010.1 File : met10 method Time : 30-MAR-2017 09:46
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8674731	3.05
Yttrium	R	1042460	1022390	-1.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706011.1 File : met10 method Time : 30-MAR-2017 09:50
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	5.177	5.000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18600	ug/L	93	
Copper	A	20000	21970	ug/L	110	
Manganese	A	20000	18300	ug/L	91	
Nickel	A	20000	16540	ug/L	83	
Titanium	A	20000	18520	ug/L	93	
Vanadium	A	20000	21370	ug/L	107	
Aluminum	R	500000	537900	ug/L	108	
Calcium	R	500000	502600	ug/L	101	
Iron	R	200000	193300	ug/L	97	
Magnesium	R	500000	451700	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	6946042	-17.48
Yttrium	R	1042460	899519	-13.71

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706012.1 File : met10 method Time : 30-MAR-2017 09:55
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	954.7	ug/L	-5	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	6914140	-17.86
Yttrium	R	1042460	903803	-13.30

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706200.1 File : met10 method Time : 30-MAR-2017 20:02
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.5299	5000	4860	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8288273	-1.54
Yttrium	R	1042460	1033753	-0.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706202.1 File : met10 method Time : 30-MAR-2017 20:08
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8853104	5.17
Yttrium	R	1042460	1070793	2.72

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706213.1 File : met10 method Time : 30-MAR-2017 20:39
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.4929	5000	4789	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8376214	-0.49
Yttrium	R	1042460	1040432	-0.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706214.1 File : met10 method Time : 30-MAR-2017 20:42
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8717383	3.56
Yttrium	R	1042460	1065649	2.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706215.1 File : met10 method Time : 30-MAR-2017 20:45
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8692802	3.27
Yttrium	R	1042460	1071252	2.76

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706226.1 File : met10 method Time : 30-MAR-2017 21:16
Cal : 1087128706001 Caldate : 30-MAR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.6340	2.5344	5000	4869	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8429113	0.14
Yttrium	R	1042460	1047873	0.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087128706227.1 File : met10 method Time : 30-MAR-2017 21:19
Cal : 1087128706001 Caldate : 30-MAR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8417582	8870877	5.39
Yttrium	R	1042460	1071012	2.74

SAMPLE PREPARATION SUMMARY

Batch # : 246036
Started By : MB4
Method : 3050B
Spike #1 ID : S30560
Prep Date : 28-MAR-2017 20:00
Spike #2 ID : S30743
Analysis : ICP
Finished By : MB4
Units : g
Spike #3 ID : S32291

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-041		Soil	1.04	50	1	48.08						6010	
287077-042		Soil	.9	50	1	55.56						6010	
287077-043		Soil	.95	50	1	52.63						6010	
287077-044		Soil	.92	50	1	54.35						6010	
287077-045		Soil	1.1	50	1	45.45						6010	
287077-046		Soil	.96	50	1	52.08						6010	
287077-047		Soil	1.09	50	1	45.87						6010	
287077-048		Soil	.96	50	1	52.08						6010	
287077-049		Soil	1.06	50	1	47.17						6010	
287077-050		Soil	.92	50	1	54.35						6010	
287082-001		Soil	1.05	50	1	47.62						6010	
287082-002		Soil	1.06	50	1	47.17						6010	
287082-003		Soil	1.03	50	1	48.54						6010	
287082-004		Soil	1	50	1	50.0						6010	
287082-005		Soil	.91	50	1	54.95						6010	
287082-006		Soil	1.07	50	1	46.73						6010	
287082-007		Soil	.95	50	1	52.63						6010	
287082-008		Soil	1.01	50	1	49.50						6010	
287082-009		Soil	1.01	50	1	49.50						6010	
QC878956	BLANK	Soil	.92	50	1	54.35							
QC878957	BS	Soil	.93	50	1	53.76		.5	.5	.5			
QC878958	BSD	Soil	.96	50	1	52.08		.5	.5	.5			
QC878959	MS	Soil	.92	50	1	54.35		.5	.5	.5			
QC878960	MSD	Soil	1	50	1	50.0		.5	.5	.5			
QC878961	SER	Soil	.9	50	1	55.56							
QC878962	PDS	Soil	.9	50	1	55.56							

Analyst: MNA Date: 03/29/17 Reviewer: PRW Date: 03/30/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246036 Digestion Method: Time ON: 20:00 **BK 4043**

Date Digested: 3-28-2017 ☒ EPA 3050b Time OFF: 22:55 Page 42

Digested by: MBH ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		0.92	☒ 50 ☐	Yes	✓	QC#878956
BS		0.93	☒ 50 ☐		✓	57
BSD		0.96	☒ 50 ☐		✓	58
287077-042 MS		0.92	☒ 50 ☐		✓	59
- 042 MSD		1.00	☒ 50 ☐		✓	60
- 041	A	1.04	☐ 50 ☐		✓	
- 042		0.90	☐ 50 ☐		✓	
- 043		0.95	☐ 50 ☐		✓	
- 044		0.92	☒ 50 ☐		✓	
- 045		1.10	☐ 50 ☐		✓	
- 046		0.96	☒ 50 ☐		✓	
- 047		1.09	☒ 50 ☐		✓	
- 048		0.96	☐ 50 ☐		✓	
- 049		1.06	☒ 50 ☐		✓	
- 050		0.92	☒ 50 ☐		✓	
287082 - 001	A	1.05	☐ 50 ☐		✓	
- 002		1.06	☐ 50 ☐		✓	
- 003		1.03	☒ 50 ☐		✓	
- 004		1.00	☒ 50 ☐		✓	
- 005		0.91	☐ 50 ☐		✓	
- 006		1.07	☐ 50 ☐		✓	
- 007		0.95	☒ 50 ☐		✓	
- 008		1.01	☒ 50 ☐		✓	
- 009		1.01	☒ 50 ☐		✓	
			☐ 50 ☐			

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259935-2005	1610138-7030-KE	MBH 3-28-17
Blank 'matrix' lot#	T458-7A007		
.5 mL of spike solution (Std1) was added to all spikes	S307243		
.5 mL of spike solution (Std2) was added to all spikes	S32291		
.5 mL of spike solution (Std3) was added to all spikes	S30568		
Digestion Block ID, Probe Location	Teflon	35	
Temperature (°C), Thermometer ID	95°C	M14581	
1:1 HNO3 Reagent ID	BDH 2016110955S		
concentrated HNO3 lot#	BDH 20170119882		
3mL 30% hydrogen peroxide lot#	EMD 562586039		
concentrated HCl lot#	JTB162118		
☒ filtered thru' Whatman 541, lot#	9746447		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N2715OD
5	24442267
1-5	24442267

3-28-2017

Digestion Chemist / Date

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246037 Analysis : ICP
Started By : MB4 Prep Date : 28-MAR-2017 20:00 Finished By : MB4
Method : 3050B Units : g
Spike #1 ID : S30560 Spike #2 ID : S30743 Spike #3 ID : S32291

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287082-010		Soil	1	50	1	50.0						6010	
287082-011		Soil	1.05	50	1	47.62						6010	
287082-012		Soil	1.05	50	1	47.62						6010	
287082-013		Soil	1.03	50	1	48.54						6010	
287082-014		Soil	1.04	50	1	48.08						6010	
287082-015		Soil	1.09	50	1	45.87						6010	
287082-016		Soil	.9	50	1	55.56						6010	
287082-017		Soil	.97	50	1	51.55						6010	
287082-018		Soil	.91	50	1	54.95						6010	
287082-019		Soil	.97	50	1	51.55						6010	
287321-001		Soil	.95	50	1	52.63						6010	
287321-002		Soil	.98	50	1	51.02						6010	
287321-003		Soil	1.04	50	1	48.08						6010	
287321-004		Soil	.92	50	1	54.35						6010	
287321-005		Soil	1.05	50	1	47.62						6010	
287321-006		Soil	.99	50	1	50.51						6010	
287321-007		Soil	.94	50	1	53.19						6010	
287321-008		Soil	1.01	50	1	49.50						6010	
287321-009		Soil	1.08	50	1	46.30						6010	
287321-010		Soil	.94	50	1	53.19						6010	
QC878963	BLANK	Soil	.97	50	1	51.55							
QC878964	BS	Soil	1.08	50	1	46.30		.5	.5	.5			
QC878965	BSD	Soil	.95	50	1	52.63		.5	.5	.5			
QC878966	MS	Soil	1.03	50	1	48.54		.5	.5	.5			
QC878967	MSD	Soil	1.09	50	1	45.87		.5	.5	.5			
QC878968	SER	Soil	1	50	1	50.0							
QC878969	PDS	Soil	1	50	1	50.0							

Analyst: MNA Date: 03/30/17 Reviewer: PRW Date: 03/31/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246037 Digestion Method: Time ON: 20:00 BK 4043

Date Digested: 3-28-2017 ☒ EPA 3050b Time OFF: 22:55 Page 43

Digested by: MB4 ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
Blank		0.97	☒50 ☐____	Yes	✓	QC# 8789603
BS		1.08	☒50 ☐____		✓	4
BSD		0.95	☒50 ☐____		✓	5
MS		1.03	☒50 ☐____		✓	6
MSD		1.09	☒50 ☐____		✓	7
287082-010	A	1.00	☒50 ☐____		✓	MSS
-011		1.05	☒50 ☐____		✓	
-012		1.05	☒50 ☐____		✓	
-013		1.03	☒50 ☐____		✓	
-014		1.04	☒50 ☐____		✓	
-015		1.09	☒50 ☐____		✓	
-016		0.90	☒50 ☐____		✓	
-017		0.97	☒50 ☐____		✓	
-018		0.91	☒50 ☐____		✓	
-019		0.97	☒50 ☐____		✓	
287321-001		0.95	☒50 ☐____		✓	
-002		0.98	☒50 ☐____		✓	
-003		1.04	☒50 ☐____		✓	
-004		0.92	☒50 ☐____		✓	
-005		1.05	☒50 ☐____		✓	
-006		0.99	☒50 ☐____		✓	
-007		0.94	☒50 ☐____		✓	
-008		1.01	☒50 ☐____		✓	
-009		1.08	☒50 ☐____		✓	
-010		0.94	☒50 ☐____		✓	

Balance ID: B-10 calibration has been checked? ☒Yes ☐No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259935-2005	1616138-7030-KE	MB4 3-28-17
Blank 'matrix' lot#	T458-7A007		
0.5 mL of spike solution (Std1) was added to all spikes	S305160		
0.5 mL of spike solution (Std2) was added to all spikes	S30743		
0.5 mL of spike solution (Std3) was added to all spikes	S32291		
Digestion Block ID, Probe Location	Teton	35	
Temperature (°C), Thermometer ID	95°C	M14581	
1:1 HNO3 Reagent ID	BDH 20161609555		
concentrated HNO3 lot#	BDH 20170119882		
3mL 30% hydrogen peroxide lot#	EMD 56258639		
concentrated HCl lot#	JTB1102118		
☒ filtered thru' Whatman 541, lot#	97109447		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	NZ7150D
5	24442667
1.5	24442667

3-28-2017

Digestion Chemist / Date

Continued from page ∅

Continued on page _____

Reviewed Online/ See LIMS

Laboratory Job Number 287082

ANALYTICAL REPORT

Metals

Matrix: SPLP Leachate

Curtis & Tompkins, Ltd.

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Analysis:	EPA 6010C
Project#:	15048.001.003.0005.1		
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Sampled:	03/15/17
Units:	mg/L	Received:	03/17/17

Field ID	Type	Lab ID	Result	RL	Batch#	Chemist	Prepared	Analyzed	Prep
21-SS060	SAMPLE	287082-001	0.0058	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS061	SAMPLE	287082-002	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS062	SAMPLE	287082-003	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS063	SAMPLE	287082-004	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS064	SAMPLE	287082-005	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS065	SAMPLE	287082-006	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS066	SAMPLE	287082-007	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS067	SAMPLE	287082-008	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS068	SAMPLE	287082-009	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS069	SAMPLE	287082-010	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
21-SS070	SAMPLE	287082-011	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS071	SAMPLE	287082-012	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS073	SAMPLE	287082-013	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS076	SAMPLE	287082-014	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS077	SAMPLE	287082-015	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS078	SAMPLE	287082-016	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS079	SAMPLE	287082-017	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS080	SAMPLE	287082-018	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
21-SS081	SAMPLE	287082-019	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP
	BLANK	QC879419	ND	0.0050	246147	TLO	03/31/17	04/11/17	EPA 3010A
	BLANK	QC879884	ND	0.0050	246256	MNA	04/04/17	04/06/17	SPLP

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military
Client:	Weston Solutions	Analysis:	EPA 6010C
Project#:	15048.001.003.0005.1		
Analyte:	Lead	Units:	mg/L
Matrix:	SPLP Leachate	Diln Fac:	1.000

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Chemist	Sampled	Received	Prepared	Analyzed	Prep
	BS		QC879420		0.1000	0.1060	106	77-120			246147	TLO			03/31/17	04/11/17	EPA 3010A
	BSD		QC879421		0.1000	0.1044	104	77-120	2	20	246147	TLO			03/31/17	04/11/17	EPA 3010A
16-SS042	MS	287077-042	QC879422	0.01166	0.1000	0.1141	102	56-127			246147	TLO	03/14/17	03/17/17	03/31/17	04/11/17	EPA 3010A
16-SS042	MSD	287077-042	QC879423		0.1000	0.1148	103	56-127	1	33	246147	TLO	03/14/17	03/17/17	03/31/17	04/11/17	EPA 3010A
	BS		QC879885		0.1000	0.09959	100	77-120			246256	MNA			04/04/17	04/06/17	SPLP
	BSD		QC879886		0.1000	0.1006	101	77-120	1	20	246256	MNA			04/04/17	04/06/17	SPLP
ZZZZZZZZZZ	MS	287252-001	QC879887	0.001212	0.1000	0.09775	97	56-127			246256	MNA	03/15/17	03/23/17	04/04/17	04/06/17	SPLP
ZZZZZZZZZZ	MSD	287252-001	QC879888		0.1000	0.09887	98	56-127	1	33	246256	MNA	03/15/17	03/23/17	04/04/17	04/06/17	SPLP
ZZZZZZZZZZ	MS	287252-007	QC879889	ND	0.1000	0.1044	104	56-127			246256	MNA	03/16/17	03/23/17	04/04/17	04/11/17	SPLP
ZZZZZZZZZZ	MSD	287252-007	QC879890		0.1000	0.1014	101	56-127	3	33	246256	MNA	03/16/17	03/23/17	04/04/17	04/11/17	SPLP

ND= Not Detected
RPD= Relative Percent Difference

11.0

Curtis & Tompkins, Ltd.

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Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	16-SS042	Batch#:	246147
Type:	Serial Dilution	Chemist:	TLO
MSS Lab ID:	287077-042	Sampled:	03/14/17
Lab ID:	QC879424	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.01166	0.005000	0.01333 J	0.02500	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	16-SS042	Batch#:	246147
Type:	Post Digest Spike	Chemist:	TLO
MSS Lab ID:	287077-042	Sampled:	03/14/17
Lab ID:	QC879425	Received:	03/17/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
0.01166	0.1000	0.1274	116	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	ZZZZZZZZZZ	Batch#:	246256
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287252-007	Sampled:	03/16/17
Lab ID:	QC879891	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287082	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0005.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	ZZZZZZZZZZ	Batch#:	246256
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287252-007	Sampled:	03/16/17
Lab ID:	QC879892	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/07/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
ND	0.1000	0.1119	112	75-125

ND= Not Detected

REPORTING SUMMARY FOR 287082 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287082-001	MET10	04/11/17 06:14	1.0	+
287082-002	MET10	04/11/17 06:16	1.0	
287082-002	MET10	04/11/17 18:21	1.0	
287082-002	MET10	04/11/17 21:47	1.0	+
287082-003	MET10	04/11/17 06:19	1.0	+
287082-004	MET10	04/11/17 06:21	1.0	+
287082-005	MET10	04/11/17 06:23	1.0	+
287082-006	MET10	04/11/17 06:27	1.0	+
287082-007	MET10	04/11/17 06:39	1.0	+
287082-008	MET10	04/11/17 06:42	1.0	+
287082-009	MET10	04/11/17 06:44	1.0	+
287082-010	MET10	04/11/17 06:48	1.0	+
287082-011	MET10	04/06/17 20:30	1.0	+
287082-012	MET10	04/06/17 20:34	1.0	+
287082-013	MET10	04/06/17 20:37	1.0	+
287082-014	MET10	04/06/17 20:39	1.0	+
287082-015	MET10	04/06/17 20:43	1.0	+
287082-016	MET10	04/06/17 20:46	1.0	+
287082-017	MET10	04/06/17 20:48	1.0	+
287082-018	MET10	04/06/17 21:00	1.0	+
287082-019	MET10	04/06/17 21:03	1.0	+
QC879419	MET10	04/11/17 05:09	1.0	+
QC879420	MET10	04/11/17 05:13	1.0	+
QC879421	MET10	04/11/17 05:15	1.0	+
QC879422	MET10	04/11/17 05:29	1.0	+
QC879423	MET10	04/11/17 05:31	1.0	+
QC879424	MET10	04/11/17 05:34	5.0	+
QC879425	MET10	04/11/17 05:37	1.0	+

REPORTING SUMMARY FOR 287082 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC879884	MET10	04/06/17 19:52	1.0	+	
QC879885	MET10	04/06/17 19:55	1.0	+	
QC879886	MET10	04/06/17 19:58	1.0	+	
QC879887	MET10	04/06/17 20:03	1.0	+	
QC879888	MET10	04/06/17 20:05	1.0	+	
QC879889	MET10	04/06/17 20:10	1.0		
QC879889	MET10	04/07/17 02:51	1.0		
QC879889	MET10	04/11/17 16:53	1.0	+	
QC879890	MET10	04/06/17 20:21	1.0		
QC879890	MET10	04/07/17 02:54	1.0		
QC879890	MET10	04/11/17 16:55	1.0	+	
QC879891	MET10	04/06/17 20:25	5.0		
QC879891	MET10	04/07/17 03:05	5.0		
QC879891	MET10	04/11/17 21:53	5.0		
QC879891	MET10	04/11/17 22:35	5.0	+	
QC879892	MET10	04/06/17 20:27	1.0		
QC879892	MET10	04/07/17 03:08	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10
Method : EPA 6010C

Begun : 04/06/17 08:52
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/06/17 08:52	1.0		
002	met10 method	ICAL	L1			04/06/17 08:56	1.0	1	
003	met10 method	ICAL	L2			04/06/17 08:59	1.0	2	
004	met10 method	ICAL	L3			04/06/17 09:01	1.0	3	
005	met10 method	ICAL	L4			04/06/17 09:03	1.0	4	
006	met10 method	ICAL	L5			04/06/17 09:06	1.0	5	
007	met10 method	ICV				04/06/17 09:09	1.0	6	
008	met10 method	CRI				04/06/17 09:12	1.0	7	
009	met10 method	ICB				04/06/17 09:27	1.0		
010	met10 method	ICSA				04/06/17 09:31	1.0	8	10:AL=560000
011	met10 method	ICSAB				04/06/17 09:35	1.0	9	5:AL=580000
012	met10 method	XICSAB				04/06/17 10:06	1.0	9	
013	met10 method	ICSAB				04/06/17 10:16	1.0	9	5:AL=550000
014	met10 method	SAMPLE	287630-003	Soil	246334	04/06/17 11:16	1.0		2:TI=14000
015	met10 method	SAMPLE	287630-004	Soil	246334	04/06/17 11:19	1.0		4:CA=500000
016	met10 method	SAMPLE	287630-005	Soil	246334	04/06/17 11:22	1.0		4:FE=430000
017	met10 method	SAMPLE	287630-006	Soil	246334	04/06/17 11:25	1.0		6:FE=550000
018	met10 method	MSS	287630-007	Soil	246334	04/06/17 11:28	1.0		4:CA=1000000
019	met10 method	SAMPLE	287724-001	Soil	246334	04/06/17 11:31	1.0		5:FE=550000
020	met10 method	BLANK	QC880099	WET Leachate	246307	04/06/17 11:34	10.0		1:NA=170000
021	met10 method	BS	QC880100	WET Leachate	246307	04/06/17 11:37	1.0		
022	met10 method	BSD	QC880101	WET Leachate	246307	04/06/17 11:39	1.0		
023	met10 method	MSS	287513-001	WET Leachate	246307	04/06/17 11:42	10.0		1:NA=150000
024	met10 method	CCV				04/06/17 11:45	1.0	10	
025	met10 method	CCB				04/06/17 11:48	1.0		
026	met10 method	CCB				04/06/17 11:51	1.0		
027	met10 method	MS	QC880102	WET Leachate	246307	04/06/17 11:55	10.0		
028	met10 method	MSD	QC880103	WET Leachate	246307	04/06/17 11:58	10.0		
029	met10 method	SAMPLE	287416-001	WET Leachate	246307	04/06/17 12:00	10.0		2:NA=140000
030	met10 method	SAMPLE	287727-001	WET Leachate	246307	04/06/17 12:03	10.0		1:NA=150000
031	met10 method	SAMPLE	287727-001	TCLP Leachate	246190	04/06/17 12:05	10.0		1:NA=160000
032	met10 method	SAMPLE	287513-002	WET Leachate	246307	04/06/17 12:09	10.0		1:NA=170000
033	met10 method	SAMPLE	287513-003	WET Leachate	246307	04/06/17 12:11	10.0		1:NA=140000
034	met10 method	SAMPLE	287513-004	WET Leachate	246307	04/06/17 12:14	10.0		1:NA=150000
035	met10 method	SAMPLE	287513-005	WET Leachate	246307	04/06/17 12:16	10.0		1:NA=140000
036	met10 method	SAMPLE	287513-006	WET Leachate	246307	04/06/17 12:19	10.0		1:NA=140000
037	met10 method	CCV				04/06/17 12:21	1.0	10	
038	met10 method	CCB				04/06/17 12:24	1.0		
039	met10 method	CCB				04/06/17 12:27	1.0		
040	met10 method	SAMPLE	287513-007	WET Leachate	246307	04/06/17 12:31	10.0		1:NA=160000
041	met10 method	SAMPLE	287513-008	WET Leachate	246307	04/06/17 12:34	10.0		1:NA=140000
042	met10 method	SAMPLE	287513-009	WET Leachate	246307	04/06/17 12:36	10.0		1:NA=150000
043	met10 method	SAMPLE	287513-010	WET Leachate	246307	04/06/17 12:39	10.0		1:NA=140000
044	met10 method	SAMPLE	287513-011	WET Leachate	246307	04/06/17 12:41	10.0		1:NA=160000
045	met10 method	SAMPLE	287513-012	WET Leachate	246307	04/06/17 12:44	10.0		1:NA=160000
046	met10 method	SAMPLE	287513-013	WET Leachate	246307	04/06/17 12:46	10.0		1:NA=160000
047	met10 method	SAMPLE	287560-001	WET Leachate	246307	04/06/17 12:49	1.0		1:NA=160000
048	met10 method	SAMPLE	287560-002	WET Leachate	246307	04/06/17 12:52	1.0		1:NA=160000
049	met10 method	SAMPLE	287439-001	WET Leachate	246307	04/06/17 12:55	10.0		
050	met10 method	CCV				04/06/17 12:57	1.0	10	
051	met10 method	CCB				04/06/17 13:00	1.0		
052	met10 method	CCB				04/06/17 13:03	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287543-005	WET Leachate	246307	04/06/17 13:06	10.0		
054	met10 method	SAMPLE	286962-005	Soil	246123	04/06/17 13:09	1.0		3:CA=5400000
055	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:12	100.0		
056	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:14	1.0		10:CA=2800000
057	met10 method	X	RINSE			04/06/17 13:17	1.0		
058	met10 method	SAMPLE	287315-001	Miscell.	246094	04/06/17 13:21	1.0		1:K=230000
059	met10 method	SAMPLE	287318-001	Miscell.	246094	04/06/17 13:23	1.0		1:K=170000
060	met10 method	SAMPLE	287467-001	Soil	246170	04/06/17 13:26	1.0		1:FE=110000
061	met10 method	SAMPLE	287467-002	Soil	246170	04/06/17 13:28	1.0		5:FE=430000
062	met10 method	SAMPLE	287467-003	Soil	246170	04/06/17 13:31	1.0		1:FE=110000
063	met10 method	CCV				04/06/17 13:33	1.0	10	
064	met10 method	CCB				04/06/17 13:36	1.0		
065	met10 method	CCB				04/06/17 13:39	1.0		
066	met10 method	X	RINSE			04/06/17 13:43	1.0		
067	met10 method	SER	QC880366	WET Leachate	246307	04/06/17 13:46	50.0		
068	met10 method	PDS	QC880367	WET Leachate	246307	04/06/17 13:50	10.0	11 12 13	1:NA=160000
069	met10 method	SAMPLE	287595-027	Soil	246333	04/06/17 13:52	1.0		5:CA=1700000
070	met10 method	SAMPLE	287595-029	Soil	246333	04/06/17 13:55	1.0		4:CA=2300000
071	met10 method	BLANK	QC879203	Soil	246096	04/06/17 13:59	1.0		
072	met10 method	BS	QC879001	WET Leachate	246046	04/06/17 14:02	1.0		
073	met10 method	BSD	QC879002	WET Leachate	246046	04/06/17 14:04	1.0		
074	met10 method	SAMPLE	287325-001	WET Leachate	246046	04/06/17 14:07	10.0		1:NA=110000
075	met10 method	SAMPLE	287325-002	WET Leachate	246046	04/06/17 14:10	10.0		1:NA=100000
076	met10 method	CCV				04/06/17 14:13	1.0	10	
077	met10 method	CCB				04/06/17 14:15	1.0		
078	met10 method	SAMPLE	287331-001	WET Leachate	246046	04/06/17 14:19	10.0		
079	met10 method	X	RINSE			04/06/17 14:25	1.0		
080	met10 method	MSS	287252-007	Soil	246299	04/06/17 14:30	1.0		4:FE=530000
081	met10 method	MS	QC880060	Soil	246299	04/06/17 14:32	1.0		4:AL=540000
082	met10 method	MSD	QC880061	Soil	246299	04/06/17 14:35	1.0		4:FE=640000
083	met10 method	SER	QC880062	Soil	246299	04/06/17 14:38	5.0		1:FE=120000
084	met10 method	PDS	QC880063	Soil	246299	04/06/17 14:40	1.0	11 12 13	4:FE=520000
085	met10 method	SAMPLE	287252-042	Soil	246299	04/06/17 14:43	1.0		4:FE=700000
086	met10 method	SAMPLE	287252-043	Soil	246299	04/06/17 14:46	1.0		4:AL=560000
087	met10 method	SAMPLE	287252-044	Soil	246299	04/06/17 14:49	1.0		4:AL=580000
088	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 14:52	1.0		5:FE=500000
089	met10 method	CCV				04/06/17 14:55	1.0	10	
090	met10 method	CCB				04/06/17 14:57	1.0		
091	met10 method	CCB				04/06/17 15:00	1.0		
092	met10 method	SAMPLE	287362-045	Soil	246299	04/06/17 15:04	1.0		4:FE=730000
093	met10 method	SAMPLE	287362-046	Soil	246299	04/06/17 15:07	1.0		4:AL=610000
094	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 15:10	1.0		5:CA=1800000
095	met10 method	SAMPLE	287533-001	Soil	246299	04/06/17 15:13	1.0		6:FE=640000
096	met10 method	SAMPLE	287533-002	Soil	246299	04/06/17 15:16	1.0		6:FE=750000
097	met10 method	SAMPLE	287533-003	Soil	246299	04/06/17 15:19	1.0		6:FE=710000
098	met10 method	SAMPLE	287533-004	Soil	246299	04/06/17 15:22	1.0		5:FE=490000
099	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 15:25	1.0		2:FE=300000
100	met10 method	X	RINSE			04/06/17 15:57	1.0		
101	met10 method	MSS	287530-001	Soil	246333	04/06/17 16:01	1.0		5:CA=1100000
102	met10 method	CCV				04/06/17 16:04	1.0	10	
103	met10 method	CCB				04/06/17 16:07	1.0		
104	met10 method	CCB				04/06/17 16:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287166-002	Air	246062	04/06/17 16:14	1.0		
106	met10 method	SAMPLE	287168-003	Air	246062	04/06/17 16:16	1.0		
107	met10 method	SAMPLE	287171-002	Air	246062	04/06/17 16:18	1.0		
108	met10 method	MSS	287505-010	TCLP Leachate	246190	04/06/17 16:21	10.0		1:NA=170000
109	met10 method	SAMPLE	287418-005	Filtrate	246184	04/06/17 16:25	1.0		5:NA=3300000
110	met10 method	SAMPLE	287418-006	Filtrate	246184	04/06/17 16:27	1.0		4:NA=2800000
111	met10 method	SAMPLE	287418-007	Filtrate	246184	04/06/17 16:31	1.0		4:NA=5100000
112	met10 method	SAMPLE	287418-008	Filtrate	246184	04/06/17 16:33	1.0		4:NA=3300000
113	met10 method	SAMPLE	287418-009	Filtrate	246184	04/06/17 16:37	1.0		3:NA=2200000
114	met10 method	SAMPLE	287418-010	Filtrate	246184	04/06/17 16:40	1.0		2:NA=700000
115	met10 method	CCV				04/06/17 16:42	1.0	10	
116	met10 method	CCB				04/06/17 16:45	1.0		
117	met10 method	CCB				04/06/17 16:48	1.0		
118	met10 method	SAMPLE	287418-011	Filtrate	246184	04/06/17 16:51	1.0		4:NA=4700000
119	met10 method	MSS	287252-028	Soil	246272	04/06/17 16:55	100.0		
120	met10 method	SAMPLE	287252-029	Soil	246272	04/06/17 16:57	100.0		
121	met10 method	SAMPLE	287252-030	Soil	246272	04/06/17 16:59	1.0		4:FE=370000
122	met10 method	SAMPLE	287252-033	Soil	246272	04/06/17 17:02	100.0		
123	met10 method	SAMPLE	287252-034	Soil	246272	04/06/17 17:04	100.0		
124	met10 method	SAMPLE	287252-035	Soil	246272	04/06/17 17:07	100.0		
125	met10 method	SAMPLE	287252-036	Soil	246272	04/06/17 17:09	1.0		4:FE=410000
126	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 17:12	100.0		
127	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 17:14	1.0		5:CA=1700000
128	met10 method	CCV				04/06/17 17:17	1.0	10	
129	met10 method	CCB				04/06/17 17:20	1.0		
130	met10 method	CCB				04/06/17 17:22	1.0		
131	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 17:26	100.0		
132	met10 method	X	RINSE			04/06/17 17:28	1.0		
133	met10 method	BLANK	QC879918	Water	246267	04/06/17 17:31	1.0		
134	met10 method	BS	QC879919	Water	246267	04/06/17 17:35	1.0		
135	met10 method	BSD	QC879920	Water	246267	04/06/17 17:37	1.0		
136	met10 method	MSS	287440-001	Water	246267	04/06/17 17:39	1.0		
137	met10 method	MS	QC879921	Water	246267	04/06/17 17:43	1.0		
138	met10 method	MSD	QC879922	Water	246267	04/06/17 17:45	1.0		
139	met10 method	SAMPLE	287417-001	Water	246267	04/06/17 17:48	1.0		
140	met10 method	SAMPLE	287417-002	Water	246267	04/06/17 17:50	1.0		1:CA=130000
141	met10 method	CCV				04/06/17 17:53	1.0	10	
142	met10 method	CCB				04/06/17 17:56	1.0		
143	met10 method	CCB				04/06/17 17:59	1.0		
144	met10 method	SAMPLE	287516-001	Water	246267	04/06/17 18:03	1.0		1:NA=290000
145	met10 method	X	RINSE			04/06/17 18:06	1.0		
146	met10 method	BLANK	QC880251	Soil	246347	04/06/17 18:09	1.0		
147	met10 method	LCS	QC880252	Soil	246347	04/06/17 18:12	1.0		
148	met10 method	MSS	287623-009	Soil	246347	04/06/17 18:15	100.0		
149	met10 method	MS	QC880253	Soil	246347	04/06/17 18:17	100.0		
150	met10 method	MSD	QC880254	Soil	246347	04/06/17 18:20	100.0		
151	met10 method	PDS	QC880255	Soil	246347	04/06/17 18:22	100.0	11 12 13	
152	met10 method	SER	QC880256	Soil	246347	04/06/17 18:24	500.0		
153	met10 method	SAMPLE	287623-001	Soil	246347	04/06/17 18:27	100.0		
154	met10 method	CCV				04/06/17 18:29	1.0	10	
155	met10 method	CCB				04/06/17 18:32	1.0		
156	met10 method	CCB				04/06/17 18:35	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287623-003	Soil	246347	04/06/17 18:39	100.0		
158	met10 method	SAMPLE	287623-004	Soil	246347	04/06/17 18:42	100.0		
159	met10 method	SAMPLE	287623-005	Soil	246347	04/06/17 18:44	100.0		
160	met10 method	SAMPLE	287623-006	Soil	246347	04/06/17 18:46	100.0		
161	met10 method	SAMPLE	287623-007	Soil	246347	04/06/17 18:49	100.0		
162	met10 method	SAMPLE	287623-010	Soil	246347	04/06/17 18:51	100.0		
163	met10 method	CCV				04/06/17 18:54	1.0	10	
164	met10 method	CCB				04/06/17 18:56	1.0		
165	met10 method	CCB				04/06/17 18:59	1.0		
166	met10 method	X	RINSE			04/06/17 19:08	1.0		
167	met10 method	BLANK	QC880298	Filtrate	246356	04/06/17 19:12	1.0		
168	met10 method	BS	QC880299	Filtrate	246356	04/06/17 19:15	1.0		
169	met10 method	BSD	QC880300	Filtrate	246356	04/06/17 19:17	1.0		
170	met10 method	MSS	287633-008	Filtrate	246356	04/06/17 19:20	1.0		2:CA=300000
171	met10 method	MS	QC880301	Filtrate	246356	04/06/17 19:22	1.0		
172	met10 method	MSD	QC880302	Filtrate	246356	04/06/17 19:25	1.0		
173	met10 method	SAMPLE	287589-001	Filtrate	246356	04/06/17 19:27	1.0		3:NA=390000
174	met10 method	SAMPLE	287633-004	Filtrate	246356	04/06/17 19:30	1.0		3:NA=460000
175	met10 method	SAMPLE	287633-006	Filtrate	246356	04/06/17 19:33	1.0		3:NA=280000
176	met10 method	CCV				04/06/17 19:37	1.0	10	
177	met10 method	CCB				04/06/17 19:40	1.0		
178	met10 method	CCB				04/06/17 19:43	1.0		
179	met10 method	SAMPLE	287633-007	Filtrate	246356	04/06/17 19:46	1.0		2:CA=270000
180	met10 method	X	RINSE			04/06/17 19:49	1.0		
181	met10 method	BLANK	QC879884	SPLP Leachate	246256	04/06/17 19:52	1.0		
182	met10 method	BS	QC879885	SPLP Leachate	246256	04/06/17 19:55	1.0		
183	met10 method	BSD	QC879886	SPLP Leachate	246256	04/06/17 19:58	1.0		
184	met10 method	MSS	287252-001	SPLP Leachate	246256	04/06/17 20:00	1.0		
185	met10 method	MS	QC879887	SPLP Leachate	246256	04/06/17 20:03	1.0		
186	met10 method	MSD	QC879888	SPLP Leachate	246256	04/06/17 20:05	1.0		
187	met10 method	MSS	287252-007	SPLP Leachate	246256	04/06/17 20:07	1.0		
188	met10 method	MS	QC879889	SPLP Leachate	246256	04/06/17 20:10	1.0		
189	met10 method	CCV				04/06/17 20:12	1.0	10	
190	met10 method	CCB				04/06/17 20:15	1.0		
191	met10 method	CCB				04/06/17 20:18	1.0		
192	met10 method	MSD	QC879890	SPLP Leachate	246256	04/06/17 20:21	1.0		
193	met10 method	SER	QC879891	SPLP Leachate	246256	04/06/17 20:25	5.0		
194	met10 method	PDS	QC879892	SPLP Leachate	246256	04/06/17 20:27	1.0	11 12 13	
195	met10 method	SAMPLE	287082-011	SPLP Leachate	246256	04/06/17 20:30	1.0		
196	met10 method	SAMPLE	287082-012	SPLP Leachate	246256	04/06/17 20:34	1.0		
197	met10 method	SAMPLE	287082-013	SPLP Leachate	246256	04/06/17 20:37	1.0		
198	met10 method	SAMPLE	287082-014	SPLP Leachate	246256	04/06/17 20:39	1.0		
199	met10 method	SAMPLE	287082-015	SPLP Leachate	246256	04/06/17 20:43	1.0		
200	met10 method	SAMPLE	287082-016	SPLP Leachate	246256	04/06/17 20:46	1.0		
201	met10 method	SAMPLE	287082-017	SPLP Leachate	246256	04/06/17 20:48	1.0		
202	met10 method	CCV				04/06/17 20:51	1.0	10	
203	met10 method	CCB				04/06/17 20:53	1.0		
204	met10 method	CCB				04/06/17 20:56	1.0		
205	met10 method	SAMPLE	287082-018	SPLP Leachate	246256	04/06/17 21:00	1.0		
206	met10 method	SAMPLE	287082-019	SPLP Leachate	246256	04/06/17 21:03	1.0		
207	met10 method	SAMPLE	287252-002	SPLP Leachate	246256	04/06/17 21:05	1.0		
208	met10 method	SAMPLE	287252-003	SPLP Leachate	246256	04/06/17 21:08	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287252-004	SPLP Leachate	246256	04/06/17 21:10	1.0		
210	met10 method	SAMPLE	287252-005	SPLP Leachate	246256	04/06/17 21:12	1.0		
211	met10 method	SAMPLE	287252-006	SPLP Leachate	246256	04/06/17 21:15	1.0		
212	met10 method	SAMPLE	287252-008	SPLP Leachate	246256	04/06/17 21:18	1.0		
213	met10 method	SAMPLE	287252-009	SPLP Leachate	246256	04/06/17 21:21	1.0		
214	met10 method	SAMPLE	287252-010	SPLP Leachate	246256	04/06/17 21:24	1.0		
215	met10 method	CCV				04/06/17 21:26	1.0	10	
216	met10 method	CCB				04/06/17 21:29	1.0		
217	met10 method	CCB				04/06/17 21:32	1.0		
218	met10 method	SAMPLE	287252-011	SPLP Leachate	246256	04/06/17 21:35	1.0		
219	met10 method	CCV				04/06/17 21:38	1.0	10	
220	met10 method	CCB				04/06/17 21:41	1.0		
221	met10 method	CCB				04/06/17 21:44	1.0		
222	met10 method	X	RINSE			04/06/17 22:04	1.0		
223	met10 method	BLANK	QC880277	Air	246352	04/06/17 22:08	1.0		
224	met10 method	BS	QC880278	Air	246352	04/06/17 22:11	1.0		
225	met10 method	BSD	QC880279	Air	246352	04/06/17 22:14	1.0		
226	met10 method	MSS	287419-001	Air	246352	04/06/17 22:16	1.0		
227	met10 method	MS	QC880280	Air	246352	04/06/17 22:19	1.0		
228	met10 method	MSD	QC880281	Air	246352	04/06/17 22:21	1.0		
229	met10 method	SER	QC880282	Air	246352	04/06/17 22:24	5.0		
230	met10 method	PDS	QC880283	Air	246352	04/06/17 22:27	1.0	11 12 13	
231	met10 method	PREPBLK	QC880284	Air	246352	04/06/17 22:30	1.0		
232	met10 method	CCV				04/06/17 22:33	1.0	10	
233	met10 method	CCB				04/06/17 22:36	1.0		
234	met10 method	CCB				04/06/17 22:38	1.0		
235	met10 method	PREPBLK	QC880285	Air	246352	04/06/17 22:42	1.0		
236	met10 method	SAMPLE	287419-002	Air	246352	04/06/17 22:45	1.0		
237	met10 method	SAMPLE	287419-003	Air	246352	04/06/17 22:47	1.0		
238	met10 method	SAMPLE	287420-001	Air	246352	04/06/17 22:50	1.0		
239	met10 method	SAMPLE	287420-002	Air	246352	04/06/17 22:53	1.0		
240	met10 method	SAMPLE	287421-001	Air	246352	04/06/17 22:57	1.0		
241	met10 method	SAMPLE	287421-002	Air	246352	04/06/17 23:00	1.0		
242	met10 method	X	RINSE			04/06/17 23:02	1.0		
243	met10 method	BLANK	QC880093	TCLP Leachate	246305	04/06/17 23:06	10.0		1:NA=160000
244	met10 method	BS	QC880094	TCLP Leachate	246305	04/06/17 23:09	1.0		
245	met10 method	CCV				04/06/17 23:12	1.0	10	
246	met10 method	CCB				04/06/17 23:14	1.0		
247	met10 method	CCB				04/06/17 23:17	1.0		
248	met10 method	BSD	QC880095	TCLP Leachate	246305	04/06/17 23:21	1.0		
249	met10 method	MSS	287513-001	TCLP Leachate	246305	04/06/17 23:23	10.0		1:NA=170000
250	met10 method	MS	QC880096	TCLP Leachate	246305	04/06/17 23:27	10.0		
251	met10 method	MSD	QC880097	TCLP Leachate	246305	04/06/17 23:29	10.0		
252	met10 method	SAMPLE	287513-002	TCLP Leachate	246305	04/06/17 23:32	10.0		1:NA=160000
253	met10 method	SAMPLE	287513-003	TCLP Leachate	246305	04/06/17 23:35	10.0		1:NA=150000
254	met10 method	SAMPLE	287513-004	TCLP Leachate	246305	04/06/17 23:39	10.0		1:NA=150000
255	met10 method	SAMPLE	287513-006	TCLP Leachate	246305	04/06/17 23:42	10.0		1:NA=150000
256	met10 method	SAMPLE	287513-007	TCLP Leachate	246305	04/06/17 23:45	10.0		1:NA=160000
257	met10 method	SAMPLE	287513-010	TCLP Leachate	246305	04/06/17 23:49	10.0		1:NA=160000
258	met10 method	CCV				04/06/17 23:52	1.0	10	
259	met10 method	CCB				04/06/17 23:55	1.0		
260	met10 method	CCB				04/06/17 23:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10
Method : EPA 6010C

Begun : 04/06/17 08:52
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287515-001	TCLP Leachate	246305	04/07/17 00:01	10.0		1:NA=160000
262	met10 method	SAMPLE	287515-002	TCLP Leachate	246305	04/07/17 00:05	10.0		1:NA=160000
263	met10 method	SAMPLE	287543-005	TCLP Leachate	246305	04/07/17 00:08	10.0		
264	met10 method	SAMPLE	287617-001	TCLP Leachate	246305	04/07/17 00:12	10.0		1:NA=160000
265	met10 method	CCV				04/07/17 00:15	1.0	10	
266	met10 method	CCB				04/07/17 00:18	1.0		
267	met10 method	CCB				04/07/17 00:21	1.0		
268	met10 method	X	RINSE			04/07/17 00:38	1.0		
269	met10 method	BLANK	QC879456	Water	246155	04/07/17 00:41	1.0		
270	met10 method	BS	QC879457	Water	246155	04/07/17 00:44	1.0		
271	met10 method	BSD	QC879458	Water	246155	04/07/17 00:47	1.0		
272	met10 method	MSS	287365-001	Water	246155	04/07/17 00:49	1.0		
273	met10 method	MS	QC879459	Water	246155	04/07/17 00:52	1.0		
274	met10 method	MSD	QC879460	Water	246155	04/07/17 00:54	1.0		
275	met10 method	SAMPLE	287246-009	Water	246155	04/07/17 00:57	1.0		4:NA=2100000
276	met10 method	SAMPLE	287348-001	Water	246155	04/07/17 00:59	1.0		
277	met10 method	SAMPLE	287348-002	Water	246155	04/07/17 01:02	1.0		
278	met10 method	CCV				04/07/17 01:04	1.0	10	
279	met10 method	CCB				04/07/17 01:07	1.0		
280	met10 method	CCB				04/07/17 01:10	1.0		
281	met10 method	SAMPLE	287365-002	Water	246155	04/07/17 01:13	1.0		
282	met10 method	SAMPLE	287365-003	Water	246155	04/07/17 01:16	1.0		
283	met10 method	SAMPLE	287365-004	Water	246155	04/07/17 01:20	1.0		
284	met10 method	SAMPLE	287365-005	Water	246155	04/07/17 01:22	1.0		
285	met10 method	SAMPLE	287365-006	Water	246155	04/07/17 01:25	1.0		
286	met10 method	SAMPLE	287365-007	Water	246155	04/07/17 01:27	1.0		
287	met10 method	SAMPLE	287365-008	Water	246155	04/07/17 01:29	1.0		
288	met10 method	SAMPLE	287365-009	Water	246155	04/07/17 01:32	1.0		
289	met10 method	SAMPLE	287365-010	Water	246155	04/07/17 01:34	1.0		
290	met10 method	SAMPLE	287365-011	Water	246155	04/07/17 01:37	1.0		
291	met10 method	CCV				04/07/17 01:39	1.0	10	
292	met10 method	CCB				04/07/17 01:42	1.0		
293	met10 method	CCB				04/07/17 01:45	1.0		
294	met10 method	SAMPLE	287365-012	Water	246155	04/07/17 01:48	1.0		
295	met10 method	SAMPLE	287365-013	Water	246155	04/07/17 01:50	1.0		
296	met10 method	SAMPLE	287365-014	Water	246155	04/07/17 01:54	1.0		
297	met10 method	SAMPLE	287365-015	Water	246155	04/07/17 01:57	1.0		
298	met10 method	SAMPLE	287365-019	Water	246155	04/07/17 02:00	1.0		
299	met10 method	X	RINSE			04/07/17 02:04	1.0		
300	met10 method	MS	QC879944	Soil	246272	04/07/17 02:07	100.0		
301	met10 method	MSD	QC879945	Soil	246272	04/07/17 02:09	100.0		
302	met10 method	X	RINSE			04/07/17 02:12	1.0		
303	met10 method	MSS	287418-003	Filtrate	246184	04/07/17 02:15	1.0		2:NA=270000
304	met10 method	CCV				04/07/17 02:17	1.0	10	
305	met10 method	CCB				04/07/17 02:20	1.0		
306	met10 method	CCB				04/07/17 02:23	1.0		
307	met10 method	SAMPLE	287418-004	Filtrate	246184	04/07/17 02:27	1.0		4:NA=4300000
308	met10 method	SAMPLE	287418-006	Filtrate	246184	04/07/17 02:30	1.0		4:NA=2700000
309	met10 method	SAMPLE	287418-007	Filtrate	246184	04/07/17 02:33	1.0		4:NA=5000000
310	met10 method	SAMPLE	287418-008	Filtrate	246184	04/07/17 02:36	1.0		4:NA=3200000
311	met10 method	SAMPLE	287418-009	Filtrate	246184	04/07/17 02:40	1.0		3:NA=2200000
312	met10 method	SAMPLE	287418-011	Filtrate	246184	04/07/17 02:42	1.0		4:NA=4600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	X	RINSE			04/07/17 02:46	1.0		
314	met10 method	MSS	287252-007	SPLP Leachate	246256	04/07/17 02:49	1.0		
315	met10 method	MS	QC879889	SPLP Leachate	246256	04/07/17 02:51	1.0		
316	met10 method	MSD	QC879890	SPLP Leachate	246256	04/07/17 02:54	1.0		
317	met10 method	CCV				04/07/17 02:56	1.0	10	
318	met10 method	CCB				04/07/17 02:59	1.0		
319	met10 method	CCB				04/07/17 03:02	1.0		
320	met10 method	SER	QC879891	SPLP Leachate	246256	04/07/17 03:05	5.0		
321	met10 method	PDS	QC879892	SPLP Leachate	246256	04/07/17 03:08	1.0	11 12 13	
322	met10 method	CCV				04/07/17 03:11	1.0	10	
323	met10 method	CCB				04/07/17 03:13	1.0		
324	met10 method	CCB				04/07/17 03:16	1.0		

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 37.

MNA 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 38 through 236.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
		ICAL STD	8366014	998107
		LOWER LIMIT	2509804	299432
		UPPER LIMIT	10039216	1197728
009	ICB		8268979	1000301
010	ICSA		6658881	890473
013	ICSAB		6614508	911695
076	CCV		7992819	1003975
077	CCB		8412844	1037669
078	SAMPLE	287331-001	7826823	999841
080	MSS	287252-007	7476391	969369
085	SAMPLE	287252-042	7300034	968007
086	SAMPLE	287252-043	7360832	960895
087	SAMPLE	287252-044	7332549	967966
088	SAMPLE	287252-045	7490291	973049
089	CCV		7981104	1006315
090	CCB		8477036	1028695
091	CCB		10050731 *	87356 *
092	SAMPLE	287362-045	7272749	959076
093	SAMPLE	287362-046	7470095	980821
102	CCV		7975354	1006254
103	CCB		8632355	1032857
115	CCV		7977498	1004328
117	CCB		8479781	156217 *
119	MSS	287252-028	8323418	1034554
120	SAMPLE	287252-029	8441001	1044557
121	SAMPLE	287252-030	7760832	1017274
122	SAMPLE	287252-033	8603135	1040728
123	SAMPLE	287252-034	8299852	1047209
124	SAMPLE	287252-035	8532200	1035659
125	SAMPLE	287252-036	8054234	1050851
126	SAMPLE	287252-045	8393765	1050717
128	CCV		8011887	1020215
129	CCB		8584972	1045810
176	CCV		7959140	994874
178	CCB		8504928	1477400 *
181	BLANK	QC879884	8546081	1052164
182	BS	QC879885	8284327	1034377
183	BSD	QC879886	8237025	1028132
184	MSS	287252-001	8502245	1063454
185	MS	QC879887	8247875	1035510
186	MSD	QC879888	8232943	1027654
187	MSS	287252-007	8242116	1033958
188	MS	QC879889	8258787	1036833
189	CCV		8065241	999831
190	CCB		8525895	1028160
191	CCB		8561761	1037546
192	MSD	QC879890	8417969	1034289
193	SER	QC879891	8003583	1032510
194	PDS	QC879892	8390029	1056800
195	SAMPLE	287082-011	8328211	1052933
196	SAMPLE	287082-012	8462604	1051300

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
197	SAMPLE	287082-013	8382479	1050475
198	SAMPLE	287082-014	8552286	1039245
199	SAMPLE	287082-015	8453637	1047445
200	SAMPLE	287082-016	8590771	1042345
201	SAMPLE	287082-017	8476746	1044559
202	CCV		7988531	1009781
203	CCB		8670761	1038069
204	CCB		8506314	1037616
205	SAMPLE	287082-018	8268493	1036319
206	SAMPLE	287082-019	8437429	1052520
207	SAMPLE	287252-002	8372999	1053046
208	SAMPLE	287252-003	8287407	1050939
209	SAMPLE	287252-004	8408122	1045062
210	SAMPLE	287252-005	8535131	1042388
211	SAMPLE	287252-006	8364788	1050187
212	SAMPLE	287252-008	8543230	1061338
213	SAMPLE	287252-009	8395682	1063187
214	SAMPLE	287252-010	8376064	1045641
215	CCV		8028908	1015417
216	CCB		8599671	1024964
217	CCB		8453477	1087479
218	SAMPLE	287252-011	8355713	1064071
219	CCV		8060704	1026336
220	CCB		8727329	1036141
291	CCV		7924140	1007424
293	CCB		8561485	1034541
304	CCV		7954662	996076
305	CCB		8564334	1041166
306	CCB		8516577	89211 *
314	MSS	287252-007	8279453	1044542
315	MS	QC879889	8033192	1043694
316	MSD	QC879890	8051761	1054137
317	CCV		7957909	1029257
318	CCB		8523855	1035587
319	CCB		8519843	1038723
320	SER	QC879891	8336728	1034103
321	PDS	QC879892	8202814	1052781
322	CCV		8003400	1023589
323	CCB		8543601	1050972

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287082 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087138772001
Units : ug/L

Date : 06-APR-2017 08:52
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087138772002	L1	06-APR-2017 08:56	S32578
L2	met10 method	1087138772003	L2	06-APR-2017 08:59	S32571
L3	met10 method	1087138772004	L3	06-APR-2017 09:01	S32367
L4	met10 method	1087138772005	L4	06-APR-2017 09:03	S32368
L5	met10 method	1087138772006	L5	06-APR-2017 09:06	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8800	2.7920	2.6354	2.5586		LOR0	0.00000	0.39071		2.7165	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	13	100.00	9	1000.0	3	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087138772001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287082 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087138772001 Cal Date : 06-APR-2017

ICV 1087138772007 (06-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5087	ug/L	2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772008.2 File : met10 method Time : 06-APR-2017 09:12
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.455	ug/L	9	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8249216	-1.40
Yttrium	R	998107	1022393	2.43

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772009.2 File : met10 method Time : 06-APR-2017 09:27
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8268979	-1.16
Yttrium	R	998107	1000301	0.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772010.2 File : met10 method Time : 06-APR-2017 09:31
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-4.747]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18370	ug/L	92	
Copper	A	20000	22890	ug/L	114	
Manganese	A	20000	18080	ug/L	90	
Nickel	A	20000	16360	ug/L	82	
Titanium	A	20000	18630	ug/L	93	
Vanadium	A	20000	21300	ug/L	107	
Aluminum	R	500000	561800	ug/L	112	
Calcium	R	500000	508600	ug/L	102	
Iron	R	200000	201300	ug/L	101	
Magnesium	R	500000	447700	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6658881	-20.41
Yttrium	R	998107	890473	-10.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772013.1 File : met10 method Time : 06-APR-2017 10:16
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	931.7	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6614508	-20.94
Yttrium	R	998107	911695	-8.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772176.2 File : met10 method Time : 06-APR-2017 19:37
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4913	5000	4867	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7959140	-4.86
Yttrium	R	998107	994874	-0.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772178.1 File : met10 method Time : 06-APR-2017 19:43
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8504928	1.66
Yttrium	R	998107	1477400	**48.02 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772189.2 File : met10 method Time : 06-APR-2017 20:12
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4449	5000	4776	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8065241	-3.60
Yttrium	R	998107	999831	0.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772190.1 File : met10 method Time : 06-APR-2017 20:15
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8525895	1.91
Yttrium	R	998107	1028160	3.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772191.1 File : met10 method Time : 06-APR-2017 20:18
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8561761	2.34
Yttrium	R	998107	1037546	3.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772202.1 File : met10 method Time : 06-APR-2017 20:51
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4468	5000	4780	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7988531	-4.51
Yttrium	R	998107	1009781	1.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772203.1 File : met10 method Time : 06-APR-2017 20:53
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8670761	3.64
Yttrium	R	998107	1038069	4.00

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772204.1 File : met10 method Time : 06-APR-2017 20:56
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8506314	1.68
Yttrium	R	998107	1037616	3.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772215.1 File : met10 method Time : 06-APR-2017 21:26
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4147	5000	4717	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8028908	-4.03
Yttrium	R	998107	1015417	1.73

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772216.1 File : met10 method Time : 06-APR-2017 21:29
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8599671	2.79
Yttrium	R	998107	1024964	2.69

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772317.1 File : met10 method Time : 07-APR-2017 02:56
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4826	5000	4850	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7957909	-4.88
Yttrium	R	998107	1029257	3.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772319.1 File : met10 method Time : 07-APR-2017 03:02
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8519843	1.84
Yttrium	R	998107	1038723	4.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772322.1 File : met10 method Time : 07-APR-2017 03:11
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4566	5000	4799	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8003400	-4.33
Yttrium	R	998107	1023589	2.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772323.1 File : met10 method Time : 07-APR-2017 03:13
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8543601	2.12
Yttrium	R	998107	1050972	5.30

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/10/17 10:43	1.0		
002	met10 method	ICAL	L1			04/10/17 10:46	1.0	1	
003	met10 method	ICAL	L2			04/10/17 10:50	1.0	2	
004	met10 method	ICAL	L3			04/10/17 10:52	1.0	3	
005	met10 method	ICAL	L4			04/10/17 10:54	1.0	4	
006	met10 method	ICAL	L5			04/10/17 10:57	1.0	5	
007	met10 method	ICV				04/10/17 10:59	1.0	6	1:SR=4200000
008	met10 method	XCRI				04/10/17 11:02	1.0	7	
009	met10 method	CRI				04/10/17 11:06	1.0	7	1:SR=43000
010	met10 method	ICB				04/10/17 11:10	1.0		1:SR=1500
011	met10 method	ICSA				04/10/17 11:13	1.0	8	11:CA=550000
012	met10 method	XICSAB				04/10/17 11:29	1.0	9	6:SR=4500000
013	met10 method	XICSAB				04/10/17 11:37	1.0	9	6:SR=4500000
014	met10 method	ICSAB				04/10/17 11:41	1.0	9	6:SR=4100000
015	met10 method	CCV				04/10/17 11:44	1.0	10	1:SR=3000000
016	met10 method	CCB				04/10/17 11:47	1.0		1:SR=2900
017	met10 method	CCB				04/10/17 11:50	1.0		
018	met10 method	CCV				04/10/17 11:57	1.0	10	1:SR=4000000
019	met10 method	CCB				04/10/17 12:00	1.0		1:SR=2500
020	met10 method	CCB				04/10/17 12:03	1.0		1:SR=1700
021	met10 method	CCB				04/10/17 12:05	1.0		1:SR=1400
022	met10 method	X	RINSE			04/10/17 12:13	1.0		
023	met10 method	BLANK	QC880555	Soil	246422	04/10/17 12:16	1.0		1:SR=2200
024	met10 method	BS	QC880556	Soil	246422	04/10/17 12:20	1.0		1:SR=81000000
025	met10 method	BSD	QC880557	Soil	246422	04/10/17 12:22	1.0		1:SR=80000000
026	met10 method	MSS	287500-014	Soil	246422	04/10/17 12:25	1.0		5:SR=4900000
027	met10 method	MS	QC880558	Soil	246422	04/10/17 12:27	1.0		
028	met10 method	MSD	QC880559	Soil	246422	04/10/17 12:30	1.0		
029	met10 method	SAMPLE	287505-005	Soil	246422	04/10/17 12:33	1.0		3:SR=7800000
030	met10 method	SAMPLE	287505-010	Soil	246422	04/10/17 12:36	1.0		3:SR=9200000
031	met10 method	SAMPLE	287750-001	Soil	246422	04/10/17 12:38	1.0		6:SR=4800000
032	met10 method	CCV				04/10/17 12:41	1.0	10	1:SR=3900000
033	met10 method	XCCB				04/10/17 12:43	1.0		1:SR=3900
034	met10 method	CCB				04/10/17 12:46	1.0		1:SR=2400
035	met10 method	SAMPLE	287750-002	Soil	246422	04/10/17 12:49	1.0		6:SR=3800000
036	met10 method	SAMPLE	287750-003	Soil	246422	04/10/17 12:52	1.0		3:SR=3700000
037	met10 method	SAMPLE	287750-004	Soil	246422	04/10/17 12:55	1.0		4:SR=3600000
038	met10 method	SAMPLE	287750-005	Soil	246422	04/10/17 12:57	1.0		4:SR=2500000
039	met10 method	SAMPLE	287750-006	Soil	246422	04/10/17 13:00	1.0		7:SR=2400000
040	met10 method	SAMPLE	287750-007	Soil	246422	04/10/17 13:02	1.0		4:SR=4100000
041	met10 method	SAMPLE	287750-008	Soil	246422	04/10/17 13:05	1.0		3:SR=1500000
042	met10 method	SAMPLE	287750-009	Soil	246422	04/10/17 13:08	1.0		5:SR=5400000
043	met10 method	SAMPLE	287750-010	Soil	246422	04/10/17 13:10	1.0		6:SR=4800000
044	met10 method	SAMPLE	287750-011	Soil	246422	04/10/17 13:13	1.0		6:SR=4800000
045	met10 method	CCV				04/10/17 13:16	1.0	10	1:SR=4100000
046	met10 method	XCCB				04/10/17 13:18	1.0		1:SR=2500
047	met10 method	CCB				04/10/17 13:21	1.0		1:SR=1900
048	met10 method	SAMPLE	287750-012	Soil	246422	04/10/17 13:24	1.0		6:SR=3200000
049	met10 method	SER	QC880744	Soil	246422	04/10/17 13:27	5.0		
050	met10 method	PDS	QC880745	Soil	246422	04/10/17 13:29	1.0	11 12 13	6:SR=5500000
051	met10 method	X	RINSE			04/10/17 13:32	1.0		
052	met10 method	BLANK	QC880681	WET Leachate	246460	04/10/17 13:35	10.0		2:NA=170000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	BS	QC880682	WET Leachate	246460	04/10/17 13:39	1.0		1:SR=840000
054	met10 method	BSD	QC880683	WET Leachate	246460	04/10/17 13:41	1.0		1:SR=830000
055	met10 method	MSS	287505-005	WET Leachate	246460	04/10/17 13:44	10.0		2:SR=1100000
056	met10 method	MS	QC880684	WET Leachate	246460	04/10/17 13:46	10.0		
057	met10 method	MSD	QC880685	WET Leachate	246460	04/10/17 13:49	10.0		
058	met10 method	CCV				04/10/17 13:51	1.0	10	1:SR=4100000
059	met10 method	XCCB				04/10/17 13:54	1.0		1:SR=3000
060	met10 method	CCB				04/10/17 13:56	1.0		1:SR=1900
061	met10 method	SER	QC880686	WET Leachate	246460	04/10/17 14:00	50.0		
062	met10 method	PDS	QC880687	WET Leachate	246460	04/10/17 14:03	10.0	11 12 13	3:SR=2100000
063	met10 method	SAMPLE	287505-010	WET Leachate	246460	04/10/17 14:06	10.0		2:SR=1300000
064	met10 method	SAMPLE	287617-001	WET Leachate	246460	04/10/17 14:08	10.0		2:SR=450000
065	met10 method	SAMPLE	287625-001	WET Leachate	246460	04/10/17 14:11	10.0		2:SR=410000
066	met10 method	SAMPLE	287627-001	WET Leachate	246460	04/10/17 14:13	10.0		2:SR=380000
067	met10 method	SAMPLE	287627-002	WET Leachate	246460	04/10/17 14:16	10.0		2:SR=370000
068	met10 method	SAMPLE	287627-003	WET Leachate	246460	04/10/17 14:18	10.0		2:SR=430000
069	met10 method	SAMPLE	287627-004	WET Leachate	246460	04/10/17 14:20	10.0		2:SR=450000
070	met10 method	SAMPLE	287627-005	WET Leachate	246460	04/10/17 14:23	10.0		2:SR=420000
071	met10 method	CCV				04/10/17 14:25	1.0	10	1:SR=4100000
072	met10 method	XCCB				04/10/17 14:28	1.0		1:SR=1600
073	met10 method	CCB				04/10/17 14:31	1.0		
074	met10 method	SAMPLE	287627-006	WET Leachate	246460	04/10/17 14:34	10.0		2:SR=360000
075	met10 method	SAMPLE	287627-007	WET Leachate	246460	04/10/17 14:37	10.0		2:SR=460000
076	met10 method	SAMPLE	287627-008	WET Leachate	246460	04/10/17 14:39	10.0		2:SR=410000
077	met10 method	SAMPLE	287627-009	WET Leachate	246460	04/10/17 14:42	10.0		2:SR=430000
078	met10 method	SAMPLE	287627-010	WET Leachate	246460	04/10/17 14:44	10.0		2:SR=430000
079	met10 method	SAMPLE	287627-011	WET Leachate	246460	04/10/17 14:47	10.0		2:SR=440000
080	met10 method	SAMPLE	287627-012	WET Leachate	246460	04/10/17 14:49	10.0		2:SR=360000
081	met10 method	SAMPLE	287627-013	WET Leachate	246460	04/10/17 14:52	10.0		2:SR=390000
082	met10 method	SAMPLE	287627-014	WET Leachate	246460	04/10/17 14:54	10.0		2:SR=420000
083	met10 method	SAMPLE	287627-015	WET Leachate	246460	04/10/17 14:56	10.0		2:SR=440000
084	met10 method	CCV				04/10/17 14:59	1.0	10	1:SR=4100000
085	met10 method	XCCB				04/10/17 15:02	1.0		1:SR=1500
086	met10 method	CCB				04/10/17 15:04	1.0		1:SR=1700
087	met10 method	SAMPLE	287627-016	WET Leachate	246460	04/10/17 15:08	10.0		2:SR=450000
088	met10 method	X	RINSE			04/10/17 15:10	1.0		
089	met10 method	BLANK	QC880563	Soil	246424	04/10/17 15:14	1.0		1:SR=2300
090	met10 method	BS	QC880564	Soil	246424	04/10/17 15:17	1.0		1:SR=82000000
091	met10 method	BSD	QC880565	Soil	246424	04/10/17 15:19	1.0		1:SR=81000000
092	met10 method	MSS	287640-001	Soil	246424	04/10/17 15:22	1.0		2:SR=1600000
093	met10 method	MS	QC880566	Soil	246424	04/10/17 15:24	1.0		1:SR=84000000
094	met10 method	MSD	QC880567	Soil	246424	04/10/17 15:27	1.0		1:SR=82000000
095	met10 method	SER	QC880719	Soil	246424	04/10/17 15:29	5.0		
096	met10 method	PDS	QC880720	Soil	246424	04/10/17 15:32	1.0	11 12 13	4:SR=2600000
097	met10 method	CCV				04/10/17 15:34	1.0	10	1:SR=4100000
098	met10 method	XCCB				04/10/17 15:37	1.0		
099	met10 method	CCB				04/10/17 15:40	1.0		1:SR=1800
100	met10 method	SAMPLE	287759-001	Soil	246424	04/10/17 15:43	1.0		4:SR=8300000
101	met10 method	SAMPLE	287759-002	Soil	246424	04/10/17 15:46	1.0		4:SR=5800000
102	met10 method	X	RINSE			04/10/17 15:48	1.0		
103	met10 method	BLANK	QC880641	Soil	246450	04/10/17 15:51	1.0		1:SR=1800
104	met10 method	BS	QC880642	Soil	246450	04/10/17 15:55	1.0		1:SR=82000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BSD	QC880643	Soil	246450	04/10/17 15:57	1.0		1:SR=84000000
106	met10 method	MSS	287739-001	Soil	246450	04/10/17 16:00	1.0		6:SR=9300000
107	met10 method	MS	QC880644	Soil	246450	04/10/17 16:02	1.0		1:SR=86000000
108	met10 method	MSD	QC880645	Soil	246450	04/10/17 16:05	1.0		1:SR=87000000
109	met10 method	SER	QC880646	Soil	246450	04/10/17 16:07	5.0		
110	met10 method	CCV				04/10/17 16:10	1.0	10	1:SR=4100000
111	met10 method	XCCB				04/10/17 16:13	1.0		
112	met10 method	CCB				04/10/17 16:15	1.0		1:SR=1300
113	met10 method	PDS	QC880647	Soil	246450	04/10/17 16:19	1.0	11 12 13	7:SR=9500000
114	met10 method	SAMPLE	287805-001	Soil	246450	04/10/17 16:21	1.0		4:SR=2100000
115	met10 method	SAMPLE	287805-002	Soil	246450	04/10/17 16:24	1.0		4:SR=1900000
116	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 16:26	1.0		6:SR=1900000
117	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 16:29	1.0		4:SR=2500000
118	met10 method	SAMPLE	287805-005	Soil	246450	04/10/17 16:32	1.0		4:SR=3000000
119	met10 method	SAMPLE	287805-006	Soil	246450	04/10/17 16:34	1.0		3:SR=3100000
120	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 16:37	1.0		5:SR=2100000
121	met10 method	X	RINSE			04/10/17 16:39	1.0		
122	met10 method	BLANK	QC880688	WET Leachate	246461	04/10/17 16:43	10.0		2:NA=170000
123	met10 method	CCV				04/10/17 16:46	1.0	10	1:SR=4100000
124	met10 method	XCCB				04/10/17 16:50	1.0		1:SR=1600
125	met10 method	CCB				04/10/17 16:53	1.0		1:SR=1600
126	met10 method	X	RINSE			04/10/17 17:00	1.0		
127	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 17:03	100.0		1:SR=18000
128	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 17:05	100.0		1:SR=22000
129	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 17:08	1.0		4:SR=2600000
130	met10 method	BS	QC880689	WET Leachate	246461	04/10/17 17:11	1.0		1:SR=840000
131	met10 method	BSD	QC880690	WET Leachate	246461	04/10/17 17:13	1.0		1:SR=860000
132	met10 method	MSS	287762-001	WET Leachate	246461	04/10/17 17:15	10.0		2:SR=300000
133	met10 method	MS	QC880691	WET Leachate	246461	04/10/17 17:18	10.0		
134	met10 method	MSD	QC880692	WET Leachate	246461	04/10/17 17:21	10.0		
135	met10 method	PDS	QC880745	Soil	246422	04/10/17 17:23	1.0	11 12 13	
136	met10 method	CCV				04/10/17 17:26	1.0	10	1:SR=4200000
137	met10 method	CCB				04/10/17 17:29	1.0		1:SR=2800
138	met10 method	CCB				04/10/17 17:31	1.0		
139	met10 method	BLANK	QC878606	Water	245945	04/10/17 17:35	1.0		
140	met10 method	BS	QC878607	Water	245945	04/10/17 17:38	1.0		1:SR=900000
141	met10 method	BSD	QC878608	Water	245945	04/10/17 17:40	1.0		1:SR=900000
142	met10 method	SAMPLE	287283-001	Water	245945	04/10/17 17:43	1.0		5:SR=49000000
143	met10 method	SAMPLE	287283-002	Water	245945	04/10/17 17:45	1.0		5:SR=32000000
144	met10 method	SAMPLE	287283-004	Water	245945	04/10/17 17:49	1.0		7:SR=79000000
145	met10 method	SAMPLE	287283-005	Water	245945	04/10/17 17:51	1.0		5:SR=66000000
146	met10 method	SAMPLE	287343-001	Water	245945	04/10/17 17:54	1.0		5:SR=63000000
147	met10 method	SAMPLE	287343-002	Water	245945	04/10/17 17:56	1.0		2:SR=6100000
148	met10 method	SAMPLE	287077-035	SPLP Leachate	246105	04/10/17 17:59	1.0		1:SR=31000
149	met10 method	CCV				04/10/17 18:01	1.0	10	1:SR=4100000
150	met10 method	XCCB				04/10/17 18:04	1.0		1:SR=2900
151	met10 method	CCB				04/10/17 18:07	1.0		1:SR=3800
152	met10 method	X	RINSE			04/10/17 18:10	1.0		
153	met10 method	BLANK	QC879918	Water	246267	04/10/17 18:13	1.0		1:SR=3800
154	met10 method	BS	QC879919	Water	246267	04/10/17 18:17	1.0		1:SR=870000
155	met10 method	BSD	QC879920	Water	246267	04/10/17 18:19	1.0		1:SR=870000
156	met10 method	MSS	287440-001	Water	246267	04/10/17 18:21	1.0		1:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	MS	QC879921	Water	246267	04/10/17 18:25	1.0		
158	met10 method	MSD	QC879922	Water	246267	04/10/17 18:27	1.0		
159	met10 method	MSS	287440-001	Water	246267	04/10/17 18:29	1.0		2:SR=370000
160	met10 method	BS	QC879457	Water	246155	04/10/17 18:32	1.0		1:SR=850000
161	met10 method	BSD	QC879458	Water	246155	04/10/17 18:34	1.0		1:SR=840000
162	met10 method	CCV				04/10/17 18:37	1.0	10	1:SR=4100000
163	met10 method	XCCB				04/10/17 18:39	1.0		1:SR=3400
164	met10 method	CCB				04/10/17 18:42	1.0		1:SR=4000
165	met10 method	MSS	287365-001	Water	246155	04/10/17 18:45	1.0		1:SR=510000
166	met10 method	MS	QC879459	Water	246155	04/10/17 18:48	1.0		
167	met10 method	MSD	QC879460	Water	246155	04/10/17 18:50	1.0		
168	met10 method	SAMPLE	287348-001	Water	246155	04/10/17 18:53	1.0		1:SR=900000
169	met10 method	SAMPLE	287365-002	Water	246155	04/10/17 18:55	1.0		1:SR=55000
170	met10 method	SAMPLE	287365-003	Water	246155	04/10/17 18:58	1.0		1:SR=130000
171	met10 method	SAMPLE	287365-005	Water	246155	04/10/17 19:02	1.0		1:SR=68000
172	met10 method	SAMPLE	287365-006	Water	246155	04/10/17 19:04	1.0		1:SR=100000
173	met10 method	SAMPLE	287365-007	Water	246155	04/10/17 19:07	1.0		1:SR=160000
174	met10 method	SAMPLE	287365-008	Water	246155	04/10/17 19:09	1.0		1:SR=120000
175	met10 method	CCV				04/10/17 19:11	1.0	10	1:SR=4100000
176	met10 method	CCB				04/10/17 19:14	1.0		1:SR=3700
177	met10 method	CCB				04/10/17 19:17	1.0		
178	met10 method	SAMPLE	287365-009	Water	246155	04/10/17 19:21	1.0		1:SR=82000
179	met10 method	SAMPLE	287365-010	Water	246155	04/10/17 19:24	1.0		1:SR=140000
180	met10 method	SAMPLE	287365-011	Water	246155	04/10/17 19:26	1.0		1:SR=62000
181	met10 method	SAMPLE	287365-012	Water	246155	04/10/17 19:28	1.0		1:SR=110000
182	met10 method	MSS	287252-028	Soil	246272	04/10/17 19:31	1.0		6:SR=4400000
183	met10 method	SAMPLE	287252-029	Soil	246272	04/10/17 19:34	1.0		6:SR=5500000
184	met10 method	SAMPLE	287675-003	Soil	246450	04/10/17 19:36	1.0		4:SR=2900000
185	met10 method	SAMPLE	287675-004	Soil	246450	04/10/17 19:39	1.0		3:SR=3500000
186	met10 method	SAMPLE	287676-001	Soil	246450	04/10/17 19:42	1.0		3:SR=2200000
187	met10 method	SAMPLE	287713-001	Soil	246450	04/10/17 19:44	1.0		5:SR=5500000
188	met10 method	CCV				04/10/17 19:47	1.0	10	1:SR=4100000
189	met10 method	CCB				04/10/17 19:50	1.0		1:SR=3600
190	met10 method	CCB				04/10/17 19:52	1.0		1:SR=3100
191	met10 method	SAMPLE	287739-002	Soil	246450	04/10/17 19:56	1.0		7:SR=9600000
192	met10 method	SAMPLE	287753-001	Soil	246450	04/10/17 19:58	1.0		4:SR=9700000
193	met10 method	SAMPLE	287761-005	Soil	246450	04/10/17 20:01	1.0		5:SR=7500000
194	met10 method	SAMPLE	287761-010	Soil	246450	04/10/17 20:04	1.0		4:SR=3200000
195	met10 method	SAMPLE	287761-015	Soil	246450	04/10/17 20:07	1.0		5:SR=6200000
196	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/10/17 20:09	10.0		2:NA=180000
197	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/10/17 20:12	10.0		2:NA=170000
198	met10 method	SAMPLE	287634-001	WET Leachate	246461	04/10/17 20:15	10.0		2:SR=3000000
199	met10 method	SAMPLE	287634-002	WET Leachate	246461	04/10/17 20:17	10.0		2:SR=750000
200	met10 method	SAMPLE	287634-003	WET Leachate	246461	04/10/17 20:20	10.0		2:SR=950000
201	met10 method	CCV				04/10/17 20:22	1.0	10	1:SR=4100000
202	met10 method	CCB				04/10/17 20:25	1.0		1:SR=3200
203	met10 method	CCB				04/10/17 20:30	1.0		1:SR=3500
204	met10 method	SAMPLE	287634-004	WET Leachate	246461	04/10/17 20:33	10.0		2:SR=390000
205	met10 method	SAMPLE	287634-005	WET Leachate	246461	04/10/17 20:36	10.0		2:SR=730000
206	met10 method	SAMPLE	287634-006	WET Leachate	246461	04/10/17 20:38	10.0		2:SR=400000
207	met10 method	SAMPLE	287634-007	WET Leachate	246461	04/10/17 20:41	10.0		2:SR=630000
208	met10 method	SAMPLE	287634-008	WET Leachate	246461	04/10/17 20:43	10.0		2:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287634-009	WET Leachate	246461	04/10/17 20:46	10.0		2:SR=2100000
210	met10 method	SAMPLE	287634-010	WET Leachate	246461	04/10/17 20:48	10.0		2:SR=600000
211	met10 method	SAMPLE	287634-011	WET Leachate	246461	04/10/17 20:51	10.0		2:SR=1100000
212	met10 method	SAMPLE	287634-012	WET Leachate	246461	04/10/17 20:53	10.0		2:SR=560000
213	met10 method	SAMPLE	287634-013	WET Leachate	246461	04/10/17 20:56	10.0		2:SR=1100000
214	met10 method	CCV				04/10/17 20:58	1.0	10	1:SR=4100000
215	met10 method	CCB				04/10/17 21:01	1.0		1:SR=3900
216	met10 method	CCB				04/10/17 21:04	1.0		1:SR=3000
217	met10 method	SAMPLE	287753-001	WET Leachate	246461	04/10/17 21:07	10.0		2:SR=690000
218	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:10	100.0		1:SR=120000
219	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:12	1.0		7:SR=12000000
220	met10 method	X	RINSE			04/10/17 21:15	1.0		
221	met10 method	SAMPLE	287640-003	Soil	246424	04/10/17 21:18	1.0		5:SR=4200000
222	met10 method	SAMPLE	287640-004	Soil	246424	04/10/17 21:21	1.0		5:SR=4100000
223	met10 method	SAMPLE	287640-005	Soil	246424	04/10/17 21:24	1.0		5:SR=4200000
224	met10 method	SAMPLE	287640-006	Soil	246424	04/10/17 21:27	1.0		5:SR=4000000
225	met10 method	CCV				04/10/17 21:29	1.0	10	1:SR=4000000
226	met10 method	CCB				04/10/17 21:32	1.0		1:SR=3600
227	met10 method	CCB				04/10/17 21:35	1.0		1:SR=3600
228	met10 method	X	RINSE			04/10/17 21:40	1.0		
229	met10 method	BLANK	QC880768	Soil	246479	04/10/17 21:44	1.0		1:SR=3600
230	met10 method	BS	QC880769	Soil	246479	04/10/17 21:47	1.0		1:SR=81000000
231	met10 method	BSD	QC880770	Soil	246479	04/10/17 21:50	1.0		1:SR=80000000
232	met10 method	MSS	287740-001	Soil	246479	04/10/17 21:52	1.0		6:SR=7400000
233	met10 method	MS	QC880771	Soil	246479	04/10/17 21:55	1.0		1:SR=83000000
234	met10 method	MSD	QC880772	Soil	246479	04/10/17 21:57	1.0		1:SR=89000000
235	met10 method	SAMPLE	287525-001	Miscell.	246479	04/10/17 22:00	1.0		1:SR=180000
236	met10 method	SAMPLE	287526-001	Miscell.	246479	04/10/17 22:02	1.0		2:SR=1800000
237	met10 method	SAMPLE	287683-005	Soil	246479	04/10/17 22:06	1.0		3:SR=2900000
238	met10 method	CCV				04/10/17 22:08	1.0	10	1:SR=4000000
239	met10 method	CCB				04/10/17 22:11	1.0		1:SR=4000
240	met10 method	CCB				04/10/17 22:14	1.0		1:SR=3400
241	met10 method	SAMPLE	287756-001	Soil	246479	04/10/17 22:17	1.0		4:SR=1400000
242	met10 method	SAMPLE	287756-002	Soil	246479	04/10/17 22:20	1.0		6:SR=2900000
243	met10 method	SAMPLE	287756-003	Soil	246479	04/10/17 22:22	1.0		4:SR=1700000
244	met10 method	SAMPLE	287756-004	Soil	246479	04/10/17 22:25	1.0		4:SR=1200000
245	met10 method	SAMPLE	287756-005	Soil	246479	04/10/17 22:28	1.0		6:SR=3200000
246	met10 method	SAMPLE	287756-006	Soil	246479	04/10/17 22:30	1.0		5:SR=2300000
247	met10 method	SAMPLE	287756-007	Soil	246479	04/10/17 22:33	1.0		6:SR=3500000
248	met10 method	SAMPLE	287756-008	Soil	246479	04/10/17 22:36	1.0		5:SR=6600000
249	met10 method	SAMPLE	287795-001	Soil	246479	04/10/17 22:38	1.0		4:SR=2900000
250	met10 method	SAMPLE	287795-002	Soil	246479	04/10/17 22:41	1.0		4:SR=3100000
251	met10 method	CCV				04/10/17 22:43	1.0	10	1:SR=4000000
252	met10 method	CCB				04/10/17 22:46	1.0		1:SR=3800
253	met10 method	CCB				04/10/17 22:49	1.0		1:SR=4000
254	met10 method	X	RINSE			04/10/17 22:52	1.0		
255	met10 method	BLANK	QC880498	Water	246408	04/10/17 22:56	1.0		1:SR=3800
256	met10 method	BS	QC880499	Water	246408	04/10/17 22:59	1.0		1:SR=840000
257	met10 method	BSD	QC880500	Water	246408	04/10/17 23:01	1.0		1:SR=830000
258	met10 method	MSS	287612-001	Water	246408	04/10/17 23:04	1.0		1:SR=1400000
259	met10 method	MS	QC880501	Water	246408	04/10/17 23:07	1.0		
260	met10 method	MSD	QC880502	Water	246408	04/10/17 23:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287612-002	Water	246408	04/10/17 23:12	1.0		1:SR=1400000
262	met10 method	SAMPLE	287648-001	Water	246408	04/10/17 23:15	1.0		5:SR=8000000
263	met10 method	SAMPLE	287648-002	Water	246408	04/10/17 23:18	1.0		4:SR=11000000
264	met10 method	CCV				04/10/17 23:21	1.0	10	1:SR=4100000
265	met10 method	CCB				04/10/17 23:24	1.0		1:SR=3100
266	met10 method	CCB				04/10/17 23:27	1.0		1:SR=2600
267	met10 method	SAMPLE	287648-003	Water	246408	04/10/17 23:30	1.0		4:SR=18000000
268	met10 method	SAMPLE	287648-004	Water	246408	04/10/17 23:34	1.0		5:SR=13000000
269	met10 method	SAMPLE	287648-005	Water	246408	04/10/17 23:37	1.0		5:SR=12000000
270	met10 method	SAMPLE	287648-006	Water	246408	04/10/17 23:40	1.0		4:SR=18000000
271	met10 method	SAMPLE	287654-001	Water	246408	04/10/17 23:44	1.0		4:SR=3800000
272	met10 method	SAMPLE	287662-001	Water	246408	04/10/17 23:47	1.0		4:SR=27000000
273	met10 method	SAMPLE	287662-002	Water	246408	04/10/17 23:50	1.0		5:SR=17000000
274	met10 method	SAMPLE	287662-003	Water	246408	04/10/17 23:53	1.0		4:SR=19000000
275	met10 method	SAMPLE	287662-004	Water	246408	04/10/17 23:57	1.0		4:SR=23000000
276	met10 method	SAMPLE	287662-006	Water	246408	04/10/17 23:59	1.0		1:SR=4500
277	met10 method	CCV				04/11/17 00:02	1.0	10	1:SR=4100000
278	met10 method	CCB				04/11/17 00:05	1.0		1:SR=3200
279	met10 method	CCB				04/11/17 00:08	1.0		1:SR=3000
280	met10 method	X	RINSE			04/11/17 00:11	1.0		
281	met10 method	BLANK	QC880630	Water	246447	04/11/17 00:15	1.0		1:SR=1500
282	met10 method	BS	QC880631	Water	246447	04/11/17 00:18	1.0		1:SR=830000
283	met10 method	BSD	QC880632	Water	246447	04/11/17 00:20	1.0		1:SR=820000
284	met10 method	MSS	287646-001	Water	246447	04/11/17 00:23	1.0		1:SR=1500000
285	met10 method	MS	QC880633	Water	246447	04/11/17 00:25	1.0		
286	met10 method	MSD	QC880634	Water	246447	04/11/17 00:28	1.0		
287	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 00:30	1.0		1:SR=13000
288	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 00:33	1.0		1:SR=22000
289	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 00:37	1.0		1:SR=36000
290	met10 method	CCV				04/11/17 00:40	1.0	10	1:SR=4200000
291	met10 method	XCCB				04/11/17 00:43	1.0		1:SR=2800
292	met10 method	CCB				04/11/17 00:46	1.0		1:SR=3200
293	met10 method	XSAMPLE	275868-047	Water	246447	04/11/17 00:49	1.0		
294	met10 method	XSAMPLE	287717-004	Water	246447	04/11/17 00:52	1.0		
295	met10 method	XSAMPLE	287786-001	Water	246447	04/11/17 00:55	1.0		
296	met10 method	XSAMPLE	287789-001	Water	246447	04/11/17 00:59	1.0		
297	met10 method	XSAMPLE	287791-002	Water	246447	04/11/17 01:02	1.0		
298	met10 method	XSAMPLE	287791-003	Water	246447	04/11/17 01:05	1.0		
299	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 01:18	1.0		1:SR=83000
300	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 01:21	1.0		2:SR=3200000
301	met10 method	SAMPLE	287786-001	Water	246447	04/11/17 01:24	1.0		1:SR=310000
302	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 01:26	1.0		4:SR=10000000
303	met10 method	CCV				04/11/17 01:30	1.0	10	1:SR=4100000
304	met10 method	XCCB				04/11/17 01:32	1.0		1:SR=3000
305	met10 method	CCB				04/11/17 01:35	1.0		1:SR=2900
306	met10 method	SAMPLE	287791-002	Water	246447	04/11/17 01:38	1.0		1:SR=680000
307	met10 method	SAMPLE	287791-003	Water	246447	04/11/17 01:41	1.0		1:SR=670000
308	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 01:43	1.0		1:SR=280000
309	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 01:47	1.0		1:SR=1200000
310	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 01:50	1.0		2:SR=550000
311	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 01:53	1.0		2:SR=7500000
312	met10 method	X	RINSE			04/11/17 01:56	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	BLANK	QC880667	SPLP Leachate	246458	04/11/17 01:59	1.0		1:SR=3300
314	met10 method	BS	QC880668	SPLP Leachate	246458	04/11/17 02:02	1.0		1:SR=860000
315	met10 method	BSD	QC880669	SPLP Leachate	246458	04/11/17 02:05	1.0		1:SR=850000
316	met10 method	CCV				04/11/17 02:07	1.0	10	1:SR=4100000
317	met10 method	XCCB				04/11/17 02:10	1.0		1:SR=3100
318	met10 method	CCB				04/11/17 02:13	1.0		1:SR=3200
319	met10 method	MSS	287252-028	SPLP Leachate	246458	04/11/17 02:16	1.0		1:SR=8100
320	met10 method	MS	QC880670	SPLP Leachate	246458	04/11/17 02:20	1.0		
321	met10 method	MSD	QC880671	SPLP Leachate	246458	04/11/17 02:22	1.0		
322	met10 method	SER	QC880672	SPLP Leachate	246458	04/11/17 02:24	5.0		
323	met10 method	PDS	QC880673	SPLP Leachate	246458	04/11/17 02:28	1.0	11 14 13	2:SR=970000
324	met10 method	SAMPLE	287252-012	SPLP Leachate	246458	04/11/17 02:30	1.0		1:SR=8400
325	met10 method	SAMPLE	287252-013	SPLP Leachate	246458	04/11/17 02:33	1.0		1:SR=7100
326	met10 method	SAMPLE	287252-014	SPLP Leachate	246458	04/11/17 02:37	1.0		1:SR=2500
327	met10 method	SAMPLE	287252-015	SPLP Leachate	246458	04/11/17 02:40	1.0		1:SR=4000
328	met10 method	SAMPLE	287252-016	SPLP Leachate	246458	04/11/17 02:43	1.0		1:SR=3700
329	met10 method	CCV				04/11/17 02:46	1.0	10	1:SR=4100000
330	met10 method	XCCB				04/11/17 02:49	1.0		1:SR=2300
331	met10 method	CCB				04/11/17 02:52	1.0		1:SR=2600
332	met10 method	SAMPLE	287252-017	SPLP Leachate	246458	04/11/17 02:55	1.0		1:SR=1600
333	met10 method	SAMPLE	287252-018	SPLP Leachate	246458	04/11/17 02:59	1.0		1:SR=2000
334	met10 method	SAMPLE	287252-019	SPLP Leachate	246458	04/11/17 03:02	1.0		1:SR=4300
335	met10 method	SAMPLE	287252-020	SPLP Leachate	246458	04/11/17 03:05	1.0		1:SR=5200
336	met10 method	SAMPLE	287252-021	SPLP Leachate	246458	04/11/17 03:08	1.0		1:SR=2800
337	met10 method	SAMPLE	287252-022	SPLP Leachate	246458	04/11/17 03:12	1.0		1:SR=2300
338	met10 method	SAMPLE	287252-023	SPLP Leachate	246458	04/11/17 03:15	1.0		1:SR=3200
339	met10 method	SAMPLE	287252-024	SPLP Leachate	246458	04/11/17 03:18	1.0		1:SR=11000
340	met10 method	SAMPLE	287252-025	SPLP Leachate	246458	04/11/17 03:21	1.0		1:SR=6100
341	met10 method	SAMPLE	287252-026	SPLP Leachate	246458	04/11/17 03:24	1.0		1:SR=15000
342	met10 method	CCV				04/11/17 03:26	1.0	10	1:SR=4200000
343	met10 method	XCCB				04/11/17 03:29	1.0		1:SR=2700
344	met10 method	CCB				04/11/17 03:32	1.0		1:SR=2300
345	met10 method	SAMPLE	287252-027	SPLP Leachate	246458	04/11/17 03:35	1.0		1:SR=9300
346	met10 method	SAMPLE	287252-029	SPLP Leachate	246458	04/11/17 03:37	1.0		1:SR=18000
347	met10 method	SAMPLE	287252-030	SPLP Leachate	246458	04/11/17 03:40	1.0		1:SR=16000
348	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 03:42	1.0		1:SR=18000
349	met10 method	X	RINSE			04/11/17 03:45	1.0		
350	met10 method	BLANK	QC880674	SPLP Leachate	246459	04/11/17 03:48	1.0		1:SR=2800
351	met10 method	BS	QC880675	SPLP Leachate	246459	04/11/17 03:51	1.0		1:SR=850000
352	met10 method	BSD	QC880676	SPLP Leachate	246459	04/11/17 03:54	1.0		1:SR=860000
353	met10 method	MSS	287252-032	SPLP Leachate	246459	04/11/17 03:56	1.0		1:SR=8700
354	met10 method	MS	QC880677	SPLP Leachate	246459	04/11/17 03:59	1.0		
355	met10 method	CCV				04/11/17 04:01	1.0	10	1:SR=4100000
356	met10 method	XCCB				04/11/17 04:04	1.0		1:SR=2500
357	met10 method	CCB				04/11/17 04:07	1.0		1:SR=2700
358	met10 method	MSD	QC880678	SPLP Leachate	246459	04/11/17 04:10	1.0		
359	met10 method	SER	QC880679	SPLP Leachate	246459	04/11/17 04:12	5.0		
360	met10 method	PDS	QC880680	SPLP Leachate	246459	04/11/17 04:16	1.0	11 12 13	1:SR=980000
361	met10 method	SAMPLE	287252-033	SPLP Leachate	246459	04/11/17 04:18	1.0		1:SR=13000
362	met10 method	SAMPLE	287252-034	SPLP Leachate	246459	04/11/17 04:20	1.0		1:SR=12000
363	met10 method	SAMPLE	287252-035	SPLP Leachate	246459	04/11/17 04:23	1.0		1:SR=4200
364	met10 method	SAMPLE	287252-036	SPLP Leachate	246459	04/11/17 04:26	1.0		1:SR=2200

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	SAMPLE	287252-037	SPLP Leachate	246459	04/11/17 04:29	1.0		1:SR=3200
366	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 04:33	1.0		1:SR=8200
367	met10 method	SAMPLE	287252-039	SPLP Leachate	246459	04/11/17 04:35	1.0		1:SR=7800
368	met10 method	CCV				04/11/17 04:38	1.0	10	1:SR=4100000
369	met10 method	XCCB				04/11/17 04:41	1.0		1:SR=2400
370	met10 method	CCB				04/11/17 04:44	1.0		1:SR=1500
371	met10 method	SAMPLE	287252-040	SPLP Leachate	246459	04/11/17 04:47	1.0		1:SR=3100
372	met10 method	SAMPLE	287252-041	SPLP Leachate	246459	04/11/17 04:50	1.0		1:SR=7700
373	met10 method	SAMPLE	287252-042	SPLP Leachate	246459	04/11/17 04:53	1.0		1:SR=5100
374	met10 method	SAMPLE	287252-043	SPLP Leachate	246459	04/11/17 04:56	1.0		1:SR=7100
375	met10 method	SAMPLE	287252-044	SPLP Leachate	246459	04/11/17 04:59	1.0		1:SR=3600
376	met10 method	SAMPLE	287252-045	SPLP Leachate	246459	04/11/17 05:03	1.0		1:SR=7300
377	met10 method	X	RINSE			04/11/17 05:06	1.0		
378	met10 method	BLANK	QC879419	SPLP Leachate	246147	04/11/17 05:09	1.0		
379	met10 method	BS	QC879420	SPLP Leachate	246147	04/11/17 05:13	1.0		1:SR=860000
380	met10 method	BSD	QC879421	SPLP Leachate	246147	04/11/17 05:15	1.0		1:SR=860000
381	met10 method	CCV				04/11/17 05:17	1.0	10	1:SR=4100000
382	met10 method	XCCB				04/11/17 05:20	1.0		1:SR=2100
383	met10 method	CCB				04/11/17 05:23	1.0		1:SR=1600
384	met10 method	MSS	287077-042	SPLP Leachate	246147	04/11/17 05:27	1.0		1:SR=5200
385	met10 method	MS	QC879422	SPLP Leachate	246147	04/11/17 05:29	1.0		
386	met10 method	MSD	QC879423	SPLP Leachate	246147	04/11/17 05:31	1.0		
387	met10 method	SER	QC879424	SPLP Leachate	246147	04/11/17 05:34	5.0		
388	met10 method	PDS	QC879425	SPLP Leachate	246147	04/11/17 05:37	1.0	11 12 13	2:SR=960000
389	met10 method	SAMPLE	287077-041	SPLP Leachate	246147	04/11/17 05:40	1.0		1:SR=11000
390	met10 method	SAMPLE	287077-043	SPLP Leachate	246147	04/11/17 05:42	1.0		1:SR=4100
391	met10 method	SAMPLE	287077-044	SPLP Leachate	246147	04/11/17 05:45	1.0		1:SR=2200
392	met10 method	SAMPLE	287077-045	SPLP Leachate	246147	04/11/17 05:48	1.0		1:SR=8400
393	met10 method	SAMPLE	287077-046	SPLP Leachate	246147	04/11/17 05:51	1.0		1:SR=4400
394	met10 method	CCV				04/11/17 05:53	1.0	10	1:SR=4100000
395	met10 method	CCB				04/11/17 05:56	1.0		1:SR=2100
396	met10 method	CCB				04/11/17 05:59	1.0		1:SR=1600
397	met10 method	SAMPLE	287077-047	SPLP Leachate	246147	04/11/17 06:02	1.0		1:SR=15000
398	met10 method	SAMPLE	287077-048	SPLP Leachate	246147	04/11/17 06:04	1.0		1:SR=1900
399	met10 method	SAMPLE	287077-049	SPLP Leachate	246147	04/11/17 06:07	1.0		1:SR=3900
400	met10 method	SAMPLE	287077-050	SPLP Leachate	246147	04/11/17 06:11	1.0		1:SR=6900
401	met10 method	SAMPLE	287082-001	SPLP Leachate	246147	04/11/17 06:14	1.0		1:SR=11000
402	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 06:16	1.0		1:SR=16000
403	met10 method	SAMPLE	287082-003	SPLP Leachate	246147	04/11/17 06:19	1.0		1:SR=11000
404	met10 method	SAMPLE	287082-004	SPLP Leachate	246147	04/11/17 06:21	1.0		1:SR=15000
405	met10 method	SAMPLE	287082-005	SPLP Leachate	246147	04/11/17 06:23	1.0		1:SR=2600
406	met10 method	SAMPLE	287082-006	SPLP Leachate	246147	04/11/17 06:27	1.0		1:SR=4100
407	met10 method	CCV				04/11/17 06:30	1.0	10	1:SR=4200000
408	met10 method	CCB				04/11/17 06:33	1.0		1:SR=1400
409	met10 method	CCB				04/11/17 06:35	1.0		1:SR=4100
410	met10 method	SAMPLE	287082-007	SPLP Leachate	246147	04/11/17 06:39	1.0		1:SR=4600
411	met10 method	SAMPLE	287082-008	SPLP Leachate	246147	04/11/17 06:42	1.0		1:SR=13000
412	met10 method	SAMPLE	287082-009	SPLP Leachate	246147	04/11/17 06:44	1.0		1:SR=6800
413	met10 method	SAMPLE	287082-010	SPLP Leachate	246147	04/11/17 06:48	1.0		1:SR=2700
414	met10 method	CCV				04/11/17 06:51	1.0	10	1:SR=4100000
415	met10 method	CCB				04/11/17 06:54	1.0		1:SR=3600
416	met10 method	CCB				04/11/17 06:57	1.0		1:SR=2000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

TLO 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

MNA 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 39 through 179.

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 180 through 416.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S2984

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
		ICAL STD	6893796	894629
		LOWER LIMIT	2068139	268389
		UPPER LIMIT	8272555	1073554
010	ICB		7043252	902935
011	ICSA		5743386	790346
014	ICSAB		5730121	787134
026	MSS	287500-014	6222165	827217
136	CCV		6608958	875081
138	CCB		7089613	906239
142	SAMPLE	287283-001	4070897	666319
143	SAMPLE	287283-002	4408531	718213
144	SAMPLE	287283-004	3275466	580533
145	SAMPLE	287283-005	3704856	627479
146	SAMPLE	287343-001	3785585	644515
147	SAMPLE	287343-002	5926080	841314
148	SAMPLE	287077-035	7064849	940445
149	CCV		6760096	901935
151	CCB		7260707	929185
182	MSS	287252-028	6391232	849181
183	SAMPLE	287252-029	6498493	866630
258	MSS	287612-001	6929197	919197
261	SAMPLE	287612-002	6976654	893243
303	CCV		6643608	879771
305	CCB		7249370	918757
316	CCV		6788683	881121
318	CCB		7289723	914834
319	MSS	287252-028	7161428	916775
324	SAMPLE	287252-012	7135749	914940
325	SAMPLE	287252-013	7111697	934358
326	SAMPLE	287252-014	7185108	907684
327	SAMPLE	287252-015	7046711	912503
328	SAMPLE	287252-016	7095052	913710
329	CCV		6787983	894586
331	CCB		7245194	912872
332	SAMPLE	287252-017	7181880	909689
333	SAMPLE	287252-018	7198298	914174
334	SAMPLE	287252-019	7064917	910020
335	SAMPLE	287252-020	7028486	898766
336	SAMPLE	287252-021	7032263	917271
337	SAMPLE	287252-022	7193492	916449
338	SAMPLE	287252-023	7166386	913195
339	SAMPLE	287252-024	7060885	907734
340	SAMPLE	287252-025	6973892	898952
341	SAMPLE	287252-026	7037041	915699
342	CCV		6722983	884426
344	CCB		7295180	908343
345	SAMPLE	287252-027	7038991	896336
346	SAMPLE	287252-029	6905896	906263
347	SAMPLE	287252-030	6901632	900753
348	SAMPLE	287252-031	7011126	918215
353	MSS	287252-032	7046126	897140

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
355	CCV		6757315	879863
357	CCB		7280217	1448223 *
361	SAMPLE	287252-033	7053441	903655
362	SAMPLE	287252-034	7113006	911191
363	SAMPLE	287252-035	7025231	906081
364	SAMPLE	287252-036	7132409	906791
365	SAMPLE	287252-037	7039334	907372
366	SAMPLE	287252-038	7019741	906154
367	SAMPLE	287252-039	7022379	929128
368	CCV		6713915	885954
370	CCB		7261927	909081
371	SAMPLE	287252-040	7070499	916369
372	SAMPLE	287252-041	6982779	910174
373	SAMPLE	287252-042	7063940	913724
374	SAMPLE	287252-043	7090356	917091
375	SAMPLE	287252-044	7064037	912598
376	SAMPLE	287252-045	7026920	906171
378	BLANK	QC879419	7200002	900389
379	BS	QC879420	6822357	898277
380	BSD	QC879421	6840156	893266
381	CCV		6692776	881951
383	CCB		7211687	917171
384	MSS	287077-042	6945336	899941
385	MS	QC879422	6810328	899139
386	MSD	QC879423	6823435	894533
387	SER	QC879424	7115946	902111
388	PDS	QC879425	6803293	887555
389	SAMPLE	287077-041	6893137	902582
390	SAMPLE	287077-043	7038623	908955
391	SAMPLE	287077-044	7049050	916748
392	SAMPLE	287077-045	6917071	901614
393	SAMPLE	287077-046	7009637	907650
394	CCV		6700561	880033
395	CCB		7180352	904417
396	CCB		7177217	910965
397	SAMPLE	287077-047	6948027	907765
398	SAMPLE	287077-048	7033836	896098
399	SAMPLE	287077-049	7109813	912783
400	SAMPLE	287077-050	7040727	899845
401	SAMPLE	287082-001	7008624	905926
402	SAMPLE	287082-002	6842413	898506
403	SAMPLE	287082-003	6883302	904317
404	SAMPLE	287082-004	6855780	900188
405	SAMPLE	287082-005	7066526	907352
406	SAMPLE	287082-006	7048392	920676
407	CCV		6637853	874780
408	CCB		7171323	909012
409	CCB		7232267	1017791
410	SAMPLE	287082-007	6899545	898826
411	SAMPLE	287082-008	6997736	907867
412	SAMPLE	287082-009	6916676	906767
413	SAMPLE	287082-010	6949148	905579

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
414	CCV		6663915	877646
415	CCB		7178495	922096

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287082 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087144643001
Units : ug/L

Date : 10-APR-2017 10:43
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087144643002	L1	10-APR-2017 10:46	S32578
L2	met10 method	1087144643003	L2	10-APR-2017 10:50	S32571
L3	met10 method	1087144643004	L3	10-APR-2017 10:52	S32367
L4	met10 method	1087144643005	L4	10-APR-2017 10:54	S32368
L5	met10 method	1087144643006	L5	10-APR-2017 10:57	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	1.9600	2.0120	2.1588	1.9567		LOR0	0.00000	0.51054		2.0219	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	0	100.00	3	1000.0	10	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287082 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087144643001 Cal Date : 10-APR-2017

ICV 1087144643007 (10-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4912	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643009.2 File : met10 method Time : 10-APR-2017 11:06
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.664	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6971685	1.13
Yttrium	R	894629	898388	0.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643010.2 File : met10 method Time : 10-APR-2017 11:10
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7043252	2.17
Yttrium	R	894629	902935	0.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643011.2 File : met10 method Time : 10-APR-2017 11:13
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[4.390]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19420	ug/L	97	
Copper	A	20000	23100	ug/L	115	
Manganese	A	20000	18930	ug/L	95	
Nickel	A	20000	17170	ug/L	86	
Titanium	A	20000	19750	ug/L	99	
Vanadium	A	20000	22020	ug/L	110	
Aluminum	R	500000	547000	ug/L	109	
Calcium	R	500000	549300	ug/L	110	
Iron	R	200000	209000	ug/L	105	
Magnesium	R	500000	459900	ug/L	92	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5743386	-16.69
Yttrium	R	894629	790346	-11.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643014.2 File : met10 method Time : 10-APR-2017 11:41
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	919.9	ug/L	-8	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5730121	-16.88
Yttrium	R	894629	787134	-12.02

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643368.1 File : met10 method Time : 11-APR-2017 04:38
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9035	5000	4859	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6713915	-2.61
Yttrium	R	894629	885954	-0.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643370.1 File : met10 method Time : 11-APR-2017 04:44
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7261927	5.34
Yttrium	R	894629	909081	1.62

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643381.1 File : met10 method Time : 11-APR-2017 05:17
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9029	5000	4858	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6692776	-2.92
Yttrium	R	894629	881951	-1.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643383.1 File : met10 method Time : 11-APR-2017 05:23
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7211687	4.61
Yttrium	R	894629	917171	2.52

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643394.1 File : met10 method Time : 11-APR-2017 05:53
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.8801	5000	4799	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6700561	-2.80
Yttrium	R	894629	880033	-1.63

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643395.1 File : met10 method Time : 11-APR-2017 05:56
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7180352	4.16
Yttrium	R	894629	904417	1.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643396.1 File : met10 method Time : 11-APR-2017 05:59
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7177217	4.11
Yttrium	R	894629	910965	1.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643407.1 File : met10 method Time : 11-APR-2017 06:30
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9100	5000	4876	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6637853	-3.71
Yttrium	R	894629	874780	-2.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643408.1 File : met10 method Time : 11-APR-2017 06:33
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7171323	4.03
Yttrium	R	894629	909012	1.61

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643409.1 File : met10 method Time : 11-APR-2017 06:35
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7232267	4.91
Yttrium	R	894629	1017791	13.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643414.1 File : met10 method Time : 11-APR-2017 06:51
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.8978	5000	4845	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6663915	-3.33
Yttrium	R	894629	877646	-1.90

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643415.1 File : met10 method Time : 11-APR-2017 06:54
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7178495	4.13
Yttrium	R	894629	922096	3.07

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/11/17 10:33	1.0		
002	met10 method	ICAL	L1			04/11/17 10:36	1.0	1	
003	met10 method	ICAL	L2			04/11/17 10:39	1.0	2	
004	met10 method	ICAL	L3			04/11/17 10:42	1.0	3	
005	met10 method	ICAL	L4			04/11/17 10:44	1.0	4	
006	met10 method	ICAL	L5			04/11/17 10:46	1.0	5	
007	met10 method	ICV				04/11/17 10:49	1.0	6	1:SR=4400000
008	met10 method	XCRI				04/11/17 10:56	1.0	7	
009	met10 method	CRI				04/11/17 11:03	1.0	7	1:SR=46000
010	met10 method	ICB				04/11/17 11:07	1.0		
011	met10 method	ICSA				04/11/17 11:10	1.0	8	11:AL=570000
012	met10 method	ICSAB				04/11/17 11:15	1.0	9	6:SR=4800000
013	met10 method	CCV				04/11/17 11:19	1.0	10	1:SR=4500000
014	met10 method	CCB				04/11/17 11:21	1.0		1:SR=1200
015	met10 method	CCB				04/11/17 11:24	1.0		1:SR=2400
016	met10 method	X	RINSE			04/11/17 11:28	1.0		
017	met10 method	BLANK	QC880855	TCLP Leachate	246501	04/11/17 11:31	10.0		1:SR=3200
018	met10 method	BS	QC880856	TCLP Leachate	246501	04/11/17 11:35	1.0		1:SR=920000
019	met10 method	X	RINSE			04/11/17 11:44	1.0		
020	met10 method	BSD	QC880857	TCLP Leachate	246501	04/11/17 11:48	1.0		1:SR=920000
021	met10 method	MSS	287753-001	TCLP Leachate	246501	04/11/17 11:50	10.0		1:SR=740000
022	met10 method	MS	QC880858	TCLP Leachate	246501	04/11/17 11:54	10.0		
023	met10 method	MSD	QC880859	TCLP Leachate	246501	04/11/17 11:56	10.0		
024	met10 method	SAMPLE	287752-001	TCLP Leachate	246501	04/11/17 11:59	10.0		1:SR=110000
025	met10 method	SAMPLE	287752-002	TCLP Leachate	246501	04/11/17 12:02	10.0		1:SR=1300000
026	met10 method	CCV				04/11/17 12:05	1.0	10	1:SR=4300000
027	met10 method	XCCB				04/11/17 12:08	1.0		1:SR=2900
028	met10 method	CCB				04/11/17 12:11	1.0		1:SR=2600
029	met10 method	X	RINSE			04/11/17 12:16	1.0		
030	met10 method	BLANK	QC880703	Water	246465	04/11/17 12:20	1.0		1:SR=2200
031	met10 method	BLANK	QC880855	TCLP Leachate	246501	04/11/17 12:23	10.0		1:SR=4200
032	met10 method	BS	QC880704	Water	246465	04/11/17 12:27	1.0		1:SR=940000
033	met10 method	BSD	QC880705	Water	246465	04/11/17 12:29	1.0		1:SR=910000
034	met10 method	MSS	287738-002	Water	246465	04/11/17 12:31	1.0		1:SR=1400000
035	met10 method	MS	QC880706	Water	246465	04/11/17 12:34	1.0		
036	met10 method	MSD	QC880707	Water	246465	04/11/17 12:36	1.0		
037	met10 method	SER	QC880708	Water	246465	04/11/17 12:39	5.0		
038	met10 method	PDS	QC880709	Water	246465	04/11/17 12:42	1.0	11 12 13	2:SR=2400000
039	met10 method	CCV				04/11/17 12:45	1.0	10	1:SR=4400000
040	met10 method	XCCB				04/11/17 12:47	1.0		1:SR=1900
041	met10 method	CCB				04/11/17 12:50	1.0		1:SR=1400
042	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 12:54	1.0		4:SR=70000000
043	met10 method	SAMPLE	287675-001	Water	246465	04/11/17 12:56	1.0		1:SR=1700000
044	met10 method	SAMPLE	287675-002	Water	246465	04/11/17 12:59	1.0		1:SR=1900000
045	met10 method	SAMPLE	287712-002	Water	246465	04/11/17 13:02	1.0		3:SR=4000000
046	met10 method	X	RINSE			04/11/17 13:05	1.0		
047	met10 method	BLANK	QC880703	Water	246465	04/11/17 13:09	1.0		1:SR=2200
048	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 13:12	100.0		1:SR=670000
049	met10 method	SAMPLE	287712-003	Water	246465	04/11/17 13:16	1.0		2:SR=3000000
050	met10 method	SAMPLE	287712-004	Water	246465	04/11/17 13:19	1.0		4:SR=6400000
051	met10 method	SAMPLE	287712-005	Water	246465	04/11/17 13:22	1.0		1:SR=3200000
052	met10 method	CCV				04/11/17 13:25	1.0	10	1:SR=4500000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	XCCB				04/11/17 13:28	1.0		1:SR=2000
054	met10 method	CCB				04/11/17 13:31	1.0		1:SR=1200
055	met10 method	SAMPLE	287712-006	Water	246465	04/11/17 13:34	1.0		4:SR=4700000
056	met10 method	SAMPLE	287731-009	Water	246465	04/11/17 13:38	1.0		1:SR=3000
057	met10 method	SAMPLE	287732-001	Water	246465	04/11/17 13:41	1.0		4:SR=15000000
058	met10 method	SAMPLE	287735-001	Water	246465	04/11/17 13:44	1.0		2:SR=4600000
059	met10 method	SAMPLE	287735-002	Water	246465	04/11/17 13:46	1.0		1:SR=3900000
060	met10 method	SAMPLE	287736-001	Water	246465	04/11/17 13:49	1.0		3:SR=15000000
061	met10 method	SAMPLE	287738-003	Water	246465	04/11/17 13:51	1.0		1:SR=1800000
062	met10 method	SAMPLE	287738-007	Water	246465	04/11/17 13:55	1.0		1:SR=1800000
063	met10 method	SAMPLE	287738-008	Water	246465	04/11/17 13:58	1.0		1:SR=2100000
064	met10 method	SAMPLE	287675-004	Soil	246450	04/11/17 14:01	1.0		4:SR=3800000
065	met10 method	CCV				04/11/17 14:03	1.0	10	1:SR=4400000
066	met10 method	XCCB				04/11/17 14:06	1.0		1:SR=2200
067	met10 method	CCB				04/11/17 14:09	1.0		1:SR=1100
068	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 14:12	10.0		1:SR=7300000
069	met10 method	SAMPLE	287676-001	Soil	246450	04/11/17 14:16	1.0		3:SR=2400000
070	met10 method	SAMPLE	287713-001	Soil	246450	04/11/17 14:19	1.0		5:SR=6000000
071	met10 method	SAMPLE	287739-002	Soil	246450	04/11/17 14:22	1.0		7:SR=11000000
072	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/11/17 14:25	10.0		2:NA=190000
073	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/11/17 14:27	10.0		2:NA=180000
074	met10 method	X	RINSE			04/11/17 14:30	1.0		
075	met10 method	BLANK	QC880768	Soil	246479	04/11/17 14:33	1.0		1:SR=4000
076	met10 method	BS	QC880769	Soil	246479	04/11/17 14:36	1.0		2:SR=90000000
077	met10 method	BSD	QC880770	Soil	246479	04/11/17 14:39	1.0		2:SR=88000000
078	met10 method	CCV				04/11/17 14:41	1.0	10	1:SR=4600000
079	met10 method	CCB				04/11/17 14:44	1.0		1:SR=1800
080	met10 method	MSS	287740-001	Soil	246479	04/11/17 14:47	1.0		7:SR=8200000
081	met10 method	MS	QC880771	Soil	246479	04/11/17 14:50	1.0		1:SR=93000000
082	met10 method	MSD	QC880772	Soil	246479	04/11/17 14:53	1.0		1:SR=97000000
083	met10 method	SAMPLE	287683-005	Soil	246479	04/11/17 14:56	1.0		3:SR=3300000
084	met10 method	SAMPLE	287795-001	Soil	246479	04/11/17 14:59	1.0		4:SR=3300000
085	met10 method	SAMPLE	287795-002	Soil	246479	04/11/17 15:01	1.0		4:SR=3500000
086	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 15:04	1.0		1:SR=20000
087	met10 method	X	RINSE			04/11/17 15:07	1.0		
088	met10 method	BLANK	QC880331	Soil	246364	04/11/17 15:11	1.0		1:SR=3900
089	met10 method	BS	QC880332	Soil	246364	04/11/17 15:14	1.0		1:SR=46000000
090	met10 method	CCV				04/11/17 15:17	1.0	10	1:SR=4600000
091	met10 method	CCB				04/11/17 15:19	1.0		1:SR=1700
092	met10 method	BSD	QC880333	Soil	246364	04/11/17 15:23	1.0		1:SR=46000000
093	met10 method	MSS	287737-014	Soil	246364	04/11/17 15:25	1.0		3:SR=1900000
094	met10 method	MS	QC880334	Soil	246364	04/11/17 15:28	1.0		
095	met10 method	MSD	QC880335	Soil	246364	04/11/17 15:30	1.0		
096	met10 method	SAMPLE	287737-001	Soil	246364	04/11/17 15:33	1.0		5:SR=31000000
097	met10 method	SAMPLE	287737-002	Soil	246364	04/11/17 15:36	1.0		4:SR=1500000
098	met10 method	SAMPLE	287737-003	Soil	246364	04/11/17 15:39	1.0		4:SR=2100000
099	met10 method	SAMPLE	287737-004	Soil	246364	04/11/17 15:41	1.0		4:SR=1700000
100	met10 method	SAMPLE	287737-005	Soil	246364	04/11/17 15:44	1.0		3:SR=1100000
101	met10 method	SAMPLE	287737-006	Soil	246364	04/11/17 15:46	1.0		3:SR=880000
102	met10 method	CCV				04/11/17 15:49	1.0	10	1:SR=4500000
103	met10 method	CCB				04/11/17 15:52	1.0		1:SR=2200
104	met10 method	SAMPLE	287737-007	Soil	246364	04/11/17 15:55	1.0		4:SR=1600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287737-008	Soil	246364	04/11/17 15:58	1.0		2:SR=850000
106	met10 method	SAMPLE	287737-009	Soil	246364	04/11/17 16:00	1.0		4:SR=2100000
107	met10 method	SAMPLE	287737-010	Soil	246364	04/11/17 16:03	1.0		3:SR=1200000
108	met10 method	SAMPLE	287737-011	Soil	246364	04/11/17 16:05	1.0		3:SR=1500000
109	met10 method	SAMPLE	287737-012	Soil	246364	04/11/17 16:08	1.0		3:SR=1500000
110	met10 method	SAMPLE	287737-013	Soil	246364	04/11/17 16:10	1.0		4:SR=10000000
111	met10 method	SAMPLE	287737-015	Soil	246364	04/11/17 16:13	1.0		3:SR=1500000
112	met10 method	SAMPLE	287737-016	Soil	246364	04/11/17 16:16	1.0		3:SR=1400000
113	met10 method	SAMPLE	287737-017	Soil	246364	04/11/17 16:18	1.0		4:SR=1800000
114	met10 method	CCV				04/11/17 16:21	1.0	10	1:SR=4600000
115	met10 method	CCB				04/11/17 16:24	1.0		1:SR=2200
116	met10 method	BLANK	QC880368	Water	246373	04/11/17 16:27	1.0		1:SR=2200
117	met10 method	BS	QC880369	Water	246373	04/11/17 16:30	1.0		2:SR=940000
118	met10 method	BSD	QC880370	Water	246373	04/11/17 16:33	1.0		2:SR=930000
119	met10 method	MSS	287737-018	Water	246373	04/11/17 16:35	1.0		1:SR=3900
120	met10 method	MS	QC880371	Water	246373	04/11/17 16:39	1.0		
121	met10 method	MSD	QC880372	Water	246373	04/11/17 16:41	1.0		
122	met10 method	CCV				04/11/17 16:43	1.0	10	1:SR=4600000
123	met10 method	CCB				04/11/17 16:46	1.0		1:SR=1300
124	met10 method	MSS	287252-007	SPLP Leachate	246256	04/11/17 16:49	1.0		1:SR=7100
125	met10 method	MS	QC879889	SPLP Leachate	246256	04/11/17 16:53	1.0		1:SR=930000
126	met10 method	MSD	QC879890	SPLP Leachate	246256	04/11/17 16:55	1.0		1:SR=940000
127	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 16:57	1.0		1:SR=9600
128	met10 method	X	RINSE			04/11/17 17:00	1.0		
129	met10 method	BLANK	QC880630	Water	246447	04/11/17 17:03	1.0		1:SR=2200
130	met10 method	BS	QC880631	Water	246447	04/11/17 17:07	1.0		1:SR=910000
131	met10 method	BSD	QC880632	Water	246447	04/11/17 17:09	1.0		2:SR=900000
132	met10 method	MSS	287646-001	Water	246447	04/11/17 17:12	1.0		1:SR=1700000
133	met10 method	MS	QC880633	Water	246447	04/11/17 17:14	1.0		
134	met10 method	CCV				04/11/17 17:19	1.0	10	1:SR=4500000
135	met10 method	XCCB				04/11/17 17:22	1.0		1:SR=1400
136	met10 method	CCB				04/11/17 17:25	1.0		1:SR=2100
137	met10 method	MSD	QC880634	Water	246447	04/11/17 17:28	1.0		
138	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 17:31	1.0		1:SR=14000
139	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 17:34	1.0		1:SR=25000
140	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 17:38	1.0		1:SR=39000
141	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 17:41	1.0		1:SR=93000
142	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 17:44	1.0		2:SR=3500000
143	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 17:47	1.0		3:SR=11000000
144	met10 method	?SAMPLE	287791-002		246447	04/11/17 17:50	1.0		
145	met10 method	?SAMPLE	287791-003		246447	04/11/17 17:53	1.0		
146	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 17:55	1.0		1:SR=300000
147	met10 method	CCV				04/11/17 17:58	1.0	10	1:SR=4500000
148	met10 method	CCB				04/11/17 18:01	1.0		
149	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 18:04	1.0		1:SR=1400000
150	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 18:08	1.0		2:SR=610000
151	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 18:11	1.0		2:SR=8400000
152	met10 method	MSS	287252-028	Soil	246272	04/11/17 18:14	100.0		1:SR=49000
153	met10 method	SAMPLE	287252-029	Soil	246272	04/11/17 18:16	100.0		1:SR=64000
154	met10 method	PDS	QC880745	Soil	246422	04/11/17 18:18	1.0	11 12 13	6:SR=6200000
155	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 18:21	1.0		1:SR=20000
156	met10 method	SAMPLE	287648-001	Water	246408	04/11/17 18:24	1.0		5:SR=9000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10
Method : EPA 6010C

Begun : 04/11/17 10:33
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287648-002	Water	246408	04/11/17 18:26	1.0		4:SR=13000000
158	met10 method	SAMPLE	287648-003	Water	246408	04/11/17 18:30	1.0		4:SR=20000000
159	met10 method	CCV				04/11/17 18:33	1.0	10	1:SR=4500000
160	met10 method	CCB				04/11/17 18:36	1.0		1:SR=2700
161	met10 method	CCB				04/11/17 18:39	1.0		1:SR=8500
162	met10 method	SAMPLE	287648-004	Water	246408	04/11/17 18:42	1.0		5:SR=15000000
163	met10 method	SAMPLE	287662-001	Water	246408	04/11/17 18:45	1.0		4:SR=31000000
164	met10 method	SAMPLE	287662-002	Water	246408	04/11/17 18:49	1.0		5:SR=19000000
165	met10 method	SAMPLE	287662-003	Water	246408	04/11/17 18:51	1.0		4:SR=22000000
166	met10 method	SAMPLE	287662-004	Water	246408	04/11/17 18:55	1.0		4:SR=25000000
167	met10 method	SAMPLE	287640-002	Soil	246424	04/11/17 18:57	1.0		7:SR=13000000
168	met10 method	SAMPLE	287640-003	Soil	246424	04/11/17 19:00	1.0		5:SR=4900000
169	met10 method	SAMPLE	287640-004	Soil	246424	04/11/17 19:03	1.0		5:SR=4600000
170	met10 method	SAMPLE	287640-005	Soil	246424	04/11/17 19:06	1.0		5:SR=4900000
171	met10 method	SAMPLE	287640-006	Soil	246424	04/11/17 19:09	1.0		5:SR=4500000
172	met10 method	CCV				04/11/17 19:12	1.0	10	1:SR=4400000
173	met10 method	CCB				04/11/17 19:15	1.0		1:SR=2000
174	met10 method	CCB				04/11/17 19:17	1.0		1:SR=1900
175	met10 method	X	RINSE			04/11/17 19:21	1.0		
176	met10 method	BLANK	QC879456	Water	246155	04/11/17 19:24	1.0		1:SR=2400
177	met10 method	BS	QC879457	Water	246155	04/11/17 19:28	1.0		2:SR=940000
178	met10 method	BSD	QC879458	Water	246155	04/11/17 19:30	1.0		2:SR=930000
179	met10 method	MSS	287365-001	Water	246155	04/11/17 19:32	1.0		1:SR=550000
180	met10 method	MS	QC879459	Water	246155	04/11/17 19:35	1.0		
181	met10 method	MSD	QC879460	Water	246155	04/11/17 19:37	1.0		
182	met10 method	SAMPLE	287348-001	Water	246155	04/11/17 19:40	1.0		1:SR=990000
183	met10 method	MSS	287365-001	Water	246155	04/11/17 19:42	1.0		1:SR=60000
184	met10 method	SAMPLE	287365-003	Water	246155	04/11/17 19:46	1.0		1:SR=140000
185	met10 method	CCV				04/11/17 19:49	1.0	10	1:SR=4500000
186	met10 method	CCB				04/11/17 19:52	1.0		1:SR=2500
187	met10 method	SAMPLE	287365-005	Water	246155	04/11/17 19:55	1.0		1:SR=74000
188	met10 method	SAMPLE	287365-006	Water	246155	04/11/17 19:57	1.0		1:SR=110000
189	met10 method	SAMPLE	287365-007	Water	246155	04/11/17 20:00	1.0		1:SR=180000
190	met10 method	SAMPLE	287365-008	Water	246155	04/11/17 20:02	1.0		1:SR=130000
191	met10 method	SAMPLE	287365-009	Water	246155	04/11/17 20:05	1.0		1:SR=90000
192	met10 method	SAMPLE	287365-010	Water	246155	04/11/17 20:07	1.0		1:SR=150000
193	met10 method	SAMPLE	287365-011	Water	246155	04/11/17 20:10	1.0		1:SR=68000
194	met10 method	SAMPLE	287365-012	Water	246155	04/11/17 20:12	1.0		1:SR=110000
195	met10 method	X	RINSE			04/11/17 20:15	1.0		
196	met10 method	BLANK	QC879918	Water	246267	04/11/17 20:18	1.0		1:SR=2800
197	met10 method	CCV				04/11/17 20:21	1.0	10	1:SR=4500000
198	met10 method	CCB				04/11/17 20:24	1.0		1:SR=1200
199	met10 method	BS	QC879919	Water	246267	04/11/17 20:27	1.0		2:SR=930000
200	met10 method	BSD	QC879920	Water	246267	04/11/17 20:30	1.0		2:SR=960000
201	met10 method	MSS	287440-001	Water	246267	04/11/17 20:32	1.0		1:SR=1300000
202	met10 method	MS	QC879921	Water	246267	04/11/17 20:36	1.0		
203	met10 method	MSD	QC879922	Water	246267	04/11/17 20:38	1.0		
204	met10 method	SAMPLE	287516-001	Water	246267	04/11/17 20:40	1.0		2:SR=400000
205	met10 method	X	RINSE			04/11/17 20:43	1.0		
206	met10 method	BLANK	QC880290	Water	246354	04/11/17 20:46	1.0		1:SR=3200
207	met10 method	BS	QC880291	Water	246354	04/11/17 20:50	1.0		1:SR=950000
208	met10 method	BSD	QC880292	Water	246354	04/11/17 20:52	1.0		1:SR=940000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	CCV				04/11/17 20:55	1.0	10	1:SR=4400000
210	met10 method	CCB				04/11/17 20:57	1.0		1:SR=2900
211	met10 method	CCB				04/11/17 21:00	1.0		1:SR=1600
212	met10 method	MSS	287645-005	Water	246354	04/11/17 21:04	1.0		2:SR=4800000
213	met10 method	MS	QC880293	Water	246354	04/11/17 21:06	1.0		
214	met10 method	MSD	QC880294	Water	246354	04/11/17 21:09	1.0		
215	met10 method	SAMPLE	287641-001	Water	246354	04/11/17 21:12	1.0		1:SR=270000
216	met10 method	SAMPLE	287641-002	Water	246354	04/11/17 21:14	1.0		1:SR=1900000
217	met10 method	SAMPLE	287641-003	Water	246354	04/11/17 21:16	1.0		1:SR=1300000
218	met10 method	SAMPLE	287641-004	Water	246354	04/11/17 21:19	1.0		2:SR=6100000
219	met10 method	CCV				04/11/17 21:22	1.0	10	1:SR=4400000
220	met10 method	CCB				04/11/17 21:24	1.0		
221	met10 method	X	RINSE			04/11/17 21:44	1.0		
222	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 21:47	1.0		1:SR=19000
223	met10 method	X	RINSE			04/11/17 21:50	1.0		
224	met10 method	SER	QC879891	SPLP Leachate	246256	04/11/17 21:53	5.0		
225	met10 method	X	RINSE			04/11/17 21:59	1.0		
226	met10 method	?SAMPLE	287662-001		246256	04/11/17 22:03	1.0		
227	met10 method	X	RINSE			04/11/17 22:06	1.0		
228	met10 method	BLANK	QC880888	Water	246512	04/11/17 22:10	1.0		1:SR=3400
229	met10 method	BS	QC880889	Water	246512	04/11/17 22:13	1.0		1:SR=920000
230	met10 method	BSD	QC880890	Water	246512	04/11/17 22:15	1.0		1:SR=940000
231	met10 method	CCV				04/11/17 22:18	1.0	10	1:SR=4500000
232	met10 method	CCB				04/11/17 22:21	1.0		1:SR=2900
233	met10 method	MSS	287852-001	Water	246512	04/11/17 22:24	1.0		4:SR=8600000
234	met10 method	MS	QC880891	Water	246512	04/11/17 22:26	1.0		
235	met10 method	MSD	QC880892	Water	246512	04/11/17 22:29	1.0		
236	met10 method	X	RINSE			04/11/17 22:32	1.0		
237	met10 method	SER	QC879891	SPLP Leachate	246256	04/11/17 22:35	5.0		
238	met10 method	SAMPLE	287791-002	Water	246512	04/11/17 22:38	1.0		1:SR=730000
239	met10 method	SAMPLE	287791-003	Water	246512	04/11/17 22:41	1.0		1:SR=720000
240	met10 method	SAMPLE	287808-001	Water	246512	04/11/17 22:43	1.0		1:SR=210000
241	met10 method	SAMPLE	287808-002	Water	246512	04/11/17 22:45	1.0		1:SR=130000
242	met10 method	SAMPLE	287808-003	Water	246512	04/11/17 22:48	1.0		1:SR=78000
243	met10 method	CCV				04/11/17 22:50	1.0	10	1:SR=4600000
244	met10 method	CCB				04/11/17 22:53	1.0		1:SR=2200
245	met10 method	SAMPLE	287843-001	Water	246512	04/11/17 22:56	1.0		3:SR=4200000
246	met10 method	SAMPLE	287843-002	Water	246512	04/11/17 23:00	1.0		3:SR=4100000
247	met10 method	X	RINSE			04/11/17 23:04	1.0		
248	met10 method	BLANK	QC880989	Soil	246536	04/11/17 23:07	1.0		1:SR=4100
249	met10 method	BS	QC880990	Soil	246536	04/11/17 23:10	1.0		1:SR=90000000
250	met10 method	BSD	QC880991	Soil	246536	04/11/17 23:13	1.0		1:SR=89000000
251	met10 method	MSS	287766-003	Soil	246536	04/11/17 23:16	1.0		5:SR=24000000
252	met10 method	MS	QC880992	Soil	246536	04/11/17 23:19	1.0		
253	met10 method	MSD	QC880993	Soil	246536	04/11/17 23:22	1.0		
254	met10 method	SER	QC880994	Soil	246536	04/11/17 23:25	5.0		
255	met10 method	CCV				04/11/17 23:27	1.0	10	1:SR=4600000
256	met10 method	CCB				04/11/17 23:30	1.0		1:SR=4300
257	met10 method	PDS	QC880995	Soil	246536	04/11/17 23:34	1.0	11 12 14	6:SR=25000000
258	met10 method	SAMPLE	287651-001	Soil	246536	04/11/17 23:37	1.0		5:SR=3400000
259	met10 method	SAMPLE	287651-002	Soil	246536	04/11/17 23:40	1.0		5:SR=2200000
260	met10 method	SAMPLE	287651-003	Soil	246536	04/11/17 23:43	1.0		5:SR=2300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287651-004	Soil	246536	04/11/17 23:46	1.0		5:SR=2900000
262	met10 method	SAMPLE	287766-004	Soil	246536	04/11/17 23:48	1.0		5:SR=25000000
263	met10 method	SAMPLE	287766-006	Soil	246536	04/11/17 23:52	1.0		5:SR=17000000
264	met10 method	SAMPLE	287766-008	Soil	246536	04/11/17 23:55	1.0		5:SR=20000000
265	met10 method	SAMPLE	287766-010	Soil	246536	04/11/17 23:58	1.0		5:SR=21000000
266	met10 method	SAMPLE	287766-012	Soil	246536	04/12/17 00:01	1.0		6:SR=23000000
267	met10 method	CCV				04/12/17 00:04	1.0	10	1:SR=4500000
268	met10 method	CCB				04/12/17 00:06	1.0		1:SR=3300
269	met10 method	SAMPLE	287780-001	Soil	246536	04/12/17 00:10	1.0		5:SR=9000000
270	met10 method	SAMPLE	287814-001	Soil	246536	04/12/17 00:13	1.0		10:SR=100000000
271	met10 method	SAMPLE	287814-002	Soil	246536	04/12/17 00:16	1.0		7:SR=19000000
272	met10 method	SAMPLE	287815-001	Soil	246536	04/12/17 00:19	1.0		10:SR=89000000
273	met10 method	SAMPLE	287815-002	Soil	246536	04/12/17 00:22	1.0		8:SR=19000000
274	met10 method	SAMPLE	287839-001	Soil	246536	04/12/17 00:25	1.0		3:SR=8600000
275	met10 method	SAMPLE	287855-001	Soil	246536	04/12/17 00:28	1.0		7:SR=9600000
276	met10 method	SAMPLE	287872-005	Soil	246536	04/12/17 00:31	1.0		5:SR=5000000
277	met10 method	SAMPLE	287872-010	Soil	246536	04/12/17 00:34	1.0		5:SR=4400000
278	met10 method	X	RINSE			04/12/17 00:36	1.0		
279	met10 method	CCV				04/12/17 00:40	1.0	10	1:SR=4600000
280	met10 method	XCCB				04/12/17 00:42	1.0		1:SR=3500
281	met10 method	CCB				04/12/17 00:45	1.0		1:SR=2000
282	met10 method	BLANK	QC881020	Filtrate	246541	04/12/17 00:49	1.0		1:SR=2800
283	met10 method	BS	QC881021	Filtrate	246541	04/12/17 00:52	1.0		1:SR=920000
284	met10 method	BSD	QC881022	Filtrate	246541	04/12/17 00:54	1.0		1:SR=910000
285	met10 method	MSS	287502-002	Filtrate	246541	04/12/17 00:57	1.0		4:SR=17000000
286	met10 method	MS	QC881023	Filtrate	246541	04/12/17 01:00	1.0		
287	met10 method	MSD	QC881024	Filtrate	246541	04/12/17 01:03	1.0		
288	met10 method	BLANK	QC881026	Filtrate	246541	04/12/17 01:05	1.0		1:SR=4100
289	met10 method	SAMPLE	287502-005	Filtrate	246541	04/12/17 01:09	1.0		4:SR=25000000
290	met10 method	SAMPLE	287502-006	Filtrate	246541	04/12/17 01:11	1.0		4:SR=27000000
291	met10 method	SAMPLE	287502-007	Filtrate	246541	04/12/17 01:15	1.0		2:SR=4900000
292	met10 method	CCV				04/12/17 01:18	1.0	10	1:SR=4500000
293	met10 method	XCCB				04/12/17 01:21	1.0		1:SR=3200
294	met10 method	CCB				04/12/17 01:24	1.0		1:SR=3600
295	met10 method	SAMPLE	287502-008	Filtrate	246541	04/12/17 01:27	1.0		3:SR=9000000
296	met10 method	SAMPLE	287502-011	Filtrate	246541	04/12/17 01:31	1.0		5:SR=28000000
297	met10 method	SAMPLE	287502-012	Filtrate	246541	04/12/17 01:34	1.0		5:SR=32000000
298	met10 method	SAMPLE	287502-013	Filtrate	246541	04/12/17 01:36	1.0		1:SR=2900
299	met10 method	SAMPLE	287502-014	Filtrate	246541	04/12/17 01:39	1.0		3:SR=9200000
300	met10 method	SAMPLE	287502-015	Filtrate	246541	04/12/17 01:43	1.0		2:SR=4300000
301	met10 method	SAMPLE	287502-016	Filtrate	246541	04/12/17 01:46	1.0		4:SR=21000000
302	met10 method	SAMPLE	287788-001	Filtrate	246541	04/12/17 01:49	1.0		1:SR=920000
303	met10 method	SAMPLE	287788-002	Filtrate	246541	04/12/17 01:52	1.0		1:SR=1700000
304	met10 method	X	RINSE			04/12/17 01:56	1.0		
305	met10 method	CCV				04/12/17 01:59	1.0	10	1:SR=4500000
306	met10 method	XCCB				04/12/17 02:02	1.0		1:SR=3600
307	met10 method	CCB				04/12/17 02:05	1.0		1:SR=2500
308	met10 method	BLANK	QC881015	Filtrate	246540	04/12/17 02:08	1.0		1:SR=1100
309	met10 method	BS	QC881016	Filtrate	246540	04/12/17 02:11	1.0		1:SR=920000
310	met10 method	BSD	QC881017	Filtrate	246540	04/12/17 02:14	1.0		1:SR=930000
311	met10 method	MSS	287723-006	Filtrate	246540	04/12/17 02:16	1.0		4:SR=40000000
312	met10 method	MS	QC881018	Filtrate	246540	04/12/17 02:19	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	MSD	QC881019	Filtrate	246540	04/12/17 02:22	1.0		
314	met10 method	BLANK	QC881038	Filtrate	246540	04/12/17 02:24	1.0		1:SR=4800
315	met10 method	SAMPLE	287722-002	Filtrate	246540	04/12/17 02:28	1.0		6:SR=54000000
316	met10 method	SAMPLE	287722-003	Filtrate	246540	04/12/17 02:30	1.0		3:SR=18000000
317	met10 method	SAMPLE	287723-007	Filtrate	246540	04/12/17 02:33	1.0		5:SR=34000000
318	met10 method	CCV				04/12/17 02:36	1.0	10	1:SR=4500000
319	met10 method	XCCB				04/12/17 02:39	1.0		1:SR=2900
320	met10 method	CCB				04/12/17 02:42	1.0		1:SR=3800
321	met10 method	SAMPLE	287723-008	Filtrate	246540	04/12/17 02:45	1.0		3:SR=12000000
322	met10 method	SAMPLE	287723-009	Filtrate	246540	04/12/17 02:47	1.0		5:SR=48000000
323	met10 method	SAMPLE	287723-010	Filtrate	246540	04/12/17 02:50	1.0		4:SR=34000000
324	met10 method	SAMPLE	287732-001	Filtrate	246540	04/12/17 02:53	1.0		4:SR=15000000
325	met10 method	X	RINSE			04/12/17 02:56	1.0		
326	met10 method	BLANK	QC881061	Soil	246551	04/12/17 03:00	1.0		1:SR=6700
327	met10 method	BS	QC881062	Soil	246551	04/12/17 03:03	1.0		1:SR=92000000
328	met10 method	BSD	QC881063	Soil	246551	04/12/17 03:06	1.0		1:SR=92000000
329	met10 method	MSS	287921-002	Soil	246551	04/12/17 03:08	1.0		5:SR=2300000
330	met10 method	MS	QC881064	Soil	246551	04/12/17 03:11	1.0		
331	met10 method	CCV				04/12/17 03:14	1.0	10	1:SR=4500000
332	met10 method	CCB				04/12/17 03:17	1.0		1:SR=4500
333	met10 method	MSD	QC881065	Soil	246551	04/12/17 03:20	1.0		
334	met10 method	SAMPLE	287768-001	Soil	246551	04/12/17 03:23	1.0		5:SR=5800000
335	met10 method	SAMPLE	287768-002	Soil	246551	04/12/17 03:25	1.0		3:SR=20000000
336	met10 method	SAMPLE	287768-003	Soil	246551	04/12/17 03:28	1.0		7:SR=12000000
337	met10 method	SAMPLE	287768-004	Soil	246551	04/12/17 03:31	1.0		4:SR=10000000
338	met10 method	SAMPLE	287921-001	Soil	246551	04/12/17 03:34	1.0		5:SR=2300000
339	met10 method	X	RINSE			04/12/17 03:36	1.0		
340	met10 method	BLANK	QC881066	Air	246552	04/12/17 03:40	1.0		1:SR=5000
341	met10 method	BS	QC881067	Air	246552	04/12/17 03:43	1.0		1:SR=94000000
342	met10 method	BSD	QC881068	Air	246552	04/12/17 03:45	1.0		1:SR=89000000
343	met10 method	CCV				04/12/17 03:48	1.0	10	1:SR=4500000
344	met10 method	CCB				04/12/17 03:50	1.0		1:SR=2800
345	met10 method	MSS	287929-001	Air	246552	04/12/17 03:54	1.0		1:SR=35000
346	met10 method	SAMPLE	287929-002	Air	246552	04/12/17 03:57	1.0		1:SR=34000
347	met10 method	X	RINSE			04/12/17 04:00	1.0		
348	met10 method	BLANK	QC881069	Wipe	246553	04/12/17 04:04	1.0		1:SR=4300
349	met10 method	BS	QC881070	Wipe	246553	04/12/17 04:07	1.0		1:SR=92000000
350	met10 method	BSD	QC881071	Wipe	246553	04/12/17 04:09	1.0		1:SR=92000000
351	met10 method	SAMPLE	287881-001	Wipe	246553	04/12/17 04:12	1.0		1:SR=450000
352	met10 method	CCV				04/12/17 04:14	1.0	10	1:SR=4400000
353	met10 method	CCB				04/12/17 04:17	1.0		1:SR=3300

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

MNA 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 29 through 133.

TLO 04/12/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 134 through 353.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087146073

Date : 04/11/17 Reference : met10 method
Sequence : MET10 04/11/17 Analyzed : 04/11/17 10:36

#	Type	Sample ID	Y A	Y R
		ICAL STD	9447720	1106130
		LOWER LIMIT	2834316	331839
		UPPER LIMIT	11337264	1327356
010	ICB		9493289	1085173
011	ICSA		7683826	944234
012	ICSAB		7727663	951958
078	CCV		8755638	1039620
079	CCB		9412253	1071952
086	SAMPLE	287252-031	9166125	1084130
090	CCV		8748251	1047731
091	CCB		9418120	1072143
122	CCV		8915990	1031138
123	CCB		9425077	1063331
124	MSS	287252-007	9370805	1101213
125	MS	QC879889	8933692	1090309
126	MSD	QC879890	9211863	1064463
127	SAMPLE	287252-038	9278459	1086023
134	CCV		8667641	1035984
136	CCB		9344580	1063175
147	CCV		8637460	1033990
148	CCB		9408914	1059104
152	MSS	287252-028	9242825	1063251
153	SAMPLE	287252-029	9247389	1053413
155	SAMPLE	287082-002	9146469	1058447
159	CCV		8775442	1047406
160	CCB		9388959	1064253
219	CCV		8697539	1040905
220	CCB		9505187	1052721
222	SAMPLE	287082-002	9027808	1061572
224	SER	QC879891	19378625 *	310383 *
231	CCV		8683560	1036334
232	CCB		9386764	1070900
237	SER	QC879891	9281131	1057186
243	CCV		8928126	1033371
244	CCB		9402252	1070792
251	MSS	287766-003	7895071	980433
262	SAMPLE	287766-004	7909247	990129
263	SAMPLE	287766-006	8021061	992096
264	SAMPLE	287766-008	7850580	986330
265	SAMPLE	287766-010	7811978	974739
266	SAMPLE	287766-012	8292999	1008194

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287082 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087146073001
Units : ug/L

Date : 11-APR-2017 10:33
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087146073002	L1	11-APR-2017 10:36	S32578
L2	met10 method	1087146073003	L2	11-APR-2017 10:39	S32571
L3	met10 method	1087146073004	L3	11-APR-2017 10:42	S32367
L4	met10 method	1087146073005	L4	11-APR-2017 10:44	S32368
L5	met10 method	1087146073006	L5	11-APR-2017 10:46	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8600	3.1530	3.0836	3.0501		LOR0	0.00000	0.32783		3.0367	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-6	100.00	3	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287082 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087146073001 Cal Date : 11-APR-2017

ICV 1087146073007 (11-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4914	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073009.1 File : met10 method Time : 11-APR-2017 11:03
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.177	ug/L	-16	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9353345	-1.00
Yttrium	R	1106130	1101587	-0.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073010.1 File : met10 method Time : 11-APR-2017 11:07
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9493289	0.48
Yttrium	R	1106130	1085173	-1.89

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073011.1 File : met10 method Time : 11-APR-2017 11:10
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-6.104]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18810	ug/L	94	
Copper	A	20000	21910	ug/L	110	
Manganese	A	20000	18460	ug/L	92	
Nickel	A	20000	16630	ug/L	83	
Titanium	A	20000	18700	ug/L	93	
Vanadium	A	20000	21510	ug/L	108	
Aluminum	R	500000	566500	ug/L	113	
Calcium	R	500000	529000	ug/L	106	
Iron	R	200000	202300	ug/L	101	
Magnesium	R	500000	440700	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	7683826	-18.67
Yttrium	R	1106130	944234	-14.64

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073012.1 File : met10 method Time : 11-APR-2017 11:15
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	956.9	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	7727663	-18.21
Yttrium	R	1106130	951958	-13.94

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073122.1 File : met10 method Time : 11-APR-2017 16:43
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	2.9967	5000	4912	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8915990	-5.63
Yttrium	R	1106130	1031138	-6.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073123.1 File : met10 method Time : 11-APR-2017 16:46
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9425077	-0.24
Yttrium	R	1106130	1063331	-3.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073134.1 File : met10 method Time : 11-APR-2017 17:19
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0391	5000	4982	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8667641	-8.26
Yttrium	R	1106130	1035984	-6.34

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073136.1 File : met10 method Time : 11-APR-2017 17:25
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9344580	-1.09
Yttrium	R	1106130	1063175	-3.88

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073219.1 File : met10 method Time : 11-APR-2017 21:22
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0933	5000	5070	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8697539	-7.94
Yttrium	R	1106130	1040905	-5.90

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073220.1 File : met10 method Time : 11-APR-2017 21:24
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9505187	0.61
Yttrium	R	1106130	1052721	-4.83

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073231.1 File : met10 method Time : 11-APR-2017 22:18
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0366	5000	4977	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8683560	-8.09
Yttrium	R	1106130	1036334	-6.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073232.1 File : met10 method Time : 11-APR-2017 22:21
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9386764	-0.65
Yttrium	R	1106130	1070900	-3.18

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073243.1 File : met10 method Time : 11-APR-2017 22:50
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	2.9971	5000	4913	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8928126	-5.50
Yttrium	R	1106130	1033371	-6.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287082 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073244.1 File : met10 method Time : 11-APR-2017 22:53
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9402252	-0.48
Yttrium	R	1106130	1070792	-3.19

SAMPLE PREPARATION SUMMARY

Batch # : 246147
Started By : VV
Method : 3010A
Spike #1 ID : S29983
Prep Date : 31-MAR-2017 06:25
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287077-041		SPLP Leachate	50	50	1	1.0						6010	
287077-042		SPLP Leachate	50	50	1	1.0						6010	
287077-043		SPLP Leachate	50	50	1	1.0						6010	
287077-044		SPLP Leachate	50	50	1	1.0						6010	
287077-045		SPLP Leachate	50	50	1	1.0						6010	
287077-046		SPLP Leachate	50	50	1	1.0						6010	
287077-047		SPLP Leachate	50	50	1	1.0						6010	
287077-048		SPLP Leachate	50	50	1	1.0						6010	
287077-049		SPLP Leachate	50	50	1	1.0						6010	
287077-050		SPLP Leachate	50	50	1	1.0						6010	
287082-001		SPLP Leachate	50	50	1	1.0						6010	
287082-002		SPLP Leachate	50	50	1	1.0						6010	
287082-003		SPLP Leachate	50	50	1	1.0						6010	
287082-004		SPLP Leachate	50	50	1	1.0						6010	
287082-005		SPLP Leachate	50	50	1	1.0						6010	
287082-006		SPLP Leachate	50	50	1	1.0						6010	
287082-007		SPLP Leachate	50	50	1	1.0						6010	
287082-008		SPLP Leachate	50	50	1	1.0						6010	
287082-009		SPLP Leachate	50	50	1	1.0						6010	
287082-010		SPLP Leachate	50	50	1	1.0						6010	
QC879419	BLANK	SPLP Leachate	50	50	1	1.0							
QC879420	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879421	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879422	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879423	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879424	SER	SPLP Leachate	50	50	1	1.0							
QC879425	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: TLO Date: 04/11/17 Reviewer: PRW Date: 04/11/17

TCLP/SPLP Extract Digestion for ICP — Curtis & Tompkins, Ltd.

LIMS Batch #: 246147
Date Digested: 3-31-17
Digested by: VV
Matrix: ☐ TCLP Extract ☒ SPLP Extract

Digestion Method: BK 3999
☒ EPA 3010a for ICP — Page 36
☐ _____ — Continued on p: _____

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC#	☒ 50 ☐	☒ 50 ☐	NO	
*	BS	☒ 50 ☐	☒ 50 ☐		
*	BSD	☒ 50 ☐	☒ 50 ☐		
*	287077-042 MS	☒ 50 ☐	☒ 50 ☐		
5 *	042 MSD	☒ 50 ☐	☒ 50 ☐		
	042	☒ 50 ☐	☒ 50 ☐		
	041	☒ 50 ☐	☒ 50 ☐		
	043	☒ 50 ☐	☒ 50 ☐		
	044	☒ 50 ☐	☒ 50 ☐		
10	045	☒ 50 ☐	☒ 50 ☐		
	046	☒ 50 ☐	☒ 50 ☐		
	047	☒ 50 ☐	☒ 50 ☐		
	048	☒ 50 ☐	☒ 50 ☐		
	049	☒ 50 ☐	☒ 50 ☐		
15	050	☒ 50 ☐	☒ 50 ☐		
	VV 3-31-17 051 -001	☒ 50 ☐	☒ 50 ☐		
	287082- 052 -002	☒ 50 ☐	☒ 50 ☐		
	053 -003	☒ 50 ☐	☒ 50 ☐		
	054 -004	☒ 50 ☐	☒ 50 ☐		
20	055 -005	☒ 50 ☐	☒ 50 ☐		
	056 -006	☒ 50 ☐	☒ 50 ☐		
	057 -007	☒ 50 ☐	☒ 50 ☐		
	058 -008	☒ 50 ☐	☒ 50 ☐		
	059 -009	☒ 50 ☐	☒ 50 ☐		
	-010	☒ 50 ☐	☒ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	1597886-2005		VV 3-31-17
Digestion Block ID/ Probe Location	JUSTICE	37	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983 *		
0.5 mL of spike solution (Std1) was added to all spikes	S29984 *		
0.5 mL of spike solution (Std3) was added to all spikes	S32702 *		
Digestion started at (time)	0625		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170111988-BDH		VV 3-31-17
1:1 HCl reagent ID	162118-040217 040317 VV 3-31-17		VV 040217
Digestion ended at (time)	0120		VV 040317
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICAP		

Pipettes

Vol.(mL)	ID
0.5	N27150D

3-31-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246102
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: 1-4-3

Date/ Time ON: 3-30-17 09:00
Temp (°C) ON: 23°C
Date/ Time OFF: 3-31-17 01:30
Temp (°C) ON: 21°C-24°C

Page: 40 BK 3994
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK 899227	QC	Ø	Ø	Ø	Ø	Ø	2	☒ 2000 ☐	5.08	
287077-041	A	100.13	NO	NO	N/A	N/A		☒ 2000 ☐	5.28	
-042		100.11						☒ 2000 ☐	5.22	
-043		100.23						☒ 2000 ☐	5.35	
-044		100.04						☒ 2000 ☐	5.51	
-045		100.26						☒ 2000 ☐	5.45	
-046		100.09						☒ 2000 ☐	5.47	
-047		100.03						☒ 2000 ☐	5.41	
-048		100.01						☒ 2000 ☐	5.54	
-049		100.03						☒ 2000 ☐	5.49	
-050		100.01						☒ 2000 ☐	5.48	
287082-001		100.25						☒ 2000 ☐	5.79	
-002		100.28						☒ 2000 ☐	5.59	
-003		100.10						☒ 2000 ☐	5.63	
-004		100.13						☒ 2000 ☐	5.60	
-005		100.01						☒ 2000 ☐	5.69	
-006		100.09						☒ 2000 ☐	5.52	
-007		100.01						☒ 2000 ☐	5.59	
-008		100.02						☒ 2000 ☐	5.77	
-009		100.07						☒ 2000 ☐	5.75	
-010	↓	100.06	↓	↓	↓	↓	↓	☒ 2000 ☐	5.91	
		VV 3-31-17						☐ 2000 ☐		
								☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☑ Yes ☐ No
pH Meter ID: 013869 has been calibrated? ☑ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initial
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	NA	3-30-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	—
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	5.05/5.00	3-29-17/3-30-17
Hot Plate Thermometer (Temperature, Serial #)	NA °C ID: —	
filtered thru TCLP filter paper, lot#	E-E 480121	3-31-17 VV
acidified to pH <2 with 1 mL HNO3	20170111988-BDH	
pH paper strips, lot#	10BDH1061	

3-30-17
Extraction Chemist **Date**

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246256
Started By : VV
Method : SPLP
Spike #1 ID : S29983
Prep Date : 04-APR-2017 03:46
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287082-011		SPLP Leachate	50	50	1	1.0						6010	
287082-012		SPLP Leachate	50	50	1	1.0						6010	
287082-013		SPLP Leachate	50	50	1	1.0						6010	
287082-014		SPLP Leachate	50	50	1	1.0						6010	
287082-015		SPLP Leachate	50	50	1	1.0						6010	
287082-016		SPLP Leachate	50	50	1	1.0						6010	
287082-017		SPLP Leachate	50	50	1	1.0						6010	
287082-018		SPLP Leachate	50	50	1	1.0						6010	
287082-019		SPLP Leachate	50	50	1	1.0						6010	
287252-001		SPLP Leachate	50	50	1	1.0						6010	
287252-002		SPLP Leachate	50	50	1	1.0						6010	
287252-003		SPLP Leachate	50	50	1	1.0						6010	
287252-004		SPLP Leachate	50	50	1	1.0						6010	
287252-005		SPLP Leachate	50	50	1	1.0						6010	
287252-006		SPLP Leachate	50	50	1	1.0						6010	
287252-007		SPLP Leachate	50	50	1	1.0						6010	
287252-008		SPLP Leachate	50	50	1	1.0						6010	
287252-009		SPLP Leachate	50	50	1	1.0						6010	
287252-010		SPLP Leachate	50	50	1	1.0						6010	
287252-011		SPLP Leachate	50	50	1	1.0						6010	
QC879884	BLANK	SPLP Leachate	50	50	1	1.0							
QC879885	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879886	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879887	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879888	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879889	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879890	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879891	SER	SPLP Leachate	50	50	1	1.0							
QC879892	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 04/06/17 Reviewer: PRW Date: 04/12/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246256
Date Digested: 4-4-17
Digested by: VV
Matrix: ~~☒ TCLP Extract~~ VV 4-4-17
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
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Continued on p: 39

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC# 879884	☒ 50 ☐	☒ 50 ☐	Y VV 4-5-17	
*	BS 879885	☒ 50 ☐	☒ 50 ☐	N	
*	BSD 879886	☒ 50 ☐	☒ 50 ☐		
*	287252-001 MS	☒ 50 ☐	☒ 50 ☐		
5 *	- 001 MSD	☒ 50 ☐	☒ 50 ☐		
*	- 007 MS	☒ 50 ☐	☒ 50 ☐		
*	- 007 MSD	☒ 50 ☐	☒ 50 ☐		
	287082-011	☒ 50 ☐	☒ 50 ☐		
	- 012	☒ 50 ☐	☒ 50 ☐		
10	- 013	☒ 50 ☐	☒ 50 ☐		
	- 014	☒ 50 ☐	☒ 50 ☐		
	- 015	☒ 50 ☐	☒ 50 ☐		
	- 016	☒ 50 ☐	☒ 50 ☐		
	- 017	☒ 50 ☐	☒ 50 ☐		
15	- 018	☒ 50 ☐	☒ 50 ☐		
	- 019	☒ 50 ☐	☒ 50 ☐		
	287252-001	☒ 50 ☐	☒ 50 ☐		
	- 002	☒ 50 ☐	☒ 50 ☐		
	- 003	☒ 50 ☐	☒ 50 ☐		
20	- 004	☒ 50 ☐	☒ 50 ☐		
	- 005	☒ 50 ☐	☒ 50 ☐		
	- 006	☒ 50 ☐	☒ 50 ☐		
	- 007	☒ 50 ☐	☒ 50 ☐		
	- 008	☒ 50 ☐	☒ 50 ☐		
	- 009	☒ 50 ☐	☒ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	259788-2005		VV 4-4-17
Digestion Block ID/ Probe Location	JUSTICE	42	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983 *		
0.5 mL of spike solution (Std1) was added to all spikes	S29984 *		
0.5 mL of spike solution (Std3) was added to all spikes	S32702 *		
Digestion started at (time)	03:46		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170111988-BDH		
1:1 HCl reagent ID	162118-040517		VV 4-5-17
Digestion ended at (time)	01:50		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICAP		

Pipettes

Vol.(mL)	ID
0.5	N271500

VV 4-4-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246256
Date Digested: 4-4-17
Digested by: VV
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
Page 39
Continued on p: 38

Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
287252-010	☒ 50 ☐	☒ 50 ☐	NO	
↓ -011	☒ 50 ☐	☒ 50 ☐	↓	
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	29788-2005		VV 4-4-17
Digestion Block ID/ Probe Location	JUSTICE	42	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	95°C	
_____ mL of spike solution (Std1) was added to all spikes	—		
_____ mL of spike solution (Std1) was added to all spikes	—		
_____ mL of spike solution (Std3) was added to all spikes	—		
Digestion started at (time)	0346		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170119B8-BDH		
1:1 HCl reagent ID	162118-040817		VV 4-5-17
Digestion ended at (time)	0150		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICAP		

Pipettes

Vol.(mL)	ID

4-5-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 246263 Date/ Time ON: 4-4-17 08:20 Page: 44 BK 3994

Extraction Method: ☐ EPA 1311: TCLP Temp (°C) ON: 22°C

☑ EPA 1312: SPLP Date/ Time OFF: 4-5-17 01:30 Thermometer ID: 111755122

Rotator #'s: 1/4 Temp (°C) ON: 21°C-25°C Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK#879905	QC	Ø	Ø	Ø	Ø	Ø	2#	☒ 2000 ☐	5.09	
287252-012	A	100.08	NO	NO	N/A	N/A		☒ 2000 ☐	5.33	
-013		100.12						☒ 2000 ☐	5.71	
-014		100.10						☒ 2000 ☐	5.75	
-015		100.09						☒ 2000 ☐	5.72	
-016		100.19						☒ 2000 ☐	5.61	
-017		100.21						☒ 2000 ☐	5.65	
-018		100.08						☒ 2000 ☐	5.80	
-019		100.06						☒ 2000 ☐	5.85	
-020		100.10						☒ 2000 ☐	5.85	
-021		100.14						☒ 2000 ☐	5.80	
-022		100.15						☒ 2000 ☐	5.91	
-023		100.25						☒ 2000 ☐	5.71	
-024		100.13						☒ 2000 ☐		Added pH 4-5-17@0600
-025		100.10						☒ 2000 ☐		
-026		100.18						☒ 2000 ☐		
-027		100.10						☒ 2000 ☐		
-028		100.04						☒ 2000 ☐		
-029		100.16						☒ 2000 ☐		
-030		100.12						☒ 2000 ☐		
-031		100.07						☒ 2000 ☐		
								☐ 2000 ☒		
								☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

pH Meter ID: ~~OB~~ 013869 has been calibrated? ☒ Yes ☐ No

VV 4-4-17

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	4-4-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	5.02/4.99	4-4-17
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	EE. 400126-6308	4-5-17 VV
acidified to pH <2 with 1 mL HNO3	20170111988-BDH	
pH paper strips, lot#	10BDH1061	

VV 4-4-17

Extraction Chemist Date

Reviewed Online / See LIMS

SPLP/TCLP EXTRACTION LOG — **Curtis & Tompkins, Ltd.**

LIMS Batch #: 246212 — Date/ Time ON: 4-3-17 06:30 — Page: 43 — BK 3994

Extraction Method: ☐ EPA 1311: TCLP — Temp (°C) ON: 22°C

☑ EPA 1312: SPLP — Date/ Time OFF: 4-4-17 01:00 — Thermometer ID: 111755122

Rotator #'s: 1/3/4 — Temp (°C) ON: 21°C - 23°C — Temperature Limits: 21 - 25 C

	Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
	BLK #879696	QC	Ø	Ø	Ø	Ø	Ø	2	☒ 2000 ☐	5.04	
	287082-011	A	100.12	NO	NO	N/A	N/A		☒ 2000 ☐	5.45	
	-012		100.14						☒ 2000 ☐	5.57	
	-013		100.08						☒ 2000 ☐	5.69	
5	-014		100.07						☒ 2000 ☐	5.72	
	-015		100.01						☒ 2000 ☐	5.65	
	-016		100.13						☒ 2000 ☐	5.66	
	-017		100.09						☒ 2000 ☐	5.72	
	-018		100.21						☒ 2000 ☐	5.82	
10	-019		100.01						☒ 2000 ☐	5.73	
	287252-001		100.03						☒ 2000 ☐	5.75	
	-002		100.01						☒ 2000 ☐	5.55	
	-003		100.24						☒ 2000 ☐	5.56	
	-004		100.15						☒ 2000 ☐	5.41	
15	-005		100.06						☒ 2000 ☐	5.52	
	-006		100.01						☒ 2000 ☐	5.79	
	-007		100.03						☒ 2000 ☐	5.32	
	-008		100.26						☒ 2000 ☐	5.48	
	-009		100.24						☒ 2000 ☐	5.44	
20	-010		100.08						☒ 2000 ☐	5.55	
	-011		100.02						☒ 2000 ☐	5.60	
									☐ 2000 ☐		
									☐ 2000 ☐		
									☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

pH Meter ID: ~~Ø~~ 013869 has been calibrated? ☒ Yes ☐ No — VV 4-3-17

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	VV 4-3-17
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	3-30-17 / 4-3-17 / 5.00 / 5.00 / 4.97	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	E.E. 400126-6308	VV 4-4-17
acidified to pH <2 with 1 mL HNO3	20170111988- BDH	
pH paper strips, lot#	10BDH1061	

VV 4-3-17
Extraction Chemist Date

Reviewed Online / See LIMS

Laboratory Job Number 287082

ANALYTICAL REPORT

Wet Chemistry

Matrix: Soil

Percent Moisture Summary Report

Batch: 245921
Date: 03/25/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287082-001	11.2789	17.4787	15.4313	67	33
287082-002	11.3056	17.6861	14.8453	55	45
287082-003	11.0375	18.6305	15.2469	55	45
287082-004	11.0394	17.0706	14.5613	58	42
287082-005	11.3002	17.3929	15.0822	62	38
287082-006	11.1957	17.4955	15.3274	66	34
287082-007	11.3258	17.8800	15.2995	61	39
287082-008	11.2600	17.5305	14.6874	55	45
287082-009	11.3542	17.9718	15.1783	58	42
287082-010	11.0840	19.7125	16.4923	63	37
287082-011	11.2110	16.3383	14.4431	63	37
287082-012	11.0106	18.5062	15.4986	60	40
287082-013	11.3031	16.6647	14.8887	67	33
287082-014	11.2147	18.5485	15.5083	59	41
287082-015	10.8764	17.1787	14.5521	58	42
287082-016	11.4298	17.3289	15.0474	61	39
287082-017	11.3696	17.8620	15.5549	64	36
287082-018	10.8304	17.6886	15.0367	61	39
287082-019	11.3608	19.0005	16.0343	61	39
QC878511	10.9537	18.8756	16.0335	64	36
of 287082-019			RPD:	4.7%	7.9%

LIMS Batch #: 245921
Date: 3-25-2017

Page: **19**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☒ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
Blank	34	11.0254	Ø	11.0216	
287082-001 A	68	11.2789	17.4787	15.4313	
-002	26	11.3056	17.6861	14.8453	
-003	64	11.0375	18.6305	15.2469	
-004	62	11.0394	17.0706	14.5613	
-005	95	11.3002	17.3929	15.0822	
-006	85	11.1957	17.4955	15.3274	
-007	35	11.3258	17.8800	15.2995	
-008	89	11.2600	17.5305	14.6874	
-009	92	11.3542	17.9718	15.1783	
-010	24	11.0840	19.7125	16.4923	
-011	09	11.2110	14.3383	14.4431	
-012	23	11.0106	18.5062	15.4986	
-013	25	11.3031	16.0647	14.8887	
-014	67	11.2147	18.5485	15.5083	
-015	63	10.8764	17.1787	14.5521	
-016	11	11.4298	17.3289	15.0474	
-017	71	11.3696	17.8620	15.5549	
-018	90	10.8304	17.6886	15.0367	
↓ -019 ↓	37	11.3608	19.0005	16.0343	SDUP
SDUP -019	7	10.9537	18.8756	16.0335	

	In	Out	In-2	Out-2
Date:	3-25-17	3-25-17		
Time:	104°C	21:50		
Min/Max Range (°C)	00:45	104		
Thermometer ID:	P49096	P49096		
Weighed by:	MBH	MBH		

MBH 3-25-17
Analyst Initials / Date

Reviewed Online / See LIMS

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	///	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	MBH	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	MBH 3-23-17 ~~0.1997~~ 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 287252
ANALYTICAL REPORT

Weston Solutions	Project : 15048.001.003.0006.1
1340 Treat Blvd	Location : Camp Bonneville Military Reservation
Walnut Creek, CA 94597	Level : III

Sample ID	Lab ID	Sample ID	Lab ID
21-SS075	287252-001	21-SS099	287252-024
21-SS074	287252-002	21-SS100	287252-025
21-SS059	287252-003	21-SS101	287252-026
21-SS058	287252-004	21-SS096	287252-027
21-SS057	287252-005	21-SS095	287252-028
21-SS056	287252-006	21-SS094	287252-029
21-SS055	287252-007	21-SS093	287252-030
21-SS054	287252-008	21-SS092	287252-031
21-SS053	287252-009	21-SS091	287252-032
21-SS052	287252-010	21-SS107	287252-033
21-SS051	287252-011	21-SS106	287252-034
21-SS086	287252-012	21-SS105	287252-035
21-SS085	287252-013	21-SS104	287252-036
21-SS084	287252-014	21-SS103	287252-037
21-SS083	287252-015	21-SS102	287252-038
21-SS082	287252-016	21-SS108	287252-039
21-SS087	287252-017	21-SS109	287252-040
21-SS088	287252-018	21-SS110	287252-041
21-SS089	287252-019	21-SS111	287252-042
21-SS090	287252-020	21-SS112	287252-043
21-SS097	287252-021	21-SS113	287252-044
21-SS098	287252-022	21-SS119	287252-045
21-SS072	287252-023		

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

Signature: _____ Date: 04/18/2017

Dina Ali
Project Manager
dina.ali@ctberk.com
(510) 204-2223 Ext 13105

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**287252**
Client:	**Weston Solutions**
Project:	**15048.001.003.0006.1**
Location:	**Camp Bonneville Military Reservation**
Request Date:	**03/23/17**
Samples Received:	**03/23/17**

This data package contains sample and QC results for forty five soil samples, requested for the above referenced project on 03/23/17. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C) Soil:

Low recovery was observed for lead in the MSD of 21-SS075 (lab # 287252-001); the BS/BSD were within limits, and the associated RPD was within limits.

High % difference was observed for lead in the serial dilution of 21-SS075 (lab # 287252-001).

No other analytical problems were encountered.

Metals (EPA 6010C) SPLP Leachate:

No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.

Chain of Custody

287252

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 2
Sampler's *(Signature)*			Page 1 of 4

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
1	21-SS075	3/15/17	1155	X		Soil	2	X	X								MS/MSD
2	21-SS074	3/15/17	1215	X		Soil	1	X	X								
3	21-SS059	3/16/17	840	X		Soil	1	X	X								
4	21-SS058	3/16/17	850	X		Soil	1	X	X								
5	21-SS057	3/16/17	905	X		Soil	1	X	X								
6	21-SS056	3/16/17	920	X		Soil	1	X	X								
7	21-SS055	3/16/17	930	X		Soil	2	X	X								MS/MSD
8	21-SS054	3/16/17	945	X		Soil	1	X	X								
9	21-SS053	3/16/17	1000	X		Soil	1	X	X								
10	21-SS052	3/16/17	1015	X		Soil	1	X	X								
11	21-SS051	3/16/17	1030	X		Soil	1	X	X								
12	21-SS086	3/16/17	1055	X		Soil	1	X	X								
13	21-SS085	3/16/17	1110	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:
Jeremy Haney, Weston Solutions	3/21/2017 1430	FeEx 7787 0563 6976	3/21/2017 1430
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/23/17 @ 10:15
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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287252

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 2
Sampler's *(Signature)*			Page 2 of 4

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
14	21-SS084	3/16/17	1125	X		Soil	1	X	X								
15	21-SS083	3/16/17	1145	X		Soil	1	X	X								
16	21-SS082	3/16/17	1205	X		Soil	1	X	X								
17	21-SS087	3/16/17	1215	X		Soil	1	X	X								
18	21-SS088	3/16/17	1230	X		Soil	1	X	X								
19	21-SS089	3/16/17	1245	X		Soil	1	X	X								
20	21-SS090	3/16/17	1300	X		Soil	1	X	X								
21	21-SS097	3/16/17	1650	X		Soil	1	X	X								
22	21-SS098	3/16/17	1700	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:
Jeremy Haney, Weston Solutions	3/21/2017 1430	FeEx 7787 0563 6976	3/21/2017 1430
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/23/17 @ 10:K
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

287252

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10					Project Name: Camp Bonneville Military Reservation		Request for Analysis										Chain of Custody No.: 2
Sampler's *(Signature)*																	Page 3 of 4
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
23	21-SS072	3/15/17	1335	X		Soil	1	X	X								
24	21-SS099	3/20/17	840	X		Soil	1	X	X								
25	21-SS100	3/20/17	850	X		Soil	1	X	X								
26	21-SS101	3/20/17	905	X		Soil	1	X	X								
27	21-SS096	3/20/17	920	X		Soil	1	X	X								
28	21-SS095	3/20/17	940	X		Soil	2	X	X								MS/MSD
29	21-SS094	3/20/17	1000	X		Soil	1	X	X								
30	21-SS093	3/20/17	1020	X		Soil	1	X	X								
31	21-SS092	3/20/17	1040	X		Soil	1	X	X								
32	21-SS091	3/20/17	1100	X		Soil	1	X	X								
33	21-SS107	3/20/17	1130	X		Soil	1	X	X								
34	21-SS106	3/20/17	1140	X		Soil	1	X	X								
35	21-SS105	3/20/17	1150	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/21/2017 1430	Received by: (Signature and affiliation) FeEx 7787 0563 6704 (master: 7787 0563 6976)	Date and Time: 3/21/2017 1430
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/23/17 @ 10:15
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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287252

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10					Project Name: Camp Bonneville Military Reservation		Request for Analysis									Chain of Custody No.: 2	
Sampler's *(Signature)*																Page 4 of 4	
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements	
36	21-SS104	3/20/17	1205	X		Soil	2	X	X								
37	21-SS103	3/20/17	1220	X		Soil	1	X	X								
38	21-SS102	3/20/17	1240	X		Soil	1	X	X								
39	21-SS108	3/20/17	1335	X		Soil	1	X	X								
40	21-SS109	3/20/17	1350	X		Soil	1	X	X								
41	21-SS110	3/20/17	1405	X		Soil	1	X	X								
42	21-SS111	3/20/17	1420	X		Soil	2	X	X								
43	21-SS112	3/20/17	1440	X		Soil	1	X	X								
44	21-SS113	3/20/17	1500	X		Soil	1	X	X								
45	21-SS119	3/20/17	1510	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/21/2017 1430	Received by: (Signature and affiliation) FeEx 7787 0563 6704 (master: 7787 0563 6976)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)

Date and Time: 3/21/2017 1430	
Date and Time: 3/23/17 @ 10:15	
Date and Time:	For Laboratory Use Only

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 287252 Date Received 03/22/17 Number of coolers 2
Client WESTON Project CAMP BONNEVILLE MILITARY RESERVATION

Date Opened 03/22/17 By (print) KPS (sign) KSBeng
Date Logged in ↓ By (print) ↓ (sign) ↓
Date Labeled ↓ 3/23/17 By (print) ↓ IVO (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) FEDEX (YES) NO
   Shipping info 7787 0563
2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples (☒) NO
   How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO (N/A)
3. Were custody papers dry and intact when received? ____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ ~~Bubble Wrap~~ ☐ ~~Foam blocks~~ ☐ ~~Bags~~ ☐ ~~None~~
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.7, 4.0

☐ Temperature blank(s) included? ☐ Thermometer# ____ ☒ IR Gun# A

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES (NO)
   If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ (YES) NO
10. Are there any missing / extra samples? ____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? ____ (YES) NO
12. Are sample labels present, in good condition and complete? ____ (YES) NO
13. Do the sample labels agree with custody papers? ____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? ____ (YES) NO
15. Are the samples appropriately preserved? ____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? ____ YES NO (N/A)
17. Did you document your preservative check? (pH strip lot# ____) YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? ____ YES (NO)
   If YES, Who was called? ____ By ____ Date: ____

COMMENTS

Curtis & Tompkins, Ltd.

Detections Summary for 287252

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

Client : Weston Solutions
Project : 15048.001.003.0006.1
Location : Camp Bonneville Military Reservation

Client Sample ID : 21-SS075 Laboratory Sample ID : 287252-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS074 Laboratory Sample ID : 287252-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	56		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS059 Laboratory Sample ID : 287252-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130		0.67	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS058 Laboratory Sample ID : 287252-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	99		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS057 Laboratory Sample ID : 287252-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	140		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS056 Laboratory Sample ID : 287252-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	37		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS055 Laboratory Sample ID : 287252-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	87		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS054 Laboratory Sample ID : 287252-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS053 Laboratory Sample ID : 287252-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	62		0.87	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS052 Laboratory Sample ID : 287252-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130		0.84	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS051 Laboratory Sample ID : 287252-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	80		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS086 Laboratory Sample ID : 287252-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	400		0.89	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS085 Laboratory Sample ID : 287252-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	410		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS084 Laboratory Sample ID : 287252-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	410		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS083 Laboratory Sample ID : 287252-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	250		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS082 Laboratory Sample ID : 287252-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130		0.87	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS087 Laboratory Sample ID : 287252-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	75		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS088 Laboratory Sample ID : 287252-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	55		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS089 Laboratory Sample ID : 287252-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.82	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS090 Laboratory Sample ID : 287252-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	20		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS097 Laboratory Sample ID : 287252-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	77		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS098 Laboratory Sample ID : 287252-022

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	73		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS072 Laboratory Sample ID : 287252-023

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	39		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS099 Laboratory Sample ID : 287252-024

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	58		0.86	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS100 Laboratory Sample ID : 287252-025

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	28		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS101 Laboratory Sample ID : 287252-026

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS096 Laboratory Sample ID : 287252-027

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	730		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0081		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS095 Laboratory Sample ID : 287252-028

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	2,600		74	mg/Kg	Dry	100.0	EPA 6010C	EPA 3050B
Lead	0.011		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS094 Laboratory Sample ID : 287252-029

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	1,700		78	mg/Kg	Dry	100.0	EPA 6010C	EPA 3050B
Lead	0.030		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS093 Laboratory Sample ID : 287252-030

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	620		0.82	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0068		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS092 Laboratory Sample ID : 287252-031

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	650		0.98	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0056		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS091 Laboratory Sample ID : 287252-032

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	140		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS107 Laboratory Sample ID : 287252-033

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	2,100		70	mg/Kg	Dry	100.0	EPA 6010C	EPA 3050B
Lead	0.030		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS106 Laboratory Sample ID : 287252-034

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	5,400		77	mg/Kg	Dry	100.0	EPA 6010C	EPA 3050B
Lead	0.042		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS105 Laboratory Sample ID : 287252-035

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	3,200		70	mg/Kg	Dry	100.0	EPA 6010C	EPA 3050B
Lead	0.010		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS104 Laboratory Sample ID : 287252-036

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS103 Laboratory Sample ID : 287252-037

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	300		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS102 Laboratory Sample ID : 287252-038

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	520		0.98	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0059		0.0050	mg/L	SPLP	1.000	EPA 6010C	SPLP

Client Sample ID : 21-SS108 Laboratory Sample ID : 287252-039

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	160		0.75	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS109 Laboratory Sample ID : 287252-040

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	56		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS110 Laboratory Sample ID : 287252-041

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	28		0.86	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

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Client Sample ID : 21-SS111 Laboratory Sample ID : 287252-042

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	26		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS112 Laboratory Sample ID : 287252-043

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	20		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS113 Laboratory Sample ID : 287252-044

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS119 Laboratory Sample ID : 287252-045

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	910		69	mg/Kg	Dry	100.0	EPA 6010C	EPA 3050B

Laboratory Job Number 287252

ANALYTICAL REPORT

Metals

Matrix: Soil

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Received:	03/23/17
Units:	mg/Kg	Prepared:	04/04/17
Basis:	dry		

Field ID	Type	Lab ID	Matrix	Result	RL	Moisture	Dln Fac	Batch#	Chemist	Sampled	Analyzed
21-SS075	SAMPLE	287252-001	Soil	120	0.88	42%	1.000	246268	TLO	03/15/17	04/05/17
21-SS074	SAMPLE	287252-002	Soil	56	0.83	39%	1.000	246268	TLO	03/15/17	04/05/17
21-SS059	SAMPLE	287252-003	Soil	130	0.67	32%	1.000	246268	TLO	03/16/17	04/05/17
21-SS058	SAMPLE	287252-004	Soil	99	0.78	30%	1.000	246268	TLO	03/16/17	04/05/17
21-SS057	SAMPLE	287252-005	Soil	140	0.76	39%	1.000	246268	TLO	03/16/17	04/05/17
21-SS056	SAMPLE	287252-006	Soil	37	0.74	31%	1.000	246268	TLO	03/16/17	04/05/17
21-SS055	SAMPLE	287252-007	Soil	87	0.81	38%	1.000	246299	KER	03/16/17	04/06/17
21-SS054	SAMPLE	287252-008	Soil	150	0.77	34%	1.000	246268	TLO	03/16/17	04/05/17
21-SS053	SAMPLE	287252-009	Soil	62	0.87	41%	1.000	246268	TLO	03/16/17	04/05/17
21-SS052	SAMPLE	287252-010	Soil	130	0.84	34%	1.000	246268	TLO	03/16/17	04/05/17
21-SS051	SAMPLE	287252-011	Soil	80	0.76	38%	1.000	246268	TLO	03/16/17	04/05/17
21-SS086	SAMPLE	287252-012	Soil	400	0.89	41%	1.000	246268	TLO	03/16/17	04/05/17
21-SS085	SAMPLE	287252-013	Soil	410	0.76	36%	1.000	246268	TLO	03/16/17	04/05/17
21-SS084	SAMPLE	287252-014	Soil	410	0.74	28%	1.000	246268	TLO	03/16/17	04/05/17
21-SS083	SAMPLE	287252-015	Soil	250	0.78	36%	1.000	246268	TLO	03/16/17	04/05/17
21-SS082	SAMPLE	287252-016	Soil	130	0.87	41%	1.000	246268	TLO	03/16/17	04/05/17
21-SS087	SAMPLE	287252-017	Soil	75	0.83	36%	1.000	246268	TLO	03/16/17	04/05/17
21-SS088	SAMPLE	287252-018	Soil	55	0.70	31%	1.000	246268	TLO	03/16/17	04/05/17
21-SS089	SAMPLE	287252-019	Soil	120	0.82	38%	1.000	246268	TLO	03/16/17	04/05/17
21-SS090	SAMPLE	287252-020	Soil	20	0.72	31%	1.000	246268	TLO	03/16/17	04/05/17
21-SS097	SAMPLE	287252-021	Soil	77	0.79	36%	1.000	246268	TLO	03/16/17	04/05/17
21-SS098	SAMPLE	287252-022	Soil	73	0.80	36%	1.000	246272	MNA	03/16/17	04/05/17
21-SS072	SAMPLE	287252-023	Soil	39	0.70	35%	1.000	246272	MNA	03/15/17	04/05/17
21-SS099	SAMPLE	287252-024	Soil	58	0.86	40%	1.000	246272	MNA	03/20/17	04/05/17
21-SS100	SAMPLE	287252-025	Soil	28	0.72	32%	1.000	246272	MNA	03/20/17	04/05/17
21-SS101	SAMPLE	287252-026	Soil	150	0.76	29%	1.000	246272	MNA	03/20/17	04/05/17
21-SS096	SAMPLE	287252-027	Soil	730	0.76	36%	1.000	246272	MNA	03/20/17	04/05/17
21-SS095	SAMPLE	287252-028	Soil	2,600	74	31%	100.0	246272	MNA	03/20/17	04/11/17

ND= Not Detected
RL= Reporting Limit

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Received:	03/23/17
Units:	mg/Kg	Prepared:	04/04/17
Basis:	dry		

Field ID	Type	Lab ID	Matrix	Result	RL	Moisture	Diln Fac	Batch#	Chemist	Sampled	Analyzed
21-SS094	SAMPLE	287252-029	Soil	1,700	78	35%	100.0	246272	MNA	03/20/17	04/11/17
21-SS093	SAMPLE	287252-030	Soil	620	0.82	34%	1.000	246272	MNA	03/20/17	04/06/17
21-SS092	SAMPLE	287252-031	Soil	650	0.98	45%	1.000	246272	MNA	03/20/17	04/05/17
21-SS091	SAMPLE	287252-032	Soil	140	0.81	40%	1.000	246272	MNA	03/20/17	04/05/17
21-SS107	SAMPLE	287252-033	Soil	2,100	70	29%	100.0	246272	MNA	03/20/17	04/06/17
21-SS106	SAMPLE	287252-034	Soil	5,400	77	35%	100.0	246272	MNA	03/20/17	04/06/17
21-SS105	SAMPLE	287252-035	Soil	3,200	70	34%	100.0	246272	MNA	03/20/17	04/06/17
21-SS104	SAMPLE	287252-036	Soil	130	0.74	32%	1.000	246272	MNA	03/20/17	04/06/17
21-SS103	SAMPLE	287252-037	Soil	300	0.79	36%	1.000	246272	MNA	03/20/17	04/05/17
21-SS102	SAMPLE	287252-038	Soil	520	0.98	45%	1.000	246272	MNA	03/20/17	04/05/17
21-SS108	SAMPLE	287252-039	Soil	160	0.75	35%	1.000	246272	MNA	03/20/17	04/05/17
21-SS109	SAMPLE	287252-040	Soil	56	0.78	34%	1.000	246272	MNA	03/20/17	04/05/17
21-SS110	SAMPLE	287252-041	Soil	28	0.86	36%	1.000	246272	MNA	03/20/17	04/05/17
21-SS111	SAMPLE	287252-042	Soil	26	0.72	33%	1.000	246299	KER	03/20/17	04/06/17
21-SS112	SAMPLE	287252-043	Soil	20	0.76	36%	1.000	246299	KER	03/20/17	04/06/17
21-SS113	SAMPLE	287252-044	Soil	22	0.73	31%	1.000	246299	KER	03/20/17	04/06/17
21-SS119	SAMPLE	287252-045	Soil	910	69	34%	100.0	246299	KER	03/20/17	04/06/17
	BLANK	QC879923	Soil	ND	0.54		1.000	246268	TLO		04/05/17
	BLANK	QC879941	Soil	ND	0.53		1.000	246272	MNA		04/05/17
	BLANK	QC880057	Miscell.	ND	0.54		1.000	246299	KER		04/05/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Received:	03/23/17
Units:	mg/Kg	Prepared:	04/04/17
Basis:	dry		

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim	Diln Fac	Batch#	Chemist	Sampled	Analyzed
	BS		QC879924	Soil		50.00	48.47	97	75-125				1.000	246268	TLO		04/05/17
	BSD		QC879925	Soil		53.19	53.07	100	75-125		3	35	1.000	246268	TLO		04/05/17
21-SS075	MS	287252-001	QC879926	Soil	115.7	84.52	180.0	76	75-125	42%			1.000	246268	TLO	03/15/17	04/05/17
21-SS075	MSD	287252-001	QC879927	Soil		87.97	173.2	65 *	75-125	42%	6	35	1.000	246268	TLO	03/15/17	04/05/17
	BS		QC879942	Soil		47.62	48.68	102	75-125				1.000	246272	MNA		04/05/17
	BSD		QC879943	Soil		52.08	53.92	104	75-125		1	35	1.000	246272	MNA		04/05/17
21-SS095	MS	287252-028	QC879944	Soil	2,558	71.75	1,513	-1458 NM	75-125	31%			100.0	246272	MNA	03/20/17	04/07/17
21-SS095	MSD	287252-028	QC879945	Soil		77.92	2,064	-634 NM	75-125	31%	31	35	100.0	246272	MNA	03/20/17	04/07/17
	BS		QC880058	Miscell.		48.08	48.99	102	75-125				1.000	246299	KER		04/05/17
	BSD		QC880059	Miscell.		46.30	46.49	100	75-125		1	35	1.000	246299	KER		04/05/17
21-SS055	MS	287252-007	QC880060	Soil	87.06	83.14	154.8	82	75-125	38%			1.000	246299	KER	03/16/17	04/06/17
21-SS055	MSD	287252-007	QC880061	Soil		81.46	151.2	79	75-125	38%	1	35	1.000	246299	KER	03/16/17	04/06/17

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS055	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246299
MSS Lab ID:	287252-007	Chemist:	KER
Lab ID:	QC880062	Sampled:	03/16/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff Lim
87.06	0.8065	95.62	4.032	38%	10 10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS055	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246299
MSS Lab ID:	287252-007	Chemist:	KER
Lab ID:	QC880063	Sampled:	03/16/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
87.06	8.065	92.65	69 NM	75-125	38%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS095	Diln Fac:	500.0
Type:	Serial Dilution	Batch#:	246272
MSS Lab ID:	287252-028	Chemist:	MNA
Lab ID:	QC880476	Sampled:	03/20/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/07/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
2,558	73.94	2,415	369.7	31%	6	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS095	Diln Fac:	100.0
Type:	Post Digest Spike	Batch#:	246272
MSS Lab ID:	287252-028	Chemist:	MNA
Lab ID:	QC880477	Sampled:	03/20/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/07/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
2,558	739.4	3,353	108	75-125	31%

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS075	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246268
MSS Lab ID:	287252-001	Chemist:	TLO
Lab ID:	QC880490	Sampled:	03/15/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/07/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff		Lim
115.7	0.8797	131.7	4.398	42%	14	*	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS075	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246268
MSS Lab ID:	287252-001	Chemist:	TLO
Lab ID:	QC880491	Sampled:	03/15/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/07/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
115.7	8.797	124.3	97 NM	75-125	42%

NM= Not Meaningful: Sample concentration > 4X spike concentration

REPORTING SUMMARY FOR 287252 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287252-001	MET10	04/05/17 15:20	1.0	+
287252-002	MET10	04/05/17 15:28	1.0	+
287252-003	MET10	04/05/17 15:31	1.0	+
287252-004	MET10	04/05/17 15:34	1.0	+
287252-005	MET10	04/05/17 15:36	1.0	+
287252-006	MET10	04/05/17 15:39	1.0	+
287252-007	MET10	04/06/17 14:30	1.0	+
287252-007	MET10	04/07/17 16:35	100.0	
287252-008	MET10	04/05/17 15:42	1.0	+
287252-009	MET10	04/05/17 15:53	1.0	+
287252-010	MET10	04/05/17 15:56	1.0	+
287252-011	MET10	04/05/17 15:59	1.0	+
287252-012	MET10	04/05/17 16:01	1.0	+
287252-013	MET10	04/05/17 16:04	1.0	+
287252-014	MET10	04/05/17 16:07	1.0	+
287252-015	MET10	04/05/17 16:09	1.0	+
287252-016	MET10	04/05/17 16:12	1.0	+
287252-017	MET10	04/05/17 16:15	1.0	+
287252-018	MET10	04/05/17 16:18	1.0	+
287252-019	MET10	04/05/17 16:26	1.0	+
287252-020	MET10	04/05/17 16:29	1.0	+
287252-021	MET10	04/05/17 16:31	1.0	+
287252-022	MET10	04/05/17 17:37	1.0	+
287252-023	MET10	04/05/17 17:39	1.0	+
287252-024	MET10	04/05/17 17:42	1.0	+
287252-025	MET10	04/05/17 17:45	1.0	+
287252-026	MET10	04/05/17 17:47	1.0	+

REPORTING SUMMARY FOR 287252 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287252-027	MET10	04/05/17 17:50	1.0	+
287252-028	MET10	04/05/17 17:15	1.0	
287252-028	MET10	04/06/17 16:55	100.0	
287252-028	MET10	04/10/17 19:31	1.0	
287252-028	MET10	04/11/17 18:14	100.0	+
287252-028	MET10	04/14/17 21:11	1.0	
287252-029	MET10	04/05/17 17:53	1.0	
287252-029	MET10	04/06/17 16:57	100.0	
287252-029	MET10	04/10/17 19:34	1.0	
287252-029	MET10	04/11/17 18:16	100.0	+
287252-030	MET10	04/05/17 17:56	1.0	
287252-030	MET10	04/06/17 16:59	1.0	+
287252-031	MET10	04/05/17 17:58	1.0	+
287252-032	MET10	04/05/17 18:01	1.0	+
287252-033	MET10	04/05/17 18:12	1.0	
287252-033	MET10	04/06/17 17:02	100.0	+
287252-034	MET10	04/05/17 18:15	1.0	
287252-034	MET10	04/06/17 17:04	100.0	+
287252-035	MET10	04/05/17 18:18	1.0	
287252-035	MET10	04/06/17 17:07	100.0	+
287252-036	MET10	04/05/17 18:20	1.0	
287252-036	MET10	04/06/17 17:09	1.0	+
287252-037	MET10	04/05/17 18:23	1.0	+
287252-038	MET10	04/05/17 18:26	1.0	+
287252-039	MET10	04/05/17 18:29	1.0	+
287252-040	MET10	04/05/17 18:31	1.0	+
287252-041	MET10	04/05/17 18:34	1.0	+
287252-042	MET10	04/06/17 14:43	1.0	+
287252-043	MET10	04/06/17 14:46	1.0	+
287252-044	MET10	04/06/17 14:49	1.0	+
287252-045	MET10	04/06/17 14:52	1.0	
287252-045	MET10	04/06/17 17:12	100.0	+
QC879923	MET10	04/05/17 15:03	1.0	+

REPORTING SUMMARY FOR 287252 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
QC879924	MET10	04/05/17 15:06	1.0	+
QC879925	MET10	04/05/17 15:17	1.0	+
QC879926	MET10	04/05/17 15:22	1.0	+
QC879927	MET10	04/05/17 15:25	1.0	+
QC880490	MET10	04/07/17 12:50	5.0	+
QC880491	MET10	04/07/17 12:52	1.0	+
QC879941	MET10	04/05/17 17:07	1.0	+
QC879942	MET10	04/05/17 17:11	1.0	+
QC879943	MET10	04/05/17 17:13	1.0	+
QC879944	MET10	04/05/17 17:18	1.0	
QC879944	MET10	04/07/17 02:07	100.0	+
QC879945	MET10	04/05/17 17:21	1.0	
QC879945	MET10	04/07/17 02:09	100.0	+
QC880025	MET10	04/05/17 17:24	1.0	+
QC880026	MET10	04/05/17 17:27	1.0	+
QC880476	MET10	04/07/17 12:55	500.0	+
QC880476	MET10	04/08/17 03:43	500.0	
QC880477	MET10	04/07/17 12:58	100.0	+
QC880477	MET10	04/08/17 03:46	100.0	
QC880057	MET10	04/05/17 11:21	1.0	
QC880057	MET10	04/05/17 13:26	1.0	+
QC880058	MET10	04/05/17 11:24	1.0	+
QC880058	MET10	04/05/17 13:30	1.0	
QC880059	MET10	04/05/17 11:27	1.0	+
QC880059	MET10	04/05/17 13:32	1.0	
QC880060	MET10	04/06/17 14:32	1.0	+
QC880060	MET10	04/08/17 02:39	1.0	
QC880061	MET10	04/06/17 14:35	1.0	+
QC880061	MET10	04/08/17 02:41	1.0	
QC880062	MET10	04/06/17 14:38	5.0	+
QC880062	MET10	04/07/17 16:37	500.0	
QC880063	MET10	04/06/17 14:40	1.0	+

REPORTING SUMMARY FOR 287252 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC880063	MET10	04/07/17 16:41	100.0		

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137365

Instrument : MET10 Begun : 04/05/17 09:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10_sn_306	ICALBLK				04/05/17 09:25	1.0		
002	met10 method	ICAL	L1			04/05/17 09:28	1.0	1	
003	met10 method	ICAL	L2			04/05/17 09:32	1.0	2	
004	met10_sn_306	ICAL	L3			04/05/17 09:37	1.0	3	
005	met10 method	ICAL	L4			04/05/17 09:39	1.0	4	
006	met10_sn_306	ICAL	L5			04/05/17 09:42	1.0	5	
007	met10_sn_306	ICV				04/05/17 09:45	1.0	6	
008	met10_sn_306	CRI				04/05/17 09:47	1.0	7	
009	met10_sn_306	ICB				04/05/17 09:54	1.0		
010	met10_sn_306	ICSA				04/05/17 09:57	1.0	8	10:AL=530000
011	met10_sn_306	ICSAB				04/05/17 10:10	1.0	9	5:AL=530000
012	met10_sn_306	BLANK	QC878810	Water	246001	04/05/17 10:19	1.0		
013	met10 method	BS	QC878811	Water	246001	04/05/17 10:22	1.0		
014	met10 method	BSD	QC878812	Water	246001	04/05/17 10:25	1.0		
015	met10 method	SAMPLE	287273-001	Water	246001	04/05/17 10:27	100.0		
016	met10 method	SAMPLE	287273-002	Water	246001	04/05/17 10:30	100.0		
017	met10 method	BLANK	QC879643	Soil	246199	04/05/17 10:34	1.0		
018	met10 method	SAMPLE	287524-001	Miscell.	246199	04/05/17 10:37	1.0		
019	met10 method	SAMPLE	287524-002	Miscell.	246199	04/05/17 10:39	1.0		
020	met10 method	BLANK	QC880088	Air	246304	04/05/17 10:42	1.0		
021	met10 method	BS	QC880089	Air	246304	04/05/17 10:45	1.0		
022	met10_sn_306	CCV				04/05/17 10:48	1.0	10	
023	met10_sn_306	CCB				04/05/17 11:03	1.0		
024	met10 method	BSD	QC880090	Air	246304	04/05/17 11:06	1.0		
025	met10 method	SAMPLE	287658-001	Air	246304	04/05/17 11:09	1.0		
026	met10 method	SAMPLE	287658-002	Air	246304	04/05/17 11:12	1.0		
027	met10 method	PREPBLK	QC880091	Air	246304	04/05/17 11:15	1.0		
028	met10 method	PREPBLK	QC880092	Air	246304	04/05/17 11:18	1.0		
029	met10 method	BLANK	QC880057	Miscell.	246299	04/05/17 11:21	1.0		
030	met10 method	BS	QC880058	Miscell.	246299	04/05/17 11:24	1.0		
031	met10 method	BSD	QC880059	Miscell.	246299	04/05/17 11:27	1.0		
032	met10 method	SAMPLE	287644-001	Soil	246299	04/05/17 11:29	1.0		5:FE=610000
033	met10 method	SAMPLE	287644-002	Soil	246299	04/05/17 11:32	1.0		5:FE=580000
034	met10 method	CCV				04/05/17 11:35	1.0	10	
035	met10 method	CCB				04/05/17 11:38	1.0		
036	met10 method	CCB				04/05/17 11:41	1.0		
037	met10 method	SAMPLE	287644-003	Soil	246299	04/05/17 11:44	1.0		3:FE=590000
038	met10 method	SAMPLE	287644-004	Soil	246299	04/05/17 11:47	1.0		4:FE=660000
039	met10 method	XCCV				04/05/17 11:50	1.0	10	
040	met10 method	CCV				04/05/17 11:53	1.0	10	
041	met10 method	CCB				04/05/17 11:56	1.0		

KER 04/05/17 : 039 was a misinject, CCV reran

KER 04/05/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087137365

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 09:28

#	Type	Sample ID	Y A	Y R
		ICAL STD	9269908	1082634
		LOWER LIMIT	2780972	324790
		UPPER LIMIT	11123889	1299161
009	ICB		9184137	1084790
010	ICSA		7394767	941448
011	ICSAB		7330224	951278
022	CCV		9011121	1061720
023	CCB		9082156	143117 *
029	BLANK	QC880057	9176290	1096742
030	BS	QC880058	8687712	1061555
031	BSD	QC880059	8652096	1086978
034	CCV		8693989	1065421
035	CCB		9136574	1074135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087137365002
Units : ug/L

Date : 05-APR-2017 09:25
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087137365002	L1	05-APR-2017 09:28	S32578
L2	met10 method	1087137365003	L2	05-APR-2017 09:32	S32571
L3	met10_sn_306	1087137365004	L3	05-APR-2017 09:37	S32367
L4	met10 method	1087137365005	L4	05-APR-2017 09:39	S32368
L5	met10_sn_306	1087137365006	L5	05-APR-2017 09:42	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.2400	3.2080	3.1669	3.0014		LOR0	0.00000	0.33300		2.9041	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	**-25**	100.00	7	1000.0	5	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087137365002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087137365002 Cal Date : 05-APR-2017

ICV 1087137365007 (05-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5132	ug/L	3	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365008.1 File : met10_sn_306 Time : 05-APR-2017 09:47
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.002	ug/L	20	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9160716	-1.18
Yttrium	R	1082634	1076906	-0.53

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365009.1 File : met10_sn_306 Time : 05-APR-2017 09:54
Cal : 1087137365002 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9184137	-0.93
Yttrium	R	1082634	1084790	0.20

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365010.1 File : met10_sn_306 Time : 05-APR-2017 09:57
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-5.548]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18590	ug/L	93	
Copper	A	20000	21560	ug/L	108	
Manganese	A	20000	18160	ug/L	91	
Nickel	A	20000	16210	ug/L	81	
Titanium	A	20000	18420	ug/L	92	
Vanadium	A	20000	21260	ug/L	106	
Aluminum	R	500000	534400	ug/L	107	
Calcium	R	500000	517900	ug/L	104	
Iron	R	200000	200400	ug/L	100	
Magnesium	R	500000	437800	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	7394767	-20.23
Yttrium	R	1082634	941448	-13.04

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365011.1 File : met10_sn_306 Time : 05-APR-2017 10:10
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	960.0	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	7330224	-20.92
Yttrium	R	1082634	951278	-12.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365022.1 File : met10_sn_306 Time : 05-APR-2017 10:48
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.9041	2.9989	5000	4993	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9011121	-2.79
Yttrium	R	1082634	1061720	-1.93

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365023.1 File : met10_sn_306 Time : 05-APR-2017 11:03
Cal : 1087137365002 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9082156	-2.03
Yttrium	R	1082634	143117	**-86.78 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365034.1 File : met10 method Time : 05-APR-2017 11:35
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.9041	2.9857	5000	4971	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	8693989	-6.21
Yttrium	R	1082634	1065421	-1.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365035.1 File : met10 method Time : 05-APR-2017 11:38
Cal : 1087137365002 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9136574	-1.44
Yttrium	R	1082634	1074135	-0.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/05/17 12:22	1.0		
002	met10 method	ICAL	L1			04/05/17 12:25	1.0	1	
003	met10 method	ICAL	L2			04/05/17 12:28	1.0	2	
004	met10 method	ICAL	L3			04/05/17 12:30	1.0	3	
005	met10 method	ICAL	L4			04/05/17 12:33	1.0	4	
006	met10 method	ICAL	L5			04/05/17 12:35	1.0	5	
007	met10 method	ICV				04/05/17 12:38	1.0	6	
008	met10 method	CRI				04/05/17 12:42	1.0	7	
009	met10 method	ICB				04/05/17 12:45	1.0		
010	met10 method	XICB				04/05/17 12:53	1.0		
011	met10 method	ICSA				04/05/17 12:57	1.0	8	10:AL=540000
012	met10 method	ICSAB				04/05/17 13:12	1.0	9	5:AL=540000
013	met10 method	BLANK	QC880057	Miscell.	246299	04/05/17 13:26	1.0		
014	met10 method	BS	QC880058	Miscell.	246299	04/05/17 13:30	1.0		
015	met10 method	BSD	QC880059	Miscell.	246299	04/05/17 13:32	1.0		
016	met10 method	SAMPLE	287576-005	Soil	246299	04/05/17 13:35	1.0		5:FE=530000
017	met10 method	SAMPLE	287642-001	Miscell.	246299	04/05/17 13:38	1.0		4:CA=1100000
018	met10 method	SAMPLE	287273-001	Water	246001	04/05/17 13:40	100.0		
019	met10 method	SAMPLE	287273-002	Water	246001	04/05/17 13:43	100.0		
020	met10 method	BLANK	QC879913	Water	246266	04/05/17 13:45	1.0		
021	met10 method	BS	QC879914	Water	246266	04/05/17 13:48	1.0		
022	met10 method	BSD	QC879915	Water	246266	04/05/17 13:51	1.0		
023	met10 method	CCV				04/05/17 13:53	1.0	10	
024	met10 method	CCB				04/05/17 13:56	1.0		
025	met10 method	XCCB				04/05/17 13:59	1.0		
026	met10 method	MSS	287611-001	Water	246266	04/05/17 14:02	1.0		4:NA=3200000
027	met10 method	MS	QC879916	Water	246266	04/05/17 14:05	1.0		
028	met10 method	MSD	QC879917	Water	246266	04/05/17 14:08	1.0		
029	met10 method	X	RINSE			04/05/17 14:10	1.0		
030	met10 method	SAMPLE	287611-002	Water	246266	04/05/17 14:14	1.0		4:NA=3300000
031	met10 method	SAMPLE	287615-002	Water	246266	04/05/17 14:16	1.0		1:NA=170000
032	met10 method	BLANK	QC879632	Water	246197	04/05/17 14:19	1.0		
033	met10 method	BS	QC879633	Water	246197	04/05/17 14:22	1.0		
034	met10 method	BSD	QC879634	Water	246197	04/05/17 14:25	1.0		
035	met10 method	MSS	287558-001	Water	246197	04/05/17 14:27	1.0		
036	met10 method	CCV				04/05/17 14:29	1.0	10	
037	met10 method	CCB				04/05/17 14:32	1.0		
038	met10 method	CCB				04/05/17 14:35	1.0		
039	met10 method	MS	QC879635	Water	246197	04/05/17 14:38	1.0		
040	met10 method	MSD	QC879636	Water	246197	04/05/17 14:41	1.0		
041	met10 method	SAMPLE	287389-001	Water	246197	04/05/17 14:43	1.0		
042	met10 method	SAMPLE	287389-002	Water	246197	04/05/17 14:47	1.0		
043	met10 method	SAMPLE	287389-003	Water	246197	04/05/17 14:50	1.0		
044	met10 method	SAMPLE	287570-003	Water	246197	04/05/17 14:53	1.0		4:NA=4300000
045	met10 method	SAMPLE	287538-001	Filtrate	246296	04/05/17 14:56	1.0		2:CA=550000
046	met10 method	SAMPLE	287538-004	Filtrate	246296	04/05/17 14:59	100.0		
047	met10 method	BLANK	QC879923	Soil	246268	04/05/17 15:03	1.0		
048	met10 method	BS	QC879924	Soil	246268	04/05/17 15:06	1.0		
049	met10 method	CCV				04/05/17 15:08	1.0	10	
050	met10 method	CCB				04/05/17 15:11	1.0		
051	met10 method	CCB				04/05/17 15:14	1.0		
052	met10 method	BSD	QC879925	Soil	246268	04/05/17 15:17	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MSS	287252-001	Soil	246268	04/05/17 15:20	1.0		3:FE=410000
054	met10 method	MS	QC879926	Soil	246268	04/05/17 15:22	1.0		1:FE=490000
055	met10 method	MSD	QC879927	Soil	246268	04/05/17 15:25	1.0		1:FE=480000
056	met10 method	SAMPLE	287252-002	Soil	246268	04/05/17 15:28	1.0		3:FE=530000
057	met10 method	SAMPLE	287252-003	Soil	246268	04/05/17 15:31	1.0		4:FE=570000
058	met10 method	SAMPLE	287252-004	Soil	246268	04/05/17 15:34	1.0		4:FE=520000
059	met10 method	SAMPLE	287252-005	Soil	246268	04/05/17 15:36	1.0		4:FE=670000
060	met10 method	SAMPLE	287252-006	Soil	246268	04/05/17 15:39	1.0		4:FE=650000
061	met10 method	SAMPLE	287252-008	Soil	246268	04/05/17 15:42	1.0		4:FE=520000
062	met10 method	CCV				04/05/17 15:45	1.0	10	
063	met10 method	CCB				04/05/17 15:47	1.0		
064	met10 method	CCB				04/05/17 15:50	1.0		
065	met10 method	SAMPLE	287252-009	Soil	246268	04/05/17 15:53	1.0		2:FE=410000
066	met10 method	SAMPLE	287252-010	Soil	246268	04/05/17 15:56	1.0		4:FE=450000
067	met10 method	SAMPLE	287252-011	Soil	246268	04/05/17 15:59	1.0		4:FE=500000
068	met10 method	SAMPLE	287252-012	Soil	246268	04/05/17 16:01	1.0		3:FE=390000
069	met10 method	SAMPLE	287252-013	Soil	246268	04/05/17 16:04	1.0		4:FE=460000
070	met10 method	SAMPLE	287252-014	Soil	246268	04/05/17 16:07	1.0		4:FE=440000
071	met10 method	SAMPLE	287252-015	Soil	246268	04/05/17 16:09	1.0		4:FE=400000
072	met10 method	SAMPLE	287252-016	Soil	246268	04/05/17 16:12	1.0		3:FE=560000
073	met10 method	SAMPLE	287252-017	Soil	246268	04/05/17 16:15	1.0		5:FE=500000
074	met10 method	SAMPLE	287252-018	Soil	246268	04/05/17 16:18	1.0		4:FE=480000
075	met10 method	CCV				04/05/17 16:20	1.0	10	
076	met10 method	CCB				04/05/17 16:23	1.0		
077	met10 method	SAMPLE	287252-019	Soil	246268	04/05/17 16:26	1.0		4:AL=530000
078	met10 method	SAMPLE	287252-020	Soil	246268	04/05/17 16:29	1.0		4:FE=550000
079	met10 method	SAMPLE	287252-021	Soil	246268	04/05/17 16:31	1.0		4:FE=460000
080	met10 method	X	RINSE			04/05/17 16:34	1.0		
081	met10 method	MSS	287558-001	Water	246197	04/05/17 16:38	1.0		
082	met10 method	SER	QC879637	Water	246197	04/05/17 16:40	5.0		
083	met10 method	PDS	QC879638	Water	246197	04/05/17 16:42	1.0	11 12 13	
084	met10 method	SAMPLE	287642-001	Miscell.	246299	04/05/17 16:45	100.0		
085	met10 method	SAMPLE	287446-001	TCLP Leachate	246041	04/05/17 16:47	10.0		1:NA=140000
086	met10 method	SAMPLE	287446-002	TCLP Leachate	246041	04/05/17 16:51	10.0		1:NA=150000
087	met10 method	CCV				04/05/17 16:54	1.0	10	
088	met10 method	CCB				04/05/17 16:57	1.0		
089	met10 method	?SAMPLE	287446-003		246041	04/05/17 17:00	10.0		
090	met10 method	SAMPLE	287446-004	TCLP Leachate	246041	04/05/17 17:04	10.0		1:NA=130000
091	met10 method	BLANK	QC879941	Soil	246272	04/05/17 17:07	1.0		
092	met10 method	BS	QC879942	Soil	246272	04/05/17 17:11	1.0		
093	met10 method	BSD	QC879943	Soil	246272	04/05/17 17:13	1.0		
094	met10 method	MSS	287252-028	Soil	246272	04/05/17 17:15	1.0		5:FE=520000
095	met10 method	MS	QC879944	Soil	246272	04/05/17 17:18	1.0		5:AL=590000
096	met10 method	MSD	QC879945	Soil	246272	04/05/17 17:21	1.0		5:AL=530000
097	met10 method	PREPBLK	QC880025	Soil	246272	04/05/17 17:24	1.0		
098	met10 method	PREPBLK	QC880026	Soil	246272	04/05/17 17:27	1.0		
099	met10 method	CCV				04/05/17 17:31	1.0	10	
100	met10 method	CCB				04/05/17 17:33	1.0		
101	met10 method	SAMPLE	287252-022	Soil	246272	04/05/17 17:37	1.0		4:FE=480000
102	met10 method	SAMPLE	287252-023	Soil	246272	04/05/17 17:39	1.0		4:AL=610000
103	met10 method	SAMPLE	287252-024	Soil	246272	04/05/17 17:42	1.0		4:FE=470000
104	met10 method	SAMPLE	287252-025	Soil	246272	04/05/17 17:45	1.0		4:FE=530000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287252-026	Soil	246272	04/05/17 17:47	1.0		4:FE=510000
106	met10 method	SAMPLE	287252-027	Soil	246272	04/05/17 17:50	1.0		4:FE=510000
107	met10 method	SAMPLE	287252-029	Soil	246272	04/05/17 17:53	1.0		5:FE=430000
108	met10 method	SAMPLE	287252-030	Soil	246272	04/05/17 17:56	1.0		4:FE=390000
109	met10 method	SAMPLE	287252-031	Soil	246272	04/05/17 17:58	1.0		2:FE=520000
110	met10 method	SAMPLE	287252-032	Soil	246272	04/05/17 18:01	1.0		4:FE=450000
111	met10 method	CCV				04/05/17 18:04	1.0	10	
112	met10 method	XCCB				04/05/17 18:06	1.0		
113	met10 method	CCB				04/05/17 18:09	1.0		
114	met10 method	SAMPLE	287252-033	Soil	246272	04/05/17 18:12	1.0		5:FE=510000
115	met10 method	SAMPLE	287252-034	Soil	246272	04/05/17 18:15	1.0		5:FE=440000
116	met10 method	SAMPLE	287252-035	Soil	246272	04/05/17 18:18	1.0		5:AL=490000
117	met10 method	SAMPLE	287252-036	Soil	246272	04/05/17 18:20	1.0		4:FE=430000
118	met10 method	SAMPLE	287252-037	Soil	246272	04/05/17 18:23	1.0		4:FE=450000
119	met10 method	SAMPLE	287252-038	Soil	246272	04/05/17 18:26	1.0		4:FE=480000
120	met10 method	SAMPLE	287252-039	Soil	246272	04/05/17 18:29	1.0		4:FE=440000
121	met10 method	SAMPLE	287252-040	Soil	246272	04/05/17 18:31	1.0		4:FE=430000
122	met10 method	SAMPLE	287252-041	Soil	246272	04/05/17 18:34	1.0		4:FE=560000
123	met10 method	X	RINSE			04/05/17 18:36	1.0		
124	met10 method	CCV				04/05/17 18:40	1.0	10	
125	met10 method	XCCB				04/05/17 18:43	1.0		
126	met10 method	CCB				04/05/17 18:45	1.0		
127	met10 method	BLANK	QC880197	Soil	246335	04/05/17 18:49	1.0		
128	met10 method	BS	QC880198	Soil	246335	04/05/17 18:52	1.0		
129	met10 method	BSD	QC880199	Soil	246335	04/05/17 18:54	1.0		
130	met10 method	MSS	287585-002	Soil	246335	04/05/17 18:57	1.0		4:FE=550000
131	met10 method	MS	QC880200	Soil	246335	04/05/17 19:00	1.0		
132	met10 method	MSD	QC880201	Soil	246335	04/05/17 19:03	1.0		
133	met10 method	SAMPLE	287585-006	Soil	246335	04/05/17 19:06	1.0		4:FE=430000
134	met10 method	SAMPLE	287585-008	Soil	246335	04/05/17 19:09	1.0		3:FE=420000
135	met10 method	SAMPLE	287585-010	Soil	246335	04/05/17 19:11	1.0		3:FE=410000
136	met10 method	SAMPLE	287585-012	Soil	246335	04/05/17 19:14	1.0		2:FE=290000
137	met10 method	CCV				04/05/17 19:17	1.0	10	
138	met10 method	XCCB				04/05/17 19:19	1.0		
139	met10 method	CCB				04/05/17 19:22	1.0		
140	met10 method	SAMPLE	287585-014	Soil	246335	04/05/17 19:25	1.0		3:FE=340000
141	met10 method	SAMPLE	287591-001	Soil	246335	04/05/17 19:28	1.0		5:MG=690000
142	met10 method	SAMPLE	287591-002	Soil	246335	04/05/17 19:31	1.0		3:FE=370000
143	met10 method	SAMPLE	287591-004	Soil	246335	04/05/17 19:34	1.0		4:MG=940000
144	met10 method	SAMPLE	287591-005	Soil	246335	04/05/17 19:37	1.0		4:MG=620000
145	met10 method	SAMPLE	287591-006	Soil	246335	04/05/17 19:39	1.0		4:FE=530000
146	met10 method	SAMPLE	287591-007	Soil	246335	04/05/17 19:42	1.0		4:MG=1200000
147	met10 method	SAMPLE	287650-001	Miscell.	246335	04/05/17 19:45	1.0		8:AL=1700000
148	met10 method	SAMPLE	287650-002	Miscell.	246335	04/05/17 19:48	1.0		7:AL=1600000
149	met10 method	SAMPLE	287650-003	Miscell.	246335	04/05/17 20:29	1.0		4:FE=500000
150	met10 method	CCV				04/05/17 20:32	1.0	10	
151	met10 method	CCB				04/05/17 20:35	1.0		
152	met10 method	CCB				04/05/17 20:38	1.0		
153	met10 method	SAMPLE	287653-001	Miscell.	246335	04/05/17 20:41	1.0		4:AL=280000
154	met10 method	SAMPLE	287653-002	Miscell.	246335	04/05/17 20:44	1.0		1:K=180000
155	met10 method	X	RINSE			04/05/17 20:47	1.0		
156	met10 method	BLANK	QC880192	Soil	246334	04/05/17 20:50	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	BS	QC880193	Soil	246334	04/05/17 20:53	1.0		
158	met10 method	BSD	QC880194	Soil	246334	04/05/17 20:56	1.0		
159	met10 method	MSS	287630-007	Soil	246334	04/05/17 20:58	1.0		4:CA=1000000
160	met10 method	MS	QC880195	Soil	246334	04/05/17 21:01	1.0		
161	met10 method	MSD	QC880196	Soil	246334	04/05/17 21:04	1.0		
162	met10 method	SAMPLE	287560-001	Soil	246334	04/05/17 21:08	1.0		8:CA=1700000
163	met10 method	CCV				04/05/17 21:10	1.0	10	
164	met10 method	CCB				04/05/17 21:13	1.0		
165	met10 method	CCB				04/05/17 21:16	1.0		

KER 04/05/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

KER 04/05/17 : 010 and 025 were misinjects

MNA 04/05/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 29 through 100.

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 101 through 165.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087137542

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 12:25

#	Type	Sample ID	Y A	Y R
		ICAL STD	8890839	1088491
		LOWER LIMIT	2667252	326547
		UPPER LIMIT	10669007	1306189
009	ICB		8928553	1302486
011	ICSA		7116813	933411
012	ICSAB		7087780	947368
013	BLANK	QC880057	8777540	142835 *
014	BS	QC880058	8343518	1069376
015	BSD	QC880059	8304491	1085515
023	CCV		8276643	1053268
024	CCB		8895599	1073454
036	CCV		8231462	1053814
038	CCB		8672989	197861 *
047	BLANK	QC879923	8753631	1085066
048	BS	QC879924	8211025	1065500
049	CCV		8180099	1039865
050	CCB		8628914	1070133
051	CCB		8765201	145267 *
052	BSD	QC879925	8148586	1062621
053	MSS	287252-001	7935739	1034891
054	MS	QC879926	7697497	1049585
055	MSD	QC879927	7561883	1033201
056	SAMPLE	287252-002	7720302	993787
057	SAMPLE	287252-003	7655183	999496
058	SAMPLE	287252-004	7789918	1005897
059	SAMPLE	287252-005	7667029	997074
060	SAMPLE	287252-006	7588667	998716
061	SAMPLE	287252-008	7762010	984525
062	CCV		8245006	1032880
063	CCB		8754695	1071320
064	CCB		9009682	142740 *
065	SAMPLE	287252-009	7978684	1018474
066	SAMPLE	287252-010	7910613	1008658
067	SAMPLE	287252-011	7836692	1001141
068	SAMPLE	287252-012	7938247	1020989
069	SAMPLE	287252-013	7832777	1008831
070	SAMPLE	287252-014	7934887	1011700
071	SAMPLE	287252-015	8104614	1027518
072	SAMPLE	287252-016	7963442	1013161
073	SAMPLE	287252-017	7777795	1004516
074	SAMPLE	287252-018	7799217	990524
075	CCV		8251674	1037770
076	CCB		8845380	1084634
077	SAMPLE	287252-019	7684575	996718
078	SAMPLE	287252-020	7681637	996377
079	SAMPLE	287252-021	7837007	1004806
087	CCV		8288668	1037687
088	CCB		8837068	1065466
091	BLANK	QC879941	8872943	1084548
092	BS	QC879942	8281978	1044384
093	BSD	QC879943	8259733	1049861

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087137542

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 12:25

#	Type	Sample ID	Y A	Y R
094	MSS	287252-028	7833604	998460
095	MS	QC879944	7638306	1008869
096	MSD	QC879945	7650563	1002939
097	PREPBLK	QC880025	8630956	1069309
098	PREPBLK	QC880026	8839109	1057761
099	CCV		8317714	1041999
100	CCB		8728109	1084770
101	SAMPLE	287252-022	7758605	987899
102	SAMPLE	287252-023	7671162	988353
103	SAMPLE	287252-024	7843182	992636
104	SAMPLE	287252-025	7713927	990116
105	SAMPLE	287252-026	7788541	1002987
106	SAMPLE	287252-027	7842837	1001968
107	SAMPLE	287252-029	7951187	1007846
108	SAMPLE	287252-030	8019652	1007255
109	SAMPLE	287252-031	8000836	1005340
110	SAMPLE	287252-032	8014469	1018709
111	CCV		8258824	1045704
113	CCB		8841969	1059280
114	SAMPLE	287252-033	7821398	1003999
115	SAMPLE	287252-034	7893629	999656
116	SAMPLE	287252-035	7909738	1017867
117	SAMPLE	287252-036	8304449	1052442
118	SAMPLE	287252-037	8078367	1022271
119	SAMPLE	287252-038	7962661	999426
120	SAMPLE	287252-039	7872918	993953
121	SAMPLE	287252-040	7890982	987860
122	SAMPLE	287252-041	7797216	988502
124	CCV		8279642	1026376
126	CCB		8964469	1091402
153	SAMPLE	287653-001	8093237	1018880
154	SAMPLE	287653-002	8286889	1015357

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087137542001
Units : ug/L

Date : 05-APR-2017 12:22
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087137542002	L1	05-APR-2017 12:25	S32578
L2	met10 method	1087137542003	L2	05-APR-2017 12:28	S32571
L3	met10 method	1087137542004	L3	05-APR-2017 12:30	S32367
L4	met10 method	1087137542005	L4	05-APR-2017 12:33	S32368
L5	met10 method	1087137542006	L5	05-APR-2017 12:35	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.2400	2.9650	2.8830	2.7430		LOR0	0.00000	0.36438		2.7077	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-18	100.00	8	1000.0	5	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087137542001 Cal Date : 05-APR-2017

ICV 1087137542007 (05-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4986	ug/L	0	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542008.1 File : met10 method Time : 05-APR-2017 12:42
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.040	ug/L	1	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8772995	-1.33
Yttrium	R	1088491	1062271	-2.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542009.1 File : met10 method Time : 05-APR-2017 12:45
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8928553	0.42
Yttrium	R	1088491	1302486	19.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542011.1 File : met10 method Time : 05-APR-2017 12:57
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-7.403]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	17260	ug/L	86	
Copper	A	20000	21700	ug/L	108	
Manganese	A	20000	17830	ug/L	89	
Nickel	A	20000	16410	ug/L	82	
Titanium	A	20000	18180	ug/L	91	
Vanadium	A	20000	20950	ug/L	105	
Aluminum	R	500000	535200	ug/L	107	
Calcium	R	500000	491000	ug/L	98	
Iron	R	200000	195400	ug/L	98	
Magnesium	R	500000	437800	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	7116813	-19.95
Yttrium	R	1088491	933411	-14.25

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542012.1 File : met10 method Time : 05-APR-2017 13:12
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	930.8	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	7087780	-20.28
Yttrium	R	1088491	947368	-12.97

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542023.1 File : met10 method Time : 05-APR-2017 13:53
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7156	5000	4948	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8276643	-6.91
Yttrium	R	1088491	1053268	-3.24

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542024.1 File : met10 method Time : 05-APR-2017 13:56
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8895599	0.05
Yttrium	R	1088491	1073454	-1.38

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542036.2 File : met10 method Time : 05-APR-2017 14:29
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7166	5000	4949	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8231462	-7.42
Yttrium	R	1088491	1053814	-3.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542038.1 File : met10 method Time : 05-APR-2017 14:35
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8672989	-2.45
Yttrium	R	1088491	197861	**-81.82 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542049.2 File : met10 method Time : 05-APR-2017 15:08
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.6845	5000	4891	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8180099	-7.99
Yttrium	R	1088491	1039865	-4.47

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542050.1 File : met10 method Time : 05-APR-2017 15:11
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8628914	-2.95
Yttrium	R	1088491	1070133	-1.69

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542051.1 File : met10 method Time : 05-APR-2017 15:14
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8765201	-1.41
Yttrium	R	1088491	145267	**-86.65 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542062.1 File : met10 method Time : 05-APR-2017 15:45
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7471	5000	5005	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8245006	-7.26
Yttrium	R	1088491	1032880	-5.11

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542063.1 File : met10 method Time : 05-APR-2017 15:47
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8754695	-1.53
Yttrium	R	1088491	1071320	-1.58

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542064.1 File : met10 method Time : 05-APR-2017 15:50
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	9009682	1.34
Yttrium	R	1088491	142740	**-86.89 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542075.1 File : met10 method Time : 05-APR-2017 16:20
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7557	5000	5021	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8251674	-7.19
Yttrium	R	1088491	1037770	-4.66

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542076.1 File : met10 method Time : 05-APR-2017 16:23
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8845380	-0.51
Yttrium	R	1088491	1084634	-0.35

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542087.1 File : met10 method Time : 05-APR-2017 16:54
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.8007	5000	5103	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8288668	-6.77
Yttrium	R	1088491	1037687	-4.67

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542088.1 File : met10 method Time : 05-APR-2017 16:57
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8837068	-0.60
Yttrium	R	1088491	1065466	-2.12

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542099.1 File : met10 method Time : 05-APR-2017 17:31
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7452	5000	5001	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8317714	-6.45
Yttrium	R	1088491	1041999	-4.27

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542100.1 File : met10 method Time : 05-APR-2017 17:33
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8728109	-1.83
Yttrium	R	1088491	1084770	-0.34

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542111.1 File : met10 method Time : 05-APR-2017 18:04
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7389	5000	4990	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8258824	-7.11
Yttrium	R	1088491	1045704	-3.93

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542113.1 File : met10 method Time : 05-APR-2017 18:09
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8841969	-0.55
Yttrium	R	1088491	1059280	-2.68

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542124.1 File : met10 method Time : 05-APR-2017 18:40
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7635	5000	5035	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8279642	-6.87
Yttrium	R	1088491	1026376	-5.71

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542126.1 File : met10 method Time : 05-APR-2017 18:45
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[3.232]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8964469	0.83
Yttrium	R	1088491	1091402	0.27

!=warning CCB=instrument blank

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/06/17 08:52	1.0		
002	met10 method	ICAL	L1			04/06/17 08:56	1.0	1	
003	met10 method	ICAL	L2			04/06/17 08:59	1.0	2	
004	met10 method	ICAL	L3			04/06/17 09:01	1.0	3	
005	met10 method	ICAL	L4			04/06/17 09:03	1.0	4	
006	met10 method	ICAL	L5			04/06/17 09:06	1.0	5	
007	met10 method	ICV				04/06/17 09:09	1.0	6	
008	met10 method	CRI				04/06/17 09:12	1.0	7	
009	met10 method	ICB				04/06/17 09:27	1.0		
010	met10 method	ICSA				04/06/17 09:31	1.0	8	10:AL=560000
011	met10 method	ICSAB				04/06/17 09:35	1.0	9	5:AL=580000
012	met10 method	XICSAB				04/06/17 10:06	1.0	9	
013	met10 method	ICSAB				04/06/17 10:16	1.0	9	5:AL=550000
014	met10 method	SAMPLE	287630-003	Soil	246334	04/06/17 11:16	1.0		2:TI=14000
015	met10 method	SAMPLE	287630-004	Soil	246334	04/06/17 11:19	1.0		4:CA=500000
016	met10 method	SAMPLE	287630-005	Soil	246334	04/06/17 11:22	1.0		4:FE=430000
017	met10 method	SAMPLE	287630-006	Soil	246334	04/06/17 11:25	1.0		6:FE=550000
018	met10 method	MSS	287630-007	Soil	246334	04/06/17 11:28	1.0		4:CA=1000000
019	met10 method	SAMPLE	287724-001	Soil	246334	04/06/17 11:31	1.0		5:FE=550000
020	met10 method	BLANK	QC880099	WET Leachate	246307	04/06/17 11:34	10.0		1:NA=170000
021	met10 method	BS	QC880100	WET Leachate	246307	04/06/17 11:37	1.0		
022	met10 method	BSD	QC880101	WET Leachate	246307	04/06/17 11:39	1.0		
023	met10 method	MSS	287513-001	WET Leachate	246307	04/06/17 11:42	10.0		1:NA=150000
024	met10 method	CCV				04/06/17 11:45	1.0	10	
025	met10 method	CCB				04/06/17 11:48	1.0		
026	met10 method	CCB				04/06/17 11:51	1.0		
027	met10 method	MS	QC880102	WET Leachate	246307	04/06/17 11:55	10.0		
028	met10 method	MSD	QC880103	WET Leachate	246307	04/06/17 11:58	10.0		
029	met10 method	SAMPLE	287416-001	WET Leachate	246307	04/06/17 12:00	10.0		2:NA=140000
030	met10 method	SAMPLE	287727-001	WET Leachate	246307	04/06/17 12:03	10.0		1:NA=150000
031	met10 method	SAMPLE	287727-001	TCLP Leachate	246190	04/06/17 12:05	10.0		1:NA=160000
032	met10 method	SAMPLE	287513-002	WET Leachate	246307	04/06/17 12:09	10.0		1:NA=170000
033	met10 method	SAMPLE	287513-003	WET Leachate	246307	04/06/17 12:11	10.0		1:NA=140000
034	met10 method	SAMPLE	287513-004	WET Leachate	246307	04/06/17 12:14	10.0		1:NA=150000
035	met10 method	SAMPLE	287513-005	WET Leachate	246307	04/06/17 12:16	10.0		1:NA=140000
036	met10 method	SAMPLE	287513-006	WET Leachate	246307	04/06/17 12:19	10.0		1:NA=140000
037	met10 method	CCV				04/06/17 12:21	1.0	10	
038	met10 method	CCB				04/06/17 12:24	1.0		
039	met10 method	CCB				04/06/17 12:27	1.0		
040	met10 method	SAMPLE	287513-007	WET Leachate	246307	04/06/17 12:31	10.0		1:NA=160000
041	met10 method	SAMPLE	287513-008	WET Leachate	246307	04/06/17 12:34	10.0		1:NA=140000
042	met10 method	SAMPLE	287513-009	WET Leachate	246307	04/06/17 12:36	10.0		1:NA=150000
043	met10 method	SAMPLE	287513-010	WET Leachate	246307	04/06/17 12:39	10.0		1:NA=140000
044	met10 method	SAMPLE	287513-011	WET Leachate	246307	04/06/17 12:41	10.0		1:NA=160000
045	met10 method	SAMPLE	287513-012	WET Leachate	246307	04/06/17 12:44	10.0		1:NA=160000
046	met10 method	SAMPLE	287513-013	WET Leachate	246307	04/06/17 12:46	10.0		1:NA=160000
047	met10 method	SAMPLE	287560-001	WET Leachate	246307	04/06/17 12:49	1.0		1:NA=160000
048	met10 method	SAMPLE	287560-002	WET Leachate	246307	04/06/17 12:52	1.0		1:NA=160000
049	met10 method	SAMPLE	287439-001	WET Leachate	246307	04/06/17 12:55	10.0		
050	met10 method	CCV				04/06/17 12:57	1.0	10	
051	met10 method	CCB				04/06/17 13:00	1.0		
052	met10 method	CCB				04/06/17 13:03	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287543-005	WET Leachate	246307	04/06/17 13:06	10.0		
054	met10 method	SAMPLE	286962-005	Soil	246123	04/06/17 13:09	1.0		3:CA=5400000
055	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:12	100.0		
056	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:14	1.0		10:CA=2800000
057	met10 method	X	RINSE			04/06/17 13:17	1.0		
058	met10 method	SAMPLE	287315-001	Miscell.	246094	04/06/17 13:21	1.0		1:K=230000
059	met10 method	SAMPLE	287318-001	Miscell.	246094	04/06/17 13:23	1.0		1:K=170000
060	met10 method	SAMPLE	287467-001	Soil	246170	04/06/17 13:26	1.0		1:FE=110000
061	met10 method	SAMPLE	287467-002	Soil	246170	04/06/17 13:28	1.0		5:FE=430000
062	met10 method	SAMPLE	287467-003	Soil	246170	04/06/17 13:31	1.0		1:FE=110000
063	met10 method	CCV				04/06/17 13:33	1.0	10	
064	met10 method	CCB				04/06/17 13:36	1.0		
065	met10 method	CCB				04/06/17 13:39	1.0		
066	met10 method	X	RINSE			04/06/17 13:43	1.0		
067	met10 method	SER	QC880366	WET Leachate	246307	04/06/17 13:46	50.0		
068	met10 method	PDS	QC880367	WET Leachate	246307	04/06/17 13:50	10.0	11 12 13	1:NA=160000
069	met10 method	SAMPLE	287595-027	Soil	246333	04/06/17 13:52	1.0		5:CA=1700000
070	met10 method	SAMPLE	287595-029	Soil	246333	04/06/17 13:55	1.0		4:CA=2300000
071	met10 method	BLANK	QC879203	Soil	246096	04/06/17 13:59	1.0		
072	met10 method	BS	QC879001	WET Leachate	246046	04/06/17 14:02	1.0		
073	met10 method	BSD	QC879002	WET Leachate	246046	04/06/17 14:04	1.0		
074	met10 method	SAMPLE	287325-001	WET Leachate	246046	04/06/17 14:07	10.0		1:NA=110000
075	met10 method	SAMPLE	287325-002	WET Leachate	246046	04/06/17 14:10	10.0		1:NA=100000
076	met10 method	CCV				04/06/17 14:13	1.0	10	
077	met10 method	CCB				04/06/17 14:15	1.0		
078	met10 method	SAMPLE	287331-001	WET Leachate	246046	04/06/17 14:19	10.0		
079	met10 method	X	RINSE			04/06/17 14:25	1.0		
080	met10 method	MSS	287252-007	Soil	246299	04/06/17 14:30	1.0		4:FE=530000
081	met10 method	MS	QC880060	Soil	246299	04/06/17 14:32	1.0		4:AL=540000
082	met10 method	MSD	QC880061	Soil	246299	04/06/17 14:35	1.0		4:FE=640000
083	met10 method	SER	QC880062	Soil	246299	04/06/17 14:38	5.0		1:FE=120000
084	met10 method	PDS	QC880063	Soil	246299	04/06/17 14:40	1.0	11 12 13	4:FE=520000
085	met10 method	SAMPLE	287252-042	Soil	246299	04/06/17 14:43	1.0		4:FE=700000
086	met10 method	SAMPLE	287252-043	Soil	246299	04/06/17 14:46	1.0		4:AL=560000
087	met10 method	SAMPLE	287252-044	Soil	246299	04/06/17 14:49	1.0		4:AL=580000
088	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 14:52	1.0		5:FE=500000
089	met10 method	CCV				04/06/17 14:55	1.0	10	
090	met10 method	CCB				04/06/17 14:57	1.0		
091	met10 method	CCB				04/06/17 15:00	1.0		
092	met10 method	SAMPLE	287362-045	Soil	246299	04/06/17 15:04	1.0		4:FE=730000
093	met10 method	SAMPLE	287362-046	Soil	246299	04/06/17 15:07	1.0		4:AL=610000
094	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 15:10	1.0		5:CA=1800000
095	met10 method	SAMPLE	287533-001	Soil	246299	04/06/17 15:13	1.0		6:FE=640000
096	met10 method	SAMPLE	287533-002	Soil	246299	04/06/17 15:16	1.0		6:FE=750000
097	met10 method	SAMPLE	287533-003	Soil	246299	04/06/17 15:19	1.0		6:FE=710000
098	met10 method	SAMPLE	287533-004	Soil	246299	04/06/17 15:22	1.0		5:FE=490000
099	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 15:25	1.0		2:FE=300000
100	met10 method	X	RINSE			04/06/17 15:57	1.0		
101	met10 method	MSS	287530-001	Soil	246333	04/06/17 16:01	1.0		5:CA=1100000
102	met10 method	CCV				04/06/17 16:04	1.0	10	
103	met10 method	CCB				04/06/17 16:07	1.0		
104	met10 method	CCB				04/06/17 16:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287166-002	Air	246062	04/06/17 16:14	1.0		
106	met10 method	SAMPLE	287168-003	Air	246062	04/06/17 16:16	1.0		
107	met10 method	SAMPLE	287171-002	Air	246062	04/06/17 16:18	1.0		
108	met10 method	MSS	287505-010	TCLP Leachate	246190	04/06/17 16:21	10.0		1:NA=170000
109	met10 method	SAMPLE	287418-005	Filtrate	246184	04/06/17 16:25	1.0		5:NA=3300000
110	met10 method	SAMPLE	287418-006	Filtrate	246184	04/06/17 16:27	1.0		4:NA=2800000
111	met10 method	SAMPLE	287418-007	Filtrate	246184	04/06/17 16:31	1.0		4:NA=5100000
112	met10 method	SAMPLE	287418-008	Filtrate	246184	04/06/17 16:33	1.0		4:NA=3300000
113	met10 method	SAMPLE	287418-009	Filtrate	246184	04/06/17 16:37	1.0		3:NA=2200000
114	met10 method	SAMPLE	287418-010	Filtrate	246184	04/06/17 16:40	1.0		2:NA=700000
115	met10 method	CCV				04/06/17 16:42	1.0	10	
116	met10 method	CCB				04/06/17 16:45	1.0		
117	met10 method	CCB				04/06/17 16:48	1.0		
118	met10 method	SAMPLE	287418-011	Filtrate	246184	04/06/17 16:51	1.0		4:NA=4700000
119	met10 method	MSS	287252-028	Soil	246272	04/06/17 16:55	100.0		
120	met10 method	SAMPLE	287252-029	Soil	246272	04/06/17 16:57	100.0		
121	met10 method	SAMPLE	287252-030	Soil	246272	04/06/17 16:59	1.0		4:FE=370000
122	met10 method	SAMPLE	287252-033	Soil	246272	04/06/17 17:02	100.0		
123	met10 method	SAMPLE	287252-034	Soil	246272	04/06/17 17:04	100.0		
124	met10 method	SAMPLE	287252-035	Soil	246272	04/06/17 17:07	100.0		
125	met10 method	SAMPLE	287252-036	Soil	246272	04/06/17 17:09	1.0		4:FE=410000
126	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 17:12	100.0		
127	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 17:14	1.0		5:CA=1700000
128	met10 method	CCV				04/06/17 17:17	1.0	10	
129	met10 method	CCB				04/06/17 17:20	1.0		
130	met10 method	CCB				04/06/17 17:22	1.0		
131	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 17:26	100.0		
132	met10 method	X	RINSE			04/06/17 17:28	1.0		
133	met10 method	BLANK	QC879918	Water	246267	04/06/17 17:31	1.0		
134	met10 method	BS	QC879919	Water	246267	04/06/17 17:35	1.0		
135	met10 method	BSD	QC879920	Water	246267	04/06/17 17:37	1.0		
136	met10 method	MSS	287440-001	Water	246267	04/06/17 17:39	1.0		
137	met10 method	MS	QC879921	Water	246267	04/06/17 17:43	1.0		
138	met10 method	MSD	QC879922	Water	246267	04/06/17 17:45	1.0		
139	met10 method	SAMPLE	287417-001	Water	246267	04/06/17 17:48	1.0		
140	met10 method	SAMPLE	287417-002	Water	246267	04/06/17 17:50	1.0		1:CA=130000
141	met10 method	CCV				04/06/17 17:53	1.0	10	
142	met10 method	CCB				04/06/17 17:56	1.0		
143	met10 method	CCB				04/06/17 17:59	1.0		
144	met10 method	SAMPLE	287516-001	Water	246267	04/06/17 18:03	1.0		1:NA=290000
145	met10 method	X	RINSE			04/06/17 18:06	1.0		
146	met10 method	BLANK	QC880251	Soil	246347	04/06/17 18:09	1.0		
147	met10 method	LCS	QC880252	Soil	246347	04/06/17 18:12	1.0		
148	met10 method	MSS	287623-009	Soil	246347	04/06/17 18:15	100.0		
149	met10 method	MS	QC880253	Soil	246347	04/06/17 18:17	100.0		
150	met10 method	MSD	QC880254	Soil	246347	04/06/17 18:20	100.0		
151	met10 method	PDS	QC880255	Soil	246347	04/06/17 18:22	100.0	11 12 13	
152	met10 method	SER	QC880256	Soil	246347	04/06/17 18:24	500.0		
153	met10 method	SAMPLE	287623-001	Soil	246347	04/06/17 18:27	100.0		
154	met10 method	CCV				04/06/17 18:29	1.0	10	
155	met10 method	CCB				04/06/17 18:32	1.0		
156	met10 method	CCB				04/06/17 18:35	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287623-003	Soil	246347	04/06/17 18:39	100.0		
158	met10 method	SAMPLE	287623-004	Soil	246347	04/06/17 18:42	100.0		
159	met10 method	SAMPLE	287623-005	Soil	246347	04/06/17 18:44	100.0		
160	met10 method	SAMPLE	287623-006	Soil	246347	04/06/17 18:46	100.0		
161	met10 method	SAMPLE	287623-007	Soil	246347	04/06/17 18:49	100.0		
162	met10 method	SAMPLE	287623-010	Soil	246347	04/06/17 18:51	100.0		
163	met10 method	CCV				04/06/17 18:54	1.0	10	
164	met10 method	CCB				04/06/17 18:56	1.0		
165	met10 method	CCB				04/06/17 18:59	1.0		
166	met10 method	X	RINSE			04/06/17 19:08	1.0		
167	met10 method	BLANK	QC880298	Filtrate	246356	04/06/17 19:12	1.0		
168	met10 method	BS	QC880299	Filtrate	246356	04/06/17 19:15	1.0		
169	met10 method	BSD	QC880300	Filtrate	246356	04/06/17 19:17	1.0		
170	met10 method	MSS	287633-008	Filtrate	246356	04/06/17 19:20	1.0		2:CA=300000
171	met10 method	MS	QC880301	Filtrate	246356	04/06/17 19:22	1.0		
172	met10 method	MSD	QC880302	Filtrate	246356	04/06/17 19:25	1.0		
173	met10 method	SAMPLE	287589-001	Filtrate	246356	04/06/17 19:27	1.0		3:NA=390000
174	met10 method	SAMPLE	287633-004	Filtrate	246356	04/06/17 19:30	1.0		3:NA=460000
175	met10 method	SAMPLE	287633-006	Filtrate	246356	04/06/17 19:33	1.0		3:NA=280000
176	met10 method	CCV				04/06/17 19:37	1.0	10	
177	met10 method	CCB				04/06/17 19:40	1.0		
178	met10 method	CCB				04/06/17 19:43	1.0		
179	met10 method	SAMPLE	287633-007	Filtrate	246356	04/06/17 19:46	1.0		2:CA=270000
180	met10 method	X	RINSE			04/06/17 19:49	1.0		
181	met10 method	BLANK	QC879884	SPLP Leachate	246256	04/06/17 19:52	1.0		
182	met10 method	BS	QC879885	SPLP Leachate	246256	04/06/17 19:55	1.0		
183	met10 method	BSD	QC879886	SPLP Leachate	246256	04/06/17 19:58	1.0		
184	met10 method	MSS	287252-001	SPLP Leachate	246256	04/06/17 20:00	1.0		
185	met10 method	MS	QC879887	SPLP Leachate	246256	04/06/17 20:03	1.0		
186	met10 method	MSD	QC879888	SPLP Leachate	246256	04/06/17 20:05	1.0		
187	met10 method	MSS	287252-007	SPLP Leachate	246256	04/06/17 20:07	1.0		
188	met10 method	MS	QC879889	SPLP Leachate	246256	04/06/17 20:10	1.0		
189	met10 method	CCV				04/06/17 20:12	1.0	10	
190	met10 method	CCB				04/06/17 20:15	1.0		
191	met10 method	CCB				04/06/17 20:18	1.0		
192	met10 method	MSD	QC879890	SPLP Leachate	246256	04/06/17 20:21	1.0		
193	met10 method	SER	QC879891	SPLP Leachate	246256	04/06/17 20:25	5.0		
194	met10 method	PDS	QC879892	SPLP Leachate	246256	04/06/17 20:27	1.0	11 12 13	
195	met10 method	SAMPLE	287082-011	SPLP Leachate	246256	04/06/17 20:30	1.0		
196	met10 method	SAMPLE	287082-012	SPLP Leachate	246256	04/06/17 20:34	1.0		
197	met10 method	SAMPLE	287082-013	SPLP Leachate	246256	04/06/17 20:37	1.0		
198	met10 method	SAMPLE	287082-014	SPLP Leachate	246256	04/06/17 20:39	1.0		
199	met10 method	SAMPLE	287082-015	SPLP Leachate	246256	04/06/17 20:43	1.0		
200	met10 method	SAMPLE	287082-016	SPLP Leachate	246256	04/06/17 20:46	1.0		
201	met10 method	SAMPLE	287082-017	SPLP Leachate	246256	04/06/17 20:48	1.0		
202	met10 method	CCV				04/06/17 20:51	1.0	10	
203	met10 method	CCB				04/06/17 20:53	1.0		
204	met10 method	CCB				04/06/17 20:56	1.0		
205	met10 method	SAMPLE	287082-018	SPLP Leachate	246256	04/06/17 21:00	1.0		
206	met10 method	SAMPLE	287082-019	SPLP Leachate	246256	04/06/17 21:03	1.0		
207	met10 method	SAMPLE	287252-002	SPLP Leachate	246256	04/06/17 21:05	1.0		
208	met10 method	SAMPLE	287252-003	SPLP Leachate	246256	04/06/17 21:08	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10
Method : EPA 6010C
Begun : 04/06/17 08:52
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287252-004	SPLP Leachate	246256	04/06/17 21:10	1.0		
210	met10 method	SAMPLE	287252-005	SPLP Leachate	246256	04/06/17 21:12	1.0		
211	met10 method	SAMPLE	287252-006	SPLP Leachate	246256	04/06/17 21:15	1.0		
212	met10 method	SAMPLE	287252-008	SPLP Leachate	246256	04/06/17 21:18	1.0		
213	met10 method	SAMPLE	287252-009	SPLP Leachate	246256	04/06/17 21:21	1.0		
214	met10 method	SAMPLE	287252-010	SPLP Leachate	246256	04/06/17 21:24	1.0		
215	met10 method	CCV				04/06/17 21:26	1.0	10	
216	met10 method	CCB				04/06/17 21:29	1.0		
217	met10 method	CCB				04/06/17 21:32	1.0		
218	met10 method	SAMPLE	287252-011	SPLP Leachate	246256	04/06/17 21:35	1.0		
219	met10 method	CCV				04/06/17 21:38	1.0	10	
220	met10 method	CCB				04/06/17 21:41	1.0		
221	met10 method	CCB				04/06/17 21:44	1.0		
222	met10 method	X	RINSE			04/06/17 22:04	1.0		
223	met10 method	BLANK	QC880277	Air	246352	04/06/17 22:08	1.0		
224	met10 method	BS	QC880278	Air	246352	04/06/17 22:11	1.0		
225	met10 method	BSD	QC880279	Air	246352	04/06/17 22:14	1.0		
226	met10 method	MSS	287419-001	Air	246352	04/06/17 22:16	1.0		
227	met10 method	MS	QC880280	Air	246352	04/06/17 22:19	1.0		
228	met10 method	MSD	QC880281	Air	246352	04/06/17 22:21	1.0		
229	met10 method	SER	QC880282	Air	246352	04/06/17 22:24	5.0		
230	met10 method	PDS	QC880283	Air	246352	04/06/17 22:27	1.0	11 12 13	
231	met10 method	PREPBLK	QC880284	Air	246352	04/06/17 22:30	1.0		
232	met10 method	CCV				04/06/17 22:33	1.0	10	
233	met10 method	CCB				04/06/17 22:36	1.0		
234	met10 method	CCB				04/06/17 22:38	1.0		
235	met10 method	PREPBLK	QC880285	Air	246352	04/06/17 22:42	1.0		
236	met10 method	SAMPLE	287419-002	Air	246352	04/06/17 22:45	1.0		
237	met10 method	SAMPLE	287419-003	Air	246352	04/06/17 22:47	1.0		
238	met10 method	SAMPLE	287420-001	Air	246352	04/06/17 22:50	1.0		
239	met10 method	SAMPLE	287420-002	Air	246352	04/06/17 22:53	1.0		
240	met10 method	SAMPLE	287421-001	Air	246352	04/06/17 22:57	1.0		
241	met10 method	SAMPLE	287421-002	Air	246352	04/06/17 23:00	1.0		
242	met10 method	X	RINSE			04/06/17 23:02	1.0		
243	met10 method	BLANK	QC880093	TCLP Leachate	246305	04/06/17 23:06	10.0		1:NA=160000
244	met10 method	BS	QC880094	TCLP Leachate	246305	04/06/17 23:09	1.0		
245	met10 method	CCV				04/06/17 23:12	1.0	10	
246	met10 method	CCB				04/06/17 23:14	1.0		
247	met10 method	CCB				04/06/17 23:17	1.0		
248	met10 method	BSD	QC880095	TCLP Leachate	246305	04/06/17 23:21	1.0		
249	met10 method	MSS	287513-001	TCLP Leachate	246305	04/06/17 23:23	10.0		1:NA=170000
250	met10 method	MS	QC880096	TCLP Leachate	246305	04/06/17 23:27	10.0		
251	met10 method	MSD	QC880097	TCLP Leachate	246305	04/06/17 23:29	10.0		
252	met10 method	SAMPLE	287513-002	TCLP Leachate	246305	04/06/17 23:32	10.0		1:NA=160000
253	met10 method	SAMPLE	287513-003	TCLP Leachate	246305	04/06/17 23:35	10.0		1:NA=150000
254	met10 method	SAMPLE	287513-004	TCLP Leachate	246305	04/06/17 23:39	10.0		1:NA=150000
255	met10 method	SAMPLE	287513-006	TCLP Leachate	246305	04/06/17 23:42	10.0		1:NA=150000
256	met10 method	SAMPLE	287513-007	TCLP Leachate	246305	04/06/17 23:45	10.0		1:NA=160000
257	met10 method	SAMPLE	287513-010	TCLP Leachate	246305	04/06/17 23:49	10.0		1:NA=160000
258	met10 method	CCV				04/06/17 23:52	1.0	10	
259	met10 method	CCB				04/06/17 23:55	1.0		
260	met10 method	CCB				04/06/17 23:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287515-001	TCLP Leachate	246305	04/07/17 00:01	10.0		1:NA=160000
262	met10 method	SAMPLE	287515-002	TCLP Leachate	246305	04/07/17 00:05	10.0		1:NA=160000
263	met10 method	SAMPLE	287543-005	TCLP Leachate	246305	04/07/17 00:08	10.0		
264	met10 method	SAMPLE	287617-001	TCLP Leachate	246305	04/07/17 00:12	10.0		1:NA=160000
265	met10 method	CCV				04/07/17 00:15	1.0	10	
266	met10 method	CCB				04/07/17 00:18	1.0		
267	met10 method	CCB				04/07/17 00:21	1.0		
268	met10 method	X	RINSE			04/07/17 00:38	1.0		
269	met10 method	BLANK	QC879456	Water	246155	04/07/17 00:41	1.0		
270	met10 method	BS	QC879457	Water	246155	04/07/17 00:44	1.0		
271	met10 method	BSD	QC879458	Water	246155	04/07/17 00:47	1.0		
272	met10 method	MSS	287365-001	Water	246155	04/07/17 00:49	1.0		
273	met10 method	MS	QC879459	Water	246155	04/07/17 00:52	1.0		
274	met10 method	MSD	QC879460	Water	246155	04/07/17 00:54	1.0		
275	met10 method	SAMPLE	287246-009	Water	246155	04/07/17 00:57	1.0		4:NA=2100000
276	met10 method	SAMPLE	287348-001	Water	246155	04/07/17 00:59	1.0		
277	met10 method	SAMPLE	287348-002	Water	246155	04/07/17 01:02	1.0		
278	met10 method	CCV				04/07/17 01:04	1.0	10	
279	met10 method	CCB				04/07/17 01:07	1.0		
280	met10 method	CCB				04/07/17 01:10	1.0		
281	met10 method	SAMPLE	287365-002	Water	246155	04/07/17 01:13	1.0		
282	met10 method	SAMPLE	287365-003	Water	246155	04/07/17 01:16	1.0		
283	met10 method	SAMPLE	287365-004	Water	246155	04/07/17 01:20	1.0		
284	met10 method	SAMPLE	287365-005	Water	246155	04/07/17 01:22	1.0		
285	met10 method	SAMPLE	287365-006	Water	246155	04/07/17 01:25	1.0		
286	met10 method	SAMPLE	287365-007	Water	246155	04/07/17 01:27	1.0		
287	met10 method	SAMPLE	287365-008	Water	246155	04/07/17 01:29	1.0		
288	met10 method	SAMPLE	287365-009	Water	246155	04/07/17 01:32	1.0		
289	met10 method	SAMPLE	287365-010	Water	246155	04/07/17 01:34	1.0		
290	met10 method	SAMPLE	287365-011	Water	246155	04/07/17 01:37	1.0		
291	met10 method	CCV				04/07/17 01:39	1.0	10	
292	met10 method	CCB				04/07/17 01:42	1.0		
293	met10 method	CCB				04/07/17 01:45	1.0		
294	met10 method	SAMPLE	287365-012	Water	246155	04/07/17 01:48	1.0		
295	met10 method	SAMPLE	287365-013	Water	246155	04/07/17 01:50	1.0		
296	met10 method	SAMPLE	287365-014	Water	246155	04/07/17 01:54	1.0		
297	met10 method	SAMPLE	287365-015	Water	246155	04/07/17 01:57	1.0		
298	met10 method	SAMPLE	287365-019	Water	246155	04/07/17 02:00	1.0		
299	met10 method	X	RINSE			04/07/17 02:04	1.0		
300	met10 method	MS	QC879944	Soil	246272	04/07/17 02:07	100.0		
301	met10 method	MSD	QC879945	Soil	246272	04/07/17 02:09	100.0		
302	met10 method	X	RINSE			04/07/17 02:12	1.0		
303	met10 method	MSS	287418-003	Filtrate	246184	04/07/17 02:15	1.0		2:NA=270000
304	met10 method	CCV				04/07/17 02:17	1.0	10	
305	met10 method	CCB				04/07/17 02:20	1.0		
306	met10 method	CCB				04/07/17 02:23	1.0		
307	met10 method	SAMPLE	287418-004	Filtrate	246184	04/07/17 02:27	1.0		4:NA=4300000
308	met10 method	SAMPLE	287418-006	Filtrate	246184	04/07/17 02:30	1.0		4:NA=2700000
309	met10 method	SAMPLE	287418-007	Filtrate	246184	04/07/17 02:33	1.0		4:NA=5000000
310	met10 method	SAMPLE	287418-008	Filtrate	246184	04/07/17 02:36	1.0		4:NA=3200000
311	met10 method	SAMPLE	287418-009	Filtrate	246184	04/07/17 02:40	1.0		3:NA=2200000
312	met10 method	SAMPLE	287418-011	Filtrate	246184	04/07/17 02:42	1.0		4:NA=4600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	X	RINSE			04/07/17 02:46	1.0		
314	met10 method	MSS	287252-007	SPLP Leachate	246256	04/07/17 02:49	1.0		
315	met10 method	MS	QC879889	SPLP Leachate	246256	04/07/17 02:51	1.0		
316	met10 method	MSD	QC879890	SPLP Leachate	246256	04/07/17 02:54	1.0		
317	met10 method	CCV				04/07/17 02:56	1.0	10	
318	met10 method	CCB				04/07/17 02:59	1.0		
319	met10 method	CCB				04/07/17 03:02	1.0		
320	met10 method	SER	QC879891	SPLP Leachate	246256	04/07/17 03:05	5.0		
321	met10 method	PDS	QC879892	SPLP Leachate	246256	04/07/17 03:08	1.0	11 12 13	
322	met10 method	CCV				04/07/17 03:11	1.0	10	
323	met10 method	CCB				04/07/17 03:13	1.0		
324	met10 method	CCB				04/07/17 03:16	1.0		

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 37.

MNA 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 38 through 236.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
		ICAL STD	8366014	998107
		LOWER LIMIT	2509804	299432
		UPPER LIMIT	10039216	1197728
009	ICB		8268979	1000301
010	ICSA		6658881	890473
013	ICSAB		6614508	911695
076	CCV		7992819	1003975
077	CCB		8412844	1037669
078	SAMPLE	287331-001	7826823	999841
080	MSS	287252-007	7476391	969369
081	MS	QC880060	7349833	980103
082	MSD	QC880061	7317495	984305
083	SER	QC880062	8097286	1018630
084	PDS	QC880063	7470166	987353
085	SAMPLE	287252-042	7300034	968007
086	SAMPLE	287252-043	7360832	960895
087	SAMPLE	287252-044	7332549	967966
088	SAMPLE	287252-045	7490291	973049
089	CCV		7981104	1006315
090	CCB		8477036	1028695
091	CCB		10050731 *	87356 *
092	SAMPLE	287362-045	7272749	959076
093	SAMPLE	287362-046	7470095	980821
102	CCV		7975354	1006254
103	CCB		8632355	1032857
115	CCV		7977498	1004328
117	CCB		8479781	156217 *
119	MSS	287252-028	8323418	1034554
120	SAMPLE	287252-029	8441001	1044557
121	SAMPLE	287252-030	7760832	1017274
122	SAMPLE	287252-033	8603135	1040728
123	SAMPLE	287252-034	8299852	1047209
124	SAMPLE	287252-035	8532200	1035659
125	SAMPLE	287252-036	8054234	1050851
126	SAMPLE	287252-045	8393765	1050717
128	CCV		8011887	1020215
129	CCB		8584972	1045810
176	CCV		7959140	994874
178	CCB		8504928	1477400 *
184	MSS	287252-001	8502245	1063454
187	MSS	287252-007	8242116	1033958
189	CCV		8065241	999831
190	CCB		8525895	1028160
191	CCB		8561761	1037546
195	SAMPLE	287082-011	8328211	1052933
196	SAMPLE	287082-012	8462604	1051300
197	SAMPLE	287082-013	8382479	1050475
198	SAMPLE	287082-014	8552286	1039245
199	SAMPLE	287082-015	8453637	1047445
200	SAMPLE	287082-016	8590771	1042345
201	SAMPLE	287082-017	8476746	1044559

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
202	CCV		7988531	1009781
203	CCB		8670761	1038069
204	CCB		8506314	1037616
205	SAMPLE	287082-018	8268493	1036319
206	SAMPLE	287082-019	8437429	1052520
207	SAMPLE	287252-002	8372999	1053046
208	SAMPLE	287252-003	8287407	1050939
209	SAMPLE	287252-004	8408122	1045062
210	SAMPLE	287252-005	8535131	1042388
211	SAMPLE	287252-006	8364788	1050187
212	SAMPLE	287252-008	8543230	1061338
213	SAMPLE	287252-009	8395682	1063187
214	SAMPLE	287252-010	8376064	1045641
215	CCV		8028908	1015417
216	CCB		8599671	1024964
217	CCB		8453477	1087479
218	SAMPLE	287252-011	8355713	1064071
219	CCV		8060704	1026336
220	CCB		8727329	1036141
291	CCV		7924140	1007424
293	CCB		8561485	1034541
300	MS	QC879944	8471430	1039570
301	MSD	QC879945	8399966	1031365
304	CCV		7954662	996076
305	CCB		8564334	1041166
306	CCB		8516577	89211 *
314	MSS	287252-007	8279453	1044542
317	CCV		7957909	1029257
318	CCB		8523855	1035587
319	CCB		8519843	1038723
322	CCV		8003400	1023589
323	CCB		8543601	1050972

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087138772001
Units : ug/L

Date : 06-APR-2017 08:52
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087138772002	L1	06-APR-2017 08:56	S32578
L2	met10 method	1087138772003	L2	06-APR-2017 08:59	S32571
L3	met10 method	1087138772004	L3	06-APR-2017 09:01	S32367
L4	met10 method	1087138772005	L4	06-APR-2017 09:03	S32368
L5	met10 method	1087138772006	L5	06-APR-2017 09:06	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8800	2.7920	2.6354	2.5586		LOR0	0.00000	0.39071		2.7165	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	13	100.00	9	1000.0	3	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087138772001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087138772001 Cal Date : 06-APR-2017

ICV 1087138772007 (06-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5087	ug/L	2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772008.2 File : met10 method Time : 06-APR-2017 09:12
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.455	ug/L	9	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8249216	-1.40
Yttrium	R	998107	1022393	2.43

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772009.2 File : met10 method Time : 06-APR-2017 09:27
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8268979	-1.16
Yttrium	R	998107	1000301	0.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772010.2 File : met10 method Time : 06-APR-2017 09:31
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-4.747]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18370	ug/L	92	
Copper	A	20000	22890	ug/L	114	
Manganese	A	20000	18080	ug/L	90	
Nickel	A	20000	16360	ug/L	82	
Titanium	A	20000	18630	ug/L	93	
Vanadium	A	20000	21300	ug/L	107	
Aluminum	R	500000	561800	ug/L	112	
Calcium	R	500000	508600	ug/L	102	
Iron	R	200000	201300	ug/L	101	
Magnesium	R	500000	447700	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6658881	-20.41
Yttrium	R	998107	890473	-10.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772013.1 File : met10 method Time : 06-APR-2017 10:16
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	931.7	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6614508	-20.94
Yttrium	R	998107	911695	-8.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772076.2 File : met10 method Time : 06-APR-2017 14:13
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.5196	5000	4922	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7992819	-4.46
Yttrium	R	998107	1003975	0.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772077.2 File : met10 method Time : 06-APR-2017 14:15
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8412844	0.56
Yttrium	R	998107	1037669	3.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772089.2 File : met10 method Time : 06-APR-2017 14:55
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.5191	5000	4921	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7981104	-4.60
Yttrium	R	998107	1006315	0.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772090.2 File : met10 method Time : 06-APR-2017 14:57
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8477036	1.33
Yttrium	R	998107	1028695	3.06

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772115.1 File : met10 method Time : 06-APR-2017 16:42
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.5189	5000	4921	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7977498	-4.64
Yttrium	R	998107	1004328	0.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772117.1 File : met10 method Time : 06-APR-2017 16:48
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8479781	1.36
Yttrium	R	998107	156217	**-84.35 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772128.2 File : met10 method Time : 06-APR-2017 17:17
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4714	5000	4828	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8011887	-4.23
Yttrium	R	998107	1020215	2.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772129.1 File : met10 method Time : 06-APR-2017 17:20
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8584972	2.62
Yttrium	R	998107	1045810	4.78

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772291.1 File : met10 method Time : 07-APR-2017 01:39
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4669	5000	4819	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7924140	-5.28
Yttrium	R	998107	1007424	0.93

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772293.1 File : met10 method Time : 07-APR-2017 01:45
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8561485	2.34
Yttrium	R	998107	1034541	3.65

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772304.1 File : met10 method Time : 07-APR-2017 02:17
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4548	5000	4796	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7954662	-4.92
Yttrium	R	998107	996076	-0.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772305.1 File : met10 method Time : 07-APR-2017 02:20
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8564334	2.37
Yttrium	R	998107	1041166	4.31

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140245

Instrument : MET10
Method : EPA 6010C

Begun : 04/07/17 09:25
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/07/17 09:25	1.0		
002	met10 method	ICAL	L1			04/07/17 09:29	1.0	1	
003	met10 method	ICAL	L2			04/07/17 09:32	1.0	2	
004	met10 method	ICAL	L3			04/07/17 09:34	1.0	3	
005	met10 method	ICAL	L4			04/07/17 09:36	1.0	4	
006	met10 method	ICAL	L5			04/07/17 09:39	1.0	5	
007	met10 method	ICV				04/07/17 09:42	1.0	6	
008	met10 method	CRI				04/07/17 09:53	1.0	7	
009	met10 method	ICB				04/07/17 09:56	1.0		
010	met10 method	ICSA				04/07/17 09:59	1.0	8	9:AL=530000
011	met10 method	ICSAB				04/07/17 10:04	1.0	9	5:AL=530000
012	met10 method	ICSAB				04/07/17 10:15	1.0	9	5:AL=530000
013	met10 method	X	RINSE			04/07/17 10:43	1.0		
014	met10 method	SAMPLE	287315-001	Miscell.	246094	04/07/17 10:46	1.0		1:K=230000
015	met10 method	SAMPLE	287318-001	Miscell.	246094	04/07/17 10:49	1.0		1:K=160000
016	met10 method	SAMPLE	287467-001	Soil	246170	04/07/17 10:51	1.0		1:FE=100000
017	met10 method	SAMPLE	287467-003	Soil	246170	04/07/17 10:54	1.0		1:FE=100000
018	met10 method	BLANK	QC879449	Water	246154	04/07/17 10:56	1.0		
019	met10 method	MSS	287544-001	Water	246154	04/07/17 10:59	1.0		1:NA=140000
020	met10 method	CCV				04/07/17 11:03	1.0	10	
021	met10 method	XCCB				04/07/17 11:06	1.0		
022	met10 method	CCB				04/07/17 11:09	1.0		
023	met10 method	BLANK	QC880290	Water	246354	04/07/17 11:12	1.0		
024	met10 method	BS	QC880291	Water	246354	04/07/17 11:15	1.0		
025	met10 method	BSD	QC880292	Water	246354	04/07/17 11:18	1.0		
026	met10 method	MSS	287645-005	Water	246354	04/07/17 11:20	1.0		1:NA=220000
027	met10 method	MS	QC880293	Water	246354	04/07/17 11:23	1.0		
028	met10 method	MSD	QC880294	Water	246354	04/07/17 11:25	1.0		
029	met10 method	SAMPLE	287631-001	Water	246354	04/07/17 11:28	1.0		2:NA=170000
030	met10 method	SAMPLE	287632-001	Water	246354	04/07/17 11:30	1.0		2:NA=160000
031	met10 method	SAMPLE	287641-001	Water	246354	04/07/17 11:33	1.0		
032	met10 method	SAMPLE	287641-002	Water	246354	04/07/17 11:36	1.0		
033	met10 method	CCV				04/07/17 11:39	1.0	10	
034	met10 method	XCCB				04/07/17 11:41	1.0		
035	met10 method	CCB				04/07/17 11:44	1.0		
036	met10 method	SAMPLE	287641-003	Water	246354	04/07/17 11:48	1.0		
037	met10 method	SAMPLE	287641-004	Water	246354	04/07/17 11:50	1.0		1:FE=110000
038	met10 method	CCV				04/07/17 11:53	1.0	10	
039	met10 method	XCCB				04/07/17 11:56	1.0		
040	met10 method	CCB				04/07/17 11:59	1.0		
041	met10 method	X	RINSE			04/07/17 12:11	1.0		
042	met10 method	BLANK	QC880471	Soil	246401	04/07/17 12:14	1.0		
043	met10 method	BS	QC880472	Soil	246401	04/07/17 12:18	1.0		
044	met10 method	BSD	QC880473	Soil	246401	04/07/17 12:20	1.0		
045	met10 method	SAMPLE	287744-004	Soil	246401	04/07/17 12:22	1.0		4:FE=370000
046	met10 method	SAMPLE	287760-006	Soil	246401	04/07/17 12:25	1.0		5:FE=410000
047	met10 method	SAMPLE	287760-007	Soil	246401	04/07/17 12:28	1.0		4:FE=310000
048	met10 method	X	RINSE			04/07/17 12:31	1.0		
049	met10 method	BLANK	QC879191	Miscell.	246094	04/07/17 12:34	1.0		
050	met10 method	SER	QC879454	Water	246154	04/07/17 12:37	5.0		
051	met10 method	CCV				04/07/17 12:41	1.0	10	
052	met10 method	XCCB				04/07/17 12:43	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140245

Instrument : MET10 Begun : 04/07/17 09:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	CCB				04/07/17 12:46	1.0		
054	met10 method	SER	QC880490	Soil	246268	04/07/17 12:50	5.0		
055	met10 method	PDS	QC880491	Soil	246268	04/07/17 12:52	1.0	11 12 13	4:FE=400000
056	met10 method	SER	QC880476	Soil	246272	04/07/17 12:55	500.0		
057	met10 method	PDS	QC880477	Soil	246272	04/07/17 12:58	100.0	11 12 13	
058	met10 method	SAMPLE	287418-002	Filtrate	246184	04/07/17 13:01	1.0		4:NA=4200000
059	met10 method	CCV				04/07/17 13:03	1.0	10	
060	met10 method	XCCB				04/07/17 13:06	1.0		
061	met10 method	CCB				04/07/17 13:09	1.0		

KER 04/07/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 61.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140245

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 09:29

#	Type	Sample ID	Y A	Y R
		ICAL STD	8565870	1051635
		LOWER LIMIT	2569761	315491
		UPPER LIMIT	10279043	1261962
009	ICB		8723721	1049068
010	ICSA		6946447	918515
012	ICSAB		6912959	919452
029	SAMPLE	287631-001	7619406	973843
030	SAMPLE	287632-001	7632842	986030
038	CCV		8189686	1022145
040	CCB		8602593	1069219
051	CCV		7996283	1026232
053	CCB		8717220	1124508
054	SER	QC880490	8408725	1033084
055	PDS	QC880491	8054804	1038646
056	SER	QC880476	8584802	1035591
057	PDS	QC880477	8319844	1029417
059	CCV		8226653	1024369
061	CCB		8749165	397944

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087140245002
Units : ug/L

Date : 07-APR-2017 09:25
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087140245002	L1	07-APR-2017 09:29	S32578
L2	met10 method	1087140245003	L2	07-APR-2017 09:32	S32571
L3	met10 method	1087140245004	L3	07-APR-2017 09:34	S32367
L4	met10 method	1087140245005	L4	07-APR-2017 09:36	S32368
L5	met10 method	1087140245006	L5	07-APR-2017 09:39	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.3200	2.6650	2.4737	2.4523		LOR0	0.00000	0.40774		2.4777	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-5	100.00	9	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087140245002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087140245002 Cal Date : 07-APR-2017

ICV 1087140245007 (07-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5085	ug/L	2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245008.2 File : met10 method Time : 07-APR-2017 09:53
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.673	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8473616	-1.08
Yttrium	R	1051635	1045140	-0.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245009.3 File : met10 method Time : 07-APR-2017 09:56
Cal : 1087140245002 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8723721	1.84
Yttrium	R	1051635	1049068	-0.24

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245010.3 File : met10 method Time : 07-APR-2017 09:59
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-4.354]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Copper	A	20000	22090	ug/L	110	
Manganese	A	20000	17980	ug/L	90	
Nickel	A	20000	16530	ug/L	83	
Titanium	A	20000	18390	ug/L	92	
Vanadium	A	20000	21090	ug/L	105	
Aluminum	R	500000	532700	ug/L	107	
Calcium	R	500000	500300	ug/L	100	
Iron	R	200000	198800	ug/L	99	
Magnesium	R	500000	452000	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	6946447	-18.91
Yttrium	R	1051635	918515	-12.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245012.2 File : met10 method Time : 07-APR-2017 10:15
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	970.6	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	6912959	-19.30
Yttrium	R	1051635	919452	-12.57

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245051.1 File : met10 method Time : 07-APR-2017 12:41
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4777	2.4716	5000	5039	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	7996283	-6.65
Yttrium	R	1051635	1026232	-2.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245053.1 File : met10 method Time : 07-APR-2017 12:46
Cal : 1087140245002 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8717220	1.77
Yttrium	R	1051635	1124508	6.93

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245059.1 File : met10 method Time : 07-APR-2017 13:03
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4777	2.4398	5000	4974	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8226653	-3.96
Yttrium	R	1051635	1024369	-2.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245061.1 File : met10 method Time : 07-APR-2017 13:09
Cal : 1087140245002 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8749165	2.14
Yttrium	R	1051635	397944	-62.16

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/11/17 10:33	1.0		
002	met10 method	ICAL	L1			04/11/17 10:36	1.0	1	
003	met10 method	ICAL	L2			04/11/17 10:39	1.0	2	
004	met10 method	ICAL	L3			04/11/17 10:42	1.0	3	
005	met10 method	ICAL	L4			04/11/17 10:44	1.0	4	
006	met10 method	ICAL	L5			04/11/17 10:46	1.0	5	
007	met10 method	ICV				04/11/17 10:49	1.0	6	1:SR=4400000
008	met10 method	XCRI				04/11/17 10:56	1.0	7	
009	met10 method	CRI				04/11/17 11:03	1.0	7	1:SR=46000
010	met10 method	ICB				04/11/17 11:07	1.0		
011	met10 method	ICSA				04/11/17 11:10	1.0	8	11:AL=570000
012	met10 method	ICSAB				04/11/17 11:15	1.0	9	6:SR=4800000
013	met10 method	CCV				04/11/17 11:19	1.0	10	1:SR=4500000
014	met10 method	CCB				04/11/17 11:21	1.0		1:SR=1200
015	met10 method	CCB				04/11/17 11:24	1.0		1:SR=2400
016	met10 method	X	RINSE			04/11/17 11:28	1.0		
017	met10 method	BLANK	QC880855	TCLP Leachate	246501	04/11/17 11:31	10.0		1:SR=3200
018	met10 method	BS	QC880856	TCLP Leachate	246501	04/11/17 11:35	1.0		1:SR=920000
019	met10 method	X	RINSE			04/11/17 11:44	1.0		
020	met10 method	BSD	QC880857	TCLP Leachate	246501	04/11/17 11:48	1.0		1:SR=920000
021	met10 method	MSS	287753-001	TCLP Leachate	246501	04/11/17 11:50	10.0		1:SR=740000
022	met10 method	MS	QC880858	TCLP Leachate	246501	04/11/17 11:54	10.0		
023	met10 method	MSD	QC880859	TCLP Leachate	246501	04/11/17 11:56	10.0		
024	met10 method	SAMPLE	287752-001	TCLP Leachate	246501	04/11/17 11:59	10.0		1:SR=110000
025	met10 method	SAMPLE	287752-002	TCLP Leachate	246501	04/11/17 12:02	10.0		1:SR=1300000
026	met10 method	CCV				04/11/17 12:05	1.0	10	1:SR=4300000
027	met10 method	XCCB				04/11/17 12:08	1.0		1:SR=2900
028	met10 method	CCB				04/11/17 12:11	1.0		1:SR=2600
029	met10 method	X	RINSE			04/11/17 12:16	1.0		
030	met10 method	BLANK	QC880703	Water	246465	04/11/17 12:20	1.0		1:SR=2200
031	met10 method	BLANK	QC880855	TCLP Leachate	246501	04/11/17 12:23	10.0		1:SR=4200
032	met10 method	BS	QC880704	Water	246465	04/11/17 12:27	1.0		1:SR=940000
033	met10 method	BSD	QC880705	Water	246465	04/11/17 12:29	1.0		1:SR=910000
034	met10 method	MSS	287738-002	Water	246465	04/11/17 12:31	1.0		1:SR=1400000
035	met10 method	MS	QC880706	Water	246465	04/11/17 12:34	1.0		
036	met10 method	MSD	QC880707	Water	246465	04/11/17 12:36	1.0		
037	met10 method	SER	QC880708	Water	246465	04/11/17 12:39	5.0		
038	met10 method	PDS	QC880709	Water	246465	04/11/17 12:42	1.0	11 12 13	2:SR=2400000
039	met10 method	CCV				04/11/17 12:45	1.0	10	1:SR=4400000
040	met10 method	XCCB				04/11/17 12:47	1.0		1:SR=1900
041	met10 method	CCB				04/11/17 12:50	1.0		1:SR=1400
042	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 12:54	1.0		4:SR=70000000
043	met10 method	SAMPLE	287675-001	Water	246465	04/11/17 12:56	1.0		1:SR=1700000
044	met10 method	SAMPLE	287675-002	Water	246465	04/11/17 12:59	1.0		1:SR=1900000
045	met10 method	SAMPLE	287712-002	Water	246465	04/11/17 13:02	1.0		3:SR=4000000
046	met10 method	X	RINSE			04/11/17 13:05	1.0		
047	met10 method	BLANK	QC880703	Water	246465	04/11/17 13:09	1.0		1:SR=2200
048	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 13:12	100.0		1:SR=670000
049	met10 method	SAMPLE	287712-003	Water	246465	04/11/17 13:16	1.0		2:SR=3000000
050	met10 method	SAMPLE	287712-004	Water	246465	04/11/17 13:19	1.0		4:SR=6400000
051	met10 method	SAMPLE	287712-005	Water	246465	04/11/17 13:22	1.0		1:SR=3200000
052	met10 method	CCV				04/11/17 13:25	1.0	10	1:SR=4500000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	XCCB				04/11/17 13:28	1.0		1:SR=2000
054	met10 method	CCB				04/11/17 13:31	1.0		1:SR=1200
055	met10 method	SAMPLE	287712-006	Water	246465	04/11/17 13:34	1.0		4:SR=4700000
056	met10 method	SAMPLE	287731-009	Water	246465	04/11/17 13:38	1.0		1:SR=3000
057	met10 method	SAMPLE	287732-001	Water	246465	04/11/17 13:41	1.0		4:SR=15000000
058	met10 method	SAMPLE	287735-001	Water	246465	04/11/17 13:44	1.0		2:SR=4600000
059	met10 method	SAMPLE	287735-002	Water	246465	04/11/17 13:46	1.0		1:SR=3900000
060	met10 method	SAMPLE	287736-001	Water	246465	04/11/17 13:49	1.0		3:SR=15000000
061	met10 method	SAMPLE	287738-003	Water	246465	04/11/17 13:51	1.0		1:SR=1800000
062	met10 method	SAMPLE	287738-007	Water	246465	04/11/17 13:55	1.0		1:SR=1800000
063	met10 method	SAMPLE	287738-008	Water	246465	04/11/17 13:58	1.0		1:SR=2100000
064	met10 method	SAMPLE	287675-004	Soil	246450	04/11/17 14:01	1.0		4:SR=3800000
065	met10 method	CCV				04/11/17 14:03	1.0	10	1:SR=4400000
066	met10 method	XCCB				04/11/17 14:06	1.0		1:SR=2200
067	met10 method	CCB				04/11/17 14:09	1.0		1:SR=1100
068	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 14:12	10.0		1:SR=7300000
069	met10 method	SAMPLE	287676-001	Soil	246450	04/11/17 14:16	1.0		3:SR=2400000
070	met10 method	SAMPLE	287713-001	Soil	246450	04/11/17 14:19	1.0		5:SR=6000000
071	met10 method	SAMPLE	287739-002	Soil	246450	04/11/17 14:22	1.0		7:SR=11000000
072	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/11/17 14:25	10.0		2:NA=190000
073	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/11/17 14:27	10.0		2:NA=180000
074	met10 method	X	RINSE			04/11/17 14:30	1.0		
075	met10 method	BLANK	QC880768	Soil	246479	04/11/17 14:33	1.0		1:SR=4000
076	met10 method	BS	QC880769	Soil	246479	04/11/17 14:36	1.0		2:SR=90000000
077	met10 method	BSD	QC880770	Soil	246479	04/11/17 14:39	1.0		2:SR=88000000
078	met10 method	CCV				04/11/17 14:41	1.0	10	1:SR=4600000
079	met10 method	CCB				04/11/17 14:44	1.0		1:SR=1800
080	met10 method	MSS	287740-001	Soil	246479	04/11/17 14:47	1.0		7:SR=8200000
081	met10 method	MS	QC880771	Soil	246479	04/11/17 14:50	1.0		1:SR=93000000
082	met10 method	MSD	QC880772	Soil	246479	04/11/17 14:53	1.0		1:SR=97000000
083	met10 method	SAMPLE	287683-005	Soil	246479	04/11/17 14:56	1.0		3:SR=3300000
084	met10 method	SAMPLE	287795-001	Soil	246479	04/11/17 14:59	1.0		4:SR=3300000
085	met10 method	SAMPLE	287795-002	Soil	246479	04/11/17 15:01	1.0		4:SR=3500000
086	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 15:04	1.0		1:SR=20000
087	met10 method	X	RINSE			04/11/17 15:07	1.0		
088	met10 method	BLANK	QC880331	Soil	246364	04/11/17 15:11	1.0		1:SR=3900
089	met10 method	BS	QC880332	Soil	246364	04/11/17 15:14	1.0		1:SR=46000000
090	met10 method	CCV				04/11/17 15:17	1.0	10	1:SR=4600000
091	met10 method	CCB				04/11/17 15:19	1.0		1:SR=1700
092	met10 method	BSD	QC880333	Soil	246364	04/11/17 15:23	1.0		1:SR=46000000
093	met10 method	MSS	287737-014	Soil	246364	04/11/17 15:25	1.0		3:SR=1900000
094	met10 method	MS	QC880334	Soil	246364	04/11/17 15:28	1.0		
095	met10 method	MSD	QC880335	Soil	246364	04/11/17 15:30	1.0		
096	met10 method	SAMPLE	287737-001	Soil	246364	04/11/17 15:33	1.0		5:SR=31000000
097	met10 method	SAMPLE	287737-002	Soil	246364	04/11/17 15:36	1.0		4:SR=1500000
098	met10 method	SAMPLE	287737-003	Soil	246364	04/11/17 15:39	1.0		4:SR=2100000
099	met10 method	SAMPLE	287737-004	Soil	246364	04/11/17 15:41	1.0		4:SR=1700000
100	met10 method	SAMPLE	287737-005	Soil	246364	04/11/17 15:44	1.0		3:SR=1100000
101	met10 method	SAMPLE	287737-006	Soil	246364	04/11/17 15:46	1.0		3:SR=880000
102	met10 method	CCV				04/11/17 15:49	1.0	10	1:SR=4500000
103	met10 method	CCB				04/11/17 15:52	1.0		1:SR=2200
104	met10 method	SAMPLE	287737-007	Soil	246364	04/11/17 15:55	1.0		4:SR=1600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287737-008	Soil	246364	04/11/17 15:58	1.0		2:SR=850000
106	met10 method	SAMPLE	287737-009	Soil	246364	04/11/17 16:00	1.0		4:SR=2100000
107	met10 method	SAMPLE	287737-010	Soil	246364	04/11/17 16:03	1.0		3:SR=1200000
108	met10 method	SAMPLE	287737-011	Soil	246364	04/11/17 16:05	1.0		3:SR=1500000
109	met10 method	SAMPLE	287737-012	Soil	246364	04/11/17 16:08	1.0		3:SR=1500000
110	met10 method	SAMPLE	287737-013	Soil	246364	04/11/17 16:10	1.0		4:SR=10000000
111	met10 method	SAMPLE	287737-015	Soil	246364	04/11/17 16:13	1.0		3:SR=1500000
112	met10 method	SAMPLE	287737-016	Soil	246364	04/11/17 16:16	1.0		3:SR=1400000
113	met10 method	SAMPLE	287737-017	Soil	246364	04/11/17 16:18	1.0		4:SR=1800000
114	met10 method	CCV				04/11/17 16:21	1.0	10	1:SR=4600000
115	met10 method	CCB				04/11/17 16:24	1.0		1:SR=2200
116	met10 method	BLANK	QC880368	Water	246373	04/11/17 16:27	1.0		1:SR=2200
117	met10 method	BS	QC880369	Water	246373	04/11/17 16:30	1.0		2:SR=940000
118	met10 method	BSD	QC880370	Water	246373	04/11/17 16:33	1.0		2:SR=930000
119	met10 method	MSS	287737-018	Water	246373	04/11/17 16:35	1.0		1:SR=3900
120	met10 method	MS	QC880371	Water	246373	04/11/17 16:39	1.0		
121	met10 method	MSD	QC880372	Water	246373	04/11/17 16:41	1.0		
122	met10 method	CCV				04/11/17 16:43	1.0	10	1:SR=4600000
123	met10 method	CCB				04/11/17 16:46	1.0		1:SR=1300
124	met10 method	MSS	287252-007	SPLP Leachate	246256	04/11/17 16:49	1.0		1:SR=7100
125	met10 method	MS	QC879889	SPLP Leachate	246256	04/11/17 16:53	1.0		
126	met10 method	MSD	QC879890	SPLP Leachate	246256	04/11/17 16:55	1.0		
127	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 16:57	1.0		1:SR=9600
128	met10 method	X	RINSE			04/11/17 17:00	1.0		
129	met10 method	BLANK	QC880630	Water	246447	04/11/17 17:03	1.0		1:SR=2200
130	met10 method	BS	QC880631	Water	246447	04/11/17 17:07	1.0		1:SR=910000
131	met10 method	BSD	QC880632	Water	246447	04/11/17 17:09	1.0		2:SR=900000
132	met10 method	MSS	287646-001	Water	246447	04/11/17 17:12	1.0		1:SR=1700000
133	met10 method	MS	QC880633	Water	246447	04/11/17 17:14	1.0		
134	met10 method	CCV				04/11/17 17:19	1.0	10	1:SR=4500000
135	met10 method	XCCB				04/11/17 17:22	1.0		1:SR=1400
136	met10 method	CCB				04/11/17 17:25	1.0		1:SR=2100
137	met10 method	MSD	QC880634	Water	246447	04/11/17 17:28	1.0		
138	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 17:31	1.0		1:SR=14000
139	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 17:34	1.0		1:SR=25000
140	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 17:38	1.0		1:SR=39000
141	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 17:41	1.0		1:SR=93000
142	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 17:44	1.0		2:SR=3500000
143	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 17:47	1.0		3:SR=11000000
144	met10 method	?SAMPLE	287791-002		246447	04/11/17 17:50	1.0		
145	met10 method	?SAMPLE	287791-003		246447	04/11/17 17:53	1.0		
146	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 17:55	1.0		1:SR=300000
147	met10 method	CCV				04/11/17 17:58	1.0	10	1:SR=4500000
148	met10 method	CCB				04/11/17 18:01	1.0		
149	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 18:04	1.0		1:SR=1400000
150	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 18:08	1.0		2:SR=610000
151	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 18:11	1.0		2:SR=8400000
152	met10 method	MSS	287252-028	Soil	246272	04/11/17 18:14	100.0		1:SR=49000
153	met10 method	SAMPLE	287252-029	Soil	246272	04/11/17 18:16	100.0		1:SR=64000
154	met10 method	PDS	QC880745	Soil	246422	04/11/17 18:18	1.0	11 12 13	6:SR=6200000
155	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 18:21	1.0		1:SR=20000
156	met10 method	SAMPLE	287648-001	Water	246408	04/11/17 18:24	1.0		5:SR=9000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287648-002	Water	246408	04/11/17 18:26	1.0		4:SR=13000000
158	met10 method	SAMPLE	287648-003	Water	246408	04/11/17 18:30	1.0		4:SR=20000000
159	met10 method	CCV				04/11/17 18:33	1.0	10	1:SR=4500000
160	met10 method	CCB				04/11/17 18:36	1.0		1:SR=2700
161	met10 method	CCB				04/11/17 18:39	1.0		1:SR=8500
162	met10 method	SAMPLE	287648-004	Water	246408	04/11/17 18:42	1.0		5:SR=15000000
163	met10 method	SAMPLE	287662-001	Water	246408	04/11/17 18:45	1.0		4:SR=31000000
164	met10 method	SAMPLE	287662-002	Water	246408	04/11/17 18:49	1.0		5:SR=19000000
165	met10 method	SAMPLE	287662-003	Water	246408	04/11/17 18:51	1.0		4:SR=22000000
166	met10 method	SAMPLE	287662-004	Water	246408	04/11/17 18:55	1.0		4:SR=25000000
167	met10 method	SAMPLE	287640-002	Soil	246424	04/11/17 18:57	1.0		7:SR=13000000
168	met10 method	SAMPLE	287640-003	Soil	246424	04/11/17 19:00	1.0		5:SR=4900000
169	met10 method	SAMPLE	287640-004	Soil	246424	04/11/17 19:03	1.0		5:SR=4600000
170	met10 method	SAMPLE	287640-005	Soil	246424	04/11/17 19:06	1.0		5:SR=4900000
171	met10 method	SAMPLE	287640-006	Soil	246424	04/11/17 19:09	1.0		5:SR=4500000
172	met10 method	CCV				04/11/17 19:12	1.0	10	1:SR=4400000
173	met10 method	CCB				04/11/17 19:15	1.0		1:SR=2000
174	met10 method	CCB				04/11/17 19:17	1.0		1:SR=1900
175	met10 method	X	RINSE			04/11/17 19:21	1.0		
176	met10 method	BLANK	QC879456	Water	246155	04/11/17 19:24	1.0		1:SR=2400
177	met10 method	BS	QC879457	Water	246155	04/11/17 19:28	1.0		2:SR=940000
178	met10 method	BSD	QC879458	Water	246155	04/11/17 19:30	1.0		2:SR=930000
179	met10 method	MSS	287365-001	Water	246155	04/11/17 19:32	1.0		1:SR=550000
180	met10 method	MS	QC879459	Water	246155	04/11/17 19:35	1.0		
181	met10 method	MSD	QC879460	Water	246155	04/11/17 19:37	1.0		
182	met10 method	SAMPLE	287348-001	Water	246155	04/11/17 19:40	1.0		1:SR=990000
183	met10 method	MSS	287365-001	Water	246155	04/11/17 19:42	1.0		1:SR=60000
184	met10 method	SAMPLE	287365-003	Water	246155	04/11/17 19:46	1.0		1:SR=140000
185	met10 method	CCV				04/11/17 19:49	1.0	10	1:SR=4500000
186	met10 method	CCB				04/11/17 19:52	1.0		1:SR=2500
187	met10 method	SAMPLE	287365-005	Water	246155	04/11/17 19:55	1.0		1:SR=74000
188	met10 method	SAMPLE	287365-006	Water	246155	04/11/17 19:57	1.0		1:SR=110000
189	met10 method	SAMPLE	287365-007	Water	246155	04/11/17 20:00	1.0		1:SR=180000
190	met10 method	SAMPLE	287365-008	Water	246155	04/11/17 20:02	1.0		1:SR=130000
191	met10 method	SAMPLE	287365-009	Water	246155	04/11/17 20:05	1.0		1:SR=90000
192	met10 method	SAMPLE	287365-010	Water	246155	04/11/17 20:07	1.0		1:SR=150000
193	met10 method	SAMPLE	287365-011	Water	246155	04/11/17 20:10	1.0		1:SR=68000
194	met10 method	SAMPLE	287365-012	Water	246155	04/11/17 20:12	1.0		1:SR=110000
195	met10 method	X	RINSE			04/11/17 20:15	1.0		
196	met10 method	BLANK	QC879918	Water	246267	04/11/17 20:18	1.0		1:SR=2800
197	met10 method	CCV				04/11/17 20:21	1.0	10	1:SR=4500000
198	met10 method	CCB				04/11/17 20:24	1.0		1:SR=1200
199	met10 method	BS	QC879919	Water	246267	04/11/17 20:27	1.0		2:SR=930000
200	met10 method	BSD	QC879920	Water	246267	04/11/17 20:30	1.0		2:SR=960000
201	met10 method	MSS	287440-001	Water	246267	04/11/17 20:32	1.0		1:SR=1300000
202	met10 method	MS	QC879921	Water	246267	04/11/17 20:36	1.0		
203	met10 method	MSD	QC879922	Water	246267	04/11/17 20:38	1.0		
204	met10 method	SAMPLE	287516-001	Water	246267	04/11/17 20:40	1.0		2:SR=400000
205	met10 method	X	RINSE			04/11/17 20:43	1.0		
206	met10 method	BLANK	QC880290	Water	246354	04/11/17 20:46	1.0		1:SR=3200
207	met10 method	BS	QC880291	Water	246354	04/11/17 20:50	1.0		1:SR=950000
208	met10 method	BSD	QC880292	Water	246354	04/11/17 20:52	1.0		1:SR=940000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	CCV				04/11/17 20:55	1.0	10	1:SR=4400000
210	met10 method	CCB				04/11/17 20:57	1.0		1:SR=2900
211	met10 method	CCB				04/11/17 21:00	1.0		1:SR=1600
212	met10 method	MSS	287645-005	Water	246354	04/11/17 21:04	1.0		2:SR=4800000
213	met10 method	MS	QC880293	Water	246354	04/11/17 21:06	1.0		
214	met10 method	MSD	QC880294	Water	246354	04/11/17 21:09	1.0		
215	met10 method	SAMPLE	287641-001	Water	246354	04/11/17 21:12	1.0		1:SR=270000
216	met10 method	SAMPLE	287641-002	Water	246354	04/11/17 21:14	1.0		1:SR=1900000
217	met10 method	SAMPLE	287641-003	Water	246354	04/11/17 21:16	1.0		1:SR=1300000
218	met10 method	SAMPLE	287641-004	Water	246354	04/11/17 21:19	1.0		2:SR=6100000
219	met10 method	CCV				04/11/17 21:22	1.0	10	1:SR=4400000
220	met10 method	CCB				04/11/17 21:24	1.0		
221	met10 method	X	RINSE			04/11/17 21:44	1.0		
222	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 21:47	1.0		1:SR=19000
223	met10 method	X	RINSE			04/11/17 21:50	1.0		
224	met10 method	SER	QC879891	SPLP Leachate	246256	04/11/17 21:53	5.0		
225	met10 method	X	RINSE			04/11/17 21:59	1.0		
226	met10 method	?SAMPLE	287662-001		246256	04/11/17 22:03	1.0		
227	met10 method	X	RINSE			04/11/17 22:06	1.0		
228	met10 method	BLANK	QC880888	Water	246512	04/11/17 22:10	1.0		1:SR=3400
229	met10 method	BS	QC880889	Water	246512	04/11/17 22:13	1.0		1:SR=920000
230	met10 method	BSD	QC880890	Water	246512	04/11/17 22:15	1.0		1:SR=940000
231	met10 method	CCV				04/11/17 22:18	1.0	10	1:SR=4500000
232	met10 method	CCB				04/11/17 22:21	1.0		1:SR=2900
233	met10 method	MSS	287852-001	Water	246512	04/11/17 22:24	1.0		4:SR=8600000
234	met10 method	MS	QC880891	Water	246512	04/11/17 22:26	1.0		
235	met10 method	MSD	QC880892	Water	246512	04/11/17 22:29	1.0		
236	met10 method	X	RINSE			04/11/17 22:32	1.0		
237	met10 method	SER	QC879891	SPLP Leachate	246256	04/11/17 22:35	5.0		
238	met10 method	SAMPLE	287791-002	Water	246512	04/11/17 22:38	1.0		1:SR=730000
239	met10 method	SAMPLE	287791-003	Water	246512	04/11/17 22:41	1.0		1:SR=720000
240	met10 method	SAMPLE	287808-001	Water	246512	04/11/17 22:43	1.0		1:SR=210000
241	met10 method	SAMPLE	287808-002	Water	246512	04/11/17 22:45	1.0		1:SR=130000
242	met10 method	SAMPLE	287808-003	Water	246512	04/11/17 22:48	1.0		1:SR=78000
243	met10 method	CCV				04/11/17 22:50	1.0	10	1:SR=4600000
244	met10 method	CCB				04/11/17 22:53	1.0		1:SR=2200
245	met10 method	SAMPLE	287843-001	Water	246512	04/11/17 22:56	1.0		3:SR=4200000
246	met10 method	SAMPLE	287843-002	Water	246512	04/11/17 23:00	1.0		3:SR=4100000
247	met10 method	X	RINSE			04/11/17 23:04	1.0		
248	met10 method	BLANK	QC880989	Soil	246536	04/11/17 23:07	1.0		1:SR=4100
249	met10 method	BS	QC880990	Soil	246536	04/11/17 23:10	1.0		1:SR=90000000
250	met10 method	BSD	QC880991	Soil	246536	04/11/17 23:13	1.0		1:SR=89000000
251	met10 method	MSS	287766-003	Soil	246536	04/11/17 23:16	1.0		5:SR=24000000
252	met10 method	MS	QC880992	Soil	246536	04/11/17 23:19	1.0		
253	met10 method	MSD	QC880993	Soil	246536	04/11/17 23:22	1.0		
254	met10 method	SER	QC880994	Soil	246536	04/11/17 23:25	5.0		
255	met10 method	CCV				04/11/17 23:27	1.0	10	1:SR=4600000
256	met10 method	CCB				04/11/17 23:30	1.0		1:SR=4300
257	met10 method	PDS	QC880995	Soil	246536	04/11/17 23:34	1.0	11 12 14	6:SR=25000000
258	met10 method	SAMPLE	287651-001	Soil	246536	04/11/17 23:37	1.0		5:SR=3400000
259	met10 method	SAMPLE	287651-002	Soil	246536	04/11/17 23:40	1.0		5:SR=2200000
260	met10 method	SAMPLE	287651-003	Soil	246536	04/11/17 23:43	1.0		5:SR=2300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287651-004	Soil	246536	04/11/17 23:46	1.0		5:SR=2900000
262	met10 method	SAMPLE	287766-004	Soil	246536	04/11/17 23:48	1.0		5:SR=25000000
263	met10 method	SAMPLE	287766-006	Soil	246536	04/11/17 23:52	1.0		5:SR=17000000
264	met10 method	SAMPLE	287766-008	Soil	246536	04/11/17 23:55	1.0		5:SR=20000000
265	met10 method	SAMPLE	287766-010	Soil	246536	04/11/17 23:58	1.0		5:SR=21000000
266	met10 method	SAMPLE	287766-012	Soil	246536	04/12/17 00:01	1.0		6:SR=23000000
267	met10 method	CCV				04/12/17 00:04	1.0	10	1:SR=4500000
268	met10 method	CCB				04/12/17 00:06	1.0		1:SR=3300
269	met10 method	SAMPLE	287780-001	Soil	246536	04/12/17 00:10	1.0		5:SR=9000000
270	met10 method	SAMPLE	287814-001	Soil	246536	04/12/17 00:13	1.0		10:SR=100000000
271	met10 method	SAMPLE	287814-002	Soil	246536	04/12/17 00:16	1.0		7:SR=19000000
272	met10 method	SAMPLE	287815-001	Soil	246536	04/12/17 00:19	1.0		10:SR=89000000
273	met10 method	SAMPLE	287815-002	Soil	246536	04/12/17 00:22	1.0		8:SR=19000000
274	met10 method	SAMPLE	287839-001	Soil	246536	04/12/17 00:25	1.0		3:SR=8600000
275	met10 method	SAMPLE	287855-001	Soil	246536	04/12/17 00:28	1.0		7:SR=9600000
276	met10 method	SAMPLE	287872-005	Soil	246536	04/12/17 00:31	1.0		5:SR=5000000
277	met10 method	SAMPLE	287872-010	Soil	246536	04/12/17 00:34	1.0		5:SR=4400000
278	met10 method	X	RINSE			04/12/17 00:36	1.0		
279	met10 method	CCV				04/12/17 00:40	1.0	10	1:SR=4600000
280	met10 method	XCCB				04/12/17 00:42	1.0		1:SR=3500
281	met10 method	CCB				04/12/17 00:45	1.0		1:SR=2000
282	met10 method	BLANK	QC881020	Filtrate	246541	04/12/17 00:49	1.0		1:SR=2800
283	met10 method	BS	QC881021	Filtrate	246541	04/12/17 00:52	1.0		1:SR=920000
284	met10 method	BSD	QC881022	Filtrate	246541	04/12/17 00:54	1.0		1:SR=910000
285	met10 method	MSS	287502-002	Filtrate	246541	04/12/17 00:57	1.0		4:SR=17000000
286	met10 method	MS	QC881023	Filtrate	246541	04/12/17 01:00	1.0		
287	met10 method	MSD	QC881024	Filtrate	246541	04/12/17 01:03	1.0		
288	met10 method	BLANK	QC881026	Filtrate	246541	04/12/17 01:05	1.0		1:SR=4100
289	met10 method	SAMPLE	287502-005	Filtrate	246541	04/12/17 01:09	1.0		4:SR=25000000
290	met10 method	SAMPLE	287502-006	Filtrate	246541	04/12/17 01:11	1.0		4:SR=27000000
291	met10 method	SAMPLE	287502-007	Filtrate	246541	04/12/17 01:15	1.0		2:SR=4900000
292	met10 method	CCV				04/12/17 01:18	1.0	10	1:SR=4500000
293	met10 method	XCCB				04/12/17 01:21	1.0		1:SR=3200
294	met10 method	CCB				04/12/17 01:24	1.0		1:SR=3600
295	met10 method	SAMPLE	287502-008	Filtrate	246541	04/12/17 01:27	1.0		3:SR=9000000
296	met10 method	SAMPLE	287502-011	Filtrate	246541	04/12/17 01:31	1.0		5:SR=28000000
297	met10 method	SAMPLE	287502-012	Filtrate	246541	04/12/17 01:34	1.0		5:SR=32000000
298	met10 method	SAMPLE	287502-013	Filtrate	246541	04/12/17 01:36	1.0		1:SR=2900
299	met10 method	SAMPLE	287502-014	Filtrate	246541	04/12/17 01:39	1.0		3:SR=9200000
300	met10 method	SAMPLE	287502-015	Filtrate	246541	04/12/17 01:43	1.0		2:SR=4300000
301	met10 method	SAMPLE	287502-016	Filtrate	246541	04/12/17 01:46	1.0		4:SR=21000000
302	met10 method	SAMPLE	287788-001	Filtrate	246541	04/12/17 01:49	1.0		1:SR=920000
303	met10 method	SAMPLE	287788-002	Filtrate	246541	04/12/17 01:52	1.0		1:SR=1700000
304	met10 method	X	RINSE			04/12/17 01:56	1.0		
305	met10 method	CCV				04/12/17 01:59	1.0	10	1:SR=4500000
306	met10 method	XCCB				04/12/17 02:02	1.0		1:SR=3600
307	met10 method	CCB				04/12/17 02:05	1.0		1:SR=2500
308	met10 method	BLANK	QC881015	Filtrate	246540	04/12/17 02:08	1.0		1:SR=1100
309	met10 method	BS	QC881016	Filtrate	246540	04/12/17 02:11	1.0		1:SR=920000
310	met10 method	BSD	QC881017	Filtrate	246540	04/12/17 02:14	1.0		1:SR=930000
311	met10 method	MSS	287723-006	Filtrate	246540	04/12/17 02:16	1.0		4:SR=40000000
312	met10 method	MS	QC881018	Filtrate	246540	04/12/17 02:19	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	MSD	QC881019	Filtrate	246540	04/12/17 02:22	1.0		
314	met10 method	BLANK	QC881038	Filtrate	246540	04/12/17 02:24	1.0		1:SR=4800
315	met10 method	SAMPLE	287722-002	Filtrate	246540	04/12/17 02:28	1.0		6:SR=54000000
316	met10 method	SAMPLE	287722-003	Filtrate	246540	04/12/17 02:30	1.0		3:SR=18000000
317	met10 method	SAMPLE	287723-007	Filtrate	246540	04/12/17 02:33	1.0		5:SR=34000000
318	met10 method	CCV				04/12/17 02:36	1.0	10	1:SR=4500000
319	met10 method	XCCB				04/12/17 02:39	1.0		1:SR=2900
320	met10 method	CCB				04/12/17 02:42	1.0		1:SR=3800
321	met10 method	SAMPLE	287723-008	Filtrate	246540	04/12/17 02:45	1.0		3:SR=12000000
322	met10 method	SAMPLE	287723-009	Filtrate	246540	04/12/17 02:47	1.0		5:SR=48000000
323	met10 method	SAMPLE	287723-010	Filtrate	246540	04/12/17 02:50	1.0		4:SR=34000000
324	met10 method	SAMPLE	287732-001	Filtrate	246540	04/12/17 02:53	1.0		4:SR=15000000
325	met10 method	X	RINSE			04/12/17 02:56	1.0		
326	met10 method	BLANK	QC881061	Soil	246551	04/12/17 03:00	1.0		1:SR=6700
327	met10 method	BS	QC881062	Soil	246551	04/12/17 03:03	1.0		1:SR=92000000
328	met10 method	BSD	QC881063	Soil	246551	04/12/17 03:06	1.0		1:SR=92000000
329	met10 method	MSS	287921-002	Soil	246551	04/12/17 03:08	1.0		5:SR=2300000
330	met10 method	MS	QC881064	Soil	246551	04/12/17 03:11	1.0		
331	met10 method	CCV				04/12/17 03:14	1.0	10	1:SR=4500000
332	met10 method	CCB				04/12/17 03:17	1.0		1:SR=4500
333	met10 method	MSD	QC881065	Soil	246551	04/12/17 03:20	1.0		
334	met10 method	SAMPLE	287768-001	Soil	246551	04/12/17 03:23	1.0		5:SR=5800000
335	met10 method	SAMPLE	287768-002	Soil	246551	04/12/17 03:25	1.0		3:SR=20000000
336	met10 method	SAMPLE	287768-003	Soil	246551	04/12/17 03:28	1.0		7:SR=12000000
337	met10 method	SAMPLE	287768-004	Soil	246551	04/12/17 03:31	1.0		4:SR=10000000
338	met10 method	SAMPLE	287921-001	Soil	246551	04/12/17 03:34	1.0		5:SR=2300000
339	met10 method	X	RINSE			04/12/17 03:36	1.0		
340	met10 method	BLANK	QC881066	Air	246552	04/12/17 03:40	1.0		1:SR=5000
341	met10 method	BS	QC881067	Air	246552	04/12/17 03:43	1.0		1:SR=94000000
342	met10 method	BSD	QC881068	Air	246552	04/12/17 03:45	1.0		1:SR=89000000
343	met10 method	CCV				04/12/17 03:48	1.0	10	1:SR=4500000
344	met10 method	CCB				04/12/17 03:50	1.0		1:SR=2800
345	met10 method	MSS	287929-001	Air	246552	04/12/17 03:54	1.0		1:SR=35000
346	met10 method	SAMPLE	287929-002	Air	246552	04/12/17 03:57	1.0		1:SR=34000
347	met10 method	X	RINSE			04/12/17 04:00	1.0		
348	met10 method	BLANK	QC881069	Wipe	246553	04/12/17 04:04	1.0		1:SR=4300
349	met10 method	BS	QC881070	Wipe	246553	04/12/17 04:07	1.0		1:SR=92000000
350	met10 method	BSD	QC881071	Wipe	246553	04/12/17 04:09	1.0		1:SR=92000000
351	met10 method	SAMPLE	287881-001	Wipe	246553	04/12/17 04:12	1.0		1:SR=450000
352	met10 method	CCV				04/12/17 04:14	1.0	10	1:SR=4400000
353	met10 method	CCB				04/12/17 04:17	1.0		1:SR=3300

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

MNA 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 29 through 133.

TLO 04/12/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 134 through 353.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087146073

Date : 04/11/17 Reference : met10 method
Sequence : MET10 04/11/17 Analyzed : 04/11/17 10:36

#	Type	Sample ID	Y A	Y R
		ICAL STD	9447720	1106130
		LOWER LIMIT	2834316	331839
		UPPER LIMIT	11337264	1327356
010	ICB		9493289	1085173
011	ICSA		7683826	944234
012	ICSAB		7727663	951958
078	CCV		8755638	1039620
079	CCB		9412253	1071952
086	SAMPLE	287252-031	9166125	1084130
090	CCV		8748251	1047731
091	CCB		9418120	1072143
122	CCV		8915990	1031138
123	CCB		9425077	1063331
124	MSS	287252-007	9370805	1101213
127	SAMPLE	287252-038	9278459	1086023
134	CCV		8667641	1035984
136	CCB		9344580	1063175
147	CCV		8637460	1033990
148	CCB		9408914	1059104
152	MSS	287252-028	9242825	1063251
153	SAMPLE	287252-029	9247389	1053413
155	SAMPLE	287082-002	9146469	1058447
159	CCV		8775442	1047406
160	CCB		9388959	1064253
219	CCV		8697539	1040905
220	CCB		9505187	1052721
222	SAMPLE	287082-002	9027808	1061572
231	CCV		8683560	1036334
232	CCB		9386764	1070900
243	CCV		8928126	1033371
244	CCB		9402252	1070792
251	MSS	287766-003	7895071	980433
262	SAMPLE	287766-004	7909247	990129
263	SAMPLE	287766-006	8021061	992096
264	SAMPLE	287766-008	7850580	986330
265	SAMPLE	287766-010	7811978	974739
266	SAMPLE	287766-012	8292999	1008194

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087146073001
Units : ug/L

Date : 11-APR-2017 10:33
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087146073002	L1	11-APR-2017 10:36	S32578
L2	met10 method	1087146073003	L2	11-APR-2017 10:39	S32571
L3	met10 method	1087146073004	L3	11-APR-2017 10:42	S32367
L4	met10 method	1087146073005	L4	11-APR-2017 10:44	S32368
L5	met10 method	1087146073006	L5	11-APR-2017 10:46	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8600	3.1530	3.0836	3.0501		LOR0	0.00000	0.32783		3.0367	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-6	100.00	3	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087146073001 Cal Date : 11-APR-2017

ICV 1087146073007 (11-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4914	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073009.1 File : met10 method Time : 11-APR-2017 11:03
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.177	ug/L	-16	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9353345	-1.00
Yttrium	R	1106130	1101587	-0.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073010.1 File : met10 method Time : 11-APR-2017 11:07
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9493289	0.48
Yttrium	R	1106130	1085173	-1.89

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073011.1 File : met10 method Time : 11-APR-2017 11:10
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-6.104]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18810	ug/L	94	
Copper	A	20000	21910	ug/L	110	
Manganese	A	20000	18460	ug/L	92	
Nickel	A	20000	16630	ug/L	83	
Titanium	A	20000	18700	ug/L	93	
Vanadium	A	20000	21510	ug/L	108	
Aluminum	R	500000	566500	ug/L	113	
Calcium	R	500000	529000	ug/L	106	
Iron	R	200000	202300	ug/L	101	
Magnesium	R	500000	440700	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	7683826	-18.67
Yttrium	R	1106130	944234	-14.64

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073012.1 File : met10 method Time : 11-APR-2017 11:15
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	956.9	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	7727663	-18.21
Yttrium	R	1106130	951958	-13.94

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073147.2 File : met10 method Time : 11-APR-2017 17:58
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0743	5000	5039	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8637460	-8.58
Yttrium	R	1106130	1033990	-6.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073148.2 File : met10 method Time : 11-APR-2017 18:01
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9408914	-0.41
Yttrium	R	1106130	1059104	-4.25

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073159.2 File : met10 method Time : 11-APR-2017 18:33
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0579	5000	5012	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8775442	-7.12
Yttrium	R	1106130	1047406	-5.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073160.2 File : met10 method Time : 11-APR-2017 18:36
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9388959	-0.62
Yttrium	R	1106130	1064253	-3.79

SAMPLE PREPARATION SUMMARY

Batch # : 246268 | Analysis : ICP
Started By : SL | Prep Date : 04-APR-2017 10:10 | Finished By : SL
Method : 3050B | Units : g
Spike #1 ID : S30743 | Spike #2 ID : S32291 | Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287252-001		Soil	.98	50	1	51.02						6010	
287252-002		Soil	.99	50	1	50.51						6010	
287252-003		Soil	1.09	50	1	45.87						6010	
287252-004		Soil	.91	50	1	54.95						6010	
287252-005		Soil	1.08	50	1	46.30						6010	
287252-006		Soil	.98	50	1	51.02						6010	
287252-008		Soil	.99	50	1	50.51						6010	
287252-009		Soil	.97	50	1	51.55						6010	
287252-010		Soil	.9	50	1	55.56						6010	
287252-011		Soil	1.06	50	1	47.17						6010	
287252-012		Soil	.95	50	1	52.63						6010	
287252-013		Soil	1.03	50	1	48.54						6010	
287252-014		Soil	.94	50	1	53.19						6010	
287252-015		Soil	1	50	1	50.0						6010	
287252-016		Soil	.97	50	1	51.55						6010	
287252-017		Soil	.94	50	1	53.19						6010	
287252-018		Soil	1.03	50	1	48.54						6010	
287252-019		Soil	.98	50	1	51.02						6010	
287252-020		Soil	1	50	1	50.0						6010	
287252-021		Soil	.99	50	1	50.51						6010	
QC879923	BLANK	Soil	.92	50	1	54.35							
QC879924	BS	Soil	1	50	1	50.0		.5	.5	.5			
QC879925	BSD	Soil	.94	50	1	53.19		.5	.5	.5			
QC879926	MS	Soil	1.02	50	1	49.02		.5	.5	.5			
QC879927	MSD	Soil	.98	50	1	51.02		.5	.5	.5			
QC880490	SER	Soil	.98	50	1	51.02							
QC880491	PDS	Soil	.98	50	1	51.02							

Analyst: TLO Date: 04/12/17 Reviewer: PRW Date: 04/12/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246268 Digestion Method: Time ON: 1010 BK 4043

Date Digested: 4-4-17 ☒ EPA 3050b Time OFF: 1250 Page 67

Digested by: SL ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		0.92	☒ 50 ☐	Y	✓	QC879923
BS		1.00	☒ 50 ☐		✓	4
BSD		0.94	☒ 50 ☐		✓	5
287252-001 MS		1.02	☒ 50 ☐		✓	6
- 001 MSD		0.98	☒ 50 ☐		✓	7
- 001	A	0.98	☒ 50 ☐		✓	MS
- 002		0.99	☒ 50 ☐		✓	
- 003		1.09	☒ 50 ☐		✓	
- 004		0.91	☒ 50 ☐		✓	
- 005		1.08	☒ 50 ☐		✓	
- 006		0.98	☒ 50 ☐		✓	
- 008		0.99	☒ 50 ☐		✓	
- 009		0.97	☒ 50 ☐		✓	
- 010		0.90	☒ 50 ☐		✓	
- 011		1.06	☒ 50 ☐		✓	
- 012		0.95	☒ 50 ☐		✓	
- 013		1.03	☒ 50 ☐		✓	
- 014		0.94	☒ 50 ☐		✓	
- 015		1.00	☒ 50 ☐		✓	
- 016		0.97	☒ 50 ☐		✓	
- 017		0.94	☒ 50 ☐		✓	
- 018		1.03	☒ 50 ☐		✓	
- 019		0.98	☒ 50 ☐		✓	
- 020		1.00	☒ 50 ☐		✓	
- 021		0.99	☒ 50 ☐		✓	

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot# SL 4-4-17	~~259780-2005~~		SL 4-4-17
Blank 'matrix' lot#	T458-7A007		
.5 mL of spike solution (Std1) was added to all spikes	S30743		
.5 mL of spike solution (Std2) was added to all spikes	S32291		
.5 mL of spike solution (Std3) was added to all spikes	S32702		
Digestion Block ID, Probe Location	TETON	42	
Temperature (°C), Thermometer ID	95°, M14581		
1:1 HNO3 Reagent ID	BDH 20170119882		
concentrated HNO3 lot#	BDH 20170119882		
3mL 30% hydrogen peroxide lot#	EMP 56258639		
concentrated HCl lot#	JTB 162118		
☐ filtered thru' Whatman 541, lot#	9769447		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
.5	N271500
5	2444267
1.5	2444267

4-4-17

Digestion Chemist / Date

Continued from page Ø

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Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246272 Analysis : ICP
Started By : SL Prep Date : 04-APR-2017 10:10 Finished By : SL
Method : 3050B Units : g
Spike #1 ID : S30743 Spike #2 ID : S32291 Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287252-022		Soil	.98	50	1	51.02						6010	
287252-023		Soil	1.1	50	1	45.45						6010	
287252-024		Soil	.97	50	1	51.55						6010	
287252-025		Soil	1.02	50	1	49.02						6010	
287252-026		Soil	.93	50	1	53.76						6010	
287252-027		Soil	1.03	50	1	48.54						6010	
287252-028		Soil	.98	50	1	51.02						6010	
287252-029		Soil	.98	50	1	51.02						6010	
287252-030		Soil	.92	50	1	54.35						6010	
287252-031		Soil	.93	50	1	53.76						6010	
287252-032		Soil	1.03	50	1	48.54						6010	
287252-033		Soil	1.01	50	1	49.50						6010	
287252-034		Soil	1	50	1	50.0						6010	
287252-035		Soil	1.08	50	1	46.30						6010	
287252-036		Soil	1	50	1	50.0						6010	
287252-037		Soil	.99	50	1	50.51						6010	
287252-038		Soil	.93	50	1	53.76						6010	
287252-039		Soil	1.03	50	1	48.54						6010	
287252-040		Soil	.97	50	1	51.55						6010	
287252-041		Soil	.91	50	1	54.95						6010	
QC879941	BLANK	Soil	.95	50	1	52.63							
QC879942	BS	Soil	1.05	50	1	47.62		.5	.5	.5			
QC879943	BSD	Soil	.96	50	1	52.08		.5	.5	.5			
QC879944	MS	Soil	1.01	50	1	49.50		.5	.5	.5			
QC879945	MSD	Soil	.93	50	1	53.76		.5	.5	.5			
QC880025	PREPBLK	Soil	1	50	1	50.0							
QC880026	PREPBLK	Soil	1	50	1	50.0							
QC880476	SER	Soil	.98	50	1	51.02							
QC880477	PDS	Soil	.98	50	1	51.02							

Analyst: MNA Date: 04/06/17 Reviewer: PRW Date: 04/18/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246272 Digestion Method: Time ON: 1010 **BK 4043**

Date Digested: 4-4-17 ☒ EPA 3050b Time OFF: 1250 Page 68

Digested by: SC ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		0.95	☒50 ☐	Y	✓	QC879941
BS		1.05	☒50 ☐		✓	2
BSD		0.96	☒50 ☐		✓	3
287252-028 MS		1.01	☒50 ☐		✓	4
- 028 MSD		0.93	☒50 ☐		✓	5
- 022	A	0.98	☒50 ☐		✓	~~AA55~~ 4-4-17
- 023		1.10	☒50 ☐		✓	
- 024		0.97	☒50 ☐		✓	
- 025		1.02	☒50 ☐		✓	
- 026		0.93	☒50 ☐		✓	
- 027		1.03	☒50 ☐		✓	
- 028		0.98	☒50 ☐		✓	MS5
- 029		0.98	☒50 ☐		✓	
- 030		0.92	☒50 ☐		✓	
- 031		0.93	☒50 ☐		✓	
- 032		1.03	☒50 ☐		✓	
- 033		1.01	☒50 ☐		✓	
- 034		1.00	☒50 ☐		✓	
- 035		1.08	☒50 ☐		✓	
- 036		1.00	☒50 ☐		✓	
- 037		0.99	☒50 ☐		✓	
- 038		0.93	☒50 ☐		✓	
- 039		1.03	☒50 ☐		✓	
- 040		0.97	☒50 ☐		✓	
- 041		0.91	☒50 ☐		✓	

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #	Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	~~259986-2007~~	SC 4-4-17
Blank 'matrix' lot#	T458-7A007	
.5 mL of spike solution (Std1) was added to all spikes	S30743	
.5 mL of spike solution (Std2) was added to all spikes	S32291	
.5 mL of spike solution (Std3) was added to all spikes	S32702	
Digestion Block ID, Probe Location	RAINER 42	
Temperature (°C), Thermometer ID	95°, AG4730	
1:1 HNO3 Reagent ID	BDH 20170119887	
concentrated HNO3 lot#	BDH 20170119887	
3mL 30% hydrogen peroxide lot#	EMD 56258689	
concentrated HCl lot#	JTB 162118	
☐ filtered thru' Whatman 541, lot#	9693346	
Relinquished to ICP group	ICP	

Pipettes

Vol.(mL)	ID
.5	N2715OD
5	2444267
1.5	2444267

Digestion Chemist / Date 4/4/17

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Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246299
Started By : MB4
Method : 3050B
Spike #1 ID : S30743
Prep Date : 04-APR-2017 18:05
Spike #2 ID : S32291
Analysis : ICP
Finished By : MB4
Units : g
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287252-007		Soil	1	50	1	50.0						6010	
287252-042		Soil	1.04	50	1	48.08						6010	
287252-043		Soil	1.03	50	1	48.54						6010	
287252-044		Soil	.99	50	1	50.51						6010	
287252-045		Soil	1.1	50	1	45.45						6010	
287362-045		Soil	1.02	50	1	49.02						6010	
287362-046		Soil	.96	50	1	52.08						6010	
287528-001		Soil	1.03	50	1	48.54						6010	
287533-001		Soil	.92	50	1	54.35						6010	
287533-002		Soil	1.03	50	1	48.54						6010	
287533-003		Soil	1.05	50	1	47.62						6010	
287533-004		Soil	1.03	50	1	48.54						6010	
287543-005		Soil	.81	50	1	61.73						6010	
287576-005		Soil	1.02	50	1	49.02						6010	
287642-001		Miscell.	.99	50	1	50.51						6010	
287644-001		Soil	1.05	50	1	47.62						6010	
287644-002		Soil	1.1	50	1	45.45						6010	
287644-003		Soil	1.02	50	1	49.02						6010	
287644-004		Soil	1.08	50	1	46.30						6010	
QC880057	BLANK	Miscell.	.93	50	1	53.76							
QC880058	BS	Miscell.	1.04	50	1	48.08		.5	.5	.5			
QC880059	BSD	Miscell.	1.08	50	1	46.30		.5	.5	.5			
QC880060	MS	Soil	.97	50	1	51.55		.5	.5	.5			
QC880061	MSD	Soil	.99	50	1	50.51		.5	.5	.5			
QC880062	SER	Soil	1	50	1	50.0							
QC880063	PDS	Soil	1	50	1	50.0							
QC880064	PREPBLK	Miscell.	1	50	1	50.0							
QC880065	PREPBLK	Miscell.	1	50	1	50.0							

Analyst: KER Date: 04/05/17 Reviewer: PRW Date: 04/05/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246299 Digestion Method: Time ON: 18:05 BK 4043

Date Digested: 4-4-2017 ☒ EPA 3050b Time OFF: 20:55 Page 69

Digested by: MB4 ☐ _____

	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
	BLK		0.93	☒50 ☐	Yes	✓	QC#880057
	BS		1.04	☒50 ☐		✓	58
	BSD		1.08	☒50 ☐		✓	59
	287252-007MS		0.97	☒50 ☐		✓	60
5	-007MSD		0.99	☒50 ☐		✓	61
	-007	A	1.00	☒50 ☐		✓	
	-042		1.04	☒50 ☐		✓	
	-043		1.03	☒50 ☐		✓	
	-044		0.99	☒50 ☐		✓	
10	-045		1.10	☒50 ☐		✓	
	287528-001	A	1.03	☒50 ☐		✓	
	287533-001	A	0.92	☒50 ☐		✓	
	-002		1.03	☒50 ☐		✓	
	-003		1.05	☒50 ☐		✓	
15	-004		1.03	☒50 ☐		✓	
	287543-005		0.81	☒50 ☐		✓	comp 287543 1-4 @ 50g ea.
	287576-005		1.02	☒50 ☐		✓	comp 287576 1-4 @ 50g ea.
	287642-001	A	0.99	☒50 ☐		✓	
	287644-001	A	1.05	☒50 ☐		✓	
20	-002		1.10	☒50 ☐		✓	
	-003		1.02	☒50 ☐		✓	
	-004		1.08	☒50 ☐		✓	
	287362-045	A	1.02	☒50 ☐	Yes	—	Added on 4-5-17 @ 03:30.
	-046		0.96	☒50 ☐	Yes	✓	
				☐ 50 ☐			

← Limited Sample Volume

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259788-2005	—	MB4 4-4-17
Blank 'matrix' lot#	T458-7A007		
0.5 mL of spike solution (Std1) was added to all spikes	S20743		
0.5 mL of spike solution (Std2) was added to all spikes	S32291		
0.5 mL of spike solution (Std3) was added to all spikes	S32702		
Digestion Block ID, Probe Location	Rainier	42	
Temperature (°C), Thermometer ID	96°C	AG4730	
1:1 HNO3 Reagent ID	BDH 20170119887		
concentrated HNO3 lot#	BDH 20170119887		
3mL 30% hydrogen peroxide lot#	EMD 562586039		
concentrated HCl lot#	JTB162118		
☒ filtered thru' Whatman 541, lot#	96933346		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N27150P
5	24442627
1.5	24442627

4-4-17

Digestion Chemist / Date

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

Laboratory Job Number 287252

ANALYTICAL REPORT

Metals

Matrix: SPLP Leachate

Curtis & Tompkins, Ltd.

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Dil'n Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/23/17
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Chemist	Sampled	Prepared	Analyzed
21-SS075	SAMPLE	287252-001	ND	0.0050	246256	MNA	03/15/17	04/04/17	04/06/17
21-SS074	SAMPLE	287252-002	ND	0.0050	246256	MNA	03/15/17	04/04/17	04/06/17
21-SS059	SAMPLE	287252-003	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS058	SAMPLE	287252-004	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS057	SAMPLE	287252-005	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS056	SAMPLE	287252-006	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS055	SAMPLE	287252-007	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/07/17
21-SS054	SAMPLE	287252-008	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS053	SAMPLE	287252-009	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS052	SAMPLE	287252-010	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS051	SAMPLE	287252-011	ND	0.0050	246256	MNA	03/16/17	04/04/17	04/06/17
21-SS086	SAMPLE	287252-012	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS085	SAMPLE	287252-013	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS084	SAMPLE	287252-014	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS083	SAMPLE	287252-015	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS082	SAMPLE	287252-016	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS087	SAMPLE	287252-017	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS088	SAMPLE	287252-018	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS089	SAMPLE	287252-019	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS090	SAMPLE	287252-020	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS097	SAMPLE	287252-021	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS098	SAMPLE	287252-022	ND	0.0050	246458	TLO	03/16/17	04/10/17	04/11/17
21-SS072	SAMPLE	287252-023	ND	0.0050	246458	TLO	03/15/17	04/10/17	04/11/17
21-SS099	SAMPLE	287252-024	ND	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS100	SAMPLE	287252-025	ND	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS101	SAMPLE	287252-026	ND	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS096	SAMPLE	287252-027	0.0081	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS095	SAMPLE	287252-028	0.011	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS094	SAMPLE	287252-029	0.030	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS093	SAMPLE	287252-030	0.0068	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS092	SAMPLE	287252-031	0.0056	0.0050	246458	TLO	03/20/17	04/10/17	04/11/17
21-SS091	SAMPLE	287252-032	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS107	SAMPLE	287252-033	0.030	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS106	SAMPLE	287252-034	0.042	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS105	SAMPLE	287252-035	0.010	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS104	SAMPLE	287252-036	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS103	SAMPLE	287252-037	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS102	SAMPLE	287252-038	0.0059	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS108	SAMPLE	287252-039	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS109	SAMPLE	287252-040	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS110	SAMPLE	287252-041	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS111	SAMPLE	287252-042	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS112	SAMPLE	287252-043	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS113	SAMPLE	287252-044	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
21-SS119	SAMPLE	287252-045	ND	0.0050	246459	TLO	03/20/17	04/10/17	04/11/17
	BLANK	QC879884	ND	0.0050	246256	MNA		04/04/17	04/06/17
	BLANK	QC880667	ND	0.0050	246458	TLO		04/10/17	04/11/17
	BLANK	QC880674	ND	0.0050	246459	TLO		04/10/17	04/11/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/23/17
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Chemist	Sampled	Prepared	Analyzed
	BS		QC879885		0.1000	0.09959	100	77-120			246256	MNA		04/04/17	04/06/17
	BSD		QC879886		0.1000	0.1006	101	77-120	1	20	246256	MNA		04/04/17	04/06/17
21-SS075	MS	287252-001	QC879887	0.001212	0.1000	0.09775	97	56-127			246256	MNA	03/15/17	04/04/17	04/06/17
21-SS075	MSD	287252-001	QC879888		0.1000	0.09887	98	56-127	1	33	246256	MNA	03/15/17	04/04/17	04/06/17
21-SS055	MS	287252-007	QC879889	ND	0.1000	0.1044	104	56-127			246256	MNA	03/16/17	04/04/17	04/11/17
21-SS055	MSD	287252-007	QC879890		0.1000	0.1014	101	56-127	3	33	246256	MNA	03/16/17	04/04/17	04/11/17
	BS		QC880668		0.1000	0.09748	97	77-120			246458	TLO		04/10/17	04/11/17
	BSD		QC880669		0.1000	0.09622	96	77-120	1	20	246458	TLO		04/10/17	04/11/17
21-SS095	MS	287252-028	QC880670	0.01073	0.1000	0.1079	97	56-127			246458	TLO	03/20/17	04/10/17	04/11/17
21-SS095	MSD	287252-028	QC880671		0.1000	0.1070	96	56-127	1	33	246458	TLO	03/20/17	04/10/17	04/11/17
	BS		QC880675		0.1000	0.09755	98	77-120			246459	TLO		04/10/17	04/11/17
	BSD		QC880676		0.1000	0.09836	98	77-120	1	20	246459	TLO		04/10/17	04/11/17
21-SS091	MS	287252-032	QC880677	0.002402	0.1000	0.09320	91	56-127			246459	TLO	03/20/17	04/10/17	04/11/17
21-SS091	MSD	287252-032	QC880678		0.1000	0.09917	97	56-127	6	33	246459	TLO	03/20/17	04/10/17	04/11/17

ND= Not Detected
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS055	Batch#:	246256
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287252-007	Sampled:	03/16/17
Lab ID:	QC879891	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/07/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS055	Batch#:	246256
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287252-007	Sampled:	03/16/17
Lab ID:	QC879892	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/07/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
ND	0.1000	0.1119	112	75-125

ND= Not Detected

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS095	Batch#:	246458
Type:	Serial Dilution	Chemist:	TLO
MSS Lab ID:	287252-028	Sampled:	03/20/17
Lab ID:	QC880672	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.01073	0.005000	0.01927 J	0.02500	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS095	Batch#:	246458
Type:	Post Digest Spike	Chemist:	TLO
MSS Lab ID:	287252-028	Sampled:	03/20/17
Lab ID:	QC880673	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
0.01073	0.1000	0.1236	113	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS091	Batch#:	246459
Type:	Serial Dilution	Chemist:	TLO
MSS Lab ID:	287252-032	Sampled:	03/20/17
Lab ID:	QC880679	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
0.002402	0.005000	0.007288 J	0.02500	NC	10

J= Estimated value
NC= Not Calculated
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287252	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	SPLP
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS091	Batch#:	246459
Type:	Post Digest Spike	Chemist:	TLO
MSS Lab ID:	287252-032	Sampled:	03/20/17
Lab ID:	QC880680	Received:	03/23/17
Matrix:	SPLP Leachate	Analyzed:	04/11/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
0.002402	0.1000	0.1129	110	75-125

REPORTING SUMMARY FOR 287252 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287252-001	MET10	04/06/17 20:00	1.0	+
287252-002	MET10	04/06/17 21:05	1.0	+
287252-003	MET10	04/06/17 21:08	1.0	+
287252-004	MET10	04/06/17 21:10	1.0	+
287252-005	MET10	04/06/17 21:12	1.0	+
287252-006	MET10	04/06/17 21:15	1.0	+
287252-007	MET10	04/06/17 20:07	1.0	
287252-007	MET10	04/07/17 02:49	1.0	+
287252-007	MET10	04/11/17 16:49	1.0	
287252-008	MET10	04/06/17 21:18	1.0	+
287252-009	MET10	04/06/17 21:21	1.0	+
287252-010	MET10	04/06/17 21:24	1.0	+
287252-011	MET10	04/06/17 21:35	1.0	+
287252-012	MET10	04/11/17 02:30	1.0	+
287252-013	MET10	04/11/17 02:33	1.0	+
287252-014	MET10	04/11/17 02:37	1.0	+
287252-015	MET10	04/11/17 02:40	1.0	+
287252-016	MET10	04/11/17 02:43	1.0	+
287252-017	MET10	04/11/17 02:55	1.0	+
287252-018	MET10	04/11/17 02:59	1.0	+
287252-019	MET10	04/11/17 03:02	1.0	+
287252-020	MET10	04/11/17 03:05	1.0	+
287252-021	MET10	04/11/17 03:08	1.0	+
287252-022	MET10	04/11/17 03:12	1.0	+
287252-023	MET10	04/11/17 03:15	1.0	+
287252-024	MET10	04/11/17 03:18	1.0	+
287252-025	MET10	04/11/17 03:21	1.0	+
287252-026	MET10	04/11/17 03:24	1.0	+

REPORTING SUMMARY FOR 287252 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287252-027	MET10	04/11/17 03:35	1.0	+	
287252-028	MET10	04/11/17 02:16	1.0	+	
287252-029	MET10	04/11/17 03:37	1.0	+	
287252-030	MET10	04/11/17 03:40	1.0	+	
287252-031	MET10	04/11/17 03:42	1.0		
287252-031	MET10	04/11/17 15:04	1.0	+	
287252-032	MET10	04/11/17 03:56	1.0	+	
287252-033	MET10	04/11/17 04:18	1.0	+	
287252-034	MET10	04/11/17 04:20	1.0	+	
287252-035	MET10	04/11/17 04:23	1.0	+	
287252-036	MET10	04/11/17 04:26	1.0	+	
287252-037	MET10	04/11/17 04:29	1.0	+	
287252-038	MET10	04/11/17 04:33	1.0		
287252-038	MET10	04/11/17 16:57	1.0	+	
287252-039	MET10	04/11/17 04:35	1.0	+	
287252-040	MET10	04/11/17 04:47	1.0	+	
287252-041	MET10	04/11/17 04:50	1.0	+	
287252-042	MET10	04/11/17 04:53	1.0	+	
287252-043	MET10	04/11/17 04:56	1.0	+	
287252-044	MET10	04/11/17 04:59	1.0	+	
287252-045	MET10	04/11/17 05:03	1.0	+	
QC879884	MET10	04/06/17 19:52	1.0	+	
QC879885	MET10	04/06/17 19:55	1.0	+	
QC879886	MET10	04/06/17 19:58	1.0	+	
QC879887	MET10	04/06/17 20:03	1.0	+	
QC879888	MET10	04/06/17 20:05	1.0	+	
QC879889	MET10	04/06/17 20:10	1.0		
QC879889	MET10	04/07/17 02:51	1.0		

REPORTING SUMMARY FOR 287252 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC879889	MET10	04/11/17 16:53	1.0	+	
QC879890	MET10	04/06/17 20:21	1.0		
QC879890	MET10	04/07/17 02:54	1.0		
QC879890	MET10	04/11/17 16:55	1.0	+	
QC879891	MET10	04/06/17 20:25	5.0		
QC879891	MET10	04/07/17 03:05	5.0	+	
QC879891	MET10	04/11/17 21:53	5.0		
QC879891	MET10	04/11/17 22:35	5.0		
QC879892	MET10	04/06/17 20:27	1.0		
QC879892	MET10	04/07/17 03:08	1.0	+	
QC880667	MET10	04/11/17 01:59	1.0	+	
QC880668	MET10	04/11/17 02:02	1.0	+	
QC880669	MET10	04/11/17 02:05	1.0	+	
QC880670	MET10	04/11/17 02:20	1.0	+	
QC880671	MET10	04/11/17 02:22	1.0	+	
QC880672	MET10	04/11/17 02:24	5.0	+	
QC880673	MET10	04/11/17 02:28	1.0	+	
QC880674	MET10	04/11/17 03:48	1.0	+	
QC880675	MET10	04/11/17 03:51	1.0	+	
QC880676	MET10	04/11/17 03:54	1.0	+	
QC880677	MET10	04/11/17 03:59	1.0	+	
QC880678	MET10	04/11/17 04:10	1.0	+	
QC880679	MET10	04/11/17 04:12	5.0	+	
QC880680	MET10	04/11/17 04:16	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/06/17 08:52	1.0		
002	met10 method	ICAL	L1			04/06/17 08:56	1.0	1	
003	met10 method	ICAL	L2			04/06/17 08:59	1.0	2	
004	met10 method	ICAL	L3			04/06/17 09:01	1.0	3	
005	met10 method	ICAL	L4			04/06/17 09:03	1.0	4	
006	met10 method	ICAL	L5			04/06/17 09:06	1.0	5	
007	met10 method	ICV				04/06/17 09:09	1.0	6	
008	met10 method	CRI				04/06/17 09:12	1.0	7	
009	met10 method	ICB				04/06/17 09:27	1.0		
010	met10 method	ICSA				04/06/17 09:31	1.0	8	10:AL=560000
011	met10 method	ICSAB				04/06/17 09:35	1.0	9	5:AL=580000
012	met10 method	XICSAB				04/06/17 10:06	1.0	9	
013	met10 method	ICSAB				04/06/17 10:16	1.0	9	5:AL=550000
014	met10 method	SAMPLE	287630-003	Soil	246334	04/06/17 11:16	1.0		2:TI=14000
015	met10 method	SAMPLE	287630-004	Soil	246334	04/06/17 11:19	1.0		4:CA=500000
016	met10 method	SAMPLE	287630-005	Soil	246334	04/06/17 11:22	1.0		4:FE=430000
017	met10 method	SAMPLE	287630-006	Soil	246334	04/06/17 11:25	1.0		6:FE=550000
018	met10 method	MSS	287630-007	Soil	246334	04/06/17 11:28	1.0		4:CA=1000000
019	met10 method	SAMPLE	287724-001	Soil	246334	04/06/17 11:31	1.0		5:FE=550000
020	met10 method	BLANK	QC880099	WET Leachate	246307	04/06/17 11:34	10.0		1:NA=170000
021	met10 method	BS	QC880100	WET Leachate	246307	04/06/17 11:37	1.0		
022	met10 method	BSD	QC880101	WET Leachate	246307	04/06/17 11:39	1.0		
023	met10 method	MSS	287513-001	WET Leachate	246307	04/06/17 11:42	10.0		1:NA=150000
024	met10 method	CCV				04/06/17 11:45	1.0	10	
025	met10 method	CCB				04/06/17 11:48	1.0		
026	met10 method	CCB				04/06/17 11:51	1.0		
027	met10 method	MS	QC880102	WET Leachate	246307	04/06/17 11:55	10.0		
028	met10 method	MSD	QC880103	WET Leachate	246307	04/06/17 11:58	10.0		
029	met10 method	SAMPLE	287416-001	WET Leachate	246307	04/06/17 12:00	10.0		2:NA=140000
030	met10 method	SAMPLE	287727-001	WET Leachate	246307	04/06/17 12:03	10.0		1:NA=150000
031	met10 method	SAMPLE	287727-001	TCLP Leachate	246190	04/06/17 12:05	10.0		1:NA=160000
032	met10 method	SAMPLE	287513-002	WET Leachate	246307	04/06/17 12:09	10.0		1:NA=170000
033	met10 method	SAMPLE	287513-003	WET Leachate	246307	04/06/17 12:11	10.0		1:NA=140000
034	met10 method	SAMPLE	287513-004	WET Leachate	246307	04/06/17 12:14	10.0		1:NA=150000
035	met10 method	SAMPLE	287513-005	WET Leachate	246307	04/06/17 12:16	10.0		1:NA=140000
036	met10 method	SAMPLE	287513-006	WET Leachate	246307	04/06/17 12:19	10.0		1:NA=140000
037	met10 method	CCV				04/06/17 12:21	1.0	10	
038	met10 method	CCB				04/06/17 12:24	1.0		
039	met10 method	CCB				04/06/17 12:27	1.0		
040	met10 method	SAMPLE	287513-007	WET Leachate	246307	04/06/17 12:31	10.0		1:NA=160000
041	met10 method	SAMPLE	287513-008	WET Leachate	246307	04/06/17 12:34	10.0		1:NA=140000
042	met10 method	SAMPLE	287513-009	WET Leachate	246307	04/06/17 12:36	10.0		1:NA=150000
043	met10 method	SAMPLE	287513-010	WET Leachate	246307	04/06/17 12:39	10.0		1:NA=140000
044	met10 method	SAMPLE	287513-011	WET Leachate	246307	04/06/17 12:41	10.0		1:NA=160000
045	met10 method	SAMPLE	287513-012	WET Leachate	246307	04/06/17 12:44	10.0		1:NA=160000
046	met10 method	SAMPLE	287513-013	WET Leachate	246307	04/06/17 12:46	10.0		1:NA=160000
047	met10 method	SAMPLE	287560-001	WET Leachate	246307	04/06/17 12:49	1.0		1:NA=160000
048	met10 method	SAMPLE	287560-002	WET Leachate	246307	04/06/17 12:52	1.0		1:NA=160000
049	met10 method	SAMPLE	287439-001	WET Leachate	246307	04/06/17 12:55	10.0		
050	met10 method	CCV				04/06/17 12:57	1.0	10	
051	met10 method	CCB				04/06/17 13:00	1.0		
052	met10 method	CCB				04/06/17 13:03	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287543-005	WET Leachate	246307	04/06/17 13:06	10.0		
054	met10 method	SAMPLE	286962-005	Soil	246123	04/06/17 13:09	1.0		3:CA=5400000
055	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:12	100.0		
056	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:14	1.0		10:CA=2800000
057	met10 method	X	RINSE			04/06/17 13:17	1.0		
058	met10 method	SAMPLE	287315-001	Miscell.	246094	04/06/17 13:21	1.0		1:K=230000
059	met10 method	SAMPLE	287318-001	Miscell.	246094	04/06/17 13:23	1.0		1:K=170000
060	met10 method	SAMPLE	287467-001	Soil	246170	04/06/17 13:26	1.0		1:FE=110000
061	met10 method	SAMPLE	287467-002	Soil	246170	04/06/17 13:28	1.0		5:FE=430000
062	met10 method	SAMPLE	287467-003	Soil	246170	04/06/17 13:31	1.0		1:FE=110000
063	met10 method	CCV				04/06/17 13:33	1.0	10	
064	met10 method	CCB				04/06/17 13:36	1.0		
065	met10 method	CCB				04/06/17 13:39	1.0		
066	met10 method	X	RINSE			04/06/17 13:43	1.0		
067	met10 method	SER	QC880366	WET Leachate	246307	04/06/17 13:46	50.0		
068	met10 method	PDS	QC880367	WET Leachate	246307	04/06/17 13:50	10.0	11 12 13	1:NA=160000
069	met10 method	SAMPLE	287595-027	Soil	246333	04/06/17 13:52	1.0		5:CA=1700000
070	met10 method	SAMPLE	287595-029	Soil	246333	04/06/17 13:55	1.0		4:CA=2300000
071	met10 method	BLANK	QC879203	Soil	246096	04/06/17 13:59	1.0		
072	met10 method	BS	QC879001	WET Leachate	246046	04/06/17 14:02	1.0		
073	met10 method	BSD	QC879002	WET Leachate	246046	04/06/17 14:04	1.0		
074	met10 method	SAMPLE	287325-001	WET Leachate	246046	04/06/17 14:07	10.0		1:NA=110000
075	met10 method	SAMPLE	287325-002	WET Leachate	246046	04/06/17 14:10	10.0		1:NA=100000
076	met10 method	CCV				04/06/17 14:13	1.0	10	
077	met10 method	CCB				04/06/17 14:15	1.0		
078	met10 method	SAMPLE	287331-001	WET Leachate	246046	04/06/17 14:19	10.0		
079	met10 method	X	RINSE			04/06/17 14:25	1.0		
080	met10 method	MSS	287252-007	Soil	246299	04/06/17 14:30	1.0		4:FE=530000
081	met10 method	MS	QC880060	Soil	246299	04/06/17 14:32	1.0		4:AL=540000
082	met10 method	MSD	QC880061	Soil	246299	04/06/17 14:35	1.0		4:FE=640000
083	met10 method	SER	QC880062	Soil	246299	04/06/17 14:38	5.0		1:FE=120000
084	met10 method	PDS	QC880063	Soil	246299	04/06/17 14:40	1.0	11 12 13	4:FE=520000
085	met10 method	SAMPLE	287252-042	Soil	246299	04/06/17 14:43	1.0		4:FE=700000
086	met10 method	SAMPLE	287252-043	Soil	246299	04/06/17 14:46	1.0		4:AL=560000
087	met10 method	SAMPLE	287252-044	Soil	246299	04/06/17 14:49	1.0		4:AL=580000
088	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 14:52	1.0		5:FE=500000
089	met10 method	CCV				04/06/17 14:55	1.0	10	
090	met10 method	CCB				04/06/17 14:57	1.0		
091	met10 method	CCB				04/06/17 15:00	1.0		
092	met10 method	SAMPLE	287362-045	Soil	246299	04/06/17 15:04	1.0		4:FE=730000
093	met10 method	SAMPLE	287362-046	Soil	246299	04/06/17 15:07	1.0		4:AL=610000
094	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 15:10	1.0		5:CA=1800000
095	met10 method	SAMPLE	287533-001	Soil	246299	04/06/17 15:13	1.0		6:FE=640000
096	met10 method	SAMPLE	287533-002	Soil	246299	04/06/17 15:16	1.0		6:FE=750000
097	met10 method	SAMPLE	287533-003	Soil	246299	04/06/17 15:19	1.0		6:FE=710000
098	met10 method	SAMPLE	287533-004	Soil	246299	04/06/17 15:22	1.0		5:FE=490000
099	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 15:25	1.0		2:FE=300000
100	met10 method	X	RINSE			04/06/17 15:57	1.0		
101	met10 method	MSS	287530-001	Soil	246333	04/06/17 16:01	1.0		5:CA=1100000
102	met10 method	CCV				04/06/17 16:04	1.0	10	
103	met10 method	CCB				04/06/17 16:07	1.0		
104	met10 method	CCB				04/06/17 16:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287166-002	Air	246062	04/06/17 16:14	1.0		
106	met10 method	SAMPLE	287168-003	Air	246062	04/06/17 16:16	1.0		
107	met10 method	SAMPLE	287171-002	Air	246062	04/06/17 16:18	1.0		
108	met10 method	MSS	287505-010	TCLP Leachate	246190	04/06/17 16:21	10.0		1:NA=170000
109	met10 method	SAMPLE	287418-005	Filtrate	246184	04/06/17 16:25	1.0		5:NA=3300000
110	met10 method	SAMPLE	287418-006	Filtrate	246184	04/06/17 16:27	1.0		4:NA=2800000
111	met10 method	SAMPLE	287418-007	Filtrate	246184	04/06/17 16:31	1.0		4:NA=5100000
112	met10 method	SAMPLE	287418-008	Filtrate	246184	04/06/17 16:33	1.0		4:NA=3300000
113	met10 method	SAMPLE	287418-009	Filtrate	246184	04/06/17 16:37	1.0		3:NA=2200000
114	met10 method	SAMPLE	287418-010	Filtrate	246184	04/06/17 16:40	1.0		2:NA=700000
115	met10 method	CCV				04/06/17 16:42	1.0	10	
116	met10 method	CCB				04/06/17 16:45	1.0		
117	met10 method	CCB				04/06/17 16:48	1.0		
118	met10 method	SAMPLE	287418-011	Filtrate	246184	04/06/17 16:51	1.0		4:NA=4700000
119	met10 method	MSS	287252-028	Soil	246272	04/06/17 16:55	100.0		
120	met10 method	SAMPLE	287252-029	Soil	246272	04/06/17 16:57	100.0		
121	met10 method	SAMPLE	287252-030	Soil	246272	04/06/17 16:59	1.0		4:FE=370000
122	met10 method	SAMPLE	287252-033	Soil	246272	04/06/17 17:02	100.0		
123	met10 method	SAMPLE	287252-034	Soil	246272	04/06/17 17:04	100.0		
124	met10 method	SAMPLE	287252-035	Soil	246272	04/06/17 17:07	100.0		
125	met10 method	SAMPLE	287252-036	Soil	246272	04/06/17 17:09	1.0		4:FE=410000
126	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 17:12	100.0		
127	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 17:14	1.0		5:CA=1700000
128	met10 method	CCV				04/06/17 17:17	1.0	10	
129	met10 method	CCB				04/06/17 17:20	1.0		
130	met10 method	CCB				04/06/17 17:22	1.0		
131	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 17:26	100.0		
132	met10 method	X	RINSE			04/06/17 17:28	1.0		
133	met10 method	BLANK	QC879918	Water	246267	04/06/17 17:31	1.0		
134	met10 method	BS	QC879919	Water	246267	04/06/17 17:35	1.0		
135	met10 method	BSD	QC879920	Water	246267	04/06/17 17:37	1.0		
136	met10 method	MSS	287440-001	Water	246267	04/06/17 17:39	1.0		
137	met10 method	MS	QC879921	Water	246267	04/06/17 17:43	1.0		
138	met10 method	MSD	QC879922	Water	246267	04/06/17 17:45	1.0		
139	met10 method	SAMPLE	287417-001	Water	246267	04/06/17 17:48	1.0		
140	met10 method	SAMPLE	287417-002	Water	246267	04/06/17 17:50	1.0		1:CA=130000
141	met10 method	CCV				04/06/17 17:53	1.0	10	
142	met10 method	CCB				04/06/17 17:56	1.0		
143	met10 method	CCB				04/06/17 17:59	1.0		
144	met10 method	SAMPLE	287516-001	Water	246267	04/06/17 18:03	1.0		1:NA=290000
145	met10 method	X	RINSE			04/06/17 18:06	1.0		
146	met10 method	BLANK	QC880251	Soil	246347	04/06/17 18:09	1.0		
147	met10 method	LCS	QC880252	Soil	246347	04/06/17 18:12	1.0		
148	met10 method	MSS	287623-009	Soil	246347	04/06/17 18:15	100.0		
149	met10 method	MS	QC880253	Soil	246347	04/06/17 18:17	100.0		
150	met10 method	MSD	QC880254	Soil	246347	04/06/17 18:20	100.0		
151	met10 method	PDS	QC880255	Soil	246347	04/06/17 18:22	100.0	11 12 13	
152	met10 method	SER	QC880256	Soil	246347	04/06/17 18:24	500.0		
153	met10 method	SAMPLE	287623-001	Soil	246347	04/06/17 18:27	100.0		
154	met10 method	CCV				04/06/17 18:29	1.0	10	
155	met10 method	CCB				04/06/17 18:32	1.0		
156	met10 method	CCB				04/06/17 18:35	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287623-003	Soil	246347	04/06/17 18:39	100.0		
158	met10 method	SAMPLE	287623-004	Soil	246347	04/06/17 18:42	100.0		
159	met10 method	SAMPLE	287623-005	Soil	246347	04/06/17 18:44	100.0		
160	met10 method	SAMPLE	287623-006	Soil	246347	04/06/17 18:46	100.0		
161	met10 method	SAMPLE	287623-007	Soil	246347	04/06/17 18:49	100.0		
162	met10 method	SAMPLE	287623-010	Soil	246347	04/06/17 18:51	100.0		
163	met10 method	CCV				04/06/17 18:54	1.0	10	
164	met10 method	CCB				04/06/17 18:56	1.0		
165	met10 method	CCB				04/06/17 18:59	1.0		
166	met10 method	X	RINSE			04/06/17 19:08	1.0		
167	met10 method	BLANK	QC880298	Filtrate	246356	04/06/17 19:12	1.0		
168	met10 method	BS	QC880299	Filtrate	246356	04/06/17 19:15	1.0		
169	met10 method	BSD	QC880300	Filtrate	246356	04/06/17 19:17	1.0		
170	met10 method	MSS	287633-008	Filtrate	246356	04/06/17 19:20	1.0		2:CA=300000
171	met10 method	MS	QC880301	Filtrate	246356	04/06/17 19:22	1.0		
172	met10 method	MSD	QC880302	Filtrate	246356	04/06/17 19:25	1.0		
173	met10 method	SAMPLE	287589-001	Filtrate	246356	04/06/17 19:27	1.0		3:NA=390000
174	met10 method	SAMPLE	287633-004	Filtrate	246356	04/06/17 19:30	1.0		3:NA=460000
175	met10 method	SAMPLE	287633-006	Filtrate	246356	04/06/17 19:33	1.0		3:NA=280000
176	met10 method	CCV				04/06/17 19:37	1.0	10	
177	met10 method	CCB				04/06/17 19:40	1.0		
178	met10 method	CCB				04/06/17 19:43	1.0		
179	met10 method	SAMPLE	287633-007	Filtrate	246356	04/06/17 19:46	1.0		2:CA=270000
180	met10 method	X	RINSE			04/06/17 19:49	1.0		
181	met10 method	BLANK	QC879884	SPLP Leachate	246256	04/06/17 19:52	1.0		
182	met10 method	BS	QC879885	SPLP Leachate	246256	04/06/17 19:55	1.0		
183	met10 method	BSD	QC879886	SPLP Leachate	246256	04/06/17 19:58	1.0		
184	met10 method	MSS	287252-001	SPLP Leachate	246256	04/06/17 20:00	1.0		
185	met10 method	MS	QC879887	SPLP Leachate	246256	04/06/17 20:03	1.0		
186	met10 method	MSD	QC879888	SPLP Leachate	246256	04/06/17 20:05	1.0		
187	met10 method	MSS	287252-007	SPLP Leachate	246256	04/06/17 20:07	1.0		
188	met10 method	MS	QC879889	SPLP Leachate	246256	04/06/17 20:10	1.0		
189	met10 method	CCV				04/06/17 20:12	1.0	10	
190	met10 method	CCB				04/06/17 20:15	1.0		
191	met10 method	CCB				04/06/17 20:18	1.0		
192	met10 method	MSD	QC879890	SPLP Leachate	246256	04/06/17 20:21	1.0		
193	met10 method	SER	QC879891	SPLP Leachate	246256	04/06/17 20:25	5.0		
194	met10 method	PDS	QC879892	SPLP Leachate	246256	04/06/17 20:27	1.0	11 12 13	
195	met10 method	SAMPLE	287082-011	SPLP Leachate	246256	04/06/17 20:30	1.0		
196	met10 method	SAMPLE	287082-012	SPLP Leachate	246256	04/06/17 20:34	1.0		
197	met10 method	SAMPLE	287082-013	SPLP Leachate	246256	04/06/17 20:37	1.0		
198	met10 method	SAMPLE	287082-014	SPLP Leachate	246256	04/06/17 20:39	1.0		
199	met10 method	SAMPLE	287082-015	SPLP Leachate	246256	04/06/17 20:43	1.0		
200	met10 method	SAMPLE	287082-016	SPLP Leachate	246256	04/06/17 20:46	1.0		
201	met10 method	SAMPLE	287082-017	SPLP Leachate	246256	04/06/17 20:48	1.0		
202	met10 method	CCV				04/06/17 20:51	1.0	10	
203	met10 method	CCB				04/06/17 20:53	1.0		
204	met10 method	CCB				04/06/17 20:56	1.0		
205	met10 method	SAMPLE	287082-018	SPLP Leachate	246256	04/06/17 21:00	1.0		
206	met10 method	SAMPLE	287082-019	SPLP Leachate	246256	04/06/17 21:03	1.0		
207	met10 method	SAMPLE	287252-002	SPLP Leachate	246256	04/06/17 21:05	1.0		
208	met10 method	SAMPLE	287252-003	SPLP Leachate	246256	04/06/17 21:08	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287252-004	SPLP Leachate	246256	04/06/17 21:10	1.0		
210	met10 method	SAMPLE	287252-005	SPLP Leachate	246256	04/06/17 21:12	1.0		
211	met10 method	SAMPLE	287252-006	SPLP Leachate	246256	04/06/17 21:15	1.0		
212	met10 method	SAMPLE	287252-008	SPLP Leachate	246256	04/06/17 21:18	1.0		
213	met10 method	SAMPLE	287252-009	SPLP Leachate	246256	04/06/17 21:21	1.0		
214	met10 method	SAMPLE	287252-010	SPLP Leachate	246256	04/06/17 21:24	1.0		
215	met10 method	CCV				04/06/17 21:26	1.0	10	
216	met10 method	CCB				04/06/17 21:29	1.0		
217	met10 method	CCB				04/06/17 21:32	1.0		
218	met10 method	SAMPLE	287252-011	SPLP Leachate	246256	04/06/17 21:35	1.0		
219	met10 method	CCV				04/06/17 21:38	1.0	10	
220	met10 method	CCB				04/06/17 21:41	1.0		
221	met10 method	CCB				04/06/17 21:44	1.0		
222	met10 method	X	RINSE			04/06/17 22:04	1.0		
223	met10 method	BLANK	QC880277	Air	246352	04/06/17 22:08	1.0		
224	met10 method	BS	QC880278	Air	246352	04/06/17 22:11	1.0		
225	met10 method	BSD	QC880279	Air	246352	04/06/17 22:14	1.0		
226	met10 method	MSS	287419-001	Air	246352	04/06/17 22:16	1.0		
227	met10 method	MS	QC880280	Air	246352	04/06/17 22:19	1.0		
228	met10 method	MSD	QC880281	Air	246352	04/06/17 22:21	1.0		
229	met10 method	SER	QC880282	Air	246352	04/06/17 22:24	5.0		
230	met10 method	PDS	QC880283	Air	246352	04/06/17 22:27	1.0	11 12 13	
231	met10 method	PREPBLK	QC880284	Air	246352	04/06/17 22:30	1.0		
232	met10 method	CCV				04/06/17 22:33	1.0	10	
233	met10 method	CCB				04/06/17 22:36	1.0		
234	met10 method	CCB				04/06/17 22:38	1.0		
235	met10 method	PREPBLK	QC880285	Air	246352	04/06/17 22:42	1.0		
236	met10 method	SAMPLE	287419-002	Air	246352	04/06/17 22:45	1.0		
237	met10 method	SAMPLE	287419-003	Air	246352	04/06/17 22:47	1.0		
238	met10 method	SAMPLE	287420-001	Air	246352	04/06/17 22:50	1.0		
239	met10 method	SAMPLE	287420-002	Air	246352	04/06/17 22:53	1.0		
240	met10 method	SAMPLE	287421-001	Air	246352	04/06/17 22:57	1.0		
241	met10 method	SAMPLE	287421-002	Air	246352	04/06/17 23:00	1.0		
242	met10 method	X	RINSE			04/06/17 23:02	1.0		
243	met10 method	BLANK	QC880093	TCLP Leachate	246305	04/06/17 23:06	10.0		1:NA=160000
244	met10 method	BS	QC880094	TCLP Leachate	246305	04/06/17 23:09	1.0		
245	met10 method	CCV				04/06/17 23:12	1.0	10	
246	met10 method	CCB				04/06/17 23:14	1.0		
247	met10 method	CCB				04/06/17 23:17	1.0		
248	met10 method	BSD	QC880095	TCLP Leachate	246305	04/06/17 23:21	1.0		
249	met10 method	MSS	287513-001	TCLP Leachate	246305	04/06/17 23:23	10.0		1:NA=170000
250	met10 method	MS	QC880096	TCLP Leachate	246305	04/06/17 23:27	10.0		
251	met10 method	MSD	QC880097	TCLP Leachate	246305	04/06/17 23:29	10.0		
252	met10 method	SAMPLE	287513-002	TCLP Leachate	246305	04/06/17 23:32	10.0		1:NA=160000
253	met10 method	SAMPLE	287513-003	TCLP Leachate	246305	04/06/17 23:35	10.0		1:NA=150000
254	met10 method	SAMPLE	287513-004	TCLP Leachate	246305	04/06/17 23:39	10.0		1:NA=150000
255	met10 method	SAMPLE	287513-006	TCLP Leachate	246305	04/06/17 23:42	10.0		1:NA=150000
256	met10 method	SAMPLE	287513-007	TCLP Leachate	246305	04/06/17 23:45	10.0		1:NA=160000
257	met10 method	SAMPLE	287513-010	TCLP Leachate	246305	04/06/17 23:49	10.0		1:NA=160000
258	met10 method	CCV				04/06/17 23:52	1.0	10	
259	met10 method	CCB				04/06/17 23:55	1.0		
260	met10 method	CCB				04/06/17 23:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287515-001	TCLP Leachate	246305	04/07/17 00:01	10.0		1:NA=160000
262	met10 method	SAMPLE	287515-002	TCLP Leachate	246305	04/07/17 00:05	10.0		1:NA=160000
263	met10 method	SAMPLE	287543-005	TCLP Leachate	246305	04/07/17 00:08	10.0		
264	met10 method	SAMPLE	287617-001	TCLP Leachate	246305	04/07/17 00:12	10.0		1:NA=160000
265	met10 method	CCV				04/07/17 00:15	1.0	10	
266	met10 method	CCB				04/07/17 00:18	1.0		
267	met10 method	CCB				04/07/17 00:21	1.0		
268	met10 method	X	RINSE			04/07/17 00:38	1.0		
269	met10 method	BLANK	QC879456	Water	246155	04/07/17 00:41	1.0		
270	met10 method	BS	QC879457	Water	246155	04/07/17 00:44	1.0		
271	met10 method	BSD	QC879458	Water	246155	04/07/17 00:47	1.0		
272	met10 method	MSS	287365-001	Water	246155	04/07/17 00:49	1.0		
273	met10 method	MS	QC879459	Water	246155	04/07/17 00:52	1.0		
274	met10 method	MSD	QC879460	Water	246155	04/07/17 00:54	1.0		
275	met10 method	SAMPLE	287246-009	Water	246155	04/07/17 00:57	1.0		4:NA=2100000
276	met10 method	SAMPLE	287348-001	Water	246155	04/07/17 00:59	1.0		
277	met10 method	SAMPLE	287348-002	Water	246155	04/07/17 01:02	1.0		
278	met10 method	CCV				04/07/17 01:04	1.0	10	
279	met10 method	CCB				04/07/17 01:07	1.0		
280	met10 method	CCB				04/07/17 01:10	1.0		
281	met10 method	SAMPLE	287365-002	Water	246155	04/07/17 01:13	1.0		
282	met10 method	SAMPLE	287365-003	Water	246155	04/07/17 01:16	1.0		
283	met10 method	SAMPLE	287365-004	Water	246155	04/07/17 01:20	1.0		
284	met10 method	SAMPLE	287365-005	Water	246155	04/07/17 01:22	1.0		
285	met10 method	SAMPLE	287365-006	Water	246155	04/07/17 01:25	1.0		
286	met10 method	SAMPLE	287365-007	Water	246155	04/07/17 01:27	1.0		
287	met10 method	SAMPLE	287365-008	Water	246155	04/07/17 01:29	1.0		
288	met10 method	SAMPLE	287365-009	Water	246155	04/07/17 01:32	1.0		
289	met10 method	SAMPLE	287365-010	Water	246155	04/07/17 01:34	1.0		
290	met10 method	SAMPLE	287365-011	Water	246155	04/07/17 01:37	1.0		
291	met10 method	CCV				04/07/17 01:39	1.0	10	
292	met10 method	CCB				04/07/17 01:42	1.0		
293	met10 method	CCB				04/07/17 01:45	1.0		
294	met10 method	SAMPLE	287365-012	Water	246155	04/07/17 01:48	1.0		
295	met10 method	SAMPLE	287365-013	Water	246155	04/07/17 01:50	1.0		
296	met10 method	SAMPLE	287365-014	Water	246155	04/07/17 01:54	1.0		
297	met10 method	SAMPLE	287365-015	Water	246155	04/07/17 01:57	1.0		
298	met10 method	SAMPLE	287365-019	Water	246155	04/07/17 02:00	1.0		
299	met10 method	X	RINSE			04/07/17 02:04	1.0		
300	met10 method	MS	QC879944	Soil	246272	04/07/17 02:07	100.0		
301	met10 method	MSD	QC879945	Soil	246272	04/07/17 02:09	100.0		
302	met10 method	X	RINSE			04/07/17 02:12	1.0		
303	met10 method	MSS	287418-003	Filtrate	246184	04/07/17 02:15	1.0		2:NA=270000
304	met10 method	CCV				04/07/17 02:17	1.0	10	
305	met10 method	CCB				04/07/17 02:20	1.0		
306	met10 method	CCB				04/07/17 02:23	1.0		
307	met10 method	SAMPLE	287418-004	Filtrate	246184	04/07/17 02:27	1.0		4:NA=4300000
308	met10 method	SAMPLE	287418-006	Filtrate	246184	04/07/17 02:30	1.0		4:NA=2700000
309	met10 method	SAMPLE	287418-007	Filtrate	246184	04/07/17 02:33	1.0		4:NA=5000000
310	met10 method	SAMPLE	287418-008	Filtrate	246184	04/07/17 02:36	1.0		4:NA=3200000
311	met10 method	SAMPLE	287418-009	Filtrate	246184	04/07/17 02:40	1.0		3:NA=2200000
312	met10 method	SAMPLE	287418-011	Filtrate	246184	04/07/17 02:42	1.0		4:NA=4600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	X	RINSE			04/07/17 02:46	1.0		
314	met10 method	MSS	287252-007	SPLP Leachate	246256	04/07/17 02:49	1.0		
315	met10 method	MS	QC879889	SPLP Leachate	246256	04/07/17 02:51	1.0		
316	met10 method	MSD	QC879890	SPLP Leachate	246256	04/07/17 02:54	1.0		
317	met10 method	CCV				04/07/17 02:56	1.0	10	
318	met10 method	CCB				04/07/17 02:59	1.0		
319	met10 method	CCB				04/07/17 03:02	1.0		
320	met10 method	SER	QC879891	SPLP Leachate	246256	04/07/17 03:05	5.0		
321	met10 method	PDS	QC879892	SPLP Leachate	246256	04/07/17 03:08	1.0	11 12 13	
322	met10 method	CCV				04/07/17 03:11	1.0	10	
323	met10 method	CCB				04/07/17 03:13	1.0		
324	met10 method	CCB				04/07/17 03:16	1.0		

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 37.

MNA 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 38 through 236.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
		ICAL STD	8366014	998107
		LOWER LIMIT	2509804	299432
		UPPER LIMIT	10039216	1197728
009	ICB		8268979	1000301
010	ICSA		6658881	890473
013	ICSAB		6614508	911695
076	CCV		7992819	1003975
077	CCB		8412844	1037669
078	SAMPLE	287331-001	7826823	999841
080	MSS	287252-007	7476391	969369
085	SAMPLE	287252-042	7300034	968007
086	SAMPLE	287252-043	7360832	960895
087	SAMPLE	287252-044	7332549	967966
088	SAMPLE	287252-045	7490291	973049
089	CCV		7981104	1006315
090	CCB		8477036	1028695
091	CCB		10050731 *	87356 *
092	SAMPLE	287362-045	7272749	959076
093	SAMPLE	287362-046	7470095	980821
102	CCV		7975354	1006254
103	CCB		8632355	1032857
115	CCV		7977498	1004328
117	CCB		8479781	156217 *
119	MSS	287252-028	8323418	1034554
120	SAMPLE	287252-029	8441001	1044557
121	SAMPLE	287252-030	7760832	1017274
122	SAMPLE	287252-033	8603135	1040728
123	SAMPLE	287252-034	8299852	1047209
124	SAMPLE	287252-035	8532200	1035659
125	SAMPLE	287252-036	8054234	1050851
126	SAMPLE	287252-045	8393765	1050717
128	CCV		8011887	1020215
129	CCB		8584972	1045810
176	CCV		7959140	994874
178	CCB		8504928	1477400 *
181	BLANK	QC879884	8546081	1052164
182	BS	QC879885	8284327	1034377
183	BSD	QC879886	8237025	1028132
184	MSS	287252-001	8502245	1063454
185	MS	QC879887	8247875	1035510
186	MSD	QC879888	8232943	1027654
187	MSS	287252-007	8242116	1033958
188	MS	QC879889	8258787	1036833
189	CCV		8065241	999831
190	CCB		8525895	1028160
191	CCB		8561761	1037546
192	MSD	QC879890	8417969	1034289
193	SER	QC879891	8003583	1032510
194	PDS	QC879892	8390029	1056800
195	SAMPLE	287082-011	8328211	1052933
196	SAMPLE	287082-012	8462604	1051300

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
197	SAMPLE	287082-013	8382479	1050475
198	SAMPLE	287082-014	8552286	1039245
199	SAMPLE	287082-015	8453637	1047445
200	SAMPLE	287082-016	8590771	1042345
201	SAMPLE	287082-017	8476746	1044559
202	CCV		7988531	1009781
203	CCB		8670761	1038069
204	CCB		8506314	1037616
205	SAMPLE	287082-018	8268493	1036319
206	SAMPLE	287082-019	8437429	1052520
207	SAMPLE	287252-002	8372999	1053046
208	SAMPLE	287252-003	8287407	1050939
209	SAMPLE	287252-004	8408122	1045062
210	SAMPLE	287252-005	8535131	1042388
211	SAMPLE	287252-006	8364788	1050187
212	SAMPLE	287252-008	8543230	1061338
213	SAMPLE	287252-009	8395682	1063187
214	SAMPLE	287252-010	8376064	1045641
215	CCV		8028908	1015417
216	CCB		8599671	1024964
217	CCB		8453477	1087479
218	SAMPLE	287252-011	8355713	1064071
219	CCV		8060704	1026336
220	CCB		8727329	1036141
291	CCV		7924140	1007424
293	CCB		8561485	1034541
304	CCV		7954662	996076
305	CCB		8564334	1041166
306	CCB		8516577	89211 *
314	MSS	287252-007	8279453	1044542
315	MS	QC879889	8033192	1043694
316	MSD	QC879890	8051761	1054137
317	CCV		7957909	1029257
318	CCB		8523855	1035587
319	CCB		8519843	1038723
320	SER	QC879891	8336728	1034103
321	PDS	QC879892	8202814	1052781
322	CCV		8003400	1023589
323	CCB		8543601	1050972

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087138772001
Units : ug/L

Date : 06-APR-2017 08:52
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087138772002	L1	06-APR-2017 08:56	S32578
L2	met10 method	1087138772003	L2	06-APR-2017 08:59	S32571
L3	met10 method	1087138772004	L3	06-APR-2017 09:01	S32367
L4	met10 method	1087138772005	L4	06-APR-2017 09:03	S32368
L5	met10 method	1087138772006	L5	06-APR-2017 09:06	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8800	2.7920	2.6354	2.5586		LOR0	0.00000	0.39071		2.7165	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	13	100.00	9	1000.0	3	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087138772001 Cal Date : 06-APR-2017

ICV 1087138772007 (06-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5087	ug/L	2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772008.2 File : met10 method Time : 06-APR-2017 09:12
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.455	ug/L	9	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8249216	-1.40
Yttrium	R	998107	1022393	2.43

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772009.2 File : met10 method Time : 06-APR-2017 09:27
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8268979	-1.16
Yttrium	R	998107	1000301	0.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772010.2 File : met10 method Time : 06-APR-2017 09:31
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-4.747]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18370	ug/L	92	
Copper	A	20000	22890	ug/L	114	
Manganese	A	20000	18080	ug/L	90	
Nickel	A	20000	16360	ug/L	82	
Titanium	A	20000	18630	ug/L	93	
Vanadium	A	20000	21300	ug/L	107	
Aluminum	R	500000	561800	ug/L	112	
Calcium	R	500000	508600	ug/L	102	
Iron	R	200000	201300	ug/L	101	
Magnesium	R	500000	447700	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6658881	-20.41
Yttrium	R	998107	890473	-10.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772013.1 File : met10 method Time : 06-APR-2017 10:16
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	931.7	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6614508	-20.94
Yttrium	R	998107	911695	-8.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772176.2 File : met10 method Time : 06-APR-2017 19:37
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4913	5000	4867	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7959140	-4.86
Yttrium	R	998107	994874	-0.32

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772178.1 File : met10 method Time : 06-APR-2017 19:43
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8504928	1.66
Yttrium	R	998107	1477400	**48.02 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772189.2 File : met10 method Time : 06-APR-2017 20:12
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4449	5000	4776	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8065241	-3.60
Yttrium	R	998107	999831	0.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772190.1 File : met10 method Time : 06-APR-2017 20:15
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8525895	1.91
Yttrium	R	998107	1028160	3.01

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772202.1 File : met10 method Time : 06-APR-2017 20:51
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4468	5000	4780	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7988531	-4.51
Yttrium	R	998107	1009781	1.17

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772204.1 File : met10 method Time : 06-APR-2017 20:56
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8506314	1.68
Yttrium	R	998107	1037616	3.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772215.1 File : met10 method Time : 06-APR-2017 21:26
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4147	5000	4717	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8028908	-4.03
Yttrium	R	998107	1015417	1.73

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772216.1 File : met10 method Time : 06-APR-2017 21:29
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8599671	2.79
Yttrium	R	998107	1024964	2.69

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772217.1 File : met10 method Time : 06-APR-2017 21:32
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8453477	1.05
Yttrium	R	998107	1087479	8.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772219.1 File : met10 method Time : 06-APR-2017 21:38
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.3982	5000	4685	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8060704	-3.65
Yttrium	R	998107	1026336	2.83

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772220.1 File : met10 method Time : 06-APR-2017 21:41
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8727329	4.32
Yttrium	R	998107	1036141	3.81

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772304.1 File : met10 method Time : 07-APR-2017 02:17
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4548	5000	4796	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7954662	-4.92
Yttrium	R	998107	996076	-0.20

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772306.1 File : met10 method Time : 07-APR-2017 02:23
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[3.289]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8516577	1.80
Yttrium	R	998107	89211	**-91.06 ***

!=warning CCB=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772317.1 File : met10 method Time : 07-APR-2017 02:56
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4826	5000	4850	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7957909	-4.88
Yttrium	R	998107	1029257	3.12

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772318.1 File : met10 method Time : 07-APR-2017 02:59
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8523855	1.89
Yttrium	R	998107	1035587	3.76

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772319.1 File : met10 method Time : 07-APR-2017 03:02
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8519843	1.84
Yttrium	R	998107	1038723	4.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772322.1 File : met10 method Time : 07-APR-2017 03:11
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4566	5000	4799	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8003400	-4.33
Yttrium	R	998107	1023589	2.55

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772323.1 File : met10 method Time : 07-APR-2017 03:13
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8543601	2.12
Yttrium	R	998107	1050972	5.30

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/10/17 10:43	1.0		
002	met10 method	ICAL	L1			04/10/17 10:46	1.0	1	
003	met10 method	ICAL	L2			04/10/17 10:50	1.0	2	
004	met10 method	ICAL	L3			04/10/17 10:52	1.0	3	
005	met10 method	ICAL	L4			04/10/17 10:54	1.0	4	
006	met10 method	ICAL	L5			04/10/17 10:57	1.0	5	
007	met10 method	ICV				04/10/17 10:59	1.0	6	1:SR=4200000
008	met10 method	XCRI				04/10/17 11:02	1.0	7	
009	met10 method	CRI				04/10/17 11:06	1.0	7	1:SR=43000
010	met10 method	ICB				04/10/17 11:10	1.0		1:SR=1500
011	met10 method	ICSA				04/10/17 11:13	1.0	8	11:CA=550000
012	met10 method	XICSAB				04/10/17 11:29	1.0	9	6:SR=4500000
013	met10 method	XICSAB				04/10/17 11:37	1.0	9	6:SR=4500000
014	met10 method	ICSAB				04/10/17 11:41	1.0	9	6:SR=4100000
015	met10 method	CCV				04/10/17 11:44	1.0	10	1:SR=3000000
016	met10 method	CCB				04/10/17 11:47	1.0		1:SR=2900
017	met10 method	CCB				04/10/17 11:50	1.0		
018	met10 method	CCV				04/10/17 11:57	1.0	10	1:SR=4000000
019	met10 method	CCB				04/10/17 12:00	1.0		1:SR=2500
020	met10 method	CCB				04/10/17 12:03	1.0		1:SR=1700
021	met10 method	CCB				04/10/17 12:05	1.0		1:SR=1400
022	met10 method	X	RINSE			04/10/17 12:13	1.0		
023	met10 method	BLANK	QC880555	Soil	246422	04/10/17 12:16	1.0		1:SR=2200
024	met10 method	BS	QC880556	Soil	246422	04/10/17 12:20	1.0		1:SR=81000000
025	met10 method	BSD	QC880557	Soil	246422	04/10/17 12:22	1.0		1:SR=80000000
026	met10 method	MSS	287500-014	Soil	246422	04/10/17 12:25	1.0		5:SR=4900000
027	met10 method	MS	QC880558	Soil	246422	04/10/17 12:27	1.0		
028	met10 method	MSD	QC880559	Soil	246422	04/10/17 12:30	1.0		
029	met10 method	SAMPLE	287505-005	Soil	246422	04/10/17 12:33	1.0		3:SR=7800000
030	met10 method	SAMPLE	287505-010	Soil	246422	04/10/17 12:36	1.0		3:SR=9200000
031	met10 method	SAMPLE	287750-001	Soil	246422	04/10/17 12:38	1.0		6:SR=4800000
032	met10 method	CCV				04/10/17 12:41	1.0	10	1:SR=3900000
033	met10 method	XCCB				04/10/17 12:43	1.0		1:SR=3900
034	met10 method	CCB				04/10/17 12:46	1.0		1:SR=2400
035	met10 method	SAMPLE	287750-002	Soil	246422	04/10/17 12:49	1.0		6:SR=3800000
036	met10 method	SAMPLE	287750-003	Soil	246422	04/10/17 12:52	1.0		3:SR=3700000
037	met10 method	SAMPLE	287750-004	Soil	246422	04/10/17 12:55	1.0		4:SR=3600000
038	met10 method	SAMPLE	287750-005	Soil	246422	04/10/17 12:57	1.0		4:SR=2500000
039	met10 method	SAMPLE	287750-006	Soil	246422	04/10/17 13:00	1.0		7:SR=2400000
040	met10 method	SAMPLE	287750-007	Soil	246422	04/10/17 13:02	1.0		4:SR=4100000
041	met10 method	SAMPLE	287750-008	Soil	246422	04/10/17 13:05	1.0		3:SR=1500000
042	met10 method	SAMPLE	287750-009	Soil	246422	04/10/17 13:08	1.0		5:SR=5400000
043	met10 method	SAMPLE	287750-010	Soil	246422	04/10/17 13:10	1.0		6:SR=4800000
044	met10 method	SAMPLE	287750-011	Soil	246422	04/10/17 13:13	1.0		6:SR=4800000
045	met10 method	CCV				04/10/17 13:16	1.0	10	1:SR=4100000
046	met10 method	XCCB				04/10/17 13:18	1.0		1:SR=2500
047	met10 method	CCB				04/10/17 13:21	1.0		1:SR=1900
048	met10 method	SAMPLE	287750-012	Soil	246422	04/10/17 13:24	1.0		6:SR=3200000
049	met10 method	SER	QC880744	Soil	246422	04/10/17 13:27	5.0		
050	met10 method	PDS	QC880745	Soil	246422	04/10/17 13:29	1.0	11 12 13	6:SR=5500000
051	met10 method	X	RINSE			04/10/17 13:32	1.0		
052	met10 method	BLANK	QC880681	WET Leachate	246460	04/10/17 13:35	10.0		2:NA=170000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	BS	QC880682	WET Leachate	246460	04/10/17 13:39	1.0		1:SR=840000
054	met10 method	BSD	QC880683	WET Leachate	246460	04/10/17 13:41	1.0		1:SR=830000
055	met10 method	MSS	287505-005	WET Leachate	246460	04/10/17 13:44	10.0		2:SR=1100000
056	met10 method	MS	QC880684	WET Leachate	246460	04/10/17 13:46	10.0		
057	met10 method	MSD	QC880685	WET Leachate	246460	04/10/17 13:49	10.0		
058	met10 method	CCV				04/10/17 13:51	1.0	10	1:SR=4100000
059	met10 method	XCCB				04/10/17 13:54	1.0		1:SR=3000
060	met10 method	CCB				04/10/17 13:56	1.0		1:SR=1900
061	met10 method	SER	QC880686	WET Leachate	246460	04/10/17 14:00	50.0		
062	met10 method	PDS	QC880687	WET Leachate	246460	04/10/17 14:03	10.0	11 12 13	3:SR=2100000
063	met10 method	SAMPLE	287505-010	WET Leachate	246460	04/10/17 14:06	10.0		2:SR=1300000
064	met10 method	SAMPLE	287617-001	WET Leachate	246460	04/10/17 14:08	10.0		2:SR=450000
065	met10 method	SAMPLE	287625-001	WET Leachate	246460	04/10/17 14:11	10.0		2:SR=410000
066	met10 method	SAMPLE	287627-001	WET Leachate	246460	04/10/17 14:13	10.0		2:SR=380000
067	met10 method	SAMPLE	287627-002	WET Leachate	246460	04/10/17 14:16	10.0		2:SR=370000
068	met10 method	SAMPLE	287627-003	WET Leachate	246460	04/10/17 14:18	10.0		2:SR=430000
069	met10 method	SAMPLE	287627-004	WET Leachate	246460	04/10/17 14:20	10.0		2:SR=450000
070	met10 method	SAMPLE	287627-005	WET Leachate	246460	04/10/17 14:23	10.0		2:SR=420000
071	met10 method	CCV				04/10/17 14:25	1.0	10	1:SR=4100000
072	met10 method	XCCB				04/10/17 14:28	1.0		1:SR=1600
073	met10 method	CCB				04/10/17 14:31	1.0		
074	met10 method	SAMPLE	287627-006	WET Leachate	246460	04/10/17 14:34	10.0		2:SR=360000
075	met10 method	SAMPLE	287627-007	WET Leachate	246460	04/10/17 14:37	10.0		2:SR=460000
076	met10 method	SAMPLE	287627-008	WET Leachate	246460	04/10/17 14:39	10.0		2:SR=410000
077	met10 method	SAMPLE	287627-009	WET Leachate	246460	04/10/17 14:42	10.0		2:SR=430000
078	met10 method	SAMPLE	287627-010	WET Leachate	246460	04/10/17 14:44	10.0		2:SR=430000
079	met10 method	SAMPLE	287627-011	WET Leachate	246460	04/10/17 14:47	10.0		2:SR=440000
080	met10 method	SAMPLE	287627-012	WET Leachate	246460	04/10/17 14:49	10.0		2:SR=360000
081	met10 method	SAMPLE	287627-013	WET Leachate	246460	04/10/17 14:52	10.0		2:SR=390000
082	met10 method	SAMPLE	287627-014	WET Leachate	246460	04/10/17 14:54	10.0		2:SR=420000
083	met10 method	SAMPLE	287627-015	WET Leachate	246460	04/10/17 14:56	10.0		2:SR=440000
084	met10 method	CCV				04/10/17 14:59	1.0	10	1:SR=4100000
085	met10 method	XCCB				04/10/17 15:02	1.0		1:SR=1500
086	met10 method	CCB				04/10/17 15:04	1.0		1:SR=1700
087	met10 method	SAMPLE	287627-016	WET Leachate	246460	04/10/17 15:08	10.0		2:SR=450000
088	met10 method	X	RINSE			04/10/17 15:10	1.0		
089	met10 method	BLANK	QC880563	Soil	246424	04/10/17 15:14	1.0		1:SR=2300
090	met10 method	BS	QC880564	Soil	246424	04/10/17 15:17	1.0		1:SR=82000000
091	met10 method	BSD	QC880565	Soil	246424	04/10/17 15:19	1.0		1:SR=81000000
092	met10 method	MSS	287640-001	Soil	246424	04/10/17 15:22	1.0		2:SR=1600000
093	met10 method	MS	QC880566	Soil	246424	04/10/17 15:24	1.0		1:SR=84000000
094	met10 method	MSD	QC880567	Soil	246424	04/10/17 15:27	1.0		1:SR=82000000
095	met10 method	SER	QC880719	Soil	246424	04/10/17 15:29	5.0		
096	met10 method	PDS	QC880720	Soil	246424	04/10/17 15:32	1.0	11 12 13	4:SR=2600000
097	met10 method	CCV				04/10/17 15:34	1.0	10	1:SR=4100000
098	met10 method	XCCB				04/10/17 15:37	1.0		
099	met10 method	CCB				04/10/17 15:40	1.0		1:SR=1800
100	met10 method	SAMPLE	287759-001	Soil	246424	04/10/17 15:43	1.0		4:SR=8300000
101	met10 method	SAMPLE	287759-002	Soil	246424	04/10/17 15:46	1.0		4:SR=5800000
102	met10 method	X	RINSE			04/10/17 15:48	1.0		
103	met10 method	BLANK	QC880641	Soil	246450	04/10/17 15:51	1.0		1:SR=1800
104	met10 method	BS	QC880642	Soil	246450	04/10/17 15:55	1.0		1:SR=82000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BSD	QC880643	Soil	246450	04/10/17 15:57	1.0		1:SR=84000000
106	met10 method	MSS	287739-001	Soil	246450	04/10/17 16:00	1.0		6:SR=9300000
107	met10 method	MS	QC880644	Soil	246450	04/10/17 16:02	1.0		1:SR=86000000
108	met10 method	MSD	QC880645	Soil	246450	04/10/17 16:05	1.0		1:SR=87000000
109	met10 method	SER	QC880646	Soil	246450	04/10/17 16:07	5.0		
110	met10 method	CCV				04/10/17 16:10	1.0	10	1:SR=4100000
111	met10 method	XCCB				04/10/17 16:13	1.0		
112	met10 method	CCB				04/10/17 16:15	1.0		1:SR=1300
113	met10 method	PDS	QC880647	Soil	246450	04/10/17 16:19	1.0	11 12 13	7:SR=9500000
114	met10 method	SAMPLE	287805-001	Soil	246450	04/10/17 16:21	1.0		4:SR=2100000
115	met10 method	SAMPLE	287805-002	Soil	246450	04/10/17 16:24	1.0		4:SR=1900000
116	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 16:26	1.0		6:SR=1900000
117	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 16:29	1.0		4:SR=2500000
118	met10 method	SAMPLE	287805-005	Soil	246450	04/10/17 16:32	1.0		4:SR=3000000
119	met10 method	SAMPLE	287805-006	Soil	246450	04/10/17 16:34	1.0		3:SR=3100000
120	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 16:37	1.0		5:SR=2100000
121	met10 method	X	RINSE			04/10/17 16:39	1.0		
122	met10 method	BLANK	QC880688	WET Leachate	246461	04/10/17 16:43	10.0		2:NA=170000
123	met10 method	CCV				04/10/17 16:46	1.0	10	1:SR=4100000
124	met10 method	XCCB				04/10/17 16:50	1.0		1:SR=1600
125	met10 method	CCB				04/10/17 16:53	1.0		1:SR=1600
126	met10 method	X	RINSE			04/10/17 17:00	1.0		
127	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 17:03	100.0		1:SR=18000
128	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 17:05	100.0		1:SR=22000
129	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 17:08	1.0		4:SR=2600000
130	met10 method	BS	QC880689	WET Leachate	246461	04/10/17 17:11	1.0		1:SR=840000
131	met10 method	BSD	QC880690	WET Leachate	246461	04/10/17 17:13	1.0		1:SR=860000
132	met10 method	MSS	287762-001	WET Leachate	246461	04/10/17 17:15	10.0		2:SR=300000
133	met10 method	MS	QC880691	WET Leachate	246461	04/10/17 17:18	10.0		
134	met10 method	MSD	QC880692	WET Leachate	246461	04/10/17 17:21	10.0		
135	met10 method	PDS	QC880745	Soil	246422	04/10/17 17:23	1.0	11 12 13	
136	met10 method	CCV				04/10/17 17:26	1.0	10	1:SR=4200000
137	met10 method	CCB				04/10/17 17:29	1.0		1:SR=2800
138	met10 method	CCB				04/10/17 17:31	1.0		
139	met10 method	BLANK	QC878606	Water	245945	04/10/17 17:35	1.0		
140	met10 method	BS	QC878607	Water	245945	04/10/17 17:38	1.0		1:SR=900000
141	met10 method	BSD	QC878608	Water	245945	04/10/17 17:40	1.0		1:SR=900000
142	met10 method	SAMPLE	287283-001	Water	245945	04/10/17 17:43	1.0		5:SR=49000000
143	met10 method	SAMPLE	287283-002	Water	245945	04/10/17 17:45	1.0		5:SR=32000000
144	met10 method	SAMPLE	287283-004	Water	245945	04/10/17 17:49	1.0		7:SR=79000000
145	met10 method	SAMPLE	287283-005	Water	245945	04/10/17 17:51	1.0		5:SR=66000000
146	met10 method	SAMPLE	287343-001	Water	245945	04/10/17 17:54	1.0		5:SR=63000000
147	met10 method	SAMPLE	287343-002	Water	245945	04/10/17 17:56	1.0		2:SR=6100000
148	met10 method	SAMPLE	287077-035	SPLP Leachate	246105	04/10/17 17:59	1.0		1:SR=31000
149	met10 method	CCV				04/10/17 18:01	1.0	10	1:SR=4100000
150	met10 method	XCCB				04/10/17 18:04	1.0		1:SR=2900
151	met10 method	CCB				04/10/17 18:07	1.0		1:SR=3800
152	met10 method	X	RINSE			04/10/17 18:10	1.0		
153	met10 method	BLANK	QC879918	Water	246267	04/10/17 18:13	1.0		1:SR=3800
154	met10 method	BS	QC879919	Water	246267	04/10/17 18:17	1.0		1:SR=870000
155	met10 method	BSD	QC879920	Water	246267	04/10/17 18:19	1.0		1:SR=870000
156	met10 method	MSS	287440-001	Water	246267	04/10/17 18:21	1.0		1:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	MS	QC879921	Water	246267	04/10/17 18:25	1.0		
158	met10 method	MSD	QC879922	Water	246267	04/10/17 18:27	1.0		
159	met10 method	MSS	287440-001	Water	246267	04/10/17 18:29	1.0		2:SR=370000
160	met10 method	BS	QC879457	Water	246155	04/10/17 18:32	1.0		1:SR=850000
161	met10 method	BSD	QC879458	Water	246155	04/10/17 18:34	1.0		1:SR=840000
162	met10 method	CCV				04/10/17 18:37	1.0	10	1:SR=4100000
163	met10 method	XCCB				04/10/17 18:39	1.0		1:SR=3400
164	met10 method	CCB				04/10/17 18:42	1.0		1:SR=4000
165	met10 method	MSS	287365-001	Water	246155	04/10/17 18:45	1.0		1:SR=510000
166	met10 method	MS	QC879459	Water	246155	04/10/17 18:48	1.0		
167	met10 method	MSD	QC879460	Water	246155	04/10/17 18:50	1.0		
168	met10 method	SAMPLE	287348-001	Water	246155	04/10/17 18:53	1.0		1:SR=900000
169	met10 method	SAMPLE	287365-002	Water	246155	04/10/17 18:55	1.0		1:SR=55000
170	met10 method	SAMPLE	287365-003	Water	246155	04/10/17 18:58	1.0		1:SR=130000
171	met10 method	SAMPLE	287365-005	Water	246155	04/10/17 19:02	1.0		1:SR=68000
172	met10 method	SAMPLE	287365-006	Water	246155	04/10/17 19:04	1.0		1:SR=100000
173	met10 method	SAMPLE	287365-007	Water	246155	04/10/17 19:07	1.0		1:SR=160000
174	met10 method	SAMPLE	287365-008	Water	246155	04/10/17 19:09	1.0		1:SR=120000
175	met10 method	CCV				04/10/17 19:11	1.0	10	1:SR=4100000
176	met10 method	CCB				04/10/17 19:14	1.0		1:SR=3700
177	met10 method	CCB				04/10/17 19:17	1.0		
178	met10 method	SAMPLE	287365-009	Water	246155	04/10/17 19:21	1.0		1:SR=82000
179	met10 method	SAMPLE	287365-010	Water	246155	04/10/17 19:24	1.0		1:SR=140000
180	met10 method	SAMPLE	287365-011	Water	246155	04/10/17 19:26	1.0		1:SR=62000
181	met10 method	SAMPLE	287365-012	Water	246155	04/10/17 19:28	1.0		1:SR=110000
182	met10 method	MSS	287252-028	Soil	246272	04/10/17 19:31	1.0		6:SR=4400000
183	met10 method	SAMPLE	287252-029	Soil	246272	04/10/17 19:34	1.0		6:SR=5500000
184	met10 method	SAMPLE	287675-003	Soil	246450	04/10/17 19:36	1.0		4:SR=2900000
185	met10 method	SAMPLE	287675-004	Soil	246450	04/10/17 19:39	1.0		3:SR=3500000
186	met10 method	SAMPLE	287676-001	Soil	246450	04/10/17 19:42	1.0		3:SR=2200000
187	met10 method	SAMPLE	287713-001	Soil	246450	04/10/17 19:44	1.0		5:SR=5500000
188	met10 method	CCV				04/10/17 19:47	1.0	10	1:SR=4100000
189	met10 method	CCB				04/10/17 19:50	1.0		1:SR=3600
190	met10 method	CCB				04/10/17 19:52	1.0		1:SR=3100
191	met10 method	SAMPLE	287739-002	Soil	246450	04/10/17 19:56	1.0		7:SR=9600000
192	met10 method	SAMPLE	287753-001	Soil	246450	04/10/17 19:58	1.0		4:SR=9700000
193	met10 method	SAMPLE	287761-005	Soil	246450	04/10/17 20:01	1.0		5:SR=7500000
194	met10 method	SAMPLE	287761-010	Soil	246450	04/10/17 20:04	1.0		4:SR=3200000
195	met10 method	SAMPLE	287761-015	Soil	246450	04/10/17 20:07	1.0		5:SR=6200000
196	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/10/17 20:09	10.0		2:NA=180000
197	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/10/17 20:12	10.0		2:NA=170000
198	met10 method	SAMPLE	287634-001	WET Leachate	246461	04/10/17 20:15	10.0		2:SR=3000000
199	met10 method	SAMPLE	287634-002	WET Leachate	246461	04/10/17 20:17	10.0		2:SR=750000
200	met10 method	SAMPLE	287634-003	WET Leachate	246461	04/10/17 20:20	10.0		2:SR=950000
201	met10 method	CCV				04/10/17 20:22	1.0	10	1:SR=4100000
202	met10 method	CCB				04/10/17 20:25	1.0		1:SR=3200
203	met10 method	CCB				04/10/17 20:30	1.0		1:SR=3500
204	met10 method	SAMPLE	287634-004	WET Leachate	246461	04/10/17 20:33	10.0		2:SR=390000
205	met10 method	SAMPLE	287634-005	WET Leachate	246461	04/10/17 20:36	10.0		2:SR=730000
206	met10 method	SAMPLE	287634-006	WET Leachate	246461	04/10/17 20:38	10.0		2:SR=400000
207	met10 method	SAMPLE	287634-007	WET Leachate	246461	04/10/17 20:41	10.0		2:SR=630000
208	met10 method	SAMPLE	287634-008	WET Leachate	246461	04/10/17 20:43	10.0		2:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10
Method : EPA 6010C

Begun : 04/10/17 10:43
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287634-009	WET Leachate	246461	04/10/17 20:46	10.0		2:SR=2100000
210	met10 method	SAMPLE	287634-010	WET Leachate	246461	04/10/17 20:48	10.0		2:SR=600000
211	met10 method	SAMPLE	287634-011	WET Leachate	246461	04/10/17 20:51	10.0		2:SR=1100000
212	met10 method	SAMPLE	287634-012	WET Leachate	246461	04/10/17 20:53	10.0		2:SR=560000
213	met10 method	SAMPLE	287634-013	WET Leachate	246461	04/10/17 20:56	10.0		2:SR=1100000
214	met10 method	CCV				04/10/17 20:58	1.0	10	1:SR=4100000
215	met10 method	CCB				04/10/17 21:01	1.0		1:SR=3900
216	met10 method	CCB				04/10/17 21:04	1.0		1:SR=3000
217	met10 method	SAMPLE	287753-001	WET Leachate	246461	04/10/17 21:07	10.0		2:SR=690000
218	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:10	100.0		1:SR=120000
219	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:12	1.0		7:SR=12000000
220	met10 method	X	RINSE			04/10/17 21:15	1.0		
221	met10 method	SAMPLE	287640-003	Soil	246424	04/10/17 21:18	1.0		5:SR=4200000
222	met10 method	SAMPLE	287640-004	Soil	246424	04/10/17 21:21	1.0		5:SR=4100000
223	met10 method	SAMPLE	287640-005	Soil	246424	04/10/17 21:24	1.0		5:SR=4200000
224	met10 method	SAMPLE	287640-006	Soil	246424	04/10/17 21:27	1.0		5:SR=4000000
225	met10 method	CCV				04/10/17 21:29	1.0	10	1:SR=4000000
226	met10 method	CCB				04/10/17 21:32	1.0		1:SR=3600
227	met10 method	CCB				04/10/17 21:35	1.0		1:SR=3600
228	met10 method	X	RINSE			04/10/17 21:40	1.0		
229	met10 method	BLANK	QC880768	Soil	246479	04/10/17 21:44	1.0		1:SR=3600
230	met10 method	BS	QC880769	Soil	246479	04/10/17 21:47	1.0		1:SR=81000000
231	met10 method	BSD	QC880770	Soil	246479	04/10/17 21:50	1.0		1:SR=80000000
232	met10 method	MSS	287740-001	Soil	246479	04/10/17 21:52	1.0		6:SR=7400000
233	met10 method	MS	QC880771	Soil	246479	04/10/17 21:55	1.0		1:SR=83000000
234	met10 method	MSD	QC880772	Soil	246479	04/10/17 21:57	1.0		1:SR=89000000
235	met10 method	SAMPLE	287525-001	Miscell.	246479	04/10/17 22:00	1.0		1:SR=180000
236	met10 method	SAMPLE	287526-001	Miscell.	246479	04/10/17 22:02	1.0		2:SR=1800000
237	met10 method	SAMPLE	287683-005	Soil	246479	04/10/17 22:06	1.0		3:SR=2900000
238	met10 method	CCV				04/10/17 22:08	1.0	10	1:SR=4000000
239	met10 method	CCB				04/10/17 22:11	1.0		1:SR=4000
240	met10 method	CCB				04/10/17 22:14	1.0		1:SR=3400
241	met10 method	SAMPLE	287756-001	Soil	246479	04/10/17 22:17	1.0		4:SR=1400000
242	met10 method	SAMPLE	287756-002	Soil	246479	04/10/17 22:20	1.0		6:SR=2900000
243	met10 method	SAMPLE	287756-003	Soil	246479	04/10/17 22:22	1.0		4:SR=1700000
244	met10 method	SAMPLE	287756-004	Soil	246479	04/10/17 22:25	1.0		4:SR=1200000
245	met10 method	SAMPLE	287756-005	Soil	246479	04/10/17 22:28	1.0		6:SR=3200000
246	met10 method	SAMPLE	287756-006	Soil	246479	04/10/17 22:30	1.0		5:SR=2300000
247	met10 method	SAMPLE	287756-007	Soil	246479	04/10/17 22:33	1.0		6:SR=3500000
248	met10 method	SAMPLE	287756-008	Soil	246479	04/10/17 22:36	1.0		5:SR=6600000
249	met10 method	SAMPLE	287795-001	Soil	246479	04/10/17 22:38	1.0		4:SR=2900000
250	met10 method	SAMPLE	287795-002	Soil	246479	04/10/17 22:41	1.0		4:SR=3100000
251	met10 method	CCV				04/10/17 22:43	1.0	10	1:SR=4000000
252	met10 method	CCB				04/10/17 22:46	1.0		1:SR=3800
253	met10 method	CCB				04/10/17 22:49	1.0		1:SR=4000
254	met10 method	X	RINSE			04/10/17 22:52	1.0		
255	met10 method	BLANK	QC880498	Water	246408	04/10/17 22:56	1.0		1:SR=3800
256	met10 method	BS	QC880499	Water	246408	04/10/17 22:59	1.0		1:SR=840000
257	met10 method	BSD	QC880500	Water	246408	04/10/17 23:01	1.0		1:SR=830000
258	met10 method	MSS	287612-001	Water	246408	04/10/17 23:04	1.0		1:SR=1400000
259	met10 method	MS	QC880501	Water	246408	04/10/17 23:07	1.0		
260	met10 method	MSD	QC880502	Water	246408	04/10/17 23:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10
Method : EPA 6010C

Begun : 04/10/17 10:43
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287612-002	Water	246408	04/10/17 23:12	1.0		1:SR=1400000
262	met10 method	SAMPLE	287648-001	Water	246408	04/10/17 23:15	1.0		5:SR=8000000
263	met10 method	SAMPLE	287648-002	Water	246408	04/10/17 23:18	1.0		4:SR=11000000
264	met10 method	CCV				04/10/17 23:21	1.0	10	1:SR=4100000
265	met10 method	CCB				04/10/17 23:24	1.0		1:SR=3100
266	met10 method	CCB				04/10/17 23:27	1.0		1:SR=2600
267	met10 method	SAMPLE	287648-003	Water	246408	04/10/17 23:30	1.0		4:SR=18000000
268	met10 method	SAMPLE	287648-004	Water	246408	04/10/17 23:34	1.0		5:SR=13000000
269	met10 method	SAMPLE	287648-005	Water	246408	04/10/17 23:37	1.0		5:SR=12000000
270	met10 method	SAMPLE	287648-006	Water	246408	04/10/17 23:40	1.0		4:SR=18000000
271	met10 method	SAMPLE	287654-001	Water	246408	04/10/17 23:44	1.0		4:SR=3800000
272	met10 method	SAMPLE	287662-001	Water	246408	04/10/17 23:47	1.0		4:SR=27000000
273	met10 method	SAMPLE	287662-002	Water	246408	04/10/17 23:50	1.0		5:SR=17000000
274	met10 method	SAMPLE	287662-003	Water	246408	04/10/17 23:53	1.0		4:SR=19000000
275	met10 method	SAMPLE	287662-004	Water	246408	04/10/17 23:57	1.0		4:SR=23000000
276	met10 method	SAMPLE	287662-006	Water	246408	04/10/17 23:59	1.0		1:SR=4500
277	met10 method	CCV				04/11/17 00:02	1.0	10	1:SR=4100000
278	met10 method	CCB				04/11/17 00:05	1.0		1:SR=3200
279	met10 method	CCB				04/11/17 00:08	1.0		1:SR=3000
280	met10 method	X	RINSE			04/11/17 00:11	1.0		
281	met10 method	BLANK	QC880630	Water	246447	04/11/17 00:15	1.0		1:SR=1500
282	met10 method	BS	QC880631	Water	246447	04/11/17 00:18	1.0		1:SR=830000
283	met10 method	BSD	QC880632	Water	246447	04/11/17 00:20	1.0		1:SR=820000
284	met10 method	MSS	287646-001	Water	246447	04/11/17 00:23	1.0		1:SR=1500000
285	met10 method	MS	QC880633	Water	246447	04/11/17 00:25	1.0		
286	met10 method	MSD	QC880634	Water	246447	04/11/17 00:28	1.0		
287	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 00:30	1.0		1:SR=13000
288	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 00:33	1.0		1:SR=22000
289	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 00:37	1.0		1:SR=36000
290	met10 method	CCV				04/11/17 00:40	1.0	10	1:SR=4200000
291	met10 method	XCCB				04/11/17 00:43	1.0		1:SR=2800
292	met10 method	CCB				04/11/17 00:46	1.0		1:SR=3200
293	met10 method	XSAMPLE	275868-047	Water	246447	04/11/17 00:49	1.0		
294	met10 method	XSAMPLE	287717-004	Water	246447	04/11/17 00:52	1.0		
295	met10 method	XSAMPLE	287786-001	Water	246447	04/11/17 00:55	1.0		
296	met10 method	XSAMPLE	287789-001	Water	246447	04/11/17 00:59	1.0		
297	met10 method	XSAMPLE	287791-002	Water	246447	04/11/17 01:02	1.0		
298	met10 method	XSAMPLE	287791-003	Water	246447	04/11/17 01:05	1.0		
299	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 01:18	1.0		1:SR=83000
300	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 01:21	1.0		2:SR=3200000
301	met10 method	SAMPLE	287786-001	Water	246447	04/11/17 01:24	1.0		1:SR=310000
302	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 01:26	1.0		4:SR=10000000
303	met10 method	CCV				04/11/17 01:30	1.0	10	1:SR=4100000
304	met10 method	XCCB				04/11/17 01:32	1.0		1:SR=3000
305	met10 method	CCB				04/11/17 01:35	1.0		1:SR=2900
306	met10 method	SAMPLE	287791-002	Water	246447	04/11/17 01:38	1.0		1:SR=680000
307	met10 method	SAMPLE	287791-003	Water	246447	04/11/17 01:41	1.0		1:SR=670000
308	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 01:43	1.0		1:SR=280000
309	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 01:47	1.0		1:SR=1200000
310	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 01:50	1.0		2:SR=550000
311	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 01:53	1.0		2:SR=7500000
312	met10 method	X	RINSE			04/11/17 01:56	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	BLANK	QC880667	SPLP Leachate	246458	04/11/17 01:59	1.0		1:SR=3300
314	met10 method	BS	QC880668	SPLP Leachate	246458	04/11/17 02:02	1.0		1:SR=860000
315	met10 method	BSD	QC880669	SPLP Leachate	246458	04/11/17 02:05	1.0		1:SR=850000
316	met10 method	CCV				04/11/17 02:07	1.0	10	1:SR=4100000
317	met10 method	XCCB				04/11/17 02:10	1.0		1:SR=3100
318	met10 method	CCB				04/11/17 02:13	1.0		1:SR=3200
319	met10 method	MSS	287252-028	SPLP Leachate	246458	04/11/17 02:16	1.0		1:SR=8100
320	met10 method	MS	QC880670	SPLP Leachate	246458	04/11/17 02:20	1.0		
321	met10 method	MSD	QC880671	SPLP Leachate	246458	04/11/17 02:22	1.0		
322	met10 method	SER	QC880672	SPLP Leachate	246458	04/11/17 02:24	5.0		
323	met10 method	PDS	QC880673	SPLP Leachate	246458	04/11/17 02:28	1.0	11 14 13	2:SR=970000
324	met10 method	SAMPLE	287252-012	SPLP Leachate	246458	04/11/17 02:30	1.0		1:SR=8400
325	met10 method	SAMPLE	287252-013	SPLP Leachate	246458	04/11/17 02:33	1.0		1:SR=7100
326	met10 method	SAMPLE	287252-014	SPLP Leachate	246458	04/11/17 02:37	1.0		1:SR=2500
327	met10 method	SAMPLE	287252-015	SPLP Leachate	246458	04/11/17 02:40	1.0		1:SR=4000
328	met10 method	SAMPLE	287252-016	SPLP Leachate	246458	04/11/17 02:43	1.0		1:SR=3700
329	met10 method	CCV				04/11/17 02:46	1.0	10	1:SR=4100000
330	met10 method	XCCB				04/11/17 02:49	1.0		1:SR=2300
331	met10 method	CCB				04/11/17 02:52	1.0		1:SR=2600
332	met10 method	SAMPLE	287252-017	SPLP Leachate	246458	04/11/17 02:55	1.0		1:SR=1600
333	met10 method	SAMPLE	287252-018	SPLP Leachate	246458	04/11/17 02:59	1.0		1:SR=2000
334	met10 method	SAMPLE	287252-019	SPLP Leachate	246458	04/11/17 03:02	1.0		1:SR=4300
335	met10 method	SAMPLE	287252-020	SPLP Leachate	246458	04/11/17 03:05	1.0		1:SR=5200
336	met10 method	SAMPLE	287252-021	SPLP Leachate	246458	04/11/17 03:08	1.0		1:SR=2800
337	met10 method	SAMPLE	287252-022	SPLP Leachate	246458	04/11/17 03:12	1.0		1:SR=2300
338	met10 method	SAMPLE	287252-023	SPLP Leachate	246458	04/11/17 03:15	1.0		1:SR=3200
339	met10 method	SAMPLE	287252-024	SPLP Leachate	246458	04/11/17 03:18	1.0		1:SR=11000
340	met10 method	SAMPLE	287252-025	SPLP Leachate	246458	04/11/17 03:21	1.0		1:SR=6100
341	met10 method	SAMPLE	287252-026	SPLP Leachate	246458	04/11/17 03:24	1.0		1:SR=15000
342	met10 method	CCV				04/11/17 03:26	1.0	10	1:SR=4200000
343	met10 method	XCCB				04/11/17 03:29	1.0		1:SR=2700
344	met10 method	CCB				04/11/17 03:32	1.0		1:SR=2300
345	met10 method	SAMPLE	287252-027	SPLP Leachate	246458	04/11/17 03:35	1.0		1:SR=9300
346	met10 method	SAMPLE	287252-029	SPLP Leachate	246458	04/11/17 03:37	1.0		1:SR=18000
347	met10 method	SAMPLE	287252-030	SPLP Leachate	246458	04/11/17 03:40	1.0		1:SR=16000
348	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 03:42	1.0		1:SR=18000
349	met10 method	X	RINSE			04/11/17 03:45	1.0		
350	met10 method	BLANK	QC880674	SPLP Leachate	246459	04/11/17 03:48	1.0		1:SR=2800
351	met10 method	BS	QC880675	SPLP Leachate	246459	04/11/17 03:51	1.0		1:SR=850000
352	met10 method	BSD	QC880676	SPLP Leachate	246459	04/11/17 03:54	1.0		1:SR=860000
353	met10 method	MSS	287252-032	SPLP Leachate	246459	04/11/17 03:56	1.0		1:SR=8700
354	met10 method	MS	QC880677	SPLP Leachate	246459	04/11/17 03:59	1.0		
355	met10 method	CCV				04/11/17 04:01	1.0	10	1:SR=4100000
356	met10 method	XCCB				04/11/17 04:04	1.0		1:SR=2500
357	met10 method	CCB				04/11/17 04:07	1.0		1:SR=2700
358	met10 method	MSD	QC880678	SPLP Leachate	246459	04/11/17 04:10	1.0		
359	met10 method	SER	QC880679	SPLP Leachate	246459	04/11/17 04:12	5.0		
360	met10 method	PDS	QC880680	SPLP Leachate	246459	04/11/17 04:16	1.0	11 12 13	1:SR=980000
361	met10 method	SAMPLE	287252-033	SPLP Leachate	246459	04/11/17 04:18	1.0		1:SR=13000
362	met10 method	SAMPLE	287252-034	SPLP Leachate	246459	04/11/17 04:20	1.0		1:SR=12000
363	met10 method	SAMPLE	287252-035	SPLP Leachate	246459	04/11/17 04:23	1.0		1:SR=4200
364	met10 method	SAMPLE	287252-036	SPLP Leachate	246459	04/11/17 04:26	1.0		1:SR=2200

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	SAMPLE	287252-037	SPLP Leachate	246459	04/11/17 04:29	1.0		1:SR=3200
366	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 04:33	1.0		1:SR=8200
367	met10 method	SAMPLE	287252-039	SPLP Leachate	246459	04/11/17 04:35	1.0		1:SR=7800
368	met10 method	CCV				04/11/17 04:38	1.0	10	1:SR=4100000
369	met10 method	XCCB				04/11/17 04:41	1.0		1:SR=2400
370	met10 method	CCB				04/11/17 04:44	1.0		1:SR=1500
371	met10 method	SAMPLE	287252-040	SPLP Leachate	246459	04/11/17 04:47	1.0		1:SR=3100
372	met10 method	SAMPLE	287252-041	SPLP Leachate	246459	04/11/17 04:50	1.0		1:SR=7700
373	met10 method	SAMPLE	287252-042	SPLP Leachate	246459	04/11/17 04:53	1.0		1:SR=5100
374	met10 method	SAMPLE	287252-043	SPLP Leachate	246459	04/11/17 04:56	1.0		1:SR=7100
375	met10 method	SAMPLE	287252-044	SPLP Leachate	246459	04/11/17 04:59	1.0		1:SR=3600
376	met10 method	SAMPLE	287252-045	SPLP Leachate	246459	04/11/17 05:03	1.0		1:SR=7300
377	met10 method	X	RINSE			04/11/17 05:06	1.0		
378	met10 method	BLANK	QC879419	SPLP Leachate	246147	04/11/17 05:09	1.0		
379	met10 method	BS	QC879420	SPLP Leachate	246147	04/11/17 05:13	1.0		1:SR=860000
380	met10 method	BSD	QC879421	SPLP Leachate	246147	04/11/17 05:15	1.0		1:SR=860000
381	met10 method	CCV				04/11/17 05:17	1.0	10	1:SR=4100000
382	met10 method	XCCB				04/11/17 05:20	1.0		1:SR=2100
383	met10 method	CCB				04/11/17 05:23	1.0		1:SR=1600
384	met10 method	MSS	287077-042	SPLP Leachate	246147	04/11/17 05:27	1.0		1:SR=5200
385	met10 method	MS	QC879422	SPLP Leachate	246147	04/11/17 05:29	1.0		
386	met10 method	MSD	QC879423	SPLP Leachate	246147	04/11/17 05:31	1.0		
387	met10 method	SER	QC879424	SPLP Leachate	246147	04/11/17 05:34	5.0		
388	met10 method	PDS	QC879425	SPLP Leachate	246147	04/11/17 05:37	1.0	11 12 13	2:SR=960000
389	met10 method	SAMPLE	287077-041	SPLP Leachate	246147	04/11/17 05:40	1.0		1:SR=11000
390	met10 method	SAMPLE	287077-043	SPLP Leachate	246147	04/11/17 05:42	1.0		1:SR=4100
391	met10 method	SAMPLE	287077-044	SPLP Leachate	246147	04/11/17 05:45	1.0		1:SR=2200
392	met10 method	SAMPLE	287077-045	SPLP Leachate	246147	04/11/17 05:48	1.0		1:SR=8400
393	met10 method	SAMPLE	287077-046	SPLP Leachate	246147	04/11/17 05:51	1.0		1:SR=4400
394	met10 method	CCV				04/11/17 05:53	1.0	10	1:SR=4100000
395	met10 method	CCB				04/11/17 05:56	1.0		1:SR=2100
396	met10 method	CCB				04/11/17 05:59	1.0		1:SR=1600
397	met10 method	SAMPLE	287077-047	SPLP Leachate	246147	04/11/17 06:02	1.0		1:SR=15000
398	met10 method	SAMPLE	287077-048	SPLP Leachate	246147	04/11/17 06:04	1.0		1:SR=1900
399	met10 method	SAMPLE	287077-049	SPLP Leachate	246147	04/11/17 06:07	1.0		1:SR=3900
400	met10 method	SAMPLE	287077-050	SPLP Leachate	246147	04/11/17 06:11	1.0		1:SR=6900
401	met10 method	SAMPLE	287082-001	SPLP Leachate	246147	04/11/17 06:14	1.0		1:SR=11000
402	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 06:16	1.0		1:SR=16000
403	met10 method	SAMPLE	287082-003	SPLP Leachate	246147	04/11/17 06:19	1.0		1:SR=11000
404	met10 method	SAMPLE	287082-004	SPLP Leachate	246147	04/11/17 06:21	1.0		1:SR=15000
405	met10 method	SAMPLE	287082-005	SPLP Leachate	246147	04/11/17 06:23	1.0		1:SR=2600
406	met10 method	SAMPLE	287082-006	SPLP Leachate	246147	04/11/17 06:27	1.0		1:SR=4100
407	met10 method	CCV				04/11/17 06:30	1.0	10	1:SR=4200000
408	met10 method	CCB				04/11/17 06:33	1.0		1:SR=1400
409	met10 method	CCB				04/11/17 06:35	1.0		1:SR=4100
410	met10 method	SAMPLE	287082-007	SPLP Leachate	246147	04/11/17 06:39	1.0		1:SR=4600
411	met10 method	SAMPLE	287082-008	SPLP Leachate	246147	04/11/17 06:42	1.0		1:SR=13000
412	met10 method	SAMPLE	287082-009	SPLP Leachate	246147	04/11/17 06:44	1.0		1:SR=6800
413	met10 method	SAMPLE	287082-010	SPLP Leachate	246147	04/11/17 06:48	1.0		1:SR=2700
414	met10 method	CCV				04/11/17 06:51	1.0	10	1:SR=4100000
415	met10 method	CCB				04/11/17 06:54	1.0		1:SR=3600
416	met10 method	CCB				04/11/17 06:57	1.0		1:SR=2000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

TLO 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

MNA 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 39 through 179.

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 180 through 416.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S2984

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
		ICAL STD	6893796	894629
		LOWER LIMIT	2068139	268389
		UPPER LIMIT	8272555	1073554
010	ICB		7043252	902935
011	ICSA		5743386	790346
014	ICSAB		5730121	787134
026	MSS	287500-014	6222165	827217
136	CCV		6608958	875081
138	CCB		7089613	906239
142	SAMPLE	287283-001	4070897	666319
143	SAMPLE	287283-002	4408531	718213
144	SAMPLE	287283-004	3275466	580533
145	SAMPLE	287283-005	3704856	627479
146	SAMPLE	287343-001	3785585	644515
147	SAMPLE	287343-002	5926080	841314
148	SAMPLE	287077-035	7064849	940445
149	CCV		6760096	901935
151	CCB		7260707	929185
182	MSS	287252-028	6391232	849181
183	SAMPLE	287252-029	6498493	866630
258	MSS	287612-001	6929197	919197
261	SAMPLE	287612-002	6976654	893243
303	CCV		6643608	879771
305	CCB		7249370	918757
313	BLANK	QC880667	7159522	903755
314	BS	QC880668	6880827	892406
315	BSD	QC880669	6849829	890022
316	CCV		6788683	881121
318	CCB		7289723	914834
319	MSS	287252-028	7161428	916775
320	MS	QC880670	6883628	896599
321	MSD	QC880671	6871019	889555
322	SER	QC880672	7200034	906330
323	PDS	QC880673	6730661	898270
324	SAMPLE	287252-012	7135749	914940
325	SAMPLE	287252-013	7111697	934358
326	SAMPLE	287252-014	7185108	907684
327	SAMPLE	287252-015	7046711	912503
328	SAMPLE	287252-016	7095052	913710
329	CCV		6787983	894586
331	CCB		7245194	912872
332	SAMPLE	287252-017	7181880	909689
333	SAMPLE	287252-018	7198298	914174
334	SAMPLE	287252-019	7064917	910020
335	SAMPLE	287252-020	7028486	898766
336	SAMPLE	287252-021	7032263	917271
337	SAMPLE	287252-022	7193492	916449
338	SAMPLE	287252-023	7166386	913195
339	SAMPLE	287252-024	7060885	907734
340	SAMPLE	287252-025	6973892	898952
341	SAMPLE	287252-026	7037041	915699

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
342	CCV		6722983	884426
344	CCB		7295180	908343
345	SAMPLE	287252-027	7038991	896336
346	SAMPLE	287252-029	6905896	906263
347	SAMPLE	287252-030	6901632	900753
348	SAMPLE	287252-031	7011126	918215
350	BLANK	QC880674	7230691	909362
351	BS	QC880675	6893373	891028
352	BSD	QC880676	6873661	893500
353	MSS	287252-032	7046126	897140
354	MS	QC880677	6888952	896812
355	CCV		6757315	879863
357	CCB		7280217	1448223 *
358	MSD	QC880678	6823030	896335
359	SER	QC880679	7130648	917678
360	PDS	QC880680	6706836	889179
361	SAMPLE	287252-033	7053441	903655
362	SAMPLE	287252-034	7113006	911191
363	SAMPLE	287252-035	7025231	906081
364	SAMPLE	287252-036	7132409	906791
365	SAMPLE	287252-037	7039334	907372
366	SAMPLE	287252-038	7019741	906154
367	SAMPLE	287252-039	7022379	929128
368	CCV		6713915	885954
370	CCB		7261927	909081
371	SAMPLE	287252-040	7070499	916369
372	SAMPLE	287252-041	6982779	910174
373	SAMPLE	287252-042	7063940	913724
374	SAMPLE	287252-043	7090356	917091
375	SAMPLE	287252-044	7064037	912598
376	SAMPLE	287252-045	7026920	906171
381	CCV		6692776	881951
383	CCB		7211687	917171
384	MSS	287077-042	6945336	899941
389	SAMPLE	287077-041	6893137	902582
390	SAMPLE	287077-043	7038623	908955
391	SAMPLE	287077-044	7049050	916748
392	SAMPLE	287077-045	6917071	901614
393	SAMPLE	287077-046	7009637	907650
394	CCV		6700561	880033
395	CCB		7180352	904417
396	CCB		7177217	910965
397	SAMPLE	287077-047	6948027	907765
398	SAMPLE	287077-048	7033836	896098
399	SAMPLE	287077-049	7109813	912783
400	SAMPLE	287077-050	7040727	899845
401	SAMPLE	287082-001	7008624	905926
402	SAMPLE	287082-002	6842413	898506
403	SAMPLE	287082-003	6883302	904317
404	SAMPLE	287082-004	6855780	900188
405	SAMPLE	287082-005	7066526	907352
406	SAMPLE	287082-006	7048392	920676

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
407	CCV		6637853	874780
408	CCB		7171323	909012
409	CCB		7232267	1017791
410	SAMPLE	287082-007	6899545	898826
411	SAMPLE	287082-008	6997736	907867
412	SAMPLE	287082-009	6916676	906767
413	SAMPLE	287082-010	6949148	905579
414	CCV		6663915	877646
415	CCB		7178495	922096

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087144643001
Units : ug/L

Date : 10-APR-2017 10:43
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087144643002	L1	10-APR-2017 10:46	S32578
L2	met10 method	1087144643003	L2	10-APR-2017 10:50	S32571
L3	met10 method	1087144643004	L3	10-APR-2017 10:52	S32367
L4	met10 method	1087144643005	L4	10-APR-2017 10:54	S32368
L5	met10 method	1087144643006	L5	10-APR-2017 10:57	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	1.9600	2.0120	2.1588	1.9567		LOR0	0.00000	0.51054		2.0219	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	0	100.00	3	1000.0	10	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087144643001 Cal Date : 10-APR-2017

ICV 1087144643007 (10-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4912	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643009.2 File : met10 method Time : 10-APR-2017 11:06
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.664	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6971685	1.13
Yttrium	R	894629	898388	0.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643010.2 File : met10 method Time : 10-APR-2017 11:10
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7043252	2.17
Yttrium	R	894629	902935	0.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643011.2 File : met10 method Time : 10-APR-2017 11:13
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[4.390]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19420	ug/L	97	
Copper	A	20000	23100	ug/L	115	
Manganese	A	20000	18930	ug/L	95	
Nickel	A	20000	17170	ug/L	86	
Titanium	A	20000	19750	ug/L	99	
Vanadium	A	20000	22020	ug/L	110	
Aluminum	R	500000	547000	ug/L	109	
Calcium	R	500000	549300	ug/L	110	
Iron	R	200000	209000	ug/L	105	
Magnesium	R	500000	459900	ug/L	92	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5743386	-16.69
Yttrium	R	894629	790346	-11.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643014.2 File : met10 method Time : 10-APR-2017 11:41
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	919.9	ug/L	-8	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5730121	-16.88
Yttrium	R	894629	787134	-12.02

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643303.2 File : met10 method Time : 11-APR-2017 01:30
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9265	5000	4918	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6643608	-3.63
Yttrium	R	894629	879771	-1.66

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643305.1 File : met10 method Time : 11-APR-2017 01:35
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7249370	5.16
Yttrium	R	894629	918757	2.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643316.1 File : met10 method Time : 11-APR-2017 02:07
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9122	5000	4881	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6788683	-1.52
Yttrium	R	894629	881121	-1.51

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643318.1 File : met10 method Time : 11-APR-2017 02:13
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7289723	5.74
Yttrium	R	894629	914834	2.26

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643329.1 File : met10 method Time : 11-APR-2017 02:46
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9158	5000	4890	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6787983	-1.53
Yttrium	R	894629	894586	0.00

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643331.1 File : met10 method Time : 11-APR-2017 02:52
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7245194	5.10
Yttrium	R	894629	912872	2.04

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643342.1 File : met10 method Time : 11-APR-2017 03:26
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9189	5000	4898	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6722983	-2.48
Yttrium	R	894629	884426	-1.14

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643344.1 File : met10 method Time : 11-APR-2017 03:32
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7295180	5.82
Yttrium	R	894629	908343	1.53

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643355.1 File : met10 method Time : 11-APR-2017 04:01
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9039	5000	4860	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6757315	-1.98
Yttrium	R	894629	879863	-1.65

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643357.1 File : met10 method Time : 11-APR-2017 04:07
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7280217	5.61
Yttrium	R	894629	1448223	**61.88 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643368.1 File : met10 method Time : 11-APR-2017 04:38
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9035	5000	4859	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6713915	-2.61
Yttrium	R	894629	885954	-0.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643370.1 File : met10 method Time : 11-APR-2017 04:44
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7261927	5.34
Yttrium	R	894629	909081	1.62

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643381.1 File : met10 method Time : 11-APR-2017 05:17
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9029	5000	4858	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6692776	-2.92
Yttrium	R	894629	881951	-1.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643383.1 File : met10 method Time : 11-APR-2017 05:23
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7211687	4.61
Yttrium	R	894629	917171	2.52

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/11/17 10:33	1.0		
002	met10 method	ICAL	L1			04/11/17 10:36	1.0	1	
003	met10 method	ICAL	L2			04/11/17 10:39	1.0	2	
004	met10 method	ICAL	L3			04/11/17 10:42	1.0	3	
005	met10 method	ICAL	L4			04/11/17 10:44	1.0	4	
006	met10 method	ICAL	L5			04/11/17 10:46	1.0	5	
007	met10 method	ICV				04/11/17 10:49	1.0	6	1:SR=4400000
008	met10 method	XCRI				04/11/17 10:56	1.0	7	
009	met10 method	CRI				04/11/17 11:03	1.0	7	1:SR=46000
010	met10 method	ICB				04/11/17 11:07	1.0		
011	met10 method	ICSA				04/11/17 11:10	1.0	8	11:AL=570000
012	met10 method	ICSAB				04/11/17 11:15	1.0	9	6:SR=4800000
013	met10 method	CCV				04/11/17 11:19	1.0	10	1:SR=4500000
014	met10 method	CCB				04/11/17 11:21	1.0		1:SR=1200
015	met10 method	CCB				04/11/17 11:24	1.0		1:SR=2400
016	met10 method	X	RINSE			04/11/17 11:28	1.0		
017	met10 method	BLANK	QC880855	TCLP Leachate	246501	04/11/17 11:31	10.0		1:SR=3200
018	met10 method	BS	QC880856	TCLP Leachate	246501	04/11/17 11:35	1.0		1:SR=920000
019	met10 method	X	RINSE			04/11/17 11:44	1.0		
020	met10 method	BSD	QC880857	TCLP Leachate	246501	04/11/17 11:48	1.0		1:SR=920000
021	met10 method	MSS	287753-001	TCLP Leachate	246501	04/11/17 11:50	10.0		1:SR=740000
022	met10 method	MS	QC880858	TCLP Leachate	246501	04/11/17 11:54	10.0		
023	met10 method	MSD	QC880859	TCLP Leachate	246501	04/11/17 11:56	10.0		
024	met10 method	SAMPLE	287752-001	TCLP Leachate	246501	04/11/17 11:59	10.0		1:SR=110000
025	met10 method	SAMPLE	287752-002	TCLP Leachate	246501	04/11/17 12:02	10.0		1:SR=1300000
026	met10 method	CCV				04/11/17 12:05	1.0	10	1:SR=4300000
027	met10 method	XCCB				04/11/17 12:08	1.0		1:SR=2900
028	met10 method	CCB				04/11/17 12:11	1.0		1:SR=2600
029	met10 method	X	RINSE			04/11/17 12:16	1.0		
030	met10 method	BLANK	QC880703	Water	246465	04/11/17 12:20	1.0		1:SR=2200
031	met10 method	BLANK	QC880855	TCLP Leachate	246501	04/11/17 12:23	10.0		1:SR=4200
032	met10 method	BS	QC880704	Water	246465	04/11/17 12:27	1.0		1:SR=940000
033	met10 method	BSD	QC880705	Water	246465	04/11/17 12:29	1.0		1:SR=910000
034	met10 method	MSS	287738-002	Water	246465	04/11/17 12:31	1.0		1:SR=1400000
035	met10 method	MS	QC880706	Water	246465	04/11/17 12:34	1.0		
036	met10 method	MSD	QC880707	Water	246465	04/11/17 12:36	1.0		
037	met10 method	SER	QC880708	Water	246465	04/11/17 12:39	5.0		
038	met10 method	PDS	QC880709	Water	246465	04/11/17 12:42	1.0	11 12 13	2:SR=2400000
039	met10 method	CCV				04/11/17 12:45	1.0	10	1:SR=4400000
040	met10 method	XCCB				04/11/17 12:47	1.0		1:SR=1900
041	met10 method	CCB				04/11/17 12:50	1.0		1:SR=1400
042	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 12:54	1.0		4:SR=70000000
043	met10 method	SAMPLE	287675-001	Water	246465	04/11/17 12:56	1.0		1:SR=1700000
044	met10 method	SAMPLE	287675-002	Water	246465	04/11/17 12:59	1.0		1:SR=1900000
045	met10 method	SAMPLE	287712-002	Water	246465	04/11/17 13:02	1.0		3:SR=4000000
046	met10 method	X	RINSE			04/11/17 13:05	1.0		
047	met10 method	BLANK	QC880703	Water	246465	04/11/17 13:09	1.0		1:SR=2200
048	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 13:12	100.0		1:SR=670000
049	met10 method	SAMPLE	287712-003	Water	246465	04/11/17 13:16	1.0		2:SR=3000000
050	met10 method	SAMPLE	287712-004	Water	246465	04/11/17 13:19	1.0		4:SR=6400000
051	met10 method	SAMPLE	287712-005	Water	246465	04/11/17 13:22	1.0		1:SR=3200000
052	met10 method	CCV				04/11/17 13:25	1.0	10	1:SR=4500000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	XCCB				04/11/17 13:28	1.0		1:SR=2000
054	met10 method	CCB				04/11/17 13:31	1.0		1:SR=1200
055	met10 method	SAMPLE	287712-006	Water	246465	04/11/17 13:34	1.0		4:SR=4700000
056	met10 method	SAMPLE	287731-009	Water	246465	04/11/17 13:38	1.0		1:SR=3000
057	met10 method	SAMPLE	287732-001	Water	246465	04/11/17 13:41	1.0		4:SR=15000000
058	met10 method	SAMPLE	287735-001	Water	246465	04/11/17 13:44	1.0		2:SR=4600000
059	met10 method	SAMPLE	287735-002	Water	246465	04/11/17 13:46	1.0		1:SR=3900000
060	met10 method	SAMPLE	287736-001	Water	246465	04/11/17 13:49	1.0		3:SR=15000000
061	met10 method	SAMPLE	287738-003	Water	246465	04/11/17 13:51	1.0		1:SR=1800000
062	met10 method	SAMPLE	287738-007	Water	246465	04/11/17 13:55	1.0		1:SR=1800000
063	met10 method	SAMPLE	287738-008	Water	246465	04/11/17 13:58	1.0		1:SR=2100000
064	met10 method	SAMPLE	287675-004	Soil	246450	04/11/17 14:01	1.0		4:SR=3800000
065	met10 method	CCV				04/11/17 14:03	1.0	10	1:SR=4400000
066	met10 method	XCCB				04/11/17 14:06	1.0		1:SR=2200
067	met10 method	CCB				04/11/17 14:09	1.0		1:SR=1100
068	met10 method	SAMPLE	287763-001	Water	246465	04/11/17 14:12	10.0		1:SR=7300000
069	met10 method	SAMPLE	287676-001	Soil	246450	04/11/17 14:16	1.0		3:SR=2400000
070	met10 method	SAMPLE	287713-001	Soil	246450	04/11/17 14:19	1.0		5:SR=6000000
071	met10 method	SAMPLE	287739-002	Soil	246450	04/11/17 14:22	1.0		7:SR=11000000
072	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/11/17 14:25	10.0		2:NA=190000
073	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/11/17 14:27	10.0		2:NA=180000
074	met10 method	X	RINSE			04/11/17 14:30	1.0		
075	met10 method	BLANK	QC880768	Soil	246479	04/11/17 14:33	1.0		1:SR=4000
076	met10 method	BS	QC880769	Soil	246479	04/11/17 14:36	1.0		2:SR=90000000
077	met10 method	BSD	QC880770	Soil	246479	04/11/17 14:39	1.0		2:SR=88000000
078	met10 method	CCV				04/11/17 14:41	1.0	10	1:SR=4600000
079	met10 method	CCB				04/11/17 14:44	1.0		1:SR=1800
080	met10 method	MSS	287740-001	Soil	246479	04/11/17 14:47	1.0		7:SR=8200000
081	met10 method	MS	QC880771	Soil	246479	04/11/17 14:50	1.0		1:SR=93000000
082	met10 method	MSD	QC880772	Soil	246479	04/11/17 14:53	1.0		1:SR=97000000
083	met10 method	SAMPLE	287683-005	Soil	246479	04/11/17 14:56	1.0		3:SR=3300000
084	met10 method	SAMPLE	287795-001	Soil	246479	04/11/17 14:59	1.0		4:SR=3300000
085	met10 method	SAMPLE	287795-002	Soil	246479	04/11/17 15:01	1.0		4:SR=3500000
086	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 15:04	1.0		1:SR=20000
087	met10 method	X	RINSE			04/11/17 15:07	1.0		
088	met10 method	BLANK	QC880331	Soil	246364	04/11/17 15:11	1.0		1:SR=3900
089	met10 method	BS	QC880332	Soil	246364	04/11/17 15:14	1.0		1:SR=46000000
090	met10 method	CCV				04/11/17 15:17	1.0	10	1:SR=4600000
091	met10 method	CCB				04/11/17 15:19	1.0		1:SR=1700
092	met10 method	BSD	QC880333	Soil	246364	04/11/17 15:23	1.0		1:SR=46000000
093	met10 method	MSS	287737-014	Soil	246364	04/11/17 15:25	1.0		3:SR=1900000
094	met10 method	MS	QC880334	Soil	246364	04/11/17 15:28	1.0		
095	met10 method	MSD	QC880335	Soil	246364	04/11/17 15:30	1.0		
096	met10 method	SAMPLE	287737-001	Soil	246364	04/11/17 15:33	1.0		5:SR=31000000
097	met10 method	SAMPLE	287737-002	Soil	246364	04/11/17 15:36	1.0		4:SR=1500000
098	met10 method	SAMPLE	287737-003	Soil	246364	04/11/17 15:39	1.0		4:SR=2100000
099	met10 method	SAMPLE	287737-004	Soil	246364	04/11/17 15:41	1.0		4:SR=1700000
100	met10 method	SAMPLE	287737-005	Soil	246364	04/11/17 15:44	1.0		3:SR=1100000
101	met10 method	SAMPLE	287737-006	Soil	246364	04/11/17 15:46	1.0		3:SR=880000
102	met10 method	CCV				04/11/17 15:49	1.0	10	1:SR=4500000
103	met10 method	CCB				04/11/17 15:52	1.0		1:SR=2200
104	met10 method	SAMPLE	287737-007	Soil	246364	04/11/17 15:55	1.0		4:SR=1600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287737-008	Soil	246364	04/11/17 15:58	1.0		2:SR=850000
106	met10 method	SAMPLE	287737-009	Soil	246364	04/11/17 16:00	1.0		4:SR=2100000
107	met10 method	SAMPLE	287737-010	Soil	246364	04/11/17 16:03	1.0		3:SR=1200000
108	met10 method	SAMPLE	287737-011	Soil	246364	04/11/17 16:05	1.0		3:SR=1500000
109	met10 method	SAMPLE	287737-012	Soil	246364	04/11/17 16:08	1.0		3:SR=1500000
110	met10 method	SAMPLE	287737-013	Soil	246364	04/11/17 16:10	1.0		4:SR=10000000
111	met10 method	SAMPLE	287737-015	Soil	246364	04/11/17 16:13	1.0		3:SR=1500000
112	met10 method	SAMPLE	287737-016	Soil	246364	04/11/17 16:16	1.0		3:SR=1400000
113	met10 method	SAMPLE	287737-017	Soil	246364	04/11/17 16:18	1.0		4:SR=1800000
114	met10 method	CCV				04/11/17 16:21	1.0	10	1:SR=4600000
115	met10 method	CCB				04/11/17 16:24	1.0		1:SR=2200
116	met10 method	BLANK	QC880368	Water	246373	04/11/17 16:27	1.0		1:SR=2200
117	met10 method	BS	QC880369	Water	246373	04/11/17 16:30	1.0		2:SR=940000
118	met10 method	BSD	QC880370	Water	246373	04/11/17 16:33	1.0		2:SR=930000
119	met10 method	MSS	287737-018	Water	246373	04/11/17 16:35	1.0		1:SR=3900
120	met10 method	MS	QC880371	Water	246373	04/11/17 16:39	1.0		
121	met10 method	MSD	QC880372	Water	246373	04/11/17 16:41	1.0		
122	met10 method	CCV				04/11/17 16:43	1.0	10	1:SR=4600000
123	met10 method	CCB				04/11/17 16:46	1.0		1:SR=1300
124	met10 method	MSS	287252-007	SPLP Leachate	246256	04/11/17 16:49	1.0		1:SR=7100
125	met10 method	MS	QC879889	SPLP Leachate	246256	04/11/17 16:53	1.0		1:SR=930000
126	met10 method	MSD	QC879890	SPLP Leachate	246256	04/11/17 16:55	1.0		1:SR=940000
127	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 16:57	1.0		1:SR=9600
128	met10 method	X	RINSE			04/11/17 17:00	1.0		
129	met10 method	BLANK	QC880630	Water	246447	04/11/17 17:03	1.0		1:SR=2200
130	met10 method	BS	QC880631	Water	246447	04/11/17 17:07	1.0		1:SR=910000
131	met10 method	BSD	QC880632	Water	246447	04/11/17 17:09	1.0		2:SR=900000
132	met10 method	MSS	287646-001	Water	246447	04/11/17 17:12	1.0		1:SR=1700000
133	met10 method	MS	QC880633	Water	246447	04/11/17 17:14	1.0		
134	met10 method	CCV				04/11/17 17:19	1.0	10	1:SR=4500000
135	met10 method	XCCB				04/11/17 17:22	1.0		1:SR=1400
136	met10 method	CCB				04/11/17 17:25	1.0		1:SR=2100
137	met10 method	MSD	QC880634	Water	246447	04/11/17 17:28	1.0		
138	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 17:31	1.0		1:SR=14000
139	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 17:34	1.0		1:SR=25000
140	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 17:38	1.0		1:SR=39000
141	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 17:41	1.0		1:SR=93000
142	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 17:44	1.0		2:SR=3500000
143	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 17:47	1.0		3:SR=11000000
144	met10 method	?SAMPLE	287791-002		246447	04/11/17 17:50	1.0		
145	met10 method	?SAMPLE	287791-003		246447	04/11/17 17:53	1.0		
146	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 17:55	1.0		1:SR=300000
147	met10 method	CCV				04/11/17 17:58	1.0	10	1:SR=4500000
148	met10 method	CCB				04/11/17 18:01	1.0		
149	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 18:04	1.0		1:SR=1400000
150	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 18:08	1.0		2:SR=610000
151	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 18:11	1.0		2:SR=8400000
152	met10 method	MSS	287252-028	Soil	246272	04/11/17 18:14	100.0		1:SR=49000
153	met10 method	SAMPLE	287252-029	Soil	246272	04/11/17 18:16	100.0		1:SR=64000
154	met10 method	PDS	QC880745	Soil	246422	04/11/17 18:18	1.0	11 12 13	6:SR=6200000
155	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 18:21	1.0		1:SR=20000
156	met10 method	SAMPLE	287648-001	Water	246408	04/11/17 18:24	1.0		5:SR=9000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287648-002	Water	246408	04/11/17 18:26	1.0		4:SR=13000000
158	met10 method	SAMPLE	287648-003	Water	246408	04/11/17 18:30	1.0		4:SR=20000000
159	met10 method	CCV				04/11/17 18:33	1.0	10	1:SR=4500000
160	met10 method	CCB				04/11/17 18:36	1.0		1:SR=2700
161	met10 method	CCB				04/11/17 18:39	1.0		1:SR=8500
162	met10 method	SAMPLE	287648-004	Water	246408	04/11/17 18:42	1.0		5:SR=15000000
163	met10 method	SAMPLE	287662-001	Water	246408	04/11/17 18:45	1.0		4:SR=31000000
164	met10 method	SAMPLE	287662-002	Water	246408	04/11/17 18:49	1.0		5:SR=19000000
165	met10 method	SAMPLE	287662-003	Water	246408	04/11/17 18:51	1.0		4:SR=22000000
166	met10 method	SAMPLE	287662-004	Water	246408	04/11/17 18:55	1.0		4:SR=25000000
167	met10 method	SAMPLE	287640-002	Soil	246424	04/11/17 18:57	1.0		7:SR=13000000
168	met10 method	SAMPLE	287640-003	Soil	246424	04/11/17 19:00	1.0		5:SR=4900000
169	met10 method	SAMPLE	287640-004	Soil	246424	04/11/17 19:03	1.0		5:SR=4600000
170	met10 method	SAMPLE	287640-005	Soil	246424	04/11/17 19:06	1.0		5:SR=4900000
171	met10 method	SAMPLE	287640-006	Soil	246424	04/11/17 19:09	1.0		5:SR=4500000
172	met10 method	CCV				04/11/17 19:12	1.0	10	1:SR=4400000
173	met10 method	CCB				04/11/17 19:15	1.0		1:SR=2000
174	met10 method	CCB				04/11/17 19:17	1.0		1:SR=1900
175	met10 method	X	RINSE			04/11/17 19:21	1.0		
176	met10 method	BLANK	QC879456	Water	246155	04/11/17 19:24	1.0		1:SR=2400
177	met10 method	BS	QC879457	Water	246155	04/11/17 19:28	1.0		2:SR=940000
178	met10 method	BSD	QC879458	Water	246155	04/11/17 19:30	1.0		2:SR=930000
179	met10 method	MSS	287365-001	Water	246155	04/11/17 19:32	1.0		1:SR=550000
180	met10 method	MS	QC879459	Water	246155	04/11/17 19:35	1.0		
181	met10 method	MSD	QC879460	Water	246155	04/11/17 19:37	1.0		
182	met10 method	SAMPLE	287348-001	Water	246155	04/11/17 19:40	1.0		1:SR=990000
183	met10 method	MSS	287365-001	Water	246155	04/11/17 19:42	1.0		1:SR=60000
184	met10 method	SAMPLE	287365-003	Water	246155	04/11/17 19:46	1.0		1:SR=140000
185	met10 method	CCV				04/11/17 19:49	1.0	10	1:SR=4500000
186	met10 method	CCB				04/11/17 19:52	1.0		1:SR=2500
187	met10 method	SAMPLE	287365-005	Water	246155	04/11/17 19:55	1.0		1:SR=74000
188	met10 method	SAMPLE	287365-006	Water	246155	04/11/17 19:57	1.0		1:SR=110000
189	met10 method	SAMPLE	287365-007	Water	246155	04/11/17 20:00	1.0		1:SR=180000
190	met10 method	SAMPLE	287365-008	Water	246155	04/11/17 20:02	1.0		1:SR=130000
191	met10 method	SAMPLE	287365-009	Water	246155	04/11/17 20:05	1.0		1:SR=90000
192	met10 method	SAMPLE	287365-010	Water	246155	04/11/17 20:07	1.0		1:SR=150000
193	met10 method	SAMPLE	287365-011	Water	246155	04/11/17 20:10	1.0		1:SR=68000
194	met10 method	SAMPLE	287365-012	Water	246155	04/11/17 20:12	1.0		1:SR=110000
195	met10 method	X	RINSE			04/11/17 20:15	1.0		
196	met10 method	BLANK	QC879918	Water	246267	04/11/17 20:18	1.0		1:SR=2800
197	met10 method	CCV				04/11/17 20:21	1.0	10	1:SR=4500000
198	met10 method	CCB				04/11/17 20:24	1.0		1:SR=1200
199	met10 method	BS	QC879919	Water	246267	04/11/17 20:27	1.0		2:SR=930000
200	met10 method	BSD	QC879920	Water	246267	04/11/17 20:30	1.0		2:SR=960000
201	met10 method	MSS	287440-001	Water	246267	04/11/17 20:32	1.0		1:SR=1300000
202	met10 method	MS	QC879921	Water	246267	04/11/17 20:36	1.0		
203	met10 method	MSD	QC879922	Water	246267	04/11/17 20:38	1.0		
204	met10 method	SAMPLE	287516-001	Water	246267	04/11/17 20:40	1.0		2:SR=400000
205	met10 method	X	RINSE			04/11/17 20:43	1.0		
206	met10 method	BLANK	QC880290	Water	246354	04/11/17 20:46	1.0		1:SR=3200
207	met10 method	BS	QC880291	Water	246354	04/11/17 20:50	1.0		1:SR=950000
208	met10 method	BSD	QC880292	Water	246354	04/11/17 20:52	1.0		1:SR=940000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	CCV				04/11/17 20:55	1.0	10	1:SR=4400000
210	met10 method	CCB				04/11/17 20:57	1.0		1:SR=2900
211	met10 method	CCB				04/11/17 21:00	1.0		1:SR=1600
212	met10 method	MSS	287645-005	Water	246354	04/11/17 21:04	1.0		2:SR=4800000
213	met10 method	MS	QC880293	Water	246354	04/11/17 21:06	1.0		
214	met10 method	MSD	QC880294	Water	246354	04/11/17 21:09	1.0		
215	met10 method	SAMPLE	287641-001	Water	246354	04/11/17 21:12	1.0		1:SR=270000
216	met10 method	SAMPLE	287641-002	Water	246354	04/11/17 21:14	1.0		1:SR=1900000
217	met10 method	SAMPLE	287641-003	Water	246354	04/11/17 21:16	1.0		1:SR=1300000
218	met10 method	SAMPLE	287641-004	Water	246354	04/11/17 21:19	1.0		2:SR=6100000
219	met10 method	CCV				04/11/17 21:22	1.0	10	1:SR=4400000
220	met10 method	CCB				04/11/17 21:24	1.0		
221	met10 method	X	RINSE			04/11/17 21:44	1.0		
222	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 21:47	1.0		1:SR=19000
223	met10 method	X	RINSE			04/11/17 21:50	1.0		
224	met10 method	SER	QC879891	SPLP Leachate	246256	04/11/17 21:53	5.0		
225	met10 method	X	RINSE			04/11/17 21:59	1.0		
226	met10 method	?SAMPLE	287662-001		246256	04/11/17 22:03	1.0		
227	met10 method	X	RINSE			04/11/17 22:06	1.0		
228	met10 method	BLANK	QC880888	Water	246512	04/11/17 22:10	1.0		1:SR=3400
229	met10 method	BS	QC880889	Water	246512	04/11/17 22:13	1.0		1:SR=920000
230	met10 method	BSD	QC880890	Water	246512	04/11/17 22:15	1.0		1:SR=940000
231	met10 method	CCV				04/11/17 22:18	1.0	10	1:SR=4500000
232	met10 method	CCB				04/11/17 22:21	1.0		1:SR=2900
233	met10 method	MSS	287852-001	Water	246512	04/11/17 22:24	1.0		4:SR=8600000
234	met10 method	MS	QC880891	Water	246512	04/11/17 22:26	1.0		
235	met10 method	MSD	QC880892	Water	246512	04/11/17 22:29	1.0		
236	met10 method	X	RINSE			04/11/17 22:32	1.0		
237	met10 method	SER	QC879891	SPLP Leachate	246256	04/11/17 22:35	5.0		
238	met10 method	SAMPLE	287791-002	Water	246512	04/11/17 22:38	1.0		1:SR=730000
239	met10 method	SAMPLE	287791-003	Water	246512	04/11/17 22:41	1.0		1:SR=720000
240	met10 method	SAMPLE	287808-001	Water	246512	04/11/17 22:43	1.0		1:SR=210000
241	met10 method	SAMPLE	287808-002	Water	246512	04/11/17 22:45	1.0		1:SR=130000
242	met10 method	SAMPLE	287808-003	Water	246512	04/11/17 22:48	1.0		1:SR=78000
243	met10 method	CCV				04/11/17 22:50	1.0	10	1:SR=4600000
244	met10 method	CCB				04/11/17 22:53	1.0		1:SR=2200
245	met10 method	SAMPLE	287843-001	Water	246512	04/11/17 22:56	1.0		3:SR=4200000
246	met10 method	SAMPLE	287843-002	Water	246512	04/11/17 23:00	1.0		3:SR=4100000
247	met10 method	X	RINSE			04/11/17 23:04	1.0		
248	met10 method	BLANK	QC880989	Soil	246536	04/11/17 23:07	1.0		1:SR=4100
249	met10 method	BS	QC880990	Soil	246536	04/11/17 23:10	1.0		1:SR=90000000
250	met10 method	BSD	QC880991	Soil	246536	04/11/17 23:13	1.0		1:SR=89000000
251	met10 method	MSS	287766-003	Soil	246536	04/11/17 23:16	1.0		5:SR=24000000
252	met10 method	MS	QC880992	Soil	246536	04/11/17 23:19	1.0		
253	met10 method	MSD	QC880993	Soil	246536	04/11/17 23:22	1.0		
254	met10 method	SER	QC880994	Soil	246536	04/11/17 23:25	5.0		
255	met10 method	CCV				04/11/17 23:27	1.0	10	1:SR=4600000
256	met10 method	CCB				04/11/17 23:30	1.0		1:SR=4300
257	met10 method	PDS	QC880995	Soil	246536	04/11/17 23:34	1.0	11 12 14	6:SR=25000000
258	met10 method	SAMPLE	287651-001	Soil	246536	04/11/17 23:37	1.0		5:SR=3400000
259	met10 method	SAMPLE	287651-002	Soil	246536	04/11/17 23:40	1.0		5:SR=2200000
260	met10 method	SAMPLE	287651-003	Soil	246536	04/11/17 23:43	1.0		5:SR=2300000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287651-004	Soil	246536	04/11/17 23:46	1.0		5:SR=2900000
262	met10 method	SAMPLE	287766-004	Soil	246536	04/11/17 23:48	1.0		5:SR=25000000
263	met10 method	SAMPLE	287766-006	Soil	246536	04/11/17 23:52	1.0		5:SR=17000000
264	met10 method	SAMPLE	287766-008	Soil	246536	04/11/17 23:55	1.0		5:SR=20000000
265	met10 method	SAMPLE	287766-010	Soil	246536	04/11/17 23:58	1.0		5:SR=21000000
266	met10 method	SAMPLE	287766-012	Soil	246536	04/12/17 00:01	1.0		6:SR=23000000
267	met10 method	CCV				04/12/17 00:04	1.0	10	1:SR=4500000
268	met10 method	CCB				04/12/17 00:06	1.0		1:SR=3300
269	met10 method	SAMPLE	287780-001	Soil	246536	04/12/17 00:10	1.0		5:SR=9000000
270	met10 method	SAMPLE	287814-001	Soil	246536	04/12/17 00:13	1.0		10:SR=100000000
271	met10 method	SAMPLE	287814-002	Soil	246536	04/12/17 00:16	1.0		7:SR=19000000
272	met10 method	SAMPLE	287815-001	Soil	246536	04/12/17 00:19	1.0		10:SR=89000000
273	met10 method	SAMPLE	287815-002	Soil	246536	04/12/17 00:22	1.0		8:SR=19000000
274	met10 method	SAMPLE	287839-001	Soil	246536	04/12/17 00:25	1.0		3:SR=8600000
275	met10 method	SAMPLE	287855-001	Soil	246536	04/12/17 00:28	1.0		7:SR=9600000
276	met10 method	SAMPLE	287872-005	Soil	246536	04/12/17 00:31	1.0		5:SR=5000000
277	met10 method	SAMPLE	287872-010	Soil	246536	04/12/17 00:34	1.0		5:SR=4400000
278	met10 method	X	RINSE			04/12/17 00:36	1.0		
279	met10 method	CCV				04/12/17 00:40	1.0	10	1:SR=4600000
280	met10 method	XCCB				04/12/17 00:42	1.0		1:SR=3500
281	met10 method	CCB				04/12/17 00:45	1.0		1:SR=2000
282	met10 method	BLANK	QC881020	Filtrate	246541	04/12/17 00:49	1.0		1:SR=2800
283	met10 method	BS	QC881021	Filtrate	246541	04/12/17 00:52	1.0		1:SR=920000
284	met10 method	BSD	QC881022	Filtrate	246541	04/12/17 00:54	1.0		1:SR=910000
285	met10 method	MSS	287502-002	Filtrate	246541	04/12/17 00:57	1.0		4:SR=17000000
286	met10 method	MS	QC881023	Filtrate	246541	04/12/17 01:00	1.0		
287	met10 method	MSD	QC881024	Filtrate	246541	04/12/17 01:03	1.0		
288	met10 method	BLANK	QC881026	Filtrate	246541	04/12/17 01:05	1.0		1:SR=4100
289	met10 method	SAMPLE	287502-005	Filtrate	246541	04/12/17 01:09	1.0		4:SR=25000000
290	met10 method	SAMPLE	287502-006	Filtrate	246541	04/12/17 01:11	1.0		4:SR=27000000
291	met10 method	SAMPLE	287502-007	Filtrate	246541	04/12/17 01:15	1.0		2:SR=4900000
292	met10 method	CCV				04/12/17 01:18	1.0	10	1:SR=4500000
293	met10 method	XCCB				04/12/17 01:21	1.0		1:SR=3200
294	met10 method	CCB				04/12/17 01:24	1.0		1:SR=3600
295	met10 method	SAMPLE	287502-008	Filtrate	246541	04/12/17 01:27	1.0		3:SR=9000000
296	met10 method	SAMPLE	287502-011	Filtrate	246541	04/12/17 01:31	1.0		5:SR=28000000
297	met10 method	SAMPLE	287502-012	Filtrate	246541	04/12/17 01:34	1.0		5:SR=32000000
298	met10 method	SAMPLE	287502-013	Filtrate	246541	04/12/17 01:36	1.0		1:SR=2900
299	met10 method	SAMPLE	287502-014	Filtrate	246541	04/12/17 01:39	1.0		3:SR=9200000
300	met10 method	SAMPLE	287502-015	Filtrate	246541	04/12/17 01:43	1.0		2:SR=4300000
301	met10 method	SAMPLE	287502-016	Filtrate	246541	04/12/17 01:46	1.0		4:SR=21000000
302	met10 method	SAMPLE	287788-001	Filtrate	246541	04/12/17 01:49	1.0		1:SR=920000
303	met10 method	SAMPLE	287788-002	Filtrate	246541	04/12/17 01:52	1.0		1:SR=1700000
304	met10 method	X	RINSE			04/12/17 01:56	1.0		
305	met10 method	CCV				04/12/17 01:59	1.0	10	1:SR=4500000
306	met10 method	XCCB				04/12/17 02:02	1.0		1:SR=3600
307	met10 method	CCB				04/12/17 02:05	1.0		1:SR=2500
308	met10 method	BLANK	QC881015	Filtrate	246540	04/12/17 02:08	1.0		1:SR=1100
309	met10 method	BS	QC881016	Filtrate	246540	04/12/17 02:11	1.0		1:SR=920000
310	met10 method	BSD	QC881017	Filtrate	246540	04/12/17 02:14	1.0		1:SR=930000
311	met10 method	MSS	287723-006	Filtrate	246540	04/12/17 02:16	1.0		4:SR=40000000
312	met10 method	MS	QC881018	Filtrate	246540	04/12/17 02:19	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	MSD	QC881019	Filtrate	246540	04/12/17 02:22	1.0		
314	met10 method	BLANK	QC881038	Filtrate	246540	04/12/17 02:24	1.0		1:SR=4800
315	met10 method	SAMPLE	287722-002	Filtrate	246540	04/12/17 02:28	1.0		6:SR=54000000
316	met10 method	SAMPLE	287722-003	Filtrate	246540	04/12/17 02:30	1.0		3:SR=18000000
317	met10 method	SAMPLE	287723-007	Filtrate	246540	04/12/17 02:33	1.0		5:SR=34000000
318	met10 method	CCV				04/12/17 02:36	1.0	10	1:SR=4500000
319	met10 method	XCCB				04/12/17 02:39	1.0		1:SR=2900
320	met10 method	CCB				04/12/17 02:42	1.0		1:SR=3800
321	met10 method	SAMPLE	287723-008	Filtrate	246540	04/12/17 02:45	1.0		3:SR=12000000
322	met10 method	SAMPLE	287723-009	Filtrate	246540	04/12/17 02:47	1.0		5:SR=48000000
323	met10 method	SAMPLE	287723-010	Filtrate	246540	04/12/17 02:50	1.0		4:SR=34000000
324	met10 method	SAMPLE	287732-001	Filtrate	246540	04/12/17 02:53	1.0		4:SR=15000000
325	met10 method	X	RINSE			04/12/17 02:56	1.0		
326	met10 method	BLANK	QC881061	Soil	246551	04/12/17 03:00	1.0		1:SR=6700
327	met10 method	BS	QC881062	Soil	246551	04/12/17 03:03	1.0		1:SR=92000000
328	met10 method	BSD	QC881063	Soil	246551	04/12/17 03:06	1.0		1:SR=92000000
329	met10 method	MSS	287921-002	Soil	246551	04/12/17 03:08	1.0		5:SR=2300000
330	met10 method	MS	QC881064	Soil	246551	04/12/17 03:11	1.0		
331	met10 method	CCV				04/12/17 03:14	1.0	10	1:SR=4500000
332	met10 method	CCB				04/12/17 03:17	1.0		1:SR=4500
333	met10 method	MSD	QC881065	Soil	246551	04/12/17 03:20	1.0		
334	met10 method	SAMPLE	287768-001	Soil	246551	04/12/17 03:23	1.0		5:SR=5800000
335	met10 method	SAMPLE	287768-002	Soil	246551	04/12/17 03:25	1.0		3:SR=20000000
336	met10 method	SAMPLE	287768-003	Soil	246551	04/12/17 03:28	1.0		7:SR=12000000
337	met10 method	SAMPLE	287768-004	Soil	246551	04/12/17 03:31	1.0		4:SR=10000000
338	met10 method	SAMPLE	287921-001	Soil	246551	04/12/17 03:34	1.0		5:SR=2300000
339	met10 method	X	RINSE			04/12/17 03:36	1.0		
340	met10 method	BLANK	QC881066	Air	246552	04/12/17 03:40	1.0		1:SR=5000
341	met10 method	BS	QC881067	Air	246552	04/12/17 03:43	1.0		1:SR=94000000
342	met10 method	BSD	QC881068	Air	246552	04/12/17 03:45	1.0		1:SR=89000000
343	met10 method	CCV				04/12/17 03:48	1.0	10	1:SR=4500000
344	met10 method	CCB				04/12/17 03:50	1.0		1:SR=2800
345	met10 method	MSS	287929-001	Air	246552	04/12/17 03:54	1.0		1:SR=35000
346	met10 method	SAMPLE	287929-002	Air	246552	04/12/17 03:57	1.0		1:SR=34000
347	met10 method	X	RINSE			04/12/17 04:00	1.0		
348	met10 method	BLANK	QC881069	Wipe	246553	04/12/17 04:04	1.0		1:SR=4300
349	met10 method	BS	QC881070	Wipe	246553	04/12/17 04:07	1.0		1:SR=92000000
350	met10 method	BSD	QC881071	Wipe	246553	04/12/17 04:09	1.0		1:SR=92000000
351	met10 method	SAMPLE	287881-001	Wipe	246553	04/12/17 04:12	1.0		1:SR=450000
352	met10 method	CCV				04/12/17 04:14	1.0	10	1:SR=4400000
353	met10 method	CCB				04/12/17 04:17	1.0		1:SR=3300

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

MNA 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 29 through 133.

TLO 04/12/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 134 through 353.

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087146073

Instrument : MET10 Begun : 04/11/17 10:33
Method : EPA 6010C SOP Version : icp metals_rv18

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087146073

Date : 04/11/17 Reference : met10 method
Sequence : MET10 04/11/17 Analyzed : 04/11/17 10:36

#	Type	Sample ID	Y A	Y R
		ICAL STD	9447720	1106130
		LOWER LIMIT	2834316	331839
		UPPER LIMIT	11337264	1327356
010	ICB		9493289	1085173
011	ICSA		7683826	944234
012	ICSAB		7727663	951958
078	CCV		8755638	1039620
079	CCB		9412253	1071952
086	SAMPLE	287252-031	9166125	1084130
090	CCV		8748251	1047731
091	CCB		9418120	1072143
122	CCV		8915990	1031138
123	CCB		9425077	1063331
124	MSS	287252-007	9370805	1101213
125	MS	QC879889	8933692	1090309
126	MSD	QC879890	9211863	1064463
127	SAMPLE	287252-038	9278459	1086023
134	CCV		8667641	1035984
136	CCB		9344580	1063175
147	CCV		8637460	1033990
148	CCB		9408914	1059104
152	MSS	287252-028	9242825	1063251
153	SAMPLE	287252-029	9247389	1053413
155	SAMPLE	287082-002	9146469	1058447
159	CCV		8775442	1047406
160	CCB		9388959	1064253
219	CCV		8697539	1040905
220	CCB		9505187	1052721
222	SAMPLE	287082-002	9027808	1061572
224	SER	QC879891	19378625 *	310383 *
231	CCV		8683560	1036334
232	CCB		9386764	1070900
237	SER	QC879891	9281131	1057186
243	CCV		8928126	1033371
244	CCB		9402252	1070792
251	MSS	287766-003	7895071	980433
262	SAMPLE	287766-004	7909247	990129
263	SAMPLE	287766-006	8021061	992096
264	SAMPLE	287766-008	7850580	986330
265	SAMPLE	287766-010	7811978	974739
266	SAMPLE	287766-012	8292999	1008194

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287252 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087146073001
Units : ug/L

Date : 11-APR-2017 10:33
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087146073002	L1	11-APR-2017 10:36	S32578
L2	met10 method	1087146073003	L2	11-APR-2017 10:39	S32571
L3	met10 method	1087146073004	L3	11-APR-2017 10:42	S32367
L4	met10 method	1087146073005	L4	11-APR-2017 10:44	S32368
L5	met10 method	1087146073006	L5	11-APR-2017 10:46	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8600	3.1530	3.0836	3.0501		LOR0	0.00000	0.32783		3.0367	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-6	100.00	3	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287252 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087146073001 Cal Date : 11-APR-2017

ICV 1087146073007 (11-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4914	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073009.1 File : met10 method Time : 11-APR-2017 11:03
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.177	ug/L	-16	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9353345	-1.00
Yttrium	R	1106130	1101587	-0.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073010.1 File : met10 method Time : 11-APR-2017 11:07
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9493289	0.48
Yttrium	R	1106130	1085173	-1.89

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073011.1 File : met10 method Time : 11-APR-2017 11:10
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-6.104]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18810	ug/L	94	
Copper	A	20000	21910	ug/L	110	
Manganese	A	20000	18460	ug/L	92	
Nickel	A	20000	16630	ug/L	83	
Titanium	A	20000	18700	ug/L	93	
Vanadium	A	20000	21510	ug/L	108	
Aluminum	R	500000	566500	ug/L	113	
Calcium	R	500000	529000	ug/L	106	
Iron	R	200000	202300	ug/L	101	
Magnesium	R	500000	440700	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	7683826	-18.67
Yttrium	R	1106130	944234	-14.64

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073012.1 File : met10 method Time : 11-APR-2017 11:15
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	956.9	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	7727663	-18.21
Yttrium	R	1106130	951958	-13.94

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073078.1 File : met10 method Time : 11-APR-2017 14:41
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0255	5000	4959	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8755638	-7.33
Yttrium	R	1106130	1039620	-6.01

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073079.1 File : met10 method Time : 11-APR-2017 14:44
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9412253	-0.38
Yttrium	R	1106130	1071952	-3.09

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073090.1 File : met10 method Time : 11-APR-2017 15:17
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0538	5000	5006	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8748251	-7.40
Yttrium	R	1106130	1047731	-5.28

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073091.1 File : met10 method Time : 11-APR-2017 15:19
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9418120	-0.31
Yttrium	R	1106130	1072143	-3.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073122.1 File : met10 method Time : 11-APR-2017 16:43
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	2.9967	5000	4912	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8915990	-5.63
Yttrium	R	1106130	1031138	-6.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073123.1 File : met10 method Time : 11-APR-2017 16:46
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9425077	-0.24
Yttrium	R	1106130	1063331	-3.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073134.1 File : met10 method Time : 11-APR-2017 17:19
Cal : 1087146073001 Caldate : 11-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	3.0367	3.0391	5000	4982	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	8667641	-8.26
Yttrium	R	1106130	1035984	-6.34

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287252 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087146073136.1 File : met10 method Time : 11-APR-2017 17:25
Cal : 1087146073001 Caldate : 11-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9447720	9344580	-1.09
Yttrium	R	1106130	1063175	-3.88

SAMPLE PREPARATION SUMMARY

Batch # : 246256
Started By : VV
Method : SPLP
Spike #1 ID : S29983
Prep Date : 04-APR-2017 03:46
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287082-011		SPLP Leachate	50	50	1	1.0						6010	
287082-012		SPLP Leachate	50	50	1	1.0						6010	
287082-013		SPLP Leachate	50	50	1	1.0						6010	
287082-014		SPLP Leachate	50	50	1	1.0						6010	
287082-015		SPLP Leachate	50	50	1	1.0						6010	
287082-016		SPLP Leachate	50	50	1	1.0						6010	
287082-017		SPLP Leachate	50	50	1	1.0						6010	
287082-018		SPLP Leachate	50	50	1	1.0						6010	
287082-019		SPLP Leachate	50	50	1	1.0						6010	
287252-001		SPLP Leachate	50	50	1	1.0						6010	
287252-002		SPLP Leachate	50	50	1	1.0						6010	
287252-003		SPLP Leachate	50	50	1	1.0						6010	
287252-004		SPLP Leachate	50	50	1	1.0						6010	
287252-005		SPLP Leachate	50	50	1	1.0						6010	
287252-006		SPLP Leachate	50	50	1	1.0						6010	
287252-007		SPLP Leachate	50	50	1	1.0						6010	
287252-008		SPLP Leachate	50	50	1	1.0						6010	
287252-009		SPLP Leachate	50	50	1	1.0						6010	
287252-010		SPLP Leachate	50	50	1	1.0						6010	
287252-011		SPLP Leachate	50	50	1	1.0						6010	
QC879884	BLANK	SPLP Leachate	50	50	1	1.0							
QC879885	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879886	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879887	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879888	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879889	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879890	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC879891	SER	SPLP Leachate	50	50	1	1.0							
QC879892	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 04/06/17 Reviewer: PRW Date: 04/12/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246256
Date Digested: 4-4-17
Digested by: VV
Matrix: ~~☒ TCLP Extract~~ VV 4-4-17
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
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Continued on p: 39

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC# 879884	☒ 50 ☐	☒ 50 ☐	☒ VV 4-5-17	
*	BS 879885	☒ 50 ☐	☒ 50 ☐	NO	
*	BSD 879886	☒ 50 ☐	☒ 50 ☐		
*	287252-001 MS	☒ 50 ☐	☒ 50 ☐		
5 *	- 001 MSD	☒ 50 ☐	☒ 50 ☐		
*	- 007 MS	☒ 50 ☐	☒ 50 ☐		
*	- 007 MSD	☒ 50 ☐	☒ 50 ☐		
	287082-011	☒ 50 ☐	☒ 50 ☐		
	- 012	☒ 50 ☐	☒ 50 ☐		
10	- 013	☒ 50 ☐	☒ 50 ☐		
	- 014	☒ 50 ☐	☒ 50 ☐		
	- 015	☒ 50 ☐	☒ 50 ☐		
	- 016	☒ 50 ☐	☒ 50 ☐		
	- 017	☒ 50 ☐	☒ 50 ☐		
15	- 018	☒ 50 ☐	☒ 50 ☐		
	- 019	☒ 50 ☐	☒ 50 ☐		
	287252-001	☒ 50 ☐	☒ 50 ☐		
	- 002	☒ 50 ☐	☒ 50 ☐		
	- 003	☒ 50 ☐	☒ 50 ☐		
20	- 004	☒ 50 ☐	☒ 50 ☐		
	- 005	☒ 50 ☐	☒ 50 ☐		
	- 006	☒ 50 ☐	☒ 50 ☐		
	- 007	☒ 50 ☐	☒ 50 ☐		
	- 008	☒ 50 ☐	☒ 50 ☐		
	- 009	☒ 50 ☐	☒ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	259788-2005		VV 4-4-17
Digestion Block ID/ Probe Location	JUSTICE	42	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983 *		
0.5 mL of spike solution (Std1) was added to all spikes	S29984 *		
0.5 mL of spike solution (Std3) was added to all spikes	S32702 *		
Digestion started at (time)	03:46		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170111988-BDH		
1:1 HCl reagent ID	162118-040517		VV 4-5-17
Digestion ended at (time)	01:50		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICAP		

Pipettes

Vol.(mL)	ID
0.5	N271500

VV 4-4-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246256
Date Digested: 4-4-17
Digested by: VV
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
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Continued on p: 38

Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
287252-010	☒ 50 ☐	☒ 50 ☐	NO	
↓ -011	☒ 50 ☐	☒ 50 ☐	↓	
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		
	☐ 50 ☐	☐ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	29788-2005		VV 4-4-17
Digestion Block ID/ Probe Location	JUSTICE	42	
Thermometer ID/ Digestion Temperature (°C)	SN A75455	95°C	
_____ mL of spike solution (Std1) was added to all spikes	—		
_____ mL of spike solution (Std1) was added to all spikes	—		
_____ mL of spike solution (Std3) was added to all spikes	—		
Digestion started at (time)	0346		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170119 88-BDH		
1:1 HCl reagent ID	162118-040817		VV 4-5-17
Digestion ended at (time)	0150		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICAP		

Pipettes Vol.(mL)	ID

4-5-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 246263 Date/ Time ON: 4-4-17 08:20 Page: 44 BK 3994

Extraction Method: ☐ EPA 1311: TCLP Temp (°C) ON: 22°C

☑ EPA 1312: SPLP Date/ Time OFF: 4-5-17 01:30 Thermometer ID: 111755122

Rotator #'s: 1/4 Temp (°C) ON: 21°C-25°C Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK#879905	QC	Ø	Ø	Ø	Ø	Ø	2#	☒ 2000 ☐	5.09	
287252-012	A	100.08	NO	NO	N/A	N/A		☒ 2000 ☐	5.33	
-013		100.12						☒ 2000 ☐	5.71	
-014		100.10						☒ 2000 ☐	5.75	
-015		100.09						☒ 2000 ☐	5.72	
-016		100.19						☒ 2000 ☐	5.61	
-017		100.21						☒ 2000 ☐	5.65	
-018		100.08						☒ 2000 ☐	5.80	
-019		100.06						☒ 2000 ☐	5.85	
-020		100.10						☒ 2000 ☐	5.85	
-021		100.14						☒ 2000 ☐	5.80	
-022		100.15						☒ 2000 ☐	5.91	
-023		100.25						☒ 2000 ☐	5.71	
-024		100.13						☒ 2000 ☐		Added pH 4-5-17@0600
-025		100.10						☒ 2000 ☐		
-026		100.18						☒ 2000 ☐		
-027		100.10						☒ 2000 ☐		
-028		100.04						☒ 2000 ☐		
-029		100.16						☒ 2000 ☐		
-030		100.12						☒ 2000 ☐		
-031		100.07						☒ 2000 ☐		
								☐ 2000 ☒		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

pH Meter ID: ~~OB~~ 013869 has been calibrated? ☒ Yes ☐ No

VV 4-4-17

Mfg & Lot # / LIMS # Date/ Initials

☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot# N/A 4-4-17 VV

added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID

TCLP Fluid #1 pH: 4.88 - 4.98 su Sodium Hydroxide (NaOH)

TCLP Fluid #2 pH: 2.83 - 3.03 su Acetic acid (HOAc)

SPLP Fluid #1 pH: 4.15 - 4.25 su Fluid #1 pH, Prep Date —

SPLP Fluid #2 pH: 4.95 - 5.05 su Fluid #2 pH, Prep Date 5.02/4.99 4-4-17

Hot Plate Thermometer (Temperature, Serial #) N/A °C ID: —

filtered thru TCLP filter paper, lot# EE. 400126-6308 4-5-17 VV

acidified to pH <2 with 1 mL HNO3 20170111988-BDH

pH paper strips, lot# 10BDH1061

VV 4-4-17

Extraction Chemist Date

Reviewed Online / See LIMS

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246212
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: 1/3/4

Date/ Time ON: 4-3-17 06:30
Temp (°C) ON: 22°C
Date/ Time OFF: 4-4-17 01:00
Temp (°C) ON: 21°C - 23°C

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Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK #879696	QC	Ø	Ø	Ø	Ø	Ø	2	☑2000 ☐____	5.04	
287082-011	A	100.12	NO	NO	N/A	N/A		☑2000 ☐____	5.45	
-012		100.14						☑2000 ☐____	5.57	
-013		100.08						☑2000 ☐____	5.69	
-014		100.07						☑2000 ☐____	5.72	
-015		100.01						☑2000 ☐____	5.65	
-016		100.13						☑2000 ☐____	5.66	
-017		100.09						☑2000 ☐____	5.72	
-018		100.21						☑2000 ☐____	5.82	
-019		100.01						☑2000 ☐____	5.73	
287252-001		100.03						☑2000 ☐____	5.75	
-002		100.01						☑2000 ☐____	5.55	
-003		100.24						☑2000 ☐____	5.56	
-004		100.15						☑2000 ☐____	5.41	
-005		100.06						☑2000 ☐____	5.52	
-006		100.01						☑2000 ☐____	5.79	
-007		100.03						☑2000 ☐____	5.32	
-008		100.26						☑2000 ☐____	5.48	
-009		100.24						☑2000 ☐____	5.44	
-010		100.08						☑2000 ☐____	5.55	
-011		100.02						☑2000 ☐____	5.60	
								☐ 2000 ☐____		
								☐ 2000 ☐____		
								☐ 2000 ☐____		

Balance ID: B-11 calibration has been checked? ☑ Yes ☐ No

pH Meter ID: ~~☑~~ 013869 has been calibrated? ☑ Yes ☐ No
VV 4-3-17

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	VV 4-3-17
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	3-30-17 / 4-3-17 / 5.00 / 5.00 / 4.97	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	E.E. 400126-6308	VV 4-4-17
acidified to pH <2 with 1 mL HNO3	20170111988- BDH	
pH paper strips, lot#	10BDH1061	

VV 4-3-17
Extraction Chemist Date

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246458 Analysis : ICP
Started By : VV Prep Date : 10-APR-2017 00:10 Finished By : VV
Method : SPLP Units : mL
Spike #1 ID : S29983 Spike #2 ID : S29984 Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287252-012		SPLP Leachate	50	50	1	1.0						6010	
287252-013		SPLP Leachate	50	50	1	1.0						6010	
287252-014		SPLP Leachate	50	50	1	1.0						6010	
287252-015		SPLP Leachate	50	50	1	1.0						6010	
287252-016		SPLP Leachate	50	50	1	1.0						6010	
287252-017		SPLP Leachate	50	50	1	1.0						6010	
287252-018		SPLP Leachate	50	50	1	1.0						6010	
287252-019		SPLP Leachate	50	50	1	1.0						6010	
287252-020		SPLP Leachate	50	50	1	1.0						6010	
287252-021		SPLP Leachate	50	50	1	1.0						6010	
287252-022		SPLP Leachate	50	50	1	1.0						6010	
287252-023		SPLP Leachate	50	50	1	1.0						6010	
287252-024		SPLP Leachate	50	50	1	1.0						6010	
287252-025		SPLP Leachate	50	50	1	1.0						6010	
287252-026		SPLP Leachate	50	50	1	1.0						6010	
287252-027		SPLP Leachate	50	50	1	1.0						6010	
287252-028		SPLP Leachate	50	50	1	1.0						6010	
287252-029		SPLP Leachate	50	50	1	1.0						6010	
287252-030		SPLP Leachate	50	50	1	1.0						6010	
287252-031		SPLP Leachate	50	50	1	1.0						6010	
QC880667	BLANK	SPLP Leachate	50	50	1	1.0							
QC880668	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880669	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880670	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880671	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880672	SER	SPLP Leachate	50	50	1	1.0							
QC880673	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: TLO Date: 04/17/17 Reviewer: PRW Date: 04/17/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246458
Date Digested: 4-10-17
Digested by: VV
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
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	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC# 880667	☒ 50 ☐	☒ 50 ☐	NO	
*	BS ↓ 880668	☒ 50 ☐	☒ 50 ☐		
*	BSD ↓ 880669	☒ 50 ☐	☒ 50 ☐		
*	287252-028 MS	☒ 50 ☐	☒ 50 ☐		
5 *	- 028 MSD	☒ 50 ☐	☒ 50 ☐		
	- 012	☒ 50 ☐	☒ 50 ☐		
	- 013	☒ 50 ☐	☒ 50 ☐		
	- 014	☒ 50 ☐	☒ 50 ☐		
	- 015	☒ 50 ☐	☒ 50 ☐		
10	- 016	☒ 50 ☐	☒ 50 ☐		
	- 017	☒ 50 ☐	☒ 50 ☐		
	- 018	☒ 50 ☐	☒ 50 ☐		
	- 019	☒ 50 ☐	☒ 50 ☐		
	- 020	☒ 50 ☐	☒ 50 ☐		
15	- 021	☒ 50 ☐	☒ 50 ☐		
	- 022	☒ 50 ☐	☒ 50 ☐		
	- 023	☒ 50 ☐	☒ 50 ☐		
	- 024	☒ 50 ☐	☒ 50 ☐		
	- 025	☒ 50 ☐	☒ 50 ☐		
20	- 026	☒ 50 ☐	☒ 50 ☐		
	- 027	☒ 50 ☐	☒ 50 ☐		
	- 028	☒ 50 ☐	☒ 50 ☐		
	- 029	☒ 50 ☐	☒ 50 ☐		
	- 030	☒ 50 ☐	☒ 50 ☐		
	↓ - 031	☒ 50 ☐	☒ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	159788-2005		VV 4-10-17
Digestion Block ID/ Probe Location	TETON	#8	
Thermometer ID/ Digestion Temperature (°C)	SN M14581	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	529983		
0.5 mL of spike solution (Std1) was added to all spikes	529984		
0.5 mL of spike solution (Std3) was added to all spikes	532778		
Digestion started at (time)	00:10		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170119 88-BDH		
1:1 HCl reagent ID	162118-041017		
Digestion ended at (time)	07:30		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	IOM		

Pipettes

Vol.(mL)	ID
0.5	N27150D

4-10-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246263 | Date/ Time ON: 4-4-17 08:20 | Page: 44 | BK 3994

Extraction Method: ☐ EPA 1311: TCLP | Temp (°C) ON: 22°C

☑ EPA 1312: SPLP | Date/ Time OFF: 4-5-17 01:30 | Thermometer ID: 111755122

Rotator #'s: 1/4/3 | Temp (°C) ON: 21°C-23°C | Temperature Limits: 21 - 25 C

	Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
	BLK#879905	QC	Ø	Ø	Ø	Ø	Ø	2#	☒ 2000 ☐	5.09	
	287252-012	A	100.08	NO	NO	N/A	N/A		☒ 2000 ☐	5.33	
	-013		100.12						☒ 2000 ☐	5.71	
	-014		100.10						☒ 2000 ☐	5.75	
5	-015		100.09						☒ 2000 ☐	5.72	
	-016		100.19						☒ 2000 ☐	5.61	
	-017		100.21						☒ 2000 ☐	5.65	
	-018		100.08						☒ 2000 ☐	5.80	
	-019		100.06						☒ 2000 ☐	5.85	
10	-020		100.10						☒ 2000 ☐	5.85	
	-021		100.14						☒ 2000 ☐	5.80	
	-022		100.15						☒ 2000 ☐	5.91	
	-023		100.25						☒ 2000 ☐	5.71	
	-024		100.13						☒ 2000 ☐	5.43	Added pH 4.5.17@0630
15	-025		100.10						☒ 2000 ☐	5.63	
	-026		100.18						☒ 2000 ☐	5.73	
	-027		100.10						☒ 2000 ☐	5.68	
	-028		100.04						☒ 2000 ☐	5.74	
	-029		100.16						☒ 2000 ☐	5.71	
20	-030		100.12						☒ 2000 ☐	5.49	
	-031		100.07						☒ 2000 ☐	5.46	
									☐ 2000 ☐		
									☐ 2000 ☐		
									☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

pH Meter ID: OS 013869 VV 4-4-17 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	4-4-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	5.02/4.99	4-4-17
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	EE: 400126-6308	4.5.17 VV
acidified to pH <2 with 1 mL HNO3	20170111988-BDH	
pH paper strips, lot#	10BDH1061	

TC
TC
SP
SP

VV 4-4-17
Extraction Chemist Date

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246459 Analysis : ICP
Started By : VV Prep Date : 10-APR-2017 00:15 Finished By : VV
Method : SPLP Units : mL
Spike #1 ID : S29983 Spike #2 ID : S29984 Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287252-032		SPLP Leachate	50	50	1	1.0						6010	
287252-033		SPLP Leachate	50	50	1	1.0						6010	
287252-034		SPLP Leachate	50	50	1	1.0						6010	
287252-035		SPLP Leachate	50	50	1	1.0						6010	
287252-036		SPLP Leachate	50	50	1	1.0						6010	
287252-037		SPLP Leachate	50	50	1	1.0						6010	
287252-038		SPLP Leachate	50	50	1	1.0						6010	
287252-039		SPLP Leachate	50	50	1	1.0						6010	
287252-040		SPLP Leachate	50	50	1	1.0						6010	
287252-041		SPLP Leachate	50	50	1	1.0						6010	
287252-042		SPLP Leachate	50	50	1	1.0						6010	
287252-043		SPLP Leachate	50	50	1	1.0						6010	
287252-044		SPLP Leachate	50	50	1	1.0						6010	
287252-045		SPLP Leachate	50	50	1	1.0						6010	
QC880674	BLANK	SPLP Leachate	50	50	1	1.0							
QC880675	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880676	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880677	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880678	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC880679	SER	SPLP Leachate	50	50	1	1.0							
QC880680	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: TLO Date: 04/11/17 Reviewer: PRW Date: 04/11/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 246459
Date Digested: 4-10-16
Digested by: VV
Matrix: ☐ TCLP Extract ☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
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	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC# 880674	☒ 50 ☐	☒ 50 ☐	ND	
*	BS 880675	☒ 50 ☐	☒ 50 ☐		
*	BSD 880676	☒ 50 ☐	☒ 50 ☐		
*	287252-032 MS	☒ 50 ☐	☒ 50 ☐		
5 *	- 032 MSD	☒ 50 ☐	☒ 50 ☐		
	- 032	☒ 50 ☐	☒ 50 ☐		
	- 033	☒ 50 ☐	☒ 50 ☐		
	- 034	☒ 50 ☐	☒ 50 ☐		
	- 035	☒ 50 ☐	☒ 50 ☐		
10	- 036	☒ 50 ☐	☒ 50 ☐		
	- 037	☒ 50 ☐	☒ 50 ☐		
	- 038	☒ 50 ☐	☒ 50 ☐		
	- 039	☒ 50 ☐	☒ 50 ☐		
	- 040	☒ 50 ☐	☒ 50 ☐		
15	- 041	☒ 50 ☐	☒ 50 ☐		
	- 042	☒ 50 ☐	☒ 50 ☐		
	- 043	☒ 50 ☐	☒ 50 ☐		
	- 044	☒ 50 ☐	☒ 50 ☐		
	- 045	☒ 50 ☐	☒ 50 ☐		
20		☐ 50 ☐	☐ 50 ☐		
		☐ 50 ☐	☐ 50 ☐		
		☐ 50 ☐	☐ 50 ☐		
		☐ 50 ☐	☐ 50 ☐		
		☐ 50 ☐	☐ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	279788-2005		VV 4-10-17
Digestion Block ID/ Probe Location	TETON	48	
Thermometer ID/ Digestion Temperature (°C)	SN M14581		
0.5 mL of spike solution (Std1) was added to all spikes	S29983		
0.5 mL of spike solution (Std1) was added to all spikes	S29984		
0.5 mL of spike solution (Std3) was added to all spikes	S32778		
Digestion started at (time)	~~00:15~~ VV 4-10-17 00:15		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170119988 - BDH		
1:1 HCl reagent ID	162118-041017		
Digestion ended at (time)	07:35		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	JOAN		

Pipettes

Vol.(mL)	ID
0.5	N271508

VV 4-10-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: ~~246263~~ VV4417 246319

Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP

Rotator #'s: 1/4

Date/ Time ON: 4-5-17 08:30

Temp (°C) ON: 22°C

Date/ Time OFF: 4-6-17 02:30

Temp (°C) ON: 21°C - 23°C

Page: 45 **BK 3994**

Thermometer ID: 11755122

Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK#880139	BC	Ø	Ø	Ø	Ø	Ø	2	☑2000 ☐___	5.26	
287252-032	A	100.13	NO	NO	N/A	N/A		☑2000 ☐___	5.69	
-033		100.21						☑2000 ☐___	5.65	
-034		100.23						☑2000 ☐___	5.73	
-035		100.08						☑2000 ☐___	5.78	
-036		100.01						☑2000 ☐___	5.82	
-037		100.04						☑2000 ☐___	5.90	
-038		100.25						☑2000 ☐___	5.72	
-039		100.05						☑2000 ☐___	5.87	
-040		100.15						☑2000 ☐___	5.94	
-041		100.13						☑2000 ☐___	6.02	
-042		100.15						☑2000 ☐___	5.94	
-043		100.01						☑2000 ☐___	6.09	
-044		100.14						☑2000 ☐___	6.01	
-045	↓	100.15	↓	↓	↓	↓	↓	☑2000 ☐___	5.77	
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		
								☐ 2000 ☐___		

4-10-17 VV

Balance ID: B-11 calibration has been checked? ☑ Yes ☐ No

pH Meter ID: 013869 has been calibrated? ☑ Yes ☐ No

☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#

added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID

TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)

TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)

SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date

SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date

Hot Plate Thermometer (Temperature, Serial #)

filtered thru TCLP filter paper, lot#

acidified to pH <2 with 1 mL HNO3

pH paper strips, lot#

Mfg & Lot # / LIMS #	Date/ Initials
NA	4-5-17 VV
— —	
5.02/5.00 4-5-17	
N/A °C ID:	
EE-400126-6308	VV 4-6-17
20170119 88-BDH	
10BDH1061	

M. M. 4-5-17

Extraction Chemist Date

Reviewed Online / See LIMS

Laboratory Job Number 287252

ANALYTICAL REPORT

Wet Chemistry

Matrix: Soil

Percent Moisture Summary Report

Batch: 246257
Date: 04/04/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287252-001	11.3004	17.0609	14.6358	58	42
287252-002	11.3551	17.9718	15.4132	61	39
287252-003	11.3114	16.7800	15.0203	68	32
287252-004	11.0503	17.2492	15.4129	70	30
287252-005	11.1940	17.5108	15.0595	61	39
287252-006	11.0658	16.4013	14.7254	69	31
287252-007	11.1443	16.9138	14.7290	62	38
287252-008	11.2700	16.9148	14.9873	66	34
287252-009	10.8906	16.7794	14.3439	59	41
287252-010	11.3478	17.6737	15.5393	66	34
287252-011	11.3063	16.4575	14.4886	62	38
287252-012	11.2606	18.0651	15.2598	59	41
287252-013	11.3141	17.4094	15.2313	64	36
287252-014	11.3565	19.8174	17.4416	72	28
287252-015	11.0124	16.4303	14.4624	64	36
287252-016	10.8538	17.9044	14.9895	59	41
287252-017	11.6186	17.5526	15.4457	64	36
287252-018	11.2160	16.9745	15.1991	69	31
287252-019	11.2793	17.9530	15.4363	62	38
287252-020	11.0818	18.2645	16.0317	69	31
QC879893	11.0256	16.6217	14.2712	58	42
of 287252-001			RPD:	0.2%	0.2%
QC879894	11.3024	17.4217	15.2102	64	36
of 287252-007			RPD:	2.7%	4.7%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246257
Date: 4-4-17

Page: **25**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	6	11.1913	Ø	11.1858	
287252-001	88	11.3004	17.0609	14.0358	
SOUP -001	34	11.0256	16.6217	14.2712	QC 879893
-002	92	11.3551	17.9718	15.4132	
-003	95	11.3114	16.7800	15.0203	
-004	62	11.0503	17.2492	15.4129	
-005	85	11.1940	17.5108	15.0595	
-006	46	11.0658	16.4013	14.7254	
-007	1	11.1443	16.9138	14.7290	
SOUP -007	25	11.3024	17.4217	15.2102	QC 879894
-008	58	11.2700	16.9148	14.9873	
-009	72	10.8906	16.7794	14.3439	
-010	39	11.3478	17.6737	15.5393	-010
-011	26	11.3063	16.4575	14.4886	
-012	89	11.2606	18.0651	15.2598	
-013	57	11.3141	17.4094	15.2313	
-014	56	11.3565	19.8174	17.4416	
-015	23	11.0124	16.4303	14.4624	
-016	76	10.8538	17.9044	~~14.99~~ MBH 4-4-17	weight = 14.9895
-017	15	11.6186	17.5526	15.4457	
-018	67	11.2160	16.9745	15.1991	
-019	68	11.2793	17.9530	15.4363	
-020	24	11.0818	18.2645	16.0317	

	In	Out	In-2	Out-2
Date:	~~MN~~ 4-4-17	4-4-17		
Time:	0240	16:40		
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:		MBH	MBH 4-4-17	

MN 4-4-17
Analyst Initials / Date

Reviewed Online / See LIMS

PROJECT AE163 METTLER (BALANCE ID# B-3) Notebook No. BK2394 77

Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	///	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	MBH	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	~~0.1997~~ MBH 3-23-17 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417
3-28-17	MN	0.2000	100.0001	✓	40417
3-29-17	MN	0.2000	100.0004	✓	40417
3-30-17	MN	0.2000	100.0002	✓	40417
3-31-17	MBH	0.1999	100.0011	✓	40417
4-4-17	MN	0.2001	100.0005	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 246259
Date: 04/04/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287252-041	11.1214	16.3354	14.4584	64	36
287252-042	11.6375	17.6180	15.6562	67	33
287252-043	11.2917	17.5478	15.2868	64	36
287252-044	11.3623	17.9324	15.8785	69	31
287252-045	11.3368	16.8217	14.9335	66	34
QC879896	10.8861	17.2501	14.9433	64	36
of 287252-045			RPD:	2.8%	5.2%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246259
Date: 4-4-17

Page: **27**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	22	11.2587	Ø	11.2515	
207252-041	78	11.1214	16.3354	14.4584	
-042	66	11.6375	17.6180	15.6562	
-043	9	11.2917	17.5478	15.2868	
-044	5	11.3623	17.9324	15.8785	
-045	93	11.3368	16.8217	14.9335	
SQUP ↓ -045	33	10.8861	17.2501	14.9433	

	In	Out	In-2	Out-2
Date:	4-4-17	4-4-17		
Time:	0400	17:00		
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:	MV	MBY		

4-4-17 MBY

MV 4-4-17
Analyst Initials / Date

Reviewed Online / See LIMS

PROJECT AE163 METTLER (BALANCE ID# B-3) Notebook No. BK2394 77

Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET #
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	///	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	MBH	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	~~0.1997~~ MBH 3-23-17 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417
3-28-17	MN	0.2000	100.0001	✓	40417
3-29-17	MN	0.2000	100.0004	✓	40417
3-30-17	MN	0.2000	100.0002	✓	40417
3-31-17	MBH	0.1999	100.0011	✓	40417
4-4-17	MN	0.2001	100.0005	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 246258
Date: 04/04/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287252-021	10.9106	16.9513	14.7852	64	36
287252-022	11.3232	18.0813	15.6568	64	36
287252-023	11.3610	16.8303	14.9406	65	35
287252-024	11.3254	17.4609	15.0273	60	40
287252-025	11.0156	16.1443	14.5076	68	32
287252-026	11.3673	17.2482	15.5395	71	29
287252-027	11.3624	16.6220	14.7341	64	36
287252-028	11.2071	18.3823	16.1368	69	31
287252-029	11.0482	16.8017	14.7956	65	35
287252-030	11.2469	17.6993	15.5199	66	34
287252-031	11.3564	16.8785	14.3926	55	45
287252-032	10.8747	17.0524	14.5688	60	40
287252-033	11.3636	19.1564	16.9192	71	29
287252-034	11.2742	17.6385	15.3837	65	35
287252-035	11.3477	17.0001	15.1022	66	34
287252-036	11.4252	18.9997	16.5954	68	32
287252-037	11.0548	17.5637	15.2471	64	36
287252-038	11.0539	16.2804	13.9394	55	45
287252-039	11.1399	17.2745	15.1509	65	35
287252-040	11.4077	17.3314	15.3109	66	34
QC879895	11.2120	18.3089	16.1843	70	30
of 287252-028			RPD:	2.0%	4.4%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246258
Date: 4-4-17

Page: **26**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	18	11.2040	Ø	11.1981	
287252-021	21	10.9906	16.9513	14.7852	
-022	35	11.3232	18.0813	15.6568	
-023	86	11.3610	16.8303	14.9406	
-024	82	11.3254	17.4609	15.0273	
-025	73	11.0156	16.1443	14.5076	
-026	71	11.3673	17.2482	15.5395	
-027	37	11.3624	16.6220	14.7341	
-028	75	11.2071	18.3823	16.1368	
-029	64	11.0482	16.8017	14.7956	
-030	83	11.2469	17.6993	15.5199	
-031	50	11.3564	16.8785	14.3926	
-032	63	10.8747	17.0524	14.5088	
-033	94	11.3636	19.1564	16.9192	
-034	27	11.2742	17.6385	15.3837	
-035	45	11.3477	17.0001	15.1022	
-036	11	11.4252	18.9997	16.5954	
-037	80	11.0548	17.5637	15.2471	
-038	38	11.0539	16.2804	13.9394	
-039	47	11.1399	17.2745	15.1509	
-040	29	11.4077	17.3314	15.3109	
SDUP ↓ -028	69	11.2120	18.3089	16.1843	

	In	Out	In-2	Out-2
Date:	4-4-17	4-4-17		
Time:	0330	16:50		
Min/Max Range (°C)	104	104	MBL 4-4-17	
Thermometer ID:	P49096	P49096		
Weighed by:	MV	MBL		

MV 4-4-17
Analyst Initials / Date

Reviewed Online / See LIMS

PROJECT AE163 METTLER (BALANCE ID# B-3) Notebook No. BK2394 77

Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
2-15-17	MN	0.2000	100.0000	✓	40417
2-16-17	MN	0.2001	100.0005	✓	40417
2-18-17	MN	0.2000	100.0001	✓	40417
2-21-17	MN	0.2001	99.9999	✓	40417
2-22-17	MN	0.2000	100.0002	✓	40417
2-23-17	MN	0.2000	100.0001	✓	40417
2-24-17	MN	0.2000	100.0001	✓	40417
2-25-17	MN	0.2001	100.0002	✓	40417
2-26-17	MN	0.2001	100.0001	✓	40417
2-27-17	VV	0.1999	99.9997	✓	40417
2-28-17	MN	0.2000	99.9999	✓	40417
3-1-17	MN	0.2000	100.0001	✓	40417
3-2-17	MN	0.2001	100.0001	✓	40417
3-3-17	MN	0.2001	100.0001	✓	40417
3-4-17	MN	0.2000	100.0001	✓	40417
3-8-17	MN	0.2001	100.0000	✓	40417
3-9-17	MBH	0.2000	100.0000	✓	40417
3-10-17	MBH	0.2000	100.0002	✓	40417
3-11-17	MBH	0.2001	100.0000	✓	40417
3-14-17	MN	0.2002	100.0009	✓	40417
3-16-17	MN	0.2001	100.0002	✓	40417
3/17/17	///	0.2001	100.0009	✓	40417
3-18-17	MBH	0.2000	100.0001	✓	40417
3-20-17	MN	0.1999	100.0000	✓	40417
3-21-17	MBH	0.2000	100.0003	✓	40417
3-22-17	MN	0.2001	100.0003	✓	40417
3-23-17	MBH	MBH 3-23-17 ~~0.1997~~ 0.1999	100.0004	✓	40417
3-24-2017	MBH	0.1999	99.9995	✓	40417
3-25-2017	MBH	0.2000	99.9996	✓	40417
3-28-17	MN	0.2000	100.0001	✓	40417
3-29-17	MN	0.2000	100.0004	✓	40417
3-30-17	MN	0.2000	100.0002	✓	40417
3-31-17	MBH	0.1999	100.0011	✓	40417
4-4-17	MN	0.2001	100.0005	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 287362
ANALYTICAL REPORT

Weston Solutions
1340 Treat Blvd
Walnut Creek, CA 94597

Project : 15048.001.003.0006.1
Location : Camp Bonneville Military Reservation
Level : III

Sample ID	Lab ID	Sample ID	Lab ID
21-SS118	287362-001	21-SS138	287362-024
21-SS117	287362-002	21-SS139	287362-025
21-SS116	287362-003	21-SS144	287362-026
21-SS115	287362-004	21-SS145	287362-027
21-SS114	287362-005	21-SS146	287362-028
21-SS120	287362-006	21-SS147	287362-029
21-SS121	287362-007	21-SS148	287362-030
21-SS122	287362-008	21-SS149	287362-031
21-SS123	287362-009	21-SS150	287362-032
21-SS124	287362-010	21-SS151	287362-033
21-SS125	287362-011	21-SS143	287362-034
21-SS126	287362-012	21-SS142	287362-035
21-SS131	287362-013	21-SS141	287362-036
21-SS130	287362-014	21-SS140	287362-037
21-SS129	287362-015	21-SS156	287362-038
21-SS128	287362-016	21-SS157	287362-039
21-SS127	287362-017	21-SS158	287362-040
21-SS132	287362-018	21-SS159	287362-041
21-SS133	287362-019	21-SS160	287362-042
21-SS134	287362-020	21-SS161	287362-043
21-SS135	287362-021	21-SS162	287362-044
21-SS136	287362-022	21-SS163	287362-045
21-SS137	287362-023	21-SS154	287362-046

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

Signature: Will Rice Date: 05/09/2017

Will Rice
Project Manager
will.rice@ctberk.com
(510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**287362**
Client:	**Weston Solutions**
Project:	**15048.001.003.0006.1**
Location:	**Camp Bonneville Military Reservation**
Request Date:	**03/24/17**
Samples Received:	**03/24/17**

This data package contains sample and QC results for forty six soil samples, requested for the above referenced project on 03/24/17. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C) Soil:

Low recoveries were observed for lead in the MS/MSD of 21-SS115 (lab # 287362-004); the BS/BSD were within limits, and the associated RPD was within limits.

High % difference was observed for lead in the serial dilution of 21-SS115 (lab # 287362-004).

No other analytical problems were encountered.

Metals (EPA 6010C) SPLP Leachate:

No analytical problems were encountered.

Moisture (ASTM D2216/CLP):

No analytical problems were encountered.

Chain of Custody

287362

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 3
Sampler's *(Signature)*			Page 1 of 4

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
1	21-SS118	3/20/17	1520	X		Soil	1	X	X							
2	21-SS117	3/20/17	1535	X		Soil	1	X	X							
3	21-SS116	3/20/17	1550	X		Soil	1	X	X							
4	21-SS115	3/20/17	1610	X		Soil	2	X	X							MS/MSD
5	21-SS114	3/20/17	1630	X		Soil	1	X	X							
6	21-SS120	3/20/17	1700	X		Soil	1	X	X							
7	21-SS121	3/20/17	1715	X		Soil	1	X	X							
8	21-SS122	3/21/17	1515	X		Soil	1	X	X							
9	21-SS123	3/21/17	1525	X		Soil	1	X	X							
10	21-SS124	3/21/17	1540	X		Soil	1	X	X							
11	21-SS125	3/21/17	1555	X		Soil	1	X	X							
12	21-SS126	3/21/17	1615	X		Soil	1	X	X							
13	21-SS131	3/21/17	1630	X		Soil	1	X	X							

Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:
Jeremy Haney, Weston Solutions	3/23/2017 1500	FeEx Tracking #: 7787 2901 1208 (Master Tracking: 7787 2901 1208)	3/23/2017 1500
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 3/24/17 12:40
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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287362

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10					Project Name: Camp Bonneville Military Reservation		Request for Analysis										Chain of Custody No.: 3	
Sampler's *(Signature)*																	Page 2 of 4	
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements	
14	21-SS130	3/21/17	1645	X		Soil	1	X	X									
15	21-SS129	3/21/17	1700	X		Soil	1	X	X									
16	21-SS128	3/22/17	845	X		Soil	1	X	X									
17	21-SS127	3/22/17	900	X		Soil	1	X	X									
18	21-SS132	3/22/17	915	X		Soil	1	X	X									
19	21-SS133	3/22/17	930	X		Soil	1	X	X									
20	21-SS134	3/22/17	945	X		Soil	1	X	X									
21	21-SS135	3/22/17	1000	X		Soil	2	X	X								MS/MSD	
22	21-SS136	3/22/17	1020	X		Soil	1	X	X									

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/23/2017 1500	Received by: (Signature and affiliation) FeEx Tracking #: 7787 2901 1208 (Master Tracking: 7787 2901 1208)	Date and Time: 3/23/2017 1500
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation) 3/24/17 @ 12:50	Date and Time:
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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287362

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation															Chain of Custody No.: 3
Sampler's *(Signature)*						Request for Analysis										Page 3 of 4
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
23	21-SS137	3/22/17	1040	X		Soil	1	X	X							
24	21-SS138	3/22/17	1100	X		Soil	1	X	X							
25	21-SS139	3/22/17	1120	X		Soil	1	X	X							
26	21-SS144	3/22/17	1155	X		Soil	1	X	X							
27	21-SS145	3/22/17	1210	X		Soil	1	X	X							
28	21-SS146	3/22/17	1225	X		Soil	1	X	X							
29	21-SS147	3/22/17	1310	X		Soil	1	X	X							
30	21-SS148	3/22/17	1325	X		Soil	1	X	X							
31	21-SS149	3/22/17	1340	X		Soil	1	X	X							
32	21-SS150	3/22/17	1400	X		Soil	1	X	X							
33	21-SS151	3/22/17	1420	X		Soil	1	X	X							
34	21-SS143	3/22/17	1440	X		Soil	1	X	X							
35	21-SS142	3/22/17	1500	X		Soil	1	X	X							
Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions						Date and Time: 3/23/2017 1500	Received by: (Signature and affiliation) FeEx Tracking #: 7787 2901 1344 (Master Tracking: 7787 2901 1208)									Date and Time: 3/23/2017 1500
Reliquished by: *(Signature and affiliation)*						Date and Time:	Received by: (Signature and affiliation)									Date and Time: 03/24/17 12:50
Reliquished by: *(Signature and affiliation)*						Date and Time:	Received by: (Signature and affiliation)									Date and Time:
P. O. Number: **0093861** Data package: **Level III** Turnaround time: **10 day**																For Laboratory Use Only

287362

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 3
Sampler's *(Signature)*			Page 4 of 4

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
36	21-SS141	3/22/17	1520	X		Soil	1	X	X								
37	21-SS140	3/22/17	1540	X		Soil	1	X	X								
38	21-SS156	3/22/17	1610	X		Soil	1	X	X								
39	21-SS157	3/22/17	1625	X		Soil	1	X	X								
40	21-SS158	3/22/17	1640	X		Soil	1	X	X								
41	21-SS159	3/22/17	1700	X		Soil	1	X	X								
42	21-SS160	3/23/17	845	X		Soil	1	X	X								
43	21-SS161	3/23/17	900	X		Soil	1	X	X								
44	21-SS162	3/23/17	915	X		Soil	1	X	X								
45	21-SS163	3/23/17	930	X		Soil	1	X	X								
46	21-SS154	3/23/17	1010	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/23/2017 1500	Received by: (Signature and affiliation) FeEx Tracking #: 7787 2901 1344 (Master Tracking: 7787 2901 1208)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)

Date and Time: 3/23/2017 1500

Date and Time: 3/24/2017 12:50

Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 287362 Date Received 03/24/17 Number of coolers 2
Client WESTON Project CAMP BONNEVILLE

Date Opened 03/24/17 By (print) KRS (sign) [signature]
Date Logged in 3/26 By (print) DTN (sign) [signature]
Date Labeled ↓ By (print) ↓ (sign) ↓

1. Did cooler come with a shipping slip (airbill, etc) FEDEX (YES) NO
   Shipping info 7797 2907 1208
2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
   How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO (N/A)
3. Were custody papers dry and intact when received? _____ (YES) NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ (YES) NO
5. Is the project identifiable from custody papers? (If so fill out top of form) (YES) NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ ~~Cloth material~~ ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 4.1, 3.2

☐ Temperature blank(s) included? ☐ Thermometer# _____ ☒ IR Gun# B

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES (NO)
   If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ (YES) NO
10. Are there any missing / extra samples? _____ YES (NO)
11. Are samples in the appropriate containers for indicated tests? _____ (YES) NO
12. Are sample labels present, in good condition and complete? _____ (YES) NO
13. Do the sample labels agree with custody papers? _____ (YES) NO
14. Was sufficient amount of sample sent for tests requested? _____ (YES) NO
15. Are the samples appropriately preserved? _____ YES NO (N/A)
16. Did you check preservatives for all bottles for each sample? _____ YES NO (N/A)
17. Did you document your preservative check? (pH strip lot# _____) YES NO (N/A)
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO (N/A)
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO (N/A)
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO (N/A)
21. Was the client contacted concerning this sample delivery? _____ YES (NO)
   If YES, Who was called? _____ By _____ Date: _____

COMMENTS

_____
_____
_____
_____
_____
_____

Curtis & Tompkins, Ltd.

Detections Summary for 287362

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

Client : Weston Solutions
Project : 15048.001.003.0006.1
Location : Camp Bonneville Military Reservation

Client Sample ID : 21-SS118 Laboratory Sample ID : 287362-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	570		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS117 Laboratory Sample ID : 287362-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	330		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS116 Laboratory Sample ID : 287362-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	380		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS115 Laboratory Sample ID : 287362-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	160		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS114 Laboratory Sample ID : 287362-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	140		0.93	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS120 Laboratory Sample ID : 287362-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS121 Laboratory Sample ID : 287362-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	34		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS122 Laboratory Sample ID : 287362-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	32		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS123 Laboratory Sample ID : 287362-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	28		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS124 Laboratory Sample ID : 287362-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	27		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS125 Laboratory Sample ID : 287362-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	18		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS126 Laboratory Sample ID : 287362-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	35		0.84	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS131 Laboratory Sample ID : 287362-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	430		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS130 Laboratory Sample ID : 287362-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	400		0.66	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS129 Laboratory Sample ID : 287362-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	84		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS128 Laboratory Sample ID : 287362-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	560		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS127 Laboratory Sample ID : 287362-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	840		0.90	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS132 Laboratory Sample ID : 287362-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	140		0.70	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS133 Laboratory Sample ID : 287362-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	96		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS134 Laboratory Sample ID : 287362-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	34		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS135 Laboratory Sample ID : 287362-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	24		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS136 Laboratory Sample ID : 287362-022

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS137 Laboratory Sample ID : 287362-023

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS138 Laboratory Sample ID : 287362-024

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS139 Laboratory Sample ID : 287362-025

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	18		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS144 Laboratory Sample ID : 287362-026

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	220		0.67	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS145 Laboratory Sample ID : 287362-027

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	87		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS146 Laboratory Sample ID : 287362-028

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	44		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS147 Laboratory Sample ID : 287362-029

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS148 Laboratory Sample ID : 287362-030

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	23		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS149 Laboratory Sample ID : 287362-031

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	19		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS150 Laboratory Sample ID : 287362-032

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.82	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS151 Laboratory Sample ID : 287362-033

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	20		0.92	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS143 Laboratory Sample ID : 287362-034

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS142 Laboratory Sample ID : 287362-035

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	330		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS141 Laboratory Sample ID : 287362-036

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	32		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS140 Laboratory Sample ID : 287362-037

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	110		0.73	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS156 Laboratory Sample ID : 287362-038

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	76		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS157 Laboratory Sample ID : 287362-039

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	77		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS158 Laboratory Sample ID : 287362-040

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	28		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS159 Laboratory Sample ID : 287362-041

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	28		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS160 Laboratory Sample ID : 287362-042

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	27		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS161 Laboratory Sample ID : 287362-043

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	20		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS162 Laboratory Sample ID : 287362-044

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	23		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS163 Laboratory Sample ID : 287362-045

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	23		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS154 Laboratory Sample ID : 287362-046

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	520		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Laboratory Job Number 287362

ANALYTICAL REPORT

Metals

Matrix: Soil

Curtis & Tompkins, Ltd.

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Units:	mg/Kg	Chemist:	KER
Basis:	dry	Received:	03/24/17

Field ID	Type	Lab ID	Matrix	Result	RL	Moisture	Batch#	Sampled	Prepared	Analyzed
21-SS118	SAMPLE	287362-001	Soil	570	0.71	31%	246300	03/20/17	04/04/17	04/06/17
21-SS117	SAMPLE	287362-002	Soil	330	0.76	33%	246300	03/20/17	04/04/17	04/06/17
21-SS116	SAMPLE	287362-003	Soil	380	0.69	27%	246300	03/20/17	04/04/17	04/06/17
21-SS115	SAMPLE	287362-004	Soil	160	0.79	33%	246300	03/20/17	04/04/17	04/06/17
21-SS114	SAMPLE	287362-005	Soil	140	0.93	44%	246300	03/20/17	04/04/17	04/06/17
21-SS120	SAMPLE	287362-006	Soil	150	0.85	36%	246300	03/20/17	04/04/17	04/06/17
21-SS121	SAMPLE	287362-007	Soil	34	0.73	32%	246300	03/20/17	04/04/17	04/06/17
21-SS122	SAMPLE	287362-008	Soil	32	0.72	36%	246300	03/21/17	04/04/17	04/06/17
21-SS123	SAMPLE	287362-009	Soil	28	0.78	35%	246300	03/21/17	04/04/17	04/06/17
21-SS124	SAMPLE	287362-010	Soil	27	0.81	34%	246300	03/21/17	04/04/17	04/06/17
21-SS125	SAMPLE	287362-011	Soil	18	0.81	36%	246300	03/21/17	04/04/17	04/06/17
21-SS126	SAMPLE	287362-012	Soil	35	0.84	40%	246300	03/21/17	04/04/17	04/06/17
21-SS131	SAMPLE	287362-013	Soil	430	0.70	32%	246300	03/21/17	04/04/17	04/06/17
21-SS130	SAMPLE	287362-014	Soil	400	0.66	28%	246300	03/21/17	04/04/17	04/06/17
21-SS129	SAMPLE	287362-015	Soil	84	0.76	27%	246300	03/21/17	04/04/17	04/06/17
21-SS128	SAMPLE	287362-016	Soil	560	0.79	31%	246300	03/22/17	04/04/17	04/06/17
21-SS127	SAMPLE	287362-017	Soil	840	0.90	41%	246300	03/22/17	04/04/17	04/06/17
21-SS132	SAMPLE	287362-018	Soil	140	0.70	31%	246300	03/22/17	04/04/17	04/06/17
21-SS133	SAMPLE	287362-019	Soil	96	0.74	34%	246300	03/22/17	04/04/17	04/06/17
21-SS134	SAMPLE	287362-020	Soil	34	0.77	33%	246300	03/22/17	04/04/17	04/06/17
21-SS135	SAMPLE	287362-021	Soil	24	0.80	39%	246302	03/22/17	04/04/17	04/06/17
21-SS136	SAMPLE	287362-022	Soil	22	0.76	37%	246302	03/22/17	04/04/17	04/06/17
21-SS137	SAMPLE	287362-023	Soil	22	0.72	36%	246302	03/22/17	04/04/17	04/06/17
21-SS138	SAMPLE	287362-024	Soil	22	0.81	38%	246302	03/22/17	04/04/17	04/06/17
21-SS139	SAMPLE	287362-025	Soil	18	0.85	35%	246302	03/22/17	04/04/17	04/06/17
21-SS144	SAMPLE	287362-026	Soil	220	0.67	32%	246302	03/22/17	04/04/17	04/06/17
21-SS145	SAMPLE	287362-027	Soil	87	0.76	33%	246302	03/22/17	04/04/17	04/06/17
21-SS146	SAMPLE	287362-028	Soil	44	0.81	35%	246302	03/22/17	04/04/17	04/06/17
21-SS147	SAMPLE	287362-029	Soil	22	0.71	33%	246302	03/22/17	04/04/17	04/06/17
21-SS148	SAMPLE	287362-030	Soil	23	0.78	41%	246302	03/22/17	04/04/17	04/06/17
21-SS149	SAMPLE	287362-031	Soil	19	0.78	33%	246302	03/22/17	04/04/17	04/06/17
21-SS150	SAMPLE	287362-032	Soil	22	0.82	37%	246302	03/22/17	04/04/17	04/06/17
21-SS151	SAMPLE	287362-033	Soil	20	0.92	41%	246302	03/22/17	04/04/17	04/06/17
21-SS143	SAMPLE	287362-034	Soil	150	0.73	31%	246302	03/22/17	04/04/17	04/06/17
21-SS142	SAMPLE	287362-035	Soil	330	0.79	31%	246302	03/22/17	04/04/17	04/06/17
21-SS141	SAMPLE	287362-036	Soil	32	0.73	27%	246302	03/22/17	04/04/17	04/06/17
21-SS140	SAMPLE	287362-037	Soil	110	0.73	33%	246302	03/22/17	04/04/17	04/06/17
21-SS156	SAMPLE	287362-038	Soil	76	0.81	31%	246302	03/22/17	04/04/17	04/06/17
21-SS157	SAMPLE	287362-039	Soil	77	0.85	38%	246302	03/22/17	04/04/17	04/06/17
21-SS158	SAMPLE	287362-040	Soil	28	0.79	38%	246302	03/22/17	04/04/17	04/06/17
21-SS159	SAMPLE	287362-041	Soil	28	0.81	35%	246313	03/22/17	04/05/17	04/06/17
21-SS160	SAMPLE	287362-042	Soil	27	0.85	39%	246313	03/23/17	04/05/17	04/06/17
21-SS161	SAMPLE	287362-043	Soil	20	0.72	36%	246313	03/23/17	04/05/17	04/06/17
21-SS162	SAMPLE	287362-044	Soil	23	0.79	37%	246313	03/23/17	04/05/17	04/06/17
21-SS163	SAMPLE	287362-045	Soil	23	0.78	37%	246299	03/23/17	04/04/17	04/06/17
21-SS154	SAMPLE	287362-046	Soil	520	0.74	30%	246299	03/23/17	04/04/17	04/06/17
	BLANK	QC880057	Miscell.	ND	0.54		246299		04/04/17	04/05/17
	BLANK	QC880066	Soil	ND	0.47		246300		04/04/17	04/06/17
	BLANK	QC880079	Soil	ND	0.51		246302		04/04/17	04/06/17
	BLANK	QC880114	Soil	ND	0.53		246313		04/05/17	04/06/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Units:	mg/Kg	Chemist:	KER
Basis:	dry		

Field ID	Type	MSS Lab ID	Lab ID	Matrix	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim	Batch#	Sampled	Received	Prepared	Analyzed
	BS		QC880058	Miscell.		48.08	48.99	102	75-125				246299			04/04/17	04/05/17
	BSD		QC880059	Miscell.		46.30	46.49	100	75-125		1	35	246299			04/04/17	04/05/17
21-SS055	MS	287252-007	QC880060	Soil	87.06	83.14	154.8	82	75-125	38%			246299	03/16/17	03/23/17	04/04/17	04/06/17
21-SS055	MSD	287252-007	QC880061	Soil		81.46	151.2	79	75-125	38%	1	35	246299	03/16/17	03/23/17	04/04/17	04/06/17
	BS		QC880067	Soil		54.35	54.54	100	75-125				246300			04/04/17	04/06/17
	BSD		QC880068	Soil		52.63	54.20	103	75-125		3	35	246300			04/04/17	04/06/17
21-SS115	MS	287362-004	QC880069	Soil	159.4	73.16	212.8	73 *	75-125	33%			246300	03/20/17	03/24/17	04/04/17	04/06/17
21-SS115	MSD	287362-004	QC880070	Soil		71.76	179.1	27 *	75-125	33%	17	35	246300	03/20/17	03/24/17	04/04/17	04/06/17
	BS		QC880080	Soil		51.02	51.63	101	75-125				246302			04/04/17	04/06/17
	BSD		QC880081	Soil		51.55	52.51	102	75-125		1	35	246302			04/04/17	04/06/17
21-SS135	MS	287362-021	QC880082	Soil	23.99	75.20	86.25	83	75-125	39%			246302	03/22/17	03/24/17	04/04/17	04/06/17
21-SS135	MSD	287362-021	QC880083	Soil		81.97	99.57	92	75-125	39%	8	35	246302	03/22/17	03/24/17	04/04/17	04/06/17
	BS		QC880115	Soil		50.51	49.23	97	75-125				246313			04/05/17	04/06/17
	BSD		QC880116	Soil		50.00	49.56	99	75-125		2	35	246313			04/05/17	04/06/17
ZZZZZZZZZZ	MS	287548-001	QC880117	Soil	32.52	53.48	75.49	80	75-125	15%			246313	03/29/17	03/30/17	04/05/17	04/06/17
ZZZZZZZZZZ	MSD	287548-001	QC880120	Soil		63.25	96.16	101	75-125	15%	13	35	246313	03/29/17	03/30/17	04/05/17	04/06/17

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS055	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246299
MSS Lab ID:	287252-007	Chemist:	KER
Lab ID:	QC880062	Sampled:	03/16/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff Lim
87.06	0.8065	95.62	4.032	38%	10 10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS055	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246299
MSS Lab ID:	287252-007	Chemist:	KER
Lab ID:	QC880063	Sampled:	03/16/17
Matrix:	Soil	Received:	03/23/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
87.06	8.065	92.65	69 NM	75-125	38%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS115	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246300
MSS Lab ID:	287362-004	Chemist:	KER
Lab ID:	QC880071	Sampled:	03/20/17
Matrix:	Soil	Received:	03/24/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff		Lim
159.4	0.7939	190.2	3.970	33%	19	*	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS115	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246300
MSS Lab ID:	287362-004	Chemist:	KER
Lab ID:	QC880072	Sampled:	03/20/17
Matrix:	Soil	Received:	03/24/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
159.4	7.939	162.1	33 NM	75-125	33%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS135	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246302
MSS Lab ID:	287362-021	Chemist:	KER
Lab ID:	QC880084	Sampled:	03/22/17
Matrix:	Soil	Received:	03/24/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	MSS RL	Result	RL	Moisture	% Diff	Lim
23.99	0.7958	26.30	3.979	39%	10	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS135	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246302
MSS Lab ID:	287362-021	Chemist:	KER
Lab ID:	QC880085	Sampled:	03/22/17
Matrix:	Soil	Received:	03/24/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
23.99	7.958	31.51	94	75-125	39%

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246313
MSS Lab ID:	287548-001	Chemist:	KER
Lab ID:	QC880118	Sampled:	03/29/17
Matrix:	Soil	Received:	03/30/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
32.52	0.5942	34.91	2.971	15%	7	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	ZZZZZZZZZZ	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246313
MSS Lab ID:	287548-001	Chemist:	KER
Lab ID:	QC880119	Sampled:	03/29/17
Matrix:	Soil	Received:	03/30/17
Units:	mg/Kg	Analyzed:	04/06/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
32.52	5.942	37.74	88 NM	75-125	15%

NM= Not Meaningful: Sample concentration > 4X spike concentration

REPORTING SUMMARY FOR 287362 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287362-001	MET10	04/06/17 03:27	1.0	+	
287362-002	MET10	04/06/17 02:26	1.0	+	
287362-003	MET10	04/06/17 02:29	1.0	+	
287362-004	MET10	04/06/17 02:13	1.0	+	
287362-005	MET10	04/06/17 02:32	1.0	+	
287362-006	MET10	04/06/17 02:40	1.0	+	
287362-007	MET10	04/06/17 02:43	1.0	+	
287362-008	MET10	04/06/17 02:45	1.0	+	
287362-009	MET10	04/06/17 02:48	1.0	+	
287362-010	MET10	04/06/17 02:51	1.0	+	
287362-011	MET10	04/06/17 02:53	1.0	+	
287362-012	MET10	04/06/17 02:56	1.0	+	
287362-013	MET10	04/06/17 02:59	1.0	+	
287362-014	MET10	04/06/17 03:02	1.0	+	
287362-015	MET10	04/06/17 03:05	1.0	+	
287362-016	MET10	04/06/17 03:14	1.0	+	
287362-017	MET10	04/06/17 03:16	1.0	+	
287362-018	MET10	04/06/17 03:19	1.0	+	
287362-019	MET10	04/06/17 03:22	1.0	+	
287362-020	MET10	04/06/17 03:25	1.0	+	
287362-021	MET10	04/06/17 03:48	1.0	+	
287362-022	MET10	04/06/17 04:01	1.0	+	
287362-023	MET10	04/06/17 04:04	1.0	+	
287362-024	MET10	04/06/17 04:07	1.0	+	
287362-025	MET10	04/06/17 04:10	1.0	+	
287362-026	MET10	04/06/17 04:13	1.0	+	
287362-027	MET10	04/06/17 04:21	1.0	+	

REPORTING SUMMARY FOR 287362 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287362-028	MET10	04/06/17 04:24	1.0	+	
287362-029	MET10	04/06/17 04:27	1.0	+	
287362-030	MET10	04/06/17 04:30	1.0	+	
287362-031	MET10	04/06/17 04:33	1.0	+	
287362-032	MET10	04/06/17 04:35	1.0	+	
287362-033	MET10	04/06/17 04:38	1.0	+	
287362-034	MET10	04/06/17 04:41	1.0	+	
287362-035	MET10	04/06/17 04:43	1.0	+	
287362-036	MET10	04/06/17 04:46	1.0	+	
287362-037	MET10	04/06/17 04:55	1.0	+	
287362-038	MET10	04/06/17 04:58	1.0	+	
287362-039	MET10	04/06/17 05:01	1.0	+	
287362-040	MET10	04/06/17 05:03	1.0	+	
287362-041	MET10	04/06/17 05:37	1.0	+	
287362-042	MET10	04/06/17 05:40	1.0	+	
287362-043	MET10	04/06/17 05:42	1.0	+	
287362-044	MET10	04/06/17 05:45	1.0	+	
287362-045	MET10	04/06/17 15:04	1.0	+	
287362-046	MET10	04/06/17 15:07	1.0	+	
QC880057	MET10	04/05/17 11:21	1.0		
QC880057	MET10	04/05/17 13:26	1.0	+	
QC880058	MET10	04/05/17 11:24	1.0	+	
QC880058	MET10	04/05/17 13:30	1.0		
QC880059	MET10	04/05/17 11:27	1.0	+	
QC880059	MET10	04/05/17 13:32	1.0		
QC880060	MET10	04/06/17 14:32	1.0	+	
QC880060	MET10	04/08/17 02:39	1.0		
QC880061	MET10	04/06/17 14:35	1.0	+	
QC880061	MET10	04/08/17 02:41	1.0		

REPORTING SUMMARY FOR 287362 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC880062	MET10	04/06/17 14:38	5.0	+	
QC880062	MET10	04/07/17 16:37	500.0		
QC880063	MET10	04/06/17 14:40	1.0	+	
QC880063	MET10	04/07/17 16:41	100.0		
QC880066	MET10	04/06/17 01:58	1.0	+	
QC880067	MET10	04/06/17 02:08	1.0	+	
QC880068	MET10	04/06/17 02:10	1.0	+	
QC880069	MET10	04/06/17 02:15	1.0	+	
QC880070	MET10	04/06/17 02:18	1.0	+	
QC880071	MET10	04/06/17 02:21	5.0	+	
QC880072	MET10	04/06/17 02:24	1.0	+	
QC880079	MET10	04/06/17 03:33	1.0	+	
QC880080	MET10	04/06/17 03:37	1.0	+	
QC880081	MET10	04/06/17 03:39	1.0	+	
QC880082	MET10	04/06/17 03:50	1.0	+	
QC880083	MET10	04/06/17 03:53	1.0	+	
QC880084	MET10	04/06/17 03:56	5.0	+	
QC880085	MET10	04/06/17 03:59	1.0	+	
QC880114	MET10	04/06/17 05:09	1.0	+	
QC880115	MET10	04/06/17 05:13	1.0	+	
QC880116	MET10	04/06/17 05:15	1.0	+	
QC880117	MET10	04/06/17 05:20	1.0	+	
QC880118	MET10	04/06/17 05:29	5.0	+	
QC880119	MET10	04/06/17 05:31	1.0	+	
QC880120	MET10	04/06/17 05:34	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137365

Instrument : MET10 Begun : 04/05/17 09:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10_sn_306	ICALBLK				04/05/17 09:25	1.0		
002	met10 method	ICAL	L1			04/05/17 09:28	1.0	1	
003	met10 method	ICAL	L2			04/05/17 09:32	1.0	2	
004	met10_sn_306	ICAL	L3			04/05/17 09:37	1.0	3	
005	met10 method	ICAL	L4			04/05/17 09:39	1.0	4	
006	met10_sn_306	ICAL	L5			04/05/17 09:42	1.0	5	
007	met10_sn_306	ICV				04/05/17 09:45	1.0	6	
008	met10_sn_306	CRI				04/05/17 09:47	1.0	7	
009	met10_sn_306	ICB				04/05/17 09:54	1.0		
010	met10_sn_306	ICSA				04/05/17 09:57	1.0	8	10:AL=530000
011	met10_sn_306	ICSAB				04/05/17 10:10	1.0	9	5:AL=530000
012	met10_sn_306	BLANK	QC878810	Water	246001	04/05/17 10:19	1.0		
013	met10 method	BS	QC878811	Water	246001	04/05/17 10:22	1.0		
014	met10 method	BSD	QC878812	Water	246001	04/05/17 10:25	1.0		
015	met10 method	SAMPLE	287273-001	Water	246001	04/05/17 10:27	100.0		
016	met10 method	SAMPLE	287273-002	Water	246001	04/05/17 10:30	100.0		
017	met10 method	BLANK	QC879643	Soil	246199	04/05/17 10:34	1.0		
018	met10 method	SAMPLE	287524-001	Miscell.	246199	04/05/17 10:37	1.0		
019	met10 method	SAMPLE	287524-002	Miscell.	246199	04/05/17 10:39	1.0		
020	met10 method	BLANK	QC880088	Air	246304	04/05/17 10:42	1.0		
021	met10 method	BS	QC880089	Air	246304	04/05/17 10:45	1.0		
022	met10_sn_306	CCV				04/05/17 10:48	1.0	10	
023	met10_sn_306	CCB				04/05/17 11:03	1.0		
024	met10 method	BSD	QC880090	Air	246304	04/05/17 11:06	1.0		
025	met10 method	SAMPLE	287658-001	Air	246304	04/05/17 11:09	1.0		
026	met10 method	SAMPLE	287658-002	Air	246304	04/05/17 11:12	1.0		
027	met10 method	PREPBLK	QC880091	Air	246304	04/05/17 11:15	1.0		
028	met10 method	PREPBLK	QC880092	Air	246304	04/05/17 11:18	1.0		
029	met10 method	BLANK	QC880057	Miscell.	246299	04/05/17 11:21	1.0		
030	met10 method	BS	QC880058	Miscell.	246299	04/05/17 11:24	1.0		
031	met10 method	BSD	QC880059	Miscell.	246299	04/05/17 11:27	1.0		
032	met10 method	SAMPLE	287644-001	Soil	246299	04/05/17 11:29	1.0		5:FE=610000
033	met10 method	SAMPLE	287644-002	Soil	246299	04/05/17 11:32	1.0		5:FE=580000
034	met10 method	CCV				04/05/17 11:35	1.0	10	
035	met10 method	CCB				04/05/17 11:38	1.0		
036	met10 method	CCB				04/05/17 11:41	1.0		
037	met10 method	SAMPLE	287644-003	Soil	246299	04/05/17 11:44	1.0		3:FE=590000
038	met10 method	SAMPLE	287644-004	Soil	246299	04/05/17 11:47	1.0		4:FE=660000
039	met10 method	XCCV				04/05/17 11:50	1.0	10	
040	met10 method	CCV				04/05/17 11:53	1.0	10	
041	met10 method	CCB				04/05/17 11:56	1.0		

KER 04/05/17 : 039 was a misinject, CCV reran

KER 04/05/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 41.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087137365

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 09:28

#	Type	Sample ID	Y A	Y R
		ICAL STD	9269908	1082634
		LOWER LIMIT	2780972	324790
		UPPER LIMIT	11123889	1299161
009	ICB		9184137	1084790
010	ICSA		7394767	941448
011	ICSAB		7330224	951278
022	CCV		9011121	1061720
023	CCB		9082156	143117 *
029	BLANK	QC880057	9176290	1096742
030	BS	QC880058	8687712	1061555
031	BSD	QC880059	8652096	1086978
034	CCV		8693989	1065421
035	CCB		9136574	1074135

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287362 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087137365002
Units : ug/L

Date : 05-APR-2017 09:25
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087137365002	L1	05-APR-2017 09:28	S32578
L2	met10 method	1087137365003	L2	05-APR-2017 09:32	S32571
L3	met10_sn_306	1087137365004	L3	05-APR-2017 09:37	S32367
L4	met10 method	1087137365005	L4	05-APR-2017 09:39	S32368
L5	met10_sn_306	1087137365006	L5	05-APR-2017 09:42	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.2400	3.2080	3.1669	3.0014		LOR0	0.00000	0.33300		2.9041	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	**-25**	100.00	7	1000.0	5	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087137365002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287362 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087137365002 Cal Date : 05-APR-2017

ICV 1087137365007 (05-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5132	ug/L	3	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365008.1 File : met10_sn_306 Time : 05-APR-2017 09:47
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.002	ug/L	20	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9160716	-1.18
Yttrium	R	1082634	1076906	-0.53

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365009.1 File : met10_sn_306 Time : 05-APR-2017 09:54
Cal : 1087137365002 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9184137	-0.93
Yttrium	R	1082634	1084790	0.20

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365010.1 File : met10_sn_306 Time : 05-APR-2017 09:57
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-5.548]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18590	ug/L	93	
Copper	A	20000	21560	ug/L	108	
Manganese	A	20000	18160	ug/L	91	
Nickel	A	20000	16210	ug/L	81	
Titanium	A	20000	18420	ug/L	92	
Vanadium	A	20000	21260	ug/L	106	
Aluminum	R	500000	534400	ug/L	107	
Calcium	R	500000	517900	ug/L	104	
Iron	R	200000	200400	ug/L	100	
Magnesium	R	500000	437800	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	7394767	-20.23
Yttrium	R	1082634	941448	-13.04

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365011.1 File : met10_sn_306 Time : 05-APR-2017 10:10
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	960.0	ug/L	-4	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	7330224	-20.92
Yttrium	R	1082634	951278	-12.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365022.1 File : met10_sn_306 Time : 05-APR-2017 10:48
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.9041	2.9989	5000	4993	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9011121	-2.79
Yttrium	R	1082634	1061720	-1.93

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365023.1 File : met10_sn_306 Time : 05-APR-2017 11:03
Cal : 1087137365002 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9082156	-2.03
Yttrium	R	1082634	143117	**-86.78 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365034.1 File : met10 method Time : 05-APR-2017 11:35
Cal : 1087137365002 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.9041	2.9857	5000	4971	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	8693989	-6.21
Yttrium	R	1082634	1065421	-1.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137365035.1 File : met10 method Time : 05-APR-2017 11:38
Cal : 1087137365002 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9269908	9136574	-1.44
Yttrium	R	1082634	1074135	-0.79

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/05/17 12:22	1.0		
002	met10 method	ICAL	L1			04/05/17 12:25	1.0	1	
003	met10 method	ICAL	L2			04/05/17 12:28	1.0	2	
004	met10 method	ICAL	L3			04/05/17 12:30	1.0	3	
005	met10 method	ICAL	L4			04/05/17 12:33	1.0	4	
006	met10 method	ICAL	L5			04/05/17 12:35	1.0	5	
007	met10 method	ICV				04/05/17 12:38	1.0	6	
008	met10 method	CRI				04/05/17 12:42	1.0	7	
009	met10 method	ICB				04/05/17 12:45	1.0		
010	met10 method	XICB				04/05/17 12:53	1.0		
011	met10 method	ICSA				04/05/17 12:57	1.0	8	10:AL=540000
012	met10 method	ICSAB				04/05/17 13:12	1.0	9	5:AL=540000
013	met10 method	BLANK	QC880057	Miscell.	246299	04/05/17 13:26	1.0		
014	met10 method	BS	QC880058	Miscell.	246299	04/05/17 13:30	1.0		
015	met10 method	BSD	QC880059	Miscell.	246299	04/05/17 13:32	1.0		
016	met10 method	SAMPLE	287576-005	Soil	246299	04/05/17 13:35	1.0		5:FE=530000
017	met10 method	SAMPLE	287642-001	Miscell.	246299	04/05/17 13:38	1.0		4:CA=1100000
018	met10 method	SAMPLE	287273-001	Water	246001	04/05/17 13:40	100.0		
019	met10 method	SAMPLE	287273-002	Water	246001	04/05/17 13:43	100.0		
020	met10 method	BLANK	QC879913	Water	246266	04/05/17 13:45	1.0		
021	met10 method	BS	QC879914	Water	246266	04/05/17 13:48	1.0		
022	met10 method	BSD	QC879915	Water	246266	04/05/17 13:51	1.0		
023	met10 method	CCV				04/05/17 13:53	1.0	10	
024	met10 method	CCB				04/05/17 13:56	1.0		
025	met10 method	XCCB				04/05/17 13:59	1.0		
026	met10 method	MSS	287611-001	Water	246266	04/05/17 14:02	1.0		4:NA=3200000
027	met10 method	MS	QC879916	Water	246266	04/05/17 14:05	1.0		
028	met10 method	MSD	QC879917	Water	246266	04/05/17 14:08	1.0		
029	met10 method	X	RINSE			04/05/17 14:10	1.0		
030	met10 method	SAMPLE	287611-002	Water	246266	04/05/17 14:14	1.0		4:NA=3300000
031	met10 method	SAMPLE	287615-002	Water	246266	04/05/17 14:16	1.0		1:NA=170000
032	met10 method	BLANK	QC879632	Water	246197	04/05/17 14:19	1.0		
033	met10 method	BS	QC879633	Water	246197	04/05/17 14:22	1.0		
034	met10 method	BSD	QC879634	Water	246197	04/05/17 14:25	1.0		
035	met10 method	MSS	287558-001	Water	246197	04/05/17 14:27	1.0		
036	met10 method	CCV				04/05/17 14:29	1.0	10	
037	met10 method	CCB				04/05/17 14:32	1.0		
038	met10 method	CCB				04/05/17 14:35	1.0		
039	met10 method	MS	QC879635	Water	246197	04/05/17 14:38	1.0		
040	met10 method	MSD	QC879636	Water	246197	04/05/17 14:41	1.0		
041	met10 method	SAMPLE	287389-001	Water	246197	04/05/17 14:43	1.0		
042	met10 method	SAMPLE	287389-002	Water	246197	04/05/17 14:47	1.0		
043	met10 method	SAMPLE	287389-003	Water	246197	04/05/17 14:50	1.0		
044	met10 method	SAMPLE	287570-003	Water	246197	04/05/17 14:53	1.0		4:NA=4300000
045	met10 method	SAMPLE	287538-001	Filtrate	246296	04/05/17 14:56	1.0		2:CA=550000
046	met10 method	SAMPLE	287538-004	Filtrate	246296	04/05/17 14:59	100.0		
047	met10 method	BLANK	QC879923	Soil	246268	04/05/17 15:03	1.0		
048	met10 method	BS	QC879924	Soil	246268	04/05/17 15:06	1.0		
049	met10 method	CCV				04/05/17 15:08	1.0	10	
050	met10 method	CCB				04/05/17 15:11	1.0		
051	met10 method	CCB				04/05/17 15:14	1.0		
052	met10 method	BSD	QC879925	Soil	246268	04/05/17 15:17	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MSS	287252-001	Soil	246268	04/05/17 15:20	1.0		3:FE=410000
054	met10 method	MS	QC879926	Soil	246268	04/05/17 15:22	1.0		1:FE=490000
055	met10 method	MSD	QC879927	Soil	246268	04/05/17 15:25	1.0		1:FE=480000
056	met10 method	SAMPLE	287252-002	Soil	246268	04/05/17 15:28	1.0		3:FE=530000
057	met10 method	SAMPLE	287252-003	Soil	246268	04/05/17 15:31	1.0		4:FE=570000
058	met10 method	SAMPLE	287252-004	Soil	246268	04/05/17 15:34	1.0		4:FE=520000
059	met10 method	SAMPLE	287252-005	Soil	246268	04/05/17 15:36	1.0		4:FE=670000
060	met10 method	SAMPLE	287252-006	Soil	246268	04/05/17 15:39	1.0		4:FE=650000
061	met10 method	SAMPLE	287252-008	Soil	246268	04/05/17 15:42	1.0		4:FE=520000
062	met10 method	CCV				04/05/17 15:45	1.0	10	
063	met10 method	CCB				04/05/17 15:47	1.0		
064	met10 method	CCB				04/05/17 15:50	1.0		
065	met10 method	SAMPLE	287252-009	Soil	246268	04/05/17 15:53	1.0		2:FE=410000
066	met10 method	SAMPLE	287252-010	Soil	246268	04/05/17 15:56	1.0		4:FE=450000
067	met10 method	SAMPLE	287252-011	Soil	246268	04/05/17 15:59	1.0		4:FE=500000
068	met10 method	SAMPLE	287252-012	Soil	246268	04/05/17 16:01	1.0		3:FE=390000
069	met10 method	SAMPLE	287252-013	Soil	246268	04/05/17 16:04	1.0		4:FE=460000
070	met10 method	SAMPLE	287252-014	Soil	246268	04/05/17 16:07	1.0		4:FE=440000
071	met10 method	SAMPLE	287252-015	Soil	246268	04/05/17 16:09	1.0		4:FE=400000
072	met10 method	SAMPLE	287252-016	Soil	246268	04/05/17 16:12	1.0		3:FE=560000
073	met10 method	SAMPLE	287252-017	Soil	246268	04/05/17 16:15	1.0		5:FE=500000
074	met10 method	SAMPLE	287252-018	Soil	246268	04/05/17 16:18	1.0		4:FE=480000
075	met10 method	CCV				04/05/17 16:20	1.0	10	
076	met10 method	CCB				04/05/17 16:23	1.0		
077	met10 method	SAMPLE	287252-019	Soil	246268	04/05/17 16:26	1.0		4:AL=530000
078	met10 method	SAMPLE	287252-020	Soil	246268	04/05/17 16:29	1.0		4:FE=550000
079	met10 method	SAMPLE	287252-021	Soil	246268	04/05/17 16:31	1.0		4:FE=460000
080	met10 method	X	RINSE			04/05/17 16:34	1.0		
081	met10 method	MSS	287558-001	Water	246197	04/05/17 16:38	1.0		
082	met10 method	SER	QC879637	Water	246197	04/05/17 16:40	5.0		
083	met10 method	PDS	QC879638	Water	246197	04/05/17 16:42	1.0	11 12 13	
084	met10 method	SAMPLE	287642-001	Miscell.	246299	04/05/17 16:45	100.0		
085	met10 method	SAMPLE	287446-001	TCLP Leachate	246041	04/05/17 16:47	10.0		1:NA=140000
086	met10 method	SAMPLE	287446-002	TCLP Leachate	246041	04/05/17 16:51	10.0		1:NA=150000
087	met10 method	CCV				04/05/17 16:54	1.0	10	
088	met10 method	CCB				04/05/17 16:57	1.0		
089	met10 method	?SAMPLE	287446-003		246041	04/05/17 17:00	10.0		
090	met10 method	SAMPLE	287446-004	TCLP Leachate	246041	04/05/17 17:04	10.0		1:NA=130000
091	met10 method	BLANK	QC879941	Soil	246272	04/05/17 17:07	1.0		
092	met10 method	BS	QC879942	Soil	246272	04/05/17 17:11	1.0		
093	met10 method	BSD	QC879943	Soil	246272	04/05/17 17:13	1.0		
094	met10 method	MSS	287252-028	Soil	246272	04/05/17 17:15	1.0		5:FE=520000
095	met10 method	MS	QC879944	Soil	246272	04/05/17 17:18	1.0		5:AL=590000
096	met10 method	MSD	QC879945	Soil	246272	04/05/17 17:21	1.0		5:AL=530000
097	met10 method	PREPBLK	QC880025	Soil	246272	04/05/17 17:24	1.0		
098	met10 method	PREPBLK	QC880026	Soil	246272	04/05/17 17:27	1.0		
099	met10 method	CCV				04/05/17 17:31	1.0	10	
100	met10 method	CCB				04/05/17 17:33	1.0		
101	met10 method	SAMPLE	287252-022	Soil	246272	04/05/17 17:37	1.0		4:FE=480000
102	met10 method	SAMPLE	287252-023	Soil	246272	04/05/17 17:39	1.0		4:AL=610000
103	met10 method	SAMPLE	287252-024	Soil	246272	04/05/17 17:42	1.0		4:FE=470000
104	met10 method	SAMPLE	287252-025	Soil	246272	04/05/17 17:45	1.0		4:FE=530000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287252-026	Soil	246272	04/05/17 17:47	1.0		4:FE=510000
106	met10 method	SAMPLE	287252-027	Soil	246272	04/05/17 17:50	1.0		4:FE=510000
107	met10 method	SAMPLE	287252-029	Soil	246272	04/05/17 17:53	1.0		5:FE=430000
108	met10 method	SAMPLE	287252-030	Soil	246272	04/05/17 17:56	1.0		4:FE=390000
109	met10 method	SAMPLE	287252-031	Soil	246272	04/05/17 17:58	1.0		2:FE=520000
110	met10 method	SAMPLE	287252-032	Soil	246272	04/05/17 18:01	1.0		4:FE=450000
111	met10 method	CCV				04/05/17 18:04	1.0	10	
112	met10 method	XCCB				04/05/17 18:06	1.0		
113	met10 method	CCB				04/05/17 18:09	1.0		
114	met10 method	SAMPLE	287252-033	Soil	246272	04/05/17 18:12	1.0		5:FE=510000
115	met10 method	SAMPLE	287252-034	Soil	246272	04/05/17 18:15	1.0		5:FE=440000
116	met10 method	SAMPLE	287252-035	Soil	246272	04/05/17 18:18	1.0		5:AL=490000
117	met10 method	SAMPLE	287252-036	Soil	246272	04/05/17 18:20	1.0		4:FE=430000
118	met10 method	SAMPLE	287252-037	Soil	246272	04/05/17 18:23	1.0		4:FE=450000
119	met10 method	SAMPLE	287252-038	Soil	246272	04/05/17 18:26	1.0		4:FE=480000
120	met10 method	SAMPLE	287252-039	Soil	246272	04/05/17 18:29	1.0		4:FE=440000
121	met10 method	SAMPLE	287252-040	Soil	246272	04/05/17 18:31	1.0		4:FE=430000
122	met10 method	SAMPLE	287252-041	Soil	246272	04/05/17 18:34	1.0		4:FE=560000
123	met10 method	X	RINSE			04/05/17 18:36	1.0		
124	met10 method	CCV				04/05/17 18:40	1.0	10	
125	met10 method	XCCB				04/05/17 18:43	1.0		
126	met10 method	CCB				04/05/17 18:45	1.0		
127	met10 method	BLANK	QC880197	Soil	246335	04/05/17 18:49	1.0		
128	met10 method	BS	QC880198	Soil	246335	04/05/17 18:52	1.0		
129	met10 method	BSD	QC880199	Soil	246335	04/05/17 18:54	1.0		
130	met10 method	MSS	287585-002	Soil	246335	04/05/17 18:57	1.0		4:FE=550000
131	met10 method	MS	QC880200	Soil	246335	04/05/17 19:00	1.0		
132	met10 method	MSD	QC880201	Soil	246335	04/05/17 19:03	1.0		
133	met10 method	SAMPLE	287585-006	Soil	246335	04/05/17 19:06	1.0		4:FE=430000
134	met10 method	SAMPLE	287585-008	Soil	246335	04/05/17 19:09	1.0		3:FE=420000
135	met10 method	SAMPLE	287585-010	Soil	246335	04/05/17 19:11	1.0		3:FE=410000
136	met10 method	SAMPLE	287585-012	Soil	246335	04/05/17 19:14	1.0		2:FE=290000
137	met10 method	CCV				04/05/17 19:17	1.0	10	
138	met10 method	XCCB				04/05/17 19:19	1.0		
139	met10 method	CCB				04/05/17 19:22	1.0		
140	met10 method	SAMPLE	287585-014	Soil	246335	04/05/17 19:25	1.0		3:FE=340000
141	met10 method	SAMPLE	287591-001	Soil	246335	04/05/17 19:28	1.0		5:MG=690000
142	met10 method	SAMPLE	287591-002	Soil	246335	04/05/17 19:31	1.0		3:FE=370000
143	met10 method	SAMPLE	287591-004	Soil	246335	04/05/17 19:34	1.0		4:MG=940000
144	met10 method	SAMPLE	287591-005	Soil	246335	04/05/17 19:37	1.0		4:MG=620000
145	met10 method	SAMPLE	287591-006	Soil	246335	04/05/17 19:39	1.0		4:FE=530000
146	met10 method	SAMPLE	287591-007	Soil	246335	04/05/17 19:42	1.0		4:MG=1200000
147	met10 method	SAMPLE	287650-001	Miscell.	246335	04/05/17 19:45	1.0		8:AL=1700000
148	met10 method	SAMPLE	287650-002	Miscell.	246335	04/05/17 19:48	1.0		7:AL=1600000
149	met10 method	SAMPLE	287650-003	Miscell.	246335	04/05/17 20:29	1.0		4:FE=500000
150	met10 method	CCV				04/05/17 20:32	1.0	10	
151	met10 method	CCB				04/05/17 20:35	1.0		
152	met10 method	CCB				04/05/17 20:38	1.0		
153	met10 method	SAMPLE	287653-001	Miscell.	246335	04/05/17 20:41	1.0		4:AL=280000
154	met10 method	SAMPLE	287653-002	Miscell.	246335	04/05/17 20:44	1.0		1:K=180000
155	met10 method	X	RINSE			04/05/17 20:47	1.0		
156	met10 method	BLANK	QC880192	Soil	246334	04/05/17 20:50	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087137542

Instrument : MET10 Begun : 04/05/17 12:22
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	BS	QC880193	Soil	246334	04/05/17 20:53	1.0		
158	met10 method	BSD	QC880194	Soil	246334	04/05/17 20:56	1.0		
159	met10 method	MSS	287630-007	Soil	246334	04/05/17 20:58	1.0		4:CA=1000000
160	met10 method	MS	QC880195	Soil	246334	04/05/17 21:01	1.0		
161	met10 method	MSD	QC880196	Soil	246334	04/05/17 21:04	1.0		
162	met10 method	SAMPLE	287560-001	Soil	246334	04/05/17 21:08	1.0		8:CA=1700000
163	met10 method	CCV				04/05/17 21:10	1.0	10	
164	met10 method	CCB				04/05/17 21:13	1.0		
165	met10 method	CCB				04/05/17 21:16	1.0		

KER 04/05/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 28.

KER 04/05/17 : 010 and 025 were misinjects

MNA 04/05/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 29 through 100.

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 101 through 165.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087137542

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 12:25

#	Type	Sample ID	Y A	Y R
		ICAL STD	8890839	1088491
		LOWER LIMIT	2667252	326547
		UPPER LIMIT	10669007	1306189
009	ICB		8928553	1302486
011	ICSA		7116813	933411
012	ICSAB		7087780	947368
013	BLANK	QC880057	8777540	142835 *
014	BS	QC880058	8343518	1069376
015	BSD	QC880059	8304491	1085515
023	CCV		8276643	1053268
024	CCB		8895599	1073454
053	MSS	287252-001	7935739	1034891
056	SAMPLE	287252-002	7720302	993787
057	SAMPLE	287252-003	7655183	999496
058	SAMPLE	287252-004	7789918	1005897
059	SAMPLE	287252-005	7667029	997074
060	SAMPLE	287252-006	7588667	998716
061	SAMPLE	287252-008	7762010	984525
065	SAMPLE	287252-009	7978684	1018474
066	SAMPLE	287252-010	7910613	1008658
067	SAMPLE	287252-011	7836692	1001141
068	SAMPLE	287252-012	7938247	1020989
069	SAMPLE	287252-013	7832777	1008831
070	SAMPLE	287252-014	7934887	1011700
071	SAMPLE	287252-015	8104614	1027518
072	SAMPLE	287252-016	7963442	1013161
073	SAMPLE	287252-017	7777795	1004516
074	SAMPLE	287252-018	7799217	990524
077	SAMPLE	287252-019	7684575	996718
078	SAMPLE	287252-020	7681637	996377
079	SAMPLE	287252-021	7837007	1004806
094	MSS	287252-028	7833604	998460
101	SAMPLE	287252-022	7758605	987899
102	SAMPLE	287252-023	7671162	988353
103	SAMPLE	287252-024	7843182	992636
104	SAMPLE	287252-025	7713927	990116
105	SAMPLE	287252-026	7788541	1002987
106	SAMPLE	287252-027	7842837	1001968
107	SAMPLE	287252-029	7951187	1007846
108	SAMPLE	287252-030	8019652	1007255
109	SAMPLE	287252-031	8000836	1005340
110	SAMPLE	287252-032	8014469	1018709
114	SAMPLE	287252-033	7821398	1003999
115	SAMPLE	287252-034	7893629	999656
116	SAMPLE	287252-035	7909738	1017867
117	SAMPLE	287252-036	8304449	1052442
118	SAMPLE	287252-037	8078367	1022271
119	SAMPLE	287252-038	7962661	999426
120	SAMPLE	287252-039	7872918	993953
121	SAMPLE	287252-040	7890982	987860
122	SAMPLE	287252-041	7797216	988502

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087137542

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 12:25

#	Type	Sample ID	Y A	Y R
153	SAMPLE	287653-001	8093237	1018880
154	SAMPLE	287653-002	8286889	1015357

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287362 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087137542001
Units : ug/L

Date : 05-APR-2017 12:22
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087137542002	L1	05-APR-2017 12:25	S32578
L2	met10 method	1087137542003	L2	05-APR-2017 12:28	S32571
L3	met10 method	1087137542004	L3	05-APR-2017 12:30	S32367
L4	met10 method	1087137542005	L4	05-APR-2017 12:33	S32368
L5	met10 method	1087137542006	L5	05-APR-2017 12:35	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.2400	2.9650	2.8830	2.7430		LOR0	0.00000	0.36438		2.7077	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-18	100.00	8	1000.0	5	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087137542001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287362 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087137542001 Cal Date : 05-APR-2017

ICV 1087137542007 (05-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4986	ug/L	0	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542008.1 File : met10 method Time : 05-APR-2017 12:42
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.040	ug/L	1	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8772995	-1.33
Yttrium	R	1088491	1062271	-2.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542009.1 File : met10 method Time : 05-APR-2017 12:45
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8928553	0.42
Yttrium	R	1088491	1302486	19.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542011.1 File : met10 method Time : 05-APR-2017 12:57
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-7.403]	5.000	ug/L	!a-

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	17260	ug/L	86	
Copper	A	20000	21700	ug/L	108	
Manganese	A	20000	17830	ug/L	89	
Nickel	A	20000	16410	ug/L	82	
Titanium	A	20000	18180	ug/L	91	
Vanadium	A	20000	20950	ug/L	105	
Aluminum	R	500000	535200	ug/L	107	
Calcium	R	500000	491000	ug/L	98	
Iron	R	200000	195400	ug/L	98	
Magnesium	R	500000	437800	ug/L	88	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	7116813	-19.95
Yttrium	R	1088491	933411	-14.25

!=warning -=low bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542012.1 File : met10 method Time : 05-APR-2017 13:12
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	930.8	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	7087780	-20.28
Yttrium	R	1088491	947368	-12.97

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542023.1 File : met10 method Time : 05-APR-2017 13:53
Cal : 1087137542001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7077	2.7156	5000	4948	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8276643	-6.91
Yttrium	R	1088491	1053268	-3.24

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087137542024.1 File : met10 method Time : 05-APR-2017 13:56
Cal : 1087137542001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8890839	8895599	0.05
Yttrium	R	1088491	1073454	-1.38

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138133

Instrument : MET10 Begun : 04/05/17 22:13
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/05/17 22:13	1.0		
002	met10 method	ICAL	L1			04/05/17 22:17	1.0	1	
003	met10 method	ICAL	L2			04/05/17 22:20	1.0	2	
004	met10 method	ICAL	L3			04/05/17 22:22	1.0	3	
005	met10 method	ICAL	L4			04/05/17 22:25	1.0	4	
006	met10 method	ICAL	L5			04/05/17 22:27	1.0	5	
007	met10 method	XICV				04/05/17 22:30	1.0	6	
008	met10 method	ICV				04/05/17 22:34	1.0	6	1:SR=4400000
009	met10 method	XCRI				04/05/17 22:41	1.0	7	
010	met10 method	CRI				04/05/17 22:44	1.0	7	1:SR=43000
011	met10 method	ICB				04/05/17 22:48	1.0		
012	met10 method	ICSA				04/05/17 22:52	1.0	8	11:AL=550000
013	met10 method	ICSAB				04/05/17 22:56	1.0	9	6:SR=4700000
014	met10 method	MSD	QC880196	Soil	246334	04/05/17 23:11	1.0		1:SR=190000000
015	met10 method	SAMPLE	287560-002	Soil	246334	04/05/17 23:14	1.0		7:SR=21000000
016	met10 method	SAMPLE	287575-001	Soil	246334	04/05/17 23:17	1.0		4:SR=6100000
017	met10 method	SAMPLE	287575-002	Soil	246334	04/05/17 23:20	1.0		6:SR=6900000
018	met10 method	SAMPLE	287575-003	Soil	246334	04/05/17 23:22	1.0		5:SR=11000000
019	met10 method	SAMPLE	287575-004	Soil	246334	04/05/17 23:25	1.0		4:SR=14000000
020	met10 method	SAMPLE	287604-001	Miscell.	246334	04/05/17 23:28	1.0		2:SR=1800000
021	met10 method	SAMPLE	287630-001	Soil	246334	04/05/17 23:31	1.0		6:SR=27000000
022	met10 method	SAMPLE	287630-002	Soil	246334	04/05/17 23:33	1.0		6:SR=8500000
023	met10 method	SAMPLE	287630-003	Soil	246334	04/05/17 23:36	1.0		8:SR=26000000
024	met10 method	CCV				04/05/17 23:39	1.0	10	1:SR=4400000
025	met10 method	CCB				04/05/17 23:42	1.0		
026	met10 method	SAMPLE	287630-004	Soil	246334	04/05/17 23:45	1.0		5:SR=46000000
027	met10 method	SAMPLE	287630-005	Soil	246334	04/05/17 23:48	1.0		5:SR=17000000
028	met10 method	SAMPLE	287630-006	Soil	246334	04/05/17 23:51	1.0		7:SR=20000000
029	met10 method	SAMPLE	287643-001	Miscell.	246334	04/05/17 23:54	1.0		
030	met10 method	X	RINSE			04/05/17 23:57	1.0		
031	met10 method	BLANK	QC880192	Soil	246334	04/06/17 00:00	1.0		1:SR=3800
032	met10 method	BS	QC880193	Soil	246334	04/06/17 00:03	1.0		2:SR=91000000
033	met10 method	BSD	QC880194	Soil	246334	04/06/17 00:06	1.0		2:SR=88000000
034	met10 method	MSS	287630-007	Soil	246334	04/06/17 00:08	1.0		5:SR=110000000
035	met10 method	MS	QC880195	Soil	246334	04/06/17 00:11	1.0		
036	met10 method	CCV				04/06/17 00:14	1.0	10	1:SR=4300000
037	met10 method	CCB				04/06/17 00:17	1.0		1:SR=1500
038	met10 method	X	RINSE			04/06/17 00:20	1.0		
039	met10 method	BLANK	QC880187	Soil	246333	04/06/17 00:24	1.0		1:SR=2700
040	met10 method	BS	QC880188	Soil	246333	04/06/17 00:27	1.0		2:SR=86000000
041	met10 method	BSD	QC880189	Soil	246333	04/06/17 00:30	1.0		2:SR=86000000
042	met10 method	MSS	287530-001	Soil	246333	04/06/17 00:32	1.0		6:SR=24000000
043	met10 method	MS	QC880190	Soil	246333	04/06/17 00:35	1.0		
044	met10 method	MSD	QC880191	Soil	246333	04/06/17 00:38	1.0		
045	met10 method	SAMPLE	287530-002	Soil	246333	04/06/17 00:41	1.0		7:SR=5300000
046	met10 method	SAMPLE	287530-003	Soil	246333	04/06/17 00:44	1.0		7:SR=4500000
047	met10 method	SAMPLE	287530-004	Soil	246333	04/06/17 00:47	1.0		7:SR=48000000
048	met10 method	CCV				04/06/17 00:49	1.0	10	1:SR=4500000
049	met10 method	CCB				04/06/17 00:52	1.0		
050	met10 method	SAMPLE	287530-005	Soil	246333	04/06/17 00:55	1.0		7:SR=6600000
051	met10 method	SAMPLE	287530-006	Soil	246333	04/06/17 00:58	1.0		6:SR=12000000
052	met10 method	SAMPLE	287530-007	Soil	246333	04/06/17 01:01	1.0		8:SR=13000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138133

Instrument : MET10 Begun : 04/05/17 22:13
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287530-008	Soil	246333	04/06/17 01:04	1.0		7:SR=9200000
054	met10 method	SAMPLE	287530-009	Soil	246333	04/06/17 01:07	1.0		6:SR=11000000
055	met10 method	SAMPLE	287530-010	Soil	246333	04/06/17 01:10	1.0		6:SR=24000000
056	met10 method	SAMPLE	287530-020	Soil	246333	04/06/17 01:13	1.0		6:SR=26000000
057	met10 method	SAMPLE	287530-021	Soil	246333	04/06/17 01:16	1.0		5:SR=23000000
058	met10 method	SAMPLE	287595-025	Soil	246333	04/06/17 01:19	1.0		8:SR=12000000
059	met10 method	SAMPLE	287595-026	Soil	246333	04/06/17 01:22	1.0		8:SR=22000000
060	met10 method	CCV				04/06/17 01:25	1.0	10	1:SR=4400000
061	met10 method	CCB				04/06/17 01:28	1.0		
062	met10 method	SAMPLE	287595-027	Soil	246333	04/06/17 01:31	1.0		8:SR=29000000
063	met10 method	SAMPLE	287595-028	Soil	246333	04/06/17 01:34	1.0		6:SR=47000000
064	met10 method	SAMPLE	287595-029	Soil	246333	04/06/17 01:37	1.0		6:SR=48000000
065	met10 method	SAMPLE	287595-030	Soil	246333	04/06/17 01:40	1.0		6:SR=57000000
066	met10 method	X	RINSE			04/06/17 01:43	1.0		
067	met10 method	SAMPLE	287711-001	Soil	246334	04/06/17 01:47	1.0		4:SR=2700000
068	met10 method	SAMPLE	287711-002	Soil	246334	04/06/17 01:49	1.0		4:SR=3200000
069	met10 method	SAMPLE	287724-001	Soil	246334	04/06/17 01:52	1.0		7:SR=4900000
070	met10 method	X	RINSE			04/06/17 01:55	1.0		
071	met10 method	BLANK	QC880066	Soil	246300	04/06/17 01:58	1.0		1:SR=1400
072	met10 method	CCV				04/06/17 02:02	1.0	10	1:SR=4500000
073	met10 method	CCB				04/06/17 02:04	1.0		
074	met10 method	BS	QC880067	Soil	246300	04/06/17 02:08	1.0		1:SR=86000000
075	met10 method	BSD	QC880068	Soil	246300	04/06/17 02:10	1.0		1:SR=88000000
076	met10 method	MSS	287362-004	Soil	246300	04/06/17 02:13	1.0		5:SR=5400000
077	met10 method	MS	QC880069	Soil	246300	04/06/17 02:15	1.0		
078	met10 method	MSD	QC880070	Soil	246300	04/06/17 02:18	1.0		
079	met10 method	SER	QC880071	Soil	246300	04/06/17 02:21	5.0		
080	met10 method	PDS	QC880072	Soil	246300	04/06/17 02:24	1.0	11 12 13	6:SR=6100000
081	met10 method	SAMPLE	287362-002	Soil	246300	04/06/17 02:26	1.0		5:SR=5900000
082	met10 method	SAMPLE	287362-003	Soil	246300	04/06/17 02:29	1.0		5:SR=5600000
083	met10 method	SAMPLE	287362-005	Soil	246300	04/06/17 02:32	1.0		5:SR=5100000
084	met10 method	CCV				04/06/17 02:34	1.0	10	1:SR=4400000
085	met10 method	CCB				04/06/17 02:37	1.0		
086	met10 method	SAMPLE	287362-006	Soil	246300	04/06/17 02:40	1.0		5:SR=4700000
087	met10 method	SAMPLE	287362-007	Soil	246300	04/06/17 02:43	1.0		5:SR=4200000
088	met10 method	SAMPLE	287362-008	Soil	246300	04/06/17 02:45	1.0		5:SR=3700000
089	met10 method	SAMPLE	287362-009	Soil	246300	04/06/17 02:48	1.0		5:SR=4500000
090	met10 method	SAMPLE	287362-010	Soil	246300	04/06/17 02:51	1.0		5:SR=4200000
091	met10 method	SAMPLE	287362-011	Soil	246300	04/06/17 02:53	1.0		5:SR=3700000
092	met10 method	SAMPLE	287362-012	Soil	246300	04/06/17 02:56	1.0		5:SR=3500000
093	met10 method	SAMPLE	287362-013	Soil	246300	04/06/17 02:59	1.0		5:SR=5500000
094	met10 method	SAMPLE	287362-014	Soil	246300	04/06/17 03:02	1.0		5:SR=5400000
095	met10 method	SAMPLE	287362-015	Soil	246300	04/06/17 03:05	1.0		5:SR=6000000
096	met10 method	CCV				04/06/17 03:07	1.0	10	1:SR=4400000
097	met10 method	CCB				04/06/17 03:10	1.0		
098	met10 method	SAMPLE	287362-016	Soil	246300	04/06/17 03:14	1.0		5:SR=6300000
099	met10 method	SAMPLE	287362-017	Soil	246300	04/06/17 03:16	1.0		5:SR=5800000
100	met10 method	SAMPLE	287362-018	Soil	246300	04/06/17 03:19	1.0		5:SR=5800000
101	met10 method	SAMPLE	287362-019	Soil	246300	04/06/17 03:22	1.0		5:SR=6300000
102	met10 method	SAMPLE	287362-020	Soil	246300	04/06/17 03:25	1.0		5:SR=5100000
103	met10 method	SAMPLE	287362-001	Soil	246300	04/06/17 03:27	1.0		5:SR=5500000
104	met10 method	X	RINSE			04/06/17 03:30	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138133

Instrument : MET10 Begun : 04/05/17 22:13
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BLANK	QC880079	Soil	246302	04/06/17 03:33	1.0		
106	met10 method	BS	QC880080	Soil	246302	04/06/17 03:37	1.0		1:SR=87000000
107	met10 method	BSD	QC880081	Soil	246302	04/06/17 03:39	1.0		1:SR=87000000
108	met10 method	CCV				04/06/17 03:42	1.0	10	1:SR=4400000
109	met10 method	CCB				04/06/17 03:44	1.0		1:SR=1100
110	met10 method	MSS	287362-021	Soil	246302	04/06/17 03:48	1.0		5:SR=4700000
111	met10 method	MS	QC880082	Soil	246302	04/06/17 03:50	1.0		6:SR=88000000
112	met10 method	MSD	QC880083	Soil	246302	04/06/17 03:53	1.0		6:SR=86000000
113	met10 method	SER	QC880084	Soil	246302	04/06/17 03:56	5.0		
114	met10 method	PDS	QC880085	Soil	246302	04/06/17 03:59	1.0	11 12 13	6:SR=5500000
115	met10 method	SAMPLE	287362-022	Soil	246302	04/06/17 04:01	1.0		5:SR=3800000
116	met10 method	SAMPLE	287362-023	Soil	246302	04/06/17 04:04	1.0		5:SR=3700000
117	met10 method	SAMPLE	287362-024	Soil	246302	04/06/17 04:07	1.0		5:SR=4500000
118	met10 method	SAMPLE	287362-025	Soil	246302	04/06/17 04:10	1.0		5:SR=3700000
119	met10 method	SAMPLE	287362-026	Soil	246302	04/06/17 04:13	1.0		5:SR=6500000
120	met10 method	CCV				04/06/17 04:15	1.0	10	1:SR=4400000
121	met10 method	CCB				04/06/17 04:18	1.0		
122	met10 method	SAMPLE	287362-027	Soil	246302	04/06/17 04:21	1.0		5:SR=5100000
123	met10 method	SAMPLE	287362-028	Soil	246302	04/06/17 04:24	1.0		5:SR=4700000
124	met10 method	SAMPLE	287362-029	Soil	246302	04/06/17 04:27	1.0		5:SR=4600000
125	met10 method	SAMPLE	287362-030	Soil	246302	04/06/17 04:30	1.0		6:SR=4300000
126	met10 method	SAMPLE	287362-031	Soil	246302	04/06/17 04:33	1.0		5:SR=3400000
127	met10 method	SAMPLE	287362-032	Soil	246302	04/06/17 04:35	1.0		5:SR=3700000
128	met10 method	SAMPLE	287362-033	Soil	246302	04/06/17 04:38	1.0		5:SR=4100000
129	met10 method	SAMPLE	287362-034	Soil	246302	04/06/17 04:41	1.0		5:SR=5300000
130	met10 method	SAMPLE	287362-035	Soil	246302	04/06/17 04:43	1.0		5:SR=5700000
131	met10 method	SAMPLE	287362-036	Soil	246302	04/06/17 04:46	1.0		5:SR=6300000
132	met10 method	CCV				04/06/17 04:49	1.0	10	1:SR=4400000
133	met10 method	CCB				04/06/17 04:52	1.0		
134	met10 method	SAMPLE	287362-037	Soil	246302	04/06/17 04:55	1.0		5:SR=7000000
135	met10 method	SAMPLE	287362-038	Soil	246302	04/06/17 04:58	1.0		5:SR=5500000
136	met10 method	SAMPLE	287362-039	Soil	246302	04/06/17 05:01	1.0		5:SR=4600000
137	met10 method	SAMPLE	287362-040	Soil	246302	04/06/17 05:03	1.0		4:SR=4100000
138	met10 method	X	RINSE			04/06/17 05:06	1.0		
139	met10 method	BLANK	QC880114	Soil	246313	04/06/17 05:09	1.0		
140	met10 method	BS	QC880115	Soil	246313	04/06/17 05:13	1.0		1:SR=88000000
141	met10 method	BSD	QC880116	Soil	246313	04/06/17 05:15	1.0		1:SR=88000000
142	met10 method	MSS	287548-001	Soil	246313	04/06/17 05:18	1.0		6:SR=9300000
143	met10 method	MS	QC880117	Soil	246313	04/06/17 05:20	1.0		1:SR=92000000
144	met10 method	CCV				04/06/17 05:23	1.0	10	1:SR=4600000
145	met10 method	CCB				04/06/17 05:26	1.0		1:SR=3600
146	met10 method	SER	QC880118	Soil	246313	04/06/17 05:29	5.0		
147	met10 method	PDS	QC880119	Soil	246313	04/06/17 05:31	1.0	11 12 13	8:SR=9900000
148	met10 method	MSD	QC880120	Soil	246313	04/06/17 05:34	1.0		1:SR=93000000
149	met10 method	SAMPLE	287362-041	Soil	246313	04/06/17 05:37	1.0		5:SR=3700000
150	met10 method	SAMPLE	287362-042	Soil	246313	04/06/17 05:40	1.0		5:SR=4400000
151	met10 method	SAMPLE	287362-043	Soil	246313	04/06/17 05:42	1.0		5:SR=3800000
152	met10 method	SAMPLE	287362-044	Soil	246313	04/06/17 05:45	1.0		5:SR=3700000
153	met10 method	SAMPLE	287548-002	Soil	246313	04/06/17 05:48	1.0		6:SR=8700000
154	met10 method	SAMPLE	287548-003	Soil	246313	04/06/17 05:51	1.0		7:SR=9000000
155	met10 method	SAMPLE	287548-004	Soil	246313	04/06/17 05:54	1.0		6:SR=8500000
156	met10 method	CCV				04/06/17 05:56	1.0	10	1:SR=4500000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138133

Instrument : MET10 Begun : 04/05/17 22:13
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	CCB				04/06/17 05:59	1.0		
158	met10 method	SAMPLE	287548-005	Soil	246313	04/06/17 06:02	1.0		7:SR=8000000
159	met10 method	SAMPLE	287548-006	Soil	246313	04/06/17 06:05	1.0		7:SR=8600000
160	met10 method	SAMPLE	287548-007	Soil	246313	04/06/17 06:08	1.0		7:SR=9800000
161	met10 method	SAMPLE	287548-008	Soil	246313	04/06/17 06:11	1.0		7:SR=9800000
162	met10 method	SAMPLE	287548-009	Soil	246313	04/06/17 06:13	1.0		7:SR=9000000
163	met10 method	SAMPLE	287548-010	Soil	246313	04/06/17 06:16	1.0		6:SR=8500000
164	met10 method	SAMPLE	287548-011	Soil	246313	04/06/17 06:19	1.0		6:SR=8900000
165	met10 method	SAMPLE	287548-012	Soil	246313	04/06/17 06:21	1.0		6:SR=8400000
166	met10 method	SAMPLE	287548-013	Soil	246313	04/06/17 06:24	1.0		6:SR=10000000
167	met10 method	SAMPLE	287548-014	Soil	246313	04/06/17 06:27	1.0		6:SR=8300000
168	met10 method	CCV				04/06/17 06:30	1.0	10	1:SR=4400000
169	met10 method	CCB				04/06/17 06:32	1.0		1:SR=2400
170	met10 method	SAMPLE	287548-015	Soil	246313	04/06/17 06:36	1.0		5:SR=9200000
171	met10 method	SAMPLE	287548-016	Soil	246313	04/06/17 06:38	1.0		6:SR=10000000
172	met10 method	CCV				04/06/17 06:41	1.0	10	1:SR=4400000
173	met10 method	CCB				04/06/17 06:44	1.0		

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 173.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138133

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 22:17

#	Type	Sample ID	Y A	Y R
		ICAL STD	8887055	1042957
		LOWER LIMIT	2666116	312887
		UPPER LIMIT	10664466	1251549
011	ICB		9035437	1036223
012	ICSA		7226456	906800
013	ICSAB		7212385	917669
060	CCV		8278579	1026588
061	CCB		9018213	1040642
071	BLANK	QC880066	9044860	1070620
072	CCV		8282549	1023933
073	CCB		8941858	1038454
074	BS	QC880067	8585606	1038868
075	BSD	QC880068	8618656	1043078
076	MSS	287362-004	8131678	1007837
077	MS	QC880069	7980181	1016298
078	MSD	QC880070	7970214	1012419
079	SER	QC880071	8649859	1037100
080	PDS	QC880072	8117640	1027193
081	SAMPLE	287362-002	8145292	989993
082	SAMPLE	287362-003	8206659	1030649
083	SAMPLE	287362-005	8159210	1014980
084	CCV		8517575	1049747
085	CCB		9006288	1053552
086	SAMPLE	287362-006	8149728	1019171
087	SAMPLE	287362-007	8072722	1017370
088	SAMPLE	287362-008	7912259	991069
089	SAMPLE	287362-009	7921076	1001680
090	SAMPLE	287362-010	7940965	1007612
091	SAMPLE	287362-011	7973924	990871
092	SAMPLE	287362-012	8020145	1000043
093	SAMPLE	287362-013	7948364	998737
094	SAMPLE	287362-014	7857637	989330
095	SAMPLE	287362-015	8022721	1014468
096	CCV		8247020	1037939
097	CCB		8972438	1048769
098	SAMPLE	287362-016	7991140	1010553
099	SAMPLE	287362-017	8062374	1003055
100	SAMPLE	287362-018	7987124	997715
101	SAMPLE	287362-019	8028260	1013494
102	SAMPLE	287362-020	8078992	1012265
103	SAMPLE	287362-001	7906301	998576
105	BLANK	QC880079	9060706	1078772
106	BS	QC880080	8450419	1062406
107	BSD	QC880081	8439293	1060771
108	CCV		8260431	1036841
109	CCB		8910946	1065204
110	MSS	287362-021	8076417	1009365
111	MS	QC880082	7920728	1015980
112	MSD	QC880083	7947354	1014725
113	SER	QC880084	8610393	1017695
114	PDS	QC880085	8034098	1018578

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138133

Date : 04/05/17 Reference : met10 method
Sequence : MET10 04/05/17 Analyzed : 04/05/17 22:17

#	Type	Sample ID	Y A	Y R
115	SAMPLE	287362-022	7955682	1010322
116	SAMPLE	287362-023	7887269	1000901
117	SAMPLE	287362-024	7970599	1010102
118	SAMPLE	287362-025	7932153	1007153
119	SAMPLE	287362-026	7958167	1003588
120	CCV		8508248	1025749
121	CCB		9125656	1042830
122	SAMPLE	287362-027	7920311	1040042
123	SAMPLE	287362-028	8039157	1003520
124	SAMPLE	287362-029	8001703	1019981
125	SAMPLE	287362-030	7877099	1001966
126	SAMPLE	287362-031	7961180	1002402
127	SAMPLE	287362-032	7974256	1005444
128	SAMPLE	287362-033	7976913	1011040
129	SAMPLE	287362-034	8010410	1003411
130	SAMPLE	287362-035	8057237	1004957
131	SAMPLE	287362-036	7994848	1004913
132	CCV		8526763	1024143
133	CCB		8999884	1042224
134	SAMPLE	287362-037	7973905	1011530
135	SAMPLE	287362-038	8053983	1011091
136	SAMPLE	287362-039	8097132	1009122
137	SAMPLE	287362-040	8177597	1016986
139	BLANK	QC880114	8940022	1080959
140	BS	QC880115	8736935	1045153
141	BSD	QC880116	8493663	1043553
143	MS	QC880117	7657475	992892
144	CCV		8265562	1027470
145	CCB		8947937	1046375
146	SER	QC880118	8493080	1034291
147	PDS	QC880119	7783153	987185
148	MSD	QC880120	7779808	986961
149	SAMPLE	287362-041	8000992	990642
150	SAMPLE	287362-042	8022365	995512
151	SAMPLE	287362-043	7766481	972425
152	SAMPLE	287362-044	7869085	994312
156	CCV		8298185	1023647
157	CCB		8905449	1045862

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287362 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087138133001
Units : ug/L

Date : 05-APR-2017 22:13
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087138133002	L1	05-APR-2017 22:17	S32578
L2	met10 method	1087138133003	L2	05-APR-2017 22:20	S32571
L3	met10 method	1087138133004	L3	05-APR-2017 22:22	S32367
L4	met10 method	1087138133005	L4	05-APR-2017 22:25	S32368
L5	met10 method	1087138133006	L5	05-APR-2017 22:27	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.7400	2.8230	2.8772	2.6977		LOR0	0.00000	0.37044		2.7845	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	2	100.00	5	1000.0	7	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287362 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087138133001 Cal Date : 05-APR-2017

ICV 1087138133008 (05-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4995	ug/L	0	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133010.1 File : met10 method Time : 05-APR-2017 22:44
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.752	ug/L	15	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8930758	0.49
Yttrium	R	1042957	1055314	1.18

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133011.1 File : met10 method Time : 05-APR-2017 22:48
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	9035437	1.67
Yttrium	R	1042957	1036223	-0.65

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133012.1 File : met10 method Time : 05-APR-2017 22:52
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-2.838]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18980	ug/L	95	
Copper	A	20000	22000	ug/L	110	
Manganese	A	20000	18510	ug/L	93	
Nickel	A	20000	16580	ug/L	83	
Titanium	A	20000	18740	ug/L	94	
Vanadium	A	20000	21690	ug/L	108	
Aluminum	R	500000	554100	ug/L	111	
Calcium	R	500000	510100	ug/L	102	
Iron	R	200000	199700	ug/L	100	
Magnesium	R	500000	458800	ug/L	92	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	7226456	-18.69
Yttrium	R	1042957	906800	-13.05

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133013.1 File : met10 method Time : 05-APR-2017 22:56
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	981.8	ug/L	-2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	7212385	-18.84
Yttrium	R	1042957	917669	-12.01

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133060.1 File : met10 method Time : 06-APR-2017 01:25
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.7830	5000	5155	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8278579	-6.85
Yttrium	R	1042957	1026588	-1.57

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133061.1 File : met10 method Time : 06-APR-2017 01:28
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	9018213	1.48
Yttrium	R	1042957	1040642	-0.22

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133072.1 File : met10 method Time : 06-APR-2017 02:02
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.7588	5000	5110	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8282549	-6.80
Yttrium	R	1042957	1023933	-1.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133073.1 File : met10 method Time : 06-APR-2017 02:04
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8941858	0.62
Yttrium	R	1042957	1038454	-0.43

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133084.1 File : met10 method Time : 06-APR-2017 02:34
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.6988	5000	4999	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8517575	-4.16
Yttrium	R	1042957	1049747	0.65

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133085.1 File : met10 method Time : 06-APR-2017 02:37
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	9006288	1.34
Yttrium	R	1042957	1053552	1.02

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133096.1 File : met10 method Time : 06-APR-2017 03:07
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.7513	5000	5096	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8247020	-7.20
Yttrium	R	1042957	1037939	-0.48

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133097.1 File : met10 method Time : 06-APR-2017 03:10
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8972438	0.96
Yttrium	R	1042957	1048769	0.56

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133108.1 File : met10 method Time : 06-APR-2017 03:42
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.7085	5000	5017	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8260431	-7.05
Yttrium	R	1042957	1036841	-0.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133109.1 File : met10 method Time : 06-APR-2017 03:44
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8910946	0.27
Yttrium	R	1042957	1065204	2.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133120.1 File : met10 method Time : 06-APR-2017 04:15
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.6500	5000	4908	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8508248	-4.26
Yttrium	R	1042957	1025749	-1.65

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133121.1 File : met10 method Time : 06-APR-2017 04:18
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	9125656	2.68
Yttrium	R	1042957	1042830	-0.01

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133132.1 File : met10 method Time : 06-APR-2017 04:49
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.6136	5000	4841	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8526763	-4.05
Yttrium	R	1042957	1024143	-1.80

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133133.1 File : met10 method Time : 06-APR-2017 04:52
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8999884	1.27
Yttrium	R	1042957	1042224	-0.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133144.1 File : met10 method Time : 06-APR-2017 05:23
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.7756	5000	5141	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8265562	-6.99
Yttrium	R	1042957	1027470	-1.48

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133145.1 File : met10 method Time : 06-APR-2017 05:26
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8947937	0.69
Yttrium	R	1042957	1046375	0.33

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133156.1 File : met10 method Time : 06-APR-2017 05:56
Cal : 1087138133001 Caldate : 05-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7845	2.7058	5000	5012	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8298185	-6.63
Yttrium	R	1042957	1023647	-1.85

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138133157.1 File : met10 method Time : 06-APR-2017 05:59
Cal : 1087138133001 Caldate : 05-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8887055	8905449	0.21
Yttrium	R	1042957	1045862	0.28

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10
Method : EPA 6010C

Begun : 04/06/17 08:52
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/06/17 08:52	1.0		
002	met10 method	ICAL	L1			04/06/17 08:56	1.0	1	
003	met10 method	ICAL	L2			04/06/17 08:59	1.0	2	
004	met10 method	ICAL	L3			04/06/17 09:01	1.0	3	
005	met10 method	ICAL	L4			04/06/17 09:03	1.0	4	
006	met10 method	ICAL	L5			04/06/17 09:06	1.0	5	
007	met10 method	ICV				04/06/17 09:09	1.0	6	
008	met10 method	CRI				04/06/17 09:12	1.0	7	
009	met10 method	ICB				04/06/17 09:27	1.0		
010	met10 method	ICSA				04/06/17 09:31	1.0	8	10:AL=560000
011	met10 method	ICSAB				04/06/17 09:35	1.0	9	5:AL=580000
012	met10 method	XICSAB				04/06/17 10:06	1.0	9	
013	met10 method	ICSAB				04/06/17 10:16	1.0	9	5:AL=550000
014	met10 method	SAMPLE	287630-003	Soil	246334	04/06/17 11:16	1.0		2:TI=14000
015	met10 method	SAMPLE	287630-004	Soil	246334	04/06/17 11:19	1.0		4:CA=500000
016	met10 method	SAMPLE	287630-005	Soil	246334	04/06/17 11:22	1.0		4:FE=430000
017	met10 method	SAMPLE	287630-006	Soil	246334	04/06/17 11:25	1.0		6:FE=550000
018	met10 method	MSS	287630-007	Soil	246334	04/06/17 11:28	1.0		4:CA=1000000
019	met10 method	SAMPLE	287724-001	Soil	246334	04/06/17 11:31	1.0		5:FE=550000
020	met10 method	BLANK	QC880099	WET Leachate	246307	04/06/17 11:34	10.0		1:NA=170000
021	met10 method	BS	QC880100	WET Leachate	246307	04/06/17 11:37	1.0		
022	met10 method	BSD	QC880101	WET Leachate	246307	04/06/17 11:39	1.0		
023	met10 method	MSS	287513-001	WET Leachate	246307	04/06/17 11:42	10.0		1:NA=150000
024	met10 method	CCV				04/06/17 11:45	1.0	10	
025	met10 method	CCB				04/06/17 11:48	1.0		
026	met10 method	CCB				04/06/17 11:51	1.0		
027	met10 method	MS	QC880102	WET Leachate	246307	04/06/17 11:55	10.0		
028	met10 method	MSD	QC880103	WET Leachate	246307	04/06/17 11:58	10.0		
029	met10 method	SAMPLE	287416-001	WET Leachate	246307	04/06/17 12:00	10.0		2:NA=140000
030	met10 method	SAMPLE	287727-001	WET Leachate	246307	04/06/17 12:03	10.0		1:NA=150000
031	met10 method	SAMPLE	287727-001	TCLP Leachate	246190	04/06/17 12:05	10.0		1:NA=160000
032	met10 method	SAMPLE	287513-002	WET Leachate	246307	04/06/17 12:09	10.0		1:NA=170000
033	met10 method	SAMPLE	287513-003	WET Leachate	246307	04/06/17 12:11	10.0		1:NA=140000
034	met10 method	SAMPLE	287513-004	WET Leachate	246307	04/06/17 12:14	10.0		1:NA=150000
035	met10 method	SAMPLE	287513-005	WET Leachate	246307	04/06/17 12:16	10.0		1:NA=140000
036	met10 method	SAMPLE	287513-006	WET Leachate	246307	04/06/17 12:19	10.0		1:NA=140000
037	met10 method	CCV				04/06/17 12:21	1.0	10	
038	met10 method	CCB				04/06/17 12:24	1.0		
039	met10 method	CCB				04/06/17 12:27	1.0		
040	met10 method	SAMPLE	287513-007	WET Leachate	246307	04/06/17 12:31	10.0		1:NA=160000
041	met10 method	SAMPLE	287513-008	WET Leachate	246307	04/06/17 12:34	10.0		1:NA=140000
042	met10 method	SAMPLE	287513-009	WET Leachate	246307	04/06/17 12:36	10.0		1:NA=150000
043	met10 method	SAMPLE	287513-010	WET Leachate	246307	04/06/17 12:39	10.0		1:NA=140000
044	met10 method	SAMPLE	287513-011	WET Leachate	246307	04/06/17 12:41	10.0		1:NA=160000
045	met10 method	SAMPLE	287513-012	WET Leachate	246307	04/06/17 12:44	10.0		1:NA=160000
046	met10 method	SAMPLE	287513-013	WET Leachate	246307	04/06/17 12:46	10.0		1:NA=160000
047	met10 method	SAMPLE	287560-001	WET Leachate	246307	04/06/17 12:49	1.0		1:NA=160000
048	met10 method	SAMPLE	287560-002	WET Leachate	246307	04/06/17 12:52	1.0		1:NA=160000
049	met10 method	SAMPLE	287439-001	WET Leachate	246307	04/06/17 12:55	10.0		
050	met10 method	CCV				04/06/17 12:57	1.0	10	
051	met10 method	CCB				04/06/17 13:00	1.0		
052	met10 method	CCB				04/06/17 13:03	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287543-005	WET Leachate	246307	04/06/17 13:06	10.0		
054	met10 method	SAMPLE	286962-005	Soil	246123	04/06/17 13:09	1.0		3:CA=5400000
055	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:12	100.0		
056	met10 method	SAMPLE	286962-007	Soil	246123	04/06/17 13:14	1.0		10:CA=2800000
057	met10 method	X	RINSE			04/06/17 13:17	1.0		
058	met10 method	SAMPLE	287315-001	Miscell.	246094	04/06/17 13:21	1.0		1:K=230000
059	met10 method	SAMPLE	287318-001	Miscell.	246094	04/06/17 13:23	1.0		1:K=170000
060	met10 method	SAMPLE	287467-001	Soil	246170	04/06/17 13:26	1.0		1:FE=110000
061	met10 method	SAMPLE	287467-002	Soil	246170	04/06/17 13:28	1.0		5:FE=430000
062	met10 method	SAMPLE	287467-003	Soil	246170	04/06/17 13:31	1.0		1:FE=110000
063	met10 method	CCV				04/06/17 13:33	1.0	10	
064	met10 method	CCB				04/06/17 13:36	1.0		
065	met10 method	CCB				04/06/17 13:39	1.0		
066	met10 method	X	RINSE			04/06/17 13:43	1.0		
067	met10 method	SER	QC880366	WET Leachate	246307	04/06/17 13:46	50.0		
068	met10 method	PDS	QC880367	WET Leachate	246307	04/06/17 13:50	10.0	11 12 13	1:NA=160000
069	met10 method	SAMPLE	287595-027	Soil	246333	04/06/17 13:52	1.0		5:CA=1700000
070	met10 method	SAMPLE	287595-029	Soil	246333	04/06/17 13:55	1.0		4:CA=2300000
071	met10 method	BLANK	QC879203	Soil	246096	04/06/17 13:59	1.0		
072	met10 method	BS	QC879001	WET Leachate	246046	04/06/17 14:02	1.0		
073	met10 method	BSD	QC879002	WET Leachate	246046	04/06/17 14:04	1.0		
074	met10 method	SAMPLE	287325-001	WET Leachate	246046	04/06/17 14:07	10.0		1:NA=110000
075	met10 method	SAMPLE	287325-002	WET Leachate	246046	04/06/17 14:10	10.0		1:NA=100000
076	met10 method	CCV				04/06/17 14:13	1.0	10	
077	met10 method	CCB				04/06/17 14:15	1.0		
078	met10 method	SAMPLE	287331-001	WET Leachate	246046	04/06/17 14:19	10.0		
079	met10 method	X	RINSE			04/06/17 14:25	1.0		
080	met10 method	MSS	287252-007	Soil	246299	04/06/17 14:30	1.0		4:FE=530000
081	met10 method	MS	QC880060	Soil	246299	04/06/17 14:32	1.0		4:AL=540000
082	met10 method	MSD	QC880061	Soil	246299	04/06/17 14:35	1.0		4:FE=640000
083	met10 method	SER	QC880062	Soil	246299	04/06/17 14:38	5.0		1:FE=120000
084	met10 method	PDS	QC880063	Soil	246299	04/06/17 14:40	1.0	11 12 13	4:FE=520000
085	met10 method	SAMPLE	287252-042	Soil	246299	04/06/17 14:43	1.0		4:FE=700000
086	met10 method	SAMPLE	287252-043	Soil	246299	04/06/17 14:46	1.0		4:AL=560000
087	met10 method	SAMPLE	287252-044	Soil	246299	04/06/17 14:49	1.0		4:AL=580000
088	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 14:52	1.0		5:FE=500000
089	met10 method	CCV				04/06/17 14:55	1.0	10	
090	met10 method	CCB				04/06/17 14:57	1.0		
091	met10 method	CCB				04/06/17 15:00	1.0		
092	met10 method	SAMPLE	287362-045	Soil	246299	04/06/17 15:04	1.0		4:FE=730000
093	met10 method	SAMPLE	287362-046	Soil	246299	04/06/17 15:07	1.0		4:AL=610000
094	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 15:10	1.0		5:CA=1800000
095	met10 method	SAMPLE	287533-001	Soil	246299	04/06/17 15:13	1.0		6:FE=640000
096	met10 method	SAMPLE	287533-002	Soil	246299	04/06/17 15:16	1.0		6:FE=750000
097	met10 method	SAMPLE	287533-003	Soil	246299	04/06/17 15:19	1.0		6:FE=710000
098	met10 method	SAMPLE	287533-004	Soil	246299	04/06/17 15:22	1.0		5:FE=490000
099	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 15:25	1.0		2:FE=300000
100	met10 method	X	RINSE			04/06/17 15:57	1.0		
101	met10 method	MSS	287530-001	Soil	246333	04/06/17 16:01	1.0		5:CA=1100000
102	met10 method	CCV				04/06/17 16:04	1.0	10	
103	met10 method	CCB				04/06/17 16:07	1.0		
104	met10 method	CCB				04/06/17 16:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287166-002	Air	246062	04/06/17 16:14	1.0		
106	met10 method	SAMPLE	287168-003	Air	246062	04/06/17 16:16	1.0		
107	met10 method	SAMPLE	287171-002	Air	246062	04/06/17 16:18	1.0		
108	met10 method	MSS	287505-010	TCLP Leachate	246190	04/06/17 16:21	10.0		1:NA=170000
109	met10 method	SAMPLE	287418-005	Filtrate	246184	04/06/17 16:25	1.0		5:NA=3300000
110	met10 method	SAMPLE	287418-006	Filtrate	246184	04/06/17 16:27	1.0		4:NA=2800000
111	met10 method	SAMPLE	287418-007	Filtrate	246184	04/06/17 16:31	1.0		4:NA=5100000
112	met10 method	SAMPLE	287418-008	Filtrate	246184	04/06/17 16:33	1.0		4:NA=3300000
113	met10 method	SAMPLE	287418-009	Filtrate	246184	04/06/17 16:37	1.0		3:NA=2200000
114	met10 method	SAMPLE	287418-010	Filtrate	246184	04/06/17 16:40	1.0		2:NA=700000
115	met10 method	CCV				04/06/17 16:42	1.0	10	
116	met10 method	CCB				04/06/17 16:45	1.0		
117	met10 method	CCB				04/06/17 16:48	1.0		
118	met10 method	SAMPLE	287418-011	Filtrate	246184	04/06/17 16:51	1.0		4:NA=4700000
119	met10 method	MSS	287252-028	Soil	246272	04/06/17 16:55	100.0		
120	met10 method	SAMPLE	287252-029	Soil	246272	04/06/17 16:57	100.0		
121	met10 method	SAMPLE	287252-030	Soil	246272	04/06/17 16:59	1.0		4:FE=370000
122	met10 method	SAMPLE	287252-033	Soil	246272	04/06/17 17:02	100.0		
123	met10 method	SAMPLE	287252-034	Soil	246272	04/06/17 17:04	100.0		
124	met10 method	SAMPLE	287252-035	Soil	246272	04/06/17 17:07	100.0		
125	met10 method	SAMPLE	287252-036	Soil	246272	04/06/17 17:09	1.0		4:FE=410000
126	met10 method	SAMPLE	287252-045	Soil	246299	04/06/17 17:12	100.0		
127	met10 method	SAMPLE	287528-001	Soil	246299	04/06/17 17:14	1.0		5:CA=1700000
128	met10 method	CCV				04/06/17 17:17	1.0	10	
129	met10 method	CCB				04/06/17 17:20	1.0		
130	met10 method	CCB				04/06/17 17:22	1.0		
131	met10 method	SAMPLE	287543-005	Soil	246299	04/06/17 17:26	100.0		
132	met10 method	X	RINSE			04/06/17 17:28	1.0		
133	met10 method	BLANK	QC879918	Water	246267	04/06/17 17:31	1.0		
134	met10 method	BS	QC879919	Water	246267	04/06/17 17:35	1.0		
135	met10 method	BSD	QC879920	Water	246267	04/06/17 17:37	1.0		
136	met10 method	MSS	287440-001	Water	246267	04/06/17 17:39	1.0		
137	met10 method	MS	QC879921	Water	246267	04/06/17 17:43	1.0		
138	met10 method	MSD	QC879922	Water	246267	04/06/17 17:45	1.0		
139	met10 method	SAMPLE	287417-001	Water	246267	04/06/17 17:48	1.0		
140	met10 method	SAMPLE	287417-002	Water	246267	04/06/17 17:50	1.0		1:CA=130000
141	met10 method	CCV				04/06/17 17:53	1.0	10	
142	met10 method	CCB				04/06/17 17:56	1.0		
143	met10 method	CCB				04/06/17 17:59	1.0		
144	met10 method	SAMPLE	287516-001	Water	246267	04/06/17 18:03	1.0		1:NA=290000
145	met10 method	X	RINSE			04/06/17 18:06	1.0		
146	met10 method	BLANK	QC880251	Soil	246347	04/06/17 18:09	1.0		
147	met10 method	LCS	QC880252	Soil	246347	04/06/17 18:12	1.0		
148	met10 method	MSS	287623-009	Soil	246347	04/06/17 18:15	100.0		
149	met10 method	MS	QC880253	Soil	246347	04/06/17 18:17	100.0		
150	met10 method	MSD	QC880254	Soil	246347	04/06/17 18:20	100.0		
151	met10 method	PDS	QC880255	Soil	246347	04/06/17 18:22	100.0	11 12 13	
152	met10 method	SER	QC880256	Soil	246347	04/06/17 18:24	500.0		
153	met10 method	SAMPLE	287623-001	Soil	246347	04/06/17 18:27	100.0		
154	met10 method	CCV				04/06/17 18:29	1.0	10	
155	met10 method	CCB				04/06/17 18:32	1.0		
156	met10 method	CCB				04/06/17 18:35	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287623-003	Soil	246347	04/06/17 18:39	100.0		
158	met10 method	SAMPLE	287623-004	Soil	246347	04/06/17 18:42	100.0		
159	met10 method	SAMPLE	287623-005	Soil	246347	04/06/17 18:44	100.0		
160	met10 method	SAMPLE	287623-006	Soil	246347	04/06/17 18:46	100.0		
161	met10 method	SAMPLE	287623-007	Soil	246347	04/06/17 18:49	100.0		
162	met10 method	SAMPLE	287623-010	Soil	246347	04/06/17 18:51	100.0		
163	met10 method	CCV				04/06/17 18:54	1.0	10	
164	met10 method	CCB				04/06/17 18:56	1.0		
165	met10 method	CCB				04/06/17 18:59	1.0		
166	met10 method	X	RINSE			04/06/17 19:08	1.0		
167	met10 method	BLANK	QC880298	Filtrate	246356	04/06/17 19:12	1.0		
168	met10 method	BS	QC880299	Filtrate	246356	04/06/17 19:15	1.0		
169	met10 method	BSD	QC880300	Filtrate	246356	04/06/17 19:17	1.0		
170	met10 method	MSS	287633-008	Filtrate	246356	04/06/17 19:20	1.0		2:CA=300000
171	met10 method	MS	QC880301	Filtrate	246356	04/06/17 19:22	1.0		
172	met10 method	MSD	QC880302	Filtrate	246356	04/06/17 19:25	1.0		
173	met10 method	SAMPLE	287589-001	Filtrate	246356	04/06/17 19:27	1.0		3:NA=390000
174	met10 method	SAMPLE	287633-004	Filtrate	246356	04/06/17 19:30	1.0		3:NA=460000
175	met10 method	SAMPLE	287633-006	Filtrate	246356	04/06/17 19:33	1.0		3:NA=280000
176	met10 method	CCV				04/06/17 19:37	1.0	10	
177	met10 method	CCB				04/06/17 19:40	1.0		
178	met10 method	CCB				04/06/17 19:43	1.0		
179	met10 method	SAMPLE	287633-007	Filtrate	246356	04/06/17 19:46	1.0		2:CA=270000
180	met10 method	X	RINSE			04/06/17 19:49	1.0		
181	met10 method	BLANK	QC879884	SPLP Leachate	246256	04/06/17 19:52	1.0		
182	met10 method	BS	QC879885	SPLP Leachate	246256	04/06/17 19:55	1.0		
183	met10 method	BSD	QC879886	SPLP Leachate	246256	04/06/17 19:58	1.0		
184	met10 method	MSS	287252-001	SPLP Leachate	246256	04/06/17 20:00	1.0		
185	met10 method	MS	QC879887	SPLP Leachate	246256	04/06/17 20:03	1.0		
186	met10 method	MSD	QC879888	SPLP Leachate	246256	04/06/17 20:05	1.0		
187	met10 method	MSS	287252-007	SPLP Leachate	246256	04/06/17 20:07	1.0		
188	met10 method	MS	QC879889	SPLP Leachate	246256	04/06/17 20:10	1.0		
189	met10 method	CCV				04/06/17 20:12	1.0	10	
190	met10 method	CCB				04/06/17 20:15	1.0		
191	met10 method	CCB				04/06/17 20:18	1.0		
192	met10 method	MSD	QC879890	SPLP Leachate	246256	04/06/17 20:21	1.0		
193	met10 method	SER	QC879891	SPLP Leachate	246256	04/06/17 20:25	5.0		
194	met10 method	PDS	QC879892	SPLP Leachate	246256	04/06/17 20:27	1.0	11 12 13	
195	met10 method	SAMPLE	287082-011	SPLP Leachate	246256	04/06/17 20:30	1.0		
196	met10 method	SAMPLE	287082-012	SPLP Leachate	246256	04/06/17 20:34	1.0		
197	met10 method	SAMPLE	287082-013	SPLP Leachate	246256	04/06/17 20:37	1.0		
198	met10 method	SAMPLE	287082-014	SPLP Leachate	246256	04/06/17 20:39	1.0		
199	met10 method	SAMPLE	287082-015	SPLP Leachate	246256	04/06/17 20:43	1.0		
200	met10 method	SAMPLE	287082-016	SPLP Leachate	246256	04/06/17 20:46	1.0		
201	met10 method	SAMPLE	287082-017	SPLP Leachate	246256	04/06/17 20:48	1.0		
202	met10 method	CCV				04/06/17 20:51	1.0	10	
203	met10 method	CCB				04/06/17 20:53	1.0		
204	met10 method	CCB				04/06/17 20:56	1.0		
205	met10 method	SAMPLE	287082-018	SPLP Leachate	246256	04/06/17 21:00	1.0		
206	met10 method	SAMPLE	287082-019	SPLP Leachate	246256	04/06/17 21:03	1.0		
207	met10 method	SAMPLE	287252-002	SPLP Leachate	246256	04/06/17 21:05	1.0		
208	met10 method	SAMPLE	287252-003	SPLP Leachate	246256	04/06/17 21:08	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10
Method : EPA 6010C

Begun : 04/06/17 08:52
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287252-004	SPLP Leachate	246256	04/06/17 21:10	1.0		
210	met10 method	SAMPLE	287252-005	SPLP Leachate	246256	04/06/17 21:12	1.0		
211	met10 method	SAMPLE	287252-006	SPLP Leachate	246256	04/06/17 21:15	1.0		
212	met10 method	SAMPLE	287252-008	SPLP Leachate	246256	04/06/17 21:18	1.0		
213	met10 method	SAMPLE	287252-009	SPLP Leachate	246256	04/06/17 21:21	1.0		
214	met10 method	SAMPLE	287252-010	SPLP Leachate	246256	04/06/17 21:24	1.0		
215	met10 method	CCV				04/06/17 21:26	1.0	10	
216	met10 method	CCB				04/06/17 21:29	1.0		
217	met10 method	CCB				04/06/17 21:32	1.0		
218	met10 method	SAMPLE	287252-011	SPLP Leachate	246256	04/06/17 21:35	1.0		
219	met10 method	CCV				04/06/17 21:38	1.0	10	
220	met10 method	CCB				04/06/17 21:41	1.0		
221	met10 method	CCB				04/06/17 21:44	1.0		
222	met10 method	X	RINSE			04/06/17 22:04	1.0		
223	met10 method	BLANK	QC880277	Air	246352	04/06/17 22:08	1.0		
224	met10 method	BS	QC880278	Air	246352	04/06/17 22:11	1.0		
225	met10 method	BSD	QC880279	Air	246352	04/06/17 22:14	1.0		
226	met10 method	MSS	287419-001	Air	246352	04/06/17 22:16	1.0		
227	met10 method	MS	QC880280	Air	246352	04/06/17 22:19	1.0		
228	met10 method	MSD	QC880281	Air	246352	04/06/17 22:21	1.0		
229	met10 method	SER	QC880282	Air	246352	04/06/17 22:24	5.0		
230	met10 method	PDS	QC880283	Air	246352	04/06/17 22:27	1.0	11 12 13	
231	met10 method	PREPBLK	QC880284	Air	246352	04/06/17 22:30	1.0		
232	met10 method	CCV				04/06/17 22:33	1.0	10	
233	met10 method	CCB				04/06/17 22:36	1.0		
234	met10 method	CCB				04/06/17 22:38	1.0		
235	met10 method	PREPBLK	QC880285	Air	246352	04/06/17 22:42	1.0		
236	met10 method	SAMPLE	287419-002	Air	246352	04/06/17 22:45	1.0		
237	met10 method	SAMPLE	287419-003	Air	246352	04/06/17 22:47	1.0		
238	met10 method	SAMPLE	287420-001	Air	246352	04/06/17 22:50	1.0		
239	met10 method	SAMPLE	287420-002	Air	246352	04/06/17 22:53	1.0		
240	met10 method	SAMPLE	287421-001	Air	246352	04/06/17 22:57	1.0		
241	met10 method	SAMPLE	287421-002	Air	246352	04/06/17 23:00	1.0		
242	met10 method	X	RINSE			04/06/17 23:02	1.0		
243	met10 method	BLANK	QC880093	TCLP Leachate	246305	04/06/17 23:06	10.0		1:NA=160000
244	met10 method	BS	QC880094	TCLP Leachate	246305	04/06/17 23:09	1.0		
245	met10 method	CCV				04/06/17 23:12	1.0	10	
246	met10 method	CCB				04/06/17 23:14	1.0		
247	met10 method	CCB				04/06/17 23:17	1.0		
248	met10 method	BSD	QC880095	TCLP Leachate	246305	04/06/17 23:21	1.0		
249	met10 method	MSS	287513-001	TCLP Leachate	246305	04/06/17 23:23	10.0		1:NA=170000
250	met10 method	MS	QC880096	TCLP Leachate	246305	04/06/17 23:27	10.0		
251	met10 method	MSD	QC880097	TCLP Leachate	246305	04/06/17 23:29	10.0		
252	met10 method	SAMPLE	287513-002	TCLP Leachate	246305	04/06/17 23:32	10.0		1:NA=160000
253	met10 method	SAMPLE	287513-003	TCLP Leachate	246305	04/06/17 23:35	10.0		1:NA=150000
254	met10 method	SAMPLE	287513-004	TCLP Leachate	246305	04/06/17 23:39	10.0		1:NA=150000
255	met10 method	SAMPLE	287513-006	TCLP Leachate	246305	04/06/17 23:42	10.0		1:NA=150000
256	met10 method	SAMPLE	287513-007	TCLP Leachate	246305	04/06/17 23:45	10.0		1:NA=160000
257	met10 method	SAMPLE	287513-010	TCLP Leachate	246305	04/06/17 23:49	10.0		1:NA=160000
258	met10 method	CCV				04/06/17 23:52	1.0	10	
259	met10 method	CCB				04/06/17 23:55	1.0		
260	met10 method	CCB				04/06/17 23:58	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10
Method : EPA 6010C

Begun : 04/06/17 08:52
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287515-001	TCLP Leachate	246305	04/07/17 00:01	10.0		1:NA=160000
262	met10 method	SAMPLE	287515-002	TCLP Leachate	246305	04/07/17 00:05	10.0		1:NA=160000
263	met10 method	SAMPLE	287543-005	TCLP Leachate	246305	04/07/17 00:08	10.0		
264	met10 method	SAMPLE	287617-001	TCLP Leachate	246305	04/07/17 00:12	10.0		1:NA=160000
265	met10 method	CCV				04/07/17 00:15	1.0	10	
266	met10 method	CCB				04/07/17 00:18	1.0		
267	met10 method	CCB				04/07/17 00:21	1.0		
268	met10 method	X	RINSE			04/07/17 00:38	1.0		
269	met10 method	BLANK	QC879456	Water	246155	04/07/17 00:41	1.0		
270	met10 method	BS	QC879457	Water	246155	04/07/17 00:44	1.0		
271	met10 method	BSD	QC879458	Water	246155	04/07/17 00:47	1.0		
272	met10 method	MSS	287365-001	Water	246155	04/07/17 00:49	1.0		
273	met10 method	MS	QC879459	Water	246155	04/07/17 00:52	1.0		
274	met10 method	MSD	QC879460	Water	246155	04/07/17 00:54	1.0		
275	met10 method	SAMPLE	287246-009	Water	246155	04/07/17 00:57	1.0		4:NA=2100000
276	met10 method	SAMPLE	287348-001	Water	246155	04/07/17 00:59	1.0		
277	met10 method	SAMPLE	287348-002	Water	246155	04/07/17 01:02	1.0		
278	met10 method	CCV				04/07/17 01:04	1.0	10	
279	met10 method	CCB				04/07/17 01:07	1.0		
280	met10 method	CCB				04/07/17 01:10	1.0		
281	met10 method	SAMPLE	287365-002	Water	246155	04/07/17 01:13	1.0		
282	met10 method	SAMPLE	287365-003	Water	246155	04/07/17 01:16	1.0		
283	met10 method	SAMPLE	287365-004	Water	246155	04/07/17 01:20	1.0		
284	met10 method	SAMPLE	287365-005	Water	246155	04/07/17 01:22	1.0		
285	met10 method	SAMPLE	287365-006	Water	246155	04/07/17 01:25	1.0		
286	met10 method	SAMPLE	287365-007	Water	246155	04/07/17 01:27	1.0		
287	met10 method	SAMPLE	287365-008	Water	246155	04/07/17 01:29	1.0		
288	met10 method	SAMPLE	287365-009	Water	246155	04/07/17 01:32	1.0		
289	met10 method	SAMPLE	287365-010	Water	246155	04/07/17 01:34	1.0		
290	met10 method	SAMPLE	287365-011	Water	246155	04/07/17 01:37	1.0		
291	met10 method	CCV				04/07/17 01:39	1.0	10	
292	met10 method	CCB				04/07/17 01:42	1.0		
293	met10 method	CCB				04/07/17 01:45	1.0		
294	met10 method	SAMPLE	287365-012	Water	246155	04/07/17 01:48	1.0		
295	met10 method	SAMPLE	287365-013	Water	246155	04/07/17 01:50	1.0		
296	met10 method	SAMPLE	287365-014	Water	246155	04/07/17 01:54	1.0		
297	met10 method	SAMPLE	287365-015	Water	246155	04/07/17 01:57	1.0		
298	met10 method	SAMPLE	287365-019	Water	246155	04/07/17 02:00	1.0		
299	met10 method	X	RINSE			04/07/17 02:04	1.0		
300	met10 method	MS	QC879944	Soil	246272	04/07/17 02:07	100.0		
301	met10 method	MSD	QC879945	Soil	246272	04/07/17 02:09	100.0		
302	met10 method	X	RINSE			04/07/17 02:12	1.0		
303	met10 method	MSS	287418-003	Filtrate	246184	04/07/17 02:15	1.0		2:NA=270000
304	met10 method	CCV				04/07/17 02:17	1.0	10	
305	met10 method	CCB				04/07/17 02:20	1.0		
306	met10 method	CCB				04/07/17 02:23	1.0		
307	met10 method	SAMPLE	287418-004	Filtrate	246184	04/07/17 02:27	1.0		4:NA=4300000
308	met10 method	SAMPLE	287418-006	Filtrate	246184	04/07/17 02:30	1.0		4:NA=2700000
309	met10 method	SAMPLE	287418-007	Filtrate	246184	04/07/17 02:33	1.0		4:NA=5000000
310	met10 method	SAMPLE	287418-008	Filtrate	246184	04/07/17 02:36	1.0		4:NA=3200000
311	met10 method	SAMPLE	287418-009	Filtrate	246184	04/07/17 02:40	1.0		3:NA=2200000
312	met10 method	SAMPLE	287418-011	Filtrate	246184	04/07/17 02:42	1.0		4:NA=4600000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087138772

Instrument : MET10 Begun : 04/06/17 08:52
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	X	RINSE			04/07/17 02:46	1.0		
314	met10 method	MSS	287252-007	SPLP Leachate	246256	04/07/17 02:49	1.0		
315	met10 method	MS	QC879889	SPLP Leachate	246256	04/07/17 02:51	1.0		
316	met10 method	MSD	QC879890	SPLP Leachate	246256	04/07/17 02:54	1.0		
317	met10 method	CCV				04/07/17 02:56	1.0	10	
318	met10 method	CCB				04/07/17 02:59	1.0		
319	met10 method	CCB				04/07/17 03:02	1.0		
320	met10 method	SER	QC879891	SPLP Leachate	246256	04/07/17 03:05	5.0		
321	met10 method	PDS	QC879892	SPLP Leachate	246256	04/07/17 03:08	1.0	11 12 13	
322	met10 method	CCV				04/07/17 03:11	1.0	10	
323	met10 method	CCB				04/07/17 03:13	1.0		
324	met10 method	CCB				04/07/17 03:16	1.0		

KER 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 37.

MNA 04/06/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 38 through 236.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
		ICAL STD	8366014	998107
		LOWER LIMIT	2509804	299432
		UPPER LIMIT	10039216	1197728
009	ICB		8268979	1000301
010	ICSA		6658881	890473
013	ICSAB		6614508	911695
076	CCV		7992819	1003975
077	CCB		8412844	1037669
078	SAMPLE	287331-001	7826823	999841
080	MSS	287252-007	7476391	969369
081	MS	QC880060	7349833	980103
082	MSD	QC880061	7317495	984305
083	SER	QC880062	8097286	1018630
084	PDS	QC880063	7470166	987353
085	SAMPLE	287252-042	7300034	968007
086	SAMPLE	287252-043	7360832	960895
087	SAMPLE	287252-044	7332549	967966
088	SAMPLE	287252-045	7490291	973049
089	CCV		7981104	1006315
090	CCB		8477036	1028695
091	CCB		10050731 *	87356 *
092	SAMPLE	287362-045	7272749	959076
093	SAMPLE	287362-046	7470095	980821
102	CCV		7975354	1006254
103	CCB		8632355	1032857
119	MSS	287252-028	8323418	1034554
120	SAMPLE	287252-029	8441001	1044557
121	SAMPLE	287252-030	7760832	1017274
122	SAMPLE	287252-033	8603135	1040728
123	SAMPLE	287252-034	8299852	1047209
124	SAMPLE	287252-035	8532200	1035659
125	SAMPLE	287252-036	8054234	1050851
126	SAMPLE	287252-045	8393765	1050717
184	MSS	287252-001	8502245	1063454
187	MSS	287252-007	8242116	1033958
195	SAMPLE	287082-011	8328211	1052933
196	SAMPLE	287082-012	8462604	1051300
197	SAMPLE	287082-013	8382479	1050475
198	SAMPLE	287082-014	8552286	1039245
199	SAMPLE	287082-015	8453637	1047445
200	SAMPLE	287082-016	8590771	1042345
201	SAMPLE	287082-017	8476746	1044559
205	SAMPLE	287082-018	8268493	1036319
206	SAMPLE	287082-019	8437429	1052520
207	SAMPLE	287252-002	8372999	1053046
208	SAMPLE	287252-003	8287407	1050939
209	SAMPLE	287252-004	8408122	1045062
210	SAMPLE	287252-005	8535131	1042388
211	SAMPLE	287252-006	8364788	1050187
212	SAMPLE	287252-008	8543230	1061338
213	SAMPLE	287252-009	8395682	1063187

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087138772

Date : 04/06/17 Reference : met10 method
Sequence : MET10 04/06/17 Analyzed : 04/06/17 08:56

#	Type	Sample ID	Y A	Y R
214	SAMPLE	287252-010	8376064	1045641
218	SAMPLE	287252-011	8355713	1064071
314	MSS	287252-007	8279453	1044542

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287362 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087138772001
Units : ug/L

Date : 06-APR-2017 08:52
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087138772002	L1	06-APR-2017 08:56	S32578
L2	met10 method	1087138772003	L2	06-APR-2017 08:59	S32571
L3	met10 method	1087138772004	L3	06-APR-2017 09:01	S32367
L4	met10 method	1087138772005	L4	06-APR-2017 09:03	S32368
L5	met10 method	1087138772006	L5	06-APR-2017 09:06	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8800	2.7920	2.6354	2.5586		LOR0	0.00000	0.39071		2.7165	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	13	100.00	9	1000.0	3	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087138772001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287362 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087138772001 Cal Date : 06-APR-2017

ICV 1087138772007 (06-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5087	ug/L	2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772008.2 File : met10 method Time : 06-APR-2017 09:12
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.455	ug/L	9	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8249216	-1.40
Yttrium	R	998107	1022393	2.43

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772009.2 File : met10 method Time : 06-APR-2017 09:27
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8268979	-1.16
Yttrium	R	998107	1000301	0.22

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772010.2 File : met10 method Time : 06-APR-2017 09:31
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-4.747]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18370	ug/L	92	
Copper	A	20000	22890	ug/L	114	
Manganese	A	20000	18080	ug/L	90	
Nickel	A	20000	16360	ug/L	82	
Titanium	A	20000	18630	ug/L	93	
Vanadium	A	20000	21300	ug/L	107	
Aluminum	R	500000	561800	ug/L	112	
Calcium	R	500000	508600	ug/L	102	
Iron	R	200000	201300	ug/L	101	
Magnesium	R	500000	447700	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6658881	-20.41
Yttrium	R	998107	890473	-10.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772013.1 File : met10 method Time : 06-APR-2017 10:16
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	931.7	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	6614508	-20.94
Yttrium	R	998107	911695	-8.66

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772076.2 File : met10 method Time : 06-APR-2017 14:13
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.5196	5000	4922	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7992819	-4.46
Yttrium	R	998107	1003975	0.59

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772077.2 File : met10 method Time : 06-APR-2017 14:15
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8412844	0.56
Yttrium	R	998107	1037669	3.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772089.2 File : met10 method Time : 06-APR-2017 14:55
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.5191	5000	4921	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7981104	-4.60
Yttrium	R	998107	1006315	0.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772090.2 File : met10 method Time : 06-APR-2017 14:57
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8477036	1.33
Yttrium	R	998107	1028695	3.06

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772091.1 File : met10 method Time : 06-APR-2017 15:00
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	i+ ***

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	10050731	**20.14 ***
Yttrium	R	998107	87356	**-91.25 ***

+=high bias i=ISTD failure

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772102.1 File : met10 method Time : 06-APR-2017 16:04
Cal : 1087138772001 Caldate : 06-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.7165	2.4941	5000	4872	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	7975354	-4.67
Yttrium	R	998107	1006254	0.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087138772103.1 File : met10 method Time : 06-APR-2017 16:07
Cal : 1087138772001 Caldate : 06-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8366014	8632355	3.18
Yttrium	R	998107	1032857	3.48

SAMPLE PREPARATION SUMMARY

Batch # : 246299
Started By : MB4
Method : 3050B
Spike #1 ID : S30743
Prep Date : 04-APR-2017 18:05
Spike #2 ID : S32291
Analysis : ICP
Finished By : MB4
Units : g
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287252-007		Soil	1	50	1	50.0						6010	
287252-042		Soil	1.04	50	1	48.08						6010	
287252-043		Soil	1.03	50	1	48.54						6010	
287252-044		Soil	.99	50	1	50.51						6010	
287252-045		Soil	1.1	50	1	45.45						6010	
287362-045		Soil	1.02	50	1	49.02						6010	
287362-046		Soil	.96	50	1	52.08						6010	
287528-001		Soil	1.03	50	1	48.54						6010	
287533-001		Soil	.92	50	1	54.35						6010	
287533-002		Soil	1.03	50	1	48.54						6010	
287533-003		Soil	1.05	50	1	47.62						6010	
287533-004		Soil	1.03	50	1	48.54						6010	
287543-005		Soil	.81	50	1	61.73						6010	
287576-005		Soil	1.02	50	1	49.02						6010	
287642-001		Miscell.	.99	50	1	50.51						6010	
287644-001		Soil	1.05	50	1	47.62						6010	
287644-002		Soil	1.1	50	1	45.45						6010	
287644-003		Soil	1.02	50	1	49.02						6010	
287644-004		Soil	1.08	50	1	46.30						6010	
QC880057	BLANK	Miscell.	.93	50	1	53.76							
QC880058	BS	Miscell.	1.04	50	1	48.08		.5	.5	.5			
QC880059	BSD	Miscell.	1.08	50	1	46.30		.5	.5	.5			
QC880060	MS	Soil	.97	50	1	51.55		.5	.5	.5			
QC880061	MSD	Soil	.99	50	1	50.51		.5	.5	.5			
QC880062	SER	Soil	1	50	1	50.0							
QC880063	PDS	Soil	1	50	1	50.0							
QC880064	PREPBLK	Miscell.	1	50	1	50.0							
QC880065	PREPBLK	Miscell.	1	50	1	50.0							

Analyst: KER Date: 04/05/17 Reviewer: PRW Date: 04/05/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246299 Digestion Method: Time ON: 18:05 BK 4043

Date Digested: 4-4-2017 ☒ EPA 3050b Time OFF: 20:55 Page 69

Digested by: MB4 ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLK		0.93	☒50 ☐	Yes	✓	QC#880057
BS		1.04	☒50 ☐		✓	58
BSD		1.08	☒50 ☐		✓	59
287252-007MS		0.97	☒50 ☐		✓	60
-007MSD		0.99	☒50 ☐		✓	61
-007	A	1.00	☒50 ☐		✓	
-042		1.04	☒50 ☐		✓	
-043		1.03	☒50 ☐		✓	
-044		0.99	☒50 ☐		✓	
-045		1.10	☒50 ☐		✓	
287528-001	A	1.03	☒50 ☐		✓	
287533-001	A	0.92	☒50 ☐		✓	
-002		1.03	☒50 ☐		✓	
-003		1.05	☒50 ☐		✓	
-004		1.03	☒50 ☐		✓	
287543-005		0.81	☒50 ☐		✓	comp 287543 1-4 @ 50g ea.
287576-005		1.02	☒50 ☐		✓	comp 287576 1-4 @ 50g ea.
287642-001	A	0.99	☒50 ☐		✓	
287644-001	A	1.05	☒50 ☐		✓	
-002		1.10	☒50 ☐		✓	
-003		1.02	☒50 ☐		✓	
-004		1.08	☒50 ☐		✓	
287362-045	A	1.02	☒50 ☐	Yes	—	Added on 4-5-17 @ 03:30.
-046		0.96	☒50 ☐	Yes	✓	
			☐ 50 ☐			

← Limited sample volume

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259788-2005	—	MB4 4-4-17
Blank 'matrix' lot#	T458-7A007		
0.5 mL of spike solution (Std1) was added to all spikes	S20743		
6.5 mL of spike solution (Std2) was added to all spikes	S32291		
6.5 mL of spike solution (Std3) was added to all spikes	S32702		
Digestion Block ID, Probe Location	Rainier	42	
Temperature (°C), Thermometer ID	96°C	AG4730	
1:1 HNO3 Reagent ID	BDH 20170119887		
concentrated HNO3 lot#	BDH 20170119887		
3mL 30% hydrogen peroxide lot#	EMD 562586039		
concentrated HCl lot#	JTB162118		
☒ filtered thru' Whatman 541, lot#	96933346		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N27150P
5	24442627
1.5	24442627

Digestion Chemist / Date 4-4-17

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246300 Analysis : ICP
Started By : MB4 Prep Date : 04-APR-2017 18:05 Finished By : MB4
Method : 3050B Units : g
Spike #1 ID : S30743 Spike #2 ID : S32291 Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-001		Soil	1.02	50	1	49.02						6010	
287362-002		Soil	.98	50	1	51.02						6010	
287362-003		Soil	.99	50	1	50.51						6010	
287362-004		Soil	.94	50	1	53.19						6010	
287362-005		Soil	.96	50	1	52.08						6010	
287362-006		Soil	.92	50	1	54.35						6010	
287362-007		Soil	1.01	50	1	49.50						6010	
287362-008		Soil	1.09	50	1	45.87						6010	
287362-009		Soil	.98	50	1	51.02						6010	
287362-010		Soil	.93	50	1	53.76						6010	
287362-011		Soil	.96	50	1	52.08						6010	
287362-012		Soil	.99	50	1	50.51						6010	
287362-013		Soil	1.05	50	1	47.62						6010	
287362-014		Soil	1.06	50	1	47.17						6010	
287362-015		Soil	.9	50	1	55.56						6010	
287362-016		Soil	.92	50	1	54.35						6010	
287362-017		Soil	.94	50	1	53.19						6010	
287362-018		Soil	1.03	50	1	48.54						6010	
287362-019		Soil	1.03	50	1	48.54						6010	
287362-020		Soil	.97	50	1	51.55						6010	
QC880066	BLANK	Soil	1.07	50	1	46.73							
QC880067	BS	Soil	.92	50	1	54.35		.5	.5	.5			
QC880068	BSD	Soil	.95	50	1	52.63		.5	.5	.5			
QC880069	MS	Soil	1.02	50	1	49.02		.5	.5	.5			
QC880070	MSD	Soil	1.04	50	1	48.08		.5	.5	.5			
QC880071	SER	Soil	.94	50	1	53.19							
QC880072	PDS	Soil	.94	50	1	53.19							
QC880077	PREPBLK	Soil	1	50	1	50.0							
QC880078	PREPBLK	Soil	1	50	1	50.0							

Analyst: KER Date: 04/06/17 Reviewer: BJP Date: 04/06/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246300 Digestion Method: Time ON: 18:05 **BK 4043**

Date Digested: 4-4-2017 ☒ EPA 3050b Time OFF: 20:55 Page 70

Digested by: MBH ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLANK		1.07	☒ 50 ☐	YES	✓	QC# 880064
BS		0.92	☒ 50 ☐		✓	67
BSD		0.95	☒ 50 ☐		✓	68
MS		1.02	☒ 50 ☐		✓	69
MSD		1.04	☒ 50 ☐		✓	70
287362-001	A	1.02	☒ 50 ☐		✓	
-002		0.98	☒ 50 ☐		✓	
-003		0.99	☒ 50 ☐		✓	
-004		0.94	☒ 50 ☐		✓	MSS
-005		0.96	☒ 50 ☐		✓	
-006		0.92	☒ 50 ☐		✓	
-007		1.01	☒ 50 ☐		✓	
-008		1.09	☒ 50 ☐		✓	
-009		0.98	☒ 50 ☐		✓	
-010		0.93	☒ 50 ☐		✓	
-011		0.96	☒ 50 ☐		✓	
-012		0.99	☒ 50 ☐		✓	
-013		1.05	☒ 50 ☐		✓	
-014		1.06	☒ 50 ☐		✓	
-015		0.90	☒ 50 ☐		✓	
-016		0.92	☒ 50 ☐		✓	
-017		0.94	☒ 50 ☐		✓	
-018		1.03	☒ 50 ☐		✓	
-019		1.03	☒ 50 ☐		✓	
-020		0.97	☒ 50 ☐		✓	

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259788-2005	—	MBH 4-4-17
Blank 'matrix' lot#	T458-7A007		
0.5 mL of spike solution (Std1) was added to all spikes	S30743		
0.5 mL of spike solution (Std2) was added to all spikes	S32291		
0.5 mL of spike solution (Std3) was added to all spikes	S32702		
Digestion Block ID, Probe Location	Rainier	42	
Temperature (°C), Thermometer ID	96	AG4730	
1:1 HNO3 Reagent ID	BDH20170119887		
concentrated HNO3 lot#	BDH20170119887		
3mL 30% hydrogen peroxide lot#	EMD SG258039		
concentrated HCl lot#	JTB102118		
☒ filtered thru' Whatman 541, lot#	9609334		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N27150D
5	24442607
1.5	24442607

4-4-17

Digestion Chemist / Date

Continued from page Ø

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Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246302
Started By : MB4
Prep Date : 04-APR-2017 18:05
Method : 3050B
Analysis : ICP
Finished By : MB4
Units : g
Spike #1 ID : S30743
Spike #2 ID : S32291
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-021		Soil	1.03	50	1	48.54						6010	
287362-022		Soil	1.05	50	1	47.62						6010	
287362-023		Soil	1.08	50	1	46.30						6010	
287362-024		Soil	.99	50	1	50.51						6010	
287362-025		Soil	.9	50	1	55.56						6010	
287362-026		Soil	1.09	50	1	45.87						6010	
287362-027		Soil	.98	50	1	51.02						6010	
287362-028		Soil	.95	50	1	52.63						6010	
287362-029		Soil	1.05	50	1	47.62						6010	
287362-030		Soil	1.08	50	1	46.30						6010	
287362-031		Soil	.96	50	1	52.08						6010	
287362-032		Soil	.97	50	1	51.55						6010	
287362-033		Soil	.92	50	1	54.35						6010	
287362-034		Soil	.99	50	1	50.51						6010	
287362-035		Soil	.92	50	1	54.35						6010	
287362-036		Soil	.94	50	1	53.19						6010	
287362-037		Soil	1.02	50	1	49.02						6010	
287362-038		Soil	.9	50	1	55.56						6010	
287362-039		Soil	.95	50	1	52.63						6010	
287362-040		Soil	1.02	50	1	49.02						6010	
QC880079	BLANK	Soil	.98	50	1	51.02							
QC880080	BS	Soil	.98	50	1	51.02		.5	.5	.5			
QC880081	BSD	Soil	.97	50	1	51.55		.5	.5	.5			
QC880082	MS	Soil	1.09	50	1	45.87		.5	.5	.5			
QC880083	MSD	Soil	1	50	1	50.0		.5	.5	.5			
QC880084	SER	Soil	1.03	50	1	48.54							
QC880085	PDS	Soil	1.03	50	1	48.54							
QC880086	PREPBLK	Soil	1	50	1	50.0							
QC880087	PREPBLK	Soil	1	50	1	50.0							

Analyst: KER Date: 04/06/17 Reviewer: BJP Date: 04/06/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 1.1.1, Feb.2017

LIMS Batch #: 246302 Digestion Method: Time ON: 18:05 BK 4043

Date Digested: 4-4-2017 ☒ EPA 3050b Time OFF: 20:55 Page 71

Digested by: MBH ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLANK		0.98	☒50 ☐	Yes	✓	QC#880079
BS		0.98	☒50 ☐		✓	80
BSD		0.97	☒50 ☐		✓	81
MS		1.09	☒50 ☐		✓	82
MSD		1.00	☒50 ☐		✓	83
287362-021	A	1.03	☒50 ☐		✓	MSS
-022		1.05	☒50 ☐		✓	
-023		1.08	☒50 ☐		✓	
-024		0.99	☒50 ☐		✓	
-025		0.90	☒50 ☐		✓	
-026		1.09	☒50 ☐		✓	
-027		0.98	☒50 ☐		✓	
-028		0.95	☒50 ☐		✓	
-029		1.05	☒50 ☐		✓	
-030		1.08	☒50 ☐		✓	
-031		0.96	☒50 ☐		✓	
-032		0.97	☒50 ☐		✓	
-033		0.92	☒50 ☐		✓	
-034		0.99	☒50 ☐		✓	
-035		0.92	☒50 ☐		✓	
-036		0.94	☒50 ☐		✓	
-037		1.02	☒50 ☐		✓	
-038		0.90	☒50 ☐		✓	
-039		0.95	☒50 ☐		✓	
-040		1.02	☒50 ☐		✓	

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	259788-2005	—	MBH 4-4-17
Blank 'matrix' lot#	T458-7A007		
0.5 mL of spike solution (Std1) was added to all spikes	S30743		
0.5 mL of spike solution (Std2) was added to all spikes	S32291		
0.5 mL of spike solution (Std3) was added to all spikes	S32702		
Digestion Block ID, Probe Location	Teflon	42	
Temperature (°C), Thermometer ID	95°	M14581	
1:1 HNO3 Reagent ID	BDH 20170119887		
concentrated HNO3 lot#	BDH 20170119887		
3mL 30% hydrogen peroxide lot#	EMD 56258639		
concentrated HCl lot#	JTB102118		
☐ filtered thru' Whatman 541, lot#	960933416		
Relinquished to ICP group	ICP		

Pipettes

Vol (mL)	ID
0.5	N27150D
5	24442407
1.5	24442607

MBH 4-4-17

Digestion Chemist / Date

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246313
Started By : VV
Method : 3050B
Spike #1 ID : S30743
Prep Date : 05-APR-2017 03:45
Spike #2 ID : S32291
Analysis : ICP
Finished By : VV
Units : g
Spike #3 ID : S32702

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-041		Soil	.95	50	1	52.63						6010	
287362-042		Soil	.96	50	1	52.08						6010	
287362-043		Soil	1.08	50	1	46.30						6010	
287362-044		Soil	1.01	50	1	49.50						6010	
287548-001		Soil	.99	50	1	50.51						6010	
287548-002		Soil	1.01	50	1	49.50						6010	
287548-003		Soil	.98	50	1	51.02						6010	
287548-004		Soil	.93	50	1	53.76						6010	
287548-005		Soil	.97	50	1	51.55						6010	
287548-006		Soil	.94	50	1	53.19						6010	
287548-007		Soil	1.09	50	1	45.87						6010	
287548-008		Soil	1.01	50	1	49.50						6010	
287548-009		Soil	.99	50	1	50.51						6010	
287548-010		Soil	.95	50	1	52.63						6010	
287548-011		Soil	.96	50	1	52.08						6010	
287548-012		Soil	.96	50	1	52.08						6010	
287548-013		Soil	.99	50	1	50.51						6010	
287548-014		Soil	.97	50	1	51.55						6010	
287548-015		Soil	.99	50	1	50.51						6010	
287548-016		Soil	1.05	50	1	47.62						6010	
QC880114	BLANK	Soil	.95	50	1	52.63							
QC880115	BS	Soil	.99	50	1	50.51		.5	.5	.5			
QC880116	BSD	Soil	1	50	1	50.0		.5	.5	.5			
QC880117	MS	Soil	1.1	50	1	45.45		.5	.5	.5			
QC880118	SER	Soil	.99	50	1	50.51							
QC880119	PDS	Soil	.99	50	1	50.51							
QC880120	MSD	Soil	.93	50	1	53.76		.5	.5	.5			
QC880121	PREPBLK	Soil	1	50	1	50.0							
QC880122	PREPBLK	Soil	1	50	1	50.0							

Analyst: KER Date: 04/06/17 Reviewer: BJP Date: 04/06/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: ~~24~~ 2416313 (VV 4-5-17) Digestion Method: Time ON: 03:45 **BK 4043**

Date Digested: 4-5-17 ☒ EPA 3050b Time OFF: 08:30 Page 72

Digested by: VV ☐ _____

	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
	BLK # 880114	QC	0.95	☒ 50 ☐	Yes	✓	
*	BS 880115	↓	0.99	☒ 50 ☐	Yes	✓	
*	BSD 880116	↓	1.00	☒ 50 ☐	Yes	✓	
*	287548-001 MS		1.10	☒ 50 ☐	Yes	—	
5 *	↓ -001 MSD		0.93	☒ 50 ☐	Yes	—	
	287362-041	A	0.95	☒ 50 ☐	Yes	✓	
	↓ -042	↓	0.96	☒ 50 ☐	Yes	—	
	-043		1.08	☒ 50 ☐	Yes	—	
	↓ -044	↓	1.01	☒ 50 ☐	Yes	—	
10	287548-001	A	0.99	☒ 50 ☐	Yes	✓	
	-002	↓	1.01	☒ 50 ☐	Yes	—	
	-003		0.98	☒ 50 ☐	Yes	~~VV~~ 4-5-17	
	-004		0.93	☒ 50 ☐	Yes	VV 4-5-17	
	-005		0.97	☒ 50 ☐	Yes	✓	
15	-006		0.94	☒ 50 ☐	Yes	✓	
	-007		1.09	☒ 50 ☐	Yes	—	
	-008		1.01	☒ 50 ☐	Yes	—	
	-009		0.99	☒ 50 ☐	Yes	—	
	-010		0.95	☒ 50 ☐	Yes	—	
20	-011		0.96	☒ 50 ☐	Yes	—	
	-012		0.96	☒ 50 ☐	Yes	—	
	-013		0.99	☒ 50 ☐	Yes	—	
	-014		0.97	☒ 50 ☐	Yes	✓	
	-015		0.99	☒ 50 ☐	Yes	✓	
	↓ -016	↓	1.05	☒ 50 ☐	Yes	—	

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	159788-2005	160138-7050-KE	VV 4-5-17
Blank 'matrix' lot#	T458-71007		
0.5 mL of spike solution (Std1) was added to all spikes	S30743*		
0.5 mL of spike solution (Std2) was added to all spikes	S32291 *		
0.5 mL of spike solution (Std3) was added to all spikes	S32402*		
Digestion Block ID, Probe Location	RAINIER	43	
Temperature (°C) , Thermometer ID	95°C	SN AG4780	
1:1 HNO3 Reagent ID	20170111988-040517		
concentrated HNO3 lot#	20170111988 - BDH		
3mL 30% hydrogen peroxide lot#	5602558639 - EMD		
concentrated HCl lot#	162118 - JTB		
☒ filtered thru' Whatman 541, lot#	9693346		
Relinquished to ICP group	DCAP		

Pipettes

Vol.(mL)	ID
0.5	N271500
5	2444262
1.5	2444262

4-5-17

Digestion Chemist / Date

Continued from page ☒

Continued on page _____

Reviewed Online/ See LIMS

Laboratory Job Number 287362

ANALYTICAL REPORT

Metals

Matrix: SPLP Leachate

Curtis & Tompkins, Ltd.

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Dil'n Fac:	1.000
Matrix:	SPLP Leachate	Chemist:	MNA
Units:	mg/L	Received:	03/24/17

Field ID	Type	Lab ID	Result	RL	Batch#	Sampled	Prepared	Analyzed
21-SS118	SAMPLE	287362-001	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS117	SAMPLE	287362-002	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS116	SAMPLE	287362-003	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS115	SAMPLE	287362-004	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS114	SAMPLE	287362-005	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS120	SAMPLE	287362-006	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS121	SAMPLE	287362-007	ND	0.0050	246617	03/20/17	04/12/17	04/13/17
21-SS122	SAMPLE	287362-008	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS123	SAMPLE	287362-009	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS124	SAMPLE	287362-010	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS125	SAMPLE	287362-011	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS126	SAMPLE	287362-012	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS131	SAMPLE	287362-013	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS130	SAMPLE	287362-014	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS129	SAMPLE	287362-015	ND	0.0050	246617	03/21/17	04/12/17	04/13/17
21-SS128	SAMPLE	287362-016	ND	0.0050	246617	03/22/17	04/12/17	04/13/17
21-SS127	SAMPLE	287362-017	ND	0.0050	246617	03/22/17	04/12/17	04/13/17
21-SS132	SAMPLE	287362-018	ND	0.0050	246617	03/22/17	04/12/17	04/13/17
21-SS133	SAMPLE	287362-019	ND	0.0050	246617	03/22/17	04/12/17	04/13/17
21-SS134	SAMPLE	287362-020	ND	0.0050	246617	03/22/17	04/12/17	04/13/17
21-SS135	SAMPLE	287362-021	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS136	SAMPLE	287362-022	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS137	SAMPLE	287362-023	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS138	SAMPLE	287362-024	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS139	SAMPLE	287362-025	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS144	SAMPLE	287362-026	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS145	SAMPLE	287362-027	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS146	SAMPLE	287362-028	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS147	SAMPLE	287362-029	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS148	SAMPLE	287362-030	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS149	SAMPLE	287362-031	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS150	SAMPLE	287362-032	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS151	SAMPLE	287362-033	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS143	SAMPLE	287362-034	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS142	SAMPLE	287362-035	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS141	SAMPLE	287362-036	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS140	SAMPLE	287362-037	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS156	SAMPLE	287362-038	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS157	SAMPLE	287362-039	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS158	SAMPLE	287362-040	ND	0.0050	247527	03/22/17	05/05/17	05/08/17
21-SS159	SAMPLE	287362-041	ND	0.0050	247528	03/22/17	05/05/17	05/08/17
21-SS160	SAMPLE	287362-042	ND	0.0050	247528	03/23/17	05/05/17	05/08/17
21-SS161	SAMPLE	287362-043	ND	0.0050	247528	03/23/17	05/05/17	05/08/17
21-SS162	SAMPLE	287362-044	ND	0.0050	247528	03/23/17	05/05/17	05/08/17
21-SS163	SAMPLE	287362-045	ND	0.0050	247528	03/23/17	05/05/17	05/08/17
21-SS154	SAMPLE	287362-046	ND	0.0050	247528	03/23/17	05/05/17	05/08/17
	BLANK	QC881302	ND	0.0050	246617		04/12/17	04/13/17
	BLANK	QC884815	ND	0.0050	247527		05/05/17	05/08/17
	BLANK	QC884822	ND	0.0050	247528		05/05/17	05/08/17
	BLANK	QC884827	ND	0.0050	247528		05/05/17	05/08/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Chemist:	MNA
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Sampled	Received	Prepared	Analyzed
	BS		QC881303		0.1000	0.1048	105	77-120			246617			04/12/17	04/13/17
	BSD		QC881304		0.1000	0.1028	103	77-120	2	20	246617			04/12/17	04/13/17
21-SS115	MS	287362-004	QC881305	<0.001185	0.1000	0.1062	106	56-127			246617	03/20/17	03/24/17	04/12/17	04/13/17
21-SS115	MSD	287362-004	QC881306		0.1000	0.1025	102	56-127	4	33	246617	03/20/17	03/24/17	04/12/17	04/13/17
	BS		QC884816		0.1000	0.1019	102	77-120			247527			05/05/17	05/08/17
	BSD		QC884817		0.1000	0.1002	100	77-120	2	20	247527			05/05/17	05/08/17
21-SS135	MS	287362-021	QC884818	<0.001185	0.1000	0.09931	99	56-127			247527	03/22/17	03/24/17	05/05/17	05/08/17
21-SS135	MSD	287362-021	QC884819		0.1000	0.09991	100	56-127	1	33	247527	03/22/17	03/24/17	05/05/17	05/08/17
	BS		QC884823		0.1000	0.1002	100	77-120			247528			05/05/17	05/08/17
	BSD		QC884824		0.1000	0.1002	100	77-120	0	20	247528			05/05/17	05/08/17
21-SS175	MS	287500-014	QC884825	<0.001185	0.1000	0.09918	99	56-127			247528	03/27/17	03/29/17	05/05/17	05/08/17
21-SS175	MSD	287500-014	QC884826		0.1000	0.1014	101	56-127	2	33	247528	03/27/17	03/29/17	05/05/17	05/08/17

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS115	Batch#:	246617
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287362-004	Sampled:	03/20/17
Lab ID:	QC881307	Received:	03/24/17
Matrix:	SPLP Leachate	Analyzed:	04/13/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS115	Batch#:	246617
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287362-004	Sampled:	03/20/17
Lab ID:	QC881308	Received:	03/24/17
Matrix:	SPLP Leachate	Analyzed:	04/13/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1049	105	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS135	Batch#:	247527
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287362-021	Sampled:	03/22/17
Lab ID:	QC884820	Received:	03/24/17
Matrix:	SPLP Leachate	Analyzed:	05/08/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS135	Batch#:	247527
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287362-021	Sampled:	03/22/17
Lab ID:	QC884821	Received:	03/24/17
Matrix:	SPLP Leachate	Analyzed:	05/08/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1003	100	75-125

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS175	Batch#:	247528
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287500-014	Sampled:	03/27/17
Lab ID:	QC884828	Received:	03/29/17
Matrix:	SPLP Leachate	Analyzed:	05/08/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287362	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS175	Batch#:	247528
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287500-014	Sampled:	03/27/17
Lab ID:	QC884829	Received:	03/29/17
Matrix:	SPLP Leachate	Analyzed:	05/08/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1028	103	75-125

REPORTING SUMMARY FOR 287362 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287362-001	MET10	04/13/17 20:59	1.0	+
287362-002	MET10	04/13/17 21:01	1.0	+
287362-003	MET10	04/13/17 21:04	1.0	+
287362-004	MET10	04/13/17 20:46	1.0	+
287362-005	MET10	04/13/17 21:12	1.0	+
287362-006	MET10	04/13/17 21:15	1.0	+
287362-007	MET10	04/13/17 21:17	1.0	+
287362-008	MET10	04/13/17 21:20	1.0	+
287362-009	MET10	04/13/17 21:23	1.0	+
287362-010	MET10	04/13/17 21:26	1.0	+
287362-011	MET10	04/13/17 21:29	1.0	+
287362-012	MET10	04/13/17 21:32	1.0	+
287362-013	MET10	04/13/17 21:34	1.0	+
287362-014	MET10	04/13/17 21:37	1.0	+
287362-015	MET10	04/13/17 21:48	1.0	+
287362-016	MET10	04/13/17 21:51	1.0	+
287362-017	MET10	04/13/17 21:53	1.0	+
287362-018	MET10	04/13/17 21:55	1.0	+
287362-019	MET10	04/13/17 21:58	1.0	+
287362-020	MET10	04/13/17 22:01	1.0	+
287362-021	MET10	05/08/17 18:27	1.0	+
287362-022	MET10	05/08/17 18:41	1.0	+
287362-023	MET10	05/08/17 18:44	1.0	+
287362-024	MET10	05/08/17 18:54	1.0	+
287362-025	MET10	05/08/17 18:58	1.0	+
287362-026	MET10	05/08/17 19:01	1.0	+
287362-027	MET10	05/08/17 19:04	1.0	+

REPORTING SUMMARY FOR 287362 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287362-028	MET10	05/08/17 19:08	1.0	+	
287362-029	MET10	05/08/17 19:11	1.0	+	
287362-030	MET10	05/08/17 19:15	1.0	+	
287362-031	MET10	05/08/17 19:18	1.0	+	
287362-032	MET10	05/08/17 19:20	1.0	+	
287362-033	MET10	05/08/17 19:23	1.0	+	
287362-034	MET10	05/08/17 19:32	1.0	+	
287362-035	MET10	05/08/17 19:36	1.0	+	
287362-036	MET10	05/08/17 19:38	1.0	+	
287362-037	MET10	05/08/17 19:42	1.0	+	
287362-038	MET10	05/08/17 19:45	1.0	+	
287362-039	MET10	05/08/17 19:47	1.0	+	
287362-040	MET10	05/08/17 19:51	1.0	+	
287362-041	MET10	05/08/17 17:42	1.0	+	
287362-042	MET10	05/08/17 17:45	1.0	+	
287362-043	MET10	05/08/17 17:48	1.0	+	
287362-044	MET10	05/08/17 17:52	1.0	+	
287362-045	MET10	05/08/17 17:54	1.0	+	
287362-046	MET10	05/08/17 17:58	1.0	+	
QC881302	MET10	04/13/17 20:22	1.0	+	
QC881303	MET10	04/13/17 20:25	1.0	+	
QC881304	MET10	04/13/17 20:28	1.0	+	
QC881305	MET10	04/13/17 20:48	1.0	+	
QC881306	MET10	04/13/17 20:50	1.0	+	
QC881307	MET10	04/13/17 20:53	5.0	+	
QC881308	MET10	04/13/17 20:56	1.0	+	

REPORTING SUMMARY FOR 287362 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC884815	MET10	05/08/17 18:19	1.0	+	
QC884816	MET10	05/08/17 18:22	1.0	+	
QC884817	MET10	05/08/17 18:25	1.0	+	
QC884818	MET10	05/08/17 18:30	1.0	+	
QC884819	MET10	05/08/17 18:33	1.0	+	
QC884820	MET10	05/08/17 18:35	5.0	+	
QC884821	MET10	05/08/17 18:39	1.0	+	
QC884822	MET10	05/08/17 17:10	1.0	+	
QC884823	MET10	05/08/17 17:13	1.0	+	
QC884824	MET10	05/08/17 17:16	1.0	+	
QC884825	MET10	05/08/17 17:22	1.0	+	
QC884826	MET10	05/08/17 17:24	1.0	+	
QC884827	MET10	05/08/17 17:26	1.0	+	
QC884828	MET10	05/08/17 17:30	5.0	+	
QC884829	MET10	05/08/17 17:33	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148874

Instrument : MET10
Method : EPA 6010C

Begun : 04/13/17 09:14
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/13/17 09:14	1.0		
002	met10 method	ICAL	L1			04/13/17 09:17	1.0	1	
003	met10 method	ICAL	L2			04/13/17 09:20	1.0	2	
004	met10 method	ICAL	L3			04/13/17 09:23	1.0	3	
005	met10 method	ICAL	L4			04/13/17 09:25	1.0	4	
006	met10 method	ICAL	L5			04/13/17 09:28	1.0	5	
007	met10 method	ICV				04/13/17 09:31	1.0	6	1:SR=4400000
008	met10 method	XCRI				04/13/17 09:35	1.0	7	
009	met10 method	CRI				04/13/17 09:40	1.0	7	1:SR=44000
010	met10 method	ICB				04/13/17 09:43	1.0		
011	met10 method	XICAS				04/13/17 09:47	1.0	8	
012	met10 method	ICSA				04/13/17 09:50	1.0	8	11:AL=510000
013	met10 method	ICSAB				04/13/17 10:00	1.0	9	6:SR=4700000
014	met10 method	CCV				04/13/17 10:03	1.0	10	1:SR=4500000
015	met10 method	CCB				04/13/17 10:06	1.0		
016	met10 method	CCB				04/13/17 10:09	1.0		
017	met10 method	CCV				04/13/17 10:13	1.0	10	1:SR=4400000
018	met10 method	XCCB				04/13/17 10:15	1.0		
019	met10 method	XCCB				04/13/17 10:18	1.0		
020	met10 method	CCB				04/13/17 10:22	1.0		
021	met10 method	X	RINSE1			04/13/17 10:25	1.0		
022	met10 method	BLANK	QC881206	Soil	246593	04/13/17 10:29	1.0		1:SR=3400
023	met10 method	BS	QC881207	Soil	246593	04/13/17 10:32	1.0		1:SR=89000000
024	met10 method	BSD	QC881208	Soil	246593	04/13/17 10:34	1.0		1:SR=87000000
025	met10 method	MSS	287671-003	Soil	246593	04/13/17 10:37	1.0		5:SR=22000000
026	met10 method	MS	QC881209	Soil	246593	04/13/17 10:40	1.0		4:SR=100000000
027	met10 method	MSD	QC881210	Soil	246593	04/13/17 10:43	1.0		5:SR=110000000
028	met10 method	SER	QC881211	Soil	246593	04/13/17 10:46	5.0		
029	met10 method	PDS	QC881212	Soil	246593	04/13/17 10:49	1.0	11 12 13	6:SR=21000000
030	met10 method	SAMPLE	287910-001	Soil	246593	04/13/17 10:52	1.0		5:SR=6100000
031	met10 method	CCV				04/13/17 10:55	1.0	10	1:SR=4500000
032	met10 method	XCCB				04/13/17 10:58	1.0		
033	met10 method	CCB				04/13/17 11:01	1.0		
034	met10 method	SAMPLE	287910-002	Soil	246593	04/13/17 11:04	1.0		5:SR=5900000
035	met10 method	SAMPLE	287910-003	Soil	246593	04/13/17 11:07	1.0		3:SR=5900000
036	met10 method	SAMPLE	287910-004	Soil	246593	04/13/17 11:10	1.0		3:SR=5800000
037	met10 method	SAMPLE	287910-005	Soil	246593	04/13/17 11:13	1.0		4:SR=5200000
038	met10 method	SAMPLE	287910-006	Soil	246593	04/13/17 11:16	1.0		3:SR=2400000
039	met10 method	SAMPLE	287910-007	Soil	246593	04/13/17 11:19	1.0		3:SR=5600000
040	met10 method	SAMPLE	287927-001	Soil	246593	04/13/17 11:22	1.0		6:SR=8700000
041	met10 method	X	RINSE			04/13/17 11:25	1.0		
042	met10 method	SER	QC881346	Wipe	245643	04/13/17 11:28	5.0		
043	met10 method	BLANK	QC881125	Water	246571	04/13/17 11:31	1.0		
044	met10 method	CCV				04/13/17 11:34	1.0	10	1:SR=4500000
045	met10 method	CCB				04/13/17 11:37	1.0		
046	met10 method	CCB				04/13/17 11:40	1.0		
047	met10 method	BS	QC881126	Water	246571	04/13/17 11:43	1.0		1:SR=870000
048	met10 method	BSD	QC881127	Water	246571	04/13/17 11:45	1.0		1:SR=900000
049	met10 method	MSS	287923-001	Water	246571	04/13/17 11:48	1.0		1:SR=740000
050	met10 method	MS	QC881128	Water	246571	04/13/17 11:51	1.0		
051	met10 method	MSD	QC881129	Water	246571	04/13/17 11:54	1.0		
052	met10 method	SAMPLE	287925-001	Water	246571	04/13/17 11:56	1.0		3:SR=16000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148874

Instrument : MET10
Method : EPA 6010C

Begun : 04/13/17 09:14
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287925-003	Water	246571	04/13/17 11:59	1.0		3:SR=17000000
054	met10 method	X	RINSE			04/13/17 12:01	1.0		
055	met10 method	BLANK	QC881309	WET Leachate	246618	04/13/17 12:04	10.0		1:NA=170000
056	met10 method	BS	QC881310	WET Leachate	246618	04/13/17 12:08	1.0		1:SR=870000
057	met10 method	CCV				04/13/17 12:10	1.0	10	1:SR=4300000
058	met10 method	XCCB				04/13/17 12:13	1.0		
059	met10 method	CCB				04/13/17 12:16	1.0		
060	met10 method	BSD	QC881311	WET Leachate	246618	04/13/17 12:19	1.0		1:SR=880000
061	met10 method	MSS	287716-001	WET Leachate	246618	04/13/17 12:22	10.0		2:SR=810000
062	met10 method	MS	QC881312	WET Leachate	246618	04/13/17 12:24	10.0		
063	met10 method	MSD	QC881313	WET Leachate	246618	04/13/17 12:27	10.0		
064	met10 method	SAMPLE	287634-014	WET Leachate	246618	04/13/17 12:29	10.0		2:SR=1100000
065	met10 method	SAMPLE	287634-015	WET Leachate	246618	04/13/17 12:31	10.0		2:SR=1000000
066	met10 method	SAMPLE	287634-016	WET Leachate	246618	04/13/17 12:34	10.0		2:SR=1000000
067	met10 method	SAMPLE	287634-018	WET Leachate	246618	04/13/17 12:36	10.0		2:SR=730000
068	met10 method	SAMPLE	287634-019	WET Leachate	246618	04/13/17 12:39	10.0		2:SR=590000
069	met10 method	SAMPLE	287634-020	WET Leachate	246618	04/13/17 12:41	10.0		2:SR=790000
070	met10 method	CCV				04/13/17 12:44	1.0	10	1:SR=4500000
071	met10 method	XCCB				04/13/17 12:47	1.0		
072	met10 method	CCB				04/13/17 12:50	1.0		1:SR=1400
073	met10 method	SAMPLE	287634-021	WET Leachate	246618	04/13/17 12:53	10.0		2:SR=1100000
074	met10 method	SAMPLE	287634-022	WET Leachate	246618	04/13/17 12:55	10.0		2:SR=1000000
075	met10 method	SAMPLE	287634-023	WET Leachate	246618	04/13/17 12:58	10.0		2:SR=1100000
076	met10 method	MSS	287634-024	WET Leachate	246618	04/13/17 13:00	10.0		2:SR=670000
077	met10 method	SAMPLE	287847-001	WET Leachate	246618	04/13/17 13:03	10.0		2:SR=310000
078	met10 method	SAMPLE	287966-001	WET Leachate	246618	04/13/17 13:05	10.0		2:SR=310000
079	met10 method	X	RINSE			04/13/17 13:08	1.0		
080	met10 method	BLANK	QC881293	TCLP Leachate	246614	04/13/17 13:11	10.0		2:NA=150000
081	met10 method	BS	QC881294	TCLP Leachate	246614	04/13/17 13:15	1.0		1:SR=900000
082	met10 method	BSD	QC881295	TCLP Leachate	246614	04/13/17 13:17	1.0		1:SR=900000
083	met10 method	CCV				04/13/17 13:20	1.0	10	1:SR=4300000
084	met10 method	XCCB				04/13/17 13:22	1.0		
085	met10 method	CCB				04/13/17 13:25	1.0		
086	met10 method	MSS	287634-001	TCLP Leachate	246614	04/13/17 13:29	10.0		2:SR=16000000
087	met10 method	MS	QC881296	TCLP Leachate	246614	04/13/17 13:32	10.0		
088	met10 method	MSD	QC881297	TCLP Leachate	246614	04/13/17 13:35	10.0		
089	met10 method	SAMPLE	287634-002	TCLP Leachate	246614	04/13/17 13:37	10.0		
090	met10 method	SAMPLE	287634-005	TCLP Leachate	246614	04/13/17 13:41	10.0		2:SR=1300000
091	met10 method	SAMPLE	287634-009	TCLP Leachate	246614	04/13/17 13:44	10.0		2:SR=3500000
092	met10 method	SAMPLE	287634-010	TCLP Leachate	246614	04/13/17 13:48	10.0		2:SR=770000
093	met10 method	SAMPLE	287634-011	TCLP Leachate	246614	04/13/17 13:51	10.0		2:SR=2100000
094	met10 method	SAMPLE	287634-012	TCLP Leachate	246614	04/13/17 13:55	10.0		2:SR=850000
095	met10 method	SAMPLE	287634-013	TCLP Leachate	246614	04/13/17 13:58	10.0		2:SR=1900000
096	met10 method	CCV				04/13/17 14:02	1.0	10	1:SR=4300000
097	met10 method	XCCB				04/13/17 14:05	1.0		1:SR=1300
098	met10 method	CCB				04/13/17 14:07	1.0		1:SR=7300
099	met10 method	SAMPLE	287634-014	TCLP Leachate	246614	04/13/17 14:11	10.0		2:SR=1800000
100	met10 method	SAMPLE	287634-016	TCLP Leachate	246614	04/13/17 14:14	10.0		2:SR=2100000
101	met10 method	SAMPLE	287634-018	TCLP Leachate	246614	04/13/17 14:18	10.0		2:SR=1400000
102	met10 method	SAMPLE	287634-020	TCLP Leachate	246614	04/13/17 14:21	10.0		2:SR=970000
103	met10 method	SAMPLE	287634-023	TCLP Leachate	246614	04/13/17 14:25	10.0		2:SR=1700000
104	met10 method	SAMPLE	287634-024	TCLP Leachate	246614	04/13/17 14:28	10.0		2:SR=700000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148874

Instrument : MET10 Begun : 04/13/17 09:14
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287782-001	TCLP Leachate	246614	04/13/17 14:32	10.0		3:SR=180000
106	met10 method	SAMPLE	287966-001	TCLP Leachate	246614	04/13/17 14:34	10.0		2:SR=210000
107	met10 method	SAMPLE	288028-001	TCLP Leachate	246614	04/13/17 14:38	10.0		2:SR=850000
108	met10 method	SAMPLE	287935-001	TCLP Leachate	246614	04/13/17 14:41	10.0		
109	met10 method	CCV				04/13/17 14:44	1.0	10	1:SR=4500000
110	met10 method	CCB				04/13/17 14:47	1.0		1:SR=1400
111	met10 method	CCB				04/13/17 14:50	1.0		
112	met10 method	X	BS			04/13/17 14:53	1.0		
113	met10 method	X	BSD			04/13/17 14:56	1.0		
114	met10 method	SAMPLE	287671-001	Soil	246593	04/13/17 14:58	1.0		4:SR=14000000
115	met10 method	SAMPLE	287671-002	Soil	246593	04/13/17 15:01	1.0		5:SR=23000000
116	met10 method	SAMPLE	287671-004	Soil	246593	04/13/17 15:04	1.0		5:SR=23000000
117	met10 method	SAMPLE	287840-001	Soil	246593	04/13/17 15:07	1.0		6:SR=5700000
118	met10 method	SAMPLE	287840-002	Soil	246593	04/13/17 15:10	1.0		5:SR=5400000
119	met10 method	SAMPLE	287853-001	Soil	246593	04/13/17 15:13	1.0		5:SR=2500000
120	met10 method	SAMPLE	287862-001	Soil	246593	04/13/17 15:16	1.0		3:SR=3800000
121	met10 method	SAMPLE	287873-005	Soil	246593	04/13/17 15:19	100.0		1:SR=120000
122	met10 method	CCV				04/13/17 15:21	1.0	10	1:SR=4400000
123	met10 method	CCB				04/13/17 15:24	1.0		
124	met10 method	SAMPLE	287873-005	Soil	246593	04/13/17 15:27	1.0		6:SR=12000000
125	met10 method	SAMPLE	287883-001	Water	246571	04/13/17 15:30	1.0		1:SR=770000
126	met10 method	SAMPLE	287923-002	Water	246571	04/13/17 15:33	1.0		1:SR=740000
127	met10 method	X	RINSE			04/13/17 15:36	1.0		
128	met10 method	BLANK	QC881287	Filtrate	246609	04/13/17 15:39	1.0		1:SR=2400
129	met10 method	BS	QC881283	Filtrate	246609	04/13/17 15:43	1.0		1:SR=860000
130	met10 method	BSD	QC881284	Filtrate	246609	04/13/17 15:45	1.0		1:SR=890000
131	met10 method	MSS	287554-001	Filtrate	246609	04/13/17 15:48	100.0		1:SR=180000
132	met10 method	MS	QC881285	Filtrate	246609	04/13/17 15:50	100.0		
133	met10 method	SAMPLE	287966-001	TCLP Leachate	246614	04/13/17 15:53	10.0		2:SR=210000
134	met10 method	CCV				04/13/17 15:56	1.0	10	1:SR=4300000
135	met10 method	CCB				04/13/17 15:59	1.0		
136	met10 method	CCB				04/13/17 16:02	1.0		
137	met10 method	MSD	QC881286	Filtrate	246609	04/13/17 16:05	100.0		
138	met10 method	SAMPLE	287554-002	Filtrate	246609	04/13/17 16:08	100.0		1:SR=190000
139	met10 method	SAMPLE	287554-003	Filtrate	246609	04/13/17 16:10	100.0		1:SR=200000
140	met10 method	SAMPLE	287555-001	Filtrate	246609	04/13/17 16:12	100.0		1:SR=130000
141	met10 method	SAMPLE	287555-002	Filtrate	246609	04/13/17 16:16	100.0		1:SR=470000
142	met10 method	SAMPLE	287555-003	Filtrate	246609	04/13/17 16:18	100.0		1:SR=120000
143	met10 method	SAMPLE	287966-001	TCLP Leachate	246614	04/13/17 16:22	10.0		2:SR=210000
144	met10 method	SAMPLE	287555-004	Filtrate	246609	04/13/17 16:25	100.0		1:SR=180000
145	met10 method	SAMPLE	287555-005	Filtrate	246609	04/13/17 16:28	100.0		1:SR=59000
146	met10 method	SAMPLE	287555-006	Filtrate	246609	04/13/17 16:31	100.0		1:SR=83000
147	met10 method	CCV				04/13/17 16:34	1.0	10	1:SR=4300000
148	met10 method	CCB				04/13/17 16:37	1.0		
149	met10 method	CCB				04/13/17 16:40	1.0		1:SR=1100
150	met10 method	SAMPLE	287555-007	Filtrate	246609	04/13/17 16:43	100.0		1:SR=220000
151	met10 method	SAMPLE	287555-008	Filtrate	246609	04/13/17 16:46	100.0		1:SR=220000
152	met10 method	MSS	287610-017	Soil	246594	04/13/17 16:48	1.0		5:SR=6500000
153	met10 method	MS	QC881218	Soil	246594	04/13/17 16:51	1.0		
154	met10 method	MSD	QC881219	Soil	246594	04/13/17 16:55	1.0		
155	met10 method	SER	QC881220	Soil	246594	04/13/17 16:58	5.0		
156	met10 method	PDS	QC881221	Soil	246594	04/13/17 17:01	1.0	11 12 13	6:SR=7200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148874

Instrument : MET10 Begun : 04/13/17 09:14
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	287389-001	Water	246197	04/13/17 17:04	1.0		1:SR=8800
158	met10 method	SAMPLE	287389-002	Water	246197	04/13/17 17:06	1.0		1:SR=1800
159	met10 method	SAMPLE	287389-003	Water	246197	04/13/17 17:10	1.0		1:SR=1700
160	met10 method	CCV				04/13/17 17:13	1.0	10	1:SR=4300000
161	met10 method	XCCB				04/13/17 17:16	1.0		1:SR=1400
162	met10 method	CCB				04/13/17 17:19	1.0		
163	met10 method	X	RINSE			04/13/17 17:22	1.0		
164	met10 method	BLANK	QC881026	Filtrate	246541	04/13/17 17:25	1.0		1:SR=2800
165	met10 method	MSS	287502-002	Filtrate	246541	04/13/17 17:29	100.0		1:SR=160000
166	met10 method	MS	QC881023	Filtrate	246541	04/13/17 17:32	100.0		
167	met10 method	MSD	QC881024	Filtrate	246541	04/13/17 17:35	100.0		
168	met10 method	SAMPLE	287502-005	Filtrate	246541	04/13/17 17:39	100.0		1:SR=220000
169	met10 method	SAMPLE	287502-006	Filtrate	246541	04/13/17 17:42	100.0		1:SR=240000
170	met10 method	SAMPLE	287502-008	Filtrate	246541	04/13/17 17:46	100.0		1:SR=82000
171	met10 method	SAMPLE	287502-011	Filtrate	246541	04/13/17 17:49	100.0		1:SR=260000
172	met10 method	SAMPLE	287502-012	Filtrate	246541	04/13/17 17:53	100.0		1:SR=290000
173	met10 method	CCV				04/13/17 17:56	1.0	10	1:SR=4300000
174	met10 method	XCCB				04/13/17 17:59	1.0		1:SR=1500
175	met10 method	CCB				04/13/17 18:02	1.0		
176	met10 method	SAMPLE	287502-014	Filtrate	246541	04/13/17 18:05	100.0		1:SR=83000
177	met10 method	SAMPLE	287502-016	Filtrate	246541	04/13/17 18:08	100.0		1:SR=180000
178	met10 method	SAMPLE	287722-002	Filtrate	246540	04/13/17 18:12	100.0		1:SR=490000
179	met10 method	SAMPLE	287723-007	Filtrate	246540	04/13/17 18:14	100.0		1:SR=300000
180	met10 method	SAMPLE	287723-009	Filtrate	246540	04/13/17 18:17	100.0		1:SR=450000
181	met10 method	SAMPLE	287486-003	Water	246104	04/13/17 18:19	1.0		2:SR=11000000
182	met10 method	SAMPLE	287325-001	WET Leachate	246046	04/13/17 18:22	10.0		1:SR=1500000
183	met10 method	SAMPLE	287325-002	WET Leachate	246046	04/13/17 18:25	10.0		1:SR=740000
184	met10 method	SAMPLE	287717-004	Water	246447	04/13/17 18:28	1.0		2:SR=3300000
185	met10 method	X	RINSE			04/13/17 18:30	1.0		
186	met10 method	CCV				04/13/17 18:34	1.0	10	1:SR=4400000
187	met10 method	XCCB				04/13/17 18:37	1.0		
188	met10 method	CCB				04/13/17 18:39	1.0		
189	met10 method	BLANK	QC880641	Soil	246450	04/13/17 18:43	1.0		1:SR=2500
190	met10 method	SAMPLE	287675-003	Soil	246450	04/13/17 18:46	100.0		1:SR=30000
191	met10 method	SAMPLE	287675-003	Soil	246450	04/13/17 18:49	1.0		4:SR=3100000
192	met10 method	MS	QC879459	Water	246155	04/13/17 18:51	1.0		
193	met10 method	MSD	QC879460	Water	246155	04/13/17 18:54	1.0		
194	met10 method	SAMPLE	287365-002	Water	246155	04/13/17 18:56	1.0		1:SR=55000
195	met10 method	X	RINSE			04/13/17 18:59	1.0		
196	met10 method	MSS	287453-006	Filtrate	246202	04/13/17 19:02	100.0		1:SR=93000
197	met10 method	MS	QC879657	Filtrate	246202	04/13/17 19:06	100.0		
198	met10 method	MSD	QC879658	Filtrate	246202	04/13/17 19:09	100.0		
199	met10 method	CCV				04/13/17 19:12	1.0	10	1:SR=4400000
200	met10 method	XCCB				04/13/17 19:15	1.0		
201	met10 method	CCB				04/13/17 19:18	1.0		1:SR=1100
202	met10 method	SAMPLE	287453-001	Filtrate	246202	04/13/17 19:21	100.0		1:SR=300000
203	met10 method	SAMPLE	287453-002	Filtrate	246202	04/13/17 19:25	100.0		1:SR=160000
204	met10 method	SAMPLE	287453-003	Filtrate	246202	04/13/17 19:28	100.0		1:SR=180000
205	met10 method	SAMPLE	287453-004	Filtrate	246202	04/13/17 19:32	100.0		1:SR=200000
206	met10 method	SAMPLE	287453-005	Filtrate	246202	04/13/17 19:35	100.0		1:SR=190000
207	met10 method	SAMPLE	287453-007	Filtrate	246202	04/13/17 19:39	100.0		1:SR=190000
208	met10 method	SAMPLE	287453-008	Filtrate	246202	04/13/17 19:42	100.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148874

Instrument : MET10 Begun : 04/13/17 09:14
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	X	RINSE			04/13/17 19:45	1.0		
210	met10 method	BLANK	QC881381	Water	246638	04/13/17 19:49	1.0		
211	met10 method	BS	QC881382	Water	246638	04/13/17 19:52	1.0		2:SR=890000
212	met10 method	CCV				04/13/17 19:54	1.0	10	1:SR=4300000
213	met10 method	XCCB				04/13/17 19:57	1.0		1:SR=1500
214	met10 method	CCB				04/13/17 20:00	1.0		
215	met10 method	BSD	QC881383	Water	246638	04/13/17 20:03	1.0		2:SR=900000
216	met10 method	MS	QC881384	Water	246638	04/13/17 20:06	1.0		2:SR=1900000
217	met10 method	MSD	QC881385	Water	246638	04/13/17 20:09	1.0		2:SR=1900000
218	met10 method	MSS	287939-002	Water	246638	04/13/17 20:11	1.0		1:SR=1000000
219	met10 method	SAMPLE	287852-001	Water	246638	04/13/17 20:14	1.0		4:SR=8300000
220	met10 method	SAMPLE	287962-002	Water	246638	04/13/17 20:16	1.0		2:NA=2000000
221	met10 method	X	RINSE			04/13/17 20:19	1.0		
222	met10 method	BLANK	QC881302	SPLP Leachate	246617	04/13/17 20:22	1.0		1:SR=2900
223	met10 method	BS	QC881303	SPLP Leachate	246617	04/13/17 20:25	1.0		2:SR=910000
224	met10 method	BSD	QC881304	SPLP Leachate	246617	04/13/17 20:28	1.0		2:SR=880000
225	met10 method	CCV				04/13/17 20:30	1.0	10	1:SR=4400000
226	met10 method	CCB				04/13/17 20:33	1.0		1:SR=2300
227	met10 method	CCB				04/13/17 20:36	1.0		
228	met10 method	X	RINSE			04/13/17 20:39	1.0		
229	met10 method	PDS	QC881212	Soil	246593	04/13/17 20:43	1.0	11 12 13	6:SR=21000000
230	met10 method	MSS	287362-004	SPLP Leachate	246617	04/13/17 20:46	1.0		1:SR=8900
231	met10 method	MS	QC881305	SPLP Leachate	246617	04/13/17 20:48	1.0		2:SR=910000
232	met10 method	MSD	QC881306	SPLP Leachate	246617	04/13/17 20:50	1.0		2:SR=890000
233	met10 method	SER	QC881307	SPLP Leachate	246617	04/13/17 20:53	5.0		1:SR=3000
234	met10 method	PDS	QC881308	SPLP Leachate	246617	04/13/17 20:56	1.0	11 12 13	2:SR=910000
235	met10 method	SAMPLE	287362-001	SPLP Leachate	246617	04/13/17 20:59	1.0		1:SR=7600
236	met10 method	SAMPLE	287362-002	SPLP Leachate	246617	04/13/17 21:01	1.0		1:SR=11000
237	met10 method	SAMPLE	287362-003	SPLP Leachate	246617	04/13/17 21:04	1.0		1:SR=5400
238	met10 method	CCV				04/13/17 21:06	1.0	10	1:SR=4500000
239	met10 method	CCB				04/13/17 21:09	1.0		1:SR=1100
240	met10 method	SAMPLE	287362-005	SPLP Leachate	246617	04/13/17 21:12	1.0		1:SR=7100
241	met10 method	SAMPLE	287362-006	SPLP Leachate	246617	04/13/17 21:15	1.0		1:SR=7600
242	met10 method	SAMPLE	287362-007	SPLP Leachate	246617	04/13/17 21:17	1.0		1:SR=6400
243	met10 method	SAMPLE	287362-008	SPLP Leachate	246617	04/13/17 21:20	1.0		1:SR=6100
244	met10 method	SAMPLE	287362-009	SPLP Leachate	246617	04/13/17 21:23	1.0		1:SR=12000
245	met10 method	SAMPLE	287362-010	SPLP Leachate	246617	04/13/17 21:26	1.0		1:SR=11000
246	met10 method	SAMPLE	287362-011	SPLP Leachate	246617	04/13/17 21:29	1.0		1:SR=11000
247	met10 method	SAMPLE	287362-012	SPLP Leachate	246617	04/13/17 21:32	1.0		1:SR=7600
248	met10 method	SAMPLE	287362-013	SPLP Leachate	246617	04/13/17 21:34	1.0		1:SR=4500
249	met10 method	SAMPLE	287362-014	SPLP Leachate	246617	04/13/17 21:37	1.0		1:SR=8300
250	met10 method	CCV				04/13/17 21:39	1.0	10	1:SR=4500000
251	met10 method	CCB				04/13/17 21:42	1.0		
252	met10 method	CCB				04/13/17 21:45	1.0		1:SR=1700
253	met10 method	SAMPLE	287362-015	SPLP Leachate	246617	04/13/17 21:48	1.0		1:SR=2200
254	met10 method	SAMPLE	287362-016	SPLP Leachate	246617	04/13/17 21:51	1.0		1:SR=8400
255	met10 method	SAMPLE	287362-017	SPLP Leachate	246617	04/13/17 21:53	1.0		1:SR=1500
256	met10 method	SAMPLE	287362-018	SPLP Leachate	246617	04/13/17 21:55	1.0		1:SR=18000
257	met10 method	SAMPLE	287362-019	SPLP Leachate	246617	04/13/17 21:58	1.0		1:SR=15000
258	met10 method	SAMPLE	287362-020	SPLP Leachate	246617	04/13/17 22:01	1.0		1:SR=14000
259	met10 method	CCV				04/13/17 22:04	1.0	10	1:SR=4500000
260	met10 method	CCB				04/13/17 22:06	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148874

Instrument : MET10 Begun : 04/13/17 09:14
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	CCB				04/13/17 22:09	1.0		1:SR=1300
262	met10 method	X	RINSE			04/14/17 00:27	1.0		
263	met10 method	BLANK	QC880989	Soil	246536	04/14/17 00:30	1.0		1:SR=3600
264	met10 method	BS	QC880990	Soil	246536	04/14/17 00:34	1.0		2:SR=87000000
265	met10 method	BSD	QC880991	Soil	246536	04/14/17 00:36	1.0		2:SR=88000000
266	met10 method	X	RINSE			04/14/17 00:39	1.0		
267	met10 method	BLANK	QC880197	Soil	246335	04/14/17 00:42	1.0		1:SR=4800
268	met10 method	BS	QC880198	Soil	246335	04/14/17 00:46	1.0		2:SR=89000000
269	met10 method	BSD	QC880199	Soil	246335	04/14/17 00:48	1.0		2:SR=91000000
270	met10 method	SAMPLE	287591-001	Soil	246335	04/14/17 00:51	100.0		1:SR=39000
271	met10 method	SAMPLE	287591-004	Soil	246335	04/14/17 00:53	100.0		1:SR=21000
272	met10 method	CCV				04/14/17 00:56	1.0	10	1:SR=4500000
273	met10 method	CCB				04/14/17 00:59	1.0		1:SR=2300
274	met10 method	SAMPLE	287591-005	Soil	246335	04/14/17 01:02	100.0		1:SR=22000
275	met10 method	SAMPLE	287591-006	Soil	246335	04/14/17 01:04	100.0		1:SR=27000
276	met10 method	SAMPLE	287591-007	Soil	246335	04/14/17 01:07	100.0		1:SR=13000
277	met10 method	SAMPLE	287650-001	Miscell.	246335	04/14/17 01:09	100.0		1:SR=2900000
278	met10 method	SAMPLE	287653-001	Miscell.	246335	04/14/17 01:12	100.0		1:SR=1100000
279	met10 method	SAMPLE	287653-002	Miscell.	246335	04/14/17 01:14	100.0		1:SR=17000
280	met10 method	SAMPLE	287591-001	Soil	246335	04/14/17 01:18	1.0		6:SR=3700000
281	met10 method	SAMPLE	287591-002	Soil	246335	04/14/17 01:21	1.0		4:SR=3700000
282	met10 method	SAMPLE	287591-004	Soil	246335	04/14/17 01:24	1.0		5:SR=1900000
283	met10 method	SAMPLE	287591-005	Soil	246335	04/14/17 01:26	1.0		6:SR=2100000
284	met10 method	CCV				04/14/17 01:30	1.0	10	1:SR=4500000
285	met10 method	CCB				04/14/17 01:32	1.0		1:SR=1700
286	met10 method	SAMPLE	287591-006	Soil	246335	04/14/17 01:36	1.0		5:SR=2600000
287	met10 method	SAMPLE	287591-007	Soil	246335	04/14/17 01:39	1.0		5:SR=1200000
288	met10 method	SAMPLE	287650-001	Miscell.	246335	04/14/17 01:42	1.0		8:CA=1700000
289	met10 method	SAMPLE	287653-001	Miscell.	246335	04/14/17 01:45	1.0		6:SR=110000000
290	met10 method	SAMPLE	287653-002	Miscell.	246335	04/14/17 01:48	1.0		2:SR=1500000
291	met10 method	X	RINSE			04/14/17 01:50	1.0		
292	met10 method	SAMPLE	287389-001	Water	246197	04/14/17 01:54	1.0		1:SR=2800
293	met10 method	SAMPLE	287389-002	Water	246197	04/14/17 01:57	1.0		1:SR=2400
294	met10 method	X	RINSE			04/14/17 02:00	1.0		
295	met10 method	SAMPLE	287782-001	TCLP Leachate	246614	04/14/17 02:04	100.0		1:SR=21000
296	met10 method	CCV				04/14/17 02:07	1.0	10	1:SR=4400000
297	met10 method	CCB				04/14/17 02:10	1.0		1:SR=2800

TLO 04/13/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 132.

MNA 04/13/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 133 through 175.

TLO 04/14/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 176 through 297.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087148874

Date : 04/13/17 Reference : met10 method
Sequence : MET10 04/13/17 Analyzed : 04/13/17 09:17

#	Type	Sample ID	Y A	Y R
		ICAL STD	13307008	988499
		LOWER LIMIT	3992102	296550
		UPPER LIMIT	15968410	1186198
010	ICB		13080031	994739
012	ICSA		10256721	851393
013	ICSAB		10314932	863520
025	MSS	287671-003	11361421	921647
114	SAMPLE	287671-001	11469093	937967
115	SAMPLE	287671-002	11248017	938202
116	SAMPLE	287671-004	11504573	929356
147	CCV		12139982	974167
149	CCB		13175312	1009647
152	MSS	287610-017	11233731	929512
160	CCV		12159838	972410
162	CCB		13163882	982593
212	CCV		12206008	958151
214	CCB		13091270	982487
222	BLANK	QC881302	12951543	973462
223	BS	QC881303	12319801	947550
224	BSD	QC881304	12466208	983846
225	CCV		12011016	978041
226	CCB		13228302	1007790
227	CCB		13109613	143198 *
230	MSS	287362-004	13006939	970058
231	MS	QC881305	12417674	989179
232	MSD	QC881306	12610094	987847
233	SER	QC881307	13157080	1005833
234	PDS	QC881308	12416457	975741
235	SAMPLE	287362-001	12861881	1005480
236	SAMPLE	287362-002	13100500	1017835
237	SAMPLE	287362-003	13014821	995796
238	CCV		12169600	971008
239	CCB		13109123	1003577
240	SAMPLE	287362-005	13079151	1005030
241	SAMPLE	287362-006	12861410	1003115
242	SAMPLE	287362-007	13155704	1009652
243	SAMPLE	287362-008	13057100	1017674
244	SAMPLE	287362-009	13109674	1015519
245	SAMPLE	287362-010	13214519	1012181
246	SAMPLE	287362-011	12930078	1005405
247	SAMPLE	287362-012	12990544	1005322
248	SAMPLE	287362-013	13104689	1035578
249	SAMPLE	287362-014	12948082	1020808
250	CCV		12110878	956966
251	CCB		13191529	992056
252	CCB		13294704	1003034
253	SAMPLE	287362-015	13097519	1017960
254	SAMPLE	287362-016	13044026	1016447
255	SAMPLE	287362-017	12880163	1008048
256	SAMPLE	287362-018	12819581	1000217
257	SAMPLE	287362-019	12720039	1013858

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087148874

Date : 04/13/17 Reference : met10 method
Sequence : MET10 04/13/17 Analyzed : 04/13/17 09:17

#	Type	Sample ID	Y A	Y R
258	SAMPLE	287362-020	12778364	981532
259	CCV		11961921	939543
260	CCB		12763518	967321
278	SAMPLE	287653-001	12777297	985854
279	SAMPLE	287653-002	13026940	1009081
289	SAMPLE	287653-001	11736276	981494
290	SAMPLE	287653-002	12070457	972330

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287362 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087148874001
Units : ug/L

Date : 13-APR-2017 09:14
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087148874002	L1	13-APR-2017 09:17	S32578
L2	met10 method	1087148874003	L2	13-APR-2017 09:20	S32571
L3	met10 method	1087148874004	L3	13-APR-2017 09:23	S32367
L4	met10 method	1087148874005	L4	13-APR-2017 09:25	S32368
L5	met10 method	1087148874006	L5	13-APR-2017 09:28	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	7.4800	7.1430	6.8097	6.8295		LOR0	0.00000	0.14643		7.0656	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	10	100.00	5	1000.0	0	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287362 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087148874001 Cal Date : 13-APR-2017

ICV 1087148874007 (13-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4904	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874009.2 File : met10 method Time : 13-APR-2017 09:40
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.865	ug/L	-3	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	12987631	-2.40
Yttrium	R	988499	984181	-0.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874010.3 File : met10 method Time : 13-APR-2017 09:43
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13080031	-1.71
Yttrium	R	988499	994739	0.63

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874012.3 File : met10 method Time : 13-APR-2017 09:50
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[0.1484]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19170	ug/L	96	
Copper	A	20000	20250	ug/L	101	
Manganese	A	20000	18120	ug/L	91	
Nickel	A	20000	17490	ug/L	87	
Titanium	A	20000	19370	ug/L	97	
Vanadium	A	20000	21780	ug/L	109	
Aluminum	R	500000	512800	ug/L	103	
Calcium	R	500000	494800	ug/L	99	
Iron	R	200000	200700	ug/L	100	
Magnesium	R	500000	420000	ug/L	84	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	10256721	-22.92
Yttrium	R	988499	851393	-13.87

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874013.3 File : met10 method Time : 13-APR-2017 10:00
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	994.7	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	10314932	-22.48
Yttrium	R	988499	863520	-12.64

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874212.2 File : met10 method Time : 13-APR-2017 19:54
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	7.0656	6.9464	5000	5086	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	12206008	-8.27
Yttrium	R	988499	958151	-3.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874214.2 File : met10 method Time : 13-APR-2017 20:00
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13091270	-1.62
Yttrium	R	988499	982487	-0.61

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874225.2 File : met10 method Time : 13-APR-2017 20:30
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	7.0656	7.0792	5000	5183	ug/L	4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	12011016	-9.74
Yttrium	R	988499	978041	-1.06

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874226.2 File : met10 method Time : 13-APR-2017 20:33
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13228302	-0.59
Yttrium	R	988499	1007790	1.95

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874227.1 File : met10 method Time : 13-APR-2017 20:36
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13109613	-1.48
Yttrium	R	988499	143198	**-85.51 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874238.1 File : met10 method Time : 13-APR-2017 21:06
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	7.0656	6.9011	5000	5053	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	12169600	-8.55
Yttrium	R	988499	971008	-1.77

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874239.1 File : met10 method Time : 13-APR-2017 21:09
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13109123	-1.49
Yttrium	R	988499	1003577	1.53

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874250.1 File : met10 method Time : 13-APR-2017 21:39
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	7.0656	6.8956	5000	5049	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	12110878	-8.99
Yttrium	R	988499	956966	-3.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874251.1 File : met10 method Time : 13-APR-2017 21:42
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13191529	-0.87
Yttrium	R	988499	992056	0.36

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874252.1 File : met10 method Time : 13-APR-2017 21:45
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	13294704	-0.09
Yttrium	R	988499	1003034	1.47

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874259.1 File : met10 method Time : 13-APR-2017 22:04
Cal : 1087148874001 Caldate : 13-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	7.0656	6.8538	5000	5018	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	11961921	-10.11
Yttrium	R	988499	939543	-4.95

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148874260.1 File : met10 method Time : 13-APR-2017 22:06
Cal : 1087148874001 Caldate : 13-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13307008	12763518	-4.08
Yttrium	R	988499	967321	-2.14

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185135

Instrument : MET10
Method : EPA 6010C

Begun : 05/08/17 13:35
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				05/08/17 13:35	1.0		
002	met10 method	ICAL	L1			05/08/17 13:38	1.0	1	
003	met10 method	ICAL	L2			05/08/17 13:42	1.0	2	
004	met10 method	ICAL	L3			05/08/17 13:44	1.0	3	
005	met10 method	ICAL	L4			05/08/17 13:46	1.0	4	
006	met10 method	ICAL	L5			05/08/17 13:49	1.0	5	
007	met10 method	ICV				05/08/17 13:52	1.0	6	
008	met10 method	CRI				05/08/17 13:55	1.0	7	
009	met10 method	ICB				05/08/17 13:58	1.0		
010	met10 method	ICSA				05/08/17 14:01	1.0	8	10:AL=540000
011	met10 method	ICSAB				05/08/17 14:09	1.0	9	5:AL=530000
012	met10 method	X	RINSE			05/08/17 14:12	1.0		
013	met10 method	SAMPLE	288352-007	Soil	247493	05/08/17 14:15	100.0		
014	met10 method	MSS	288352-001	Soil	247493	05/08/17 14:18	1.0		6:FE=460000
015	met10 method	MS	QC884700	Soil	247493	05/08/17 14:26	1.0		1:FE=430000
016	met10 method	MSD	QC884701	Soil	247493	05/08/17 14:29	1.0		2:FE=540000
017	met10 method	SAMPLE	288352-002	Soil	247493	05/08/17 14:32	1.0		4:FE=420000
018	met10 method	SAMPLE	288352-003	Soil	247493	05/08/17 14:35	1.0		6:FE=700000
019	met10 method	SAMPLE	288352-007	Soil	247493	05/08/17 14:38	1.0		8:CA=590000
020	met10 method	SAMPLE	288352-004	Soil	247493	05/08/17 14:42	1.0		6:FE=640000
021	met10 method	SAMPLE	288352-008	Soil	247493	05/08/17 14:45	1.0		4:FE=510000
022	met10 method	CCV				05/08/17 14:48	1.0	10	
023	met10 method	CCB				05/08/17 14:51	1.0		
024	met10 method	SAMPLE	288352-009	Soil	247493	05/08/17 14:54	1.0		6:FE=700000
025	met10 method	SAMPLE	288352-010	Soil	247493	05/08/17 14:57	1.0		6:FE=670000
026	met10 method	SAMPLE	288352-013	Soil	247493	05/08/17 15:00	1.0		6:FE=470000
027	met10 method	SAMPLE	288352-014	Soil	247493	05/08/17 15:04	1.0		5:FE=620000
028	met10 method	SAMPLE	288352-015	Soil	247493	05/08/17 15:07	1.0		7:FE=690000
029	met10 method	SAMPLE	288352-016	Soil	247493	05/08/17 15:10	1.0		6:FE=730000
030	met10 method	SAMPLE	288352-019	Soil	247493	05/08/17 15:13	1.0		5:FE=430000
031	met10 method	SAMPLE	288352-020	Soil	247493	05/08/17 15:16	1.0		4:FE=570000
032	met10 method	SAMPLE	288352-021	Soil	247493	05/08/17 15:19	1.0		5:FE=590000
033	met10 method	SAMPLE	288352-022	Soil	247493	05/08/17 15:22	1.0		6:FE=580000
034	met10 method	CCV				05/08/17 15:25	1.0	10	
035	met10 method	XCCB				05/08/17 15:28	1.0		
036	met10 method	CCB				05/08/17 15:30	1.0		
037	met10 method	SAMPLE	288352-025	Soil	247493	05/08/17 15:34	1.0		3:FE=390000
038	met10 method	SAMPLE	288352-026	Soil	247493	05/08/17 15:37	1.0		5:FE=650000
039	met10 method	SAMPLE	288352-027	Soil	247493	05/08/17 15:40	1.0		6:FE=810000
040	met10 method	SAMPLE	288352-028	Soil	247493	05/08/17 15:43	1.0		6:FE=720000
041	met10 method	X	RINSE			05/08/17 15:46	1.0		
042	met10 method	BLANK	QC884877	Soil	247544	05/08/17 15:49	1.0		
043	met10 method	LCS	QC884878	Soil	247544	05/08/17 15:52	1.0		1:SR=7500
044	met10 method	MSS	288117-014	Soil	247544	05/08/17 15:54	1.0		8:FE=690000
045	met10 method	MS	QC884879	Soil	247544	05/08/17 15:58	1.0		1:FE=750000
046	met10 method	MSD	QC884880	Soil	247544	05/08/17 16:01	1.0		
047	met10 method	CCV				05/08/17 16:05	1.0	10	
048	met10 method	XCCB				05/08/17 16:07	1.0		
049	met10 method	CCB				05/08/17 16:10	1.0		
050	met10 method	SER	QC884881	Soil	247544	05/08/17 16:14	5.0		
051	met10 method	PDS	QC884882	Soil	247544	05/08/17 16:16	1.0	11 12 13	8:FE=700000
052	met10 method	SAMPLE	288013-005	Soil	247544	05/08/17 16:20	1.0		8:CA=1000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185135

Instrument : MET10 Begun : 05/08/17 13:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	288069-006	Soil	247544	05/08/17 16:23	1.0		7:CA=1000000
054	met10 method	SAMPLE	288117-001	Soil	247544	05/08/17 16:26	1.0		7:FE=890000
055	met10 method	SAMPLE	288117-002	Soil	247544	05/08/17 16:30	1.0		7:FE=1000000
056	met10 method	SAMPLE	288117-003	Soil	247544	05/08/17 16:33	1.0		7:FE=900000
057	met10 method	SAMPLE	288117-004	Soil	247544	05/08/17 16:37	1.0		8:CA=860000
058	met10 method	SAMPLE	288117-005	Soil	247544	05/08/17 16:40	1.0		8:CA=1400000
059	met10 method	SAMPLE	288117-007	Soil	247544	05/08/17 16:43	1.0		8:CA=930000
060	met10 method	CCV				05/08/17 16:46	1.0	10	
061	met10 method	XCCB				05/08/17 16:49	1.0		
062	met10 method	CCB				05/08/17 16:51	1.0		
063	met10 method	CCV				05/08/17 16:56	1.0	10	
064	met10 method	XCCB				05/08/17 16:59	1.0		
065	met10 method	CCB				05/08/17 17:02	1.0		
066	met10 method	X	RINSE			05/08/17 17:07	1.0		
067	met10 method	BLANK	QC884822	SPLP Leachate	247528	05/08/17 17:10	1.0		
068	met10 method	BS	QC884823	SPLP Leachate	247528	05/08/17 17:13	1.0		
069	met10 method	BSD	QC884824	SPLP Leachate	247528	05/08/17 17:16	1.0		
070	met10 method	MSS	287500-014	SPLP Leachate	247528	05/08/17 17:18	1.0		
071	met10 method	MS	QC884825	SPLP Leachate	247528	05/08/17 17:22	1.0		
072	met10 method	MSD	QC884826	SPLP Leachate	247528	05/08/17 17:24	1.0		
073	met10 method	BLANK	QC884827	SPLP Leachate	247528	05/08/17 17:26	1.0		
074	met10 method	SER	QC884828	SPLP Leachate	247528	05/08/17 17:30	5.0		
075	met10 method	PDS	QC884829	SPLP Leachate	247528	05/08/17 17:33	1.0	11 12 13	1:P=10000
076	met10 method	CCV				05/08/17 17:36	1.0	10	
077	met10 method	CCB				05/08/17 17:38	1.0		
078	met10 method	SAMPLE	287362-041	SPLP Leachate	247528	05/08/17 17:42	1.0		
079	met10 method	SAMPLE	287362-042	SPLP Leachate	247528	05/08/17 17:45	1.0		
080	met10 method	SAMPLE	287362-043	SPLP Leachate	247528	05/08/17 17:48	1.0		
081	met10 method	SAMPLE	287362-044	SPLP Leachate	247528	05/08/17 17:52	1.0		
082	met10 method	SAMPLE	287362-045	SPLP Leachate	247528	05/08/17 17:54	1.0		
083	met10 method	SAMPLE	287362-046	SPLP Leachate	247528	05/08/17 17:58	1.0		
084	met10 method	SAMPLE	287500-020	SPLP Leachate	247528	05/08/17 18:00	1.0		
085	met10 method	SAMPLE	287500-021	SPLP Leachate	247528	05/08/17 18:03	1.0		
086	met10 method	SAMPLE	287500-022	SPLP Leachate	247528	05/08/17 18:06	1.0		
087	met10 method	X	RINSE			05/08/17 18:09	1.0		
088	met10 method	CCV				05/08/17 18:13	1.0	10	
089	met10 method	CCB				05/08/17 18:15	1.0		
090	met10 method	BLANK	QC884815	SPLP Leachate	247527	05/08/17 18:19	1.0		
091	met10 method	BS	QC884816	SPLP Leachate	247527	05/08/17 18:22	1.0		
092	met10 method	BSD	QC884817	SPLP Leachate	247527	05/08/17 18:25	1.0		
093	met10 method	MSS	287362-021	SPLP Leachate	247527	05/08/17 18:27	1.0		
094	met10 method	MS	QC884818	SPLP Leachate	247527	05/08/17 18:30	1.0		
095	met10 method	MSD	QC884819	SPLP Leachate	247527	05/08/17 18:33	1.0		
096	met10 method	SER	QC884820	SPLP Leachate	247527	05/08/17 18:35	5.0		
097	met10 method	PDS	QC884821	SPLP Leachate	247527	05/08/17 18:39	1.0	11 12 13	1:P=10000
098	met10 method	SAMPLE	287362-022	SPLP Leachate	247527	05/08/17 18:41	1.0		
099	met10 method	SAMPLE	287362-023	SPLP Leachate	247527	05/08/17 18:44	1.0		
100	met10 method	CCV				05/08/17 18:48	1.0	10	
101	met10 method	CCB				05/08/17 18:51	1.0		
102	met10 method	SAMPLE	287362-024	SPLP Leachate	247527	05/08/17 18:54	1.0		
103	met10 method	SAMPLE	287362-025	SPLP Leachate	247527	05/08/17 18:58	1.0		
104	met10 method	SAMPLE	287362-026	SPLP Leachate	247527	05/08/17 19:01	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185135

Instrument : MET10 Begun : 05/08/17 13:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used
105	met10 method	SAMPLE	287362-027	SPLP Leachate	247527	05/08/17 19:04	1.0	
106	met10 method	SAMPLE	287362-028	SPLP Leachate	247527	05/08/17 19:08	1.0	
107	met10 method	SAMPLE	287362-029	SPLP Leachate	247527	05/08/17 19:11	1.0	
108	met10 method	SAMPLE	287362-030	SPLP Leachate	247527	05/08/17 19:15	1.0	
109	met10 method	SAMPLE	287362-031	SPLP Leachate	247527	05/08/17 19:18	1.0	
110	met10 method	SAMPLE	287362-032	SPLP Leachate	247527	05/08/17 19:20	1.0	
111	met10 method	SAMPLE	287362-033	SPLP Leachate	247527	05/08/17 19:23	1.0	
112	met10 method	CCV				05/08/17 19:26	1.0	10
113	met10 method	CCB				05/08/17 19:29	1.0	
114	met10 method	SAMPLE	287362-034	SPLP Leachate	247527	05/08/17 19:32	1.0	
115	met10 method	SAMPLE	287362-035	SPLP Leachate	247527	05/08/17 19:36	1.0	
116	met10 method	SAMPLE	287362-036	SPLP Leachate	247527	05/08/17 19:38	1.0	
117	met10 method	SAMPLE	287362-037	SPLP Leachate	247527	05/08/17 19:42	1.0	
118	met10 method	SAMPLE	287362-038	SPLP Leachate	247527	05/08/17 19:45	1.0	
119	met10 method	SAMPLE	287362-039	SPLP Leachate	247527	05/08/17 19:47	1.0	
120	met10 method	SAMPLE	287362-040	SPLP Leachate	247527	05/08/17 19:51	1.0	
121	met10 method	CCV				05/08/17 19:54	1.0	10
122	met10 method	CCB				05/08/17 19:57	1.0	

TLO 05/08/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 26.

MNA 05/09/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 27 through 122.

Standards used: 1=S32935 2=S32571 3=S32367 4=S32368 5=S32937 6=S32523 7=S32936 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087185135

Date : 05/08/17 Reference : met10 method
Sequence : MET10 05/08/17 Analyzed : 05/08/17 13:38

#	Type	Sample ID	Y A	Y R
		ICAL STD	14163852	811293
		LOWER LIMIT	4249156	243388
		UPPER LIMIT	16996623	973551
009	ICB		14461971	831690
010	ICSA		10867943	682720
011	ICSAB		10940257	688987
063	CCV		12711983	776389
065	CCB		14173543	842443
067	BLANK	QC884822	14623426	847786
068	BS	QC884823	13227858	805452
069	BSD	QC884824	13433735	806234
070	MSS	287500-014	14573948	845898
071	MS	QC884825	13310039	806353
072	MSD	QC884826	13456569	811987
073	BLANK	QC884827	14636654	864200
074	SER	QC884828	14391795	842961
075	PDS	QC884829	13473680	792930
076	CCV		12866380	778015
077	CCB		14232026	833255
078	SAMPLE	287362-041	14675408	855352
079	SAMPLE	287362-042	14321698	850714
080	SAMPLE	287362-043	14238098	831996
081	SAMPLE	287362-044	14301513	833606
082	SAMPLE	287362-045	14101671	851968
083	SAMPLE	287362-046	14350382	852575
084	SAMPLE	287500-020	14109280	840365
085	SAMPLE	287500-021	14356647	827598
086	SAMPLE	287500-022	14433434	848389
088	CCV		12872026	785207
089	CCB		14237802	821997
090	BLANK	QC884815	14596421	841500
091	BS	QC884816	13253961	802364
092	BSD	QC884817	13360024	803953
093	MSS	287362-021	14374836	829893
094	MS	QC884818	13346981	802966
095	MSD	QC884819	13283071	807554
096	SER	QC884820	14505135	834158
097	PDS	QC884821	13426352	814552
098	SAMPLE	287362-022	14210782	842261
099	SAMPLE	287362-023	14043703	856521
100	CCV		12871879	776007
101	CCB		14405976	820798
102	SAMPLE	287362-024	13947388	832220
103	SAMPLE	287362-025	14303149	858059
104	SAMPLE	287362-026	14622064	853352
105	SAMPLE	287362-027	14123757	856811
106	SAMPLE	287362-028	14186512	851858
107	SAMPLE	287362-029	14258855	836780
108	SAMPLE	287362-030	14356881	850826
109	SAMPLE	287362-031	13977733	845050
110	SAMPLE	287362-032	13625395	826806

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087185135

Date : 05/08/17 Reference : met10 method
Sequence : MET10 05/08/17 Analyzed : 05/08/17 13:38

#	Type	Sample ID	Y A	Y R
111	SAMPLE	287362-033	14245019	831377
112	CCV		12807377	772034
113	CCB		14300399	841457
114	SAMPLE	287362-034	14223603	848109
115	SAMPLE	287362-035	14034470	840569
116	SAMPLE	287362-036	14239707	841310
117	SAMPLE	287362-037	14342894	831340
118	SAMPLE	287362-038	14123877	845709
119	SAMPLE	287362-039	14098708	812149
120	SAMPLE	287362-040	14145734	834685
121	CCV		12783269	763764
122	CCB		14278861	821023

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287362 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087185135001
Units : ug/L

Date : 08-MAY-2017 13:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087185135002	L1	08-MAY-2017 13:38	S32935
L2	met10 method	1087185135003	L2	08-MAY-2017 13:42	S32571
L3	met10 method	1087185135004	L3	08-MAY-2017 13:44	S32367
L4	met10 method	1087185135005	L4	08-MAY-2017 13:46	S32368
L5	met10 method	1087185135006	L5	08-MAY-2017 13:49	S32937

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	7.3200	6.7370	6.6313	6.5911		LOR0	0.00000	0.15171		6.8198	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	11	100.00	2	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087185135001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287362 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087185135001 Cal Date : 08-MAY-2017

ICV 1087185135007 (08-MAY-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4971	ug/L	-1	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135008.1 File : met10 method Time : 08-MAY-2017 13:55
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32936

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.197	ug/L	24	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14198059	0.24
Yttrium	R	811293	820155	1.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135009.1 File : met10 method Time : 08-MAY-2017 13:58
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14461971	2.10
Yttrium	R	811293	831690	2.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135010.1 File : met10 method Time : 08-MAY-2017 14:01
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[2.163]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19860	ug/L	99	
Copper	A	20000	21260	ug/L	106	
Manganese	A	20000	18640	ug/L	93	
Nickel	A	20000	17490	ug/L	87	
Titanium	A	20000	19810	ug/L	99	
Vanadium	A	20000	22530	ug/L	113	
Aluminum	R	500000	544600	ug/L	109	
Calcium	R	500000	505000	ug/L	101	
Iron	R	200000	193700	ug/L	97	
Magnesium	R	500000	415300	ug/L	83	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	10867943	-23.27
Yttrium	R	811293	682720	-15.85

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135011.1 File : met10 method Time : 08-MAY-2017 14:09
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	985.4	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	10940257	-22.76
Yttrium	R	811293	688987	-15.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135063.1 File : met10 method Time : 08-MAY-2017 16:56
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3607	5000	4825	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12711983	-10.25
Yttrium	R	811293	776389	-4.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135065.1 File : met10 method Time : 08-MAY-2017 17:02
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14173543	0.07
Yttrium	R	811293	842443	3.84

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135076.1 File : met10 method Time : 08-MAY-2017 17:36
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3911	5000	4848	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12866380	-9.16
Yttrium	R	811293	778015	-4.10

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135077.1 File : met10 method Time : 08-MAY-2017 17:38
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14232026	0.48
Yttrium	R	811293	833255	2.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135088.1 File : met10 method Time : 08-MAY-2017 18:13
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3714	5000	4833	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12872026	-9.12
Yttrium	R	811293	785207	-3.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135089.1 File : met10 method Time : 08-MAY-2017 18:15
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14237802	0.52
Yttrium	R	811293	821997	1.32

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135100.1 File : met10 method Time : 08-MAY-2017 18:48
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3792	5000	4839	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12871879	-9.12
Yttrium	R	811293	776007	-4.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135101.1 File : met10 method Time : 08-MAY-2017 18:51
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14405976	1.71
Yttrium	R	811293	820798	1.17

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135112.1 File : met10 method Time : 08-MAY-2017 19:26
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.5313	5000	4954	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12807377	-9.58
Yttrium	R	811293	772034	-4.84

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135113.1 File : met10 method Time : 08-MAY-2017 19:29
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14300399	0.96
Yttrium	R	811293	841457	3.72

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135121.1 File : met10 method Time : 08-MAY-2017 19:54
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3996	5000	4854	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12783269	-9.75
Yttrium	R	811293	763764	-5.86

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287362 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135122.1 File : met10 method Time : 08-MAY-2017 19:57
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14278861	0.81
Yttrium	R	811293	821023	1.20

SAMPLE PREPARATION SUMMARY

Batch # : 246617
Started By : VV
Method : 3010A
Spike #1 ID : S29983
Prep Date : 12-APR-2017 03:00
Spike #2 ID : S29984
Analysis : ICP
Finished By : VV
Units : mL
Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-001		SPLP Leachate	50	50	1	1.0						6010	
287362-002		SPLP Leachate	50	50	1	1.0						6010	
287362-003		SPLP Leachate	50	50	1	1.0						6010	
287362-004		SPLP Leachate	50	50	1	1.0						6010	
287362-005		SPLP Leachate	50	50	1	1.0						6010	
287362-006		SPLP Leachate	50	50	1	1.0						6010	
287362-007		SPLP Leachate	50	50	1	1.0						6010	
287362-008		SPLP Leachate	50	50	1	1.0						6010	
287362-009		SPLP Leachate	50	50	1	1.0						6010	
287362-010		SPLP Leachate	50	50	1	1.0						6010	
287362-011		SPLP Leachate	50	50	1	1.0						6010	
287362-012		SPLP Leachate	50	50	1	1.0						6010	
287362-013		SPLP Leachate	50	50	1	1.0						6010	
287362-014		SPLP Leachate	50	50	1	1.0						6010	
287362-015		SPLP Leachate	50	50	1	1.0						6010	
287362-016		SPLP Leachate	50	50	1	1.0						6010	
287362-017		SPLP Leachate	50	50	1	1.0						6010	
287362-018		SPLP Leachate	50	50	1	1.0						6010	
287362-019		SPLP Leachate	50	50	1	1.0						6010	
287362-020		SPLP Leachate	50	50	1	1.0						6010	
QC881302	BLANK	SPLP Leachate	50	50	1	1.0							
QC881303	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC881304	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC881305	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC881306	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC881307	SER	SPLP Leachate	50	50	1	1.0							
QC881308	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 04/13/17 Reviewer: PRW Date: 04/14/17

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246497
Extraction Method: ☐ EPA 1311: TCLP
☒ EPA 1312: SPLP
Rotator #'s: 1/3/5

Date/ Time ON: 4-10-17 06:25
Temp (°C) ON: 22°C
Date/ Time OFF: 4-11-17 00:30
Temp (°C) ON: 21°C – 24°C

Page: 47 **BK 3994**

Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BIK			Ø	Ø	Ø	Ø	2	☒ 2000 ☐	5.27	
287362-001	A	100.12	ND	ND	N/A	N/A		☒ 2000 ☐	5.62	
-002		100.00						☒ 2000 ☐	5.64	
-003		100.08						☒ 2000 ☐	5.72	
-004		100.00						☒ 2000 ☐	5.59	
-005		100.05						☒ 2000 ☐	5.52	
-006		100.08						☒ 2000 ☐	5.81	
-007		100.04						☒ 2000 ☐	5.69	
-008		100.02						☒ 2000 ☐	5.85	
-009		100.12						☒ 2000 ☐	5.75	
-010		100.01						☒ 2000 ☐	5.71	
-011		100.04						☒ 2000 ☐	5.62	
-012		100.10						☒ 2000 ☐	5.70	
-013		100.02						☒ 2000 ☐	5.64	
-014		100.09						☒ 2000 ☐	5.50	
-015		100.06						☒ 2000 ☐	5.41	
-016		100.08						☒ 2000 ☐	5.36	
-017		100.09						☒ 2000 ☐	5.65	
-018		100.04						☒ 2000 ☐	5.69	
-019		100.07						☒ 2000 ☐	5.69	
-020		100.09						☒ 2000 ☐	5.78	
								☐ 2000 ☐		
								☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No
pH Meter ID: 013869 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	4-10-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
Sodium Hydroxide (NaOH)		
Acetic acid (HOAc)		
Fluid #1 pH, Prep Date	VV 4-10-17	
Fluid #2 pH, Prep Date	4.95 / 5.01 — 4-5-17 / 4-10-17	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	E-E-400126-6309	4-11-17 VV
acidified to pH <2 with 1 mL HNO3	20170119B8-BDH	
pH paper strips, lot#	10BDH1061	

TCLP Fluid #1 pH: 4.88 - 4.98 su
TCLP Fluid #2 pH: 2.83 - 3.03 su
SPLP Fluid #1 pH: 4.15 - 4.25 su
SPLP Fluid #2 pH: 4.95 - 5.05 su

VM 4-10-17
Extraction Chemist **Date**

Reviewed Online / See LIMS

TCLP/SPLP Extract Digestion for ICP — Curtis & Tompkins, Ltd.

LIMS Batch #: 246617
Date Digested: 4-12-17
Digested by: VV
Matrix: ☐ TCLP Extract ☑ SPLP Extract

Digestion Method: ☒ EPA 3010a for ICP ☐ _____

BK 3999
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Continued on p: ∅

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK QC# 881302	☒ 50 ☐ ____	☒ 50 ☐ ____	NO	
*	BS 881303	☒ 50 ☐ ____	☒ 50 ☐ ____		
*	BSD 881304	☒ 50 ☐ ____	☒ 50 ☐ ____		
*	287362-004 MS	☒ 50 ☐ ____	☒ 50 ☐ ____		
5 *	- 004 MSD	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 001	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 002	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 003	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 004	☒ 50 ☐ ____	☒ 50 ☐ ____		
10	- 005	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 006	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 007	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 008	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 009	☒ 50 ☐ ____	☒ 50 ☐ ____		
15	- 010	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 011	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 012	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 013	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 014	☒ 50 ☐ ____	☒ 50 ☐ ____		
20	- 015	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 016	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 017	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 018	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 019	☒ 50 ☐ ____	☒ 50 ☐ ____		
	- 020	☒ 50 ☐ ____	☒ 50 ☐ ____		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	259788-2005		VV 4-12-17
Digestion Block ID/ Probe Location	RAINIER	3	
Thermometer ID/ Digestion Temperature (°C)	SNA64730	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983 *		
0.5 mL of spike solution (Std1) was added to all spikes	S29984 *		
0.5 mL of spike solution (Std3) was added to all spikes	S32778 *		
Digestion started at (time)	03:00		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	20170111988-BDH		
1:1 HCl reagent ID	162118-041317		VV 4-13-17
Digestion ended at (time)	05:05		
☐ filtered thru' Whatman # 541	-		
Relinquished to ICP group	FOAP		

Pipettes

Vol.(mL)	ID
0.5	N27150D

M.V 04/13/17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SAMPLE PREPARATION SUMMARY

Batch # : 247527
Started By : MB4
Method : 3010A
Spike #1 ID : S29983
Prep Date : 05-MAY-2017 18:30
Spike #2 ID : S29984
Analysis : ICP
Finished By : MB4
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-021		SPLP Leachate	50	50	1	1.0						6010	
287362-022		SPLP Leachate	50	50	1	1.0						6010	
287362-023		SPLP Leachate	50	50	1	1.0						6010	
287362-024		SPLP Leachate	50	50	1	1.0						6010	
287362-025		SPLP Leachate	50	50	1	1.0						6010	
287362-026		SPLP Leachate	50	50	1	1.0						6010	
287362-027		SPLP Leachate	50	50	1	1.0						6010	
287362-028		SPLP Leachate	50	50	1	1.0						6010	
287362-029		SPLP Leachate	50	50	1	1.0						6010	
287362-030		SPLP Leachate	50	50	1	1.0						6010	
287362-031		SPLP Leachate	50	50	1	1.0						6010	
287362-032		SPLP Leachate	50	50	1	1.0						6010	
287362-033		SPLP Leachate	50	50	1	1.0						6010	
287362-034		SPLP Leachate	50	50	1	1.0						6010	
287362-035		SPLP Leachate	50	50	1	1.0						6010	
287362-036		SPLP Leachate	50	50	1	1.0						6010	
287362-037		SPLP Leachate	50	50	1	1.0						6010	
287362-038		SPLP Leachate	50	50	1	1.0						6010	
287362-039		SPLP Leachate	50	50	1	1.0						6010	
287362-040		SPLP Leachate	50	50	1	1.0						6010	
QC884815	BLANK	SPLP Leachate	50	50	1	1.0							
QC884816	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884817	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884818	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884819	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884820	SER	SPLP Leachate	50	50	1	1.0							
QC884821	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 05/08/17 Reviewer: PRW Date: 05/09/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 247527
Date Digested: 5-5-2017
Digested by: MB4
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

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	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	Blank QC#880845	☒ 50 ☐	☒ 50 ☐	NO	QC# 884815
	BS	☒ 50 ☐	☒ 50 ☐		6
	BSD	☒ 50 ☐	☒ 50 ☐		7
	MS	☒ 50 ☐	☒ 50 ☐		8
5	MSD	☒ 50 ☐	☒ 50 ☐		9
	287362 -021	☒ 50 ☐	☒ 50 ☐		MSS
	-022	☒ 50 ☐	☐ 50 ☐		
	-023	☒ 50 ☐	☐ 50 ☐		
	-024	☒ 50 ☐	☐ 50 ☐		
10	-025	☒ 50 ☐	☐ 50 ☐		
	-026	☒ 50 ☐	☐ 50 ☐		
	-027	☒ 50 ☐	☐ 50 ☐		
	-028	☒ 50 ☐	☐ 50 ☐		
	-029	☒ 50 ☐	☐ 50 ☐		
15	-030	☒ 50 ☐	☐ 50 ☐		
	-031	☒ 50 ☐	☐ 50 ☐		
	-032	☒ 50 ☐	☐ 50 ☐		
	-033	☒ 50 ☐	☐ 50 ☐		
	-034	☒ 50 ☐	☐ 50 ☐		
20	-035	☒ 50 ☐	☐ 50 ☐		
	-036	☒ 50 ☐	☐ 50 ☐		
	-037	☒ 50 ☐	☐ 50 ☐		
	-038	☒ 50 ☐	☐ 50 ☐		
	-039	☒ 50 ☐	☐ 50 ☐		
	-040	☒ 50 ☐	☐ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	2671642-3025	1512329-6238-KM	MB4 5-5-17
Digestion Block ID/ Probe Location	Teton	25	
Thermometer ID/ Digestion Temperature (°C) MB4 5-5-17	~~Fe~~ M14581	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983		
0.5 mL of spike solution (Std1) was added to all spikes	S29984		
0.5 mL of spike solution (Std3) was added to all spikes	S305600		
Digestion started at (time)	19:30		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	BDH20170213505		
1:1 HCl reagent ID	JTB1167022		
Digestion ended at (time)	19:40		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N27150D
5	24442167

5-16-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246505
Extraction Method: ☐ EPA 1311: TCLP ☒ EPA 1312: SPLP
Rotator #'s: 1/5/3

Date/ Time ON: 4-11-17 07:30
Temp (°C) ON: 22°C
Date/ Time OFF: 4-12-17 01:30
Temp (°C) ON: 21°C - 24°C

Page: 48 BK 3994
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

	Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
	BLK 880865	QC	Ø	Ø	Ø	Ø	Ø	2	☒2000 ☐	5.72/5.72	
	287362-021	A	100.13	ND	ND	N/A	N/A		☒2000 ☐	~~5.67~~	VV 4-12-17
	- 022		100.04						☒2000 ☐	~~5.86~~ 5.85	Final pH 5.85
	- 023		100.03						☒2000 ☐	5.78	
5	- 024		100.06						☒2000 ☐	5.87	
	- 025		100.03						☒2000 ☐	5.78	
	- 026		100.07						☒2000 ☐	5.62	
	- 027		100.09						☒2000 ☐	5.74	
	- 028		100.11						☒2000 ☐	5.66	
10	- 029		100.21						☒2000 ☐	5.75	
	- 030		100.13						☒2000 ☐	5.61	
	- 031		100.04						☒2000 ☐	5.82	
	- 032		100.15						☒2000 ☐	5.77	
	- 033		100.03						☒2000 ☐	5.76	
15	- 034		100.12						☒2000 ☐	5.58	
	- 035		100.05						☒2000 ☐	5.61	
	- 036		100.02						☒2000 ☐	5.66	
	- 037		100.00						☒2000 ☐	5.63	
	- 038		100.11						☒2000 ☐	5.67	
20	- 039		100.01						☒2000 ☐	5.47	
	- 040		100.03						☒2000 ☐	5.62	
									☐ ~~2000~~ ☐		
				VV 4-10-17					☐ 2000 ☐		
									☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No
pH Meter ID: 013869 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	4-11-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	-	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	5.01/4.96/4.95	04/11/17
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	EE 400126-6308	4-12-17 VV
acidified to pH <2 with 1 mL HNO3	20170111988-BDH	
pH paper strips, lot#	10BDH1061	

4-11-17
Extraction Chemist **Date**

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 247528
Started By : MB4
Method : 3010A
Spike #1 ID : S29983
Prep Date : 05-MAY-2017 18:15
Spike #2 ID : S29984
Analysis : ICP
Finished By : MB4
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-041		SPLP Leachate	50	50	1	1.0						6010	
287362-042		SPLP Leachate	50	50	1	1.0						6010	
287362-043		SPLP Leachate	50	50	1	1.0						6010	
287362-044		SPLP Leachate	50	50	1	1.0						6010	
287362-045		SPLP Leachate	50	50	1	1.0						6010	
287362-046		SPLP Leachate	50	50	1	1.0						6010	
287500-014		SPLP Leachate	50	50	1	1.0						6010	
287500-020		SPLP Leachate	50	50	1	1.0						6010	
287500-021		SPLP Leachate	50	50	1	1.0						6010	
287500-022		SPLP Leachate	50	50	1	1.0						6010	
QC884822	BLANK	SPLP Leachate	50	50	1	1.0							
QC884823	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884824	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884825	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884826	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884827	BLANK	SPLP Leachate	50	50	1	1.0							
QC884828	SER	SPLP Leachate	50	50	1	1.0							
QC884829	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 05/08/17 Reviewer: PRW Date: 05/09/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 247528
Date Digested: 5-5-2017
Digested by: MBH
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
Page 54
Continued on p: 0

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	Blank QC#880864	☒ 50 ☐____	☒ 50 ☐____	NO	QC# 884822
	BS	☒ 50 ☐____	☒ 50 ☐____	↓	3
	BSD	☒ 50 ☐____	☒ 50 ☐____	↓	4
	MS	☒ 50 ☐____	☒ 50 ☐____	↓	5
5	MSD	☒ 50 ☐____	☒ 50 ☐____	↓	6
	287362-041	☒ 50 ☐____	☒ 50 ☐____	↓	
	↓ -042	☒ 50 ☐____	☒ 50 ☐____	↓	
	-043	☒ 50 ☐____	☒ 50 ☐____	↓	
	-044	☒ 50 ☐____	☒ 50 ☐____	↓	
10	-045	☒ 50 ☐____	☒ 50 ☐____	↓	
	↓ -046	☒ 50 ☐____	☒ 50 ☐____	↓	
	287500-020	☒ 50 ☐____	☒ 50 ☐____	↓	
	↓ -021	☒ 50 ☐____	☒ 50 ☐____	↓	
	↓ -022	☒ 50 ☐____	☒ 50 ☐____	↓	
15	287500-024	☒ 50 ☐____	☒ 50 ☐____	↓	MSS
	Blank QC# 881318	☒ 50 ☐____	☒ 50 ☐____	↓	QC# 884827
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
20		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	207642-3025	1512329-62236-KN	MBH 5-5-17
Digestion Block ID/ Probe Location	Teton	25	↓
Thermometer ID/ Digestion Temperature (°C)	M14581	95°C	↓
0.5 mL of spike solution (Std1) was added to all spikes	829983		↓
0.5 mL of spike solution (Std1) was added to all spikes	829984		↓
0.5 mL of spike solution (Std3) was added to all spikes	830540		↓
Digestion started at (time)	18:15		↓
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	BDH 20170213505		↓
1:1 HCl reagent ID	JTB1167022		↓
Digestion ended at (time)	19:40		↓
☐ filtered thru' Whatman # 541	—		↓
Relinquished to ICP group	ICP		↓

Pipettes

Vol.(mL)	ID
0.5	N2715010
5	24442467

5-6-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246504
Extraction Method: ☐ EPA 1311: TCLP ☒ EPA 1312: SPLP
Rotator #'s: 3

Date/ Time ON: 4-11-17 05:00
Temp (°C) ON: 22°C
Date/ Time OFF: 4-11-17 2300
Temp (°C) ON: 21-24

Page: 50 BK 3994
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

	Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
	BIK 880804		Ø	Ø	Ø	Ø	Ø	2	☒2000 ☐____	5.12	
	287362-041	A	100.13	ND	ND	N/A	N/A		☒2000 ☐____	5.68	
	- 042		100.10						☒2000 ☐____	5.62	
	- 043		100.21						☒2000 ☐____	5.58	
5	- 044		100.19						☒2000 ☐____	5.65	
	- 045		100.16						☒2000 ☐____	5.69	
	- 046		100.14						☒2000 ☐____	5.52	
	287500-020	A	100.18	ND	ND	N/A	N/A	2	☒2000 ☐____	5.53	Samples added @
	- 021		100.13						☒2000 ☐____	5.62	04:30 on 4-12-17.
10	- 022		100.110						☒2000 ☐____	5.37	
									☐ 2000 ☐____		FILTERED AT
									☐ 2000 ☐____		4-12-17 2230
									☐ 2000 ☐____		
									☐ 2000 ☐____		
15									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
20									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No
pH Meter ID: 013869 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	4-11-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
Sodium Hydroxide (NaOH)		
Acetic acid (HOAc)		
Fluid #1 pH, Prep Date	4.96 4-11-17	
Fluid #2 pH, Prep Date	— —	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	EE 400126-6309	4-11-17 MV
acidified to pH <2 with 1 mL HNO3	2017011900 BDH	
pH paper strips, lot#	10 BDH1061	

TCLP Fluid #1 pH: 4.88 - 4.98 su
TCLP Fluid #2 pH: 2.83 - 3.03 su
SPLP Fluid #1 pH: 4.15 - 4.25 su
SPLP Fluid #2 pH: 4.95 - 5.05 su

4-11-17
Extraction Chemist Date

Reviewed Online / See LIMS

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246620
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: _____

Date/ Time ON: 4-13-17 08:10
Temp (°C) ON: 22°C
Date/ Time OFF: 4-14-17 02:30
Temp (°C) ON: 21°C - 24°C

Page: 51 **BK 3994**
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK # 881318	QC	Ø	J	Ø	Ø	Ø	2	☑ 2000 ☐ ____	5.05	
287500-001	A	100.12	NO	NO	N/A	N/A		☑ 2000 ☐ ____	5.38	
-002		100.07						☑ 2000 ☐ ____	5.07	
-003		100.16						☑ 2000 ☐ ____	5.45	
-004		100.02						☑ 2000 ☐ ____	5.40	
-005		100.11						☑ 2000 ☐ ____	5.46	
-006		100.04						☑ 2000 ☐ ____	5.42	
-007		100.19						☑ 2000 ☐ ____	5.53	
-008		100.09						☑ 2000 ☐ ____	5.46	
-009		100.12						☑ 2000 ☐ ____	5.53	
-010		100.13						☑ 2000 ☐ ____	5.78	
-011		100.16						☑ 2000 ☐ ____	5.83	
-012		100.04						☑ 2000 ☐ ____	5.86	
-013		100.11						☑ 2000 ☐ ____	5.74	
-014		100.16						☑ 2000 ☐ ____	5.61	
-015		100.19						☑ 2000 ☐ ____	5.47	
-016		100.05						☑ 2000 ☐ ____	5.57	
-017		100.17						☑ 2000 ☐ ____	5.76	
-018		100.02						☑ 2000 ☐ ____	5.72	
-019		100.14						☑ 2000 ☐ ____	5.82	
~~-020~~	~~V~~	~~100.18~~ VV 4-13-17						☐ 2000 ☐ ____		
								☐ 2000 ☐ ____		
								☐ 2000 ☐ ____		
								☐ 2000 ☐ ____		

Balance ID: B-11 calibration has been checked? ☑ Yes ☐ No
pH Meter ID: 03869 has been calibrated? ☑ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	VV 4-13-17
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	4.95/4.95/4.99 — 4-11-17 / 4-13-17	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	AHLSTROM - 400124	VV 4-14-17
acidified to pH <2 with 1 mL HNO3	20170119885 - BDH	
pH paper strips, lot#	10BDH1061	

M.V. 4-13-17
Extraction Chemist Date

Reviewed Online / See LIMS

Laboratory Job Number 287362

ANALYTICAL REPORT

Wet Chemistry

Matrix: Soil

Percent Moisture Summary Report

Batch: 246310
Date: 04/05/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287362-041	11.0263	19.3722	16.4835	65	35
287362-042	11.3472	17.1261	14.8466	61	39
287362-043	11.2914	17.0846	15.0140	64	36
287362-044	11.1382	17.2412	14.9549	63	37
287362-045	11.3229	18.1894	15.6664	63	37
287362-046	11.2671	17.0024	15.2981	70	30
QC880106	11.1213	17.0135	15.2439	70	30
of 287362-046			RPD:	0.5%	1.1%

LIMS Batch #: 246310
Date: 4-5-17

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Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	46	11.0656	Ø	11.0650	
287362-041 A	34	11.0263	19.3722	16.4835	
-042	45	11.3472	17.1261	14.8466	
-043	9	11.2914	17.0846	15.0140	
-044	47	11.1382	17.2412	14.9549	
-045	35	11.3229	18.1894	15.6664	
-046	58	11.2671	17.0024	15.2981	
SOUP ↓ -046 ↓	78	11.1213	17.0135	15.2439	

MV 4-5-17

	In	Out	In-2	Out-2
Date:	4-5-17	4-5-17		
Time:	0520	2318		
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:	MV	MV		

MV 4-5-17

MV 4-5-17
Analyst Initials / Date

Reviewed Online / See LIMS

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PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK 2394
Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
4-5-17	NW	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 246309
Date: 04/05/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287362-021	11.3181	18.0643	15.4621	61	39
287362-022	11.2983	18.8133	16.0016	63	37
287362-023	11.2908	18.2582	15.7243	64	36
287362-024	11.0697	17.8508	15.2952	62	38
287362-025	11.3545	17.2897	15.1838	65	35
287362-026	10.8771	18.9039	16.2987	68	32
287362-027	11.0511	16.3879	14.6010	67	33
287362-028	11.2980	17.1443	15.1182	65	35
287362-029	11.0569	18.3936	15.9703	67	33
287362-030	11.3191	17.8535	15.1827	59	41
287362-031	11.0439	18.5297	16.0889	67	33
287362-032	10.9167	18.5542	15.7609	63	37
287362-033	10.9439	17.2776	14.6796	59	41
287362-034	11.3632	16.6736	15.0468	69	31
287362-035	11.3552	17.0439	15.2911	69	31
287362-036	10.9465	19.2993	17.0337	73	27
287362-037	11.2473	18.7580	16.2501	67	33
287362-038	11.2389	18.1681	16.0241	69	31
287362-039	11.4389	17.4491	15.1526	62	38
287362-040	11.6062	16.9653	14.9417	62	38
QC880105	11.2970	17.2989	15.1242	64	36
of 287362-021			RPD:	3.7%	6.3%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246309
Date: 4-5-17

Page: **30**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	44	11.2336	Ø	11.2336	
287362-021 A	17	11.3181	18.0643	15.4621	
-022	91	11.2983	18.8133	16.0016	
-023	36	11.2908	18.2582	15.7243	
-024	55	11.0697	17.8508	15.2952	
-025	30	11.3545	17.2897	15.1838	
-026	42	10.8771	18.9039	16.2987	
-027	60	11.0511	16.3879	14.6010	
-028	32	11.2980	17.1443	15.1182	
-029	28	11.0569	18.3936	15.9703	
-030	87	11.3191	17.8535	15.1827	
-031	14	11.0439	18.5297	16.0889	
-032	20	10.9167	18.5542	15.7609	
~~-033~~	53	10.9439	17.2776	14.6796	-033
-034	81	11.3632	16.6736	15.0468	
-035	74	11.3552	17.0439	15.2911	
-036	8	10.9465	19.2993	17.0337	
-037	51	11.2473	18.7580	16.2501	
-038	59	11.2389	18.1681	16.0241	
-039	77	11.4389	17.4491	15.1526	
-040	66	11.6062	16.9653	14.9417	
SDOF ↓ -021 ↓	12	11.2970	17.2989	15.1242	
				MV 4-5-17	

	In	Out	In-2	Out-2
Date:	4-5-17	4-5-17		
Time:	0450	2315		
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:	MV	MV		

MV 4-5-17
Analyst Initials / Date

Reviewed Online / See LIMS

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PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK 2394
Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
4-5-17	DW	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed | Date | Signed | Date

Percent Moisture Summary Report

Batch: 246308
Date: 04/05/17
Method: CLP SOW 390
Analyst: MFV

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287362-001	11.3252	16.8974	15.1444	69	31
287362-002	11.0604	16.4961	14.7112	67	33
287362-003	11.2724	16.8368	15.3348	73	27
287362-004	11.3031	18.2935	15.9787	67	33
287362-005	11.4036	17.1856	14.6168	56	44
287362-006	11.0812	17.0422	14.9087	64	36
287362-007	11.3093	16.7370	14.9914	68	32
287362-008	11.1915	16.6401	14.7056	64	36
287362-009	11.2589	16.7634	14.8361	65	35
287362-010	11.3677	17.4876	15.4325	66	34
287362-011	11.2795	16.5732	14.6472	64	36
287362-012	11.0160	18.0850	15.2600	60	40
287362-013	11.3363	17.5373	15.5702	68	32
287362-014	11.0543	17.9079	15.9680	72	28
287362-015	11.3622	18.7110	16.7632	73	27
287362-016	11.2040	17.9165	15.8413	69	31
287362-017	11.2065	17.4164	14.8961	59	41
287362-018	10.9097	17.7372	15.6451	69	31
287362-019	11.3595	16.9282	15.0188	66	34
287362-020	11.0471	17.5703	15.4081	67	33
QC880104	10.8860	17.1435	15.0313	66	34
of 287362-004			RPD:	1.0%	1.9%

LIMS Batch #: 246308
Date: 4-5-17

Page: **29**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
BLK	11	11.4227	Ø	11.4223	
287362-001 A	82	11.3252	16.8974	15.1444	
-002	62	11.0604	16.4961	14.7112	
-003	27	11.2724	16.8368	15.3348	
-004	88	11.3031	18.2935	15.9787	
-005	29	11.4036	17.1856	14.6168	
-006	24	11.0812	17.0422	14.9097	
-007	95	11.3093	16.7370	14.9914	
-008	6	11.1915	16.6401	14.7056	
-009	22	11.2589	16.7634	14.8361	
-010	71	11.3677	17.4876	15.4325	
-011	60	11.2795	16.5752	14.6472	
-012	73	11.0160	18.0850	15.2660	
-013	93	11.3363	17.5373	15.5702	
-014	30	11.0543	17.9079	15.9680	
-015	37	11.3622	18.7110	16.7632	
-016	18	11.2040	17.9165	15.8413	
-017	75	11.2065	17.4164	14.8961	
-018	21	10.9097	17.7372	15.6451	
-019	86	11.3595	16.9282	15.0188	
-020	64	11.0471	17.5703	15.4081	
SDUP ↓ -004 ↓	33	10.9860	17.1435	15.0313	
					NW 4-5-17

	In	Out	In-2	Out-2
Date:	4-5-17	4-5-17		
Time:	0405	2315	NW 4-5-17	
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:	NW	NW		

NW 4-5-17
Analyst Initials / Date

Reviewed Online / See LIMS

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PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK 2394

Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
4-5-17	NW	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 287500
ANALYTICAL REPORT

Weston Solutions	Project : 15048.001.003.0006.1
1340 Treat Blvd	Location : Camp Bonneville Military Reservation
Walnut Creek, CA 94597	Level : III

Sample ID	Lab ID
21-SS152	287500-001
21-SS153	287500-002
21-SS155	287500-003
21-SS164	287500-004
21-SS165	287500-005
21-SS166	287500-006
21-SS167	287500-007
21-SS168	287500-008
21-SS169	287500-009
21-SS170	287500-010
21-SS171	287500-011
21-SS172	287500-012
21-SS173	287500-013
21-SS175	287500-014
21-SS176	287500-015
21-SS177	287500-016
21-SS178	287500-017
21-SS179	287500-018
21-SS180	287500-019
21-SS181	287500-020
21-SS182	287500-021
21-SS183	287500-022

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

Signature: _____ Date: 05/09/2017

Will Rice
Project Manager
will.rice@ctberk.com
(510) 204-2221 Ext 13102

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**287500**
Client:	**Weston Solutions**
Project:	**15048.001.003.0006.1**
Location:	**Camp Bonneville Military Reservation**
Request Date:	**03/29/17**
Samples Received:	**03/29/17**

This data package contains sample and QC results for twenty two soil samples, requested for the above referenced project on 03/29/17. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C) Soil:
Low recoveries were observed for lead in the MS/MSD of 21-SS175 (lab # 287500-014); the BS/BSD were within limits, and the associated RPD was within limits.

High % difference was observed for lead in the serial dilution of 21-SS155 (lab # 287500-003).

No other analytical problems were encountered.

Metals (EPA 6010C) SPLP Leachate:
No analytical problems were encountered.

Moisture (ASTM D2216/CLP):
No analytical problems were encountered.

Chain of Custody

287500

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10					Project Name: Camp Bonneville Military Reservation			Request for Analysis									Chain of Custody No.: 4
Sampler's *(Signature)*																	Page 1 of 2
Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)									Additional Requirements
21-SS152	3/23/17	1045	X		Soil	1	X	X									
21-SS153	3/23/17	1030	X		Soil	1	X	X									
21-SS155	3/23/17	950	X		Soil	2	X	X									MS/MSD
21-SS164	3/23/17	1115	X		Soil	1	X	X									
21-SS165	3/23/17	1130	X		Soil	1	X	X									
21-SS166	3/23/17	1150	X		Soil	1	X	X									
21-SS167	3/23/17	1210	X		Soil	1	X	X									
21-SS168	3/23/17	1230	X		Soil	1	X	X									
21-SS169	3/23/17	1250	X		Soil	1	X	X									
21-SS170	3/23/17	1550	X		Soil	1	X	X									
21-SS171	3/23/17	1610	X		Soil	1	X	X									
21-SS172	3/23/17	1630	X		Soil	1	X	X									
21-SS173	3/23/17	1650	X		Soil	1	X	X									

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/28/2017 1400	Received by: (Signature and affiliation) FeEx Tracking #: 7787 5941 7942 (Master Tracking: NA)	Date and Time: 3/28/2017 1400
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation) 3/29/17	Date and Time:
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

1 2 3 4 5 6 7 8 9 10 11 12 13

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287500

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 4
Sampler's *(Signature)*			Page 2 of 2

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements
14	21-SS175	3/27/17	1210	X		Soil	2	X	X								MS/MSD
15	21-SS176	3/27/17	1150	X		Soil	1	X	X								
16	21-SS177	3/27/17	1130	X		Soil	1	X	X								
17	21-SS178	3/27/17	1110	X		Soil	1	X	X								
18	21-SS179	3/27/17	1050	X		Soil	1	X	X								
19	21-SS180	3/27/17	1030	X		Soil	1	X	X								
20	21-SS181	3/27/17	1000	X		Soil	1	X	X								
21	21-SS182	3/27/17	940	X		Soil	1	X	X								
22	21-SS183	3/27/17	900	X		Soil	1	X	X								

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/28/2017 1400	Received by: (Signature and affiliation) FeEx Tracking #: 7787 5941 7942 (Master Tracking: NA)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)

Date and Time: 3/28/2017 1400	
Date and Time: 3/29/17 14:00	
Date and Time:	For Laboratory Use Only

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

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COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 287500 Date Received 3-29-17 Number of coolers 1
Client WESTON Project 15048.001.003.00010.10

Date Opened 3-29-17 By (print) CMP (sign)
Date Logged in 1 By (print) LCPS (sign)
Date Labeled 1 By (print) CMP (sign)

1. Did cooler come with a shipping slip (airbill, etc) FEDEX YES NO
Shipping info 7787 5941 7942

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☐ NO
How many ____ Name ____ Date ____
2B. Were custody seals intact upon arrival? ____ YES NO N/A
3. Were custody papers dry and intact when received? ____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? ____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) ____ YES NO
6. Indicate the packing in cooler: (if other, describe) ____

☐ ~~Bubble Wrap~~ ☐ ~~Foam blocks~~ ☐ ~~Bags~~ ☐ ~~None~~
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 3.8

☐ Temperature blank(s) included? ☐ Thermometer# ____ ☒ IR Gun# A

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? ____ YES NO
If YES, what time were they transferred to freezer? ____
9. Did all bottles arrive unbroken/unopened? ____ YES NO
10. Are there any missing / extra samples? ____ YES NO
11. Are samples in the appropriate containers for indicated tests? ____ YES NO
12. Are sample labels present, in good condition and complete? ____ YES NO
13. Do the sample labels agree with custody papers? ____ YES NO
14. Was sufficient amount of sample sent for tests requested? ____ YES NO
15. Are the samples appropriately preserved? ____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? ____ YES NO N/A
17. Did you document your preservative check? (pH strip lot#____) YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? ____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? ____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? ____ YES NO N/A
21. Was the client contacted concerning this sample delivery? ____ YES NO
If YES, Who was called? ____ By ____ Date: ____

COMMENTS

Curtis & Tompkins, Ltd.

Detections Summary for 287500

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

Client : Weston Solutions
Project : 15048.001.003.0006.1
Location : Camp Bonneville Military Reservation

Client Sample ID : 21-SS152 Laboratory Sample ID : 287500-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS153 Laboratory Sample ID : 287500-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	76		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS155 Laboratory Sample ID : 287500-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	380		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS164 Laboratory Sample ID : 287500-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	100		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS165 Laboratory Sample ID : 287500-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	64		0.65	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS166 Laboratory Sample ID : 287500-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	110		0.75	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS167 Laboratory Sample ID : 287500-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	21		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS168 Laboratory Sample ID : 287500-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	49		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS169 Laboratory Sample ID : 287500-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	33		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS170 Laboratory Sample ID : 287500-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS171 Laboratory Sample ID : 287500-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	19		0.72	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS172 Laboratory Sample ID : 287500-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	38		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS173 Laboratory Sample ID : 287500-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	18		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS175 Laboratory Sample ID : 287500-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	140		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS176 Laboratory Sample ID : 287500-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	130		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS177 Laboratory Sample ID : 287500-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	75		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS178 Laboratory Sample ID : 287500-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS179 Laboratory Sample ID : 287500-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	31		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS180 Laboratory Sample ID : 287500-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	63		0.82	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS181 Laboratory Sample ID : 287500-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	23		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS182 Laboratory Sample ID : 287500-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	32		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS183 Laboratory Sample ID : 287500-022

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	21		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Laboratory Job Number 287500

ANALYTICAL REPORT

Metals

Matrix: Soil

Curtis & Tompkins, Ltd.

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Received:	03/29/17
Units:	mg/Kg	Prepared:	04/07/17
Basis:	dry	Analyzed:	04/07/17

Field ID	Type	Lab ID	Result	RL	Moisture	Batch#	Chemist	Sampled
21-SS152	SAMPLE	287500-001	120	0.76	35%	246401	KER	03/23/17
21-SS153	SAMPLE	287500-002	76	0.78	32%	246401	KER	03/23/17
21-SS155	SAMPLE	287500-003	380	0.80	31%	246401	KER	03/23/17
21-SS164	SAMPLE	287500-004	100	0.69	32%	246401	KER	03/23/17
21-SS165	SAMPLE	287500-005	64	0.65	26%	246401	KER	03/23/17
21-SS166	SAMPLE	287500-006	110	0.75	32%	246401	KER	03/23/17
21-SS167	SAMPLE	287500-007	21	0.71	29%	246401	KER	03/23/17
21-SS168	SAMPLE	287500-008	49	0.88	40%	246401	KER	03/23/17
21-SS169	SAMPLE	287500-009	33	0.76	36%	246401	KER	03/23/17
21-SS170	SAMPLE	287500-010	22	0.78	31%	246401	KER	03/23/17
21-SS171	SAMPLE	287500-011	19	0.72	33%	246401	KER	03/23/17
21-SS172	SAMPLE	287500-012	38	0.81	37%	246401	KER	03/23/17
21-SS173	SAMPLE	287500-013	18	0.77	34%	246401	KER	03/23/17
21-SS175	SAMPLE	287500-014	140	0.78	30%	246422	MNA	03/27/17
21-SS176	SAMPLE	287500-015	130	0.76	29%	246401	KER	03/27/17
21-SS177	SAMPLE	287500-016	75	0.77	29%	246401	KER	03/27/17
21-SS178	SAMPLE	287500-017	120	0.78	30%	246401	KER	03/27/17
21-SS179	SAMPLE	287500-018	31	0.78	31%	246401	KER	03/27/17
21-SS180	SAMPLE	287500-019	63	0.82	34%	246422	MNA	03/27/17
21-SS181	SAMPLE	287500-020	23	0.78	34%	246422	MNA	03/27/17
21-SS182	SAMPLE	287500-021	32	0.85	35%	246422	MNA	03/27/17
21-SS183	SAMPLE	287500-022	21	0.79	33%	246422	MNA	03/23/17
	BLANK	QC880471	ND	0.51		246401	KER	
	BLANK	QC880555	ND	0.51		246422	MNA	

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	Soil	Received:	03/29/17
Units:	mg/Kg	Prepared:	04/07/17
Basis:	dry	Analyzed:	04/07/17

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim	Batch#	Chemist	Sampled
	BS		QC880472		5.263	4.900	93	75-125				246401	KER	
	BSD		QC880473		5.263	5.104	97	75-125		4	35	246401	KER	
21-SS155	MS	287500-003	QC880474	383.8	7.104	117.8	-3744 NM	75-125	31%			246401	KER	03/23/17
21-SS155	MSD	287500-003	QC880475		7.628	138.9	-3210 NM	75-125	31%	16	35	246401	KER	03/23/17
	BS		QC880556		53.76	53.82	100	75-125				246422	MNA	
	BSD		QC880557		45.87	45.74	100	75-125		0	35	246422	MNA	
21-SS175	MS	287500-014	QC880558	140.2	74.40	155.7	21 *	75-125	30%			246422	MNA	03/27/17
21-SS175	MSD	287500-014	QC880559		77.64	197.8	74 *	75-125	30%	22	35	246422	MNA	03/27/17

*= Value outside of QC limits; see narrative
NM= Not Meaningful: Sample concentration > 4X spike concentration
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS175	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246422
MSS Lab ID:	287500-014	Chemist:	MNA
Lab ID:	QC880744	Sampled:	03/27/17
Matrix:	Soil	Received:	03/29/17
Units:	mg/Kg	Analyzed:	04/10/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff	Lim
140.2	0.7849	144.4	3.925	30%	3	10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS175	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246422
MSS Lab ID:	287500-014	Chemist:	MNA
Lab ID:	QC880745	Sampled:	03/27/17
Matrix:	Soil	Received:	03/29/17
Units:	mg/Kg	Analyzed:	04/10/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
140.2	7.849	130.6	-122 NM	75-125	30%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS155	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246401
MSS Lab ID:	287500-003	Chemist:	KER
Lab ID:	QC882708	Sampled:	03/23/17
Matrix:	Soil	Received:	03/29/17
Units:	mg/Kg	Analyzed:	04/21/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff		Lim
383.8	0.7963	439.7	3.982	31%	15	*	10

*= Value outside of QC limits; see narrative
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS155	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246401
MSS Lab ID:	287500-003	Chemist:	KER
Lab ID:	QC882709	Sampled:	03/23/17
Matrix:	Soil	Received:	03/29/17
Units:	mg/Kg	Analyzed:	04/21/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
383.8	7.963	437.8	678 NM	75-125	31%

NM= Not Meaningful: Sample concentration > 4X spike concentration

REPORTING SUMMARY FOR 287500 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287500-001	MET10	04/07/17 14:27	1.0	+
287500-002	MET10	04/07/17 14:39	1.0	+
287500-003	MET10	04/07/17 14:19	1.0	+
287500-004	MET10	04/07/17 14:42	1.0	+
287500-005	MET10	04/07/17 14:45	1.0	+
287500-006	MET10	04/07/17 14:48	1.0	+
287500-007	MET10	04/07/17 14:50	1.0	+
287500-008	MET10	04/07/17 14:53	1.0	+
287500-009	MET10	04/07/17 14:56	1.0	+
287500-010	MET10	04/07/17 14:58	1.0	+
287500-011	MET10	04/07/17 15:01	1.0	+
287500-012	MET10	04/07/17 15:03	1.0	+
287500-013	MET10	04/07/17 15:16	1.0	+
287500-014	MET10	04/07/17 22:34	1.0	+
287500-014	MET10	04/10/17 12:25	1.0	
287500-015	MET10	04/07/17 15:18	1.0	+
287500-016	MET10	04/07/17 15:21	1.0	+
287500-017	MET10	04/07/17 15:24	1.0	+
287500-018	MET10	04/07/17 15:26	1.0	+
287500-019	MET10	04/07/17 22:52	1.0	+
287500-020	MET10	04/07/17 22:54	1.0	+
287500-021	MET10	04/07/17 22:57	1.0	+
287500-022	MET10	04/07/17 23:00	1.0	+
QC880471	MET10	04/07/17 12:14	1.0	+
QC880471	MET10	04/07/17 14:02	1.0	
QC880472	MET10	04/07/17 12:18	1.0	+
QC880472	MET10	04/07/17 14:06	1.0	
QC880473	MET10	04/07/17 12:20	1.0	+
QC880473	MET10	04/07/17 14:09	1.0	

REPORTING SUMMARY FOR 287500 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC880474	MET10	04/07/17 14:22	1.0	+	
QC880474	MET10	04/08/17 03:24	1.0		
QC880475	MET10	04/07/17 14:25	1.0	+	
QC880475	MET10	04/08/17 03:27	1.0		
QC882708	MET10	04/21/17 13:06	5.0	+	
QC882709	MET10	04/21/17 13:09	1.0	+	
QC880555	MET10	04/07/17 22:26	1.0	+	
QC880555	MET10	04/10/17 12:16	1.0		
QC880556	MET10	04/07/17 22:29	1.0	+	
QC880556	MET10	04/10/17 12:20	1.0		
QC880557	MET10	04/07/17 22:31	1.0	+	
QC880557	MET10	04/10/17 12:22	1.0		
QC880558	MET10	04/07/17 22:37	1.0	+	
QC880558	MET10	04/10/17 12:27	1.0		
QC880559	MET10	04/07/17 22:49	1.0	+	
QC880559	MET10	04/10/17 12:30	1.0		
QC880744	MET10	04/10/17 13:27	5.0	+	
QC880745	MET10	04/10/17 13:29	1.0	+	
QC880745	MET10	04/10/17 17:23	1.0		
QC880745	MET10	04/11/17 18:18	1.0		

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140245

Instrument : MET10
Method : EPA 6010C

Begun : 04/07/17 09:25
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/07/17 09:25	1.0		
002	met10 method	ICAL	L1			04/07/17 09:29	1.0	1	
003	met10 method	ICAL	L2			04/07/17 09:32	1.0	2	
004	met10 method	ICAL	L3			04/07/17 09:34	1.0	3	
005	met10 method	ICAL	L4			04/07/17 09:36	1.0	4	
006	met10 method	ICAL	L5			04/07/17 09:39	1.0	5	
007	met10 method	ICV				04/07/17 09:42	1.0	6	
008	met10 method	CRI				04/07/17 09:53	1.0	7	
009	met10 method	ICB				04/07/17 09:56	1.0		
010	met10 method	ICSA				04/07/17 09:59	1.0	8	9:AL=530000
011	met10 method	ICSAB				04/07/17 10:04	1.0	9	5:AL=530000
012	met10 method	ICSAB				04/07/17 10:15	1.0	9	5:AL=530000
013	met10 method	X	RINSE			04/07/17 10:43	1.0		
014	met10 method	SAMPLE	287315-001	Miscell.	246094	04/07/17 10:46	1.0		1:K=230000
015	met10 method	SAMPLE	287318-001	Miscell.	246094	04/07/17 10:49	1.0		1:K=160000
016	met10 method	SAMPLE	287467-001	Soil	246170	04/07/17 10:51	1.0		1:FE=100000
017	met10 method	SAMPLE	287467-003	Soil	246170	04/07/17 10:54	1.0		1:FE=100000
018	met10 method	BLANK	QC879449	Water	246154	04/07/17 10:56	1.0		
019	met10 method	MSS	287544-001	Water	246154	04/07/17 10:59	1.0		1:NA=140000
020	met10 method	CCV				04/07/17 11:03	1.0	10	
021	met10 method	XCCB				04/07/17 11:06	1.0		
022	met10 method	CCB				04/07/17 11:09	1.0		
023	met10 method	BLANK	QC880290	Water	246354	04/07/17 11:12	1.0		
024	met10 method	BS	QC880291	Water	246354	04/07/17 11:15	1.0		
025	met10 method	BSD	QC880292	Water	246354	04/07/17 11:18	1.0		
026	met10 method	MSS	287645-005	Water	246354	04/07/17 11:20	1.0		1:NA=220000
027	met10 method	MS	QC880293	Water	246354	04/07/17 11:23	1.0		
028	met10 method	MSD	QC880294	Water	246354	04/07/17 11:25	1.0		
029	met10 method	SAMPLE	287631-001	Water	246354	04/07/17 11:28	1.0		2:NA=170000
030	met10 method	SAMPLE	287632-001	Water	246354	04/07/17 11:30	1.0		2:NA=160000
031	met10 method	SAMPLE	287641-001	Water	246354	04/07/17 11:33	1.0		
032	met10 method	SAMPLE	287641-002	Water	246354	04/07/17 11:36	1.0		
033	met10 method	CCV				04/07/17 11:39	1.0	10	
034	met10 method	XCCB				04/07/17 11:41	1.0		
035	met10 method	CCB				04/07/17 11:44	1.0		
036	met10 method	SAMPLE	287641-003	Water	246354	04/07/17 11:48	1.0		
037	met10 method	SAMPLE	287641-004	Water	246354	04/07/17 11:50	1.0		1:FE=110000
038	met10 method	CCV				04/07/17 11:53	1.0	10	
039	met10 method	XCCB				04/07/17 11:56	1.0		
040	met10 method	CCB				04/07/17 11:59	1.0		
041	met10 method	X	RINSE			04/07/17 12:11	1.0		
042	met10 method	BLANK	QC880471	Soil	246401	04/07/17 12:14	1.0		
043	met10 method	BS	QC880472	Soil	246401	04/07/17 12:18	1.0		
044	met10 method	BSD	QC880473	Soil	246401	04/07/17 12:20	1.0		
045	met10 method	SAMPLE	287744-004	Soil	246401	04/07/17 12:22	1.0		4:FE=370000
046	met10 method	SAMPLE	287760-006	Soil	246401	04/07/17 12:25	1.0		5:FE=410000
047	met10 method	SAMPLE	287760-007	Soil	246401	04/07/17 12:28	1.0		4:FE=310000
048	met10 method	X	RINSE			04/07/17 12:31	1.0		
049	met10 method	BLANK	QC879191	Miscell.	246094	04/07/17 12:34	1.0		
050	met10 method	SER	QC879454	Water	246154	04/07/17 12:37	5.0		
051	met10 method	CCV				04/07/17 12:41	1.0	10	
052	met10 method	XCCB				04/07/17 12:43	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140245

Instrument : MET10 Begun : 04/07/17 09:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	CCB				04/07/17 12:46	1.0		
054	met10 method	SER	QC880490	Soil	246268	04/07/17 12:50	5.0		
055	met10 method	PDS	QC880491	Soil	246268	04/07/17 12:52	1.0	11 12 13	4:FE=400000
056	met10 method	SER	QC880476	Soil	246272	04/07/17 12:55	500.0		
057	met10 method	PDS	QC880477	Soil	246272	04/07/17 12:58	100.0	11 12 13	
058	met10 method	SAMPLE	287418-002	Filtrate	246184	04/07/17 13:01	1.0		4:NA=4200000
059	met10 method	CCV				04/07/17 13:03	1.0	10	
060	met10 method	XCCB				04/07/17 13:06	1.0		
061	met10 method	CCB				04/07/17 13:09	1.0		

KER 04/07/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 61.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140245

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 09:29

#	Type	Sample ID	Y A	Y R
		ICAL STD	8565870	1051635
		LOWER LIMIT	2569761	315491
		UPPER LIMIT	10279043	1261962
009	ICB		8723721	1049068
010	ICSA		6946447	918515
012	ICSAB		6912959	919452
029	SAMPLE	287631-001	7619406	973843
030	SAMPLE	287632-001	7632842	986030
038	CCV		8189686	1022145
040	CCB		8602593	1069219
042	BLANK	QC880471	8640686	1068811
043	BS	QC880472	8269954	1032447
044	BSD	QC880473	8283571	1015200
051	CCV		7996283	1026232
053	CCB		8717220	1124508
059	CCV		8226653	1024369
061	CCB		8749165	397944

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087140245002
Units : ug/L

Date : 07-APR-2017 09:25
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087140245002	L1	07-APR-2017 09:29	S32578
L2	met10 method	1087140245003	L2	07-APR-2017 09:32	S32571
L3	met10 method	1087140245004	L3	07-APR-2017 09:34	S32367
L4	met10 method	1087140245005	L4	07-APR-2017 09:36	S32368
L5	met10 method	1087140245006	L5	07-APR-2017 09:39	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.3200	2.6650	2.4737	2.4523		LOR0	0.00000	0.40774		2.4777	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-5	100.00	9	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087140245002

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087140245002 Cal Date : 07-APR-2017

ICV 1087140245007 (07-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5085	ug/L	2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245008.2 File : met10 method Time : 07-APR-2017 09:53
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.673	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8473616	-1.08
Yttrium	R	1051635	1045140	-0.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245009.3 File : met10 method Time : 07-APR-2017 09:56
Cal : 1087140245002 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8723721	1.84
Yttrium	R	1051635	1049068	-0.24

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245010.3 File : met10 method Time : 07-APR-2017 09:59
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-4.354]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Copper	A	20000	22090	ug/L	110	
Manganese	A	20000	17980	ug/L	90	
Nickel	A	20000	16530	ug/L	83	
Titanium	A	20000	18390	ug/L	92	
Vanadium	A	20000	21090	ug/L	105	
Aluminum	R	500000	532700	ug/L	107	
Calcium	R	500000	500300	ug/L	100	
Iron	R	200000	198800	ug/L	99	
Magnesium	R	500000	452000	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	6946447	-18.91
Yttrium	R	1051635	918515	-12.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245012.2 File : met10 method Time : 07-APR-2017 10:15
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	970.6	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	6912959	-19.30
Yttrium	R	1051635	919452	-12.57

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245038.1 File : met10 method Time : 07-APR-2017 11:53
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4777	2.4340	5000	4962	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8189686	-4.39
Yttrium	R	1051635	1022145	-2.80

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245040.1 File : met10 method Time : 07-APR-2017 11:59
Cal : 1087140245002 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8602593	0.43
Yttrium	R	1051635	1069219	1.67

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245051.1 File : met10 method Time : 07-APR-2017 12:41
Cal : 1087140245002 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4777	2.4716	5000	5039	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	7996283	-6.65
Yttrium	R	1051635	1026232	-2.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140245053.1 File : met10 method Time : 07-APR-2017 12:46
Cal : 1087140245002 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8565870	8717220	1.77
Yttrium	R	1051635	1124508	6.93

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140475

Instrument : MET10 Begun : 04/07/17 13:15
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/07/17 13:15	1.0		
002	met10 method	ICAL	L1			04/07/17 13:19	1.0	1	
003	met10 method	ICAL	L2			04/07/17 13:22	1.0	2	
004	met10 method	ICAL	L3			04/07/17 13:24	1.0	3	
005	met10 method	ICAL	L4			04/07/17 13:27	1.0	4	
006	met10 method	ICAL	L5			04/07/17 13:29	1.0	5	
007	met10 method	ICV				04/07/17 13:32	1.0	6	
008	met10 method	CRI				04/07/17 13:35	1.0	7	
009	met10 method	CRI				04/07/17 13:39	1.0	7	
010	met10 method	ICB				04/07/17 13:43	1.0		
011	met10 method	ICSA				04/07/17 13:46	1.0	8	10:AL=530000
012	met10 method	ICSAB				04/07/17 13:49	1.0	9	5:AL=520000
013	met10 method	ICSAB				04/07/17 13:53	1.0	9	5:AL=510000
014	met10 method	BLANK	QC880471	Soil	246401	04/07/17 14:02	1.0		
015	met10 method	BS	QC880472	Soil	246401	04/07/17 14:06	1.0		
016	met10 method	BSD	QC880473	Soil	246401	04/07/17 14:09	1.0		
017	met10 method	SAMPLE	287744-004	Soil	246401	04/07/17 14:11	1.0		4:FE=370000
018	met10 method	SAMPLE	287760-006	Soil	246401	04/07/17 14:14	1.0		4:FE=410000
019	met10 method	SAMPLE	287760-007	Soil	246401	04/07/17 14:16	1.0		4:FE=310000
020	met10 method	MSS	287500-003	Soil	246401	04/07/17 14:19	1.0		4:FE=470000
021	met10 method	MS	QC880474	Soil	246401	04/07/17 14:22	1.0		4:FE=560000
022	met10 method	MSD	QC880475	Soil	246401	04/07/17 14:25	1.0		4:FE=470000
023	met10 method	SAMPLE	287500-001	Soil	246401	04/07/17 14:27	1.0		4:AL=510000
024	met10 method	CCV				04/07/17 14:30	1.0	10	
025	met10 method	CCB				04/07/17 14:33	1.0		
026	met10 method	CCB				04/07/17 14:36	1.0		
027	met10 method	SAMPLE	287500-002	Soil	246401	04/07/17 14:39	1.0		4:AL=560000
028	met10 method	SAMPLE	287500-004	Soil	246401	04/07/17 14:42	1.0		4:AL=640000
029	met10 method	SAMPLE	287500-005	Soil	246401	04/07/17 14:45	1.0		4:AL=620000
030	met10 method	SAMPLE	287500-006	Soil	246401	04/07/17 14:48	1.0		4:AL=460000
031	met10 method	SAMPLE	287500-007	Soil	246401	04/07/17 14:50	1.0		4:FE=470000
032	met10 method	SAMPLE	287500-008	Soil	246401	04/07/17 14:53	1.0		3:FE=300000
033	met10 method	SAMPLE	287500-009	Soil	246401	04/07/17 14:56	1.0		3:FE=410000
034	met10 method	SAMPLE	287500-010	Soil	246401	04/07/17 14:58	1.0		3:AL=370000
035	met10 method	SAMPLE	287500-011	Soil	246401	04/07/17 15:01	1.0		4:FE=500000
036	met10 method	SAMPLE	287500-012	Soil	246401	04/07/17 15:03	1.0		3:FE=370000
037	met10 method	CCV				04/07/17 15:06	1.0	10	
038	met10 method	XCCB				04/07/17 15:09	1.0		
039	met10 method	CCB				04/07/17 15:12	1.0		
040	met10 method	SAMPLE	287500-013	Soil	246401	04/07/17 15:16	1.0		4:FE=470000
041	met10 method	SAMPLE	287500-015	Soil	246401	04/07/17 15:18	1.0		4:AL=530000
042	met10 method	SAMPLE	287500-016	Soil	246401	04/07/17 15:21	1.0		4:FE=470000
043	met10 method	SAMPLE	287500-017	Soil	246401	04/07/17 15:24	1.0		4:FE=430000
044	met10 method	SAMPLE	287500-018	Soil	246401	04/07/17 15:26	1.0		4:FE=430000
045	met10 method	CCV				04/07/17 15:29	1.0	10	
046	met10 method	XCCB				04/07/17 15:32	1.0		
047	met10 method	CCB				04/07/17 15:35	1.0		
048	met10 method	MSS	287418-003	Filtrate	246184	04/07/17 15:52	1.0		2:NA=270000
049	met10 method	SAMPLE	287623-001	Soil	246347	04/07/17 15:55	1.0		3:FE=210000
050	met10 method	SAMPLE	287623-003	Soil	246347	04/07/17 15:57	1.0		3:CA=330000
051	met10 method	SAMPLE	287623-004	Soil	246347	04/07/17 16:00	1.0		3:FE=220000
052	met10 method	SAMPLE	287623-005	Soil	246347	04/07/17 16:02	1.0		3:CA=240000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140475

Instrument : MET10
Method : EPA 6010C
Begun : 04/07/17 13:15
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287623-006	Soil	246347	04/07/17 16:05	1.0		4:CA=370000
054	met10 method	SAMPLE	287623-007	Soil	246347	04/07/17 16:08	1.0		4:CA=380000
055	met10 method	MSS	287623-009	Soil	246347	04/07/17 16:10	1.0		3:CA=260000
056	met10 method	SAMPLE	287623-010	Soil	246347	04/07/17 16:13	1.0		3:FE=220000
057	met10 method	MS	QC880253	Soil	246347	04/07/17 16:16	1.0		3:CA=300000
058	met10 method	CCV				04/07/17 16:18	1.0	10	
059	met10 method	XCCB				04/07/17 16:21	1.0		
060	met10 method	CCB				04/07/17 16:24	1.0		
061	met10 method	MSD	QC880254	Soil	246347	04/07/17 16:27	1.0		3:CA=300000
062	met10 method	SER	QC880256	Soil	246347	04/07/17 16:30	5.0		
063	met10 method	PDS	QC880255	Soil	246347	04/07/17 16:32	1.0	11 12 13	
064	met10 method	MSS	287252-007	Soil	246299	04/07/17 16:35	100.0		
065	met10 method	SER	QC880062	Soil	246299	04/07/17 16:37	500.0		
066	met10 method	PDS	QC880063	Soil	246299	04/07/17 16:41	100.0	11 12 13	
067	met10 method	X	RINSE			04/07/17 16:43	1.0		
068	met10 method	BLANK	QC878606	Water	245945	04/07/17 16:46	1.0		
069	met10 method	BS	QC878607	Water	245945	04/07/17 16:50	1.0		
070	met10 method	BSD	QC878608	Water	245945	04/07/17 16:52	1.0		
071	met10 method	CCV				04/07/17 16:55	1.0	10	
072	met10 method	CCB				04/07/17 16:57	1.0		
073	met10 method	SAMPLE	287283-001	Water	245945	04/07/17 17:01	1.0		4:NA=5200000
074	met10 method	SAMPLE	287283-002	Water	245945	04/07/17 17:03	1.0		4:NA=4000000
075	met10 method	SAMPLE	287283-004	Water	245945	04/07/17 17:07	1.0		6:NA=7000000
076	met10 method	SAMPLE	287283-005	Water	245945	04/07/17 17:09	1.0		4:NA=6300000
077	met10 method	SAMPLE	287343-001	Water	245945	04/07/17 17:12	1.0		4:NA=6200000
078	met10 method	SAMPLE	287343-002	Water	245945	04/07/17 17:14	1.0		1:NA=690000
079	met10 method	X	RINSE			04/07/17 17:17	1.0		
080	met10 method	BLANK	QC879027	Water	246054	04/07/17 17:20	1.0		
081	met10 method	BLANK	QC878810	Water	246001	04/07/17 17:24	1.0		
082	met10 method	BS	QC878811	Water	246001	04/07/17 17:27	1.0		
083	met10 method	CCV				04/07/17 17:29	1.0	10	
084	met10 method	CCB				04/07/17 17:32	1.0		
085	met10 method	XCCB				04/07/17 17:35	1.0		
086	met10 method	BSD	QC878812	Water	246001	04/07/17 17:39	1.0		
087	met10 method	MSS	287278-001	Water	246001	04/07/17 17:42	1.0		1:NA=470000
088	met10 method	MS	QC878813	Water	246001	04/07/17 17:45	1.0		
089	met10 method	MSD	QC878814	Water	246001	04/07/17 17:47	1.0		
090	met10 method	SAMPLE	287278-002	Water	246001	04/07/17 17:50	1.0		3:NA=1800000
091	met10 method	SAMPLE	287278-003	Water	246001	04/07/17 17:53	1.0		2:NA=1800000
092	met10 method	BLANK	QC880290	Water	246354	04/07/17 17:56	1.0		
093	met10 method	BS	QC880291	Water	246354	04/07/17 17:59	1.0		
094	met10 method	BSD	QC880292	Water	246354	04/07/17 18:02	1.0		
095	met10 method	MSS	287645-005	Water	246354	04/07/17 18:04	1.0		1:NA=230000
096	met10 method	CCV				04/07/17 18:07	1.0	10	
097	met10 method	CCB				04/07/17 18:10	1.0		
098	met10 method	CCB				04/07/17 18:12	1.0		
099	met10 method	MS	QC880293	Water	246354	04/07/17 18:16	1.0		
100	met10 method	MSD	QC880294	Water	246354	04/07/17 18:18	1.0		
101	met10 method	SAMPLE	287641-001	Water	246354	04/07/17 18:21	1.0		
102	met10 method	SAMPLE	287641-002	Water	246354	04/07/17 18:24	1.0		
103	met10 method	SAMPLE	287641-003	Water	246354	04/07/17 18:27	1.0		
104	met10 method	SAMPLE	287641-004	Water	246354	04/07/17 18:29	1.0		1:FE=100000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140475

Instrument : MET10 Begun : 04/07/17 13:15
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	CCV				04/07/17 18:32	1.0	10	
106	met10 method	CCB				04/07/17 18:35	1.0		
107	met10 method	CCB				04/07/17 18:38	1.0		
108	met10 method	CCV				04/07/17 18:47	1.0	10	
109	met10 method	CCB				04/07/17 18:50	1.0		
110	met10 method	CCB				04/07/17 18:53	1.0		

KER 04/07/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

MNA 04/07/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 48 through 110.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140475

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 13:19

#	Type	Sample ID	Y A	Y R
		ICAL STD	8563413	1049898
		LOWER LIMIT	2569024	314969
		UPPER LIMIT	10276095	1259878
010	ICB		8787296	1041681
011	ICSA		7041929	908409
013	ICSAB		7078416	922515
014	BLANK	QC880471	8837911	81536 *
015	BS	QC880472	8272549	1028055
016	BSD	QC880473	8262039	1012796
020	MSS	287500-003	7873560	981051
021	MS	QC880474	7608154	987178
022	MSD	QC880475	7741170	1000417
023	SAMPLE	287500-001	7846323	995519
024	CCV		8297720	1020694
025	CCB		8662895	1051524
026	CCB		8625671	1106762
027	SAMPLE	287500-002	7760691	986241
028	SAMPLE	287500-004	7677013	978179
029	SAMPLE	287500-005	7729209	978929
030	SAMPLE	287500-006	7851575	993370
031	SAMPLE	287500-007	7887824	983770
032	SAMPLE	287500-008	8084604	1001191
033	SAMPLE	287500-009	7913742	986524
034	SAMPLE	287500-010	7959636	982276
035	SAMPLE	287500-011	7806290	976111
036	SAMPLE	287500-012	8008473	992644
037	CCV		8356162	1032035
039	CCB		8850421	88793 *
040	SAMPLE	287500-013	7830396	974895
041	SAMPLE	287500-015	7747187	981981
042	SAMPLE	287500-016	7851676	984452
043	SAMPLE	287500-017	7912619	985612
044	SAMPLE	287500-018	7926697	994725
045	CCV		8312805	1031782
047	CCB		8695928	1066705
058	CCV		8067583	1030434
060	CCB		8781642	1074360
064	MSS	287252-007	8612800	1054470
071	CCV		8201153	1014624
072	CCB		8716275	1063188
073	SAMPLE	287283-001	5064475	777396
074	SAMPLE	287283-002	5476510	823818
075	SAMPLE	287283-004	4001735	668131
076	SAMPLE	287283-005	4527486	722498
077	SAMPLE	287343-001	4623786	730428
078	SAMPLE	287343-002	7254840	963654
087	MSS	287278-001	7483014	970282
090	SAMPLE	287278-002	6343677	882361
091	SAMPLE	287278-003	6651029	909553

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087140475001
Units : ug/L

Date : 07-APR-2017 13:15
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087140475002	L1	07-APR-2017 13:19	S32578
L2	met10 method	1087140475003	L2	07-APR-2017 13:22	S32571
L3	met10 method	1087140475004	L3	07-APR-2017 13:24	S32367
L4	met10 method	1087140475005	L4	07-APR-2017 13:27	S32368
L5	met10 method	1087140475006	L5	07-APR-2017 13:29	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	1.9000	2.7110	2.6655	2.6957		LOR0	0.00000	0.37100		2.4930	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	**-30**	100.00	1	1000.0	-1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087140475001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087140475001 Cal Date : 07-APR-2017

ICV 1087140475007 (07-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4742	ug/L	-5	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475009.1 File : met10 method Time : 07-APR-2017 13:39
Cal : 1087140475001 Caldate : 07-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.572	ug/L	-9	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8612812	0.58
Yttrium	R	1049898	1045325	-0.44

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475010.1 File : met10 method Time : 07-APR-2017 13:43
Cal : 1087140475001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8787296	2.61
Yttrium	R	1049898	1041681	-0.78

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475011.1 File : met10 method Time : 07-APR-2017 13:46
Cal : 1087140475001 Caldate : 07-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-3.734]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	17850	ug/L	89	
Copper	A	20000	21030	ug/L	105	
Manganese	A	20000	17620	ug/L	88	
Nickel	A	20000	15680	ug/L	78	
Titanium	A	20000	17860	ug/L	89	
Vanadium	A	20000	20550	ug/L	103	
Aluminum	R	500000	530700	ug/L	106	
Calcium	R	500000	494600	ug/L	99	
Iron	R	200000	196100	ug/L	98	
Magnesium	R	500000	450200	ug/L	90	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	7041929	-17.77
Yttrium	R	1049898	908409	-13.48

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475013.1 File : met10 method Time : 07-APR-2017 13:53
Cal : 1087140475001 Caldate : 07-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	898.5	ug/L	-10	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	7078416	-17.34
Yttrium	R	1049898	922515	-12.13

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475024.1 File : met10 method Time : 07-APR-2017 14:30
Cal : 1087140475001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4930	2.5113	5000	4658	ug/L	-7	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8297720	-3.10
Yttrium	R	1049898	1020694	-2.78

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475025.1 File : met10 method Time : 07-APR-2017 14:33
Cal : 1087140475001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8662895	1.16
Yttrium	R	1049898	1051524	0.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475026.1 File : met10 method Time : 07-APR-2017 14:36
Cal : 1087140475001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8625671	0.73
Yttrium	R	1049898	1106762	5.42

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475037.1 File : met10 method Time : 07-APR-2017 15:06
Cal : 1087140475001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4930	2.4989	5000	4635	ug/L	-7	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8356162	-2.42
Yttrium	R	1049898	1032035	-1.70

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475039.1 File : met10 method Time : 07-APR-2017 15:12
Cal : 1087140475001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8850421	3.35
Yttrium	R	1049898	88793	**-91.54 ***

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475045.1 File : met10 method Time : 07-APR-2017 15:29
Cal : 1087140475001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.4930	2.5057	5000	4648	ug/L	-7	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8312805	-2.93
Yttrium	R	1049898	1031782	-1.73

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140475047.1 File : met10 method Time : 07-APR-2017 15:35
Cal : 1087140475001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8563413	8695928	1.55
Yttrium	R	1049898	1066705	1.60

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/07/17 20:04	1.0		
002	met10 method	ICAL	L1			04/07/17 20:07	1.0	1	
003	met10 method	ICAL	L2			04/07/17 20:10	1.0	2	
004	met10 method	ICAL	L3			04/07/17 20:12	1.0	3	
005	met10 method	ICAL	L4			04/07/17 20:15	1.0	4	
006	met10 method	ICAL	L5			04/07/17 20:17	1.0	5	
007	met10 method	XICV				04/07/17 20:20	1.0	6	
008	met10 method	ICV				04/07/17 20:22	1.0	6	1:SR=4400000
009	met10 method	XCRI				04/07/17 20:25	1.0	7	
010	met10 method	CRI				04/07/17 20:28	1.0	7	1:SR=45000
011	met10 method	ICB				04/07/17 20:32	1.0		
012	met10 method	ICSA				04/07/17 20:36	1.0	8	11:AL=580000
013	met10 method	ICSAB				04/07/17 20:38	1.0	9	6:SR=4700000
014	met10 method	X	RINSE			04/07/17 20:56	1.0		
015	met10 method	BLANK	QC880563	Soil	246424	04/07/17 20:59	1.0		1:SR=1500
016	met10 method	BS	QC880564	Soil	246424	04/07/17 21:03	1.0		1:SR=88000000
017	met10 method	BSD	QC880565	Soil	246424	04/07/17 21:05	1.0		1:SR=88000000
018	met10 method	MSS	287640-001	Soil	246424	04/07/17 21:08	1.0		2:SR=1800000
019	met10 method	MS	QC880566	Soil	246424	04/07/17 21:10	1.0		1:SR=89000000
020	met10 method	MSD	QC880567	Soil	246424	04/07/17 21:13	1.0		1:SR=88000000
021	met10 method	SAMPLE	287640-002	Soil	246424	04/07/17 21:16	1.0		7:SR=13000000
022	met10 method	SAMPLE	287640-003	Soil	246424	04/07/17 21:19	1.0		5:SR=4800000
023	met10 method	SAMPLE	287640-004	Soil	246424	04/07/17 21:21	1.0		5:SR=4500000
024	met10 method	CCV				04/07/17 21:24	1.0	10	1:SR=4400000
025	met10 method	XCCB				04/07/17 21:27	1.0		
026	met10 method	CCB				04/07/17 21:30	1.0		
027	met10 method	SAMPLE	287640-005	Soil	246424	04/07/17 21:33	1.0		5:SR=4900000
028	met10 method	SAMPLE	287640-006	Soil	246424	04/07/17 21:36	1.0		5:SR=4500000
029	met10 method	SAMPLE	287667-001	Soil	246424	04/07/17 21:39	1.0		3:SR=4500000
030	met10 method	SAMPLE	287667-002	Soil	246424	04/07/17 21:41	1.0		3:SR=8500000
031	met10 method	SAMPLE	287667-003	Soil	246424	04/07/17 21:44	1.0		3:SR=2000000
032	met10 method	SAMPLE	287667-004	Soil	246424	04/07/17 21:47	1.0		3:SR=5000000
033	met10 method	SAMPLE	287668-001	Soil	246424	04/07/17 21:50	1.0		5:SR=1400000
034	met10 method	SAMPLE	287668-002	Soil	246424	04/07/17 21:53	1.0		6:SR=1300000
035	met10 method	SAMPLE	287668-003	Soil	246424	04/07/17 21:56	1.0		6:SR=1500000
036	met10 method	SAMPLE	287668-004	Soil	246424	04/07/17 21:59	1.0		7:SR=1600000
037	met10 method	CCV				04/07/17 22:02	1.0	10	1:SR=4400000
038	met10 method	XCCB				04/07/17 22:05	1.0		1:SR=1100
039	met10 method	CCB				04/07/17 22:08	1.0		1:SR=1200
040	met10 method	SAMPLE	287668-005	Soil	246424	04/07/17 22:11	1.0		6:SR=1300000
041	met10 method	SAMPLE	287668-006	Soil	246424	04/07/17 22:14	1.0		5:SR=1000000
042	met10 method	SAMPLE	287759-001	Soil	246424	04/07/17 22:17	1.0		4:SR=8800000
043	met10 method	SAMPLE	287759-002	Soil	246424	04/07/17 22:20	1.0		4:SR=6200000
044	met10 method	X	RINSE			04/07/17 22:22	1.0		
045	met10 method	BLANK	QC880555	Soil	246422	04/07/17 22:26	1.0		1:SR=2200
046	met10 method	BS	QC880556	Soil	246422	04/07/17 22:29	1.0		1:SR=88000000
047	met10 method	BSD	QC880557	Soil	246422	04/07/17 22:31	1.0		1:SR=89000000
048	met10 method	MSS	287500-014	Soil	246422	04/07/17 22:34	1.0		5:SR=5300000
049	met10 method	MS	QC880558	Soil	246422	04/07/17 22:37	1.0		6:SR=92000000
050	met10 method	CCV				04/07/17 22:40	1.0	10	1:SR=4500000
051	met10 method	XCCB				04/07/17 22:43	1.0		1:SR=2200
052	met10 method	CCB				04/07/17 22:46	1.0		1:SR=1600

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	MSD	QC880559	Soil	246422	04/07/17 22:49	1.0		6:SR=89000000
054	met10 method	SAMPLE	287500-019	Soil	246422	04/07/17 22:52	1.0		5:SR=3400000
055	met10 method	SAMPLE	287500-020	Soil	246422	04/07/17 22:54	1.0		5:SR=3400000
056	met10 method	SAMPLE	287500-021	Soil	246422	04/07/17 22:57	1.0		5:SR=3500000
057	met10 method	SAMPLE	287500-022	Soil	246422	04/07/17 23:00	1.0		5:SR=3500000
058	met10 method	SAMPLE	287505-005	Soil	246422	04/07/17 23:02	1.0		3:SR=8400000
059	met10 method	SAMPLE	287505-010	Soil	246422	04/07/17 23:05	1.0		3:SR=10000000
060	met10 method	SAMPLE	287617-001	Soil	246422	04/07/17 23:07	1.0		4:SR=6500000
061	met10 method	SAMPLE	287750-001	Soil	246422	04/07/17 23:10	1.0		6:SR=5400000
062	met10 method	SAMPLE	287750-002	Soil	246422	04/07/17 23:13	1.0		6:SR=4200000
063	met10 method	CCV				04/07/17 23:15	1.0	10	1:SR=4400000
064	met10 method	XCCB				04/07/17 23:18	1.0		1:SR=1800
065	met10 method	CCB				04/07/17 23:21	1.0		1:SR=1100
066	met10 method	SAMPLE	287750-003	Soil	246422	04/07/17 23:24	1.0		3:SR=4100000
067	met10 method	SAMPLE	287750-004	Soil	246422	04/07/17 23:27	1.0		4:SR=3900000
068	met10 method	SAMPLE	287750-005	Soil	246422	04/07/17 23:30	1.0		5:SR=2600000
069	met10 method	SAMPLE	287750-006	Soil	246422	04/07/17 23:33	1.0		7:SR=2600000
070	met10 method	SAMPLE	287750-007	Soil	246422	04/07/17 23:36	1.0		5:SR=4400000
071	met10 method	SAMPLE	287750-008	Soil	246422	04/07/17 23:38	1.0		3:SR=1600000
072	met10 method	SAMPLE	287750-009	Soil	246422	04/07/17 23:41	1.0		6:SR=5800000
073	met10 method	SAMPLE	287750-010	Soil	246422	04/07/17 23:44	1.0		6:SR=5300000
074	met10 method	SAMPLE	287750-011	Soil	246422	04/07/17 23:47	1.0		6:SR=5400000
075	met10 method	SAMPLE	287750-012	Soil	246422	04/07/17 23:49	1.0		7:SR=3400000
076	met10 method	CCV				04/07/17 23:52	1.0	10	1:SR=4500000
077	met10 method	XCCB				04/07/17 23:55	1.0		1:SR=1400
078	met10 method	CCB				04/07/17 23:58	1.0		1:SR=1200
079	met10 method	X	RINSE			04/08/17 00:01	1.0		
080	met10 method	BLANK	QC880589	Soil	246432	04/08/17 00:04	1.0		
081	met10 method	BS	QC880590	Soil	246432	04/08/17 00:08	1.0		2:SR=91000000
082	met10 method	BSD	QC880591	Soil	246432	04/08/17 00:10	1.0		2:SR=89000000
083	met10 method	MSS	287760-006	Soil	246432	04/08/17 00:12	1.0		7:SR=19000000
084	met10 method	MS	QC880592	Soil	246432	04/08/17 00:15	1.0		1:SR=100000000
085	met10 method	MSD	QC880593	Soil	246432	04/08/17 00:18	1.0		1:SR=110000000
086	met10 method	SAMPLE	287326-003	Soil	246432	04/08/17 00:21	1.0		3:SR=3300000
087	met10 method	SAMPLE	287744-004	Soil	246432	04/08/17 00:24	1.0		5:SR=7400000
088	met10 method	SAMPLE	287760-007	Soil	246432	04/08/17 00:27	1.0		5:SR=14000000
089	met10 method	CCV				04/08/17 00:30	1.0	10	1:SR=4500000
090	met10 method	XCCB				04/08/17 00:32	1.0		
091	met10 method	CCB				04/08/17 00:35	1.0		1:SR=1600
092	met10 method	X	RINSE			04/08/17 00:39	1.0		
093	met10 method	BLANK	QC879918	Water	246267	04/08/17 00:42	1.0		1:SR=1900
094	met10 method	BS	QC879919	Water	246267	04/08/17 00:45	1.0		2:SR=920000
095	met10 method	BSD	QC879920	Water	246267	04/08/17 00:48	1.0		2:SR=920000
096	met10 method	MSS	287440-001	Water	246267	04/08/17 00:50	1.0		1:SR=1300000
097	met10 method	MS	QC879921	Water	246267	04/08/17 00:53	1.0		
098	met10 method	MSD	QC879922	Water	246267	04/08/17 00:56	1.0		
099	met10 method	SAMPLE	287516-001	Water	246267	04/08/17 00:58	1.0		2:SR=400000
100	met10 method	X	RINSE			04/08/17 01:00	1.0		
101	met10 method	BLANK	QC879456	Water	246155	04/08/17 01:04	1.0		
102	met10 method	CCV				04/08/17 01:07	1.0	10	1:SR=4400000
103	met10 method	XCCB				04/08/17 01:10	1.0		1:SR=1300
104	met10 method	CCB				04/08/17 01:13	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BS	QC879457	Water	246155	04/08/17 01:16	1.0		2:SR=910000
106	met10 method	BSD	QC879458	Water	246155	04/08/17 01:18	1.0		2:SR=920000
107	met10 method	MSS	287365-001	Water	246155	04/08/17 01:21	1.0		1:SR=530000
108	met10 method	MS	QC879459	Water	246155	04/08/17 01:23	1.0		
109	met10 method	MSD	QC879460	Water	246155	04/08/17 01:26	1.0		
110	met10 method	SAMPLE	287246-009	Water	246155	04/08/17 01:28	1.0		5:SR=42000000
111	met10 method	SAMPLE	287348-001	Water	246155	04/08/17 01:31	1.0		1:SR=980000
112	met10 method	SAMPLE	287348-002	Water	246155	04/08/17 01:33	1.0		1:SR=4000000
113	met10 method	SAMPLE	287365-002	Water	246155	04/08/17 01:36	1.0		1:SR=57000
114	met10 method	SAMPLE	287365-003	Water	246155	04/08/17 01:39	1.0		1:SR=140000
115	met10 method	CCV				04/08/17 01:42	1.0	10	1:SR=4500000
116	met10 method	XCCB				04/08/17 01:45	1.0		
117	met10 method	CCB				04/08/17 01:48	1.0		
118	met10 method	SAMPLE	287365-004	Water	246155	04/08/17 01:51	1.0		1:SR=150000
119	met10 method	SAMPLE	287365-005	Water	246155	04/08/17 01:54	1.0		1:SR=69000
120	met10 method	SAMPLE	287365-006	Water	246155	04/08/17 01:56	1.0		1:SR=110000
121	met10 method	SAMPLE	287365-007	Water	246155	04/08/17 01:59	1.0		1:SR=170000
122	met10 method	SAMPLE	287365-008	Water	246155	04/08/17 02:01	1.0		1:SR=130000
123	met10 method	SAMPLE	287365-009	Water	246155	04/08/17 02:03	1.0		1:SR=85000
124	met10 method	SAMPLE	287365-010	Water	246155	04/08/17 02:06	1.0		1:SR=150000
125	met10 method	SAMPLE	287365-011	Water	246155	04/08/17 02:08	1.0		1:SR=65000
126	met10 method	SAMPLE	287365-012	Water	246155	04/08/17 02:11	1.0		1:SR=110000
127	met10 method	SAMPLE	287365-013	Water	246155	04/08/17 02:13	1.0		1:SR=18000
128	met10 method	CCV				04/08/17 02:16	1.0	10	1:SR=4500000
129	met10 method	XCCB				04/08/17 02:19	1.0		1:SR=1100
130	met10 method	CCB				04/08/17 02:22	1.0		
131	met10 method	SAMPLE	287365-014	Water	246155	04/08/17 02:25	1.0		1:SR=14000
132	met10 method	SAMPLE	287365-015	Water	246155	04/08/17 02:29	1.0		1:SR=10000
133	met10 method	SAMPLE	287365-019	Water	246155	04/08/17 02:32	1.0		
134	met10 method	X	RINSE			04/08/17 02:35	1.0		
135	met10 method	MS	QC880060	Soil	246299	04/08/17 02:39	1.0		4:SR=90000000
136	met10 method	MSD	QC880061	Soil	246299	04/08/17 02:41	1.0		4:SR=93000000
137	met10 method	X	RINSE			04/08/17 02:44	1.0		
138	met10 method	BLANK	QC878606	Water	245945	04/08/17 02:48	1.0		
139	met10 method	BS	QC878607	Water	245945	04/08/17 02:51	1.0		2:SR=940000
140	met10 method	BSD	QC878608	Water	245945	04/08/17 02:53	1.0		2:SR=930000
141	met10 method	CCV				04/08/17 02:56	1.0	10	1:SR=4500000
142	met10 method	XCCB				04/08/17 02:58	1.0		1:SR=1600
143	met10 method	CCB				04/08/17 03:01	1.0		1:SR=1300
144	met10 method	SAMPLE	287283-001	Water	245945	04/08/17 03:05	1.0		5:SR=52000000
145	met10 method	SAMPLE	287283-002	Water	245945	04/08/17 03:07	1.0		5:SR=35000000
146	met10 method	SAMPLE	287283-004	Water	245945	04/08/17 03:11	1.0		7:SR=88000000
147	met10 method	SAMPLE	287283-005	Water	245945	04/08/17 03:13	1.0		5:SR=73000000
148	met10 method	SAMPLE	287343-001	Water	245945	04/08/17 03:16	1.0		5:SR=70000000
149	met10 method	SAMPLE	287343-002	Water	245945	04/08/17 03:19	1.0		2:SR=6700000
150	met10 method	X	RINSE			04/08/17 03:21	1.0		
151	met10 method	MS	QC880474	Soil	246401	04/08/17 03:24	1.0		6:SR=7300000
152	met10 method	MSD	QC880475	Soil	246401	04/08/17 03:27	1.0		6:SR=6600000
153	met10 method	X	RINSE			04/08/17 03:30	1.0		
154	met10 method	CCV				04/08/17 03:34	1.0	10	1:SR=4500000
155	met10 method	XCCB				04/08/17 03:36	1.0		
156	met10 method	CCB				04/08/17 03:39	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087140884

Instrument : MET10 Begun : 04/07/17 20:04
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SER	QC880476	Soil	246272	04/08/17 03:43	500.0		
158	met10 method	PDS	QC880477	Soil	246272	04/08/17 03:46	100.0	11 12 13	2:SR=1100000
159	met10 method	X	RINSE			04/08/17 03:48	1.0		
160	met10 method	BLANK	QC879237	SPLP Leachate	246105	04/08/17 03:51	1.0		1:SR=9800
161	met10 method	BS	QC879238	SPLP Leachate	246105	04/08/17 03:55	1.0		2:SR=930000
162	met10 method	BSD	QC879239	SPLP Leachate	246105	04/08/17 03:57	1.0		2:SR=910000
163	met10 method	MSS	287077-021	SPLP Leachate	246105	04/08/17 04:00	1.0		1:SR=13000
164	met10 method	MS	QC879240	SPLP Leachate	246105	04/08/17 04:02	1.0		
165	met10 method	MSD	QC879241	SPLP Leachate	246105	04/08/17 04:04	1.0		
166	met10 method	SER	QC879242	SPLP Leachate	246105	04/08/17 04:07	5.0		
167	met10 method	CCV				04/08/17 04:10	1.0	10	1:SR=4400000
168	met10 method	XCCB				04/08/17 04:13	1.0		1:SR=1300
169	met10 method	CCB				04/08/17 04:16	1.0		
170	met10 method	PDS	QC879243	SPLP Leachate	246105	04/08/17 04:19	1.0	11 12 13	2:SR=1000000
171	met10 method	SAMPLE	287077-022	SPLP Leachate	246105	04/08/17 04:21	1.0		1:SR=79000
172	met10 method	SAMPLE	287077-023	SPLP Leachate	246105	04/08/17 04:24	1.0		1:SR=43000
173	met10 method	SAMPLE	287077-024	SPLP Leachate	246105	04/08/17 04:26	1.0		1:SR=95000
174	met10 method	SAMPLE	287077-025	SPLP Leachate	246105	04/08/17 04:29	1.0		1:SR=49000
175	met10 method	SAMPLE	287077-026	SPLP Leachate	246105	04/08/17 04:31	1.0		1:SR=45000
176	met10 method	SAMPLE	287077-027	SPLP Leachate	246105	04/08/17 04:33	1.0		1:SR=91000
177	met10 method	SAMPLE	287077-028	SPLP Leachate	246105	04/08/17 04:36	1.0		1:SR=77000
178	met10 method	SAMPLE	287077-029	SPLP Leachate	246105	04/08/17 04:38	1.0		1:SR=110000
179	met10 method	SAMPLE	287077-030	SPLP Leachate	246105	04/08/17 04:41	1.0		1:SR=35000
180	met10 method	CCV				04/08/17 04:43	1.0	10	1:SR=4500000
181	met10 method	XCCB				04/08/17 04:46	1.0		
182	met10 method	CCB				04/08/17 04:49	1.0		1:SR=4200
183	met10 method	SAMPLE	287077-031	SPLP Leachate	246105	04/08/17 04:52	1.0		1:SR=190000
184	met10 method	SAMPLE	287077-032	SPLP Leachate	246105	04/08/17 04:55	1.0		1:SR=170000
185	met10 method	SAMPLE	287077-033	SPLP Leachate	246105	04/08/17 04:57	1.0		1:SR=44000
186	met10 method	SAMPLE	287077-034	SPLP Leachate	246105	04/08/17 05:00	1.0		1:SR=87000
187	met10 method	SAMPLE	287077-035	SPLP Leachate	246105	04/08/17 05:02	1.0		1:SR=29000
188	met10 method	SAMPLE	287077-036	SPLP Leachate	246105	04/08/17 05:05	1.0		1:SR=14000
189	met10 method	SAMPLE	287077-037	SPLP Leachate	246105	04/08/17 05:07	1.0		1:SR=22000
190	met10 method	SAMPLE	287077-038	SPLP Leachate	246105	04/08/17 05:09	1.0		1:SR=11000
191	met10 method	SAMPLE	287077-039	SPLP Leachate	246105	04/08/17 05:12	1.0		1:SR=13000
192	met10 method	SAMPLE	287077-040	SPLP Leachate	246105	04/08/17 05:14	1.0		1:SR=9600
193	met10 method	CCV				04/08/17 05:16	1.0	10	1:SR=4500000
194	met10 method	CCB				04/08/17 05:19	1.0		

MNA 04/07/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 76.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140884

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 20:07

#	Type	Sample ID	Y A	Y R	
		ICAL STD	8585389	1044978	
		LOWER LIMIT	2575617	313493	
		UPPER LIMIT	10302467	1253973	
011	ICB		8658756	1034440	
012	ICSA		7081496	909784	
013	ICSAB		7125714	912794	
037	CCV		8379998	1030830	
039	CCB		8929805	1056878	
045	BLANK	QC880555	8780812	1058705	
046	BS	QC880556	8496249	1032113	
047	BSD	QC880557	8405425	1037762	
048	MSS	287500-014	7801307	981755	
049	MS	QC880558	7532029	974277	
050	CCV		8379884	1025954	
052	CCB		8755874	1038796	
053	MSD	QC880559	7610359	972954	
054	SAMPLE	287500-019	7944572	975026	
055	SAMPLE	287500-020	7915547	986242	
056	SAMPLE	287500-021	7935244	989477	
057	SAMPLE	287500-022	7782745	976886	
063	CCV		8419254	1024746	
065	CCB		8801304	1059343	
128	CCV		8313724	1009722	
130	CCB		8731788	401617	
141	CCV		8353738	1022211	
143	CCB		8761046	1622921	*
144	SAMPLE	287283-001	5196539	788638	
145	SAMPLE	287283-002	5598212	834155	
146	SAMPLE	287283-004	4040833	664697	
147	SAMPLE	287283-005	4570687	715572	
148	SAMPLE	287343-001	4605626	722838	
149	SAMPLE	287343-002	7249390	944783	
151	MS	QC880474	7689123	978065	
152	MSD	QC880475	7835101	984722	
154	CCV		8368437	1018668	
156	CCB		8939150	1445516	*
163	MSS	287077-021	8651424	1045379	
167	CCV		8364659	1026001	
169	CCB		8994076	1553047	*
171	SAMPLE	287077-022	8380660	1036402	
172	SAMPLE	287077-023	8756324	1044858	
173	SAMPLE	287077-024	8618097	1052012	
174	SAMPLE	287077-025	8678066	1051976	
175	SAMPLE	287077-026	8669898	1064566	
176	SAMPLE	287077-027	8623326	1054968	
177	SAMPLE	287077-028	8374184	1054631	
178	SAMPLE	287077-029	8595597	1046987	
179	SAMPLE	287077-030	8775924	1051601	
180	CCV		8345615	1011194	
182	CCB		8935946	1530960	*
183	SAMPLE	287077-031	8516942	1044063	

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087140884

Date : 04/07/17 Reference : met10 method
Sequence : MET10 04/07/17 Analyzed : 04/07/17 20:07

#	Type	Sample ID	Y A	Y R
184	SAMPLE	287077-032	8305645	1049910
185	SAMPLE	287077-033	8450227	1054863
186	SAMPLE	287077-034	8342485	1054267
187	SAMPLE	287077-035	8707479	1054052
188	SAMPLE	287077-036	8609514	1069285
189	SAMPLE	287077-037	8762748	1057267
190	SAMPLE	287077-038	8598675	1067035
191	SAMPLE	287077-039	8550280	1056471
192	SAMPLE	287077-040	8623642	1053081
193	CCV		8356783	1023808
194	CCB		8908204	1050923

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087140884001
Units : ug/L

Date : 07-APR-2017 20:04
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087140884002	L1	07-APR-2017 20:07	S32578
L2	met10 method	1087140884003	L2	07-APR-2017 20:10	S32571
L3	met10 method	1087140884004	L3	07-APR-2017 20:12	S32367
L4	met10 method	1087140884005	L4	07-APR-2017 20:15	S32368
L5	met10 method	1087140884006	L5	07-APR-2017 20:17	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	2.8400	2.5480	2.5675	2.4055		LOR0	0.00000	0.41544		2.5902	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	18	100.00	6	1000.0	7	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087140884001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087140884001 Cal Date : 07-APR-2017

ICV 1087140884008 (07-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	5017	ug/L	0	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884010.1 File : met10 method Time : 07-APR-2017 20:28
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.602	ug/L	-8	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8586854	0.02
Yttrium	R	1044978	1039744	-0.50

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884011.1 File : met10 method Time : 07-APR-2017 20:32
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8658756	0.85
Yttrium	R	1044978	1034440	-1.01

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884012.1 File : met10 method Time : 07-APR-2017 20:36
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-1.501]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18290	ug/L	91	
Copper	A	20000	22890	ug/L	114	
Manganese	A	20000	18890	ug/L	94	
Nickel	A	20000	17360	ug/L	87	
Titanium	A	20000	19320	ug/L	97	
Vanadium	A	20000	22140	ug/L	111	
Aluminum	R	500000	576000	ug/L	115	
Calcium	R	500000	533000	ug/L	107	
Iron	R	200000	211000	ug/L	106	
Magnesium	R	500000	472900	ug/L	95	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	7081496	-17.52
Yttrium	R	1044978	909784	-12.94

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884013.1 File : met10 method Time : 07-APR-2017 20:38
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	1002	ug/L	0	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	7125714	-17.00
Yttrium	R	1044978	912794	-12.65

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884037.3 File : met10 method Time : 07-APR-2017 22:02
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4652	5000	5121	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8379998	-2.39
Yttrium	R	1044978	1030830	-1.35

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884039.3 File : met10 method Time : 07-APR-2017 22:08
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8929805	4.01
Yttrium	R	1044978	1056878	1.14

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884050.3 File : met10 method Time : 07-APR-2017 22:40
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4424	5000	5073	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8379884	-2.39
Yttrium	R	1044978	1025954	-1.82

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884052.3 File : met10 method Time : 07-APR-2017 22:46
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8755874	1.99
Yttrium	R	1044978	1038796	-0.59

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884063.3 File : met10 method Time : 07-APR-2017 23:15
Cal : 1087140884001 Caldate : 07-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.5902	2.4365	5000	5061	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8419254	-1.94
Yttrium	R	1044978	1024746	-1.94

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087140884065.1 File : met10 method Time : 07-APR-2017 23:21
Cal : 1087140884001 Caldate : 07-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	8585389	8801304	2.51
Yttrium	R	1044978	1059343	1.37

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/10/17 10:43	1.0		
002	met10 method	ICAL	L1			04/10/17 10:46	1.0	1	
003	met10 method	ICAL	L2			04/10/17 10:50	1.0	2	
004	met10 method	ICAL	L3			04/10/17 10:52	1.0	3	
005	met10 method	ICAL	L4			04/10/17 10:54	1.0	4	
006	met10 method	ICAL	L5			04/10/17 10:57	1.0	5	
007	met10 method	ICV				04/10/17 10:59	1.0	6	1:SR=4200000
008	met10 method	XCRI				04/10/17 11:02	1.0	7	
009	met10 method	CRI				04/10/17 11:06	1.0	7	1:SR=43000
010	met10 method	ICB				04/10/17 11:10	1.0		1:SR=1500
011	met10 method	ICSA				04/10/17 11:13	1.0	8	11:CA=550000
012	met10 method	XICSAB				04/10/17 11:29	1.0	9	6:SR=4500000
013	met10 method	XICSAB				04/10/17 11:37	1.0	9	6:SR=4500000
014	met10 method	ICSAB				04/10/17 11:41	1.0	9	6:SR=4100000
015	met10 method	CCV				04/10/17 11:44	1.0	10	1:SR=3000000
016	met10 method	CCB				04/10/17 11:47	1.0		1:SR=2900
017	met10 method	CCB				04/10/17 11:50	1.0		
018	met10 method	CCV				04/10/17 11:57	1.0	10	1:SR=4000000
019	met10 method	CCB				04/10/17 12:00	1.0		1:SR=2500
020	met10 method	CCB				04/10/17 12:03	1.0		1:SR=1700
021	met10 method	CCB				04/10/17 12:05	1.0		1:SR=1400
022	met10 method	X	RINSE			04/10/17 12:13	1.0		
023	met10 method	BLANK	QC880555	Soil	246422	04/10/17 12:16	1.0		1:SR=2200
024	met10 method	BS	QC880556	Soil	246422	04/10/17 12:20	1.0		1:SR=81000000
025	met10 method	BSD	QC880557	Soil	246422	04/10/17 12:22	1.0		1:SR=80000000
026	met10 method	MSS	287500-014	Soil	246422	04/10/17 12:25	1.0		5:SR=4900000
027	met10 method	MS	QC880558	Soil	246422	04/10/17 12:27	1.0		6:SR=83000000
028	met10 method	MSD	QC880559	Soil	246422	04/10/17 12:30	1.0		6:SR=84000000
029	met10 method	SAMPLE	287505-005	Soil	246422	04/10/17 12:33	1.0		3:SR=7800000
030	met10 method	SAMPLE	287505-010	Soil	246422	04/10/17 12:36	1.0		3:SR=9200000
031	met10 method	SAMPLE	287750-001	Soil	246422	04/10/17 12:38	1.0		6:SR=4800000
032	met10 method	CCV				04/10/17 12:41	1.0	10	1:SR=3900000
033	met10 method	XCCB				04/10/17 12:43	1.0		1:SR=3900
034	met10 method	CCB				04/10/17 12:46	1.0		1:SR=2400
035	met10 method	SAMPLE	287750-002	Soil	246422	04/10/17 12:49	1.0		6:SR=3800000
036	met10 method	SAMPLE	287750-003	Soil	246422	04/10/17 12:52	1.0		3:SR=3700000
037	met10 method	SAMPLE	287750-004	Soil	246422	04/10/17 12:55	1.0		4:SR=3600000
038	met10 method	SAMPLE	287750-005	Soil	246422	04/10/17 12:57	1.0		4:SR=2500000
039	met10 method	SAMPLE	287750-006	Soil	246422	04/10/17 13:00	1.0		7:SR=2400000
040	met10 method	SAMPLE	287750-007	Soil	246422	04/10/17 13:02	1.0		4:SR=4100000
041	met10 method	SAMPLE	287750-008	Soil	246422	04/10/17 13:05	1.0		3:SR=1500000
042	met10 method	SAMPLE	287750-009	Soil	246422	04/10/17 13:08	1.0		5:SR=5400000
043	met10 method	SAMPLE	287750-010	Soil	246422	04/10/17 13:10	1.0		6:SR=4800000
044	met10 method	SAMPLE	287750-011	Soil	246422	04/10/17 13:13	1.0		6:SR=4800000
045	met10 method	CCV				04/10/17 13:16	1.0	10	1:SR=4100000
046	met10 method	XCCB				04/10/17 13:18	1.0		1:SR=2500
047	met10 method	CCB				04/10/17 13:21	1.0		1:SR=1900
048	met10 method	SAMPLE	287750-012	Soil	246422	04/10/17 13:24	1.0		6:SR=3200000
049	met10 method	SER	QC880744	Soil	246422	04/10/17 13:27	5.0		3:SR=970000
050	met10 method	PDS	QC880745	Soil	246422	04/10/17 13:29	1.0	11 12 13	6:SR=5500000
051	met10 method	X	RINSE			04/10/17 13:32	1.0		
052	met10 method	BLANK	QC880681	WET Leachate	246460	04/10/17 13:35	10.0		2:NA=170000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	BS	QC880682	WET Leachate	246460	04/10/17 13:39	1.0		1:SR=840000
054	met10 method	BSD	QC880683	WET Leachate	246460	04/10/17 13:41	1.0		1:SR=830000
055	met10 method	MSS	287505-005	WET Leachate	246460	04/10/17 13:44	10.0		2:SR=1100000
056	met10 method	MS	QC880684	WET Leachate	246460	04/10/17 13:46	10.0		
057	met10 method	MSD	QC880685	WET Leachate	246460	04/10/17 13:49	10.0		
058	met10 method	CCV				04/10/17 13:51	1.0	10	1:SR=4100000
059	met10 method	XCCB				04/10/17 13:54	1.0		1:SR=3000
060	met10 method	CCB				04/10/17 13:56	1.0		1:SR=1900
061	met10 method	SER	QC880686	WET Leachate	246460	04/10/17 14:00	50.0		
062	met10 method	PDS	QC880687	WET Leachate	246460	04/10/17 14:03	10.0	11 12 13	3:SR=2100000
063	met10 method	SAMPLE	287505-010	WET Leachate	246460	04/10/17 14:06	10.0		2:SR=1300000
064	met10 method	SAMPLE	287617-001	WET Leachate	246460	04/10/17 14:08	10.0		2:SR=450000
065	met10 method	SAMPLE	287625-001	WET Leachate	246460	04/10/17 14:11	10.0		2:SR=410000
066	met10 method	SAMPLE	287627-001	WET Leachate	246460	04/10/17 14:13	10.0		2:SR=380000
067	met10 method	SAMPLE	287627-002	WET Leachate	246460	04/10/17 14:16	10.0		2:SR=370000
068	met10 method	SAMPLE	287627-003	WET Leachate	246460	04/10/17 14:18	10.0		2:SR=430000
069	met10 method	SAMPLE	287627-004	WET Leachate	246460	04/10/17 14:20	10.0		2:SR=450000
070	met10 method	SAMPLE	287627-005	WET Leachate	246460	04/10/17 14:23	10.0		2:SR=420000
071	met10 method	CCV				04/10/17 14:25	1.0	10	1:SR=4100000
072	met10 method	XCCB				04/10/17 14:28	1.0		1:SR=1600
073	met10 method	CCB				04/10/17 14:31	1.0		
074	met10 method	SAMPLE	287627-006	WET Leachate	246460	04/10/17 14:34	10.0		2:SR=360000
075	met10 method	SAMPLE	287627-007	WET Leachate	246460	04/10/17 14:37	10.0		2:SR=460000
076	met10 method	SAMPLE	287627-008	WET Leachate	246460	04/10/17 14:39	10.0		2:SR=410000
077	met10 method	SAMPLE	287627-009	WET Leachate	246460	04/10/17 14:42	10.0		2:SR=430000
078	met10 method	SAMPLE	287627-010	WET Leachate	246460	04/10/17 14:44	10.0		2:SR=430000
079	met10 method	SAMPLE	287627-011	WET Leachate	246460	04/10/17 14:47	10.0		2:SR=440000
080	met10 method	SAMPLE	287627-012	WET Leachate	246460	04/10/17 14:49	10.0		2:SR=360000
081	met10 method	SAMPLE	287627-013	WET Leachate	246460	04/10/17 14:52	10.0		2:SR=390000
082	met10 method	SAMPLE	287627-014	WET Leachate	246460	04/10/17 14:54	10.0		2:SR=420000
083	met10 method	SAMPLE	287627-015	WET Leachate	246460	04/10/17 14:56	10.0		2:SR=440000
084	met10 method	CCV				04/10/17 14:59	1.0	10	1:SR=4100000
085	met10 method	XCCB				04/10/17 15:02	1.0		1:SR=1500
086	met10 method	CCB				04/10/17 15:04	1.0		1:SR=1700
087	met10 method	SAMPLE	287627-016	WET Leachate	246460	04/10/17 15:08	10.0		2:SR=450000
088	met10 method	X	RINSE			04/10/17 15:10	1.0		
089	met10 method	BLANK	QC880563	Soil	246424	04/10/17 15:14	1.0		1:SR=2300
090	met10 method	BS	QC880564	Soil	246424	04/10/17 15:17	1.0		1:SR=82000000
091	met10 method	BSD	QC880565	Soil	246424	04/10/17 15:19	1.0		1:SR=81000000
092	met10 method	MSS	287640-001	Soil	246424	04/10/17 15:22	1.0		2:SR=1600000
093	met10 method	MS	QC880566	Soil	246424	04/10/17 15:24	1.0		1:SR=84000000
094	met10 method	MSD	QC880567	Soil	246424	04/10/17 15:27	1.0		1:SR=82000000
095	met10 method	SER	QC880719	Soil	246424	04/10/17 15:29	5.0		
096	met10 method	PDS	QC880720	Soil	246424	04/10/17 15:32	1.0	11 12 13	4:SR=2600000
097	met10 method	CCV				04/10/17 15:34	1.0	10	1:SR=4100000
098	met10 method	XCCB				04/10/17 15:37	1.0		
099	met10 method	CCB				04/10/17 15:40	1.0		1:SR=1800
100	met10 method	SAMPLE	287759-001	Soil	246424	04/10/17 15:43	1.0		4:SR=8300000
101	met10 method	SAMPLE	287759-002	Soil	246424	04/10/17 15:46	1.0		4:SR=5800000
102	met10 method	X	RINSE			04/10/17 15:48	1.0		
103	met10 method	BLANK	QC880641	Soil	246450	04/10/17 15:51	1.0		1:SR=1800
104	met10 method	BS	QC880642	Soil	246450	04/10/17 15:55	1.0		1:SR=82000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BSD	QC880643	Soil	246450	04/10/17 15:57	1.0		1:SR=84000000
106	met10 method	MSS	287739-001	Soil	246450	04/10/17 16:00	1.0		6:SR=9300000
107	met10 method	MS	QC880644	Soil	246450	04/10/17 16:02	1.0		1:SR=86000000
108	met10 method	MSD	QC880645	Soil	246450	04/10/17 16:05	1.0		1:SR=87000000
109	met10 method	SER	QC880646	Soil	246450	04/10/17 16:07	5.0		
110	met10 method	CCV				04/10/17 16:10	1.0	10	1:SR=4100000
111	met10 method	XCCB				04/10/17 16:13	1.0		
112	met10 method	CCB				04/10/17 16:15	1.0		1:SR=1300
113	met10 method	PDS	QC880647	Soil	246450	04/10/17 16:19	1.0	11 12 13	7:SR=9500000
114	met10 method	SAMPLE	287805-001	Soil	246450	04/10/17 16:21	1.0		4:SR=2100000
115	met10 method	SAMPLE	287805-002	Soil	246450	04/10/17 16:24	1.0		4:SR=1900000
116	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 16:26	1.0		6:SR=1900000
117	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 16:29	1.0		4:SR=2500000
118	met10 method	SAMPLE	287805-005	Soil	246450	04/10/17 16:32	1.0		4:SR=3000000
119	met10 method	SAMPLE	287805-006	Soil	246450	04/10/17 16:34	1.0		3:SR=3100000
120	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 16:37	1.0		5:SR=2100000
121	met10 method	X	RINSE			04/10/17 16:39	1.0		
122	met10 method	BLANK	QC880688	WET Leachate	246461	04/10/17 16:43	10.0		2:NA=170000
123	met10 method	CCV				04/10/17 16:46	1.0	10	1:SR=4100000
124	met10 method	XCCB				04/10/17 16:50	1.0		1:SR=1600
125	met10 method	CCB				04/10/17 16:53	1.0		1:SR=1600
126	met10 method	X	RINSE			04/10/17 17:00	1.0		
127	met10 method	SAMPLE	287805-003	Soil	246450	04/10/17 17:03	100.0		1:SR=18000
128	met10 method	SAMPLE	287805-007	Soil	246450	04/10/17 17:05	100.0		1:SR=22000
129	met10 method	SAMPLE	287805-004	Soil	246450	04/10/17 17:08	1.0		4:SR=2600000
130	met10 method	BS	QC880689	WET Leachate	246461	04/10/17 17:11	1.0		1:SR=840000
131	met10 method	BSD	QC880690	WET Leachate	246461	04/10/17 17:13	1.0		1:SR=860000
132	met10 method	MSS	287762-001	WET Leachate	246461	04/10/17 17:15	10.0		2:SR=300000
133	met10 method	MS	QC880691	WET Leachate	246461	04/10/17 17:18	10.0		
134	met10 method	MSD	QC880692	WET Leachate	246461	04/10/17 17:21	10.0		
135	met10 method	PDS	QC880745	Soil	246422	04/10/17 17:23	1.0	11 12 13	6:SR=5700000
136	met10 method	CCV				04/10/17 17:26	1.0	10	1:SR=4200000
137	met10 method	CCB				04/10/17 17:29	1.0		1:SR=2800
138	met10 method	CCB				04/10/17 17:31	1.0		
139	met10 method	BLANK	QC878606	Water	245945	04/10/17 17:35	1.0		
140	met10 method	BS	QC878607	Water	245945	04/10/17 17:38	1.0		1:SR=900000
141	met10 method	BSD	QC878608	Water	245945	04/10/17 17:40	1.0		1:SR=900000
142	met10 method	SAMPLE	287283-001	Water	245945	04/10/17 17:43	1.0		5:SR=49000000
143	met10 method	SAMPLE	287283-002	Water	245945	04/10/17 17:45	1.0		5:SR=32000000
144	met10 method	SAMPLE	287283-004	Water	245945	04/10/17 17:49	1.0		7:SR=79000000
145	met10 method	SAMPLE	287283-005	Water	245945	04/10/17 17:51	1.0		5:SR=66000000
146	met10 method	SAMPLE	287343-001	Water	245945	04/10/17 17:54	1.0		5:SR=63000000
147	met10 method	SAMPLE	287343-002	Water	245945	04/10/17 17:56	1.0		2:SR=6100000
148	met10 method	SAMPLE	287077-035	SPLP Leachate	246105	04/10/17 17:59	1.0		1:SR=31000
149	met10 method	CCV				04/10/17 18:01	1.0	10	1:SR=4100000
150	met10 method	XCCB				04/10/17 18:04	1.0		1:SR=2900
151	met10 method	CCB				04/10/17 18:07	1.0		1:SR=3800
152	met10 method	X	RINSE			04/10/17 18:10	1.0		
153	met10 method	BLANK	QC879918	Water	246267	04/10/17 18:13	1.0		1:SR=3800
154	met10 method	BS	QC879919	Water	246267	04/10/17 18:17	1.0		1:SR=870000
155	met10 method	BSD	QC879920	Water	246267	04/10/17 18:19	1.0		1:SR=870000
156	met10 method	MSS	287440-001	Water	246267	04/10/17 18:21	1.0		1:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	MS	QC879921	Water	246267	04/10/17 18:25	1.0		
158	met10 method	MSD	QC879922	Water	246267	04/10/17 18:27	1.0		
159	met10 method	MSS	287440-001	Water	246267	04/10/17 18:29	1.0		2:SR=370000
160	met10 method	BS	QC879457	Water	246155	04/10/17 18:32	1.0		1:SR=850000
161	met10 method	BSD	QC879458	Water	246155	04/10/17 18:34	1.0		1:SR=840000
162	met10 method	CCV				04/10/17 18:37	1.0	10	1:SR=4100000
163	met10 method	XCCB				04/10/17 18:39	1.0		1:SR=3400
164	met10 method	CCB				04/10/17 18:42	1.0		1:SR=4000
165	met10 method	MSS	287365-001	Water	246155	04/10/17 18:45	1.0		1:SR=510000
166	met10 method	MS	QC879459	Water	246155	04/10/17 18:48	1.0		
167	met10 method	MSD	QC879460	Water	246155	04/10/17 18:50	1.0		
168	met10 method	SAMPLE	287348-001	Water	246155	04/10/17 18:53	1.0		1:SR=900000
169	met10 method	SAMPLE	287365-002	Water	246155	04/10/17 18:55	1.0		1:SR=55000
170	met10 method	SAMPLE	287365-003	Water	246155	04/10/17 18:58	1.0		1:SR=130000
171	met10 method	SAMPLE	287365-005	Water	246155	04/10/17 19:02	1.0		1:SR=68000
172	met10 method	SAMPLE	287365-006	Water	246155	04/10/17 19:04	1.0		1:SR=100000
173	met10 method	SAMPLE	287365-007	Water	246155	04/10/17 19:07	1.0		1:SR=160000
174	met10 method	SAMPLE	287365-008	Water	246155	04/10/17 19:09	1.0		1:SR=120000
175	met10 method	CCV				04/10/17 19:11	1.0	10	1:SR=4100000
176	met10 method	CCB				04/10/17 19:14	1.0		1:SR=3700
177	met10 method	CCB				04/10/17 19:17	1.0		
178	met10 method	SAMPLE	287365-009	Water	246155	04/10/17 19:21	1.0		1:SR=82000
179	met10 method	SAMPLE	287365-010	Water	246155	04/10/17 19:24	1.0		1:SR=140000
180	met10 method	SAMPLE	287365-011	Water	246155	04/10/17 19:26	1.0		1:SR=62000
181	met10 method	SAMPLE	287365-012	Water	246155	04/10/17 19:28	1.0		1:SR=110000
182	met10 method	MSS	287252-028	Soil	246272	04/10/17 19:31	1.0		6:SR=4400000
183	met10 method	SAMPLE	287252-029	Soil	246272	04/10/17 19:34	1.0		6:SR=5500000
184	met10 method	SAMPLE	287675-003	Soil	246450	04/10/17 19:36	1.0		4:SR=2900000
185	met10 method	SAMPLE	287675-004	Soil	246450	04/10/17 19:39	1.0		3:SR=3500000
186	met10 method	SAMPLE	287676-001	Soil	246450	04/10/17 19:42	1.0		3:SR=2200000
187	met10 method	SAMPLE	287713-001	Soil	246450	04/10/17 19:44	1.0		5:SR=5500000
188	met10 method	CCV				04/10/17 19:47	1.0	10	1:SR=4100000
189	met10 method	CCB				04/10/17 19:50	1.0		1:SR=3600
190	met10 method	CCB				04/10/17 19:52	1.0		1:SR=3100
191	met10 method	SAMPLE	287739-002	Soil	246450	04/10/17 19:56	1.0		7:SR=9600000
192	met10 method	SAMPLE	287753-001	Soil	246450	04/10/17 19:58	1.0		4:SR=9700000
193	met10 method	SAMPLE	287761-005	Soil	246450	04/10/17 20:01	1.0		5:SR=7500000
194	met10 method	SAMPLE	287761-010	Soil	246450	04/10/17 20:04	1.0		4:SR=3200000
195	met10 method	SAMPLE	287761-015	Soil	246450	04/10/17 20:07	1.0		5:SR=6200000
196	met10 method	SAMPLE	287515-001	WET Leachate	246461	04/10/17 20:09	10.0		2:NA=180000
197	met10 method	SAMPLE	287515-002	WET Leachate	246461	04/10/17 20:12	10.0		2:NA=170000
198	met10 method	SAMPLE	287634-001	WET Leachate	246461	04/10/17 20:15	10.0		2:SR=3000000
199	met10 method	SAMPLE	287634-002	WET Leachate	246461	04/10/17 20:17	10.0		2:SR=750000
200	met10 method	SAMPLE	287634-003	WET Leachate	246461	04/10/17 20:20	10.0		2:SR=950000
201	met10 method	CCV				04/10/17 20:22	1.0	10	1:SR=4100000
202	met10 method	CCB				04/10/17 20:25	1.0		1:SR=3200
203	met10 method	CCB				04/10/17 20:30	1.0		1:SR=3500
204	met10 method	SAMPLE	287634-004	WET Leachate	246461	04/10/17 20:33	10.0		2:SR=390000
205	met10 method	SAMPLE	287634-005	WET Leachate	246461	04/10/17 20:36	10.0		2:SR=730000
206	met10 method	SAMPLE	287634-006	WET Leachate	246461	04/10/17 20:38	10.0		2:SR=400000
207	met10 method	SAMPLE	287634-007	WET Leachate	246461	04/10/17 20:41	10.0		2:SR=630000
208	met10 method	SAMPLE	287634-008	WET Leachate	246461	04/10/17 20:43	10.0		2:SR=1200000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	SAMPLE	287634-009	WET Leachate	246461	04/10/17 20:46	10.0		2:SR=2100000
210	met10 method	SAMPLE	287634-010	WET Leachate	246461	04/10/17 20:48	10.0		2:SR=600000
211	met10 method	SAMPLE	287634-011	WET Leachate	246461	04/10/17 20:51	10.0		2:SR=1100000
212	met10 method	SAMPLE	287634-012	WET Leachate	246461	04/10/17 20:53	10.0		2:SR=560000
213	met10 method	SAMPLE	287634-013	WET Leachate	246461	04/10/17 20:56	10.0		2:SR=1100000
214	met10 method	CCV				04/10/17 20:58	1.0	10	1:SR=4100000
215	met10 method	CCB				04/10/17 21:01	1.0		1:SR=3900
216	met10 method	CCB				04/10/17 21:04	1.0		1:SR=3000
217	met10 method	SAMPLE	287753-001	WET Leachate	246461	04/10/17 21:07	10.0		2:SR=690000
218	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:10	100.0		1:SR=120000
219	met10 method	SAMPLE	287640-002	Soil	246424	04/10/17 21:12	1.0		7:SR=12000000
220	met10 method	X	RINSE			04/10/17 21:15	1.0		
221	met10 method	SAMPLE	287640-003	Soil	246424	04/10/17 21:18	1.0		5:SR=4200000
222	met10 method	SAMPLE	287640-004	Soil	246424	04/10/17 21:21	1.0		5:SR=4100000
223	met10 method	SAMPLE	287640-005	Soil	246424	04/10/17 21:24	1.0		5:SR=4200000
224	met10 method	SAMPLE	287640-006	Soil	246424	04/10/17 21:27	1.0		5:SR=4000000
225	met10 method	CCV				04/10/17 21:29	1.0	10	1:SR=4000000
226	met10 method	CCB				04/10/17 21:32	1.0		1:SR=3600
227	met10 method	CCB				04/10/17 21:35	1.0		1:SR=3600
228	met10 method	X	RINSE			04/10/17 21:40	1.0		
229	met10 method	BLANK	QC880768	Soil	246479	04/10/17 21:44	1.0		1:SR=3600
230	met10 method	BS	QC880769	Soil	246479	04/10/17 21:47	1.0		1:SR=81000000
231	met10 method	BSD	QC880770	Soil	246479	04/10/17 21:50	1.0		1:SR=80000000
232	met10 method	MSS	287740-001	Soil	246479	04/10/17 21:52	1.0		6:SR=7400000
233	met10 method	MS	QC880771	Soil	246479	04/10/17 21:55	1.0		1:SR=83000000
234	met10 method	MSD	QC880772	Soil	246479	04/10/17 21:57	1.0		1:SR=89000000
235	met10 method	SAMPLE	287525-001	Miscell.	246479	04/10/17 22:00	1.0		1:SR=180000
236	met10 method	SAMPLE	287526-001	Miscell.	246479	04/10/17 22:02	1.0		2:SR=1800000
237	met10 method	SAMPLE	287683-005	Soil	246479	04/10/17 22:06	1.0		3:SR=2900000
238	met10 method	CCV				04/10/17 22:08	1.0	10	1:SR=4000000
239	met10 method	CCB				04/10/17 22:11	1.0		1:SR=4000
240	met10 method	CCB				04/10/17 22:14	1.0		1:SR=3400
241	met10 method	SAMPLE	287756-001	Soil	246479	04/10/17 22:17	1.0		4:SR=1400000
242	met10 method	SAMPLE	287756-002	Soil	246479	04/10/17 22:20	1.0		6:SR=2900000
243	met10 method	SAMPLE	287756-003	Soil	246479	04/10/17 22:22	1.0		4:SR=1700000
244	met10 method	SAMPLE	287756-004	Soil	246479	04/10/17 22:25	1.0		4:SR=1200000
245	met10 method	SAMPLE	287756-005	Soil	246479	04/10/17 22:28	1.0		6:SR=3200000
246	met10 method	SAMPLE	287756-006	Soil	246479	04/10/17 22:30	1.0		5:SR=2300000
247	met10 method	SAMPLE	287756-007	Soil	246479	04/10/17 22:33	1.0		6:SR=3500000
248	met10 method	SAMPLE	287756-008	Soil	246479	04/10/17 22:36	1.0		5:SR=6600000
249	met10 method	SAMPLE	287795-001	Soil	246479	04/10/17 22:38	1.0		4:SR=2900000
250	met10 method	SAMPLE	287795-002	Soil	246479	04/10/17 22:41	1.0		4:SR=3100000
251	met10 method	CCV				04/10/17 22:43	1.0	10	1:SR=4000000
252	met10 method	CCB				04/10/17 22:46	1.0		1:SR=3800
253	met10 method	CCB				04/10/17 22:49	1.0		1:SR=4000
254	met10 method	X	RINSE			04/10/17 22:52	1.0		
255	met10 method	BLANK	QC880498	Water	246408	04/10/17 22:56	1.0		1:SR=3800
256	met10 method	BS	QC880499	Water	246408	04/10/17 22:59	1.0		1:SR=840000
257	met10 method	BSD	QC880500	Water	246408	04/10/17 23:01	1.0		1:SR=830000
258	met10 method	MSS	287612-001	Water	246408	04/10/17 23:04	1.0		1:SR=1400000
259	met10 method	MS	QC880501	Water	246408	04/10/17 23:07	1.0		
260	met10 method	MSD	QC880502	Water	246408	04/10/17 23:09	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	SAMPLE	287612-002	Water	246408	04/10/17 23:12	1.0		1:SR=1400000
262	met10 method	SAMPLE	287648-001	Water	246408	04/10/17 23:15	1.0		5:SR=8000000
263	met10 method	SAMPLE	287648-002	Water	246408	04/10/17 23:18	1.0		4:SR=11000000
264	met10 method	CCV				04/10/17 23:21	1.0	10	1:SR=4100000
265	met10 method	CCB				04/10/17 23:24	1.0		1:SR=3100
266	met10 method	CCB				04/10/17 23:27	1.0		1:SR=2600
267	met10 method	SAMPLE	287648-003	Water	246408	04/10/17 23:30	1.0		4:SR=18000000
268	met10 method	SAMPLE	287648-004	Water	246408	04/10/17 23:34	1.0		5:SR=13000000
269	met10 method	SAMPLE	287648-005	Water	246408	04/10/17 23:37	1.0		5:SR=12000000
270	met10 method	SAMPLE	287648-006	Water	246408	04/10/17 23:40	1.0		4:SR=18000000
271	met10 method	SAMPLE	287654-001	Water	246408	04/10/17 23:44	1.0		4:SR=3800000
272	met10 method	SAMPLE	287662-001	Water	246408	04/10/17 23:47	1.0		4:SR=27000000
273	met10 method	SAMPLE	287662-002	Water	246408	04/10/17 23:50	1.0		5:SR=17000000
274	met10 method	SAMPLE	287662-003	Water	246408	04/10/17 23:53	1.0		4:SR=19000000
275	met10 method	SAMPLE	287662-004	Water	246408	04/10/17 23:57	1.0		4:SR=23000000
276	met10 method	SAMPLE	287662-006	Water	246408	04/10/17 23:59	1.0		1:SR=4500
277	met10 method	CCV				04/11/17 00:02	1.0	10	1:SR=4100000
278	met10 method	CCB				04/11/17 00:05	1.0		1:SR=3200
279	met10 method	CCB				04/11/17 00:08	1.0		1:SR=3000
280	met10 method	X	RINSE			04/11/17 00:11	1.0		
281	met10 method	BLANK	QC880630	Water	246447	04/11/17 00:15	1.0		1:SR=1500
282	met10 method	BS	QC880631	Water	246447	04/11/17 00:18	1.0		1:SR=830000
283	met10 method	BSD	QC880632	Water	246447	04/11/17 00:20	1.0		1:SR=820000
284	met10 method	MSS	287646-001	Water	246447	04/11/17 00:23	1.0		1:SR=1500000
285	met10 method	MS	QC880633	Water	246447	04/11/17 00:25	1.0		
286	met10 method	MSD	QC880634	Water	246447	04/11/17 00:28	1.0		
287	met10 method	SAMPLE	275868-044	Water	246447	04/11/17 00:30	1.0		1:SR=13000
288	met10 method	SAMPLE	275868-045	Water	246447	04/11/17 00:33	1.0		1:SR=22000
289	met10 method	SAMPLE	275868-046	Water	246447	04/11/17 00:37	1.0		1:SR=36000
290	met10 method	CCV				04/11/17 00:40	1.0	10	1:SR=4200000
291	met10 method	XCCB				04/11/17 00:43	1.0		1:SR=2800
292	met10 method	CCB				04/11/17 00:46	1.0		1:SR=3200
293	met10 method	XSAMPLE	275868-047	Water	246447	04/11/17 00:49	1.0		
294	met10 method	XSAMPLE	287717-004	Water	246447	04/11/17 00:52	1.0		
295	met10 method	XSAMPLE	287786-001	Water	246447	04/11/17 00:55	1.0		
296	met10 method	XSAMPLE	287789-001	Water	246447	04/11/17 00:59	1.0		
297	met10 method	XSAMPLE	287791-002	Water	246447	04/11/17 01:02	1.0		
298	met10 method	XSAMPLE	287791-003	Water	246447	04/11/17 01:05	1.0		
299	met10 method	SAMPLE	275868-047	Water	246447	04/11/17 01:18	1.0		1:SR=83000
300	met10 method	SAMPLE	287717-004	Water	246447	04/11/17 01:21	1.0		2:SR=3200000
301	met10 method	SAMPLE	287786-001	Water	246447	04/11/17 01:24	1.0		1:SR=310000
302	met10 method	SAMPLE	287789-001	Water	246447	04/11/17 01:26	1.0		4:SR=10000000
303	met10 method	CCV				04/11/17 01:30	1.0	10	1:SR=4100000
304	met10 method	XCCB				04/11/17 01:32	1.0		1:SR=3000
305	met10 method	CCB				04/11/17 01:35	1.0		1:SR=2900
306	met10 method	SAMPLE	287791-002	Water	246447	04/11/17 01:38	1.0		1:SR=680000
307	met10 method	SAMPLE	287791-003	Water	246447	04/11/17 01:41	1.0		1:SR=670000
308	met10 method	SAMPLE	287821-001	Water	246447	04/11/17 01:43	1.0		1:SR=280000
309	met10 method	SAMPLE	287823-001	Water	246447	04/11/17 01:47	1.0		1:SR=1200000
310	met10 method	SAMPLE	287824-001	Water	246447	04/11/17 01:50	1.0		2:SR=550000
311	met10 method	SAMPLE	287825-001	Water	246447	04/11/17 01:53	1.0		2:SR=7500000
312	met10 method	X	RINSE			04/11/17 01:56	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	BLANK	QC880667	SPLP Leachate	246458	04/11/17 01:59	1.0		1:SR=3300
314	met10 method	BS	QC880668	SPLP Leachate	246458	04/11/17 02:02	1.0		1:SR=860000
315	met10 method	BSD	QC880669	SPLP Leachate	246458	04/11/17 02:05	1.0		1:SR=850000
316	met10 method	CCV				04/11/17 02:07	1.0	10	1:SR=4100000
317	met10 method	XCCB				04/11/17 02:10	1.0		1:SR=3100
318	met10 method	CCB				04/11/17 02:13	1.0		1:SR=3200
319	met10 method	MSS	287252-028	SPLP Leachate	246458	04/11/17 02:16	1.0		1:SR=8100
320	met10 method	MS	QC880670	SPLP Leachate	246458	04/11/17 02:20	1.0		
321	met10 method	MSD	QC880671	SPLP Leachate	246458	04/11/17 02:22	1.0		
322	met10 method	SER	QC880672	SPLP Leachate	246458	04/11/17 02:24	5.0		
323	met10 method	PDS	QC880673	SPLP Leachate	246458	04/11/17 02:28	1.0	11 14 13	2:SR=970000
324	met10 method	SAMPLE	287252-012	SPLP Leachate	246458	04/11/17 02:30	1.0		1:SR=8400
325	met10 method	SAMPLE	287252-013	SPLP Leachate	246458	04/11/17 02:33	1.0		1:SR=7100
326	met10 method	SAMPLE	287252-014	SPLP Leachate	246458	04/11/17 02:37	1.0		1:SR=2500
327	met10 method	SAMPLE	287252-015	SPLP Leachate	246458	04/11/17 02:40	1.0		1:SR=4000
328	met10 method	SAMPLE	287252-016	SPLP Leachate	246458	04/11/17 02:43	1.0		1:SR=3700
329	met10 method	CCV				04/11/17 02:46	1.0	10	1:SR=4100000
330	met10 method	XCCB				04/11/17 02:49	1.0		1:SR=2300
331	met10 method	CCB				04/11/17 02:52	1.0		1:SR=2600
332	met10 method	SAMPLE	287252-017	SPLP Leachate	246458	04/11/17 02:55	1.0		1:SR=1600
333	met10 method	SAMPLE	287252-018	SPLP Leachate	246458	04/11/17 02:59	1.0		1:SR=2000
334	met10 method	SAMPLE	287252-019	SPLP Leachate	246458	04/11/17 03:02	1.0		1:SR=4300
335	met10 method	SAMPLE	287252-020	SPLP Leachate	246458	04/11/17 03:05	1.0		1:SR=5200
336	met10 method	SAMPLE	287252-021	SPLP Leachate	246458	04/11/17 03:08	1.0		1:SR=2800
337	met10 method	SAMPLE	287252-022	SPLP Leachate	246458	04/11/17 03:12	1.0		1:SR=2300
338	met10 method	SAMPLE	287252-023	SPLP Leachate	246458	04/11/17 03:15	1.0		1:SR=3200
339	met10 method	SAMPLE	287252-024	SPLP Leachate	246458	04/11/17 03:18	1.0		1:SR=11000
340	met10 method	SAMPLE	287252-025	SPLP Leachate	246458	04/11/17 03:21	1.0		1:SR=6100
341	met10 method	SAMPLE	287252-026	SPLP Leachate	246458	04/11/17 03:24	1.0		1:SR=15000
342	met10 method	CCV				04/11/17 03:26	1.0	10	1:SR=4200000
343	met10 method	XCCB				04/11/17 03:29	1.0		1:SR=2700
344	met10 method	CCB				04/11/17 03:32	1.0		1:SR=2300
345	met10 method	SAMPLE	287252-027	SPLP Leachate	246458	04/11/17 03:35	1.0		1:SR=9300
346	met10 method	SAMPLE	287252-029	SPLP Leachate	246458	04/11/17 03:37	1.0		1:SR=18000
347	met10 method	SAMPLE	287252-030	SPLP Leachate	246458	04/11/17 03:40	1.0		1:SR=16000
348	met10 method	SAMPLE	287252-031	SPLP Leachate	246458	04/11/17 03:42	1.0		1:SR=18000
349	met10 method	X	RINSE			04/11/17 03:45	1.0		
350	met10 method	BLANK	QC880674	SPLP Leachate	246459	04/11/17 03:48	1.0		1:SR=2800
351	met10 method	BS	QC880675	SPLP Leachate	246459	04/11/17 03:51	1.0		1:SR=850000
352	met10 method	BSD	QC880676	SPLP Leachate	246459	04/11/17 03:54	1.0		1:SR=860000
353	met10 method	MSS	287252-032	SPLP Leachate	246459	04/11/17 03:56	1.0		1:SR=8700
354	met10 method	MS	QC880677	SPLP Leachate	246459	04/11/17 03:59	1.0		
355	met10 method	CCV				04/11/17 04:01	1.0	10	1:SR=4100000
356	met10 method	XCCB				04/11/17 04:04	1.0		1:SR=2500
357	met10 method	CCB				04/11/17 04:07	1.0		1:SR=2700
358	met10 method	MSD	QC880678	SPLP Leachate	246459	04/11/17 04:10	1.0		
359	met10 method	SER	QC880679	SPLP Leachate	246459	04/11/17 04:12	5.0		
360	met10 method	PDS	QC880680	SPLP Leachate	246459	04/11/17 04:16	1.0	11 12 13	1:SR=980000
361	met10 method	SAMPLE	287252-033	SPLP Leachate	246459	04/11/17 04:18	1.0		1:SR=13000
362	met10 method	SAMPLE	287252-034	SPLP Leachate	246459	04/11/17 04:20	1.0		1:SR=12000
363	met10 method	SAMPLE	287252-035	SPLP Leachate	246459	04/11/17 04:23	1.0		1:SR=4200
364	met10 method	SAMPLE	287252-036	SPLP Leachate	246459	04/11/17 04:26	1.0		1:SR=2200

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	SAMPLE	287252-037	SPLP Leachate	246459	04/11/17 04:29	1.0		1:SR=3200
366	met10 method	SAMPLE	287252-038	SPLP Leachate	246459	04/11/17 04:33	1.0		1:SR=8200
367	met10 method	SAMPLE	287252-039	SPLP Leachate	246459	04/11/17 04:35	1.0		1:SR=7800
368	met10 method	CCV				04/11/17 04:38	1.0	10	1:SR=4100000
369	met10 method	XCCB				04/11/17 04:41	1.0		1:SR=2400
370	met10 method	CCB				04/11/17 04:44	1.0		1:SR=1500
371	met10 method	SAMPLE	287252-040	SPLP Leachate	246459	04/11/17 04:47	1.0		1:SR=3100
372	met10 method	SAMPLE	287252-041	SPLP Leachate	246459	04/11/17 04:50	1.0		1:SR=7700
373	met10 method	SAMPLE	287252-042	SPLP Leachate	246459	04/11/17 04:53	1.0		1:SR=5100
374	met10 method	SAMPLE	287252-043	SPLP Leachate	246459	04/11/17 04:56	1.0		1:SR=7100
375	met10 method	SAMPLE	287252-044	SPLP Leachate	246459	04/11/17 04:59	1.0		1:SR=3600
376	met10 method	SAMPLE	287252-045	SPLP Leachate	246459	04/11/17 05:03	1.0		1:SR=7300
377	met10 method	X	RINSE			04/11/17 05:06	1.0		
378	met10 method	BLANK	QC879419	SPLP Leachate	246147	04/11/17 05:09	1.0		
379	met10 method	BS	QC879420	SPLP Leachate	246147	04/11/17 05:13	1.0		1:SR=860000
380	met10 method	BSD	QC879421	SPLP Leachate	246147	04/11/17 05:15	1.0		1:SR=860000
381	met10 method	CCV				04/11/17 05:17	1.0	10	1:SR=4100000
382	met10 method	XCCB				04/11/17 05:20	1.0		1:SR=2100
383	met10 method	CCB				04/11/17 05:23	1.0		1:SR=1600
384	met10 method	MSS	287077-042	SPLP Leachate	246147	04/11/17 05:27	1.0		1:SR=5200
385	met10 method	MS	QC879422	SPLP Leachate	246147	04/11/17 05:29	1.0		
386	met10 method	MSD	QC879423	SPLP Leachate	246147	04/11/17 05:31	1.0		
387	met10 method	SER	QC879424	SPLP Leachate	246147	04/11/17 05:34	5.0		
388	met10 method	PDS	QC879425	SPLP Leachate	246147	04/11/17 05:37	1.0	11 12 13	2:SR=960000
389	met10 method	SAMPLE	287077-041	SPLP Leachate	246147	04/11/17 05:40	1.0		1:SR=11000
390	met10 method	SAMPLE	287077-043	SPLP Leachate	246147	04/11/17 05:42	1.0		1:SR=4100
391	met10 method	SAMPLE	287077-044	SPLP Leachate	246147	04/11/17 05:45	1.0		1:SR=2200
392	met10 method	SAMPLE	287077-045	SPLP Leachate	246147	04/11/17 05:48	1.0		1:SR=8400
393	met10 method	SAMPLE	287077-046	SPLP Leachate	246147	04/11/17 05:51	1.0		1:SR=4400
394	met10 method	CCV				04/11/17 05:53	1.0	10	1:SR=4100000
395	met10 method	CCB				04/11/17 05:56	1.0		1:SR=2100
396	met10 method	CCB				04/11/17 05:59	1.0		1:SR=1600
397	met10 method	SAMPLE	287077-047	SPLP Leachate	246147	04/11/17 06:02	1.0		1:SR=15000
398	met10 method	SAMPLE	287077-048	SPLP Leachate	246147	04/11/17 06:04	1.0		1:SR=1900
399	met10 method	SAMPLE	287077-049	SPLP Leachate	246147	04/11/17 06:07	1.0		1:SR=3900
400	met10 method	SAMPLE	287077-050	SPLP Leachate	246147	04/11/17 06:11	1.0		1:SR=6900
401	met10 method	SAMPLE	287082-001	SPLP Leachate	246147	04/11/17 06:14	1.0		1:SR=11000
402	met10 method	SAMPLE	287082-002	SPLP Leachate	246147	04/11/17 06:16	1.0		1:SR=16000
403	met10 method	SAMPLE	287082-003	SPLP Leachate	246147	04/11/17 06:19	1.0		1:SR=11000
404	met10 method	SAMPLE	287082-004	SPLP Leachate	246147	04/11/17 06:21	1.0		1:SR=15000
405	met10 method	SAMPLE	287082-005	SPLP Leachate	246147	04/11/17 06:23	1.0		1:SR=2600
406	met10 method	SAMPLE	287082-006	SPLP Leachate	246147	04/11/17 06:27	1.0		1:SR=4100
407	met10 method	CCV				04/11/17 06:30	1.0	10	1:SR=4200000
408	met10 method	CCB				04/11/17 06:33	1.0		1:SR=1400
409	met10 method	CCB				04/11/17 06:35	1.0		1:SR=4100
410	met10 method	SAMPLE	287082-007	SPLP Leachate	246147	04/11/17 06:39	1.0		1:SR=4600
411	met10 method	SAMPLE	287082-008	SPLP Leachate	246147	04/11/17 06:42	1.0		1:SR=13000
412	met10 method	SAMPLE	287082-009	SPLP Leachate	246147	04/11/17 06:44	1.0		1:SR=6800
413	met10 method	SAMPLE	287082-010	SPLP Leachate	246147	04/11/17 06:48	1.0		1:SR=2700
414	met10 method	CCV				04/11/17 06:51	1.0	10	1:SR=4100000
415	met10 method	CCB				04/11/17 06:54	1.0		1:SR=3600
416	met10 method	CCB				04/11/17 06:57	1.0		1:SR=2000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087144643

Instrument : MET10 Begun : 04/10/17 10:43
Method : EPA 6010C SOP Version : icp metals_rv18

TLO 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 38.

MNA 04/10/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 39 through 179.

TLO 04/11/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 180 through 416.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S30560 14=S2984

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
		ICAL STD	6893796	894629
		LOWER LIMIT	2068139	268389
		UPPER LIMIT	8272555	1073554
010	ICB		7043252	902935
011	ICSA		5743386	790346
014	ICSAB		5730121	787134
023	BLANK	QC880555	7110457	901168
024	BS	QC880556	6741470	883772
025	BSD	QC880557	6713220	884763
026	MSS	287500-014	6222165	827217
027	MS	QC880558	5993641	829583
028	MSD	QC880559	6056550	828683
045	CCV		6683010	897391
047	CCB		7150263	920306
049	SER	QC880744	6734123	884492
050	PDS	QC880745	6098855	841038
058	CCV		6674463	890973
060	CCB		7125765	918676
135	PDS	QC880745	6032991	840959
136	CCV		6608958	875081
138	CCB		7089613	906239
142	SAMPLE	287283-001	4070897	666319
143	SAMPLE	287283-002	4408531	718213
144	SAMPLE	287283-004	3275466	580533
145	SAMPLE	287283-005	3704856	627479
146	SAMPLE	287343-001	3785585	644515
147	SAMPLE	287343-002	5926080	841314
148	SAMPLE	287077-035	7064849	940445
149	CCV		6760096	901935
151	CCB		7260707	929185
182	MSS	287252-028	6391232	849181
183	SAMPLE	287252-029	6498493	866630
258	MSS	287612-001	6929197	919197
261	SAMPLE	287612-002	6976654	893243
303	CCV		6643608	879771
305	CCB		7249370	918757
316	CCV		6788683	881121
318	CCB		7289723	914834
319	MSS	287252-028	7161428	916775
324	SAMPLE	287252-012	7135749	914940
325	SAMPLE	287252-013	7111697	934358
326	SAMPLE	287252-014	7185108	907684
327	SAMPLE	287252-015	7046711	912503
328	SAMPLE	287252-016	7095052	913710
329	CCV		6787983	894586
331	CCB		7245194	912872
332	SAMPLE	287252-017	7181880	909689
333	SAMPLE	287252-018	7198298	914174
334	SAMPLE	287252-019	7064917	910020
335	SAMPLE	287252-020	7028486	898766
336	SAMPLE	287252-021	7032263	917271

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
337	SAMPLE	287252-022	7193492	916449
338	SAMPLE	287252-023	7166386	913195
339	SAMPLE	287252-024	7060885	907734
340	SAMPLE	287252-025	6973892	898952
341	SAMPLE	287252-026	7037041	915699
342	CCV		6722983	884426
344	CCB		7295180	908343
345	SAMPLE	287252-027	7038991	896336
346	SAMPLE	287252-029	6905896	906263
347	SAMPLE	287252-030	6901632	900753
348	SAMPLE	287252-031	7011126	918215
353	MSS	287252-032	7046126	897140
355	CCV		6757315	879863
357	CCB		7280217	1448223 *
361	SAMPLE	287252-033	7053441	903655
362	SAMPLE	287252-034	7113006	911191
363	SAMPLE	287252-035	7025231	906081
364	SAMPLE	287252-036	7132409	906791
365	SAMPLE	287252-037	7039334	907372
366	SAMPLE	287252-038	7019741	906154
367	SAMPLE	287252-039	7022379	929128
368	CCV		6713915	885954
370	CCB		7261927	909081
371	SAMPLE	287252-040	7070499	916369
372	SAMPLE	287252-041	6982779	910174
373	SAMPLE	287252-042	7063940	913724
374	SAMPLE	287252-043	7090356	917091
375	SAMPLE	287252-044	7064037	912598
376	SAMPLE	287252-045	7026920	906171
381	CCV		6692776	881951
383	CCB		7211687	917171
384	MSS	287077-042	6945336	899941
389	SAMPLE	287077-041	6893137	902582
390	SAMPLE	287077-043	7038623	908955
391	SAMPLE	287077-044	7049050	916748
392	SAMPLE	287077-045	6917071	901614
393	SAMPLE	287077-046	7009637	907650
394	CCV		6700561	880033
395	CCB		7180352	904417
396	CCB		7177217	910965
397	SAMPLE	287077-047	6948027	907765
398	SAMPLE	287077-048	7033836	896098
399	SAMPLE	287077-049	7109813	912783
400	SAMPLE	287077-050	7040727	899845
401	SAMPLE	287082-001	7008624	905926
402	SAMPLE	287082-002	6842413	898506
403	SAMPLE	287082-003	6883302	904317
404	SAMPLE	287082-004	6855780	900188
405	SAMPLE	287082-005	7066526	907352
406	SAMPLE	287082-006	7048392	920676
407	CCV		6637853	874780
408	CCB		7171323	909012

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087144643

Date : 04/10/17 Reference : met10 method
Sequence : MET10 04/10/17 Analyzed : 04/10/17 10:46

#	Type	Sample ID	Y A	Y R
409	CCB		7232267	1017791
410	SAMPLE	287082-007	6899545	898826
411	SAMPLE	287082-008	6997736	907867
412	SAMPLE	287082-009	6916676	906767
413	SAMPLE	287082-010	6949148	905579
414	CCV		6663915	877646
415	CCB		7178495	922096

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087144643001
Units : ug/L

Date : 10-APR-2017 10:43
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087144643002	L1	10-APR-2017 10:46	S32578
L2	met10 method	1087144643003	L2	10-APR-2017 10:50	S32571
L3	met10 method	1087144643004	L3	10-APR-2017 10:52	S32367
L4	met10 method	1087144643005	L4	10-APR-2017 10:54	S32368
L5	met10 method	1087144643006	L5	10-APR-2017 10:57	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	1.9600	2.0120	2.1588	1.9567		LOR0	0.00000	0.51054		2.0219	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	0	100.00	3	1000.0	10	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087144643001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087144643001 Cal Date : 10-APR-2017

ICV 1087144643007 (10-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4912	ug/L	-2	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643009.2 File : met10 method Time : 10-APR-2017 11:06
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.664	ug/L	-7	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6971685	1.13
Yttrium	R	894629	898388	0.42

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643010.2 File : met10 method Time : 10-APR-2017 11:10
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7043252	2.17
Yttrium	R	894629	902935	0.93

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643011.2 File : met10 method Time : 10-APR-2017 11:13
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[4.390]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19420	ug/L	97	
Copper	A	20000	23100	ug/L	115	
Manganese	A	20000	18930	ug/L	95	
Nickel	A	20000	17170	ug/L	86	
Titanium	A	20000	19750	ug/L	99	
Vanadium	A	20000	22020	ug/L	110	
Aluminum	R	500000	547000	ug/L	109	
Calcium	R	500000	549300	ug/L	110	
Iron	R	200000	209000	ug/L	105	
Magnesium	R	500000	459900	ug/L	92	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5743386	-16.69
Yttrium	R	894629	790346	-11.66

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643014.2 File : met10 method Time : 10-APR-2017 11:41
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	919.9	ug/L	-8	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	5730121	-16.88
Yttrium	R	894629	787134	-12.02

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643045.1 File : met10 method Time : 10-APR-2017 13:16
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.9079	5000	4870	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6683010	-3.06
Yttrium	R	894629	897391	0.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643047.1 File : met10 method Time : 10-APR-2017 13:21
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7150263	3.72
Yttrium	R	894629	920306	2.87

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643058.1 File : met10 method Time : 10-APR-2017 13:51
Cal : 1087144643001 Caldate : 10-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	2.0219	1.8826	5000	4806	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	6674463	-3.18
Yttrium	R	894629	890973	-0.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087144643060.1 File : met10 method Time : 10-APR-2017 13:56
Cal : 1087144643001 Caldate : 10-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	6893796	7125765	3.36
Yttrium	R	894629	918676	2.69

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087160396

Instrument : MET10 Begun : 04/21/17 09:16
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/21/17 09:16	1.0		
002	met10 method	ICAL	L1			04/21/17 09:19	1.0	1	
003	met10 method	ICAL	L2			04/21/17 09:22	1.0	2	
004	met10 method	ICAL	L3			04/21/17 09:25	1.0	3	
005	met10 method	ICAL	L4			04/21/17 09:27	1.0	4	
006	met10 method	ICAL	L5			04/21/17 09:30	1.0	5	
007	met10 method	ICV				04/21/17 09:33	1.0	6	1:SR=4400000
008	met10 method	XCRI				04/21/17 09:36	1.0	7	
009	met10 method	CRI				04/21/17 09:40	1.0	7	1:SR=43000
010	met10 method	ICB				04/21/17 09:45	1.0		
011	met10 method	ICSA				04/21/17 09:48	1.0	8	11:AL=540000
012	met10 method	ICSAB				04/21/17 09:59	1.0	9	6:SR=4700000
013	met10 method	CCV				04/21/17 10:03	1.0	10	1:SR=4400000
014	met10 method	CCB				04/21/17 10:05	1.0		
015	met10 method	XCCB				04/21/17 10:08	1.0		
016	met10 method	SER	QC882461	Water	246867	04/21/17 10:12	5.0		
017	met10 method	PDS	QC882462	Water	246867	04/21/17 10:14	1.0	11 12 13	6:SR=58000000
018	met10 method	X	RINSE			04/21/17 10:19	1.0		
019	met10 method	SAMPLE	288087-007	Soil	246926	04/21/17 10:22	100.0		1:SR=160000
020	met10 method	SAMPLE	288087-010	Soil	246926	04/21/17 10:25	100.0		1:SR=43000
021	met10 method	SAMPLE	288087-019	Soil	246926	04/21/17 10:27	1.0		5:SR=6800000
022	met10 method	SAMPLE	288087-022	Soil	246926	04/21/17 10:30	1.0		6:SR=6100000
023	met10 method	X	RINSE			04/21/17 10:33	1.0		
024	met10 method	SER	QC881804	Water	246744	04/21/17 10:36	500.0		
025	met10 method	PDS	QC881805	Water	246744	04/21/17 10:40	100.0	11 12 13	1:SR=1000000
026	met10 method	CCV				04/21/17 10:42	1.0	10	1:SR=4500000
027	met10 method	CCB				04/21/17 10:45	1.0		
028	met10 method	SAMPLE	287721-001	Water	246744	04/21/17 10:48	10.0		1:SR=220000
029	met10 method	X	RINSE			04/21/17 10:52	1.0		
030	met10 method	BLANK	QC882471	Water	246919	04/21/17 10:55	1.0		1:SR=2700
031	met10 method	BS	QC882472	Water	246919	04/21/17 10:59	1.0		2:SR=930000
032	met10 method	BSD	QC882473	Water	246919	04/21/17 11:01	1.0		2:SR=970000
033	met10 method	MSS	288007-003	Water	246919	04/21/17 11:04	1.0		2:SR=4700000
034	met10 method	MS	QC882474	Water	246919	04/21/17 11:06	1.0		
035	met10 method	MSD	QC882475	Water	246919	04/21/17 11:09	1.0		
036	met10 method	SER	QC882476	Water	246919	04/21/17 11:11	5.0		
037	met10 method	PDS	QC882477	Water	246919	04/21/17 11:14	1.0	11 12 13	3:SR=5600000
038	met10 method	SAMPLE	288162-001	Water	246919	04/21/17 11:17	1.0		3:SR=13000000
039	met10 method	CCV				04/21/17 11:19	1.0	10	1:SR=4500000
040	met10 method	CCB				04/21/17 11:22	1.0		
041	met10 method	SAMPLE	288162-002	Water	246919	04/21/17 11:26	1.0		3:SR=13000000
042	met10 method	SAMPLE	287721-008	Water	246744	04/21/17 11:28	10.0		1:SR=130000
043	met10 method	SAMPLE	287828-003	Water	246744	04/21/17 11:32	1.0		3:SR=9000000
044	met10 method	SAMPLE	287830-003	Water	246744	04/21/17 11:35	1.0		3:SR=6400000
045	met10 method	SAMPLE	287879-003	Water	246691	04/21/17 11:37	100.0		1:SR=17000
046	met10 method	SAMPLE	287879-003	Water	246691	04/21/17 11:41	1.0		2:SR=1800000
047	met10 method	X	RINSE			04/21/17 11:43	1.0		
048	met10 method	SAMPLE	288074-001	TCLP Leachate	246862	04/21/17 11:47	10.0		2:SR=17000000
049	met10 method	SAMPLE	288074-002	TCLP Leachate	246862	04/21/17 11:50	10.0		2:SR=18000000
050	met10 method	BLANK	QC882129	Water	246834	04/21/17 11:54	1.0		1:SR=2500
051	met10 method	CCV				04/21/17 11:57	1.0	10	1:SR=4500000
052	met10 method	CCB				04/21/17 12:00	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087160396

Instrument : MET10 Begun : 04/21/17 09:16
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287954-001	Water	246834	04/21/17 12:03	10.0		1:SR=790000
054	met10 method	SAMPLE	288021-001	Water	246834	04/21/17 12:07	10.0		1:SR=62000
055	met10 method	SAMPLE	288021-002	Water	246834	04/21/17 12:09	10.0		1:SR=250000
056	met10 method	SAMPLE	288021-003	Water	246834	04/21/17 12:13	10.0		1:SR=120000
057	met10 method	SAMPLE	288021-004	Water	246834	04/21/17 12:15	10.0		1:SR=140000
058	met10 method	SAMPLE	288023-002	Water	246834	04/21/17 12:19	10.0		1:SR=120000
059	met10 method	SAMPLE	288023-003	Water	246834	04/21/17 12:22	10.0		1:SR=100000
060	met10 method	SAMPLE	288023-004	Water	246834	04/21/17 12:24	10.0		1:SR=260000
061	met10 method	SAMPLE	288023-005	Water	246834	04/21/17 12:27	10.0		1:SR=160000
062	met10 method	SAMPLE	287967-001	Soil	246900	04/21/17 12:30	1.0		5:SR=8600000
063	met10 method	CCV				04/21/17 12:33	1.0	10	1:SR=4600000
064	met10 method	CCB				04/21/17 12:36	1.0		1:SR=1900
065	met10 method	X	RINSE			04/21/17 12:39	1.0		
066	met10 method	SER	QC882391	Filtrate	246896	04/21/17 12:43	500.0		
067	met10 method	PDS	QC882392	Filtrate	246896	04/21/17 12:46	100.0	11 12 13	2:SR=960000
068	met10 method	SAMPLE	287773-004	Filtrate	246896	04/21/17 12:49	100.0		1:SR=540000
069	met10 method	SAMPLE	287773-009	Filtrate	246896	04/21/17 12:52	1.0		4:SR=12000000
070	met10 method	SAMPLE	287773-017	Filtrate	246896	04/21/17 12:56	100.0		1:SR=70000
071	met10 method	SER	QC882708	Soil	246401	04/21/17 13:06	5.0		1:SR=1000000
072	met10 method	PDS	QC882709	Soil	246401	04/21/17 13:09	1.0	11 12 13	6:SR=6400000
073	met10 method	BS	QC881016	Filtrate	246540	04/21/17 13:17	1.0		2:SR=920000
074	met10 method	BSD	QC881017	Filtrate	246540	04/21/17 13:19	1.0		1:SR=920000
075	met10 method	CCV				04/21/17 13:22	1.0	10	1:SR=4500000
076	met10 method	CCB				04/21/17 13:25	1.0		
077	met10 method	SAMPLE	287830-003	Water	246744	04/21/17 13:28	1.0		3:SR=6500000
078	met10 method	SAMPLE	287278-001	Water	246919	04/21/17 13:31	1.0		2:SR=1400000
079	met10 method	SAMPLE	287278-002	Water	246919	04/21/17 13:33	1.0		3:SR=8300000
080	met10 method	SAMPLE	287278-003	Water	246919	04/21/17 13:36	1.0		3:NA=1700000
081	met10 method	SAMPLE	287937-002	Water	246919	04/21/17 13:39	1.0		4:SR=11000000
082	met10 method	SAMPLE	287937-003	Water	246919	04/21/17 13:42	1.0		3:SR=8500000
083	met10 method	SAMPLE	287937-005	Water	246919	04/21/17 13:45	1.0		4:SR=11000000
084	met10 method	SAMPLE	287937-008	Water	246919	04/21/17 13:48	1.0		4:SR=57000000
085	met10 method	SAMPLE	287937-009	Water	246919	04/21/17 13:50	1.0		4:SR=57000000
086	met10 method	SAMPLE	287937-012	Water	246919	04/21/17 13:53	1.0		1:SR=4500
087	met10 method	CCV				04/21/17 13:57	1.0	10	1:SR=4600000
088	met10 method	CCB				04/21/17 13:59	1.0		1:SR=2000
089	met10 method	CCB				04/21/17 14:02	1.0		1:SR=1600
090	met10 method	SAMPLE	287946-003	Water	246919	04/21/17 14:06	1.0		1:SR=2200000
091	met10 method	SAMPLE	287946-004	Water	246919	04/21/17 14:08	1.0		2:SR=2400000
092	met10 method	SAMPLE	288007-001	Water	246919	04/21/17 14:11	1.0		1:SR=17000000
093	met10 method	SAMPLE	288007-002	Water	246919	04/21/17 14:14	1.0		1:SR=19000000
094	met10 method	SAMPLE	288108-001	Water	246919	04/21/17 14:16	1.0		2:SR=1000000
095	met10 method	SAMPLE	288108-002	Water	246919	04/21/17 14:20	1.0		1:SR=1100000
096	met10 method	SAMPLE	288108-003	Water	246919	04/21/17 14:23	1.0		2:SR=1700000
097	met10 method	SAMPLE	288108-004	Water	246919	04/21/17 14:25	1.0		1:SR=1400000
098	met10 method	SAMPLE	288093-001	WET Leachate	246861	04/21/17 14:28	10.0		2:SR=710000
099	met10 method	SAMPLE	288066-001	WET Leachate	246861	04/21/17 14:31	10.0		2:SR=760000
100	met10 method	CCV				04/21/17 14:33	1.0	10	1:SR=4500000
101	met10 method	CCB				04/21/17 14:36	1.0		1:SR=1900
102	met10 method	BLANK	QC882499	Soil	246926	04/21/17 14:40	1.0		1:SR=5400
103	met10 method	BS	QC882500	Soil	246926	04/21/17 14:43	1.0		1:SR=91000000
104	met10 method	BSD	QC882501	Soil	246926	04/21/17 14:46	1.0		1:SR=91000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087160396

Instrument : MET10 Begun : 04/21/17 09:16
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	MS	QC882502	Soil	246926	04/21/17 14:48	1.0		
106	met10 method	MSD	QC882503	Soil	246926	04/21/17 14:51	1.0		
107	met10 method	SAMPLE	288162-001	Water	246919	04/21/17 14:54	1.0		3:SR=13000000
108	met10 method	SAMPLE	288162-002	Water	246919	04/21/17 14:57	1.0		3:SR=13000000
109	met10 method	SAMPLE	287828-005	Water	246744	04/21/17 15:00	1.0		5:SR=21000000
110	met10 method	SER	QC882391	Filtrate	246896	04/21/17 15:03	50.0		
111	met10 method	PDS	QC882392	Filtrate	246896	04/21/17 15:06	10.0		1:SR=1100000
112	met10 method	CCV				04/21/17 15:09	1.0	10	1:SR=4600000
113	met10 method	CCB				04/21/17 15:11	1.0		1:SR=1900
114	met10 method	SAMPLE	288052-002	WET Leachate	246861	04/21/17 15:15	10.0		2:SR=270000
115	met10 method	?SAMPLE	288052-003		246861	04/21/17 15:17	10.0		

TLO 04/21/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 82.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087160396

Date : 04/21/17 Reference : met10 method
Sequence : MET10 04/21/17 Analyzed : 04/21/17 09:19

#	Type	Sample ID	Y A	Y R
		ICAL STD	12658439	921739
		LOWER LIMIT	3797532	276522
		UPPER LIMIT	15190127	1106087
010	ICB		12694518	925240
011	ICSA		10085687	832581
012	ICSAB		10090454	817138
063	CCV		11657280	939892
064	CCB		12689136	990397
071	SER	QC882708	12019860	967358
072	PDS	QC882709	11145279	956229
075	CCV		11706881	969248
076	CCB		12607329	980489
078	SAMPLE	287278-001	10865525	919743
079	SAMPLE	287278-002	9443114	849579
080	SAMPLE	287278-003	9495345	858017

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087160396001
Units : ug/L

Date : 21-APR-2017 09:16
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087160396002	L1	21-APR-2017 09:19	S32578
L2	met10 method	1087160396003	L2	21-APR-2017 09:22	S32571
L3	met10 method	1087160396004	L3	21-APR-2017 09:25	S32367
L4	met10 method	1087160396005	L4	21-APR-2017 09:27	S32368
L5	met10 method	1087160396006	L5	21-APR-2017 09:30	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	5.5400	6.3560	6.2360	6.1233		LOR0	0.00000	0.16328		6.0638	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-10	100.00	4	1000.0	2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087160396001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087160396001 Cal Date : 21-APR-2017

ICV 1087160396007 (21-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4813	ug/L	-4	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396009.2 File : met10 method Time : 21-APR-2017 09:40
Cal : 1087160396001 Caldate : 21-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.782	ug/L	-4	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	12599281	-0.47
Yttrium	R	921739	932237	1.14

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396010.2 File : met10 method Time : 21-APR-2017 09:45
Cal : 1087160396001 Caldate : 21-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	12694518	0.29
Yttrium	R	921739	925240	0.38

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396011.2 File : met10 method Time : 21-APR-2017 09:48
Cal : 1087160396001 Caldate : 21-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-2.691]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19440	ug/L	97	
Copper	A	20000	21290	ug/L	106	
Manganese	A	20000	18420	ug/L	92	
Nickel	A	20000	17410	ug/L	87	
Titanium	A	20000	20050	ug/L	100	
Vanadium	A	20000	22320	ug/L	112	
Aluminum	R	500000	537000	ug/L	107	
Calcium	R	500000	490600	ug/L	98	
Iron	R	200000	196800	ug/L	98	
Magnesium	R	500000	409200	ug/L	82	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	10085687	-20.32
Yttrium	R	921739	832581	-9.67

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396012.2 File : met10 method Time : 21-APR-2017 09:59
Cal : 1087160396001 Caldate : 21-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	997.0	ug/L	0	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	10090454	-20.29
Yttrium	R	921739	817138	-11.35

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396063.1 File : met10 method Time : 21-APR-2017 12:33
Cal : 1087160396001 Caldate : 21-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.0638	6.0167	5000	4912	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	11657280	-7.91
Yttrium	R	921739	939892	1.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396064.1 File : met10 method Time : 21-APR-2017 12:36
Cal : 1087160396001 Caldate : 21-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	12689136	0.24
Yttrium	R	921739	990397	7.45

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396075.1 File : met10 method Time : 21-APR-2017 13:22
Cal : 1087160396001 Caldate : 21-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.0638	6.0846	5000	4967	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	11706881	-7.52
Yttrium	R	921739	969248	5.15

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087160396076.1 File : met10 method Time : 21-APR-2017 13:25
Cal : 1087160396001 Caldate : 21-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	12658439	12607329	-0.40
Yttrium	R	921739	980489	6.37

SAMPLE PREPARATION SUMMARY

Batch # : 246401
Started By : SL
Method : 3050B
Spike #1 ID : S29983
Prep Date : 07-APR-2017 08:25
Spike #2 ID : S29984
Analysis : ICP
Finished By : SL
Units : g
Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287500-001		Soil	1.01	50	1	49.50						6010	
287500-002		Soil	.94	50	1	53.19						6010	
287500-003		Soil	.91	50	1	54.95						6010	
287500-004		Soil	1.07	50	1	46.73						6010	
287500-005		Soil	1.04	50	1	48.08						6010	
287500-006		Soil	.98	50	1	51.02						6010	
287500-007		Soil	.99	50	1	50.51						6010	
287500-008		Soil	.95	50	1	52.63						6010	
287500-009		Soil	1.03	50	1	48.54						6010	
287500-010		Soil	.93	50	1	53.76						6010	
287500-011		Soil	1.03	50	1	48.54						6010	
287500-012		Soil	.98	50	1	51.02						6010	
287500-013		Soil	.98	50	1	51.02						6010	
287500-015		Soil	.93	50	1	53.76						6010	
287500-016		Soil	.91	50	1	54.95						6010	
287500-017		Soil	.92	50	1	54.35						6010	
287500-018		Soil	.93	50	1	53.76						6010	
287744-004		Soil	.92	50	1	54.35						(rebatched)	
287760-006		Soil	.97	50	1	51.55						(rebatched)	
287760-007		Soil	.91	50	1	54.95						(rebatched)	
QC880471	BLANK	Soil	.98	50	1	51.02							
QC880472	BS	Soil	.95	50	1	52.63		.5	.5	.5			
QC880473	BSD	Soil	.95	50	1	52.63		.5	.5	.5			
QC880474	MS	Soil	1.02	50	1	49.02		.5	.5	.5			
QC880475	MSD	Soil	.95	50	1	52.63		.5	.5	.5			
QC882708	SER	Soil	.91	50	1	54.95							
QC882709	PDS	Soil	.91	50	1	54.95							

Analyst: KER Date: 04/10/17 Reviewer: PRW Date: 04/10/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246401 Digestion Method: Time ON: 0825 BK 4043

Date Digested: 4-7-17 ☒ EPA 3050b Time OFF: 1100 Page 79

Digested by: SL ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLANK		0.98	☒50 ☐___	Y	✓	QC880471
BS		0.95	☒50 ☐___		✓	2
BSD		0.95	☒50 ☐___		✓	3
MS		1.02	☒50 ☐___		✓	4
MSD		0.95	☒50 ☐___		✓	5
287500-001	A	1.01	☒50 ☐___		✓	
-002		0.94	☒50 ☐___		✓	
-003		0.91	☒50 ☐___		✓	MSS
-004		1.07	☒50 ☐___		✓	
-005		1.04	☒50 ☐___		✓	
-006		0.98	☒50 ☐___		✓	
-007		0.99	☒50 ☐___		✓	
-008		0.95	☒50 ☐___		✓	
-009		1.03	☒50 ☐___		✓	
-010		0.93	☒50 ☐___		✓	
-011		1.03	☒50 ☐___		✓	
-012		0.98	☒50 ☐___		✓	
-013		0.98	☒50 ☐___		✓	
-015		0.93	☒50 ☐___		✓	
-016		0.91	☒50 ☐___		✓	
-017		0.92	☒50 ☐___		✓	
-018	↓	0.93	☒50 ☐___		✓	
~~-019~~ 287744-4		0.92	☒50 ☐___		✓	comp 287744 1-3 @ 50g ea.
~~-020~~ 287760-6	B	0.97	☒50 ☐___		✓	
-021 ↓ -7	↓	0.91	☒50 ☐___	↓	✓	

SL 4-7-17

Balance ID: B-10 calibration has been checked? ☒Yes ☐No

	Reagent ID or LIMS #	Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	267642-3025 | 1572329-6238-KN	SL 4-7-17
Blank 'matrix' lot#	TH58-7A007	
.5 mL of spike solution (Std1) was added to all spikes	S30743	
.5 mL of spike solution (Std2) was added to all spikes	S32291	
.5 mL of spike solution (Std3) was added to all spikes	~~S32707~~ S32778	
Digestion Block ID, Probe Location	RAINIER ~~45~~ 45	
Temperature (°C), Thermometer ID	95 A64730	
1:1 HNO3 Reagent ID	BDH20170119887	
concentrated HNO3 lot#	BDH20170119887	
3mL 30% hydrogen peroxide lot#	EMD 56258639	
concentrated HCl lot#	JTB 162118	
☐ filtered thru' Whatman 541, lot#	97694447	
Relinquished to ICP group	ICP	

Pipettes

Vol.(mL)	ID
.5	N271500
5	24442627
1.5	24442627

4-7-17

Digestion Chemist / Date

Continued from page Ø

Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246422
Started By : SL
Method : 3050B
Spike #1 ID : S30743
Prep Date : 07-APR-2017 13:10
Spike #2 ID : S32291
Analysis : ICP
Finished By : SL
Units : g
Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287500-014		Soil	.91	50	1	54.95						6010	
287500-019		Soil	.92	50	1	54.35						6010	
287500-020		Soil	.97	50	1	51.55						6010	
287500-021		Soil	.91	50	1	54.95						6010	
287500-022		Soil	.95	50	1	52.63						6010	
287505-005		Soil	.99	50	1	50.51						6010	
287505-010		Soil	1.08	50	1	46.30						6010	
287617-001		Soil	.98	50	1	51.02						(rebatched)	
287750-001		Soil	1.06	50	1	47.17						6010	
287750-002		Soil	1.07	50	1	46.73						6010	
287750-003		Soil	.95	50	1	52.63						6010	
287750-004		Soil	.91	50	1	54.95						6010	
287750-005		Soil	.99	50	1	50.51						6010	
287750-006		Soil	.95	50	1	52.63						6010	
287750-007		Soil	1.1	50	1	45.45						6010	
287750-008		Soil	.99	50	1	50.51						6010	
287750-009		Soil	1	50	1	50.0						6010	
287750-010		Soil	1.07	50	1	46.73						6010	
287750-011		Soil	1.02	50	1	49.02						6010	
287750-012		Soil	1.04	50	1	48.08						6010	
QC880555	BLANK	Soil	.99	50	1	50.51							
QC880556	BS	Soil	.93	50	1	53.76		.5	.5	.5			
QC880557	BSD	Soil	1.09	50	1	45.87		.5	.5	.5			
QC880558	MS	Soil	.96	50	1	52.08		.5	.5	.5			
QC880559	MSD	Soil	.92	50	1	54.35		.5	.5	.5			
QC880744	SER	Soil	.91	50	1	54.95							
QC880745	PDS	Soil	.91	50	1	54.95							

Analyst: MNA Date: 04/08/17 Reviewer: PRW Date: 04/10/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246422 Digestion Method: Time ON: 1310 **BK 4043**

Date Digested: 4-7-17 ☒ EPA 3050b Time OFF: 1550 Page 80

Digested by: SL ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLANK		0.99	☒ 50 ☐		✓	QC880555
BS		0.93	☒ 50 ☐		✓	56
BSD		1.09	☒ 50 ☐		✓	57
MS		0.96	☒ 50 ☐		✓	58
MSD		0.92	☒ 50 ☐		✓	59
287500-014	A	0.91	☒ 50 ☐		✓	MSS
-019		0.92	☒ 50 ☐		✓	
-020		0.97	☒ 50 ☐		✓	
-021		0.91	☒ 50 ☐		✓	
-022		0.95	☒ 50 ☐		✓	
287505-005		0.99	☒ 50 ☐		✓	comp 287505 1-4 @100g ea
-010		1.08	☒ 50 ☐		✓	6-9
287617-001		0.98	☒ 50 ☐		✓	alias of 287146-1
287750-001		1.06	☒ 50 ☐		✓	alias of 287472-9
-002		1.07	☒ 50 ☐		✓	-10
-003		0.95	☒ 50 ☐		✓	-11
-004		0.91	☒ 50 ☐		✓	-12
-005		0.99	☒ 50 ☐		✓	-13
-006		0.95	☒ 50 ☐		✓	-14
-007		1.10	☒ 50 ☐		✓	-15
-008		0.99	☒ 50 ☐		✓	-16
-009		1.00	☒ 50 ☐		✓	-17
-010		1.07	☒ 50 ☐		✓	-18
-011		1.02	☒ 50 ☐		✓	287509-03
-012		1.04	☒ 50 ☐		✓	-04

Balance ID: B-10 calibration has been checked? ☒ Yes ☐ No

Reagent ID or LIMS #	Initials / Date
SCP Digestion tubes / ESS Watch glass, lot# 26[illegible]42-3025 | 15712329-6238-KN	SC 4-7-17
Blank 'matrix' lot# METALS ELGA (DI BJP)	
.5 mL of spike solution (Std1) was added to all spikes S30743	
.5 mL of spike solution (Std2) was added to all spikes S32291	
.5 mL of spike solution (Std3) was added to all spikes S32718	JL 4-7-17
Digestion Block ID, Probe Location RAINIER	JL 4-7-17
Temperature (°C) , Thermometer ID 95° AG4730	
1:1 HNO3 Reagent ID BDH 20170119887	
concentrated HNO3 lot# BDH 20170119887	
3mL 30% hydrogen peroxide lot# EMD 56258639	
concentrated HCl lot# JTB162118	
☐ filtered thru' Whatman 541, lot# 97694417	
Relinquished to ICP group ICP	

Pipettes

Vol.(mL)	ID
.5	N271509
5	2144426Z
1.5	2144426Z

4-7-17

Digestion Chemist / Date

Continued from page Ø

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Reviewed Online/ See LIMS

Laboratory Job Number 287500

ANALYTICAL REPORT

Metals

Matrix: SPLP Leachate

Curtis & Tompkins, Ltd.

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/29/17
Units:	mg/L	Prepared:	05/05/17

Field ID	Type	Lab ID	Result	RL	Batch#	Chemist	Sampled	Analyzed
21-SS152	SAMPLE	287500-001	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS153	SAMPLE	287500-002	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS155	SAMPLE	287500-003	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS164	SAMPLE	287500-004	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS165	SAMPLE	287500-005	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS166	SAMPLE	287500-006	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS167	SAMPLE	287500-007	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS168	SAMPLE	287500-008	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS169	SAMPLE	287500-009	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS170	SAMPLE	287500-010	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS171	SAMPLE	287500-011	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS172	SAMPLE	287500-012	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS173	SAMPLE	287500-013	ND	0.0050	247529	TLO	03/23/17	05/09/17
21-SS175	SAMPLE	287500-014	ND	0.0050	247528	MNA	03/27/17	05/08/17
21-SS176	SAMPLE	287500-015	ND	0.0050	247529	TLO	03/27/17	05/09/17
21-SS177	SAMPLE	287500-016	ND	0.0050	247529	TLO	03/27/17	05/09/17
21-SS178	SAMPLE	287500-017	ND	0.0050	247529	TLO	03/27/17	05/09/17
21-SS179	SAMPLE	287500-018	ND	0.0050	247529	TLO	03/27/17	05/09/17
21-SS180	SAMPLE	287500-019	ND	0.0050	247529	TLO	03/27/17	05/09/17
21-SS181	SAMPLE	287500-020	ND	0.0050	247528	MNA	03/27/17	05/08/17
21-SS182	SAMPLE	287500-021	ND	0.0050	247528	MNA	03/27/17	05/08/17
21-SS183	SAMPLE	287500-022	ND	0.0050	247528	MNA	03/23/17	05/08/17
	BLANK	QC884822	ND	0.0050	247528	MNA		05/08/17
	BLANK	QC884827	ND	0.0050	247528	MNA		05/08/17
	BLANK	QC884830	ND	0.0050	247529	TLO		05/09/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	03/29/17
Units:	mg/L	Prepared:	05/05/17

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Chemist	Sampled	Analyzed
	BS		QC884823		0.1000	0.1002	100	77-120			247528	MNA		05/08/17
	BSD		QC884824		0.1000	0.1002	100	77-120	0	20	247528	MNA		05/08/17
21-SS175	MS	287500-014	QC884825	<0.001185	0.1000	0.09918	99	56-127			247528	MNA	03/27/17	05/08/17
21-SS175	MSD	287500-014	QC884826		0.1000	0.1014	101	56-127	2	33	247528	MNA	03/27/17	05/08/17
	BS		QC884831		0.1000	0.1056	106	77-120			247529	TLO		05/09/17
	BSD		QC884832		0.1000	0.09983	100	77-120	6	20	247529	TLO		05/09/17
21-SS155	MS	287500-003	QC884833	<0.001185	0.1000	0.1014	101	56-127			247529	TLO	03/23/17	05/09/17
21-SS155	MSD	287500-003	QC884834		0.1000	0.1025	102	56-127	1	33	247529	TLO	03/23/17	05/09/17

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS175	Batch#:	247528
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287500-014	Sampled:	03/27/17
Lab ID:	QC884828	Received:	03/29/17
Matrix:	SPLP Leachate	Analyzed:	05/08/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS175	Batch#:	247528
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287500-014	Sampled:	03/27/17
Lab ID:	QC884829	Received:	03/29/17
Matrix:	SPLP Leachate	Analyzed:	05/08/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1028	103	75-125

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS155	Batch#:	247529
Type:	Serial Dilution	Chemist:	TLO
MSS Lab ID:	287500-003	Sampled:	03/23/17
Lab ID:	QC884835	Received:	03/29/17
Matrix:	SPLP Leachate	Analyzed:	05/09/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287500	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS155	Batch#:	247529
Type:	Post Digest Spike	Chemist:	TLO
MSS Lab ID:	287500-003	Sampled:	03/23/17
Lab ID:	QC884836	Received:	03/29/17
Matrix:	SPLP Leachate	Analyzed:	05/09/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1065	106	75-125

REPORTING SUMMARY FOR 287500 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287500-001	MET10	05/09/17 04:41	1.0	+
287500-002	MET10	05/09/17 04:51	1.0	+
287500-003	MET10	05/09/17 04:28	1.0	+
287500-004	MET10	05/09/17 04:54	1.0	+
287500-005	MET10	05/09/17 04:58	1.0	+
287500-006	MET10	05/09/17 05:01	1.0	+
287500-007	MET10	05/09/17 05:04	1.0	+
287500-008	MET10	05/09/17 05:08	1.0	+
287500-009	MET10	05/09/17 05:11	1.0	+
287500-010	MET10	05/09/17 05:15	1.0	+
287500-011	MET10	05/09/17 05:18	1.0	+
287500-012	MET10	05/09/17 05:21	1.0	+
287500-013	MET10	05/09/17 05:31	1.0	+
287500-014	MET10	05/08/17 17:18	1.0	+
287500-015	MET10	05/09/17 05:34	1.0	+
287500-016	MET10	05/09/17 05:38	1.0	+
287500-017	MET10	05/09/17 05:41	1.0	+
287500-018	MET10	05/09/17 05:44	1.0	+
287500-019	MET10	05/09/17 05:48	1.0	+
287500-020	MET10	05/08/17 18:00	1.0	+
287500-021	MET10	05/08/17 18:03	1.0	+
287500-022	MET10	05/08/17 18:06	1.0	+
QC884822	MET10	05/08/17 17:10	1.0	+
QC884823	MET10	05/08/17 17:13	1.0	+
QC884824	MET10	05/08/17 17:16	1.0	+
QC884825	MET10	05/08/17 17:22	1.0	+
QC884826	MET10	05/08/17 17:24	1.0	+

REPORTING SUMMARY FOR 287500 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC884827	MET10	05/08/17 17:26	1.0	+	
QC884828	MET10	05/08/17 17:30	5.0	+	
QC884829	MET10	05/08/17 17:33	1.0	+	
QC884830	MET10	05/09/17 04:19	1.0	+	
QC884831	MET10	05/09/17 04:23	1.0	+	
QC884832	MET10	05/09/17 04:25	1.0	+	
QC884833	MET10	05/09/17 04:31	1.0	+	
QC884834	MET10	05/09/17 04:33	1.0	+	
QC884835	MET10	05/09/17 04:36	5.0	+	
QC884836	MET10	05/09/17 04:39	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185135

Instrument : MET10
Method : EPA 6010C

Begun : 05/08/17 13:35
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				05/08/17 13:35	1.0		
002	met10 method	ICAL	L1			05/08/17 13:38	1.0	1	
003	met10 method	ICAL	L2			05/08/17 13:42	1.0	2	
004	met10 method	ICAL	L3			05/08/17 13:44	1.0	3	
005	met10 method	ICAL	L4			05/08/17 13:46	1.0	4	
006	met10 method	ICAL	L5			05/08/17 13:49	1.0	5	
007	met10 method	ICV				05/08/17 13:52	1.0	6	
008	met10 method	CRI				05/08/17 13:55	1.0	7	
009	met10 method	ICB				05/08/17 13:58	1.0		
010	met10 method	ICSA				05/08/17 14:01	1.0	8	10:AL=540000
011	met10 method	ICSAB				05/08/17 14:09	1.0	9	5:AL=530000
012	met10 method	X	RINSE			05/08/17 14:12	1.0		
013	met10 method	SAMPLE	288352-007	Soil	247493	05/08/17 14:15	100.0		
014	met10 method	MSS	288352-001	Soil	247493	05/08/17 14:18	1.0		6:FE=460000
015	met10 method	MS	QC884700	Soil	247493	05/08/17 14:26	1.0		1:FE=430000
016	met10 method	MSD	QC884701	Soil	247493	05/08/17 14:29	1.0		2:FE=540000
017	met10 method	SAMPLE	288352-002	Soil	247493	05/08/17 14:32	1.0		4:FE=420000
018	met10 method	SAMPLE	288352-003	Soil	247493	05/08/17 14:35	1.0		6:FE=700000
019	met10 method	SAMPLE	288352-007	Soil	247493	05/08/17 14:38	1.0		8:CA=590000
020	met10 method	SAMPLE	288352-004	Soil	247493	05/08/17 14:42	1.0		6:FE=640000
021	met10 method	SAMPLE	288352-008	Soil	247493	05/08/17 14:45	1.0		4:FE=510000
022	met10 method	CCV				05/08/17 14:48	1.0	10	
023	met10 method	CCB				05/08/17 14:51	1.0		
024	met10 method	SAMPLE	288352-009	Soil	247493	05/08/17 14:54	1.0		6:FE=700000
025	met10 method	SAMPLE	288352-010	Soil	247493	05/08/17 14:57	1.0		6:FE=670000
026	met10 method	SAMPLE	288352-013	Soil	247493	05/08/17 15:00	1.0		6:FE=470000
027	met10 method	SAMPLE	288352-014	Soil	247493	05/08/17 15:04	1.0		5:FE=620000
028	met10 method	SAMPLE	288352-015	Soil	247493	05/08/17 15:07	1.0		7:FE=690000
029	met10 method	SAMPLE	288352-016	Soil	247493	05/08/17 15:10	1.0		6:FE=730000
030	met10 method	SAMPLE	288352-019	Soil	247493	05/08/17 15:13	1.0		5:FE=430000
031	met10 method	SAMPLE	288352-020	Soil	247493	05/08/17 15:16	1.0		4:FE=570000
032	met10 method	SAMPLE	288352-021	Soil	247493	05/08/17 15:19	1.0		5:FE=590000
033	met10 method	SAMPLE	288352-022	Soil	247493	05/08/17 15:22	1.0		6:FE=580000
034	met10 method	CCV				05/08/17 15:25	1.0	10	
035	met10 method	XCCB				05/08/17 15:28	1.0		
036	met10 method	CCB				05/08/17 15:30	1.0		
037	met10 method	SAMPLE	288352-025	Soil	247493	05/08/17 15:34	1.0		3:FE=390000
038	met10 method	SAMPLE	288352-026	Soil	247493	05/08/17 15:37	1.0		5:FE=650000
039	met10 method	SAMPLE	288352-027	Soil	247493	05/08/17 15:40	1.0		6:FE=810000
040	met10 method	SAMPLE	288352-028	Soil	247493	05/08/17 15:43	1.0		6:FE=720000
041	met10 method	X	RINSE			05/08/17 15:46	1.0		
042	met10 method	BLANK	QC884877	Soil	247544	05/08/17 15:49	1.0		
043	met10 method	LCS	QC884878	Soil	247544	05/08/17 15:52	1.0		1:SR=7500
044	met10 method	MSS	288117-014	Soil	247544	05/08/17 15:54	1.0		8:FE=690000
045	met10 method	MS	QC884879	Soil	247544	05/08/17 15:58	1.0		1:FE=750000
046	met10 method	MSD	QC884880	Soil	247544	05/08/17 16:01	1.0		
047	met10 method	CCV				05/08/17 16:05	1.0	10	
048	met10 method	XCCB				05/08/17 16:07	1.0		
049	met10 method	CCB				05/08/17 16:10	1.0		
050	met10 method	SER	QC884881	Soil	247544	05/08/17 16:14	5.0		
051	met10 method	PDS	QC884882	Soil	247544	05/08/17 16:16	1.0	11 12 13	8:FE=700000
052	met10 method	SAMPLE	288013-005	Soil	247544	05/08/17 16:20	1.0		8:CA=1000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185135

Instrument : MET10 Begun : 05/08/17 13:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	288069-006	Soil	247544	05/08/17 16:23	1.0		7:CA=1000000
054	met10 method	SAMPLE	288117-001	Soil	247544	05/08/17 16:26	1.0		7:FE=890000
055	met10 method	SAMPLE	288117-002	Soil	247544	05/08/17 16:30	1.0		7:FE=1000000
056	met10 method	SAMPLE	288117-003	Soil	247544	05/08/17 16:33	1.0		7:FE=900000
057	met10 method	SAMPLE	288117-004	Soil	247544	05/08/17 16:37	1.0		8:CA=860000
058	met10 method	SAMPLE	288117-005	Soil	247544	05/08/17 16:40	1.0		8:CA=1400000
059	met10 method	SAMPLE	288117-007	Soil	247544	05/08/17 16:43	1.0		8:CA=930000
060	met10 method	CCV				05/08/17 16:46	1.0	10	
061	met10 method	XCCB				05/08/17 16:49	1.0		
062	met10 method	CCB				05/08/17 16:51	1.0		
063	met10 method	CCV				05/08/17 16:56	1.0	10	
064	met10 method	XCCB				05/08/17 16:59	1.0		
065	met10 method	CCB				05/08/17 17:02	1.0		
066	met10 method	X	RINSE			05/08/17 17:07	1.0		
067	met10 method	BLANK	QC884822	SPLP Leachate	247528	05/08/17 17:10	1.0		
068	met10 method	BS	QC884823	SPLP Leachate	247528	05/08/17 17:13	1.0		
069	met10 method	BSD	QC884824	SPLP Leachate	247528	05/08/17 17:16	1.0		
070	met10 method	MSS	287500-014	SPLP Leachate	247528	05/08/17 17:18	1.0		
071	met10 method	MS	QC884825	SPLP Leachate	247528	05/08/17 17:22	1.0		
072	met10 method	MSD	QC884826	SPLP Leachate	247528	05/08/17 17:24	1.0		
073	met10 method	BLANK	QC884827	SPLP Leachate	247528	05/08/17 17:26	1.0		
074	met10 method	SER	QC884828	SPLP Leachate	247528	05/08/17 17:30	5.0		
075	met10 method	PDS	QC884829	SPLP Leachate	247528	05/08/17 17:33	1.0	11 12 13	1:P=10000
076	met10 method	CCV				05/08/17 17:36	1.0	10	
077	met10 method	CCB				05/08/17 17:38	1.0		
078	met10 method	SAMPLE	287362-041	SPLP Leachate	247528	05/08/17 17:42	1.0		
079	met10 method	SAMPLE	287362-042	SPLP Leachate	247528	05/08/17 17:45	1.0		
080	met10 method	SAMPLE	287362-043	SPLP Leachate	247528	05/08/17 17:48	1.0		
081	met10 method	SAMPLE	287362-044	SPLP Leachate	247528	05/08/17 17:52	1.0		
082	met10 method	SAMPLE	287362-045	SPLP Leachate	247528	05/08/17 17:54	1.0		
083	met10 method	SAMPLE	287362-046	SPLP Leachate	247528	05/08/17 17:58	1.0		
084	met10 method	SAMPLE	287500-020	SPLP Leachate	247528	05/08/17 18:00	1.0		
085	met10 method	SAMPLE	287500-021	SPLP Leachate	247528	05/08/17 18:03	1.0		
086	met10 method	SAMPLE	287500-022	SPLP Leachate	247528	05/08/17 18:06	1.0		
087	met10 method	X	RINSE			05/08/17 18:09	1.0		
088	met10 method	CCV				05/08/17 18:13	1.0	10	
089	met10 method	CCB				05/08/17 18:15	1.0		
090	met10 method	BLANK	QC884815	SPLP Leachate	247527	05/08/17 18:19	1.0		
091	met10 method	BS	QC884816	SPLP Leachate	247527	05/08/17 18:22	1.0		
092	met10 method	BSD	QC884817	SPLP Leachate	247527	05/08/17 18:25	1.0		
093	met10 method	MSS	287362-021	SPLP Leachate	247527	05/08/17 18:27	1.0		
094	met10 method	MS	QC884818	SPLP Leachate	247527	05/08/17 18:30	1.0		
095	met10 method	MSD	QC884819	SPLP Leachate	247527	05/08/17 18:33	1.0		
096	met10 method	SER	QC884820	SPLP Leachate	247527	05/08/17 18:35	5.0		
097	met10 method	PDS	QC884821	SPLP Leachate	247527	05/08/17 18:39	1.0	11 12 13	1:P=10000
098	met10 method	SAMPLE	287362-022	SPLP Leachate	247527	05/08/17 18:41	1.0		
099	met10 method	SAMPLE	287362-023	SPLP Leachate	247527	05/08/17 18:44	1.0		
100	met10 method	CCV				05/08/17 18:48	1.0	10	
101	met10 method	CCB				05/08/17 18:51	1.0		
102	met10 method	SAMPLE	287362-024	SPLP Leachate	247527	05/08/17 18:54	1.0		
103	met10 method	SAMPLE	287362-025	SPLP Leachate	247527	05/08/17 18:58	1.0		
104	met10 method	SAMPLE	287362-026	SPLP Leachate	247527	05/08/17 19:01	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185135

Instrument : MET10 Begun : 05/08/17 13:35
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	287362-027	SPLP Leachate	247527	05/08/17 19:04	1.0		
106	met10 method	SAMPLE	287362-028	SPLP Leachate	247527	05/08/17 19:08	1.0		
107	met10 method	SAMPLE	287362-029	SPLP Leachate	247527	05/08/17 19:11	1.0		
108	met10 method	SAMPLE	287362-030	SPLP Leachate	247527	05/08/17 19:15	1.0		
109	met10 method	SAMPLE	287362-031	SPLP Leachate	247527	05/08/17 19:18	1.0		
110	met10 method	SAMPLE	287362-032	SPLP Leachate	247527	05/08/17 19:20	1.0		
111	met10 method	SAMPLE	287362-033	SPLP Leachate	247527	05/08/17 19:23	1.0		
112	met10 method	CCV				05/08/17 19:26	1.0	10	
113	met10 method	CCB				05/08/17 19:29	1.0		
114	met10 method	SAMPLE	287362-034	SPLP Leachate	247527	05/08/17 19:32	1.0		
115	met10 method	SAMPLE	287362-035	SPLP Leachate	247527	05/08/17 19:36	1.0		
116	met10 method	SAMPLE	287362-036	SPLP Leachate	247527	05/08/17 19:38	1.0		
117	met10 method	SAMPLE	287362-037	SPLP Leachate	247527	05/08/17 19:42	1.0		
118	met10 method	SAMPLE	287362-038	SPLP Leachate	247527	05/08/17 19:45	1.0		
119	met10 method	SAMPLE	287362-039	SPLP Leachate	247527	05/08/17 19:47	1.0		
120	met10 method	SAMPLE	287362-040	SPLP Leachate	247527	05/08/17 19:51	1.0		
121	met10 method	CCV				05/08/17 19:54	1.0	10	
122	met10 method	CCB				05/08/17 19:57	1.0		

TLO 05/08/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 26.

MNA 05/09/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 27 through 122.

Standards used: 1=S32935 2=S32571 3=S32367 4=S32368 5=S32937 6=S32523 7=S32936 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087185135

Date : 05/08/17 Reference : met10 method
Sequence : MET10 05/08/17 Analyzed : 05/08/17 13:38

#	Type	Sample ID	Y A	Y R
		ICAL STD	14163852	811293
		LOWER LIMIT	4249156	243388
		UPPER LIMIT	16996623	973551
009	ICB		14461971	831690
010	ICSA		10867943	682720
011	ICSAB		10940257	688987
063	CCV		12711983	776389
065	CCB		14173543	842443
067	BLANK	QC884822	14623426	847786
068	BS	QC884823	13227858	805452
069	BSD	QC884824	13433735	806234
070	MSS	287500-014	14573948	845898
071	MS	QC884825	13310039	806353
072	MSD	QC884826	13456569	811987
073	BLANK	QC884827	14636654	864200
074	SER	QC884828	14391795	842961
075	PDS	QC884829	13473680	792930
076	CCV		12866380	778015
077	CCB		14232026	833255
078	SAMPLE	287362-041	14675408	855352
079	SAMPLE	287362-042	14321698	850714
080	SAMPLE	287362-043	14238098	831996
081	SAMPLE	287362-044	14301513	833606
082	SAMPLE	287362-045	14101671	851968
083	SAMPLE	287362-046	14350382	852575
084	SAMPLE	287500-020	14109280	840365
085	SAMPLE	287500-021	14356647	827598
086	SAMPLE	287500-022	14433434	848389
088	CCV		12872026	785207
089	CCB		14237802	821997
093	MSS	287362-021	14374836	829893
098	SAMPLE	287362-022	14210782	842261
099	SAMPLE	287362-023	14043703	856521
100	CCV		12871879	776007
101	CCB		14405976	820798
102	SAMPLE	287362-024	13947388	832220
103	SAMPLE	287362-025	14303149	858059
104	SAMPLE	287362-026	14622064	853352
105	SAMPLE	287362-027	14123757	856811
106	SAMPLE	287362-028	14186512	851858
107	SAMPLE	287362-029	14258855	836780
108	SAMPLE	287362-030	14356881	850826
109	SAMPLE	287362-031	13977733	845050
110	SAMPLE	287362-032	13625395	826806
111	SAMPLE	287362-033	14245019	831377
112	CCV		12807377	772034
113	CCB		14300399	841457
114	SAMPLE	287362-034	14223603	848109
115	SAMPLE	287362-035	14034470	840569
116	SAMPLE	287362-036	14239707	841310
117	SAMPLE	287362-037	14342894	831340

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087185135

Date : 05/08/17 Reference : met10 method
Sequence : MET10 05/08/17 Analyzed : 05/08/17 13:38

#	Type	Sample ID	Y A	Y R
118	SAMPLE	287362-038	14123877	845709
119	SAMPLE	287362-039	14098708	812149
120	SAMPLE	287362-040	14145734	834685
121	CCV		12783269	763764
122	CCB		14278861	821023

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087185135001
Units : ug/L

Date : 08-MAY-2017 13:35
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087185135002	L1	08-MAY-2017 13:38	S32935
L2	met10 method	1087185135003	L2	08-MAY-2017 13:42	S32571
L3	met10 method	1087185135004	L3	08-MAY-2017 13:44	S32367
L4	met10 method	1087185135005	L4	08-MAY-2017 13:46	S32368
L5	met10 method	1087185135006	L5	08-MAY-2017 13:49	S32937

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	7.3200	6.7370	6.6313	6.5911		LOR0	0.00000	0.15171		6.8198	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	11	100.00	2	1000.0	1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087185135001 Cal Date : 08-MAY-2017

ICV 1087185135007 (08-MAY-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4971	ug/L	-1	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135008.1 File : met10 method Time : 08-MAY-2017 13:55
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32936

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.197	ug/L	24	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14198059	0.24
Yttrium	R	811293	820155	1.09

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135009.1 File : met10 method Time : 08-MAY-2017 13:58
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14461971	2.10
Yttrium	R	811293	831690	2.51

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135010.1 File : met10 method Time : 08-MAY-2017 14:01
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[2.163]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19860	ug/L	99	
Copper	A	20000	21260	ug/L	106	
Manganese	A	20000	18640	ug/L	93	
Nickel	A	20000	17490	ug/L	87	
Titanium	A	20000	19810	ug/L	99	
Vanadium	A	20000	22530	ug/L	113	
Aluminum	R	500000	544600	ug/L	109	
Calcium	R	500000	505000	ug/L	101	
Iron	R	200000	193700	ug/L	97	
Magnesium	R	500000	415300	ug/L	83	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	10867943	-23.27
Yttrium	R	811293	682720	-15.85

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135011.1 File : met10 method Time : 08-MAY-2017 14:09
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	985.4	ug/L	-1	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	10940257	-22.76
Yttrium	R	811293	688987	-15.08

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135063.1 File : met10 method Time : 08-MAY-2017 16:56
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3607	5000	4825	ug/L	-4	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12711983	-10.25
Yttrium	R	811293	776389	-4.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135065.1 File : met10 method Time : 08-MAY-2017 17:02
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14173543	0.07
Yttrium	R	811293	842443	3.84

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135076.1 File : met10 method Time : 08-MAY-2017 17:36
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3911	5000	4848	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12866380	-9.16
Yttrium	R	811293	778015	-4.10

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135077.1 File : met10 method Time : 08-MAY-2017 17:38
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14232026	0.48
Yttrium	R	811293	833255	2.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135088.1 File : met10 method Time : 08-MAY-2017 18:13
Cal : 1087185135001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.8198	6.3714	5000	4833	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	12872026	-9.12
Yttrium	R	811293	785207	-3.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185135089.1 File : met10 method Time : 08-MAY-2017 18:15
Cal : 1087185135001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14163852	14237802	0.52
Yttrium	R	811293	821997	1.32

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185522

Instrument : MET10
Method : EPA 6010C

Begun : 05/08/17 20:02
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				05/08/17 20:02	1.0		
002	met10 method	ICAL	L1			05/08/17 20:05	1.0	1	
003	met10 method	ICAL	L2			05/08/17 20:09	1.0	2	
004	met10 method	ICAL	L3			05/08/17 20:11	1.0	3	
005	met10 method	ICAL	L4			05/08/17 20:14	1.0	4	
006	met10 method	ICAL	L5			05/08/17 20:16	1.0	5	
007	met10 method	XICV				05/08/17 20:19	1.0	6	
008	met10 method	ICV				05/08/17 20:22	1.0	6	
009	met10 method	XCRI				05/08/17 20:24	1.0	7	
010	met10 method	CRI				05/08/17 20:28	1.0	7	
011	met10 method	ICB				05/08/17 20:31	1.0		
012	met10 method	ICSA				05/08/17 20:35	1.0	8	10:AL=530000
013	met10 method	ICSAB				05/08/17 20:37	1.0	9	5:AL=510000
014	met10 method	X	RINSE			05/08/17 21:06	1.0		
015	met10 method	SAMPLE	288117-006	Soil	247544	05/08/17 21:09	1.0		8:CA=1200000
016	met10 method	SAMPLE	288117-008	Soil	247544	05/08/17 21:12	1.0		8:CA=900000
017	met10 method	SAMPLE	288117-009	Soil	247544	05/08/17 21:15	1.0		8:CA=880000
018	met10 method	SAMPLE	288117-010	Soil	247544	05/08/17 21:19	1.0		11:FE=810000
019	met10 method	SAMPLE	288117-011	Soil	247544	05/08/17 21:22	1.0		8:FE=970000
020	met10 method	SAMPLE	288117-012	Soil	247544	05/08/17 21:26	1.0		8:FE=910000
021	met10 method	SAMPLE	288117-013	Soil	247544	05/08/17 21:29	1.0		9:FE=710000
022	met10 method	X	RINSE			05/08/17 21:32	1.0		
023	met10 method	SAMPLE	288352-032	Soil	247543	05/08/17 21:36	1.0		4:FE=680000
024	met10 method	CCV				05/08/17 21:39	1.0	10	
025	met10 method	CCB				05/08/17 21:42	1.0		
026	met10 method	SAMPLE	288352-033	Soil	247543	05/08/17 21:45	1.0		6:FE=790000
027	met10 method	SAMPLE	288352-034	Soil	247543	05/08/17 21:48	1.0		6:FE=650000
028	met10 method	SAMPLE	288404-031	Soil	247543	05/08/17 21:52	1.0		5:FE=1200000
029	met10 method	SAMPLE	288404-032	Soil	247543	05/08/17 21:55	1.0		5:FE=660000
030	met10 method	SAMPLE	288404-033	Soil	247543	05/08/17 21:58	1.0		6:FE=740000
031	met10 method	SAMPLE	288404-034	Soil	247543	05/08/17 22:01	1.0		6:FE=670000
032	met10 method	SAMPLE	288404-037	Soil	247543	05/08/17 22:05	1.0		7:FE=510000
033	met10 method	SAMPLE	288404-038	Soil	247543	05/08/17 22:08	1.0		3:FE=460000
034	met10 method	SAMPLE	288404-039	Soil	247543	05/08/17 22:11	1.0		6:FE=740000
035	met10 method	SAMPLE	288404-040	Soil	247543	05/08/17 22:14	1.0		5:FE=540000
036	met10 method	CCV				05/08/17 22:17	1.0	10	
037	met10 method	XCCB				05/08/17 22:20	1.0		
038	met10 method	CCB				05/08/17 22:23	1.0		
039	met10 method	SAMPLE	288404-043	Soil	247543	05/08/17 22:26	1.0		5:FE=410000
040	met10 method	SAMPLE	288404-044	Soil	247543	05/08/17 22:29	1.0		5:FE=430000
041	met10 method	SAMPLE	288404-045	Soil	247543	05/08/17 22:32	1.0		6:FE=750000
042	met10 method	SAMPLE	288404-046	Soil	247543	05/08/17 22:35	1.0		4:FE=480000
043	met10 method	X	RINSE			05/08/17 22:38	1.0		
044	met10 method	BLANK	QC884928	Water	247558	05/08/17 22:42	1.0		
045	met10 method	BS	QC884929	Water	247558	05/08/17 22:45	1.0		1:P=10000
046	met10 method	BSD	QC884930	Water	247558	05/08/17 22:47	1.0		
047	met10 method	MSS	288629-003	Water	247558	05/08/17 22:50	1.0		3:NA=410000
048	met10 method	MS	QC884931	Water	247558	05/08/17 22:52	1.0		
049	met10 method	CCV				05/08/17 22:55	1.0	10	
050	met10 method	XCCB				05/08/17 22:58	1.0		
051	met10 method	CCB				05/08/17 23:01	1.0		
052	met10 method	MSD	QC884932	Water	247558	05/08/17 23:04	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185522

Instrument : MET10 Begun : 05/08/17 20:02
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	288603-003	Water	247558	05/08/17 23:07	1.0		1:CA=200000
054	met10 method	SAMPLE	288603-004	Water	247558	05/08/17 23:10	1.0		1:CA=180000
055	met10 method	SAMPLE	288603-005	Water	247558	05/08/17 23:12	1.0		1:CA=160000
056	met10 method	SAMPLE	288603-006	Water	247558	05/08/17 23:15	1.0		1:CA=130000
057	met10 method	SAMPLE	288603-007	Water	247558	05/08/17 23:18	1.0		1:CA=160000
058	met10 method	SAMPLE	288603-008	Water	247558	05/08/17 23:20	1.0		1:CA=160000
059	met10 method	SAMPLE	288603-009	Water	247558	05/08/17 23:23	1.0		1:CA=160000
060	met10 method	SAMPLE	288603-010	Water	247558	05/08/17 23:26	1.0		1:CA=140000
061	met10 method	SAMPLE	288603-011	Water	247558	05/08/17 23:28	1.0		5:FE=270000
062	met10 method	CCV				05/08/17 23:31	1.0	10	
063	met10 method	XCCB				05/08/17 23:34	1.0		
064	met10 method	CCB				05/08/17 23:37	1.0		
065	met10 method	SAMPLE	288603-012	Water	247558	05/08/17 23:40	1.0		1:CA=130000
066	met10 method	SAMPLE	288608-004	Water	247558	05/08/17 23:43	1.0		1:NA=310000
067	met10 method	SAMPLE	288629-001	Water	247558	05/08/17 23:46	1.0		3:NA=400000
068	met10 method	X	RINSE			05/08/17 23:48	1.0		
069	met10 method	BLANK	QC884983	Soil	247570	05/08/17 23:52	1.0		
070	met10 method	BS	QC884984	Soil	247570	05/08/17 23:55	1.0		2:P=10000
071	met10 method	BSD	QC884985	Soil	247570	05/08/17 23:58	1.0		1:SR=9300
072	met10 method	MSS	288619-001	Soil	247570	05/09/17 00:00	1.0		3:FE=250000
073	met10 method	MS	QC884986	Soil	247570	05/09/17 00:03	1.0		1:FE=270000
074	met10 method	MSD	QC884987	Soil	247570	05/09/17 00:06	1.0		2:FE=270000
075	met10 method	CCV				05/09/17 00:09	1.0	10	
076	met10 method	CCB				05/09/17 00:12	1.0		
077	met10 method	SER	QC884988	Soil	247570	05/09/17 00:15	5.0		
078	met10 method	PDS	QC884989	Soil	247570	05/09/17 00:18	1.0	11 12 13	5:FE=250000
079	met10 method	SAMPLE	288346-001	Miscell.	247570	05/09/17 00:21	1.0		
080	met10 method	SAMPLE	288347-001	Miscell.	247570	05/09/17 00:23	1.0		
081	met10 method	SAMPLE	288369-002	Soil	247570	05/09/17 00:26	1.0		7:FE=380000
082	met10 method	SAMPLE	288438-001	Soil	247570	05/09/17 00:28	1.0		10:CA=1500000
083	met10 method	SAMPLE	288438-002	Soil	247570	05/09/17 00:31	1.0		7:CA=400000
084	met10 method	SAMPLE	288450-008	Soil	247570	05/09/17 00:35	1.0		2:FE=360000
085	met10 method	SAMPLE	288450-009	Soil	247570	05/09/17 00:38	1.0		5:FE=430000
086	met10 method	SAMPLE	288495-005	Soil	247570	05/09/17 00:44	1.0		5:CA=290000
087	met10 method	CCV				05/09/17 00:47	1.0	10	
088	met10 method	XCCB				05/09/17 00:50	1.0		
089	met10 method	CCB				05/09/17 00:52	1.0		
090	met10 method	SAMPLE	288495-010	Soil	247570	05/09/17 00:56	1.0		2:FE=140000
091	met10 method	SAMPLE	288521-001	Soil	247570	05/09/17 00:59	1.0		6:AL=300000
092	met10 method	SAMPLE	288544-001	Soil	247570	05/09/17 01:02	1.0		5:FE=590000
093	met10 method	SAMPLE	288605-006	Soil	247570	05/09/17 01:05	1.0		5:FE=620000
094	met10 method	SAMPLE	288606-005	Soil	247570	05/09/17 01:08	1.0		4:FE=330000
095	met10 method	SAMPLE	288606-010	Soil	247570	05/09/17 01:11	1.0		5:FE=330000
096	met10 method	SAMPLE	288619-002	Soil	247570	05/09/17 01:14	1.0		4:FE=260000
097	met10 method	SAMPLE	288619-003	Soil	247570	05/09/17 01:22	1.0		2:FE=220000
098	met10 method	SAMPLE	288619-004	Soil	247570	05/09/17 01:24	1.0		2:FE=230000
099	met10 method	X	RINSE			05/09/17 01:27	1.0		
100	met10 method	CCV				05/09/17 01:30	1.0	10	
101	met10 method	CCB				05/09/17 01:33	1.0		
102	met10 method	CCV				05/09/17 01:37	1.0	10	
103	met10 method	CCB				05/09/17 01:40	1.0		
104	met10 method	CCB				05/09/17 01:43	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185522

Instrument : MET10 Begun : 05/08/17 20:02
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BLANK	QC884755	Water	247511	05/09/17 01:46	1.0		
106	met10 method	BS	QC884756	Water	247511	05/09/17 01:50	1.0		1:P=10000
107	met10 method	BSD	QC884757	Water	247511	05/09/17 01:52	1.0		1:P=10000
108	met10 method	MSS	288225-001	Water	247511	05/09/17 01:54	1.0		
109	met10 method	SER	QC884758	Water	247511	05/09/17 01:58	5.0		
110	met10 method	PDS	QC884759	Water	247511	05/09/17 02:01	1.0	11 12 13	1:P=11000
111	met10 method	X	RINSE			05/09/17 02:04	1.0		
112	met10 method	BLANK	QC884731	Water	247504	05/09/17 02:07	1.0		
113	met10 method	BS	QC884732	Water	247504	05/09/17 02:10	1.0		
114	met10 method	BSD	QC884733	Water	247504	05/09/17 02:14	1.0		
115	met10 method	CCV				05/09/17 02:17	1.0	10	
116	met10 method	CCB				05/09/17 02:20	1.0		
117	met10 method	CCB				05/09/17 02:23	1.0		
118	met10 method	SAMPLE	288285-001	Water	247504	05/09/17 02:26	1.0		1:B=11000
119	met10 method	SAMPLE	288285-002	Water	247504	05/09/17 02:29	1.0		1:B=11000
120	met10 method	SAMPLE	288285-003	Water	247504	05/09/17 02:32	1.0		
121	met10 method	X	RINSE			05/09/17 02:35	1.0		
122	met10 method	BLANK	QC884933	Soil	247559	05/09/17 02:38	1.0		
123	met10 method	BS	QC884934	Soil	247559	05/09/17 02:41	1.0		2:P=11000
124	met10 method	BSD	QC884935	Soil	247559	05/09/17 02:44	1.0		2:P=10000
125	met10 method	MSS	288404-001	Soil	247559	05/09/17 02:46	1.0		3:FE=380000
126	met10 method	MS	QC884936	Soil	247559	05/09/17 02:50	1.0		1:FE=370000
127	met10 method	MSD	QC884937	Soil	247559	05/09/17 02:53	1.0		2:FE=370000
128	met10 method	CCV				05/09/17 02:56	1.0	10	
129	met10 method	CCB				05/09/17 02:59	1.0		
130	met10 method	SAMPLE	288404-002	Soil	247559	05/09/17 03:02	1.0		3:FE=550000
131	met10 method	SAMPLE	288404-003	Soil	247559	05/09/17 03:05	1.0		6:FE=600000
132	met10 method	SAMPLE	288404-004	Soil	247559	05/09/17 03:08	1.0		7:FE=580000
133	met10 method	SAMPLE	288404-007	Soil	247559	05/09/17 03:11	1.0		5:FE=400000
134	met10 method	SAMPLE	288404-008	Soil	247559	05/09/17 03:14	1.0		2:FE=440000
135	met10 method	SAMPLE	288404-009	Soil	247559	05/09/17 03:17	1.0		6:FE=580000
136	met10 method	SAMPLE	288404-010	Soil	247559	05/09/17 03:21	1.0		7:FE=700000
137	met10 method	SAMPLE	288404-013	Soil	247559	05/09/17 03:24	1.0		4:FE=320000
138	met10 method	SAMPLE	288404-014	Soil	247559	05/09/17 03:27	1.0		3:FE=370000
139	met10 method	SAMPLE	288404-015	Soil	247559	05/09/17 03:30	1.0		3:FE=300000
140	met10 method	CCV				05/09/17 03:32	1.0	10	
141	met10 method	CCB				05/09/17 03:35	1.0		
142	met10 method	SAMPLE	288404-016	Soil	247559	05/09/17 03:39	1.0		6:FE=590000
143	met10 method	SAMPLE	288404-019	Soil	247559	05/09/17 03:42	1.0		4:FE=390000
144	met10 method	SAMPLE	288404-020	Soil	247559	05/09/17 03:45	1.0		5:FE=600000
145	met10 method	SAMPLE	288404-021	Soil	247559	05/09/17 03:48	1.0		6:FE=660000
146	met10 method	SAMPLE	288404-022	Soil	247559	05/09/17 03:51	1.0		6:FE=610000
147	met10 method	SAMPLE	288404-025	Soil	247559	05/09/17 03:54	1.0		6:FE=460000
148	met10 method	SAMPLE	288404-026	Soil	247559	05/09/17 03:57	1.0		6:FE=570000
149	met10 method	SAMPLE	288404-027	Soil	247559	05/09/17 04:00	1.0		5:FE=450000
150	met10 method	SAMPLE	288404-028	Soil	247559	05/09/17 04:03	1.0		6:FE=610000
151	met10 method	X	RINSE			05/09/17 04:06	1.0		
152	met10 method	CCV				05/09/17 04:10	1.0	10	
153	met10 method	CCB				05/09/17 04:13	1.0		
154	met10 method	X	RINSE			05/09/17 04:16	1.0		
155	met10 method	BLANK	QC884830	SPLP Leachate	247529	05/09/17 04:19	1.0		
156	met10 method	BS	QC884831	SPLP Leachate	247529	05/09/17 04:23	1.0		1:P=10000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087185522

Instrument : MET10 Begun : 05/08/17 20:02
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	BSD	QC884832	SPLP Leachate	247529	05/09/17 04:25	1.0		
158	met10 method	MSS	287500-003	SPLP Leachate	247529	05/09/17 04:28	1.0		
159	met10 method	MS	QC884833	SPLP Leachate	247529	05/09/17 04:31	1.0		
160	met10 method	MSD	QC884834	SPLP Leachate	247529	05/09/17 04:33	1.0		
161	met10 method	SER	QC884835	SPLP Leachate	247529	05/09/17 04:36	5.0		
162	met10 method	PDS	QC884836	SPLP Leachate	247529	05/09/17 04:39	1.0	11 12 13	1:P=11000
163	met10 method	SAMPLE	287500-001	SPLP Leachate	247529	05/09/17 04:41	1.0		
164	met10 method	CCV				05/09/17 04:45	1.0	10	
165	met10 method	CCB				05/09/17 04:48	1.0		
166	met10 method	SAMPLE	287500-002	SPLP Leachate	247529	05/09/17 04:51	1.0		
167	met10 method	SAMPLE	287500-004	SPLP Leachate	247529	05/09/17 04:54	1.0		
168	met10 method	SAMPLE	287500-005	SPLP Leachate	247529	05/09/17 04:58	1.0		
169	met10 method	SAMPLE	287500-006	SPLP Leachate	247529	05/09/17 05:01	1.0		
170	met10 method	SAMPLE	287500-007	SPLP Leachate	247529	05/09/17 05:04	1.0		
171	met10 method	SAMPLE	287500-008	SPLP Leachate	247529	05/09/17 05:08	1.0		
172	met10 method	SAMPLE	287500-009	SPLP Leachate	247529	05/09/17 05:11	1.0		
173	met10 method	SAMPLE	287500-010	SPLP Leachate	247529	05/09/17 05:15	1.0		
174	met10 method	SAMPLE	287500-011	SPLP Leachate	247529	05/09/17 05:18	1.0		
175	met10 method	SAMPLE	287500-012	SPLP Leachate	247529	05/09/17 05:21	1.0		
176	met10 method	CCV				05/09/17 05:25	1.0	10	
177	met10 method	CCB				05/09/17 05:27	1.0		
178	met10 method	SAMPLE	287500-013	SPLP Leachate	247529	05/09/17 05:31	1.0		
179	met10 method	SAMPLE	287500-015	SPLP Leachate	247529	05/09/17 05:34	1.0		
180	met10 method	SAMPLE	287500-016	SPLP Leachate	247529	05/09/17 05:38	1.0		
181	met10 method	SAMPLE	287500-017	SPLP Leachate	247529	05/09/17 05:41	1.0		
182	met10 method	SAMPLE	287500-018	SPLP Leachate	247529	05/09/17 05:44	1.0		
183	met10 method	SAMPLE	287500-019	SPLP Leachate	247529	05/09/17 05:48	1.0		
184	met10 method	CCV				05/09/17 05:51	1.0	10	
185	met10 method	CCB				05/09/17 05:54	1.0		

MNA 05/09/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 85.

TLO 05/09/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 86 through 185.

Standards used: 1=S32935 2=S32571 3=S32367 4=S32368 5=S32937 6=S32523 7=S32936 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087185522

Date : 05/08/17 Reference : met10 method
Sequence : MET10 05/08/17 Analyzed : 05/08/17 20:05

#	Type	Sample ID	Y A	Y R
		ICAL STD	14226663	797440
		LOWER LIMIT	4267999	239232
		UPPER LIMIT	17071995	956928
011	ICB		14242283	797811
012	ICSA		10722690	664385
013	ICSAB		10817213	661048
086	SAMPLE	288495-005	11662975	726444
090	SAMPLE	288495-010	12050542	741844
091	SAMPLE	288521-001	11908174	722097
152	CCV		12263007	723187
153	CCB		13559919	778836
155	BLANK	QC884830	13745361	798529
156	BS	QC884831	12832136	768972
157	BSD	QC884832	12881220	769236
158	MSS	287500-003	13754588	794237
159	MS	QC884833	12807479	757286
160	MSD	QC884834	12688591	765094
161	SER	QC884835	13874240	805344
162	PDS	QC884836	12951827	775165
163	SAMPLE	287500-001	13917036	792982
164	CCV		12289243	731658
165	CCB		13829088	786825
166	SAMPLE	287500-002	14036485	806093
167	SAMPLE	287500-004	13800591	784903
168	SAMPLE	287500-005	13927983	802098
169	SAMPLE	287500-006	13798014	795764
170	SAMPLE	287500-007	13854518	792294
171	SAMPLE	287500-008	13661709	815217
172	SAMPLE	287500-009	13778105	790546
173	SAMPLE	287500-010	13774834	773358
174	SAMPLE	287500-011	14073567	806692
175	SAMPLE	287500-012	13860066	811089
176	CCV		12347093	747853
177	CCB		13685382	789187
178	SAMPLE	287500-013	13796917	795979
179	SAMPLE	287500-015	13899869	807385
180	SAMPLE	287500-016	13990220	787029
181	SAMPLE	287500-017	13828808	804797
182	SAMPLE	287500-018	13862612	777759
183	SAMPLE	287500-019	13712048	792211
184	CCV		12464836	744491
185	CCB		13870415	782275

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287500 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087185522001
Units : ug/L

Date : 08-MAY-2017 20:02
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087185522002	L1	08-MAY-2017 20:05	S32935
L2	met10 method	1087185522003	L2	08-MAY-2017 20:09	S32571
L3	met10 method	1087185522004	L3	08-MAY-2017 20:11	S32367
L4	met10 method	1087185522005	L4	08-MAY-2017 20:14	S32368
L5	met10 method	1087185522006	L5	08-MAY-2017 20:16	S32937

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	5.7000	6.5970	6.5876	6.5964		LOR0	0.00000	0.15160		6.3702	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-14	100.00	0	1000.0	0	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287500 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087185522001 Cal Date : 08-MAY-2017

ICV 1087185522008 (08-MAY-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4838	ug/L	-3	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522010.1 File : met10 method Time : 08-MAY-2017 20:28
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32936

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.504	ug/L	10	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	14152442	-0.52
Yttrium	R	797440	828411	3.88

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522011.1 File : met10 method Time : 08-MAY-2017 20:31
Cal : 1087185522001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	14242283	0.11
Yttrium	R	797440	797811	0.05

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522012.1 File : met10 method Time : 08-MAY-2017 20:35
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[3.688]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19370	ug/L	97	
Copper	A	20000	20710	ug/L	104	
Manganese	A	20000	18430	ug/L	92	
Nickel	A	20000	17420	ug/L	87	
Titanium	A	20000	19840	ug/L	99	
Vanadium	A	20000	21950	ug/L	110	
Aluminum	R	500000	531400	ug/L	106	
Calcium	R	500000	490000	ug/L	98	
Iron	R	200000	191600	ug/L	96	
Magnesium	R	500000	415800	ug/L	83	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	10722690	-24.63
Yttrium	R	797440	664385	-16.69

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522013.1 File : met10 method Time : 08-MAY-2017 20:37
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	972.0	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	10817213	-23.97
Yttrium	R	797440	661048	-17.10

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522152.1 File : met10 method Time : 09-MAY-2017 04:10
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.3702	6.6866	5000	5068	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	12263007	-13.80
Yttrium	R	797440	723187	-9.31

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522153.1 File : met10 method Time : 09-MAY-2017 04:13
Cal : 1087185522001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	[3.072]	5.000	2.500	ug/L	!CCB

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	13559919	-4.69
Yttrium	R	797440	778836	-2.33

!=warning CCB=instrument blank

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522164.1 File : met10 method Time : 09-MAY-2017 04:45
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.3702	6.6128	5000	5012	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	12289243	-13.62
Yttrium	R	797440	731658	-8.25

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522165.1 File : met10 method Time : 09-MAY-2017 04:48
Cal : 1087185522001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	13829088	-2.79
Yttrium	R	797440	786825	-1.33

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522176.1 File : met10 method Time : 09-MAY-2017 05:25
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.3702	6.6276	5000	5024	ug/L	0	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	12347093	-13.21
Yttrium	R	797440	747853	-6.22

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522177.1 File : met10 method Time : 09-MAY-2017 05:27
Cal : 1087185522001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	13685382	-3.80
Yttrium	R	797440	789187	-1.03

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522184.1 File : met10 method Time : 09-MAY-2017 05:51
Cal : 1087185522001 Caldate : 08-MAY-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	6.3702	6.6385	5000	5032	ug/L	1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	12464836	-12.38
Yttrium	R	797440	744491	-6.64

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287500 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087185522185.1 File : met10 method Time : 09-MAY-2017 05:54
Cal : 1087185522001 Caldate : 08-MAY-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	14226663	13870415	-2.50
Yttrium	R	797440	782275	-1.90

SAMPLE PREPARATION SUMMARY

Batch # : 247528
Started By : MB4
Method : 3010A
Spike #1 ID : S29983
Prep Date : 05-MAY-2017 18:15
Spike #2 ID : S29984
Analysis : ICP
Finished By : MB4
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287362-041		SPLP Leachate	50	50	1	1.0						6010	
287362-042		SPLP Leachate	50	50	1	1.0						6010	
287362-043		SPLP Leachate	50	50	1	1.0						6010	
287362-044		SPLP Leachate	50	50	1	1.0						6010	
287362-045		SPLP Leachate	50	50	1	1.0						6010	
287362-046		SPLP Leachate	50	50	1	1.0						6010	
287500-014		SPLP Leachate	50	50	1	1.0						6010	
287500-020		SPLP Leachate	50	50	1	1.0						6010	
287500-021		SPLP Leachate	50	50	1	1.0						6010	
287500-022		SPLP Leachate	50	50	1	1.0						6010	
QC884822	BLANK	SPLP Leachate	50	50	1	1.0							
QC884823	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884824	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884825	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884826	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884827	BLANK	SPLP Leachate	50	50	1	1.0							
QC884828	SER	SPLP Leachate	50	50	1	1.0							
QC884829	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 05/08/17 Reviewer: PRW Date: 05/09/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 247528
Date Digested: 5-5-2017
Digested by: MBH
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
Page 54
Continued on p: 0

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	Blank QC#880864	☒ 50 ☐____	☒ 50 ☐____	NO	QC# 884822
	BS	☒ 50 ☐____	☒ 50 ☐____	↓	↓ 3
	BSD	☒ 50 ☐____	☒ 50 ☐____	↓	↓ 4
	MS	☒ 50 ☐____	☒ 50 ☐____	↓	↓ 5
5	MSD	☒ 50 ☐____	☒ 50 ☐____	↓	↓ 6
	287362-041	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	↓ -042	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	-043	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	-044	☒ 50 ☐____	☒ 50 ☐____	↓	↓
10	-045	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	↓ -046	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	287500-020	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	↓ -021	☒ 50 ☐____	☒ 50 ☐____	↓	↓
	↓ -022	☒ 50 ☐____	☒ 50 ☐____	↓	↓
15	287500-014	☒ 50 ☐____	☒ 50 ☐____	↓	MSS
	Blank QC# 881318	☒ 50 ☐____	☒ 50 ☐____	↓	QC# 884827
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
20		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		
		☐ 50 ☐____	☐ 50 ☐____		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	2071642-3025	1512329-162386-EN	MBH 5-5-17
Digestion Block ID/ Probe Location	Teton	25	↓
Thermometer ID/ Digestion Temperature (°C)	M14581	95°C	↓
0.5 mL of spike solution (Std1) was added to all spikes	829983		↓
0.5 mL of spike solution (Std1) was added to all spikes	829984		↓
0.5 mL of spike solution (Std3) was added to all spikes	830540		↓
Digestion started at (time)	18:15		↓
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	BDH 2017021350J		↓
1:1 HCl reagent ID	JTB1167022		↓
Digestion ended at (time)	19:40		↓
☐ filtered thru' Whatman # 541	—		↓
Relinquished to ICP group	ICP		↓

Pipettes

Vol.(mL)	ID
0.5	N2715010
5	24442467

5-6-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 246504
Extraction Method: ☐ EPA 1311: TCLP ☒ EPA 1312: SPLP
Rotator #'s: 3

Date/ Time ON: 4-11-17 05:00
Temp (°C) ON: 22°C
Date/ Time OFF: 4-11-17 2300
Temp (°C) ON: 21-24

Page: 50 BK 3994
Thermometer ID: 111755122
Temperature Limits: 21 - 25 C

	Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
	BIK 880804		Ø	Ø	Ø	Ø	Ø	2	☒2000 ☐____	5.12	
	287362-041	A	100.13	ND	ND	N/A	N/A		☒2000 ☐____	5.68	
	- 042		100.10						☒2000 ☐____	5.62	
	- 043		100.21						☒2000 ☐____	5.58	
5	- 044		100.19						☒2000 ☐____	5.65	
	- 045		100.16						☒2000 ☐____	5.69	
	- 046		100.14						☒2000 ☐____	5.52	
	287500-020	A	100.18	ND	ND	N/A	N/A	2	☒2000 ☐____	5.53	Samples added @
	- 021		100.13						☒2000 ☐____	5.62	04:30 on 4-12-17.
10	- 022		100.110						☒2000 ☐____	5.37	
									☐ 2000 ☐____		FILTERED AT
									☐ 2000 ☐____		4-12-17 2230
									☐ 2000 ☐____		
									☐ 2000 ☐____		
15									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
20									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		
									☐ 2000 ☐____		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No
pH Meter ID: 013869 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	4-11-17 VV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
Sodium Hydroxide (NaOH)		
Acetic acid (HOAc)		
Fluid #1 pH, Prep Date	4.96 4-11-17	
Fluid #2 pH, Prep Date	— —	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	EE 400126-6309	4-11-17 MV
acidified to pH <2 with 1 mL HNO3	2017011900 BDH	
pH paper strips, lot#	10 BDH106	

TCLP Fluid #1 pH: 4.88 - 4.98 su
TCLP Fluid #2 pH: 2.83 - 3.03 su
SPLP Fluid #1 pH: 4.15 - 4.25 su
SPLP Fluid #2 pH: 4.95 - 5.05 su

4-11-17
Extraction Chemist Date

Reviewed Online / See LIMS

SPLP/TCLP EXTRACTION LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 246620
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: ______

Date/ Time ON: 4-13-17 08:10
Temp (°C) ON: 22°C
Date/ Time OFF: 4-14-17 02:30
Temp (°C) ON: 21°C - 24°C

Page: 51 **BK 3994**
Thermometer ID: 11755122
Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK# 881318	QC	Ø	Ø	Ø	Ø	Ø	2	☒ 2000 ☐	5.05	
287500-001	A	100.12	NO	NO	N/A	N/A		☒ 2000 ☐	5.38	
-002		100.07						☒ 2000 ☐	5.07	
-003		100.16						☒ 2000 ☐	5.45	
-004		100.02						☒ 2000 ☐	5.40	
-005		100.11						☒ 2000 ☐	5.46	
-006		100.04						☒ 2000 ☐	5.42	
-007		100.19						☒ 2000 ☐	5.53	
-008		100.09						☒ 2000 ☐	5.46	
-009		100.12						☒ 2000 ☐	5.53	
-010		100.13						☒ 2000 ☐	5.78	
-011		100.16						☒ 2000 ☐	5.83	
-012		100.04						☒ 2000 ☐	5.86	
-013		100.11						☒ 2000 ☐	5.74	
-014		100.16						☒ 2000 ☐	5.61	
-015		100.19						☒ 2000 ☐	5.47	
-016		100.05						☒ 2000 ☐	5.57	
-017		100.17						☒ 2000 ☐	5.76	
-018		100.02						☒ 2000 ☐	5.72	
-019		100.14						☒ 2000 ☐	5.82	
~~-020~~		~~100.18~~ VV 4-13-17						☐ 2000 ☐		
								☐ 2000 ☐		
								☐ 2000 ☐		
								☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-11 calibration has been checked? ☑ Yes ☐ No
pH Meter ID: 0B869 has been calibrated? ☑ Yes ☐ No

	Mfg & Lot # / LIMS #		Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A		VV 4-13-17
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID			
Sodium Hydroxide (NaOH)			
Acetic acid (HOAc)			
Fluid #1 pH, Prep Date	—		
Fluid #2 pH, Prep Date	4.95/4.95/4.99	4-11-17 / 4-13-17	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C	ID: —	
filtered thru TCLP filter paper, lot#	AHLSTROM - 400124		VV 4-14-17
acidified to pH <2 with 1 mL HNO3	2017011988 - BDH		
pH paper strips, lot#	10BDH1061		

TCLP Fluid #1 pH: 4.88 - 4.98 su
TCLP Fluid #2 pH: 2.83 - 3.03 su
SPLP Fluid #1 pH: 4.15 - 4.25 su
SPLP Fluid #2 pH: 4.95 - 5.05 su

VV 4-13-17
Extraction Chemist **Date**

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 247529
Started By : MB4
Method : 3010A
Spike #1 ID : S29983
Prep Date : 05-MAY-2017 18:00
Spike #2 ID : S29984
Analysis : ICP
Finished By : MB4
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287500-001		SPLP Leachate	50	50	1	1.0						6010	
287500-002		SPLP Leachate	50	50	1	1.0						6010	
287500-003		SPLP Leachate	50	50	1	1.0						6010	
287500-004		SPLP Leachate	50	50	1	1.0						6010	
287500-005		SPLP Leachate	50	50	1	1.0						6010	
287500-006		SPLP Leachate	50	50	1	1.0						6010	
287500-007		SPLP Leachate	50	50	1	1.0						6010	
287500-008		SPLP Leachate	50	50	1	1.0						6010	
287500-009		SPLP Leachate	50	50	1	1.0						6010	
287500-010		SPLP Leachate	50	50	1	1.0						6010	
287500-011		SPLP Leachate	50	50	1	1.0						6010	
287500-012		SPLP Leachate	50	50	1	1.0						6010	
287500-013		SPLP Leachate	50	50	1	1.0						6010	
287500-015		SPLP Leachate	50	50	1	1.0						6010	
287500-016		SPLP Leachate	50	50	1	1.0						6010	
287500-017		SPLP Leachate	50	50	1	1.0						6010	
287500-018		SPLP Leachate	50	50	1	1.0						6010	
287500-019		SPLP Leachate	50	50	1	1.0						6010	
QC884830	BLANK	SPLP Leachate	50	50	1	1.0							
QC884831	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884832	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884833	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884834	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC884835	SER	SPLP Leachate	50	50	1	1.0							
QC884836	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: TLO Date: 05/09/17 Reviewer: PRW Date: 05/09/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 247529
Date Digested: 5-5-2017
Digested by: MB4
Matrix: ☐ TCLP Extract
☒ SPLP Extract

Digestion Method:
☒ EPA 3010a for ICP
☐ _____

BK 3999
Page 55
Continued on p: ø

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	Blank QC#881318	☒ 50 ☐	☒ 50 ☐	NO	QC#884830
	BS	☒ 50 ☐	☒ 50 ☐		1
	BSD	☒ 50 ☐	☒ 50 ☐		2
	MS	☒ 50 ☐	☒ 50 ☐		3
5	MSD	☒ 50 ☐	☒ 50 ☐		4
	287500-001	☒ 50 ☐	☒ 50 ☐		
	-002	☒ 50 ☐	☒ 50 ☐		
	-003	☒ 50 ☐	☒ 50 ☐		MSS
	-004	☒ 50 ☐	☒ 50 ☐		
10	-005	☒ 50 ☐	☒ 50 ☐		
	-006	☒ 50 ☐	☒ 50 ☐		
	-007	☒ 50 ☐	☒ 50 ☐		
	-008	☒ 50 ☐	☒ 50 ☐		
	-009	☒ 50 ☐	☒ 50 ☐		
15	-010	☒ 50 ☐	☒ 50 ☐		
	-011	☒ 50 ☐	☒ 50 ☐		
	-012	☒ 50 ☐	☒ 50 ☐		
	-013	☒ 50 ☐	☒ 50 ☐		
	~~014~~	☐ 50 ☐	☐ 50 ☐		MSS MB45-5-2017
20	-015	☒ 50 ☐	☒ 50 ☐	NO	
	-016	☒ 50 ☐	☒ 50 ☐		
	-017	☒ 50 ☐	☒ 50 ☐		
	-018	☒ 50 ☐	☒ 50 ☐		
	-019	☒ 50 ☐	☒ 50 ☐		
		☐ 50 ☐	☐ 50 ☐		

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	247642-3025	1512329-4738-3	MB4 5-5-17
Digestion Block ID/ Probe Location	Rainier	25	
Thermometer ID/ Digestion Temperature (°C)	AU4730	95°C	
0.5 mL of spike solution (Std1) was added to all spikes	S29983		
0.5 mL of spike solution (Std1) was added to all spikes	S29984		
0.5 mL of spike solution (Std3) was added to all spikes	S30580		
Digestion started at (time)	18:00		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	BDH20170213505		
1:1 HCl reagent ID	JTB167022		
Digestion ended at (time)	19:40		
☐ filtered thru' Whatman # 541	—		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
0.5	N27150P
5	2444247

5-6-17

Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG — **Curtis & Tompkins, Ltd.**

LIMS Batch #: 246620 — Date/ Time ON: 4-13-17 08:10 — Page: 51 — **BK 3994**

Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP — Temp (°C) ON: 22°C

Date/ Time OFF: 4-14-17 02:30 — Thermometer ID: 111755127

Rotator #'s: _____ — Temp (°C) ON: 21°C - 24°C — Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK# 881318	QC	Ø	Ø	Ø	Ø	Ø	2	☒2000 ☐____	5.05	
287500-001	A	100.12	NO	NO	N/A	N/A		☒2000 ☐____	5.38	
-002		100.07						☒2000 ☐____	5.07	
-003		100.16						☒2000 ☐____	5.45	
-004		100.02						☒2000 ☐____	5.40	
-005		100.11						☒2000 ☐____	5.46	
-006		100.04						☒2000 ☐____	5.42	
-007		100.19						☒2000 ☐____	5.53	
-008		100.09						☒2000 ☐____	5.46	
-009		100.12						☒2000 ☐____	5.53	
-010		100.13						☒2000 ☐____	5.78	
-011		100.16						☒2000 ☐____	5.83	
-012		100.04						☒2000 ☐____	5.86	
-013		100.11						☒2000 ☐____	5.74	
-014		100.16						☒2000 ☐____	5.61	
-015		100.19						☒2000 ☐____	5.47	
-016		100.05						☒2000 ☐____	5.57	
-017		100.17						☒2000 ☐____	5.76	
-018		100.02						☒2000 ☐____	5.72	
-019		100.14						☒2000 ☐____	5.82	
-020		100.10						☐2000 ☐____		
								☐ 2000 ☐____		
								☐ 2000 ☐____		
								☐ 2000 ☐____		

Balance ID: B-11 calibration has been checked? ☒ Yes ☐ No

pH Meter ID: 083869 has been calibrated? ☒ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	VV 4-13-17
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID		
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date	—	
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	4.95/4.95/4.99	4-11-17 / 4-13-17
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: —	
filtered thru TCLP filter paper, lot#	AHLSTROM - 400124	VV 4-14-17
acidified to pH <2 with 1 mL HNO3	20170119885 - BDH	
pH paper strips, lot#	10BDH1061	

M.V. 4-13-17

Extraction Chemist **Date**

Reviewed Online / See LIMS

Laboratory Job Number 287500

ANALYTICAL REPORT

Wet Chemistry

Matrix: Soil

Percent Moisture Summary Report

Batch: 246439
Date: 04/07/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287500-021	10.9100	17.5872	15.2672	65	35
287500-022	11.2062	17.1423	15.1633	67	33
287505-005	11.2679	18.6299	18.1949	94	6
287505-010	11.3625	19.4747	18.6742	90	10
287640-001	11.1417	17.5386	15.7010	71	29
287640-002	11.3030	19.1914	16.7815	69	31
287640-003	11.4236	17.3194	15.6419	72	28
287640-004	10.8858	18.9755	17.1891	78	22
287640-005	11.1920	18.6440	16.5932	72	28
287640-006	11.2914	18.0639	16.0466	70	30
287640-007	11.2438	17.8605	15.5217	65	35
287740-001	11.2602	17.9715	17.0516	86	14
287743-008	11.2972	17.6622	16.0549	75	25
287743-023	11.4024	18.4946	17.3009	83	17
287743-024	11.6066	17.1271	15.9112	78	22
QC880611	11.2695	18.6245	17.0334	78	22
of 287743-024			RPD:	0.5%	1.8%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 2406391
Date: 4-7-17

Page: **35**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
Blank	28	11.0570	Ø	11.0484	
287500-021 A	42	10.9100	17.5872	15.2672	
↓ -022 ↓	75	11.2062	17.1423	15.1633	
287505-005	58	11.2679	18.4299	18.1949	comp 287505-1-4 @ 5g each
↓ -010	37	11.3625	19.4747	18.6742	comp 287505-6-9 @ 10g each
287640-001 A	78	11.1417	17.5386	15.7010	
-002	88	11.3030	19.1914	16.7815	
-003	11	11.4236	17.3194	15.6419	
-004	33	10.8858	18.9755	17.1891	
-005	6	11.1920	18.6440	16.5932	
↓ -006 ↓	36	11.2914	18.0639	16.0464	
287740-001 B	22	11.2602	17.9715	17.0516	
287743-008 D	91	11.2972	17.6622	16.0549	
↓ -023 ↓	29	11.4024	18.4946	17.3009	
↓ -024 ↓	66	11.6066	17.1271	15.9112	
SDUP -024	27	11.2695	18.6245	17.0334	parent = 287743-024
287640-007 B	83	11.2438	17.8605	16.5217	

MBH 4-8-17

	In	Out	In-2	Out-2
Date:	4-7-17	4-8-17		
MBH 4-7-17 Time:	~~10~~ 18:35	17:45		
Min/Max Range (°C)	104	104 MBH 4-8-17		
Thermometer ID:	P49094	~~P49096~~ P49094		
Weighed by:	MBH	MBH		

MBH 4-8-17

MBH 4-7-17
Analyst Initials / Date

Reviewed Online / See LIMS

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PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK-2394
Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET #
4-5-17	MN	0.2000	100.0001	✓	40417
4-6-17	MN	0.2001	100.0008	✓	40417
4-7-17	MN	0.2000	100.0003	✓	40417
4-8-17	MN	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 246438
Date: 04/07/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287500-001	11.2038	17.5787	15.3242	65	35
287500-002	11.0256	16.7892	14.9586	68	32
287500-003	11.2539	17.1638	15.3309	69	31
287500-004	11.2976	18.5805	16.2438	68	32
287500-005	10.9448	18.4110	16.4426	74	26
287500-006	11.3515	17.1669	15.3003	68	32
287500-007	11.3611	18.7906	16.6221	71	29
287500-008	10.9071	16.8135	14.4752	60	40
287500-009	11.4483	17.1325	15.0725	64	36
287500-010	11.3065	18.4845	16.2661	69	31
287500-011	11.0543	18.6475	16.1059	67	33
287500-012	11.3547	17.3238	15.1409	63	37
287500-013	11.3594	18.0827	15.7697	66	34
287500-014	11.2907	18.2188	16.1096	70	30
287500-015	11.0590	18.1099	16.0647	71	29
287500-016	11.3542	17.5549	15.7787	71	29
287500-017	11.3159	18.6318	16.4026	70	30
287500-018	11.0524	17.7624	15.6832	69	31
287500-019	11.2996	18.2347	15.8939	66	34
287500-020	11.3221	18.1229	15.8039	66	34
QC880609	10.9165	17.3472	15.2638	68	32
of 287500-003			RPD:	2.0%	4.4%
QC880610	11.0150	17.9232	15.8382	70	30
of 287500-014			RPD:	0.4%	0.9%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246438
Date: 4-7-17

Page: **34**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☑ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
Blank	68	11.2781	∅	11.2706	
287500-001 A	18	11.2038	17.5787	15.3242	
-002	34	11.0256	16.7892	14.9586	
-003	51	11.2539	17.1638	15.3309	
-004	32	11.2976	18.5805	16.2438	
-005	53	10.9448	18.4110	16.4426	
-006	93	11.3515	17.7669	15.3003	
-007	81	11.3611	18.7906	16.4221	
-008	21	10.9071	16.8135	14.4752	
-009	77	11.4483	17.1325	15.0725	
-010	95	11.3065	18.4845	16.2661	
-011	38	11.0543	18.6475	16.1059	
-012	74	11.3547	17.3238	15.1409	
-013	86	11.3594	18.0827	15.7697	
-014	9	11.2907	18.2188	16.1096	
-015	55	11.0590	18.1099	16.0647	
-016	30	11.3542	17.5549	15.7787	
-017	17	11.3159	18.6318	16.4026	
-018	60	11.0524	17.7624	15.6832	
-019	12	11.2996	18.2347	15.8939	
-020 ↓	35	11.3221	18.1229	15.8039	
SDUP -003	20	10.9165	17.3472	15.2638	QC#880609
SDUP ↓ -014	73	11.0150	17.9232	15.8382	QC#880610

MBH 4-8-17

	In	Out	In-2	Out-2
Date:	4-7-17	4-8-17		
Time:	18:00	17:30		
Min/Max Range (°C)	104	104		
Thermometer ID:	P49096	P49096		
Weighed by:	MBH	MBH		

MBH 4-8-17

MBH 4-7-17
Analyst Initials / Date

Reviewed Online / See LIMS

78
PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK-2394
Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET #
4-5-17	MN	0.2000	100.0001	✓	40417
4-6-17	MN	0.2001	100.0008	✓	40417
4-7-17	MN	0.2000	100.0003	✓	40417
4-8-17	MN	0.2000	100.0001	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date


Curtis & Tompkins, Ltd.
Analytical Laboratories, Since 1878

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

Laboratory Job Number 287610
ANALYTICAL REPORT

Weston Solutions
1340 Treat Blvd
Walnut Creek, CA 94597

Project : 15048.001.003.0006.1
Location : Camp Bonneville Military Reservation
Level : III

Sample ID	Lab ID	Sample ID	Lab ID
21-SS174	287610-001	21-SS207	287610-021
21-SS192	287610-002	21-SS206	287610-022
21-SS191	287610-003	21-SS205	287610-023
21-SS190	287610-004	21-SS204	287610-024
21-SS189	287610-005	21-SS203	287610-025
21-SS188	287610-006	21-SS202	287610-026
21-SS187	287610-007	21-SS209	287610-027
21-SS186	287610-008	21-SS210	287610-028
21-SS185	287610-009	21-SS212	287610-029
21-SS184	287610-010	21-SS213	287610-030
21-SS201	287610-011	21-SS214	287610-031
21-SS200	287610-012	21-SS215	287610-032
21-SS199	287610-013	21-SS220	287610-033
21-SS198	287610-014	21-SS219	287610-034
21-SS197	287610-015	21-SS218	287610-035
21-SS196	287610-016	21-SS217	287610-036
21-SS195	287610-017	21-SS216	287610-037
21-SS194	287610-018	21-SS221	287610-038
21-SS193	287610-019	21-SS222	287610-039
21-SS208	287610-020	21-SS211	287610-040

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

Signature: _____ Date: 06/29/2017

Dina Ali
Project Manager
dina.ali@ctberk.com
(510) 204-2223 Ext 13105

CA ELAP# 2896, NELAP# 4044-001

Curtis & Tompkins, Ltd.

CASE NARRATIVE

Laboratory number:	**287610**
Client:	**Weston Solutions**
Project:	**15048.001.003.0006.1**
Location:	**Camp Bonneville Military Reservation**
Request Date:	**04/03/17**
Samples Received:	**04/03/17**

This data package contains sample and QC results for forty soil samples, requested for the above referenced project on 04/03/17. See attached cooler receipt form for any sample receipt problems or discrepancies.

Metals (EPA 6010C) Soil:
High recovery was observed for lead in the MS of 21-SS195 (lab # 287610-017); the BS/BSD were within limits, and the associated RPD was within limits.

No other analytical problems were encountered.

Metals (EPA 6010C) SPLP Leachate:
High recovery was observed for lead in the post digest spike of 21-SS207 (lab # 287610-021); the BS/BSD were within limits, and this analyte was not detected at or above the RL in the associated samples.

No other analytical problems were encountered.

Moisture (ASTM D2216-98/CLP):
No analytical problems were encountered.

Chain of Custody

287610

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10					Project Name: Camp Bonneville Military Reservation		Request for Analysis									Chain of Custody No.: 5
Sampler's *(Signature)*																Page 1 of 4
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
1	21-SS174	3/27/17	1230	X		Soil	1	X	X							
2	21-SS192	3/27/17	1320	X		Soil	1	X	X							
3	21-SS191	3/27/17	1340	X		Soil	1	X	X							
4	21-SS190	3/27/17	1400	X		Soil	1	X	X							
5	21-SS189	3/27/17	1420	X		Soil	1	X	X							
6	21-SS188	3/27/17	1440	X		Soil	1	X	X							
7	21-SS187	3/27/17	1500	X		Soil	1	X	X							
8	21-SS186	3/27/17	1520	X		Soil	1	X	X							
9	21-SS185	3/27/17	1540	X		Soil	1	X	X							
10	21-SS184	3/27/17	1600	X		Soil	1	X	X							
11	21-SS201	3/27/17	1630	X		Soil	1	X	X							
12	21-SS200	3/27/17	1650	X		Soil	1	X	X							
13	21-SS199	3/27/17	1710	X		Soil	1	X	X							
Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions						Date and Time: 3/30/2017 1620	Received by: (Signature and affiliation) FeEx Tracking #: 7787 8885 1864 (Master Tracking: 7787 8885 1864)									Date and Time: 3/30/2017 1620
Reliquished by: *(Signature and affiliation)*						Date and Time:	Received by: (Signature and affiliation)									Date and Time: 4/3/17 16:20
Reliquished by: *(Signature and affiliation)*						Date and Time:	Received by: (Signature and affiliation)									Date and Time:
P. O. Number: **0093861** Data package: **Level III** Turnaround time: **10 day**																For Laboratory Use Only

26716ID

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Request for Analysis	Chain of Custody No.: 5
Sampler's *(Signature)*			Page 2 of 4

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)							Additional Requirements
14	21-SS198	3/28/17	1345	X		Soil	1	X	X							
15	21-SS197	3/28/17	1400	X		Soil	1	X	X							
16	21-SS196	3/28/17	1420	X		Soil	1	X	X							
17	21-SS195	3/28/17	1440	X		Soil	2	X	X							MS/MSD
18	21-SS194	3/28/17	1500	X		Soil	1	X	X							
19	21-SS193	3/28/17	1520	X		Soil	1	X	X							
20	21-SS208	3/28/17	1550	X		Soil	1	X	X							
21	21-SS207	3/28/17	1605	X		Soil	1	X	X							
22	21-SS206	3/28/17	1625	X		Soil	1	X	X							
23	21-SS205	3/28/17	1645	X		Soil	1	X	X							

Reliquished by: *(Signature and affiliation)* Jeremy Hancy, Weston Solutions	Date and Time: 3/30/2017 1620	Received by: (Signature and affiliation) FeEx Tracking #: 7787 8885 1864 (Master Tracking: 7787 8885 1864)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)

Date and Time: 3/30/2017 1620	Date and Time: 4/3/17 16:20	Date and Time:	For Laboratory Use Only

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

287 of 10

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10					Project Name: Camp Bonneville Military Reservation		Request for Analysis										Chain of Custody No.: 5	
Sampler's *(Signature)*																	Page 3 of 4	
	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Total Lead (EPA 6010D)	SPLP Lead (EPA 1312/6010D)								Additional Requirements	
24	21-SS204	3/28/17	1705	X		Soil	1	X	X									
25	21-SS203	3/29/17	845	X		Soil	1	X	X									
26	21-SS202	3/29/17	900	X		Soil	1	X	X									
27	21-SS209	3/29/17	920	X		Soil	1	X	X									
28	21-SS210	3/29/17	940	X		Soil	1	X	X									
29	21-SS212	3/29/17	1015	X		Soil	1	X	X									
30	21-SS213	3/29/17	1035	X		Soil	1	X	X									
31	21-SS214	3/29/17	1055	X		Soil	1	X	X									
32	21-SS215	3/29/17	1115	X		Soil	2	X	X								MS/MSD	
33	21-SS219	3/29/17	1145	X		Soil	1	X	X									
34	21-SS219	3/29/17	1205	X		Soil	1	X	X									
35	21-SS218	3/29/17	1225	X		Soil	1	X	X									
36	21-SS217	3/29/17	1245	X		Soil	1	X	X									

Reliquished by: *(Signature and affiliation)* Jeremy Haney, Weston Solutions	Date and Time: 3/30/2017 1620	Received by: (Signature and affiliation) FeEx Tracking #: 7787 8885 1978 (Master Tracking: 7787 8885 1864)	Date and Time: 3/30/2017 1620
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 4/3/17 16:20
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

297610

Chain-of-Custody Form for Curtis and Tompkins

Project Number: 15048.001.003.0006.10	Project Name: Camp Bonneville Military Reservation	Chain of Custody No.: 5
Sampler's *(Signature)*		Page 4 of 4

	Field Sample ID	Date	Time	Comp.	Grab	Matrix	No. of Containers	Request for Analysis: Total Lead (EPA 6010D)	Request for Analysis: SPLP Lead (EPA 1312/6010D)	Additional Requirements
54	21-SS216	3/28/17	1300	X		Soil	1	X	X	
58	21-SS221	3/29/17	1320	X		Soil	1	X	X	
59	21-SS222	3/29/17	1340	X		Soil	1	X	X	
170	21-SS211	3/29/17	10000	X		Soil	1	X	X	

Relinquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:
Jeremy Haney, Weston Solutions	3/30/2017 1620	FeEx Tracking #: 7787 8885 1978 (Master Tracking: 7787 8885 1864)	3/30/2017 1620
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time: 4/3/17 16:20
Reliquished by: *(Signature and affiliation)*	Date and Time:	Received by: (Signature and affiliation)	Date and Time:

P. O. Number: **0093861**
Data package: **Level III**
Turnaround time: **10 day**

For Laboratory Use Only

COOLER RECEIPT CHECKLIST

Curtis & Tompkins, Ltd.

Login # 287610 Date Received 4.3.17 Number of coolers _____
Client _____ Project Camp Bonville Military Reservation

Date Opened 4.3.17 By (print) DC (sign) _____
3.31.17 DC
Date Logged in 4.3.17 By (print) DC (sign) _____
Date Labeled _____ By (print) EM (sign) _____

1. Did cooler come with a shipping slip (airbill, etc) FedEx YES NO
Shipping info 7787 8885 1867

2A. Were custody seals present? .... ☐ YES (circle) on cooler on samples ☒ NO
How many _____ Name _____ Date _____
2B. Were custody seals intact upon arrival? _____ YES NO N/A
3. Were custody papers dry and intact when received? _____ YES NO
4. Were custody papers filled out properly (ink, signed, etc)? _____ YES NO
5. Is the project identifiable from custody papers? (If so fill out top of form) YES NO
6. Indicate the packing in cooler: (if other, describe) _____

☐ Bubble Wrap ☐ Foam blocks ☐ Bags ☐ None
☐ Cloth material ☒ Cardboard ☐ Styrofoam ☐ Paper towels

7. Temperature documentation: * Notify PM if temperature exceeds 6°C

Type of ice used: ☒ Wet ☐ Blue/Gel ☐ None Temp(°C) 11.5, 12.9

☐ Temperature blank(s) included? ☐ Thermometer# _____ ☒ IR Gun# A

☐ Samples received on ice directly from the field. Cooling process had begun

8. Were Method 5035 sampling containers present? _____ YES NO
If YES, what time were they transferred to freezer? _____
9. Did all bottles arrive unbroken/unopened? _____ YES NO
10. Are there any missing / extra samples? _____ YES NO
11. Are samples in the appropriate containers for indicated tests? _____ YES NO
12. Are sample labels present, in good condition and complete? _____ YES NO
13. Do the sample labels agree with custody papers? _____ YES NO
14. Was sufficient amount of sample sent for tests requested? _____ YES NO
15. Are the samples appropriately preserved? _____ YES NO N/A
16. Did you check preservatives for all bottles for each sample? _____ YES NO N/A
17. Did you document your preservative check? (pH strip lot# _____) YES NO N/A
18. Did you change the hold time in LIMS for unpreserved VOAs? _____ YES NO N/A
19. Did you change the hold time in LIMS for preserved terracores? _____ YES NO N/A
20. Are bubbles > 6mm absent in VOA samples? _____ YES NO N/A
21. Was the client contacted concerning this sample delivery? _____ YES NO
If YES, Who was called? _____ By _____ Date: _____

COMMENTS
13. Sample 33 received mislabeled as 21-SS219. Correct label is 21-SS220. Identified by sample time.

Curtis & Tompkins, Ltd.

Detections Summary for 287610

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

Client : Weston Solutions
Project : 15048.001.003.0006.1
Location : Camp Bonneville Military Reservation

Client Sample ID : 21-SS174 Laboratory Sample ID : 287610-001

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	97		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS192 Laboratory Sample ID : 287610-002

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	21		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS191 Laboratory Sample ID : 287610-003

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	19		0.68	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS190 Laboratory Sample ID : 287610-004

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	22		0.69	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS189 Laboratory Sample ID : 287610-005

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	32		0.75	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS188 Laboratory Sample ID : 287610-006

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	61		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS187 Laboratory Sample ID : 287610-007

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	42		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Curtis & Tompkins, Ltd.

Client Sample ID : 21-SS186 Laboratory Sample ID : 287610-008

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	430		0.65	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B
Lead	0.0065		0.0050	mg/L	SPLP	1.000	EPA 6010C	EPA 3010A

Client Sample ID : 21-SS185 Laboratory Sample ID : 287610-009

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	47		0.65	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS184 Laboratory Sample ID : 287610-010

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	370		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS201 Laboratory Sample ID : 287610-011

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	21		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS200 Laboratory Sample ID : 287610-012

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	26		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS199 Laboratory Sample ID : 287610-013

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	26		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS198 Laboratory Sample ID : 287610-014

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	31		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS197 Laboratory Sample ID : 287610-015

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.76	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS196 Laboratory Sample ID : 287610-016

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	220		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS195 Laboratory Sample ID : 287610-017

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	90		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS194 Laboratory Sample ID : 287610-018

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	37		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS193 Laboratory Sample ID : 287610-019

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	180		0.75	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS208 Laboratory Sample ID : 287610-020

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	26		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS207 Laboratory Sample ID : 287610-021

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	41		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS206 Laboratory Sample ID : 287610-022

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	58		0.83	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS205 Laboratory Sample ID : 287610-023

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	76		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS204 Laboratory Sample ID : 287610-024

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	76		0.71	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Curtis & Tompkins, Ltd.

Client Sample ID : 21-SS203 Laboratory Sample ID : 287610-025

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	81		0.74	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS202 Laboratory Sample ID : 287610-026

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	120		0.79	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS209 Laboratory Sample ID : 287610-027

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	160		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS210 Laboratory Sample ID : 287610-028

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	95		0.81	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS212 Laboratory Sample ID : 287610-029

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	100		0.95	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS213 Laboratory Sample ID : 287610-030

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	49		0.85	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS214 Laboratory Sample ID : 287610-031

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	38		0.93	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS215 Laboratory Sample ID : 287610-032

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	30		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS220 Laboratory Sample ID : 287610-033

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	29		0.88	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS219 Laboratory Sample ID : 287610-034

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	75		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS218 Laboratory Sample ID : 287610-035

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	100		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS217 Laboratory Sample ID : 287610-036

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	140		0.84	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS216 Laboratory Sample ID : 287610-037

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	150		0.77	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS221 Laboratory Sample ID : 287610-038

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	110		0.92	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS222 Laboratory Sample ID : 287610-039

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	60		0.80	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Client Sample ID : 21-SS211 Laboratory Sample ID : 287610-040

Analyte	Result	Flags	RL	Units	Basis	IDF	Method	Prep Method
Lead	62		0.78	mg/Kg	Dry	1.000	EPA 6010C	EPA 3050B

Laboratory Job Number 287610

ANALYTICAL REPORT

Metals

Matrix: Soil

Curtis & Tompkins, Ltd.

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Chemist:	???
Matrix:	Soil	Received:	04/03/17
Units:	mg/Kg	Prepared:	04/12/17
Basis:	dry	Analyzed:	04/13/17
Diln Fac:	1.000		

Field ID	Type	Lab ID	Result	RL	Moisture	Batch#	Sampled
21-SS174	SAMPLE	287610-001	97	0.85	38%	246594	03/27/17
21-SS192	SAMPLE	287610-002	21	0.81	36%	246594	03/27/17
21-SS191	SAMPLE	287610-003	19	0.68	33%	246594	03/27/17
21-SS190	SAMPLE	287610-004	22	0.69	34%	246594	03/27/17
21-SS189	SAMPLE	287610-005	32	0.75	35%	246594	03/27/17
21-SS188	SAMPLE	287610-006	61	0.79	36%	246594	03/27/17
21-SS187	SAMPLE	287610-007	42	0.80	31%	246594	03/27/17
21-SS186	SAMPLE	287610-008	430	0.65	29%	246594	03/27/17
21-SS185	SAMPLE	287610-009	47	0.65	29%	246594	03/27/17
21-SS184	SAMPLE	287610-010	370	0.79	32%	246594	03/27/17
21-SS201	SAMPLE	287610-011	21	0.74	35%	246594	03/27/17
21-SS200	SAMPLE	287610-012	26	0.83	36%	246594	03/27/17
21-SS199	SAMPLE	287610-013	26	0.81	38%	246594	03/27/17
21-SS198	SAMPLE	287610-014	31	0.80	32%	246594	03/28/17
21-SS197	SAMPLE	287610-015	150	0.76	38%	246594	03/28/17
21-SS196	SAMPLE	287610-016	220	0.78	29%	246594	03/28/17
21-SS195	SAMPLE	287610-017	90	0.78	29%	246594	03/28/17
21-SS194	SAMPLE	287610-018	37	0.74	27%	246594	03/28/17
21-SS193	SAMPLE	287610-019	180	0.75	36%	246594	03/28/17
21-SS208	SAMPLE	287610-020	26	0.81	35%	246594	03/28/17
21-SS207	SAMPLE	287610-021	41	0.88	40%	246604	03/28/17
21-SS206	SAMPLE	287610-022	58	0.83	37%	246604	03/28/17
21-SS205	SAMPLE	287610-023	76	0.85	36%	246604	03/28/17
21-SS204	SAMPLE	287610-024	76	0.71	30%	246604	03/28/17
21-SS203	SAMPLE	287610-025	81	0.74	32%	246604	03/29/17
21-SS202	SAMPLE	287610-026	120	0.79	34%	246604	03/29/17
21-SS209	SAMPLE	287610-027	160	0.77	32%	246604	03/29/17
21-SS210	SAMPLE	287610-028	95	0.81	36%	246604	03/29/17
21-SS212	SAMPLE	287610-029	100	0.95	43%	246604	03/29/17
21-SS213	SAMPLE	287610-030	49	0.85	39%	246604	03/29/17
21-SS214	SAMPLE	287610-031	38	0.93	40%	246604	03/29/17
21-SS215	SAMPLE	287610-032	30	0.77	38%	246604	03/29/17
21-SS220	SAMPLE	287610-033	29	0.88	39%	246604	03/29/17
21-SS219	SAMPLE	287610-034	75	0.78	36%	246604	03/29/17
21-SS218	SAMPLE	287610-035	100	0.77	37%	246604	03/29/17
21-SS217	SAMPLE	287610-036	140	0.84	37%	246604	03/29/17
21-SS216	SAMPLE	287610-037	150	0.77	39%	246604	03/28/17
21-SS221	SAMPLE	287610-038	110	0.92	40%	246604	03/29/17
21-SS222	SAMPLE	287610-039	60	0.80	43%	246604	03/29/17
21-SS211	SAMPLE	287610-040	62	0.78	35%	246604	03/29/17
	BLANK	QC881215	ND	0.50		246594	
	BLANK	QC881256	ND	0.52		246604	

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Chemist:	???
Matrix:	Soil	Received:	04/03/17
Units:	mg/Kg	Prepared:	04/12/17
Basis:	dry	Analyzed:	04/13/17
Diln Fac:	1.000		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	Moisture	RPD	Lim	Batch#	Sampled
	BS		QC881216		51.55	50.44	98	75-125				246594	
	BSD		QC881217		52.63	51.30	97	75-125		0	35	246594	
21-SS195	MS	287610-017	QC881218	89.63	71.13	186.7	136 *	75-125	29%			246594	03/28/17
21-SS195	MSD	287610-017	QC881219		70.42	160.0	100	75-125	29%	15	35	246594	03/28/17
	BS		QC881257		53.19	51.79	97	75-125				246604	
	BSD		QC881258		49.02	47.42	97	75-125		1	35	246604	
21-SS215	MS	287610-032	QC881259	29.77	83.14	101.8	87	75-125	38%			246604	03/29/17
21-SS215	MSD	287610-032	QC881260		87.66	110.2	92	75-125	38%	4	35	246604	03/29/17

*= Value outside of QC limits; see narrative
RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS195	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246594
MSS Lab ID:	287610-017	Chemist:	TLO
Lab ID:	QC881220	Sampled:	03/28/17
Matrix:	Soil	Received:	04/03/17
Units:	mg/Kg	Analyzed:	04/13/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff Lim
89.63	0.7825	94.36	3.912	29%	5 10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS195	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246594
MSS Lab ID:	287610-017	Chemist:	TLO
Lab ID:	QC881221	Sampled:	03/28/17
Matrix:	Soil	Received:	04/03/17
Units:	mg/Kg	Analyzed:	04/13/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
89.63	7.825	96.48	88 NM	75-125	29%

NM= Not Meaningful: Sample concentration > 4X spike concentration

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS215	Diln Fac:	5.000
Type:	Serial Dilution	Batch#:	246604
MSS Lab ID:	287610-032	Chemist:	???
Lab ID:	QC881261	Sampled:	03/29/17
Matrix:	Soil	Received:	04/03/17
Units:	mg/Kg	Analyzed:	04/13/17

MSS Result	MSS RL	Result	RL	Moisture %	Diff Lim
29.77	0.7680	30.21	3.840	38%	1 10

RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3050B
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Basis:	dry
Field ID:	21-SS215	Diln Fac:	1.000
Type:	Post Digest Spike	Batch#:	246604
MSS Lab ID:	287610-032	Chemist:	???
Lab ID:	QC881262	Sampled:	03/29/17
Matrix:	Soil	Received:	04/03/17
Units:	mg/Kg	Analyzed:	04/13/17

MSS Result	Spiked	Result	%REC	Limits	Moisture
29.77	7.680	37.52	101	75-125	38%

REPORTING SUMMARY FOR 287610 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287610-001	MET10	04/13/17 02:28	1.0	+
287610-002	MET10	04/13/17 02:31	1.0	+
287610-003	MET10	04/13/17 02:34	1.0	+
287610-004	MET10	04/13/17 02:37	1.0	+
287610-005	MET10	04/13/17 02:40	1.0	+
287610-006	MET10	04/13/17 02:43	1.0	+
287610-007	MET10	04/13/17 02:46	1.0	+
287610-008	MET10	04/13/17 02:49	1.0	+
287610-009	MET10	04/13/17 02:52	1.0	+
287610-010	MET10	04/13/17 02:56	1.0	+
287610-011	MET10	04/13/17 03:08	1.0	+
287610-012	MET10	04/13/17 03:11	1.0	+
287610-013	MET10	04/13/17 03:14	1.0	+
287610-014	MET10	04/13/17 03:17	1.0	+
287610-015	MET10	04/13/17 03:20	1.0	+
287610-016	MET10	04/13/17 03:23	1.0	+
287610-017	MET10	04/13/17 02:03	1.0	+
287610-017	MET10	04/13/17 16:48	1.0	
287610-018	MET10	04/13/17 03:26	1.0	+
287610-019	MET10	04/13/17 03:29	1.0	+
287610-020	MET10	04/13/17 03:32	1.0	+
287610-021	MET10	04/13/17 04:12	1.0	+
287610-022	MET10	04/13/17 04:15	1.0	+
287610-023	MET10	04/13/17 04:27	1.0	+
287610-024	MET10	04/13/17 04:30	1.0	+
287610-025	MET10	04/13/17 04:33	1.0	+
287610-026	MET10	04/13/17 04:36	1.0	+

REPORTING SUMMARY FOR 287610 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287610-027	MET10	04/13/17 04:40	1.0	+
287610-028	MET10	04/13/17 04:43	1.0	+
287610-029	MET10	04/13/17 04:46	1.0	+
287610-030	MET10	04/13/17 04:49	1.0	+
287610-031	MET10	04/13/17 04:52	1.0	+
287610-032	MET10	04/13/17 03:56	1.0	+
287610-033	MET10	04/13/17 04:55	1.0	+
287610-034	MET10	04/13/17 05:07	1.0	+
287610-035	MET10	04/13/17 05:10	1.0	+
287610-036	MET10	04/13/17 05:14	1.0	+
287610-037	MET10	04/13/17 05:17	1.0	+
287610-038	MET10	04/13/17 05:20	1.0	+
287610-039	MET10	04/13/17 05:23	1.0	+
287610-040	MET10	04/13/17 05:26	1.0	+
QC881215	MET10	04/13/17 01:54	1.0	+
QC881216	MET10	04/13/17 01:58	1.0	+
QC881217	MET10	04/13/17 02:00	1.0	+
QC881218	MET10	04/13/17 02:06	1.0	+
QC881218	MET10	04/13/17 16:51	1.0	
QC881219	MET10	04/13/17 02:09	1.0	+
QC881219	MET10	04/13/17 16:55	1.0	
QC881220	MET10	04/13/17 02:13	5.0	+
QC881220	MET10	04/13/17 16:58	5.0	
QC881221	MET10	04/13/17 02:15	1.0	+
QC881221	MET10	04/13/17 17:01	1.0	
QC881256	MET10	04/13/17 03:48	1.0	+
QC881257	MET10	04/13/17 03:51	1.0	+
QC881258	MET10	04/13/17 03:54	1.0	+
QC881259	MET10	04/13/17 04:00	1.0	+

REPORTING SUMMARY FOR 287610 METALS Soil
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC881260	MET10	04/13/17 04:03	1.0	+	
QC881261	MET10	04/13/17 04:06	5.0	+	
QC881262	MET10	04/13/17 04:09	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148206

Instrument : MET10 Begun : 04/12/17 22:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				04/12/17 22:06	1.0		
002	met10 method	ICAL	L1			04/12/17 22:10	1.0	1	
003	met10 method	ICAL	L2			04/12/17 22:13	1.0	2	
004	met10 method	ICAL	L3			04/12/17 22:15	1.0	3	
005	met10 method	ICAL	L4			04/12/17 22:18	1.0	4	
006	met10 method	ICAL	L5			04/12/17 22:21	1.0	5	
007	met10 method	XICV				04/12/17 22:23	1.0	6	
008	met10 method	ICV				04/12/17 22:34	1.0	6	1:SR=4500000
009	met10 method	XCRI				04/12/17 22:45	1.0	7	
010	met10 method	CRI				04/12/17 22:50	1.0	7	1:SR=43000
011	met10 method	ICB				04/12/17 22:54	1.0		1:SR=1600
012	met10 method	ICSA				04/12/17 22:57	1.0	8	11:AL=520000
013	met10 method	ICSAB				04/12/17 23:06	1.0	9	6:SR=4700000
014	met10 method	X	RINSE			04/12/17 23:14	1.0		
015	met10 method	BLANK	QC881115	Water	246569	04/12/17 23:18	1.0		
016	met10 method	BS	QC881116	Water	246569	04/12/17 23:21	1.0		1:SR=920000
017	met10 method	BSD	QC881117	Water	246569	04/12/17 23:24	1.0		1:SR=860000
018	met10 method	MSS	287828-001	Water	246569	04/12/17 23:26	1.0		3:SR=6600000
019	met10 method	MS	QC881118	Water	246569	04/12/17 23:29	1.0		
020	met10 method	MSD	QC881119	Water	246569	04/12/17 23:33	1.0		
021	met10 method	SAMPLE	287766-015	Water	246569	04/12/17 23:35	1.0		1:SR=21000
022	met10 method	SAMPLE	287791-001	Water	246569	04/12/17 23:39	1.0		1:SR=1100000
023	met10 method	SAMPLE	287794-001	Water	246569	04/12/17 23:41	1.0		1:SR=300000
024	met10 method	CCV				04/12/17 23:44	1.0	10	1:SR=4500000
025	met10 method	CCB				04/12/17 23:46	1.0		1:SR=1000
026	met10 method	SAMPLE	287827-001	Water	246569	04/12/17 23:53	1.0		1:SR=29000
027	met10 method	SAMPLE	287827-002	Water	246569	04/12/17 23:56	1.0		1:SR=28000
028	met10 method	SAMPLE	287827-003	Water	246569	04/13/17 00:00	1.0		1:SR=50000
029	met10 method	SAMPLE	287828-003	Water	246569	04/13/17 00:03	1.0		3:SR=8500000
030	met10 method	SAMPLE	287828-004	Water	246569	04/13/17 00:06	1.0		3:SR=7700000
031	met10 method	SAMPLE	287828-005	Water	246569	04/13/17 00:08	1.0		5:SR=19000000
032	met10 method	SAMPLE	287828-006	Water	246569	04/13/17 00:11	1.0		3:SR=8100000
033	met10 method	SAMPLE	287830-002	Water	246569	04/13/17 00:14	1.0		4:SR=28000000
034	met10 method	SAMPLE	287830-003	Water	246569	04/13/17 00:18	1.0		3:SR=6200000
035	met10 method	SAMPLE	287830-004	Water	246569	04/13/17 00:21	1.0		3:SR=4400000
036	met10 method	CCV				04/13/17 00:23	1.0	10	1:SR=4500000
037	met10 method	XCCB				04/13/17 00:26	1.0		
038	met10 method	CCB				04/13/17 00:29	1.0		
039	met10 method	SAMPLE	287830-005	Water	246569	04/13/17 00:32	1.0		
040	met10 method	SAMPLE	287832-001	Water	246569	04/13/17 00:35	1.0		2:SR=3900000
041	met10 method	X	RINSE			04/13/17 00:39	1.0		
042	met10 method	BLANK	QC881282	Filtrate	246609	04/13/17 00:42	1.0		1:SR=1200
043	met10 method	BS	QC881283	Filtrate	246609	04/13/17 00:46	1.0		1:SR=910000
044	met10 method	BSD	QC881284	Filtrate	246609	04/13/17 00:48	1.0		1:SR=880000
045	met10 method	MSS	287554-001	Filtrate	246609	04/13/17 00:50	1.0		3:SR=18000000
046	met10 method	MS	QC881285	Filtrate	246609	04/13/17 00:53	1.0		
047	met10 method	MSD	QC881286	Filtrate	246609	04/13/17 00:56	1.0		
048	met10 method	BLANK	QC881287	Filtrate	246609	04/13/17 00:58	1.0		1:SR=1400
049	met10 method	CCV				04/13/17 01:02	1.0	10	1:SR=4500000
050	met10 method	XCCB				04/13/17 01:04	1.0		
051	met10 method	CCB				04/13/17 01:07	1.0		1:SR=1400
052	met10 method	SAMPLE	287554-002	Filtrate	246609	04/13/17 01:11	1.0		5:SR=21000000

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148206

Instrument : MET10 Begun : 04/12/17 22:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	SAMPLE	287554-003	Filtrate	246609	04/13/17 01:13	1.0		5:SR=21000000
054	met10 method	SAMPLE	287555-001	Filtrate	246609	04/13/17 01:16	1.0		3:SR=13000000
055	met10 method	SAMPLE	287555-002	Filtrate	246609	04/13/17 01:19	1.0		5:SR=51000000
056	met10 method	SAMPLE	287555-003	Filtrate	246609	04/13/17 01:21	1.0		3:SR=13000000
057	met10 method	SAMPLE	287555-004	Filtrate	246609	04/13/17 01:24	1.0		5:SR=20000000
058	met10 method	SAMPLE	287555-005	Filtrate	246609	04/13/17 01:26	1.0		2:SR=6100000
059	met10 method	SAMPLE	287555-006	Filtrate	246609	04/13/17 01:30	1.0		3:SR=8800000
060	met10 method	SAMPLE	287555-007	Filtrate	246609	04/13/17 01:33	1.0		4:SR=23000000
061	met10 method	SAMPLE	287555-008	Filtrate	246609	04/13/17 01:36	1.0		4:SR=23000000
062	met10 method	CCV				04/13/17 01:38	1.0	10	1:SR=4500000
063	met10 method	XCCB				04/13/17 01:41	1.0		
064	met10 method	CCB				04/13/17 01:44	1.0		
065	met10 method	SAMPLE	287832-001	Filtrate	246609	04/13/17 01:47	1.0		2:SR=3800000
066	met10 method	X	RINSE			04/13/17 01:51	1.0		
067	met10 method	BLANK	QC881215	Soil	246594	04/13/17 01:54	1.0		1:SR=2000
068	met10 method	BS	QC881216	Soil	246594	04/13/17 01:58	1.0		1:SR=88000000
069	met10 method	BSD	QC881217	Soil	246594	04/13/17 02:00	1.0		1:SR=91000000
070	met10 method	MSS	287610-017	Soil	246594	04/13/17 02:03	1.0		5:SR=6700000
071	met10 method	MS	QC881218	Soil	246594	04/13/17 02:06	1.0		
072	met10 method	MSD	QC881219	Soil	246594	04/13/17 02:09	1.0		
073	met10 method	SER	QC881220	Soil	246594	04/13/17 02:13	5.0		3:SR=1300000
074	met10 method	PDS	QC881221	Soil	246594	04/13/17 02:15	1.0	11 12 13	6:SR=7400000
075	met10 method	CCV				04/13/17 02:19	1.0	10	1:SR=4500000
076	met10 method	XCCB				04/13/17 02:21	1.0		
077	met10 method	CCB				04/13/17 02:24	1.0		1:SR=1100
078	met10 method	SAMPLE	287610-001	Soil	246594	04/13/17 02:28	1.0		5:SR=4900000
079	met10 method	SAMPLE	287610-002	Soil	246594	04/13/17 02:31	1.0		5:SR=3500000
080	met10 method	SAMPLE	287610-003	Soil	246594	04/13/17 02:34	1.0		5:SR=4600000
081	met10 method	SAMPLE	287610-004	Soil	246594	04/13/17 02:37	1.0		5:SR=3400000
082	met10 method	SAMPLE	287610-005	Soil	246594	04/13/17 02:40	1.0		5:SR=4400000
083	met10 method	SAMPLE	287610-006	Soil	246594	04/13/17 02:43	1.0		5:SR=3700000
084	met10 method	SAMPLE	287610-007	Soil	246594	04/13/17 02:46	1.0		5:SR=3500000
085	met10 method	SAMPLE	287610-008	Soil	246594	04/13/17 02:49	1.0		5:SR=5500000
086	met10 method	SAMPLE	287610-009	Soil	246594	04/13/17 02:52	1.0		5:SR=7700000
087	met10 method	SAMPLE	287610-010	Soil	246594	04/13/17 02:56	1.0		5:SR=5900000
088	met10 method	CCV				04/13/17 02:59	1.0	10	1:SR=4500000
089	met10 method	XCCB				04/13/17 03:01	1.0		
090	met10 method	CCB				04/13/17 03:04	1.0		1:SR=1900
091	met10 method	SAMPLE	287610-011	Soil	246594	04/13/17 03:08	1.0		5:SR=3200000
092	met10 method	SAMPLE	287610-012	Soil	246594	04/13/17 03:11	1.0		5:SR=3100000
093	met10 method	SAMPLE	287610-013	Soil	246594	04/13/17 03:14	1.0		5:SR=3600000
094	met10 method	SAMPLE	287610-014	Soil	246594	04/13/17 03:17	1.0		5:SR=3400000
095	met10 method	SAMPLE	287610-015	Soil	246594	04/13/17 03:20	1.0		5:SR=4200000
096	met10 method	SAMPLE	287610-016	Soil	246594	04/13/17 03:23	1.0		5:SR=4800000
097	met10 method	SAMPLE	287610-018	Soil	246594	04/13/17 03:26	1.0		5:SR=6400000
098	met10 method	SAMPLE	287610-019	Soil	246594	04/13/17 03:29	1.0		5:SR=10000000
099	met10 method	SAMPLE	287610-020	Soil	246594	04/13/17 03:32	1.0		5:SR=3100000
100	met10 method	X	RINSE			04/13/17 03:36	1.0		
101	met10 method	CCV				04/13/17 03:39	1.0	10	1:SR=4500000
102	met10 method	XCCB				04/13/17 03:42	1.0		
103	met10 method	CCB				04/13/17 03:44	1.0		1:SR=2400
104	met10 method	BLANK	QC881256	Soil	246604	04/13/17 03:48	1.0		1:SR=3200

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087148206

Instrument : MET10 Begun : 04/12/17 22:06
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	BS	QC881257	Soil	246604	04/13/17 03:51	1.0		1:SR=88000000
106	met10 method	BSD	QC881258	Soil	246604	04/13/17 03:54	1.0		1:SR=87000000
107	met10 method	MSS	287610-032	Soil	246604	04/13/17 03:56	1.0		5:SR=4100000
108	met10 method	MS	QC881259	Soil	246604	04/13/17 04:00	1.0		
109	met10 method	MSD	QC881260	Soil	246604	04/13/17 04:03	1.0		
110	met10 method	SER	QC881261	Soil	246604	04/13/17 04:06	5.0		
111	met10 method	PDS	QC881262	Soil	246604	04/13/17 04:09	1.0	11 12 13	6:SR=5100000
112	met10 method	SAMPLE	287610-021	Soil	246604	04/13/17 04:12	1.0		5:SR=3900000
113	met10 method	SAMPLE	287610-022	Soil	246604	04/13/17 04:15	1.0		5:SR=3900000
114	met10 method	CCV				04/13/17 04:18	1.0	10	1:SR=4500000
115	met10 method	XCCB				04/13/17 04:21	1.0		
116	met10 method	CCB				04/13/17 04:24	1.0		
117	met10 method	SAMPLE	287610-023	Soil	246604	04/13/17 04:27	1.0		5:SR=4100000
118	met10 method	SAMPLE	287610-024	Soil	246604	04/13/17 04:30	1.0		5:SR=6500000
119	met10 method	SAMPLE	287610-025	Soil	246604	04/13/17 04:33	1.0		5:SR=6700000
120	met10 method	SAMPLE	287610-026	Soil	246604	04/13/17 04:36	1.0		5:SR=7400000
121	met10 method	SAMPLE	287610-027	Soil	246604	04/13/17 04:40	1.0		5:SR=6800000
122	met10 method	SAMPLE	287610-028	Soil	246604	04/13/17 04:43	1.0		5:SR=6400000
123	met10 method	SAMPLE	287610-029	Soil	246604	04/13/17 04:46	1.0		5:SR=4200000
124	met10 method	SAMPLE	287610-030	Soil	246604	04/13/17 04:49	1.0		5:SR=4600000
125	met10 method	SAMPLE	287610-031	Soil	246604	04/13/17 04:52	1.0		5:SR=3200000
126	met10 method	SAMPLE	287610-033	Soil	246604	04/13/17 04:55	1.0		5:SR=3700000
127	met10 method	CCV				04/13/17 04:58	1.0	10	1:SR=4500000
128	met10 method	XCCB				04/13/17 05:01	1.0		
129	met10 method	CCB				04/13/17 05:04	1.0		
130	met10 method	SAMPLE	287610-034	Soil	246604	04/13/17 05:07	1.0		5:SR=5000000
131	met10 method	SAMPLE	287610-035	Soil	246604	04/13/17 05:10	1.0		5:SR=5100000
132	met10 method	SAMPLE	287610-036	Soil	246604	04/13/17 05:14	1.0		5:SR=6500000
133	met10 method	SAMPLE	287610-037	Soil	246604	04/13/17 05:17	1.0		5:SR=6800000
134	met10 method	SAMPLE	287610-038	Soil	246604	04/13/17 05:20	1.0		5:SR=5300000
135	met10 method	SAMPLE	287610-039	Soil	246604	04/13/17 05:23	1.0		5:SR=5300000
136	met10 method	SAMPLE	287610-040	Soil	246604	04/13/17 05:26	1.0		5:SR=5700000
137	met10 method	CCV				04/13/17 05:29	1.0	10	1:SR=4500000
138	met10 method	XCCB				04/13/17 05:32	1.0		
139	met10 method	CCB				04/13/17 05:35	1.0		

TLO 04/13/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 139.

Standards used: 1=S32578 2=S32571 3=S32367 4=S32368 5=S32365 6=S32523 7=S32579 8=S32288 9=S32577 10=S32522 11=S29983 12=S29984 13=S32847

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087148206

Date : 04/12/17 Reference : met10 method
Sequence : MET10 04/12/17 Analyzed : 04/12/17 22:10

#	Type	Sample ID	Y A	Y R
		ICAL STD	13979965	899473
		LOWER LIMIT	4193989	269842
		UPPER LIMIT	16775958	1079367
011	ICB		13835604	884222
012	ICSA		10945381	754755
013	ICSAB		11122269	775646
021	SAMPLE	287766-015	13984922	912053
062	CCV		13434481	877802
064	CCB		14131638	890757
067	BLANK	QC881215	14561872	940051
068	BS	QC881216	13638462	911788
069	BSD	QC881217	13558706	895014
070	MSS	287610-017	12129636	847457
071	MS	QC881218	11842209	824585
072	MSD	QC881219	11892791	853773
073	SER	QC881220	13304709	868727
074	PDS	QC881221	12140299	867852
075	CCV		13072297	886349
077	CCB		14273294	908002
078	SAMPLE	287610-001	12359543	859607
079	SAMPLE	287610-002	12543435	846585
080	SAMPLE	287610-003	12357486	841770
081	SAMPLE	287610-004	12432708	841731
082	SAMPLE	287610-005	12504073	850736
083	SAMPLE	287610-006	12481627	851973
084	SAMPLE	287610-007	12452001	865500
085	SAMPLE	287610-008	12374196	867870
086	SAMPLE	287610-009	12122678	848824
087	SAMPLE	287610-010	12354372	849775
088	CCV		13282778	902169
090	CCB		14211941	909091
091	SAMPLE	287610-011	12240838	833939
092	SAMPLE	287610-012	12541618	845511
093	SAMPLE	287610-013	12563807	858567
094	SAMPLE	287610-014	12536699	857448
095	SAMPLE	287610-015	12430230	860136
096	SAMPLE	287610-016	12506963	846218
097	SAMPLE	287610-018	12301304	866194
098	SAMPLE	287610-019	12392485	857721
099	SAMPLE	287610-020	12707276	876364
101	CCV		13105316	893344
103	CCB		14522669	935121
104	BLANK	QC881256	14757143	942139
105	BS	QC881257	13597140	931979
106	BSD	QC881258	13569863	902943
107	MSS	287610-032	12378890	846571
108	MS	QC881259	12241148	893224
109	MSD	QC881260	12263477	856636
110	SER	QC881261	13373817	891467
111	PDS	QC881262	12210434	847340
112	SAMPLE	287610-021	12500915	846792

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087148206

Date : 04/12/17 Reference : met10 method
Sequence : MET10 04/12/17 Analyzed : 04/12/17 22:10

#	Type	Sample ID	Y A	Y R
113	SAMPLE	287610-022	12537255	865322
114	CCV		13323701	911499
116	CCB		14111628	930738
117	SAMPLE	287610-023	12480028	857788
118	SAMPLE	287610-024	12368504	849224
119	SAMPLE	287610-025	12297346	879815
120	SAMPLE	287610-026	12441065	872155
121	SAMPLE	287610-027	12403481	864529
122	SAMPLE	287610-028	12231160	869032
123	SAMPLE	287610-029	12507649	853935
124	SAMPLE	287610-030	12575144	849163
125	SAMPLE	287610-031	12743376	877870
126	SAMPLE	287610-033	12621830	888931
127	CCV		13220380	907948
129	CCB		14376348	909890
130	SAMPLE	287610-034	12433423	854857
131	SAMPLE	287610-035	12492257	869689
132	SAMPLE	287610-036	12486144	865376
133	SAMPLE	287610-037	12351327	862867
134	SAMPLE	287610-038	12278786	845071
135	SAMPLE	287610-039	12294396	847682
136	SAMPLE	287610-040	12361596	867630
137	CCV		13386564	914952
139	CCB		14550940	960901

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287610 METALS Soil: EPA 6010C

Inst : MET10
Calnum : 1087148206001
Units : ug/L

Date : 12-APR-2017 22:06
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087148206002	L1	12-APR-2017 22:10	S32578
L2	met10 method	1087148206003	L2	12-APR-2017 22:13	S32571
L3	met10 method	1087148206004	L3	12-APR-2017 22:15	S32367
L4	met10 method	1087148206005	L4	12-APR-2017 22:18	S32368
L5	met10 method	1087148206006	L5	12-APR-2017 22:21	S32365

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	5.3400	6.1440	5.8048	5.8585		LOR0	0.00000	0.17071		5.7868	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-9	100.00	5	1000.0	-1	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087148206001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287610 METALS Soil
EPA 6010C

Inst : MET10
Calnum : 1087148206001 Cal Date : 12-APR-2017

ICV 1087148206008 (12-APR-2017) stds: S32523

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4872	ug/L	-3	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206010.1 File : met10 method Time : 12-APR-2017 22:50
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32579

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	5.715	ug/L	14	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13924115	-0.40
Yttrium	R	899473	871898	-3.07

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206011.1 File : met10 method Time : 12-APR-2017 22:54
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13835604	-1.03
Yttrium	R	899473	884222	-1.70

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206012.1 File : met10 method Time : 12-APR-2017 22:57
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32288

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-0.4872]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19120	ug/L	96	
Copper	A	20000	20800	ug/L	104	
Manganese	A	20000	18170	ug/L	91	
Nickel	A	20000	16580	ug/L	83	
Titanium	A	20000	19410	ug/L	97	
Vanadium	A	20000	21980	ug/L	110	
Aluminum	R	500000	524100	ug/L	105	
Calcium	R	500000	497700	ug/L	100	
Iron	R	200000	191900	ug/L	96	
Magnesium	R	500000	443100	ug/L	89	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	10945381	-21.71
Yttrium	R	899473	754755	-16.09

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206013.1 File : met10 method Time : 12-APR-2017 23:06
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32577

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	1018	ug/L	2	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	11122269	-20.44
Yttrium	R	899473	775646	-13.77

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206062.1 File : met10 method Time : 13-APR-2017 01:38
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.5912	5000	4772	ug/L	-5	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13434481	-3.90
Yttrium	R	899473	877802	-2.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206064.1 File : met10 method Time : 13-APR-2017 01:44
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14131638	1.08
Yttrium	R	899473	890757	-0.97

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206075.1 File : met10 method Time : 13-APR-2017 02:19
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.7054	5000	4870	ug/L	-3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13072297	-6.49
Yttrium	R	899473	886349	-1.46

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206077.1 File : met10 method Time : 13-APR-2017 02:24
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14273294	2.10
Yttrium	R	899473	908002	0.95

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206088.1 File : met10 method Time : 13-APR-2017 02:59
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.7866	5000	4939	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13282778	-4.99
Yttrium	R	899473	902169	0.30

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206090.1 File : met10 method Time : 13-APR-2017 03:04
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14211941	1.66
Yttrium	R	899473	909091	1.07

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206101.1 File : met10 method Time : 13-APR-2017 03:39
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.7402	5000	4900	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13105316	-6.26
Yttrium	R	899473	893344	-0.68

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206103.1 File : met10 method Time : 13-APR-2017 03:44
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14522669	3.88
Yttrium	R	899473	935121	3.96

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206114.1 File : met10 method Time : 13-APR-2017 04:18
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.7973	5000	4948	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13323701	-4.69
Yttrium	R	899473	911499	1.34

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206116.1 File : met10 method Time : 13-APR-2017 04:24
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14111628	0.94
Yttrium	R	899473	930738	3.48

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206127.1 File : met10 method Time : 13-APR-2017 04:58
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.7260	5000	4887	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13220380	-5.43
Yttrium	R	899473	907948	0.94

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206129.1 File : met10 method Time : 13-APR-2017 05:04
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14376348	2.84
Yttrium	R	899473	909890	1.16

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206137.1 File : met10 method Time : 13-APR-2017 05:29
Cal : 1087148206001 Caldate : 12-APR-2017
Standards: S32522

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.7868	5.7595	5000	4916	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	13386564	-4.24
Yttrium	R	899473	914952	1.72

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS Soil
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087148206139.1 File : met10 method Time : 13-APR-2017 05:35
Cal : 1087148206001 Caldate : 12-APR-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	2.500	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	13979965	14550940	4.08
Yttrium	R	899473	960901	6.83

SAMPLE PREPARATION SUMMARY

Batch # : 246594 Analysis : ICP
Started By : SL Prep Date : 12-APR-2017 13:25 Finished By : SL
Method : 3050B Units : g
Spike #1 ID : S30743 Spike #2 ID : S32291 Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287610-001		Soil	.95	50	1	52.63						6010	
287610-002		Soil	.97	50	1	51.55						6010	
287610-003		Soil	1.09	50	1	45.87						6010	
287610-004		Soil	1.1	50	1	45.45						6010	
287610-005		Soil	1.03	50	1	48.54						6010	
287610-006		Soil	.99	50	1	50.51						6010	
287610-007		Soil	.91	50	1	54.95						6010	
287610-008		Soil	1.08	50	1	46.30						6010	
287610-009		Soil	1.08	50	1	46.30						6010	
287610-010		Soil	.93	50	1	53.76						6010	
287610-011		Soil	1.04	50	1	48.08						6010	
287610-012		Soil	.94	50	1	53.19						6010	
287610-013		Soil	.99	50	1	50.51						6010	
287610-014		Soil	.92	50	1	54.35						6010	
287610-015		Soil	1.06	50	1	47.17						6010	
287610-016		Soil	.9	50	1	55.56						6010	
287610-017		Soil	.9	50	1	55.56						6010	
287610-018		Soil	.93	50	1	53.76						6010	
287610-019		Soil	1.04	50	1	48.08						6010	
287610-020		Soil	.95	50	1	52.63						6010	
QC881215	BLANK	Soil	1.01	50	1	49.50							
QC881216	BS	Soil	.97	50	1	51.55		.5	.5	.5			
QC881217	BSD	Soil	.95	50	1	52.63		.5	.5	.5			
QC881218	MS	Soil	.99	50	1	50.51		.5	.5	.5			
QC881219	MSD	Soil	1	50	1	50.0		.5	.5	.5			
QC881220	SER	Soil	.9	50	1	55.56							
QC881221	PDS	Soil	.9	50	1	55.56							

Analyst: TLO Date: 04/14/17 Reviewer: PRW Date: 04/14/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246594 Digestion Method: Time ON: 1325 BK 4043

Date Digested: 4-12-17 ☒ EPA 3050b Time OFF: 1630 Page 91

Digested by: SL ☐ _____

Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
BLANK		1.01	☒50 ☐___	Y	✓	QC881215
BS		0.97	☒50 ☐___		✓	6
BSD		0.95	☒50 ☐___		✓	7
MS		0.99	☒50 ☐___		✓	8
MSD		1.00	☒50 ☐___		✓	9
287610-001	A	0.95	☒50 ☐___		✓	
-002		0.97	☒50 ☐___		✓	
-003		1.09	☒50 ☐___		✓	
-004		1.10	☒50 ☐___		✓	
-005		1.03	☒50 ☐___		✓	
-006		0.99	☒50 ☐___		✓	
-007		0.91	☒50 ☐___		✓	
-008		1.08	☒50 ☐___		✓	
-009		1.08	☒50 ☐___		✓	
-010		0.93	☒50 ☐___		✓	
-011		1.04	☒50 ☐___		✓	
-012		0.94	☒50 ☐___		✓	
-013		0.99	☒50 ☐___		✓	
-014		0.92	☒50 ☐___		✓	
-015		1.06	☒50 ☐___		✓	
-016		0.90	☒50 ☐___		✓	
-017		0.90	☒50 ☐___		✓	MS9
-018		0.93	☒50 ☐___		✓	
-019		1.04	☒50 ☐___		✓	
-020		0.95	☒50 ☐___		✓	

Balance ID: B-10 calibration has been checked? ☒Yes ☐No

	Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	26-242-3025	1512329-6238-KN	SL 4-12-17
Blank 'matrix' lot#	T458-7B023		
.5 mL of spike solution (Std1) was added to all spikes	S30743		
.5 mL of spike solution (Std2) was added to all spikes	S32291		
.5 mL of spike solution (Std3) was added to all spikes	S32778		
Digestion Block ID, Probe Location	RAINER	2	
Temperature (°C), Thermometer ID	95°	AG4730	
1:1 HNO3 Reagent ID	BDH 20170119887		
concentrated HNO3 lot#	BDH 20170119887		
3mL 30% hydrogen peroxide lot#	EMD 56258689		
concentrated HCl lot#	JTB 162118		
☐ filtered thru' Whatman 541, lot#	97694447		
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
.5	~~2M~~ N271500
5	24444267
1.5	24444267

4-12-17

Digestion Chemist / Date

Continued from page 0

Continued on page _____

Reviewed Online/ See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 246604 Analysis : ICP
Started By : MB4 Prep Date : 12-APR-2017 17:35 Finished By : MB4
Method : 3050B Units : g
Spike #1 ID : S30743 Spike #2 ID : S32291 Spike #3 ID : S32778

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287610-021		Soil	.95	50	1	52.63						6010	
287610-022		Soil	.96	50	1	52.08						6010	
287610-023		Soil	.92	50	1	54.35						6010	
287610-024		Soil	1	50	1	50.0						6010	
287610-025		Soil	.99	50	1	50.51						6010	
287610-026		Soil	.96	50	1	52.08						6010	
287610-027		Soil	.96	50	1	52.08						6010	
287610-028		Soil	.96	50	1	52.08						6010	
287610-029		Soil	.92	50	1	54.35						6010	
287610-030		Soil	.97	50	1	51.55						6010	
287610-031		Soil	.9	50	1	55.56						6010	
287610-032		Soil	1.05	50	1	47.62						6010	
287610-033		Soil	.93	50	1	53.76						6010	
287610-034		Soil	1	50	1	50.0						6010	
287610-035		Soil	1.03	50	1	48.54						6010	
287610-036		Soil	.94	50	1	53.19						6010	
287610-037		Soil	1.07	50	1	46.73						6010	
287610-038		Soil	.91	50	1	54.95						6010	
287610-039		Soil	1.09	50	1	45.87						6010	
287610-040		Soil	.99	50	1	50.51						6010	
QC881256	BLANK	Soil	.96	50	1	52.08							
QC881257	BS	Soil	.94	50	1	53.19		.5	.5	.5			
QC881258	BSD	Soil	1.02	50	1	49.02		.5	.5	.5			
QC881259	MS	Soil	.97	50	1	51.55		.5	.5	.5			
QC881260	MSD	Soil	.92	50	1	54.35		.5	.5	.5			
QC881261	SER	Soil	1.05	50	1	47.62							
QC881262	PDS	Soil	1.05	50	1	47.62							

Analyst: TLO Date: 04/14/17 Reviewer: PRW Date: 04/14/17

Soil Digestion for ICP & ICP-MS Curtis & Tompkins, Ltd. Version 11.1, Feb.2017

LIMS Batch #: 246604 Digestion Method: Time ON: 17:35 **BK 4043**

Date Digested: 4-11-2017 ☒ EPA 3050b Time OFF: 21:10 Page 92

Digested by: MBH ☐ _____

	Sample #	Container ID	Weight of Sample (g)	Final Volume (mL)	Filtered? (y/n)	ID ✓	Comments
	BLANK		0.96	☒50 ☐___	Yes	✓	QC#881256
	BS		0.94	☒50 ☐___		✓	57
	BSD		1.02	☒50 ☐___		✓	58
	MS		0.97	☒50 ☐___		✓	59
5	MSD		0.92	☒50 ☐___		✓	60
	287010-021	A	0.95	☒50 ☐___		✓	
	-022		0.96	☒50 ☐___		✓	
	-023		0.92	☒50 ☐___		✓	
	-024		1.00	☒50 ☐___		✓	
10	-025		0.99	☒50 ☐___		✓	
	-026		0.96	☒50 ☐___		✓	
	-027		0.96	☒50 ☐___		✓	
	-028		0.96	☒50 ☐___		✓	
	-029		0.92	☒50 ☐___		✓	
15	-030		0.97	☒50 ☐___		✓	
	-031		0.90	☒50 ☐___		✓	
	-032		1.05	☒50 ☐___		✓	MSS
	-033		0.93	☒50 ☐___		✓	
	-034		1.00	☒50 ☐___		✓	
20	-035		1.03	☒50 ☐___		✓	
	-036		0.94	☒50 ☐___		✓	
	-037		1.07	☒50 ☐___		✓	
	-038		0.91	☒50 ☐___		✓	
	-039		1.09	☒50 ☐___		✓	
	-040	↓	0.99	☒50 ☐___	↓	✓	

Balance ID: B-10 calibration has been checked? ☒Yes ☐No

Reagent ID or LIMS #		Initials / Date
SCP Digestion tubes / ESS Watch glass, lot#	2607642-3023 / 151232916238-KN	MBH 4-12-17
Blank 'matrix' lot#	T458-7B023	
0.5 mL of spike solution (Std1) was added to all spikes	S30743	
0.5 mL of spike solution (Std2) was added to all spikes	S32291	
0.5 mL of spike solution (Std3) was added to all spikes	S32778	
Digestion Block ID, Probe Location	Rainier 2	
Temperature (°C) , Thermometer ID	95°C A64730	
1:1 HNO3 Reagent ID	BDH20170119882	
concentrated HNO3 lot#	BDH20170119882	
3mL 30% hydrogen peroxide lot#	EMD 56258639	
concentrated HCl lot#	JTB162118	
☑ filtered thru' Whatman 541, lot#	97694447	
Relinquished to ICP group	ICP	↓

Pipettes

Vol.(mL)	ID
0.5	N27150D
5	24442607
1.5	24442607

4.12.17

Digestion Chemist / Date

Continued from page 9

Continued on page _____

Reviewed Online/ See LIMS

Laboratory Job Number 287610

ANALYTICAL REPORT

Metals

Matrix: SPLP Leachate

Curtis & Tompkins, Ltd.

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	04/03/17
Units:	mg/L		

Field ID	Type	Lab ID	Result	RL	Batch#	Chemist	Sampled	Prepared	Analyzed
21-SS174	SAMPLE	287610-001	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS192	SAMPLE	287610-002	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS191	SAMPLE	287610-003	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS190	SAMPLE	287610-004	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS189	SAMPLE	287610-005	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS188	SAMPLE	287610-006	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS187	SAMPLE	287610-007	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS186	SAMPLE	287610-008	0.0065	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS185	SAMPLE	287610-009	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS184	SAMPLE	287610-010	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS201	SAMPLE	287610-011	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS200	SAMPLE	287610-012	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS199	SAMPLE	287610-013	ND	0.0050	248959	MNA	03/27/17	06/21/17	06/26/17
21-SS198	SAMPLE	287610-014	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS197	SAMPLE	287610-015	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS196	SAMPLE	287610-016	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS195	SAMPLE	287610-017	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS194	SAMPLE	287610-018	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS193	SAMPLE	287610-019	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS208	SAMPLE	287610-020	ND	0.0050	248959	MNA	03/28/17	06/21/17	06/26/17
21-SS207	SAMPLE	287610-021	ND	0.0050	249179	TLO	03/28/17	06/28/17	06/29/17
21-SS206	SAMPLE	287610-022	ND	0.0050	249179	TLO	03/28/17	06/28/17	06/29/17
21-SS205	SAMPLE	287610-023	ND	0.0050	249179	TLO	03/28/17	06/28/17	06/29/17
21-SS204	SAMPLE	287610-024	ND	0.0050	249179	TLO	03/28/17	06/28/17	06/29/17
21-SS203	SAMPLE	287610-025	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS202	SAMPLE	287610-026	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS209	SAMPLE	287610-027	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS210	SAMPLE	287610-028	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS212	SAMPLE	287610-029	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS213	SAMPLE	287610-030	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS214	SAMPLE	287610-031	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS215	SAMPLE	287610-032	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS220	SAMPLE	287610-033	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS219	SAMPLE	287610-034	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS218	SAMPLE	287610-035	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS217	SAMPLE	287610-036	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS216	SAMPLE	287610-037	ND	0.0050	249179	TLO	03/28/17	06/28/17	06/29/17
21-SS221	SAMPLE	287610-038	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS222	SAMPLE	287610-039	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
21-SS211	SAMPLE	287610-040	ND	0.0050	249179	TLO	03/29/17	06/28/17	06/29/17
	BLANK	QC890309	ND	0.0050	248959	MNA		06/21/17	06/26/17
	BLANK	QC891167	ND	0.0050	249179	TLO		06/28/17	06/29/17

ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Matrix:	SPLP Leachate	Received:	04/03/17
Units:	mg/L		

Field ID	Type	MSS Lab ID	Lab ID	MSS Result	Spiked	Result	%REC	Limits	RPD	Lim	Batch#	Chemist	Sampled	Prepared	Analyzed
	BS		QC890310		0.1000	0.09540	95	77-120			248959	MNA		06/21/17	06/26/17
	BSD		QC890311		0.1000	0.09447	94	77-120	1	20	248959	MNA		06/21/17	06/26/17
21-SS174	MS	287610-001	QC890312	<0.001185	0.1000	0.09694	97	56-127			248959	MNA	03/27/17	06/21/17	06/26/17
21-SS174	MSD	287610-001	QC890313		0.1000	0.09368	94	56-127	3	33	248959	MNA	03/27/17	06/21/17	06/26/17
	BS		QC891168		0.1000	0.1159	116	77-120			249179	TLO		06/28/17	06/29/17
	BSD		QC891169		0.1000	0.1133	113	77-120	2	20	249179	TLO		06/28/17	06/29/17
21-SS207	MS	287610-021	QC891170	<0.001185	0.1000	0.1143	114	56-127			249179	TLO	03/28/17	06/28/17	06/29/17
21-SS207	MSD	287610-021	QC891171		0.1000	0.1074	107	56-127	6	33	249179	TLO	03/28/17	06/28/17	06/29/17

RPD= Relative Percent Difference

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS174	Batch#:	248959
Type:	Serial Dilution	Chemist:	MNA
MSS Lab ID:	287610-001	Sampled:	03/27/17
Lab ID:	QC890314	Received:	04/03/17
Matrix:	SPLP Leachate	Analyzed:	06/26/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Curtis & Tompkins, Ltd.

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS174	Batch#:	248959
Type:	Post Digest Spike	Chemist:	MNA
MSS Lab ID:	287610-001	Sampled:	03/27/17
Lab ID:	QC890315	Received:	04/03/17
Matrix:	SPLP Leachate	Analyzed:	06/26/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1175	117	75-125

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	5.000
Field ID:	21-SS207	Batch#:	249179
Type:	Serial Dilution	Chemist:	TLO
MSS Lab ID:	287610-021	Sampled:	03/28/17
Lab ID:	QC891172	Received:	04/03/17
Matrix:	SPLP Leachate	Analyzed:	06/29/17
Units:	mg/L		

MSS Result	MSS RL	Result	RL	% Diff	Lim
ND	0.005000	ND	0.02500	NC	10

NC= Not Calculated
ND= Not Detected
RL= Reporting Limit

Batch QC Report

Lead

Lab #:	287610	Location:	Camp Bonneville Military Reservation
Client:	Weston Solutions	Prep:	EPA 3010A
Project#:	15048.001.003.0006.1	Analysis:	EPA 6010C
Analyte:	Lead	Diln Fac:	1.000
Field ID:	21-SS207	Batch#:	249179
Type:	Post Digest Spike	Chemist:	TLO
MSS Lab ID:	287610-021	Sampled:	03/28/17
Lab ID:	QC891173	Received:	04/03/17
Matrix:	SPLP Leachate	Analyzed:	06/29/17
Units:	mg/L		

MSS Result	Spiked	Result	%REC	Limits
<0.001185	0.1000	0.1303	130 *	75-125

*= Value outside of QC limits; see narrative

REPORTING SUMMARY FOR 287610 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB
287610-001	MET10	06/23/17 15:17	1.0	
287610-001	MET10	06/26/17 18:57	1.0	+
287610-002	MET10	06/23/17 15:31	1.0	
287610-002	MET10	06/26/17 19:20	1.0	+
287610-003	MET10	06/23/17 15:42	1.0	
287610-003	MET10	06/26/17 19:23	1.0	+
287610-004	MET10	06/23/17 15:45	1.0	
287610-004	MET10	06/26/17 19:26	1.0	+
287610-005	MET10	06/23/17 15:48	1.0	
287610-005	MET10	06/26/17 19:28	1.0	+
287610-006	MET10	06/23/17 15:50	1.0	
287610-006	MET10	06/26/17 19:31	1.0	+
287610-007	MET10	06/23/17 15:53	1.0	
287610-007	MET10	06/26/17 19:33	1.0	+
287610-008	MET10	06/23/17 15:56	1.0	
287610-008	MET10	06/26/17 19:36	1.0	+
287610-009	MET10	06/23/17 15:59	1.0	
287610-009	MET10	06/26/17 19:38	1.0	+
287610-010	MET10	06/23/17 16:01	1.0	
287610-010	MET10	06/26/17 19:41	1.0	+
287610-011	MET10	06/23/17 16:04	1.0	
287610-011	MET10	06/26/17 19:43	1.0	+
287610-012	MET10	06/23/17 16:07	1.0	
287610-012	MET10	06/26/17 19:55	1.0	+
287610-013	MET10	06/23/17 16:19	1.0	
287610-013	MET10	06/26/17 19:57	1.0	+
287610-014	MET10	06/23/17 16:21	1.0	
287610-014	MET10	06/26/17 20:00	1.0	+
287610-015	MET10	06/23/17 16:24	1.0	
287610-015	MET10	06/26/17 20:03	1.0	+
287610-016	MET10	06/23/17 16:26	1.0	
287610-016	MET10	06/26/17 20:05	1.0	+
287610-017	MET10	06/23/17 16:29	1.0	
287610-017	MET10	06/26/17 20:08	1.0	+
287610-018	MET10	06/23/17 16:31	1.0	
287610-018	MET10	06/26/17 20:10	1.0	+

REPORTING SUMMARY FOR 287610 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
287610-019	MET10	06/23/17 16:33	1.0		
287610-019	MET10	06/26/17 20:12	1.0	+	
287610-020	MET10	06/23/17 16:36	1.0		
287610-020	MET10	06/26/17 20:15	1.0	+	
287610-021	MET10	06/29/17 04:33	1.0	+	
287610-022	MET10	06/29/17 04:48	1.0	+	
287610-023	MET10	06/29/17 04:50	1.0	+	
287610-024	MET10	06/29/17 04:53	1.0	+	
287610-025	MET10	06/29/17 04:55	1.0	+	
287610-026	MET10	06/29/17 05:07	1.0	+	
287610-027	MET10	06/29/17 05:10	1.0	+	
287610-028	MET10	06/29/17 05:12	1.0	+	
287610-029	MET10	06/29/17 05:15	1.0	+	
287610-030	MET10	06/29/17 05:17	1.0	+	
287610-031	MET10	06/29/17 05:20	1.0	+	
287610-032	MET10	06/29/17 05:23	1.0	+	
287610-033	MET10	06/29/17 05:26	1.0	+	
287610-034	MET10	06/29/17 05:28	1.0	+	
287610-035	MET10	06/29/17 05:31	1.0	+	
287610-036	MET10	06/29/17 05:39	1.0	+	
287610-037	MET10	06/29/17 05:42	1.0	+	
287610-038	MET10	06/29/17 05:44	1.0	+	
287610-039	MET10	06/29/17 05:47	1.0	+	
287610-040	MET10	06/29/17 05:49	1.0	+	
QC890309	MET10	06/23/17 15:09	1.0		
QC890309	MET10	06/26/17 18:49	1.0	+	
QC890310	MET10	06/23/17 15:12	1.0		
QC890310	MET10	06/26/17 18:52	1.0	+	

REPORTING SUMMARY FOR 287610 METALS SPLP Leachate
Curtis & Tompkins Laboratories

Lab ID	Inst ID	Analyzed	IDF	PB	
QC890311	MET10	06/23/17 15:15	1.0		
QC890311	MET10	06/26/17 18:55	1.0	+	
QC890312	MET10	06/23/17 15:20	1.0		
QC890312	MET10	06/26/17 19:00	1.0	+	
QC890313	MET10	06/23/17 15:22	1.0		
QC890313	MET10	06/26/17 19:02	1.0	+	
QC890314	MET10	06/23/17 15:25	5.0		
QC890314	MET10	06/26/17 19:05	5.0	+	
QC890315	MET10	06/23/17 15:28	1.0		
QC890315	MET10	06/26/17 19:08	1.0	+	
QC891167	MET10	06/29/17 04:15	1.0	+	
QC891168	MET10	06/29/17 04:19	1.0	+	
QC891169	MET10	06/29/17 04:31	1.0	+	
QC891170	MET10	06/29/17 04:37	1.0	+	
QC891171	MET10	06/29/17 04:40	1.0	+	
QC891172	MET10	06/29/17 04:42	5.0	+	
QC891173	MET10	06/29/17 04:45	1.0	+	

ICP Data

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10
Method : EPA 6010C

Begun : 06/26/17 08:25
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				06/26/17 08:25	1.0		
002	met10 method	ICAL	L1			06/26/17 08:28	1.0	1	
003	met10 method	ICAL	L2			06/26/17 08:32	1.0	2	
004	met10 method	ICAL	L3			06/26/17 08:34	1.0	3	
005	met10 method	ICAL	L4			06/26/17 08:37	1.0	4	
006	met10 method	ICAL	L5			06/26/17 08:39	1.0	5	
007	met10 method	ICV				06/26/17 08:42	1.0	6	
008	met10 method	CRI				06/26/17 08:47	1.0	7	
009	met10 method	CRI				06/26/17 08:52	1.0	7	
010	met10 method	ICB				06/26/17 08:56	1.0		
011	met10 method	ICSA				06/26/17 09:01	1.0	8	10:AL=510000
012	met10 method	ICSAB				06/26/17 09:16	1.0	9	5:AL=520000
013	met10 method	CCV				06/26/17 09:19	1.0	10	
014	met10 method	CCB				06/26/17 09:22	1.0		
015	met10 method	CCB				06/26/17 09:25	1.0		
016	met10 method	X	RINSE			06/26/17 09:33	1.0		
017	met10 method	BLANK	QC890849	WET Leachate	249092	06/26/17 09:36	10.0		
018	met10 method	BS	QC890850	WET Leachate	249092	06/26/17 09:39	1.0		
019	met10 method	BSD	QC890851	WET Leachate	249092	06/26/17 09:42	1.0		
020	met10 method	SAMPLE	290112-001	WET Leachate	249092	06/26/17 09:46	10.0		
021	met10 method	SAMPLE	289721-013	Soil	248742	06/26/17 09:48	1.0		
022	met10 method	MS	QC889070	Water	248624	06/26/17 09:51	1.0		
023	met10 method	MSD	QC889071	Water	248624	06/26/17 09:54	1.0		
024	met10 method	SAMPLE	289642-009	Water	248624	06/26/17 09:56	1.0		
025	met10 method	SAMPLE	289642-011	Water	248624	06/26/17 09:59	1.0		1:MG=100000
026	met10 method	CCV				06/26/17 10:01	1.0	10	
027	met10 method	CCB				06/26/17 10:05	1.0		
028	met10 method	CCB				06/26/17 10:08	1.0		
029	met10 method	SAMPLE	289604-001	Miscell.	248958	06/26/17 10:11	1.0		7:FE=1300000
030	met10 method	X	RINSE			06/26/17 10:14	1.0		
031	met10 method	BLANK	QC890294	Soil	248956	06/26/17 10:18	1.0		
032	met10 method	BS	QC890295	Soil	248956	06/26/17 10:21	1.0		1:SR=9700
033	met10 method	BSD	QC890296	Soil	248956	06/26/17 10:24	1.0		1:SR=9700
034	met10 method	SAMPLE	289604-001	Miscell.	248958	06/26/17 10:27	100.0		
035	met10 method	SAMPLE	289572-001	Water	248508	06/26/17 10:29	1.0		2:CA=110000
036	met10 method	SAMPLE	289572-003	Water	248508	06/26/17 10:32	1.0		2:CA=110000
037	met10 method	SAMPLE	289572-004	Water	248508	06/26/17 10:35	1.0		2:CA=120000
038	met10 method	SAMPLE	289572-005	Water	248508	06/26/17 10:37	1.0		2:CA=120000
039	met10 method	CCV				06/26/17 10:40	1.0	10	
040	met10 method	CCB				06/26/17 10:43	1.0		
041	met10 method	XCCB				06/26/17 10:46	1.0		
042	met10 method	MSS	290023-001	Soil	249007	06/26/17 10:50	1.0		5:FE=410000
043	met10 method	SAMPLE	289572-006	Water	248508	06/26/17 10:54	1.0		2:CA=130000
044	met10 method	SAMPLE	289572-007	Water	248508	06/26/17 10:56	100.0		
045	met10 method	MSS	289952-007	WET Leachate	249092	06/26/17 11:00	10.0		
046	met10 method	MS	QC890852	WET Leachate	249092	06/26/17 11:03	10.0		
047	met10 method	MSD	QC890853	WET Leachate	249092	06/26/17 11:05	10.0		
048	met10 method	SER	QC890854	WET Leachate	249092	06/26/17 11:08	50.0		
049	met10 method	PDS	QC890855	WET Leachate	249092	06/26/17 11:10	10.0	11 12 13	
050	met10 method	X	RINSE			06/26/17 11:13	1.0		
051	met10 method	SAMPLE	289721-012	Soil	248742	06/26/17 11:16	1.0		
052	met10 method	CCV				06/26/17 11:19	1.0	10	

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10 Begun : 06/26/17 08:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	CCB				06/26/17 11:22	1.0		
054	met10 method	CCB				06/26/17 11:25	1.0		
055	met10 method	BLANK	QC886536	Soil	247964	06/26/17 11:28	1.0		
056	met10 method	SAMPLE	288833-004	Water	247874	06/26/17 11:32	1.0		
057	met10 method	X	RINSE			06/26/17 11:34	1.0		
058	met10 method	BLANK	QC890537	Water	249016	06/26/17 11:38	1.0		
059	met10 method	BS	QC890538	Water	249016	06/26/17 11:41	1.0		
060	met10 method	BSD	QC890539	Water	249016	06/26/17 11:44	1.0		
061	met10 method	MSS	290029-001	Water	249016	06/26/17 11:47	1.0		3:MG=500000
062	met10 method	MS	QC890540	Water	249016	06/26/17 11:49	1.0		
063	met10 method	X	RINSE			06/26/17 11:52	1.0		
064	met10 method	CCV				06/26/17 11:59	1.0	10	
065	met10 method	CCB				06/26/17 12:02	1.0		
066	met10 method	SAMPLE	290029-002	Water	249016	06/26/17 12:06	10.0		1:SR=1400
067	met10 method	SAMPLE	289917-001	Water	248932	06/26/17 12:09	1.0		
068	met10 method	SAMPLE	289917-002	Water	248932	06/26/17 12:12	1.0		
069	met10 method	SAMPLE	289917-003	Water	248932	06/26/17 12:15	1.0		
070	met10 method	SAMPLE	289917-004	Water	248932	06/26/17 12:17	1.0		
071	met10 method	SAMPLE	289917-005	Water	248932	06/26/17 12:20	1.0		
072	met10 method	SAMPLE	289917-006	Water	248932	06/26/17 12:22	1.0		1:AL=150000
073	met10 method	SAMPLE	289952-008	WET Leachate	249092	06/26/17 12:25	10.0		
074	met10 method	X	RINSE			06/26/17 12:28	1.0		
075	met10 method	CCV				06/26/17 12:31	1.0	10	
076	met10 method	CCB				06/26/17 12:34	1.0		
077	met10 method	BLANK	QC890828	WET Leachate	249088	06/26/17 12:38	10.0		
078	met10 method	BS	QC890829	WET Leachate	249088	06/26/17 12:41	1.0		
079	met10 method	BSD	QC890830	WET Leachate	249088	06/26/17 12:44	1.0		
080	met10 method	MSS	289877-001	WET Leachate	249088	06/26/17 12:46	10.0		
081	met10 method	MS	QC890831	WET Leachate	249088	06/26/17 12:49	10.0		
082	met10 method	MSD	QC890832	WET Leachate	249088	06/26/17 12:51	10.0		
083	met10 method	SAMPLE	289877-002	WET Leachate	249088	06/26/17 12:54	10.0		
084	met10 method	SAMPLE	289877-003	WET Leachate	249088	06/26/17 12:56	10.0		
085	met10 method	SAMPLE	289877-004	WET Leachate	249088	06/26/17 12:59	10.0		
086	met10 method	SAMPLE	289877-005	WET Leachate	249088	06/26/17 13:02	10.0		
087	met10 method	CCV				06/26/17 13:04	1.0	10	
088	met10 method	CCB				06/26/17 13:07	1.0		
089	met10 method	SAMPLE	289877-006	WET Leachate	249088	06/26/17 13:11	10.0		
090	met10 method	SAMPLE	289877-007	WET Leachate	249088	06/26/17 13:13	10.0		
091	met10 method	SAMPLE	289970-001	WET Leachate	249088	06/26/17 13:16	10.0		
092	met10 method	SAMPLE	290021-001	WET Leachate	249088	06/26/17 13:18	10.0		
093	met10 method	SAMPLE	290021-002	WET Leachate	249088	06/26/17 13:21	10.0		
094	met10 method	SAMPLE	290021-003	WET Leachate	249088	06/26/17 13:23	10.0		
095	met10 method	SAMPLE	290021-004	WET Leachate	249088	06/26/17 13:26	10.0		
096	met10 method	SAMPLE	290021-005	WET Leachate	249088	06/26/17 13:28	10.0		
097	met10 method	XSAMPLE	290021-006	WET Leachate	249088	06/26/17 13:31	10.0		
098	met10 method	XSAMPLE	290021-007	WET Leachate	249088	06/26/17 13:33	10.0		
099	met10 method	CCV				06/26/17 13:37	1.0	10	
100	met10 method	CCB				06/26/17 13:40	1.0		
101	met10 method	XSAMPLE	290021-008	WET Leachate	249088	06/26/17 13:44	10.0		
102	met10 method	XSAMPLE	290021-009	WET Leachate	249088	06/26/17 13:47	10.0		
103	met10 method	X?SAMPLE	249043-005		249053	06/26/17 13:51	1.0		
104	met10 method	XX	RINSE			06/26/17 13:54	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10
Method : EPA 6010C

Begun : 06/26/17 08:25
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	XBLANK	QC890786	TCLP Leachate	249075	06/26/17 13:58	10.0		
106	met10 method	XBLANK	QC890787	TCLP Leachate	249075	06/26/17 14:01	10.0		
107	met10 method	CCV				06/26/17 14:06	1.0	10	
108	met10 method	CCB				06/26/17 14:09	1.0		
109	met10 method	XCCB				06/26/17 14:12	1.0		
110	met10 method	SAMPLE	290021-006	WET Leachate	249088	06/26/17 14:17	10.0		
111	met10 method	SAMPLE	290021-007	WET Leachate	249088	06/26/17 14:20	10.0		
112	met10 method	SAMPLE	290021-008	WET Leachate	249088	06/26/17 14:22	10.0		
113	met10 method	SAMPLE	290021-009	WET Leachate	249088	06/26/17 14:25	10.0		
114	met10 method	SAMPLE	290043-005	Soil	249053	06/26/17 14:27	1.0		4:CA=430000
115	met10 method	X	RINSE			06/26/17 14:31	1.0		
116	met10 method	BLANK	QC890786	TCLP Leachate	249075	06/26/17 14:34	10.0		
117	met10 method	BLANK	QC890787	TCLP Leachate	249075	06/26/17 14:38	10.0		
118	met10 method	BS	QC890788	TCLP Leachate	249075	06/26/17 14:41	1.0		
119	met10 method	BSD	QC890789	TCLP Leachate	249075	06/26/17 14:44	1.0		
120	met10 method	CCV				06/26/17 14:46	1.0	10	
121	met10 method	CCB				06/26/17 14:49	1.0		
122	met10 method	XCCB				06/26/17 14:52	1.0		
123	met10 method	MSS	289952-008	TCLP Leachate	249075	06/26/17 14:56	10.0		
124	met10 method	MS	QC890790	TCLP Leachate	249075	06/26/17 14:59	10.0		
125	met10 method	MSD	QC890791	TCLP Leachate	249075	06/26/17 15:02	10.0		
126	met10 method	SAMPLE	290112-001	TCLP Leachate	249075	06/26/17 15:04	10.0		
127	met10 method	X	RINSE			06/26/17 15:07	1.0		
128	met10 method	BLANK	QC888875	WET Leachate	248574	06/26/17 15:10	10.0		
129	met10 method	BS	QC888876	WET Leachate	248574	06/26/17 15:14	1.0		
130	met10 method	BSD	QC888877	WET Leachate	248574	06/26/17 15:17	1.0		
131	met10 method	MSS	289110-023	WET Leachate	248574	06/26/17 15:19	10.0		
132	met10 method	MS	QC888878	WET Leachate	248574	06/26/17 15:22	10.0		
133	met10 method	CCV				06/26/17 15:24	1.0	10	
134	met10 method	CCB				06/26/17 15:27	1.0		
135	met10 method	CCB				06/26/17 15:30	1.0		
136	met10 method	MSD	QC888879	WET Leachate	248574	06/26/17 15:33	10.0		
137	met10 method	SAMPLE	289110-024	WET Leachate	248574	06/26/17 15:36	10.0		
138	met10 method	SAMPLE	289110-025	WET Leachate	248574	06/26/17 15:38	10.0		
139	met10 method	SAMPLE	289110-026	WET Leachate	248574	06/26/17 15:41	10.0		
140	met10 method	SAMPLE	289110-030	WET Leachate	248574	06/26/17 15:43	10.0		
141	met10 method	SAMPLE	289110-031	WET Leachate	248574	06/26/17 15:46	10.0		
142	met10 method	SAMPLE	289110-036	WET Leachate	248574	06/26/17 15:49	10.0		
143	met10 method	SAMPLE	289110-037	WET Leachate	248574	06/26/17 15:51	10.0		
144	met10 method	SAMPLE	289110-038	WET Leachate	248574	06/26/17 15:54	10.0		
145	met10 method	SAMPLE	289110-039	WET Leachate	248574	06/26/17 15:56	10.0		
146	met10 method	CCV				06/26/17 15:59	1.0	10	
147	met10 method	CCB				06/26/17 16:02	1.0		
148	met10 method	SER	QC890833	WET Leachate	249088	06/26/17 16:14	50.0		
149	met10 method	PDS	QC890834	WET Leachate	249088	06/26/17 16:18	10.0	11 12 13	
150	met10 method	SAMPLE	289962-012	WET Leachate	249092	06/26/17 16:20	10.0		
151	met10 method	SAMPLE	289962-013	WET Leachate	249092	06/26/17 16:23	10.0		
152	met10 method	SAMPLE	289962-014	WET Leachate	249092	06/26/17 16:25	10.0		
153	met10 method	SAMPLE	289962-015	WET Leachate	249092	06/26/17 16:28	10.0		
154	met10 method	SAMPLE	289962-016	WET Leachate	249092	06/26/17 16:31	10.0		
155	met10 method	SAMPLE	289962-017	WET Leachate	249092	06/26/17 16:33	10.0		
156	met10 method	SAMPLE	289962-018	WET Leachate	249092	06/26/17 16:36	10.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10 Begun : 06/26/17 08:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
157	met10 method	SAMPLE	289962-019	WET Leachate	249092	06/26/17 16:39	10.0		
158	met10 method	CCV				06/26/17 16:41	1.0	10	
159	met10 method	CCB				06/26/17 16:44	1.0		
160	met10 method	SAMPLE	289962-020	WET Leachate	249092	06/26/17 16:48	10.0		
161	met10 method	SAMPLE	289962-021	WET Leachate	249092	06/26/17 16:50	10.0		
162	met10 method	SAMPLE	289962-022	WET Leachate	249092	06/26/17 16:53	10.0		
163	met10 method	SAMPLE	289962-023	WET Leachate	249092	06/26/17 16:56	10.0		
164	met10 method	SAMPLE	289983-004	Soil	249053	06/26/17 16:58	1.0		7:FE=250000
165	met10 method	MSS	290033-001	Soil	249053	06/26/17 17:01	1.0		5:FE=440000
166	met10 method	SAMPLE	289304-009	Water	248285	06/26/17 17:05	1.0		4:CA=360000
167	met10 method	SAMPLE	289811-001	Water	248792	06/26/17 17:07	1.0		
168	met10 method	SAMPLE	289812-001	Water	248792	06/26/17 17:11	1.0		4:MG=260000
169	met10 method	SAMPLE	289852-001	Soil	249007	06/26/17 17:14	1.0		
170	met10 method	CCV				06/26/17 17:16	1.0	10	
171	met10 method	CCB				06/26/17 17:19	1.0		
172	met10 method	SAMPLE	289942-001	Soil	249007	06/26/17 17:23	1.0		5:FE=360000
173	met10 method	SAMPLE	289944-001	Soil	249007	06/26/17 17:26	1.0		4:FE=580000
174	met10 method	SAMPLE	289951-001	Soil	249007	06/26/17 17:29	1.0		2:FE=420000
175	met10 method	SAMPLE	289951-002	Soil	249007	06/26/17 17:32	1.0		2:FE=370000
176	met10 method	SAMPLE	289951-003	Soil	249007	06/26/17 17:35	1.0		2:FE=380000
177	met10 method	SAMPLE	289956-001	Soil	249007	06/26/17 17:38	100.0		
178	met10 method	MSS	289828-001	Water	248870	06/26/17 17:41	1.0		3:CA=980000
179	met10 method	SAMPLE	289828-003	Water	248870	06/26/17 17:45	1.0		3:CA=2800000
180	met10 method	SAMPLE	289110-040	WET Leachate	248574	06/26/17 17:49	10.0		
181	met10 method	SAMPLE	289110-041	WET Leachate	248574	06/26/17 17:51	10.0		
182	met10 method	CCV				06/26/17 17:54	1.0	10	
183	met10 method	CCB				06/26/17 17:57	1.0		
184	met10 method	X	RINSE			06/26/17 18:00	1.0		
185	met10 method	BLANK	QC889639	Soil	248781	06/26/17 18:04	1.0		
186	met10 method	BS	QC889640	Soil	248781	06/26/17 18:07	1.0		1:SR=9500
187	met10 method	BSD	QC889641	Soil	248781	06/26/17 18:10	1.0		1:SR=9600
188	met10 method	MSS	289775-005	Soil	248781	06/26/17 18:13	1.0		7:FE=620000
189	met10 method	MS	QC889642	Soil	248781	06/26/17 18:16	1.0		9:FE=670000
190	met10 method	MSD	QC889643	Soil	248781	06/26/17 18:20	1.0		8:FE=690000
191	met10 method	SAMPLE	289846-004	Water	248975	06/26/17 18:23	1.0		
192	met10 method	SAMPLE	289761-001	Miscell.	248781	06/26/17 18:27	1.0		
193	met10 method	SAMPLE	287447-007	Miscell.	246039	06/26/17 18:30	100.0		1:PB=11000
194	met10 method	CCV				06/26/17 18:33	1.0	10	
195	met10 method	CCB				06/26/17 18:36	1.0		
196	met10 method	CCB				06/26/17 18:39	1.0		
197	met10 method	SAMPLE	289604-001	TCLP Leachate	248847	06/26/17 18:43	10.0		
198	met10 method	X	RINSE			06/26/17 18:45	1.0		
199	met10 method	BLANK	QC890309	SPLP Leachate	248959	06/26/17 18:49	1.0		
200	met10 method	BS	QC890310	SPLP Leachate	248959	06/26/17 18:52	1.0		
201	met10 method	BSD	QC890311	SPLP Leachate	248959	06/26/17 18:55	1.0		
202	met10 method	MSS	287610-001	SPLP Leachate	248959	06/26/17 18:57	1.0		
203	met10 method	MS	QC890312	SPLP Leachate	248959	06/26/17 19:00	1.0		
204	met10 method	MSD	QC890313	SPLP Leachate	248959	06/26/17 19:02	1.0		
205	met10 method	SER	QC890314	SPLP Leachate	248959	06/26/17 19:05	5.0		
206	met10 method	PDS	QC890315	SPLP Leachate	248959	06/26/17 19:08	1.0	11 12 13	
207	met10 method	CCV				06/26/17 19:11	1.0	10	
208	met10 method	CCB				06/26/17 19:14	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10 Begun : 06/26/17 08:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
209	met10 method	CCB				06/26/17 19:17	1.0		
210	met10 method	SAMPLE	287610-002	SPLP Leachate	248959	06/26/17 19:20	1.0		
211	met10 method	SAMPLE	287610-003	SPLP Leachate	248959	06/26/17 19:23	1.0		
212	met10 method	SAMPLE	287610-004	SPLP Leachate	248959	06/26/17 19:26	1.0		
213	met10 method	SAMPLE	287610-005	SPLP Leachate	248959	06/26/17 19:28	1.0		
214	met10 method	SAMPLE	287610-006	SPLP Leachate	248959	06/26/17 19:31	1.0		
215	met10 method	SAMPLE	287610-007	SPLP Leachate	248959	06/26/17 19:33	1.0		
216	met10 method	SAMPLE	287610-008	SPLP Leachate	248959	06/26/17 19:36	1.0		
217	met10 method	SAMPLE	287610-009	SPLP Leachate	248959	06/26/17 19:38	1.0		
218	met10 method	SAMPLE	287610-010	SPLP Leachate	248959	06/26/17 19:41	1.0		
219	met10 method	SAMPLE	287610-011	SPLP Leachate	248959	06/26/17 19:43	1.0		
220	met10 method	CCV				06/26/17 19:46	1.0	10	
221	met10 method	CCB				06/26/17 19:48	1.0		
222	met10 method	CCB				06/26/17 19:51	1.0		
223	met10 method	SAMPLE	287610-012	SPLP Leachate	248959	06/26/17 19:55	1.0		
224	met10 method	SAMPLE	287610-013	SPLP Leachate	248959	06/26/17 19:57	1.0		
225	met10 method	SAMPLE	287610-014	SPLP Leachate	248959	06/26/17 20:00	1.0		
226	met10 method	SAMPLE	287610-015	SPLP Leachate	248959	06/26/17 20:03	1.0		
227	met10 method	SAMPLE	287610-016	SPLP Leachate	248959	06/26/17 20:05	1.0		
228	met10 method	SAMPLE	287610-017	SPLP Leachate	248959	06/26/17 20:08	1.0		
229	met10 method	SAMPLE	287610-018	SPLP Leachate	248959	06/26/17 20:10	1.0		
230	met10 method	SAMPLE	287610-019	SPLP Leachate	248959	06/26/17 20:12	1.0		
231	met10 method	SAMPLE	287610-020	SPLP Leachate	248959	06/26/17 20:15	1.0		
232	met10 method	SAMPLE	289962-012	WET Leachate	249092	06/26/17 20:17	10.0		
233	met10 method	CCV				06/26/17 20:20	1.0	10	
234	met10 method	CCB				06/26/17 20:23	1.0		
235	met10 method	CCB				06/26/17 20:26	1.0		
236	met10 method	SAMPLE	289962-013	WET Leachate	249092	06/26/17 20:29	10.0		
237	met10 method	SAMPLE	289962-014	WET Leachate	249092	06/26/17 20:32	10.0		
238	met10 method	SAMPLE	289962-015	WET Leachate	249092	06/26/17 20:35	10.0		
239	met10 method	SAMPLE	289962-016	WET Leachate	249092	06/26/17 20:37	10.0		
240	met10 method	SAMPLE	289962-017	WET Leachate	249092	06/26/17 20:40	10.0		
241	met10 method	SAMPLE	289962-018	WET Leachate	249092	06/26/17 20:43	10.0		
242	met10 method	SAMPLE	289962-019	WET Leachate	249092	06/26/17 20:45	10.0		
243	met10 method	SAMPLE	289962-020	WET Leachate	249092	06/26/17 20:48	10.0		
244	met10 method	SAMPLE	289962-021	WET Leachate	249092	06/26/17 20:51	10.0		
245	met10 method	SAMPLE	289962-022	WET Leachate	249092	06/26/17 20:53	10.0		
246	met10 method	CCV				06/26/17 20:56	1.0	10	
247	met10 method	CCB				06/26/17 20:59	1.0		
248	met10 method	CCB				06/26/17 21:02	1.0		
249	met10 method	SAMPLE	289962-023	WET Leachate	249092	06/26/17 21:06	10.0		
250	met10 method	SAMPLE	289983-005	WET Leachate	249092	06/26/17 21:08	10.0		
251	met10 method	SAMPLE	290113-001	WET Leachate	249092	06/26/17 21:11	10.0		
252	met10 method	X	RINSE			06/26/17 21:13	1.0		
253	met10 method	SAMPLE	289983-004	Soil	249053	06/26/17 21:17	100.0		
254	met10 method	SAMPLE	289983-004	Soil	249053	06/26/17 21:19	1.0		2:FE=180000
255	met10 method	X	RINSE			06/26/17 21:22	1.0		
256	met10 method	MSS	290033-001	Soil	249053	06/26/17 21:26	1.0		4:FE=300000
257	met10 method	X	RINSE			06/26/17 21:29	1.0		
258	met10 method	SAMPLE	290033-001	WET Leachate	249092	06/26/17 21:32	10.0		
259	met10 method	CCV				06/26/17 21:35	1.0	10	
260	met10 method	CCB				06/26/17 21:38	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10 Begun : 06/26/17 08:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
261	met10 method	CCB				06/26/17 21:41	1.0		
262	met10 method	SAMPLE	290046-001	WET Leachate	249092	06/26/17 21:44	10.0		
263	met10 method	SAMPLE	290073-001	WET Leachate	249092	06/26/17 21:47	10.0		
264	met10 method	X	RINSE			06/26/17 21:50	1.0		
265	met10 method	SAMPLE	289665-001	Water	248666	06/26/17 21:54	100.0		
266	met10 method	SAMPLE	289665-002	Water	248666	06/26/17 21:57	100.0		
267	met10 method	SAMPLE	289665-003	Water	248666	06/26/17 22:00	100.0		
268	met10 method	SAMPLE	289665-004	Water	248666	06/26/17 22:03	100.0		
269	met10 method	SAMPLE	289665-005	Water	248666	06/26/17 22:06	100.0		
270	met10 method	SAMPLE	289665-006	Water	248666	06/26/17 22:09	100.0		
271	met10 method	SAMPLE	289665-007	Water	248666	06/26/17 22:12	100.0		
272	met10 method	CCV				06/26/17 22:15	1.0	10	
273	met10 method	CCB				06/26/17 22:18	1.0		
274	met10 method	XCCB				06/26/17 22:21	1.0		
275	met10 method	SAMPLE	289665-008	Water	248666	06/26/17 22:24	100.0		
276	met10 method	SAMPLE	289665-009	Water	248666	06/26/17 22:27	100.0		
277	met10 method	X	RINSE			06/26/17 22:30	1.0		
278	met10 method	SAMPLE	287447-005	Miscell.	246039	06/26/17 22:34	100.0		1:PB=11000
279	met10 method	SAMPLE	287447-006	Miscell.	246039	06/26/17 22:37	100.0		1:PB=11000
280	met10 method	SAMPLE	287447-007	Miscell.	246039	06/26/17 22:41	100.0		1:PB=11000
281	met10 method	X	RINSE			06/26/17 22:44	1.0		
282	met10 method	BLANK	QC888870	TCLP Leachate	248573	06/26/17 22:48	10.0		
283	met10 method	BS	QC888871	TCLP Leachate	248573	06/26/17 22:51	1.0		
284	met10 method	BSD	QC888872	TCLP Leachate	248573	06/26/17 22:54	1.0		
285	met10 method	CCV				06/26/17 22:56	1.0	10	
286	met10 method	XCCB				06/26/17 22:59	1.0		
287	met10 method	CCB				06/26/17 23:05	1.0		
288	met10 method	MSS	289110-006	TCLP Leachate	248573	06/26/17 23:10	10.0		
289	met10 method	MS	QC888873	TCLP Leachate	248573	06/26/17 23:14	10.0		
290	met10 method	MSD	QC888874	TCLP Leachate	248573	06/26/17 23:16	10.0		
291	met10 method	SAMPLE	289110-008	TCLP Leachate	248573	06/26/17 23:19	10.0		
292	met10 method	SAMPLE	289110-009	TCLP Leachate	248573	06/26/17 23:22	10.0		
293	met10 method	SAMPLE	289110-010	TCLP Leachate	248573	06/26/17 23:26	10.0		
294	met10 method	SAMPLE	289110-011	TCLP Leachate	248573	06/26/17 23:29	10.0		
295	met10 method	SAMPLE	289110-012	TCLP Leachate	248573	06/26/17 23:33	10.0		
296	met10 method	SAMPLE	289110-013	TCLP Leachate	248573	06/26/17 23:37	10.0		
297	met10 method	SAMPLE	289110-014	TCLP Leachate	248573	06/26/17 23:40	10.0		
298	met10 method	CCV				06/26/17 23:44	1.0	10	
299	met10 method	CCB				06/26/17 23:47	1.0		
300	met10 method	SAMPLE	289110-015	TCLP Leachate	248573	06/26/17 23:50	10.0		
301	met10 method	SAMPLE	289110-016	TCLP Leachate	248573	06/26/17 23:54	10.0		
302	met10 method	SAMPLE	289110-022	TCLP Leachate	248573	06/26/17 23:57	10.0		
303	met10 method	SAMPLE	289110-024	TCLP Leachate	248573	06/27/17 00:01	10.0		
304	met10 method	SAMPLE	289110-025	TCLP Leachate	248573	06/27/17 00:04	10.0		
305	met10 method	SAMPLE	289110-031	TCLP Leachate	248573	06/27/17 00:08	10.0		
306	met10 method	SAMPLE	289110-032	TCLP Leachate	248573	06/27/17 00:11	10.0		
307	met10 method	SAMPLE	289110-035	TCLP Leachate	248573	06/27/17 00:15	10.0		
308	met10 method	SAMPLE	289110-041	TCLP Leachate	248573	06/27/17 00:18	10.0		
309	met10 method	X	RINSE			06/27/17 00:22	1.0		
310	met10 method	CCV				06/27/17 00:25	1.0	10	
311	met10 method	CCB				06/27/17 00:28	1.0		
312	met10 method	MSS	289775-005	Soil	248781	06/27/17 00:32	100.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10 Begun : 06/26/17 08:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
313	met10 method	X	RINSE			06/27/17 00:34	1.0		
314	met10 method	BLANK	QC890955	Soil	249119	06/27/17 00:38	1.0		
315	met10 method	BS	QC890956	Soil	249119	06/27/17 00:41	1.0		1:SR=9400
316	met10 method	BSD	QC890957	Soil	249119	06/27/17 00:44	1.0		1:SR=9800
317	met10 method	MSS	290034-001	Soil	249119	06/27/17 00:47	1.0		2:FE=330000
318	met10 method	MS	QC890958	Soil	249119	06/27/17 00:50	1.0		2:FE=380000
319	met10 method	MSD	QC890959	Soil	249119	06/27/17 00:53	1.0		3:FE=400000
320	met10 method	SAMPLE	290016-001	Soil	249119	06/27/17 00:57	1.0		5:FE=480000
321	met10 method	SAMPLE	290040-001	Soil	249119	06/27/17 01:00	1.0		2:FE=140000
322	met10 method	CCV				06/27/17 01:03	1.0	10	
323	met10 method	CCB				06/27/17 01:06	1.0		
324	met10 method	CCB				06/27/17 01:09	1.0		
325	met10 method	SAMPLE	290042-001	Soil	249119	06/27/17 01:12	1.0		5:CA=580000
326	met10 method	SAMPLE	290044-001	Soil	249119	06/27/17 01:16	1.0		5:CA=990000
327	met10 method	SAMPLE	290044-002	Soil	249119	06/27/17 01:19	1.0		6:CA=1200000
328	met10 method	SAMPLE	290044-003	Soil	249119	06/27/17 01:22	1.0		8:CA=1200000
329	met10 method	SAMPLE	290044-004	Soil	249119	06/27/17 01:26	1.0		5:CA=1200000
330	met10 method	SAMPLE	290044-005	Soil	249119	06/27/17 01:29	1.0		5:FE=420000
331	met10 method	SAMPLE	290044-006	Soil	249119	06/27/17 01:32	1.0		6:CA=780000
332	met10 method	SAMPLE	290044-007	Soil	249119	06/27/17 01:35	1.0		7:CA=1400000
333	met10 method	SAMPLE	290044-008	Soil	249119	06/27/17 01:39	1.0		5:FE=410000
334	met10 method	SAMPLE	290080-001	Soil	249119	06/27/17 01:42	1.0		7:FE=750000
335	met10 method	CCV				06/27/17 01:45	1.0	10	
336	met10 method	CCB				06/27/17 01:48	1.0		
337	met10 method	CCB				06/27/17 01:51	1.0		
338	met10 method	SAMPLE	290080-002	Soil	249119	06/27/17 01:55	1.0		2:FE=170000
339	met10 method	SAMPLE	290080-003	Soil	249119	06/27/17 01:58	1.0		5:FE=250000
340	met10 method	SAMPLE	290080-004	Soil	249119	06/27/17 02:01	1.0		5:FE=200000
341	met10 method	SAMPLE	290080-005	Soil	249119	06/27/17 02:04	1.0		4:FE=210000
342	met10 method	SAMPLE	290080-006	Soil	249119	06/27/17 02:07	1.0		7:FE=630000
343	met10 method	SAMPLE	290080-007	Soil	249119	06/27/17 02:10	1.0		4:FE=220000
344	met10 method	X	RINSE			06/27/17 02:13	1.0		
345	met10 method	BLANK	QC890873	Water	249098	06/27/17 02:17	1.0		
346	met10 method	BS	QC890874	Water	249098	06/27/17 02:20	1.0		
347	met10 method	BSD	QC890875	Water	249098	06/27/17 02:23	1.0		
348	met10 method	CCV				06/27/17 02:25	1.0	10	
349	met10 method	CCB				06/27/17 02:28	1.0		
350	met10 method	CCB				06/27/17 02:31	1.0		
351	met10 method	MSS	290061-001	Water	249098	06/27/17 02:35	1.0		
352	met10 method	MS	QC890876	Water	249098	06/27/17 02:37	1.0		
353	met10 method	MSD	QC890877	Water	249098	06/27/17 02:40	1.0		
354	met10 method	SER	QC890878	Water	249098	06/27/17 02:43	5.0		
355	met10 method	PDS	QC890879	Water	249098	06/27/17 02:45	1.0	11 12 13	
356	met10 method	SAMPLE	290067-001	Water	249098	06/27/17 02:48	1.0		
357	met10 method	SAMPLE	290114-001	Water	249098	06/27/17 02:51	1.0		
358	met10 method	SAMPLE	290114-003	Water	249098	06/27/17 02:54	1.0		3:CA=180000
359	met10 method	X	RINSE			06/27/17 02:58	1.0		
360	met10 method	BLANK	QC890542	Water	249017	06/27/17 03:01	1.0		
361	met10 method	CCV				06/27/17 03:05	1.0	10	
362	met10 method	CCB				06/27/17 03:08	1.0		
363	met10 method	BS	QC890543	Water	249017	06/27/17 03:11	1.0		
364	met10 method	BSD	QC890544	Water	249017	06/27/17 03:14	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10
Method : EPA 6010C

Begun : 06/26/17 08:25
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
365	met10 method	MSS	289854-007	Water	249017	06/27/17 03:16	1.0		
366	met10 method	MS	QC890545	Water	249017	06/27/17 03:19	1.0		
367	met10 method	MSD	QC890546	Water	249017	06/27/17 03:21	1.0		
368	met10 method	SER	QC890547	Water	249017	06/27/17 03:24	5.0		
369	met10 method	PDS	QC890548	Water	249017	06/27/17 03:28	1.0	11 12 13	
370	met10 method	SAMPLE	289838-001	Water	249017	06/27/17 03:31	1.0		3:MG=190000
371	met10 method	SAMPLE	289838-002	Water	249017	06/27/17 03:34	1.0		
372	met10 method	SAMPLE	289838-004	Water	249017	06/27/17 03:37	1.0		4:MG=380000
373	met10 method	CCV				06/27/17 03:41	1.0	10	
374	met10 method	CCB				06/27/17 03:44	1.0		
375	met10 method	SAMPLE	289838-005	Water	249017	06/27/17 03:47	1.0		1:CA=120000
376	met10 method	SAMPLE	289854-001	Water	249017	06/27/17 03:50	1.0		
377	met10 method	SAMPLE	289854-002	Water	249017	06/27/17 03:53	1.0		
378	met10 method	SAMPLE	289854-003	Water	249017	06/27/17 03:57	1.0		
379	met10 method	SAMPLE	289854-004	Water	249017	06/27/17 04:01	1.0		
380	met10 method	SAMPLE	289854-005	Water	249017	06/27/17 04:03	1.0		
381	met10 method	SAMPLE	289854-006	Water	249017	06/27/17 04:06	1.0		
382	met10 method	SAMPLE	289854-008	Water	249017	06/27/17 04:10	1.0		
383	met10 method	SAMPLE	289854-009	Water	249017	06/27/17 04:13	1.0		
384	met10 method	SAMPLE	289854-010	Water	249017	06/27/17 04:17	1.0		
385	met10 method	CCV				06/27/17 04:20	1.0	10	
386	met10 method	CCB				06/27/17 04:23	1.0		
387	met10 method	SAMPLE	289953-002	Water	249017	06/27/17 04:27	1.0		1:K=310000
388	met10 method	SAMPLE	290010-001	Water	249017	06/27/17 04:29	1.0		
389	met10 method	X	RINSE			06/27/17 04:32	1.0		
390	met10 method	SAMPLE	289142-001	Filtrate	248073	06/27/17 04:35	100.0		
391	met10 method	SAMPLE	289142-002	Filtrate	248073	06/27/17 04:39	100.0		
392	met10 method	SAMPLE	289142-003	Filtrate	248073	06/27/17 04:43	100.0		
393	met10 method	SAMPLE	289142-004	Filtrate	248073	06/27/17 04:46	100.0		
394	met10 method	SAMPLE	289142-005	Filtrate	248073	06/27/17 04:50	100.0		
395	met10 method	SAMPLE	289142-006	Filtrate	248073	06/27/17 04:53	100.0		
396	met10 method	SAMPLE	289142-007	Filtrate	248073	06/27/17 04:56	100.0		
397	met10 method	CCV				06/27/17 05:00	1.0	10	
398	met10 method	CCB				06/27/17 05:03	1.0		
399	met10 method	SAMPLE	289142-008	Filtrate	248073	06/27/17 05:06	100.0		
400	met10 method	SAMPLE	289142-009	Filtrate	248073	06/27/17 05:10	100.0		
401	met10 method	SAMPLE	289142-010	Filtrate	248073	06/27/17 05:13	100.0		
402	met10 method	X	RINSE			06/27/17 05:17	1.0		
403	met10 method	SAMPLE	289142-011	Filtrate	248073	06/27/17 05:21	250.0		
404	met10 method	SAMPLE	289142-011	Filtrate	248073	06/27/17 05:24	100.0		
405	met10 method	X	RINSE			06/27/17 05:27	1.0		
406	met10 method	SAMPLE	289142-012	Filtrate	248073	06/27/17 05:30	100.0		
407	met10 method	SAMPLE	289142-013	Filtrate	248073	06/27/17 05:34	100.0		
408	met10 method	SAMPLE	289142-014	Filtrate	248073	06/27/17 05:37	100.0		
409	met10 method	CCV				06/27/17 05:41	1.0	10	
410	met10 method	CCB				06/27/17 05:44	1.0		
411	met10 method	SAMPLE	289142-015	Filtrate	248073	06/27/17 05:47	100.0		
412	met10 method	SAMPLE	289142-016	Filtrate	248073	06/27/17 05:51	100.0		
413	met10 method	SAMPLE	289142-017	Filtrate	248073	06/27/17 05:54	100.0		
414	met10 method	SAMPLE	289142-018	Filtrate	248073	06/27/17 05:57	100.0		
415	met10 method	MSS	289142-030	Filtrate	248073	06/27/17 06:00	100.0		
416	met10 method	X	RINSE			06/27/17 06:03	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087255385

Instrument : MET10 Begun : 06/26/17 08:25
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
417	met10 method	BLANK	QC887164	Filtrate	248128	06/27/17 06:06	1.0		
418	met10 method	BS	QC887165	Filtrate	248128	06/27/17 06:10	1.0		
419	met10 method	BSD	QC887166	Filtrate	248128	06/27/17 06:13	1.0		
420	met10 method	SAMPLE	289142-019	Filtrate	248128	06/27/17 06:15	100.0		
421	met10 method	CCV				06/27/17 06:19	1.0	10	
422	met10 method	CCB				06/27/17 06:22	1.0		
423	met10 method	SAMPLE	289142-020	Filtrate	248128	06/27/17 06:25	100.0		
424	met10 method	SAMPLE	289142-021	Filtrate	248128	06/27/17 06:29	100.0		
425	met10 method	SAMPLE	289142-022	Filtrate	248128	06/27/17 06:32	100.0		
426	met10 method	SAMPLE	289142-023	Filtrate	248128	06/27/17 06:35	100.0		
427	met10 method	SAMPLE	289142-024	Filtrate	248128	06/27/17 06:38	100.0		
428	met10 method	SAMPLE	289142-025	Filtrate	248128	06/27/17 06:41	100.0		
429	met10 method	SAMPLE	289142-026	Filtrate	248128	06/27/17 06:43	100.0		
430	met10 method	SAMPLE	289142-027	Filtrate	248128	06/27/17 06:47	100.0		
431	met10 method	SAMPLE	289142-028	Filtrate	248128	06/27/17 06:51	100.0		
432	met10 method	SAMPLE	289142-029	Filtrate	248128	06/27/17 06:53	250.0		
433	met10 method	CCV				06/27/17 06:57	1.0	10	
434	met10 method	CCB				06/27/17 07:00	1.0		
435	met10 method	SAMPLE	289142-029	Filtrate	248128	06/27/17 07:03	100.0		1:AS=54000
436	met10 method	SAMPLE	289142-031	Filtrate	248128	06/27/17 07:06	100.0		
437	met10 method	SAMPLE	289142-032	Filtrate	248128	06/27/17 07:09	100.0		
438	met10 method	SAMPLE	289142-033	Filtrate	248128	06/27/17 07:13	100.0		
439	met10 method	SAMPLE	289142-034	Filtrate	248128	06/27/17 07:15	100.0		
440	met10 method	SAMPLE	289142-035	Filtrate	248128	06/27/17 07:19	100.0		
441	met10 method	SAMPLE	289142-036	Filtrate	248128	06/27/17 07:23	100.0		
442	met10 method	SAMPLE	289142-037	Filtrate	248128	06/27/17 07:25	100.0		
443	met10 method	MSS	289142-038	Filtrate	248128	06/27/17 07:28	100.0		
444	met10 method	CCV				06/27/17 07:31	1.0	10	
445	met10 method	CCB				06/27/17 07:34	1.0		
446	met10 method	CCB				06/27/17 07:37	1.0		

TLO 06/26/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 47.

MNA 06/26/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 48 through 168.

TLO 06/27/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 169 through 446.

Standards used: 1=S32935 2=S33180 3=S33246 4=S33247 5=S33268 6=S33243 7=S33245 8=S33485 9=S33484 10=S33523 11=S29983 12=S29984 13=S30560

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087255385

Date : 06/26/17 Reference : met10 method
Sequence : MET10 06/26/17 Analyzed : 06/26/17 08:28

#	Type	Sample ID	Y A	Y R
		ICAL STD	9724000	788067
		LOWER LIMIT	2917200	236420
		UPPER LIMIT	11668800	945681
010	ICB		9730743	797068
011	ICSA		7719017	705766
012	ICSAB		7726138	700204
035	SAMPLE	289572-001	8483157	773019
036	SAMPLE	289572-003	8537940	762506
037	SAMPLE	289572-004	8483489	762424
038	SAMPLE	289572-005	8514948	772173
043	SAMPLE	289572-006	8572580	772022
044	SAMPLE	289572-007	9605007	822849
169	SAMPLE	289852-001	9429918	893049
194	CCV		9147899	854348
196	CCB		10159816	880117
199	BLANK	QC890309	9775976	887782
200	BS	QC890310	9453837	860592
201	BSD	QC890311	9451855	876194
202	MSS	287610-001	10027977	897771
203	MS	QC890312	9438994	870595
204	MSD	QC890313	9444815	863668
205	SER	QC890314	9911270	882103
206	PDS	QC890315	9342026	873172
207	CCV		9218214	858769
208	CCB		10072093	887523
209	CCB		9938712	868585
210	SAMPLE	287610-002	9765656	886259
211	SAMPLE	287610-003	9731689	886331
212	SAMPLE	287610-004	9644613	886225
213	SAMPLE	287610-005	9732467	882633
214	SAMPLE	287610-006	9795429	891315
215	SAMPLE	287610-007	10001495	875526
216	SAMPLE	287610-008	10011894	886588
217	SAMPLE	287610-009	10016138	878094
218	SAMPLE	287610-010	10046516	871773
219	SAMPLE	287610-011	9759077	875021
220	CCV		9162501	850215
221	CCB		10010326	874983
222	CCB		10008468	872489
223	SAMPLE	287610-012	9655001	871531
224	SAMPLE	287610-013	9765351	867610
225	SAMPLE	287610-014	9731427	869708
226	SAMPLE	287610-015	9980650	861512
227	SAMPLE	287610-016	9895753	879738
228	SAMPLE	287610-017	9914392	870388
229	SAMPLE	287610-018	10044117	880744
230	SAMPLE	287610-019	9922490	858743
231	SAMPLE	287610-020	9569048	872387
233	CCV		9147877	838985
234	CCB		9991449	856991

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287610 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087255385001
Units : ug/L

Date : 26-JUN-2017 08:25
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087255385002	L1	26-JUN-2017 08:28	S32935
L2	met10 method	1087255385003	L2	26-JUN-2017 08:32	S33180
L3	met10 method	1087255385004	L3	26-JUN-2017 08:34	S33246
L4	met10 method	1087255385005	L4	26-JUN-2017 08:37	S33247
L5	met10 method	1087255385006	L5	26-JUN-2017 08:39	S33268

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	8.4600	10.204	10.059	10.082		LOR0	0.00000	0.09919		9.7012	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-16	100.00	1	1000.0	0	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287610 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087255385001 Cal Date : 26-JUN-2017

ICV 1087255385007 (26-JUN-2017) stds: S33243

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4929	ug/L	-1	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385009.2 File : met10 method Time : 26-JUN-2017 08:52
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33245

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	4.800	ug/L	-4	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9763891	0.41
Yttrium	R	788067	794389	0.80

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385010.3 File : met10 method Time : 26-JUN-2017 08:56
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9730743	0.07
Yttrium	R	788067	797068	1.14

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385011.3 File : met10 method Time : 26-JUN-2017 09:01
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33485

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	[-1.653]	5.000	ug/L	

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	18960	ug/L	95	
Copper	A	20000	21430	ug/L	107	
Manganese	A	20000	17600	ug/L	88	
Nickel	A	20000	16270	ug/L	81	
Titanium	A	20000	18620	ug/L	93	
Vanadium	A	20000	19740	ug/L	99	
Aluminum	R	500000	506800	ug/L	101	
Calcium	R	500000	472000	ug/L	94	
Iron	R	200000	194100	ug/L	97	
Magnesium	R	500000	430700	ug/L	86	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	7719017	-20.62
Yttrium	R	788067	705766	-10.44

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385012.1 File : met10 method Time : 26-JUN-2017 09:16
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33484

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	930.2	ug/L	-7	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	7726138	-20.55
Yttrium	R	788067	700204	-11.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385194.1 File : met10 method Time : 26-JUN-2017 18:33
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	9.7012	9.4717	5000	4697	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9147899	-5.92
Yttrium	R	788067	854348	8.41

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385196.1 File : met10 method Time : 26-JUN-2017 18:39
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	10159816	4.48
Yttrium	R	788067	880117	11.68

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385207.1 File : met10 method Time : 26-JUN-2017 19:11
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	9.7012	9.5229	5000	4723	ug/L	-6	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9218214	-5.20
Yttrium	R	788067	858769	8.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385208.1 File : met10 method Time : 26-JUN-2017 19:14
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	10072093	3.58
Yttrium	R	788067	887523	12.62

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385209.1 File : met10 method Time : 26-JUN-2017 19:17
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9938712	2.21
Yttrium	R	788067	868585	10.22

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385220.1 File : met10 method Time : 26-JUN-2017 19:46
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	9.7012	9.3927	5000	4658	ug/L	-7	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9162501	-5.77
Yttrium	R	788067	850215	7.89

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385221.1 File : met10 method Time : 26-JUN-2017 19:48
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	10010326	2.94
Yttrium	R	788067	874983	11.03

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385222.1 File : met10 method Time : 26-JUN-2017 19:51
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	10008468	2.93
Yttrium	R	788067	872489	10.71

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385233.1 File : met10 method Time : 26-JUN-2017 20:20
Cal : 1087255385001 Caldate : 26-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	9.7012	9.5575	5000	4740	ug/L	-5	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9147877	-5.92
Yttrium	R	788067	838985	6.46

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087255385234.1 File : met10 method Time : 26-JUN-2017 20:23
Cal : 1087255385001 Caldate : 26-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9724000	9991449	2.75
Yttrium	R	788067	856991	8.75

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087259290

Instrument : MET10
Method : EPA 6010C

Begun : 06/29/17 01:30
SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
001	met10 method	ICALBLK				06/29/17 01:30	1.0		
002	met10 method	ICAL	L1			06/29/17 01:33	1.0	1	
003	met10 method	ICAL	L2			06/29/17 01:37	1.0	2	
004	met10 method	ICAL	L3			06/29/17 01:39	1.0	3	
005	met10 method	ICAL	L4			06/29/17 01:42	1.0	4	
006	met10 method	ICAL	L5			06/29/17 01:45	1.0	5	
007	met10 method	XICV				06/29/17 01:47	1.0	6	
008	met10 method	ICV				06/29/17 01:50	1.0	6	
009	met10 method	XCRI				06/29/17 01:53	1.0	7	
010	met10 method	CRI				06/29/17 02:01	1.0	7	
011	met10 method	ICB				06/29/17 02:04	1.0		
012	met10 method	ICSA				06/29/17 02:08	1.0	8	10:AL=500000
013	met10 method	ICSAB				06/29/17 02:10	1.0	9	5:AL=510000
014	met10 method	X	RINSE			06/29/17 02:24	1.0		
015	met10 method	BLANK	QC890845	Soil	249091	06/29/17 02:28	1.0		
016	met10 method	LCS	QC890846	Soil	249091	06/29/17 02:31	1.0		1:SR=9200
017	met10 method	MSS	289814-001	Soil	249091	06/29/17 02:34	1.0		6:CA=2100000
018	met10 method	SAMPLE	289814-002	Soil	249091	06/29/17 02:37	1.0		7:CA=2400000
019	met10 method	SAMPLE	289814-003	Soil	249091	06/29/17 02:41	1.0		7:CA=2300000
020	met10 method	X	RINSE			06/29/17 02:45	1.0		
021	met10 method	SAMPLE	289293-002	Filtrate	248491	06/29/17 02:48	1.0		2:CA=200000
022	met10 method	SAMPLE	289924-002	TCLP Leachate	248954	06/29/17 02:52	10.0		1:NA=160000
023	met10 method	PDS	QC887596	Soil	248238	06/29/17 02:55	1.0	10 11 12	5:FE=480000
024	met10 method	CCV				06/29/17 02:58	1.0	13	
025	met10 method	XCCB				06/29/17 03:01	1.0		
026	met10 method	CCB				06/29/17 03:04	1.0		
027	met10 method	SAMPLE	288913-002	Soil	248238	06/29/17 03:08	1.0		5:CA=310000
028	met10 method	SAMPLE	288913-003	Soil	248238	06/29/17 03:11	1.0		4:FE=320000
029	met10 method	SAMPLE	288913-004	Soil	248238	06/29/17 03:14	1.0		4:FE=500000
030	met10 method	X	RINSE			06/29/17 03:18	1.0		
031	met10 method	BLANK	QC887916	Soil	248321	06/29/17 03:21	1.0		
032	met10 method	BS	QC887917	Soil	248321	06/29/17 03:24	1.0		1:SR=9500
033	met10 method	BSD	QC887918	Soil	248321	06/29/17 03:27	1.0		1:SR=9600
034	met10 method	MS	QC887919	Soil	248321	06/29/17 03:30	1.0		
035	met10 method	MSD	QC887920	Soil	248321	06/29/17 03:34	1.0		
036	met10 method	SER	QC887921	Soil	248321	06/29/17 03:37	5.0		
037	met10 method	CCV				06/29/17 03:40	1.0	13	
038	met10 method	XCCB				06/29/17 03:42	1.0		
039	met10 method	CCB				06/29/17 03:45	1.0		
040	met10 method	PDS	QC887922	Soil	248321	06/29/17 03:49	1.0	10 11 12	6:FE=460000
041	met10 method	SAMPLE	289010-001	Soil	248321	06/29/17 03:52	1.0		9:FE=1800000
042	met10 method	SAMPLE	289010-002	Soil	248321	06/29/17 03:55	1.0		5:AL=350000
043	met10 method	SAMPLE	289010-003	Soil	248321	06/29/17 03:58	1.0		5:FE=320000
044	met10 method	SAMPLE	289010-004	Soil	248321	06/29/17 04:02	1.0		5:AL=370000
045	met10 method	SAMPLE	289010-005	Soil	248321	06/29/17 04:05	1.0		5:AL=320000
046	met10 method	SAMPLE	289010-006	Soil	248321	06/29/17 04:08	1.0		5:FE=360000
047	met10 method	X	RINSE			06/29/17 04:11	1.0		
048	met10 method	BLANK	QC891167	SPLP Leachate	249179	06/29/17 04:15	1.0		
049	met10 method	BS	QC891168	SPLP Leachate	249179	06/29/17 04:19	1.0		
050	met10 method	CCV				06/29/17 04:22	1.0	13	
051	met10 method	XCCB				06/29/17 04:24	1.0		
052	met10 method	CCB				06/29/17 04:27	1.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087259290

Instrument : MET10 Begun : 06/29/17 01:30
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
053	met10 method	BSD	QC891169	SPLP Leachate	249179	06/29/17 04:31	1.0		
054	met10 method	MSS	287610-021	SPLP Leachate	249179	06/29/17 04:33	1.0		
055	met10 method	MS	QC891170	SPLP Leachate	249179	06/29/17 04:37	1.0		
056	met10 method	MSD	QC891171	SPLP Leachate	249179	06/29/17 04:40	1.0		
057	met10 method	SER	QC891172	SPLP Leachate	249179	06/29/17 04:42	5.0		
058	met10 method	PDS	QC891173	SPLP Leachate	249179	06/29/17 04:45	1.0	10 11 12	
059	met10 method	SAMPLE	287610-022	SPLP Leachate	249179	06/29/17 04:48	1.0		
060	met10 method	SAMPLE	287610-023	SPLP Leachate	249179	06/29/17 04:50	1.0		
061	met10 method	SAMPLE	287610-024	SPLP Leachate	249179	06/29/17 04:53	1.0		
062	met10 method	SAMPLE	287610-025	SPLP Leachate	249179	06/29/17 04:55	1.0		
063	met10 method	CCV				06/29/17 04:58	1.0	13	
064	met10 method	XCCB				06/29/17 05:01	1.0		
065	met10 method	CCB				06/29/17 05:04	1.0		
066	met10 method	SAMPLE	287610-026	SPLP Leachate	249179	06/29/17 05:07	1.0		
067	met10 method	SAMPLE	287610-027	SPLP Leachate	249179	06/29/17 05:10	1.0		
068	met10 method	SAMPLE	287610-028	SPLP Leachate	249179	06/29/17 05:12	1.0		
069	met10 method	SAMPLE	287610-029	SPLP Leachate	249179	06/29/17 05:15	1.0		
070	met10 method	SAMPLE	287610-030	SPLP Leachate	249179	06/29/17 05:17	1.0		
071	met10 method	SAMPLE	287610-031	SPLP Leachate	249179	06/29/17 05:20	1.0		
072	met10 method	SAMPLE	287610-032	SPLP Leachate	249179	06/29/17 05:23	1.0		
073	met10 method	SAMPLE	287610-033	SPLP Leachate	249179	06/29/17 05:26	1.0		
074	met10 method	SAMPLE	287610-034	SPLP Leachate	249179	06/29/17 05:28	1.0		
075	met10 method	SAMPLE	287610-035	SPLP Leachate	249179	06/29/17 05:31	1.0		
076	met10 method	CCV				06/29/17 05:33	1.0	13	
077	met10 method	CCB				06/29/17 05:36	1.0		
078	met10 method	SAMPLE	287610-036	SPLP Leachate	249179	06/29/17 05:39	1.0		
079	met10 method	SAMPLE	287610-037	SPLP Leachate	249179	06/29/17 05:42	1.0		
080	met10 method	SAMPLE	287610-038	SPLP Leachate	249179	06/29/17 05:44	1.0		
081	met10 method	SAMPLE	287610-039	SPLP Leachate	249179	06/29/17 05:47	1.0		
082	met10 method	SAMPLE	287610-040	SPLP Leachate	249179	06/29/17 05:49	1.0		
083	met10 method	X	RINSE			06/29/17 05:52	1.0		
084	met10 method	BLANK	QC891202	Filtrate	249187	06/29/17 05:55	1.0		
085	met10 method	BS	QC891203	Filtrate	249187	06/29/17 05:59	1.0		
086	met10 method	BSD	QC891204	Filtrate	249187	06/29/17 06:01	1.0		
087	met10 method	MSS	290136-001	Filtrate	249187	06/29/17 06:04	1.0		1:NA=200000
088	met10 method	CCV				06/29/17 06:07	1.0	13	
089	met10 method	CCB				06/29/17 06:10	1.0		
090	met10 method	MS	QC891205	Filtrate	249187	06/29/17 06:13	1.0		
091	met10 method	MSD	QC891206	Filtrate	249187	06/29/17 06:16	1.0		
092	met10 method	X	RINSE			06/29/17 06:19	1.0		
093	met10 method	BLANK	QC887193	Miscell.	248135	06/29/17 06:22	1.0		
094	met10 method	BS	QC887194	Miscell.	248135	06/29/17 06:25	1.0		1:SR=4700
095	met10 method	BSD	QC887195	Miscell.	248135	06/29/17 06:28	1.0		1:SR=4900
096	met10 method	SAMPLE	289142-052	Miscell.	248135	06/29/17 06:31	5.0		1:ZN=52000
097	met10 method	X	RINSE			06/29/17 06:34	1.0		
098	met10 method	BLANK	QC887164	Filtrate	248128	06/29/17 06:38	1.0		
099	met10 method	BS	QC887165	Filtrate	248128	06/29/17 06:41	1.0		
100	met10 method	CCV				06/29/17 06:44	1.0	13	
101	met10 method	CCB				06/29/17 06:47	1.0		
102	met10 method	BSD	QC887166	Filtrate	248128	06/29/17 06:50	1.0		
103	met10 method	SAMPLE	289142-019	Filtrate	248128	06/29/17 06:53	5.0		1:NA=730000
104	met10 method	SAMPLE	289142-020	Filtrate	248128	06/29/17 06:56	5.0		

CURTIS & TOMPKINS SEQUENCE SUMMARY FOR 1087259290

Instrument : MET10 Begun : 06/29/17 01:30
Method : EPA 6010C SOP Version : icp metals_rv18

#	File	Type	Sample ID	Matrix	Batch	Analyzed	IDF	Stds Used	
105	met10 method	SAMPLE	289142-021	Filtrate	248128	06/29/17 06:59	5.0		1:NA=230000
106	met10 method	SAMPLE	289142-022	Filtrate	248128	06/29/17 07:02	5.0		4:NA=1000000
107	met10 method	SAMPLE	289142-023	Filtrate	248128	06/29/17 07:05	5.0		1:NA=280000
108	met10 method	SAMPLE	289142-024	Filtrate	248128	06/29/17 07:08	5.0		2:FE=590000
109	met10 method	SAMPLE	289142-025	Filtrate	248128	06/29/17 07:11	5.0		1:FE=130000
110	met10 method	SAMPLE	289142-026	Filtrate	248128	06/29/17 07:14	5.0		1:NA=180000
111	met10 method	SAMPLE	289142-027	Filtrate	248128	06/29/17 07:18	5.0		3:NA=1000000
112	met10 method	CCV				06/29/17 07:20	1.0	13	
113	met10 method	CCB				06/29/17 07:23	1.0		
114	met10 method	CCB				06/29/17 07:26	1.0		
115	met10 method	SAMPLE	289142-028	Filtrate	248128	06/29/17 07:29	5.0		2:NA=230000
116	met10 method	SAMPLE	289142-029	Filtrate	248128	06/29/17 07:32	250.0		1:AS=25000
117	met10 method	SAMPLE	289142-029	Filtrate	248128	06/29/17 07:34	5.0		5:AS=950000
118	met10 method	SAMPLE	289142-031	Filtrate	248128	06/29/17 07:38	5.0		1:NA=180000
119	met10 method	SAMPLE	289142-032	Filtrate	248128	06/29/17 07:41	5.0		3:NA=1300000
120	met10 method	SAMPLE	289142-033	Filtrate	248128	06/29/17 07:44	5.0		3:NA=290000
121	met10 method	SAMPLE	289142-034	Filtrate	248128	06/29/17 07:47	5.0		1:NA=600000
122	met10 method	SAMPLE	289142-035	Filtrate	248128	06/29/17 07:50	5.0		1:NA=680000
123	met10 method	SAMPLE	289142-036	Filtrate	248128	06/29/17 07:53	5.0		3:NA=730000
124	met10 method	SAMPLE	289142-037	Filtrate	248128	06/29/17 07:56	5.0		2:AL=200000
125	met10 method	CCV				06/29/17 07:58	1.0	13	
126	met10 method	CCB				06/29/17 08:01	1.0		

TLO 06/29/17 : I verified that the vials loaded on the instrument matched the sequence data entry, for runs 1 through 126.

Standards used: 1=S32935 2=S33180 3=S33246 4=S33247 5=S33268 6=S33522 7=S33245 8=S33485 9=S33484 10=S29983 11=S29984 12=S30560 13=S33523

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087259290

Date : 06/29/17 Reference : met10 method
Sequence : MET10 06/29/17 Analyzed : 06/29/17 01:33

#	Type	Sample ID	Y A	Y R
		ICAL STD	9278096	418853
		LOWER LIMIT	2783429	125656
		UPPER LIMIT	11133715	502624
011	ICB		9044975	408110
012	ICSA		7278715	351202
013	ICSAB		7280071	350629
021	SAMPLE	289293-002	7941507	396980
027	SAMPLE	288913-002	7562055	346360
028	SAMPLE	288913-003	7731265	355356
029	SAMPLE	288913-004	7704903	360491
037	CCV		8073749	344566
039	CCB		8980074	454630
041	SAMPLE	289010-001	7312752	333196
042	SAMPLE	289010-002	7562300	349725
043	SAMPLE	289010-003	7624120	350102
044	SAMPLE	289010-004	8041527	349002
045	SAMPLE	289010-005	7776185	356993
046	SAMPLE	289010-006	8135239	364885
048	BLANK	QC891167	8517576	372927
049	BS	QC891168	8223910	367155
050	CCV		8026211	364812
052	CCB		8838954	374043
053	BSD	QC891169	8128009	365778
054	MSS	287610-021	8623526	379968
055	MS	QC891170	8248083	366353
056	MSD	QC891171	8314186	371735
057	SER	QC891172	8909530	388936
058	PDS	QC891173	8162508	357961
059	SAMPLE	287610-022	8534972	366843
060	SAMPLE	287610-023	8506366	375872
061	SAMPLE	287610-024	8698102	377713
062	SAMPLE	287610-025	8578802	383668
063	CCV		7984981	351031
065	CCB		8814970	372167
066	SAMPLE	287610-026	8733488	387131
067	SAMPLE	287610-027	8905955	401845
068	SAMPLE	287610-028	8981754	403453
069	SAMPLE	287610-029	8920102	395681
070	SAMPLE	287610-030	8856680	413820
071	SAMPLE	287610-031	8915891	409405
072	SAMPLE	287610-032	8730161	407413
073	SAMPLE	287610-033	8812785	403212
074	SAMPLE	287610-034	8907969	407973
075	SAMPLE	287610-035	8949650	411241
076	CCV		8193481	381443
077	CCB		9078680	411273
078	SAMPLE	287610-036	8777033	409060
079	SAMPLE	287610-037	8985449	409539
080	SAMPLE	287610-038	8939748	409372
081	SAMPLE	287610-039	9087844	422343
082	SAMPLE	287610-040	8939613	412741

CURTIS & TOMPKINS INTERNAL STANDARD SUMMARY FOR SEQUENCE 1087259290

Date : 06/29/17 Reference : met10 method
Sequence : MET10 06/29/17 Analyzed : 06/29/17 01:33

#	Type	Sample ID	Y A	Y R
088	CCV		8368095	383146
089	CCB		9285207	425928

CURTIS & TOMPKINS INITIAL CALIBRATION FOR 287610 METALS SPLP Leachate: EPA 6010C

Inst : MET10
Calnum : 1087259290001
Units : ug/L

Date : 29-JUN-2017 01:30
X Axis : R

Level	File	Seqnum	Sample ID	Analyzed	Stds
L1	met10 method	1087259290002	L1	29-JUN-2017 01:33	S32935
L2	met10 method	1087259290003	L2	29-JUN-2017 01:37	S33180
L3	met10 method	1087259290004	L3	29-JUN-2017 01:39	S33246
L4	met10 method	1087259290005	L4	29-JUN-2017 01:42	S33247
L5	met10 method	1087259290006	L5	29-JUN-2017 01:45	S33268

Analyte	Ch	L1	L2	L3	L4	L5	Type	a0	a1	a2	Avg	r^2 %RSD	MnR^2	Flg
Lead	A	10.160	13.674	12.460	12.705		LOR0	0.00000	0.07872		12.250	1.000	0.998	

Spiked Amounts / Drifts	Ch	L1	%D	L2	%D	L3	%D	L4	%D	L5	%D
Lead	A	5.0000	-20	100.00	8	1000.0	-2	10000	0		

Instrument amount = a0 + response * a1 + response^2 * a2; LOR0=Linear regression forced thru origin, including 0,0 point

1087259290001

CURTIS & TOMPKINS 2ND SOURCE CALIBRATION SUMMARY FOR 287610 METALS SPLP Leachate EPA 6010C

Inst : MET10
Calnum : 1087259290001 Cal Date : 29-JUN-2017

ICV 1087259290008 (29-JUN-2017) stds: S33522

Analyte	Ch	Spiked	Quant	Units	%D	Max	Flags
Lead	A	5000	4973	ug/L	-1	10	

CURTIS & TOMPKINS LOW-LEVEL PERFORMANCE VERIFICATION STANDARD FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290010.1 File : met10 method Time : 29-JUN-2017 02:01
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33245

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	5.000	6.490	ug/L	30	30	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	9107650	-1.84
Yttrium	R	418853	414770	-0.97

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290011.1 File : met10 method Time : 29-JUN-2017 02:04
Cal : 1087259290001 Caldate : 29-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	9044975	-2.51
Yttrium	R	418853	408110	-2.56

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD A FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290012.1 File : met10 method Time : 29-JUN-2017 02:08
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33485

Analyte	Ch	Quant	IQL	Units	Flags
Lead	A	5.485	5.000	ug/L	!a+

Interferent	Ch	Spiked	Quant	Units	%Rec	Flags
Chromium	A	20000	19120	ug/L	96	
Copper	A	20000	19640	ug/L	98	
Manganese	A	20000	18380	ug/L	92	
Nickel	A	20000	18300	ug/L	91	
Titanium	A	20000	19290	ug/L	96	
Vanadium	A	20000	19750	ug/L	99	
Aluminum	R	500000	496200	ug/L	99	
Calcium	R	500000	473900	ug/L	95	
Iron	R	200000	184500	ug/L	92	
Magnesium	R	500000	396900	ug/L	79	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	7278715	-21.55
Yttrium	R	418853	351202	-16.15

!=warning +=high bias a=ICSA

CURTIS & TOMPKINS INTERFERENCE CHECK STANDARD AB FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290013.1 File : met10 method Time : 29-JUN-2017 02:10
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33484

Analyte	Ch	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	1000	966.7	ug/L	-3	20	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	7280071	-21.53
Yttrium	R	418853	350629	-16.29

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290037.1 File : met10 method Time : 29-JUN-2017 03:40
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	12.250	12.458	5000	4904	ug/L	-2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8073749	-12.98
Yttrium	R	418853	344566	-17.74

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290039.1 File : met10 method Time : 29-JUN-2017 03:45
Cal : 1087259290001 Caldate : 29-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8980074	-3.21
Yttrium	R	418853	454630	8.54

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290050.1 File : met10 method Time : 29-JUN-2017 04:22
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	12.250	13.044	5000	5134	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8026211	-13.49
Yttrium	R	418853	364812	-12.90

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290052.1 File : met10 method Time : 29-JUN-2017 04:27
Cal : 1087259290001 Caldate : 29-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8838954	-4.73
Yttrium	R	418853	374043	-10.70

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290063.1 File : met10 method Time : 29-JUN-2017 04:58
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	12.250	13.028	5000	5128	ug/L	3	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	7984981	-13.94
Yttrium	R	418853	351031	-16.19

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290065.1 File : met10 method Time : 29-JUN-2017 05:04
Cal : 1087259290001 Caldate : 29-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8814970	-4.99
Yttrium	R	418853	372167	-11.15

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290076.1 File : met10 method Time : 29-JUN-2017 05:33
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	12.250	12.941	5000	5094	ug/L	2	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8193481	-11.69
Yttrium	R	418853	381443	-8.93

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290077.1 File : met10 method Time : 29-JUN-2017 05:36
Cal : 1087259290001 Caldate : 29-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	9078680	-2.15
Yttrium	R	418853	411273	-1.81

CURTIS & TOMPKINS CONTINUING CALIBRATION FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290088.1 File : met10 method Time : 29-JUN-2017 06:07
Cal : 1087259290001 Caldate : 29-JUN-2017
Standards: S33523

Analyte	Ch	Avg RF/CF	RF/CF	Spiked	Quant	Units	%D	Max %D	Flags
Lead	A	12.250	12.533	5000	4933	ug/L	-1	10	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	8368095	-9.81
Yttrium	R	418853	383146	-8.52

CURTIS & TOMPKINS INSTRUMENT BLANK FOR 287610 METALS SPLP Leachate
EPA 6010C

Inst : MET10 IDF : 1.0
Seqnum : 1087259290089.1 File : met10 method Time : 29-JUN-2017 06:10
Cal : 1087259290001 Caldate : 29-JUN-2017

Analyte	Ch	Quant	IQL	LOD	Units	Flags
Lead	A	ND	5.000	4.000	ug/L	

ISTD (ICAL 002)	Ch	ICAL Abund	Abund	%Drift
Yttrium	A	9278096	9285207	0.08
Yttrium	R	418853	425928	1.69

SAMPLE PREPARATION SUMMARY

Batch # : 248959
Started By : MFV
Method : 3010A
Spike #1 ID : S29983
Prep Date : 21-JUN-2017 04:00
Spike #2 ID : S29984
Analysis : ICP
Finished By : MFV
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287610-001		SPLP Leachate	50	50	1	1.0						6010	
287610-002		SPLP Leachate	50	50	1	1.0						6010	
287610-003		SPLP Leachate	50	50	1	1.0						6010	
287610-004		SPLP Leachate	50	50	1	1.0						6010	
287610-005		SPLP Leachate	50	50	1	1.0						6010	
287610-006		SPLP Leachate	50	50	1	1.0						6010	
287610-007		SPLP Leachate	50	50	1	1.0						6010	
287610-008		SPLP Leachate	50	50	1	1.0						6010	
287610-009		SPLP Leachate	50	50	1	1.0						6010	
287610-010		SPLP Leachate	50	50	1	1.0						6010	
287610-011		SPLP Leachate	50	50	1	1.0						6010	
287610-012		SPLP Leachate	50	50	1	1.0						6010	
287610-013		SPLP Leachate	50	50	1	1.0						6010	
287610-014		SPLP Leachate	50	50	1	1.0						6010	
287610-015		SPLP Leachate	50	50	1	1.0						6010	
287610-016		SPLP Leachate	50	50	1	1.0						6010	
287610-017		SPLP Leachate	50	50	1	1.0						6010	
287610-018		SPLP Leachate	50	50	1	1.0						6010	
287610-019		SPLP Leachate	50	50	1	1.0						6010	
287610-020		SPLP Leachate	50	50	1	1.0						6010	
QC890309	BLANK	SPLP Leachate	50	50	1	1.0							
QC890310	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC890311	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC890312	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC890313	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC890314	SER	SPLP Leachate	50	50	1	1.0							
QC890315	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: MNA Date: 06/24/17 Reviewer: PRW Date: 06/26/17

TCLP/SPLP Extract Digestion for ICP

Curtis & Tompkins, Ltd.

LIMS Batch #: 248959
Date Digested: 6-21-17
Digested by: MV
Matrix: ☐ TCLP Extract ☑ SPLP Extract

Digestion Method:
☑ EPA 3010a for ICP
☐ _____

BK 3999
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Continued on p: Ø

	Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
	BLK 890309	☑ 50 ☐	☑ 50 ☐	N	
	BS 10	☑ 50 ☐	☑ 50 ☐		
	BSD 11	☑ 50 ☐	☑ 50 ☐		
	287610-001MS	☑ 50 ☐	☑ 50 ☐		
5	-001MSD	☑ 50 ☐	☑ 50 ☐		
	-001	☑ 50 ☐	☑ 50 ☐		
	-002	☑ 50 ☐	☑ 50 ☐		
	-003	☑ 50 ☐	☑ 50 ☐		
	-004	☑ 50 ☐	☑ 50 ☐		
10	-005	☑ 50 ☐	☑ 50 ☐		
	-006	☑ 50 ☐	☑ 50 ☐		
	-007	☑ 50 ☐	☑ 50 ☐		
	-008	☑ 50 ☐	☑ 50 ☐		
	-009	☑ 50 ☐	☑ 50 ☐		
15	-010	☑ 50 ☐	☑ 50 ☐		
	-011	☑ 50 ☐	☑ 50 ☐		
	-012	☑ 50 ☐	☑ 50 ☐		
	-013	☑ 50 ☐	☑ 50 ☐		
	-014	☑ 50 ☐	☑ 50 ☐		
20	-015	☑ 50 ☐	☑ 50 ☐		
	-016	☑ 50 ☐	☑ 50 ☐		
	-017	☑ 50 ☐	☑ 50 ☐		
	-018	☑ 50 ☐	☑ 50 ☐		
	-019	☑ 50 ☐	☑ 50 ☐		
	-020	☑ 50 ☐	☑ 50 ☐	✓	

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	272563-4428	—	MV 6-21-17
Digestion Block ID/ Probe Location	JUSTICE	48	
Thermometer ID/ Digestion Temperature (°C)	6412089	95	
0.5 mL of spike solution (Std1) was added to all spikes	329983		
0.5 mL of spike solution (Std1) was added to all spikes	329984		
0.5 mL of spike solution (Std3) was added to all spikes	330560		
Digestion started at (time)	0400		
☐ 1:1 HNO3, ☒ concentrated HNO3 ID	JTB 169331		MV 6-21-17
1:1 HCl reagent ID	JTB 167022		
Digestion ended at (time)	1455		
☐ filtered thru' Whatman # 541			
Relinquished to ICP group	ICP		

Pipettes

Vol.(mL)	ID
1	N271508
5	2444262

6-21-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG

Curtis & Tompkins, Ltd.

LIMS Batch #: 248916
Extraction Method: ☐ EPA 1311: TCLP ☑ EPA 1312: SPLP
Rotator #'s: 5/1/3

Date/ Time ON: 6-20-17 0450 Page: 78 BK 3994
Temp (°C) ON: 23
Date/ Time OFF: 6-20-17 2330 Thermometer ID: 111755122
Temp (°C) ON: 22-24 Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK 890140	QC	Ø	Ø	Ø	Ø	Ø	2	☑2000 ☐____	4.96	
287610-001	A	100.11	N	N	N/A	N/A		☑2000 ☐____	5.07	
2	A	100.21						☑2000 ☐____	5.62	
3	A	100.19						☑2000 ☐____	5.56	
4	A	100.17						☑2000 ☐____	5.39	
5	A	100.32						☑2000 ☐____	5.54	
6	A	100.16						☑2000 ☐____	5.34	
7	A	100.09						☑2000 ☐____	5.42	
8	A	100.19						☑2000 ☐____	5.27	
9	A	100.27						☑2000 ☐____	5.27	
10	A	100.13						☑2000 ☐____	5.58	
11	A	100.16						☑2000 ☐____	5.64	
12	A	100.27						☑2000 ☐____	5.46	
13	A	100.08						☑2000 ☐____	5.52	
14	A	100.19						☑2000 ☐____	5.57	
15	A	100.23						☑2000 ☐____	5.54	
16	A	100.13						☑2000 ☐____	5.32	
17	A	100.25						☑2000 ☐____	5.27	
18	A	100.37						☑2000 ☐____	5.27	
19	A	100.28						☑2000 ☐____	5.40	
20	A	100.08						☑2000 ☐____	5.07	
								☐ 2000 ☐____		
								☐ 2000 ☐____		
								☐ 2000 ☐____		

Balance ID: B-13 calibration has been checked? ☑ Yes ☐ No
pH Meter ID: 015869 has been calibrated? ☑ Yes ☐ No

☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#

	Mfg & Lot # / LIMS #	Date/ Initials
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID	N/A	6-20-17 MW
Sodium Hydroxide (NaOH)	N/A	
Acetic acid (HOAc)		
Fluid #1 pH, Prep Date	~~6-20 MW~~	
Fluid #2 pH, Prep Date	4.96/4.99/4.96 6-20-17	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: N/A	
filtered thru TCLP filter paper, lot#	ATHLESTONE 400124	
acidified to pH <2 with 1 mL HNO3	169331 STB	6-21-17 MW
pH paper strips, lot#	10BDH4951	

TCLP Fluid #1 pH: 4.88 - 4.98 su
TCLP Fluid #2 pH: 2.83 - 3.03 su
SPLP Fluid #1 pH: 4.15 - 4.25 su
SPLP Fluid #2 pH: 4.95 - 5.05 su

6-20-17
Extraction Chemist **Date**

Reviewed Online / See LIMS

SAMPLE PREPARATION SUMMARY

Batch # : 249179
Started By : MFV
Method : 3010A
Spike #1 ID : S33502
Prep Date : 28-JUN-2017 03:00
Spike #2 ID : S33503
Analysis : ICP
Finished By : MFV
Units : mL
Spike #3 ID : S30560

Sample	Stype	Matrix	Initial	Final	Clean DF	Prep DF	pH	Sp 1 Vol	Sp 2 Vol	Sp 3 Vol	Clean Method	Analysis	Comments
287610-021		SPLP Leachate	50	50	1	1.0						6010	
287610-022		SPLP Leachate	50	50	1	1.0						6010	
287610-023		SPLP Leachate	50	50	1	1.0						6010	
287610-024		SPLP Leachate	50	50	1	1.0						6010	
287610-025		SPLP Leachate	50	50	1	1.0						6010	
287610-026		SPLP Leachate	50	50	1	1.0						6010	
287610-027		SPLP Leachate	50	50	1	1.0						6010	
287610-028		SPLP Leachate	50	50	1	1.0						6010	
287610-029		SPLP Leachate	50	50	1	1.0						6010	
287610-030		SPLP Leachate	50	50	1	1.0						6010	
287610-031		SPLP Leachate	50	50	1	1.0						6010	
287610-032		SPLP Leachate	50	50	1	1.0						6010	
287610-033		SPLP Leachate	50	50	1	1.0						6010	
287610-034		SPLP Leachate	50	50	1	1.0						6010	
287610-035		SPLP Leachate	50	50	1	1.0						6010	
287610-036		SPLP Leachate	50	50	1	1.0						6010	
287610-037		SPLP Leachate	50	50	1	1.0						6010	
287610-038		SPLP Leachate	50	50	1	1.0						6010	
287610-039		SPLP Leachate	50	50	1	1.0						6010	
287610-040		SPLP Leachate	50	50	1	1.0						6010	
QC891167	BLANK	SPLP Leachate	50	50	1	1.0							
QC891168	BS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC891169	BSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC891170	MS	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC891171	MSD	SPLP Leachate	50	50	1	1.0		.5	.5	.5			
QC891172	SER	SPLP Leachate	50	50	1	1.0							
QC891173	PDS	SPLP Leachate	50	50	1	1.0							

Analyst: TLO Date: 06/29/17 Reviewer: PRW Date: 06/29/17

TCLP/SPLP Extract Digestion for ICP — Curtis & Tompkins, Ltd.

LIMS Batch #: 249179
Date Digested: 6-28-17
Digested by: MN
Matrix: ☐ TCLP Extract ☑ SPLP Extract

Digestion Method:
☑ EPA 3010a for ICP
☐ _____

BK 3999
Page 81
Continued on p: Ø

Sample #	Leachate Volume (mL)	Final Volume (mL)	Filtered? (y/n)	Comments
BLK 891167	☑50 ☐___	☑50 ☐___	N	
BS ↓ 8	☑50 ☐___	☑50 ☐___	↓	
BSD ↓ 9	☑50 ☐___	☑50 ☐___	↓	
287610-021 MS	☑50 ☐___	☑50 ☐___	↓	
-021 MSD	☑50 ☐___	☑50 ☐___	↓	
-021	☑50 ☐___	☑50 ☐___	↓	
-022	☑50 ☐___	☑50 ☐___	↓	
-023	☑50 ☐___	☑50 ☐___	↓	
-024	☑50 ☐___	☑50 ☐___	↓	
-025	☑50 ☐___	☑50 ☐___	↓	
-026	☑50 ☐___	☑50 ☐___	↓	
-027	☑50 ☐___	☑50 ☐___	↓	
-028	☑50 ☐___	☑50 ☐___	↓	
-029	☑50 ☐___	☑50 ☐___	↓	
-030	☑50 ☐___	☑50 ☐___	↓	
-031	☑50 ☐___	☑50 ☐___	↓	
-032	☑50 ☐___	☑50 ☐___	↓	
-033	☑50 ☐___	☑50 ☐___	↓	
-034	☑50 ☐___	☑50 ☐___	↓	
-035	☑50 ☐___	☑50 ☐___	↓	
-036	☑50 ☐___	☑50 ☐___	↓	
-037	☑50 ☐___	☑50 ☐___	↓	
-038	☑50 ☐___	☑50 ☐___	↓	
-039	☑50 ☐___	☑50 ☐___	↓	
-040	☑50 ☐___	☑50 ☐___	↓	

	Reagent ID or LIMS #		Initials / Date
Digestion Tubes / Watch Glasses, Lot #	272563-4428	010-500-281	MN 6-28-17
Digestion Block ID/ Probe Location	TETRA N	14	↓
Thermometer ID/ Digestion Temperature (°C)	A75455	95	↓
0.5 mL of spike solution (Std1) was added to all spikes	S33502		↓
0.5 mL of spike solution (Std1) was added to all spikes	S33503		↓
0.5 mL of spike solution (Std3) was added to all spikes	S30560		↓
Digestion started at (time)	0300		↓
☐ 1:1 HNO3; ☑ concentrated HNO3 ID	169331 JTB		↓
1:1 HCl reagent ID	JTB 169353		SG-6-28-17
Digestion ended at (time)	1430		↓
☐ filtered thru' Whatman # 541	←		↓
Relinquished to ICP group	ICP		↓

Pipettes

Vol.(mL)	ID
1	N271500
5	21444267

6-28-17
Digestion Chemist / Date

Reviewed Online / See LIMS,
Version 6, Dec.2015

SPLP/TCLP EXTRACTION LOG **Curtis & Tompkins, Ltd.**

LIMS Batch #: 249134 Date/ Time ON: 6-27-17 0500 Page: 79 **BK 3994**

Extraction Method: ☐ EPA 1311: TCLP Temp (°C) ON: 22

☑ EPA 1312: SPLP Date/ Time OFF: 6-27-17 2300 Thermometer ID: 111755122

Rotator #'s: 5, 1, 4 Temp (°C) ON: 22-24 Temperature Limits: 21 - 25 C

Sample #	SL	Sample Mass (g)	Free Liq (y/n)*	Sieved? (y/n)*	Sample pH	pH after +1N HCl	Fluid #	Extract Vol (mL)	Final pH	*Comments
BLK 891009	QC	Ø	Ø	Ø	Ø	Ø	2	☑2000 ☐	5.01	
287610-021	A	100.14	N	N	N/A	N/A		☑2000 ☐	5.04	
022	A	100.40						☑2000 ☐	5.03	
023	A	100.29						☑2000 ☐	5.11	
024	A	100.23						☑2000 ☐	5.09	
025	A	100.30						☑2000 ☐	5.12	
026	A	100.23						☑2000 ☐	5.11	
027	A	100.14						☑2000 ☐	5.06	
028	A	100.24						☑2000 ☐	5.28	
029	A	100.27						☑2000 ☐	5.14	
030	A	100.26						☑2000 ☐	5.36	
031	A	100.13						☑2000 ☐	5.06	
032	A	100.22						☑2000 ☐	5.53	
033	A	100.08						☑2000 ☐	5.38	
034	A	100.34						☑2000 ☐	5.43	
035	A	100.37						☑2000 ☐	5.25	
036	A	100.10						☑2000 ☐	5.12	
037	A	100.17						☑2000 ☐	5.22	
038	A	100.11						☑2000 ☐	5.13	
039	A	100.12						☑2000 ☐	5.25	
040	A	100.24						☑2000 ☐	5.03	
								☐ 2000 ☐		
								☐ 2000 ☐		
								☐ 2000 ☐		

Balance ID: B-13 calibration has been checked? ☑ Yes ☐ No

pH Meter ID: 013869 has been calibrated? ☑ Yes ☐ No

	Mfg & Lot # / LIMS #	Date/ Initials
☐ glass beaker/watch glass, or ☐ disposable tube/watch glass, lot#	N/A	6-27-17 MV
added 3.5 mL of 1 N HCl, Reagent ID/ pipette ID	N/A	
TCLP Fluid #1 pH: 4.88 - 4.98 su — Sodium Hydroxide (NaOH)		
TCLP Fluid #2 pH: 2.83 - 3.03 su — Acetic acid (HOAc)		
SPLP Fluid #1 pH: 4.15 - 4.25 su — Fluid #1 pH, Prep Date		
SPLP Fluid #2 pH: 4.95 - 5.05 su — Fluid #2 pH, Prep Date	4.99/4.98/5.01 6-27-17	
Hot Plate Thermometer (Temperature, Serial #)	N/A °C ID: N/A	
filtered thru TCLP filter paper, lot#	AHLSTROM 400124	
acidified to pH <2 with 1 mL HNO3	169331 JTB	
pH paper strips, lot#	10BDH4951	

6-27-17

Extraction Chemist **Date**

Reviewed Online / See LIMS

Laboratory Job Number 287610

ANALYTICAL REPORT

Wet Chemistry

Matrix: Soil

Percent Moisture Summary Report

Batch: 246611
Date: 04/12/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287610-021	11.0522	17.7763	15.0712	60	40
287610-022	11.2963	17.6105	15.3009	63	37
287610-023	11.0604	16.9991	14.8706	64	36
287610-024	11.2970	18.4057	16.2826	70	30
287610-025	11.3049	18.1702	15.9442	68	32
287610-026	11.0247	20.4518	17.2813	66	34
287610-027	11.3227	18.2423	16.0006	68	32
287610-028	11.6064	17.8337	15.5906	64	36
287610-029	11.1403	18.0448	15.0633	57	43
287610-030	11.4440	17.4724	15.1385	61	39
287610-031	11.2985	17.0462	14.7351	60	40
287610-032	11.2958	18.8731	15.9801	62	38
287610-033	11.2643	17.2933	14.9195	61	39
287610-034	11.1942	17.2075	15.0424	64	36
287610-035	11.2447	17.4350	15.1254	63	37
287610-036	10.8869	17.8878	15.3117	63	37
287610-037	11.0569	17.4795	15.0063	61	39
287610-038	11.0499	17.6668	15.0479	60	40
287610-039	11.3668	18.2267	15.2663	57	43
287610-040	11.2783	17.8410	15.5380	65	35
QC881289	11.4017	17.6768	15.4797	65	35
of 287610-040			RPD:	0.1%	0.2%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246611
Date: 4-12-17

Page: **41**
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☒ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
Blank	22	11.2610	∅	11.2551	
287611-~~01~~-021 A	80	11.0522	17.7763	15.0712	
MBM 4-12-17 -022	91	11.2963	17.6105	15.3009	
-023	55	11.0404	16.9991	14.8706	
-024	32	11.2970	18.4057	16.2826	
-025	88	11.3049	18.1702	15.9442	
-026	34	11.0247	20.4518	17.2813	
-027	35	11.3227	18.2423	16.0006	
-028	66	11.6064	17.8337	15.5906	
-029	47	11.1403	18.0448	15.0633	
-030	11	11.4440	17.4724	15.1385	
-031	95	11.2985	17.0462	14.7351	
-032	36	11.2958	18.8731	15.9801	
-033	58	11.2643	17.2933	14.9195	
-034	6	11.1942	17.2075	15.0424	
-035	51	11.2447	17.4350	15.1254	
-036	33	10.8869	17.8878	15.3117	
-037	28	11.0569	17.4795	15.0063	
-038	102	11.0499	17.6668	15.0479	
-039	37	11.3668	18.2267	15.2663	
-040 ↓	68	11.2783	17.8410	15.5380	
Spwp -040	29	11.4017	17.6768	15.4797	weight= 17.6768

MB4 4-13-17

	In	Out	In-2	Out-2
Date:	4-12-17	4-13-17		
Time:	20:30	15:10		
Min/Max Range (°C)	104	104		
Thermometer ID:	D49096	D49096		
Weighed by:	MBM	MBM		

MBM 4-13-17

MBM 4-12-17
Analyst Initials / Date

Reviewed Online / See LIMS

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PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK 2394
Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET#
4-5-17	NN	0.2000	100.0001	✓	40417
4-6-17	NN	0.2001	100.0008	✓	40417
4-7-17	NN	0.2000	100.0003	✓	40417
4-8-17	NN	0.2000	100.0001	✓	40417
4-11-17	MBH	0.2002	100.0008	✓	40417
4-12-17	MBH	0.2001	100.0002	✓	40417
4-13-17	MBH	0.2000	100.0006	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

Percent Moisture Summary Report

Batch: 246610
Date: 04/12/17
Method: CLP SOW 390
Analyst: MB4

Sample	Tare (g)	Wet (g)	Dry (g)	Percent Solids	Percent Moisture
287610-001	11.2053	17.4821	15.0994	62	38
287610-002	11.3604	19.5275	16.5845	64	36
287610-003	11.3550	18.8423	16.3825	67	33
287610-004	11.2906	19.6565	16.8043	66	34
287610-005	11.4390	18.0566	15.7543	65	35
287610-006	11.2341	18.1165	15.6588	64	36
287610-007	11.0156	19.2305	16.6832	69	31
287610-008	10.9449	17.4461	15.5349	71	29
287610-009	11.3477	17.5727	15.7375	71	29
287610-010	11.3142	17.9447	15.8256	68	32
287610-011	11.2305	18.4323	15.8965	65	35
287610-012	10.9175	17.7318	15.2962	64	36
287610-013	10.8919	17.6534	15.1069	62	38
287610-014	11.3362	18.4369	16.1526	68	32
287610-015	11.2975	17.7084	15.2878	62	38
287610-016	11.3547	19.4668	17.1537	71	29
287610-017	11.2050	17.6543	15.7688	71	29
287610-018	11.0546	17.1273	15.4696	73	27
287610-019	11.0495	18.8365	16.0515	64	36
287610-020	10.8778	17.4039	15.1086	65	35
QC881288	11.1437	17.9667	15.4557	63	37
of 287610-020			RPD:	2.5%	4.5%

Moisture LOG Curtis & Tompkins, Ltd. rev.3.1, effective 1/17/17

LIMS Batch #: 246610
Date: 4-12-17

Page: 40
Benchbook#: **BK 4044**

Balance ID: B-3
calibration has been checked? ☒ Yes ☐ No

Sample # / Letter	Dish #	Dish Weight (g)	Sample + Dish Wt (g)	Final Weight (g)	*Comments
Blank	21	10.9048	Ø	10.8977	
287610-001 A	75	11.2053	17.4821	15.0994	
-002	81	11.3604	19.5275	16.5845	
-003	74	11.3550 MBH 4-12-17	18.8423	16.3825	weight = 11.3550
-004	9	11.2906	19.6565	16.8043	
-005	77	11.4390	18.0566	15.7543	
-006	44	11.2341	18.1165	15.6588	
-007	73	11.0156	19.2305	16.6832	
-008	53	10.9449	17.4461	15.5349	
-009	39	11.3477	17.5727	15.7375	
-010	17	11.3142	17.9447	15.8256	
-011	59	11.2305	18.4323	15.8965	
-012	20	10.9175	17.7318	15.2962	
-013	72	10.8919	17.6534	15.1069	
-014	93	11.3362	18.4369	16.1526	
-015	12	11.2975	17.7084	15.2878	
-016	30	11.3547	19.4668	17.1537	
-017	18	11.2050	17.6543	15.7688	
-018	38	11.0546	17.1273	15.4696	
-019	14	11.0495	18.8365	16.0515	
-020 ↓	42	10.8778	17.4039	15.1086	
SDUP ↓ -020	1	11.1437	17.9667	15.4557	

MBH 4-13-17

	In	Out	In-2	Out-2
Date:	4-12-17	4-13-17		
Time:	20:10	15:40		
Min/Max Range (°C)	104	104		
Thermometer ID:	D49096	D49096		
Weighed by:	MBH	MBH		

MBH 4-13-17

MBH 4-12-17
Analyst Initials / Date

Reviewed Online / See LIMS

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PROJECT AE 163 METTLER (BALANCE ID# B-3) Notebook No. BK-2394
Continued From Page

DATE	ANALYST	0.2000	100.0000	LEVEL	SET #
4-5-17	MN	0.2000	100.0001	✓	40417
4-6-17	MN	0.2001	100.0008	✓	40417
4-7-17	MN	0.2000	100.0003	✓	40417
4-8-17	MN	0.2000	100.0001	✓	40417
4-11-17	MBH	0.2002	100.0008	✓	40417
4-12-17	MBH	0.2001	100.0002	✓	40417
4-13-17	MBH	0.2000	100.0006	✓	40417

Continued on Page

Read and Understood By

Signed Date Signed Date

APPENDIX D
WASTE DISPOSAL DOCUMENTATION 2010 AND 2017
(Compact Disk only)

Material Analysis Report by Account

Inbound and outbound materials for the period 10/11/2010 - 10/11/2010
Detailed Report for Sites: 1, 40
Accounts 392 - 392 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - Z

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
10/11/10	PCS-O	S	392	P	40-063479	0	0	0	33.93	33.93	441.09
10/11/10	PCS-O	S	392	P	40-063481	0	0	0	31.30	31.30	406.90
10/11/10	PCS-O	S	392	P	40-063486	0	0	0	35.58	35.58	462.54
10/11/10	PCS-O	S	392	P	40-063487	0	0	0	30.53	30.53	396.89
10/11/10	PCS-O	S	392	P	40-063488	0	0	0	33.50	33.50	435.50
10/11/10	PCS-O	S	392	P	40-063491	0	0	0	30.49	30.49	396.37
10/11/10	PCS-O	S	392	P	40-063497	0	0	0	28.67	28.67	372.71
10/11/10	PCS-O	S	392	P	40-063498	0	0	0	29.33	29.33	381.29
	BELFOR ENVIRONMENTAL - NON MET				**8**	**0**	**0**	**0**	**253.33**	**253.33**	**3,293.29**
	Average					**0**	**0**	**0**	**31.67**	**31.67**	**411.66**
	Report Total				**8**	**0**	**0**	**0**	**253.33**	**253.33**	**3,293.29**
	Report Average					**0**	**0**	**0**	**31.67**	**31.67**	**411.66**

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

** DUPLICATE TICKET **

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063479
Date In 10/11/10
12821 NE AIRPORT WY Time In 11:59
PORTLAND OR 97230 Date Out 10/11/10
Time Out 12:31

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 105960 LB Vehicle TRAIL
Scale 1 Tare Wt. 38100 LB Roll-Off
Net Wt. 67860 LB TON 33.93

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER HERIFORD 3

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063481
Date In 10/11/10
12821 NE AIRPORT WY Time In 12:07
PORTLAND OR 97230 Date Out 10/11/10
Time Out 12:34

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 102740 LB Vehicle TRAIL
Scale 1 Tare Wt. 40140 LB Roll-Off
Net Wt. 62600 LB TON 31.30

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER TAYLOR 9520

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063486
Date In 10/11/10
12821 NE AIRPORT WY Time In 12:17
PORTLAND OR 97230 Date Out 10/11/10
Time Out 12:45

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 106940 LB Vehicle TRAIL
Scale 1 Tare Wt. 35780 LB Roll-Off
Net Wt. 71160 LB TON 35.58

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER PACIFIC 5

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063487
Date In 10/11/10
12821 NE AIRPORT WY Time In 12:21
PORTLAND OR 97230 Date Out 10/11/10
Time Out 12:37

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 101200 LB Vehicle TRAIL
Scale 1 Tare Wt. 40140 LB Roll-Off
Net Wt. 61060 LB TON 30.53

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 22

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063488
Date In 10/11/10
12821 NE AIRPORT WY Time In 12:22
PORTLAND OR 97230 Date Out 10/11/10
Time Out 12:50

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104120 LB Vehicle TRAIL
Scale 1 Tare Wt. 37120 LB Roll-Off
Net Wt. 67000 LB TON 33.50

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER SCOTTIE TAY 24

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063491
Date In 10/11/10
12821 NE AIRPORT WY Time In 12:36
PORTLAND OR 97230 Date Out 10/11/10
Time Out 12:55

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 101580 LB Vehicle TRAIL
Scale 1 Tare Wt. 40600 LB Roll-Off
Net Wt. 60980 LB TON 30.49

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063497
Date In 10/11/10
12821 NE AIRPORT WY Time In 13:09
PORTLAND OR 97230 Date Out 10/11/10
Time Out 13:38

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 95980 LB Vehicle TRAIL
Scale 1 Tare Wt. 38640 LB Roll-Off
Net Wt. 57340 LB TON 28.67

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 10

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature #10

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063498
Date In 10/11/10
12821 NE AIRPORT WY Time In 13:10
PORTLAND OR 97230 Date Out 10/11/10
Time Out 13:56

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 99260 LB Vehicle TRAIL
Scale 1 Tare Wt. 40600 LB Roll-Off
Net Wt. 58660 LB TON 29.33

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 21

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature Davy Warner

Material Analysis Report by Account

Inbound and outbound materials for the period 10/12/2010 - 10/12/2010
Detailed Report for Sites: 1, 40
Accounts 392 - 392 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - Z

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
10/12/10	PCS-O	S	392	P	40-063526	0	0	0	33.83	33.83	439.79
10/12/10	PCS-O	S	392	P	40-063527	0	0	0	33.65	33.65	437.45
10/12/10	PCS-O	S	392	P	40-063529	0	0	0	31.01	31.01	403.13
10/12/10	PCS-O	S	392	P	40-063530	0	0	0	30.90	30.90	401.70
10/12/10	PCS-O	S	392	P	40-063533	0	0	0	27.59	27.59	358.67
10/12/10	PCS-O	S	392	P	40-063559	0	0	0	31.79	31.79	413.27
10/12/10	PCS-O	S	392	P	40-063560	0	0	0	31.02	31.02	403.26
10/12/10	PCS-O	S	392	P	40-063561	0	0	0	33.10	33.10	430.30
10/12/10	PCS-O	S	392	P	40-063563	0	0	0	32.21	32.21	418.73
10/12/10	PCS-O	S	392	P	40-063566	0	0	0	28.89	28.89	375.57
10/12/10	PCS-O	S	392	P	40-063567	0	0	0	33.79	33.79	439.27
10/12/10	PCS-O	S	392	P	40-063575	0	0	0	32.13	32.13	417.69
10/12/10	PCS-O	S	392	P	40-063577	0	0	0	29.40	29.40	382.20
10/12/10	PCS-O	S	392	P	40-063580	0	0	0	31.12	31.12	404.56
10/12/10	PCS-O	S	392	P	40-063586	0	0	0	29.03	29.03	377.39
10/12/10	PCS-O	S	392	P	40-063587	0	0	0	33.81	33.81	439.53
10/12/10	PCS-O	S	392	P	40-063588	0	0	0	31.85	31.85	414.05
10/12/10	PCS-O	S	392	P	40-063593	0	0	0	33.51	33.51	435.63
10/12/10	PCS-O	S	392	P	40-063594	0	0	0	28.19	28.19	366.47
10/12/10	PCS-O	S	392	P	40-063597	0	0	0	29.93	29.93	389.09
	BELFOR ENVIRONMENTAL - NON MET				20	0	0	0	626.75	626.75	8,147.75
	Average					0	0	0	31.34	31.34	407.39
	Report Total				20	0	0	0	626.75	626.75	8,147.75
	Report Average					0	0	0	31.34	31.34	407.39

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063526
Date In 10/12/10
12821 NE AIRPORT WY Time In 07:02
PORTLAND OR 97230 Date Out 10/12/10
Time Out 07:18

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 103520 LB Vehicle TRAIL
Scale 1 Tare Wt. 35860 LB Roll-Off
Net Wt. 67660 LB TON 33.83

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER PACIFIC 5

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063527
Date In 10/12/10
12821 NE AIRPORT WY Time In 07:02
PORTLAND OR 97230 Date Out 10/12/10
Time Out 07:20

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104600 LB Vehicle TRAIL
Scale 1 Tare Wt. 37300 LB Roll-Off
Net Wt. 67300 LB TON 33.65

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER SCOTTIE TAYLOR 24

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063529
Date In 10/12/10
12821 NE AIRPORT WY Time In 07:04
PORTLAND OR 97230 Date Out 10/12/10
Time Out 07:21

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 102240 LB Vehicle TRAIL
Scale 1 Tare Wt. 40220 LB Roll-Off
Net Wt. 62020 LB TON 31.01

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 22

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063530
Date In 10/12/10
12821 NE AIRPORT WY Time In 07:05
PORTLAND OR 97230 Date Out 10/12/10
Time Out 07:22

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

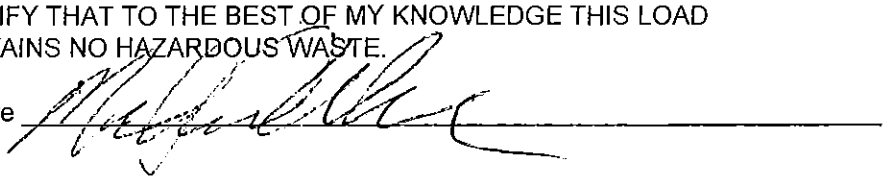
DESCRIPTION

Scale 1 Gross Wt. 102560 LB Vehicle TRAIL
Scale 1 Tare Wt. 40760 LB Roll-Off
Net Wt. 61800 LB TON 30.90

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063533
Date In 10/12/10
12821 NE AIRPORT WY Time In 07:07
PORTLAND OR 97230 Date Out 10/12/10
Time Out 07:23

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

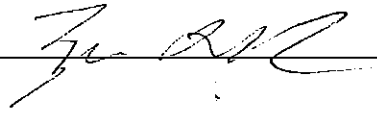
DESCRIPTION

Scale 1 Gross Wt. 94080 LB Vehicle TRAIL
Scale 1 Tare Wt. 38900 LB Roll-Off
Net Wt. 55180 LB TON 27.59

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER TAYLOR 9506

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063559
Date In 10/12/10
12821 NE AIRPORT WY Time In 10:40
PORTLAND OR 97230 Date Out 10/12/10
Time Out 11:04

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 102940 LB Vehicle TRAIL
Scale 1 Tare Wt. 39360 LB Roll-Off
Net Wt. 63580 LB TON 31.79

PETR CONT SOIL - OUT per TON

PO # CELORIE
NOTE
DRIVER DIETRICH 19

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063560
Date In 10/12/10
12821 NE AIRPORT WY Time In 11:02
PORTLAND OR 97230 Date Out 10/12/10
Time Out 11:28

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 101260 LB Vehicle TRAIL
Scale 1 Tare Wt. 39220 LB Roll-Off
Net Wt. 62040 LB TON 31.02

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 18

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature Doug Warner

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063561
Date In 10/12/10
12821 NE AIRPORT WY Time In 11:06
PORTLAND OR 97230 Date Out 10/12/10
Time Out 11:24

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104800 LB Vehicle TRAIL
Scale 1 Tare Wt. 38600 LB Roll-Off
Net Wt. 66200 LB TON 33.10

PETR CONT SOIL - OUT per TON

PO # FOR DEITRICH
NOTE
DRIVER CELORIE 10

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature #10

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063563
Date In 10/12/10
12821 NE AIRPORT WY Time In 11:20
PORTLAND OR 97230 Date Out 10/12/10
Time Out 11:40

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 105400 LB Vehicle TRAIL
Scale 1 Tare Wt. 40980 LB Roll-Off
Net Wt. 64420 LB TON 32.21

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 8

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063566
Date In 10/12/10
12821 NE AIRPORT WY Time In 11:35
PORTLAND OR 97230 Date Out 10/12/10
Time Out 11:52

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 95620 LB Vehicle TRAIL
Scale 1 Tare Wt. 37840 LB Roll-Off
Net Wt. 57780 LB TON 28.89

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER JIM SMITH, 17

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063567
Date In 10/12/10
12821 NE AIRPORT WY Time In 11:36
PORTLAND OR 97230 Date Out 10/12/10
Time Out 12:03

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 103260 LB Vehicle TRAIL
Scale 1 Tare Wt. 35680 LB Roll-Off
Net Wt. 67580 LB TON 33.79

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER PACIFIC 5

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063575
Date In 10/12/10
12821 NE AIRPORT WY Time In 12:14
PORTLAND OR 97230 Date Out 10/12/10
Time Out 12:40

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104100 LB Vehicle TRAIL
Scale 1 Tare Wt. 39840 LB Roll-Off
Net Wt. 64260 LB TON 32.13

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 22

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063577
Date In 10/12/10
12821 NE AIRPORT WY Time In 12:30
PORTLAND OR 97230 Date Out 10/12/10
Time Out 13:02

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 100120 LB Vehicle TRAIL
Scale 1 Tare Wt. 41320 LB Roll-Off
Net Wt. 58800 LB TON 29.40

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER SINES 07

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063580
Date In 10/12/10
12821 NE AIRPORT WY Time In 12:49
PORTLAND OR 97230 Date Out 10/12/10
Time Out 13:12

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

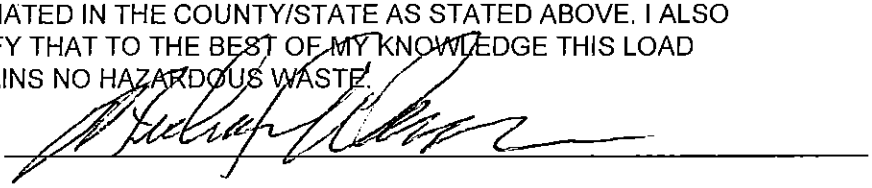
DESCRIPTION

Scale 1 Gross Wt. 102500 LB Vehicle TRAIL
Scale 1 Tare Wt. 40260 LB Roll-Off
Net Wt. 62240 LB TON 31.12

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063586
Date In 10/12/10
12821 NE AIRPORT WY Time In 13:19
PORTLAND OR 97230 Date Out 10/12/10
Time Out 13:51

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 96320 LB Vehicle TRAIL
Scale 1 Tare Wt. 38260 LB Roll-Off
Net Wt. 58060 LB TON 29.03

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER TAYLOR 9506

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063587
Date In 10/12/10
12821 NE AIRPORT WY Time In 13:21
PORTLAND OR 97230 Date Out 10/12/10
Time Out 13:55

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104580 LB Vehicle TRAIL
Scale 1 Tare Wt. 36960 LB Roll-Off
Net Wt. 67620 LB TON 33.81

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER SCOTTIE TAYLOR

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063588
Date In 10/12/10
12821 NE AIRPORT WY Time In 13:27
PORTLAND OR 97230 Date Out 10/12/10
Time Out 14:12

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 103160 LB Vehicle TRAIL
Scale 1 Tare Wt. 39460 LB Roll-Off
Net Wt. 63700 LB TON 31.85

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER 8506

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063593
Date In 10/12/10
12821 NE AIRPORT WY Time In 13:39
PORTLAND OR 97230 Date Out 10/12/10
Time Out 14:14

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 105440 LB Vehicle TRAIL
Scale 1 Tare Wt. 38420 LB Roll-Off
Net Wt. 67020 LB TON 33.51

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER ROSS ADAMS

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063594
Date In 10/12/10
12821 NE AIRPORT WY Time In 13:40
PORTLAND OR 97230 Date Out 10/12/10
Time Out 14:15

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 94820 LB Vehicle TRAIL
Scale 1 Tare Wt. 38440 LB Roll-Off
Net Wt. 56380 LB TON 28.19

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER ADAMS 201

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063597
Date In 10/12/10
12821 NE AIRPORT WY Time In 13:58
PORTLAND OR 97230 Date Out 10/12/10
Time Out 14:28

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 98940 LB Vehicle TRAIL
Scale 1 Tare Wt. 39080 LB Roll-Off
Net Wt. 59860 LB TON 29.93

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER 8503

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Material Analysis Report by Account

Inbound and outbound materials for the period 10/13/2010 - 10/13/2010
Detailed Report for Sites: 1, 40
Accounts 392 - 392 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - Z

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
10/13/10	PCS-O	S	392	P	40-063620	0	0	0	34.94	34.94	454.22
10/13/10	PCS-O	S	392	P	40-063622	0	0	0	31.48	31.48	409.24
10/13/10	PCS-O	S	392	P	40-063623	0	0	0	33.41	33.41	434.33
10/13/10	PCS-O	S	392	P	40-063625	0	0	0	30.52	30.52	396.76
10/13/10	PCS-O	S	392	P	40-063626	0	0	0	31.74	31.74	412.62
10/13/10	PCS-O	S	392	P	40-063628	0	0	0	36.56	36.56	475.28
10/13/10	PCS-O	S	392	P	40-063635	0	0	0	32.96	32.96	428.48
10/13/10	PCS-O	S	392	P	40-063666	0	0	0	34.24	34.24	445.12
10/13/10	PCS-O	S	392	P	40-063667	0	0	0	34.13	34.13	443.69
10/13/10	PCS-O	S	392	P	40-063698	0	0	0	31.77	31.77	413.01
10/13/10	PCS-O	S	392	P	40-063704	0	0	0	31.78	31.78	413.14
10/13/10	PCS-O	S	392	P	40-063705	0	0	0	30.99	30.99	402.87
	BELFOR ENVIRONMENTAL - NON MET				**12**	**0**	**0**	**0**	**394.52**	**394.52**	**5,128.76**
	Average					**0**	**0**	**0**	**32.88**	**32.88**	**427.40**
	Report Total				**12**	**0**	**0**	**0**	**394.52**	**394.52**	**5,128.76**
	Report Average					**0**	**0**	**0**	**32.88**	**32.88**	**427.40**

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063620
Date In 10/13/10
12821 NE AIRPORT WY Time In 06:49
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:09

Weighmaster NANCY Ref. 2042-10-92
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 105680 LB Vehicle TRAIL
Scale 1 Tare Wt. 35800 LB Roll-Off
Net Wt. 69880 LB TON 34.94

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER PACIFIC 5

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063622
Date In 10/13/10
12821 NE AIRPORT WY Time In 06:51
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:12

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 102420 LB Vehicle TRAIL
Scale 1 Tare Wt. 39460 LB Roll-Off
Net Wt. 62960 LB TON 31.48

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 19

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063623
Date In 10/13/10
12821 NE AIRPORT WY Time In 06:52
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:05

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

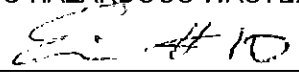
DESCRIPTION

Scale 1 Gross Wt. 105440 LB Vehicle TRAIL
Scale 1 Tare Wt. 38620 LB Roll-Off
Net Wt. 66820 LB TON 33.41

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 10

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063625
Date In 10/13/10
12821 NE AIRPORT WY Time In 06:53
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:07

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 101260 LB Vehicle TRAIL
Scale 1 Tare Wt. 40220 LB Roll-Off
Net Wt. 61040 LB TON 30.52

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 22

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063626
Date In 10/13/10
12821 NE AIRPORT WY Time In 06:54
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:16

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104500 LB Vehicle TRAIL
Scale 1 Tare Wt. 41020 LB Roll-Off
Net Wt. 63480 LB TON 31.74

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 8

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063628
Date In 10/13/10
12821 NE AIRPORT WY Time In 06:56
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:18

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 110260 LB Vehicle TRAIL
Scale 1 Tare Wt. 37140 LB Roll-Off
Net Wt. 73120 LB TON 36.56

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER NEWSON 10

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063635
Date In 10/13/10
12821 NE AIRPORT WY Time In 07:38
PORTLAND OR 97230 Date Out 10/13/10
Time Out 07:59

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

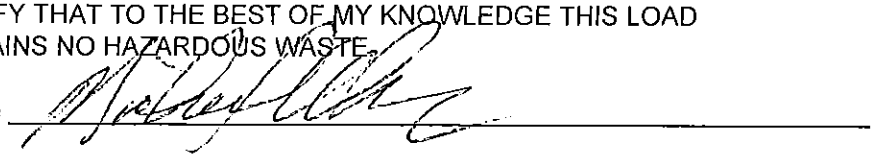
DESCRIPTION

Scale 1 Gross Wt. 106660 LB Vehicle TRAIL
Scale 1 Tare Wt. 40740 LB Roll-Off
Net Wt. 65920 LB TON 32.96

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063666
Date In 10/13/10
12821 NE AIRPORT WY Time In 11:02
PORTLAND OR 97230 Date Out 10/13/10
Time Out 11:31

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

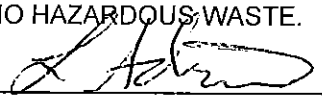
DESCRIPTION

Scale 1 Gross Wt. 106520 LB Vehicle TRAIL
Scale 1 Tare Wt. 38040 LB Roll-Off
Net Wt. 68480 LB TON 34.24

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER L ADAMS 201

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063667
Date In 10/13/10
12821 NE AIRPORT WY Time In 11:03
PORTLAND OR 97230 Date Out 10/13/10
Time Out 11:29

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 106280 LB Vehicle TRAIL
Scale 1 Tare Wt. 38020 LB Roll-Off
Net Wt. 68260 LB TON 34.13

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER ROSS ADAMS 101

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063698
Date In 10/13/10
12821 NE AIRPORT WY Time In 14:04
PORTLAND OR 97230 Date Out 10/13/10
Time Out 14:04

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Manual Gross Wt. 103660 LB Vehicle TRAIL
Manual Tare Wt. 40120 LB Roll-Off
Net Wt. 63540 LB TON 31.77

PETR CONT SOIL - OUT per TON

PO # REPLACES 63668
NOTE
DRIVER TAYLOR 9520

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063704
Date In 10/13/10
12821 NE AIRPORT WY Time In 14:43
PORTLAND OR 97230 Date Out 10/13/10
Time Out 15:01

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 103720 LB Vehicle TRAIL
Scale 1 Tare Wt. 40160 LB Roll-Off
Net Wt. 63560 LB TON 31.78

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CEL 22

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063705
Date In 10/13/10
12821 NE AIRPORT WY Time In 14:59
PORTLAND OR 97230 Date Out 10/13/10
Time Out 15:21

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 100540 LB Vehicle TRAIL
Scale 1 Tare Wt. 38560 LB Roll-Off
Net Wt. 61980 LB TON 30.99

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER CELORIE 10

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature Eric Hill

Material Analysis Report by Account

Inbound and outbound materials for the period 10/14/2010 - 10/14/2010
Detailed Report for Sites: 1, 40
Accounts 392 - 392 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - Z

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
10/14/10	PCS-O	S	392	P	40-063724	0	0	0	32.20	32.20	418.60
10/14/10	PCS-O	S	392	P	40-063753	0	0	0	31.95	31.95	415.35
10/14/10	PCS-O	S	392	P	40-063755	0	0	0	30.13	30.13	391.69
10/14/10	PCS-O	S	392	P	40-063759	0	0	0	28.20	28.20	366.60
10/14/10	PCS-O	S	392	P	40-063760	0	0	0	31.58	31.58	410.54
	BELFOR ENVIRONMENTAL - NON MET				5	0	0	0	154.06	154.06	2,002.78
	Average					0	0	0	30.81	30.81	400.56
	Report Total				5	0	0	0	154.06	154.06	2,002.78
	Report Average					0	0	0	30.81	30.81	400.56

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063724
Date In 10/14/10
12821 NE AIRPORT WY Time In 07:25
PORTLAND OR 97230 Date Out 10/14/10
Time Out 08:12

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104020 LB Vehicle TRAIL
Scale 1 Tare Wt. 39620 LB Roll-Off
Net Wt. 64400 LB TON 32.20

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER 8504

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____ (EB)

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063753
Date In 10/14/10
12821 NE AIRPORT WY Time In 10:56
PORTLAND OR 97230 Date Out 10/14/10
Time Out 11:41

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

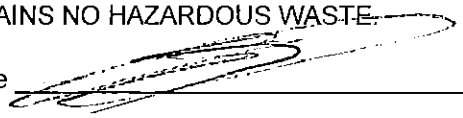
DESCRIPTION

Scale 1 Gross Wt. 103740 LB Vehicle TRAIL
Scale 1 Tare Wt. 39840 LB Roll-Off
Net Wt. 63900 LB TON 31.95

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER DIETRICH 8505

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063755
Date In 10/14/10
12821 NE AIRPORT WY Time In 11:14
PORTLAND OR 97230 Date Out 10/14/10
Time Out 11:43

Weighmaster NANCY Ref. TAY 9520 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 100400 LB Vehicle TRAIL
Scale 1 Tare Wt. 40140 LB Roll-Off
Net Wt. 60260 LB TON 30.13

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER TAYLOR 9520

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063759
Date In 10/14/10
12821 NE AIRPORT WY Time In 11:34
PORTLAND OR 97230 Date Out 10/14/10
Time Out 12:09

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

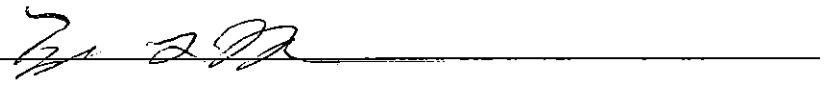
DESCRIPTION

Scale 1 Gross Wt. 94600 LB Vehicle TRAIL
Scale 1 Tare Wt. 38200 LB Roll-Off
Net Wt. 56400 LB TON 28.20

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER TAYLOR 9506

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
The Dalles, OR 97058

000392 Site 40
BELFOR ENVIRONMENTAL - NON MET Ticket 063760
Date In 10/14/10
12821 NE AIRPORT WY Time In 11:46
PORTLAND OR 97230 Date Out 10/14/10
Time Out 12:07

Weighmaster NANCY Ref. 2042-10-95
Origin WASH ST Grid

DESCRIPTION

Scale 1 Gross Wt. 104000 LB Vehicle TRAIL
Scale 1 Tare Wt. 40840 LB Roll-Off
Net Wt. 63160 LB TON 31.58

PETR CONT SOIL - OUT per TON

PO #
NOTE
DRIVER TAYLOR 9519

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234760
Date In 11/01/17
Time In 10:10:50
Date Out 11/01/17
Time Out 10:40:35

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

DESCRIPTION			
Scale 3 Gross Wt.	101900LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40280LB	Roll-Off	
Net Wt.	61620LB	TON	30.81

PETR CONT SOIL - OUT per TON

PO # 2042-14-215
NOTE
DRIVER DIETRICH 8541

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234763
Date In 11/01/17
Time In 10:28:37
Date Out 11/01/17
Time Out 10:53:53

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

DESCRIPTION

Scale 3 Gross Wt.	102840LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39720LB	Roll-Off	
Net Wt.	63120LB	TON	31.56

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER CELORIE 21

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234764
Date In 11/01/17
Time In 10:32:05
Date Out 11/01/17
Time Out 10:57:34

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

DESCRIPTION			
Scale 3 Gross Wt.	107060LB	Vehicle TRAIL	
Scale 7 Tare Wt.	42460LB	Roll-Off	
Net Wt.	64600LB	TON	32.30

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8532

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234773
Date In 11/01/17
Time In 11:13:27
Date Out 11/01/17
Time Out 11:50:02

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

DESCRIPTION

Scale 3 Gross Wt.	104520LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40160LB	Roll-Off	
Net Wt.	64360LB	TON	32.18

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8542

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234774
Date In 11/01/17
Time In 11:17:32
Date Out 11/01/17
Time Out 11:56:50

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

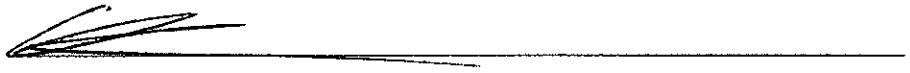
DESCRIPTION

Scale 3 Gross Wt.	112200LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41820LB	Roll-Off	
Net Wt.	70380LB	TON	35.19

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8537

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234776
Date In 11/01/17
Time In 11:22:02
Date Out 11/01/17
Time Out 11:55:31

Weighmaster:Linda
Origin WASH ST

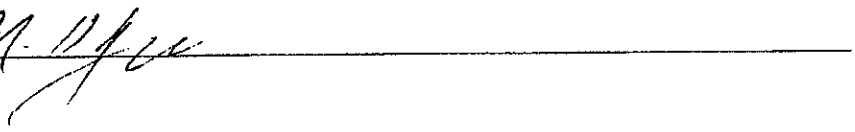
Ref. CAMP B
Grid

DESCRIPTION			
Scale 3 Gross Wt.	103040LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39820LB	Roll-Off	
Net Wt.	63220LB	TON	31.61

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8539

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234780
Date In 11/01/17
Time In 11:30:38
Date Out 11/01/17
Time Out 12:09:09

Weighmaster:Linda
Origin WASH ST

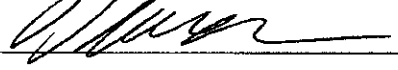
Ref. CAMP B
Grid

DESCRIPTION			
Scale 3 Gross Wt.	104940LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40540LB	Roll-Off	
Net Wt.	64400LB	TON	32.20

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8507

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234952
Date In 11/02/17
Time In 14:31:47
Date Out 11/02/17
Time Out 14:52:28

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	103100LB	Vehicle TRAIL	
Scale 7 Tare Wt.	37640LB	Roll-Off	
Net Wt.	65460LB	TON	32.73

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER TODD 67

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234953
Date In 11/02/17
Time In 14:41:43
Date Out 11/02/17
Time Out 14:56:49

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	106140LB	Vehicle TRAIL	
Scale 7 Tare Wt.	37200LB	Roll-Off	
Net Wt.	68940LB	TON	34.47

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER POTTER 58

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234954
Date In 11/02/17
Time In 14:43:20
Date Out 11/02/17
Time Out 15:01:38

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	102260LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39300LB	Roll-Off	
Net Wt.	62960LB	TON	31.48

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER CELORIE 23

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234945
Date In 11/02/17
Time In 14:14:14
Date Out 11/02/17
Time Out 14:46:59

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	104260LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41800LB	Roll-Off	
Net Wt.	62460LB	TON	31.23

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8532

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234922
Date In 11/02/17
Time In 12:30:25
Date Out 11/02/17
Time Out 12:54:02

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

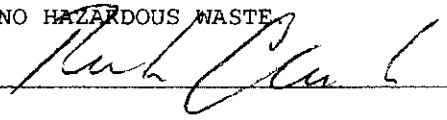
DESCRIPTION

Scale 3 Gross Wt.	103640LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39360LB	Roll-Off	
Net Wt.	64280LB	TON	32.14

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER CELORIE 21

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234898
Date In 11/02/17
Time In 10:51:36
Date Out 11/02/17
Time Out 11:28:53

Ref. CAMP BONN
Grid

Marian K
Origin WASH ST

DESCRIPTION			
Scale 3 Gross Wt.	104620LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40860LB	Roll-Off	
Net Wt.	63760LB	TON	31.88

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8533

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature Glen L. Mahan

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234894
Date In 11/02/17
Time In 10:33:28
Date Out 11/02/17
Time Out 11:01:40

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	100000LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40440LB	Roll-Off	
Net Wt.	59560LB	TON	29.78

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8535

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234890
Date In 11/02/17
Time In 10:25:05
Date Out 11/02/17
Time Out 10:45:33

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	106040LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41200LB	Roll-Off	
Net Wt.	64840LB	TON	32.42

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234886
Date In 11/02/17
Time In 10:04:26
Date Out 11/02/17
Time Out 10:21:41

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION			
Scale 3 Gross Wt.	103400LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39400LB	Roll-Off	
Net Wt.	64000LB	TON	32.00

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER CELORIE 23

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

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WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234882
Date In 11/02/17
Time In 09:46:32
Date Out 11/02/17
Time Out 10:38:45

Marian K
Origin WASH ST

Ref. CAMP BONN
Grid

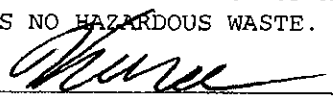
DESCRIPTION

Scale 3 Gross Wt.	103640LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40640LB	Roll-Off	
Net Wt.	63000LB	TON	31.50

PETR CONT SOIL - OUT per TON

PO # 2042-117-215
NOTE
DRIVER DIETRICH 8507

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234881
Date In 11/02/17
Time In 09:44:46
Date Out 11/02/17
Time Out 09:58:36

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	103420LB	Vehicle TRAIL	
Scale 7 Tare Wt.	37020LB	Roll-Off	
Net Wt.	66400LB	TON	33.20

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER POTTER 58

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234861
Date In 11/02/17
Time In 08:06:40
Date Out 11/02/17
Time Out 08:25:53

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION			
Scale 3 Gross Wt.	103160LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40240LB	Roll-Off	
Net Wt.	62920LB	TON	31.46

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8541

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234850
Date In 11/02/17
Time In 07:39:47
Date Out 11/02/17
Time Out 08:05:46

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

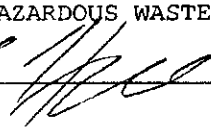
DESCRIPTION

Scale 3 Gross Wt.	105260LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39380LB	Roll-Off	
Net Wt.	65880LB	TON	32.94

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8539

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234849
Date In 11/02/17
Time In 07:38:48
Date Out 11/02/17
Time Out 07:38:48

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Manual Gross Wt.	103680LB	Vehicle TRAIL	
Scale 7 Tare Wt.	42220LB	Roll-Off	
Net Wt.	61460LB	TON	30.73

RPL#234835

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8532

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234843
Date In 11/02/17
Time In 07:21:05
Date Out 11/02/17
Time Out 08:04:26

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	104380LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40140LB	Roll-Off	
Net Wt.	64240LB	TON	32.12

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8542

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234827
Date In 11/02/17
Time In 07:02:45
Date Out 11/02/17
Time Out 07:25:17

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION			
Scale 3 Gross Wt.	102780LB	Vehicle TRAIL	
Scale 7 Tare Wt.	39720LB	Roll-Off	
Net Wt.	63060LB	TON	31.53

PETR CONT SOIL - OUT per TON

PO # 2042-17-125
NOTE
DRIVER CELORIE 21

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00235150
Date In 11/03/17
Time In 15:35:28
Date Out 11/03/17
Time Out 15:55:56

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

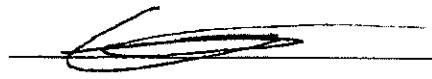
DESCRIPTION

Scale 3 Gross Wt.	104500LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41140LB	Roll-Off	
Net Wt.	63360LB	TON	31.68

PETR CONT SOIL - OUT per TON

PO # 2042-17-216
NOTE
DRIVER DIETRICH 8537

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00235149
Date In 11/03/17
Time In 15:34:01
Date Out 11/03/17
Time Out 15:53:58

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

DESCRIPTION			
Scale 3 Gross Wt.	82120LB	Vehicle TRAIL	
Scale 7 Tare Wt.	42020LB	Roll-Off	
Net Wt.	40100LB	TON	20.05

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8532

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00235090
Date In 11/03/17
Time In 12:46:35
Date Out 11/03/17
Time Out 13:03:57

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION

Scale 3 Gross Wt.	101060LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41200LB	Roll-Off	
Net Wt.	59860LB	TON	29.93

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00235037
Date In 11/03/17
Time In 09:57:29
Date Out 11/03/17
Time Out 10:17:27

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

DESCRIPTION

Scale 3 Gross Wt.	103920LB	Vehicle TRAIL	
Scale 7 Tare Wt.	42240LB	Roll-Off	
Net Wt.	61680LB	TON	30.84

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8532

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00235013
Date In 11/03/17
Time In 08:35:02
Date Out 11/03/17
Time Out 09:30:41

Weighmaster:Linda
Origin WASH ST

Ref. CAMP B
Grid

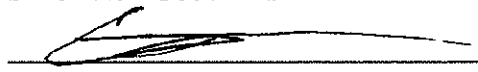
DESCRIPTION

Scale 3 Gross Wt.	108860LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41500LB	Roll-Off	
Net Wt.	67360LB	TON	33.68

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8537

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature 

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00235014
Date In 11/03/17
Time In 08:37:29
Date Out 11/03/17
Time Out 08:37:29

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION			
Manual Gross Wt.	104640LB	Vehicle TRAIL	
Scale 7 Tare Wt.	40260LB	Roll-Off	
Net Wt.	64380LB	TON	32.19

PETR CONT SOIL - OUT per TON

PO # 2042-17-215
NOTE
DRIVER DIETRICH 8535

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

Wasco County Landfill
WASCO COUNTY LANDFILL
2550 Steele Road
The Dalles, OR 97058

000179
DIETRICH TRUCKING, LLC

7211-ANE 43RD AVE
VANCOUVER WA 98661

Site 01
Ticket 00234977
Date In 11/03/17
Time In 07:27:48
Date Out 11/03/17
Time Out 07:50:37

Weighmaster:Linda
Origin WASH ST

Ref. CAMP BONN
Grid

DESCRIPTION			
Scale 3 Gross Wt.	104720LB	Vehicle TRAIL	
Scale 7 Tare Wt.	41000LB	Roll-Off	
Net Wt.	63720LB	TON	31.86

PETR CONT SOIL - OUT per TON

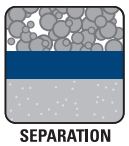
PO # 2042-17-215
NOTE
DRIVER CELORIE 11

BY SIGNING THIS, I CERTIFY THAT THIS DISPOSAL MATERIAL ORIGINATED IN THE COUNTY/STATE AS STATED ABOVE. I ALSO CERTIFY THAT TO THE BEST OF MY KNOWLEDGE THIS LOAD CONTAINS NO HAZARDOUS WASTE.

Signature _____

APPENDIX E
GEOTEXTILE TECHNICAL INFORMATION

TENCATE Mirafi®


SEPARATION


DRAINAGE

Mirafi® N-Series Nonwoven Polypropylene Geotextiles

for Soil Separation and Drainage

TenCate develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

The Difference Mirafi® N-Series Nonwoven Geotextiles Make:

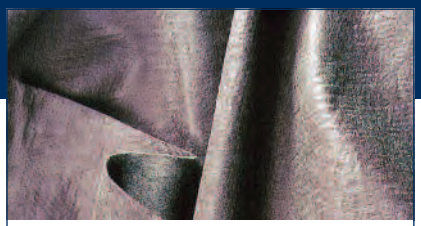
- Construction. Mirafi® N-Series polypropylene nonwoven geotextiles easily conform to the ground or trench surface for trouble free installation.
- Strength. Mirafi® N-Series geotextiles withstand installation stresses with high puncture and tear resistance.
- Drainage. High permittivity properties provide high water flow rates while providing excellent soil retention.
- Environmental. Mirafi® N-Series geotextiles are chemically stable in a wide range of aggressive environments.
- Cost Effective. Mirafi® N-Series geotextiles provide economical solutions to many civil engineering applications including a cost effective alternative to graded aggregate filters.

APPLICATIONS

Mirafi® N-Series nonwoven geotextiles are used in a wide variety of applications including soil separation and drainage applications. Lightweight nonwovens are predominantly used for subsurface drainage applications along highways, within embankments, under airfields, and athletic fields. For these drainage structures to be effective, they must have a properly designed protective filter.

Mirafi® N-Series nonwoven geotextiles eliminates the challenge of determining the aggregate gradation required to match soil conditions, finding a convenient and economical source of a specific aggregate, transporting and placing graded aggregate, and assuring that the constructed in-place drainage system provides effective filter performance.

Heavyweight nonwovens are used in critical subsurface drainage systems, soil separation, permanent erosion control, and geomembrane liner protection within landfills. These geotextiles provide the required strength and abrasion resistance to withstand installation and application stresses to create an effective, long term drainage solution.



Mirafi® N-Series Nonwoven Geotextiles

INSTALLATION GUIDELINES*

French and Trench Drains Geosynthetic Placement

Cut geosynthetic to proper width prior to placement. Width should be enough to conform to the trench perimeter with at least a 15cm (6in) top overlap. Place the geosynthetic roll over the trench, and unroll enough geosynthetic that the geosynthetic can be placed down into the trench. Anchor the edges of the geosynthetic with heavy objects to prevent the geosynthetic from falling into the trench. Where overlaps are necessary between rolls, allow for 1m (3ft) overlap from the upstream to the downstream roll.

* These guidelines serve as a general basis for installation. Detailed instructions are available from your TenCate® representative.

TENCATE Mirafi®

Mirafi® N-Series Nonwoven Polypropylene Geotextiles

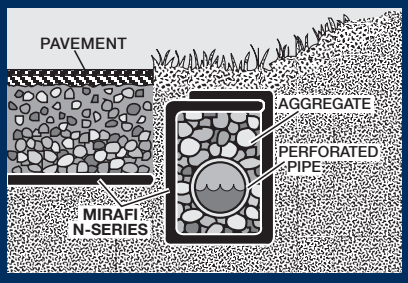
for Soil Separation and Drainage

Property / Test Method	Units	140NL	140NC	140N	160N	170N	180N	1100N	1120N	1160N
MECHANICAL PROPERTIES					**Minimum Average Roll Value**					
Grab Tensile Strength ASTM D4632										
Strength	lbs (N)	90 (401)	100 (445)	120 (534)	160 (712)	180 (801)	205 (912)	250 (1113)	300 (1335)	380 (1691)
Elongation	%	50	50	50	50	50	50	50	50	50
Trapezoid Tear Strength ASTM D4533	lbs (N)	40 (178)	45 (200)	50 (223)	60 (267)	75 (334)	80 (356)	100 (445)	115 (512)	140 (623)
CBR Puncture Strength ASTM D6241	lbs (N)	250 (1113)	250 (1113)	310 (1380)	410 (1825)	450 (2003)	500 (2224)	700 (3115)	800 (3560)	1025 (4561)
HYDRAULIC PROPERTIES										
					Maximum Opening Size					
Apparent Opening Size (AOS) ASTM D4751	US Sieve mm	50 (0.30)	70 (0.212)	70 (0.212)	70 (0.212)	70 (0.212)	80 (0.18)	100 (0.15)	100 (0.15)	100 (0.15)
					Minimum Roll Value					
Permittivity ASTM D4491	sec^{-1}	2.0	2.0	1.7	1.5	1.4	1.4	0.8	0.8	0.7
Flow Rate ASTM D4491	$gal/min/ft^2$ $(l/min/m^2)$	145 (5907)	140 (5704)	135 (5500)	110 (4481)	105 (4278)	95 (3870)	75 (3056)	65 (2648)	50 (2037)
					Minimum Test Value					
UV Resistance after 500 hrs. ASTM D4355	% strength	70	70	70	70	70	70	70	70	70

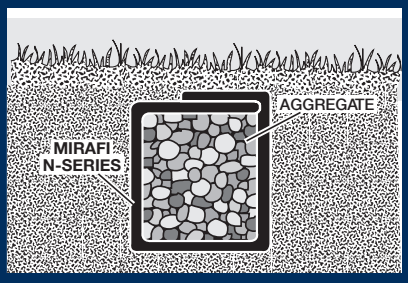
Packaging	Units	140NL	140NC	140N	160N	170N	180N	1100N	1120N	1160N
Roll Width	ft (m)	12.5 (3.8) 15.0 (4.6)	12.5 (3.8) 15.0 (4.6)	12.5 (3.8) 15.0 (4.6)	15.0 (4.6)	15.0 (4.6)	15.0 (4.6)	15.0 (4.6)	15.0 (4.6)	15.0 (4.6)
Roll Length	ft (m)	360 (110)	360 (110)	360 (110)	300 (91)	300 (91)	300 (91)	300 (91)	300 (91)	150 (46)
Area	yd^2 (m^2)	500 (418) 600 (502)	500 (418) 600 (502)	500 (418) 600 (502)	500 (418)	500 (418)	500 (418)	500 (418)	500 (418)	250 (209)

Note: Values and methods could change without notice

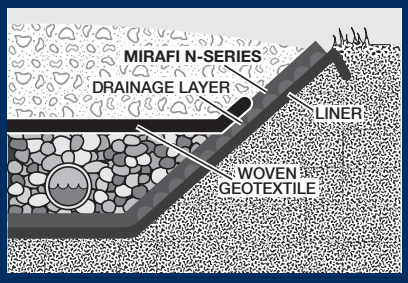
Mirafi® N-Series Nonwoven Geotextiles



Cut-off/Interceptor Drain Along a Roadway Or Another Critical Structure



French Drain Without Pipe



Liner Protection Within a Landfill

PDS.N0715

365 South Holland Drive
Pendergrass, GA 30567
Tel 800 685 9990
Tel 706 693 2226
Fax 706 693 4400
www.mirafi.com

ISO 9001 FM 61026

TENCATE materials that make a difference

Mirafi® 160N/O

Mirafi® 160N/O is an orange nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Mirafi® 160N/O is inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids.

TenCate Geosynthetics Americas Laboratories are accredited by a2La (The American Association for Laboratory Accreditation) and Geosynthetic Accreditation Institute – Laboratory Accreditation Program (GAI-LAP).

Mechanical Properties	Test Method	Unit	Typical Value[2]	
			MD	CD
Grab Tensile Strength	ASTM D4632	lbs (N)	175 (779)	175 (779)
Grab Tensile Elongation	ASTM D4632	%	75	75
Trapezoid Tear Strength	ASTM D4533	lbs (N)	85 (378)	85 (378)
CBR Puncture Strength	ASTM D6241	lbs (N)	480 (2136)	
Permittivity	ASTM D4491	sec^{-1}	1.5	
Flow Rate	ASTM D4491	$gal/min/ft^2$ ($l/min/m^2$)	105 (4278)	
UV Resistance (at 500 hours)[1]	ASTM D4355	% strength retained	80	

Apparent Opening Size (AOS): ASTM D4751: U.S. Sieve (mm): 70 (0.212) is tested to a Maximum Opening Diameter Value
[1] Modified; Minimum Test Value

Physical Properties	Unit	Typical Value[2]
Weight (ASTM D5161)	oz/yd^2 (g/m^2)	6.5 (220)
Thickness (ASTM D5199)	mils (mm)	65 (1.7)
Roll Dimensions (width x length)	ft (m)	15 x 300 (4.5 x 91)
Roll Area	yd^2 (m^2)	500 (418)
Estimated Roll Weight	lb (kg)	220 (100)

Mirafi® 160N/O orange polypropylene nonwoven is not manufactured with any heavy metals contents. The regulated metals – lead, mercury, cadmium, and hexavalent chromium are not intentionally added to any component in this product during the manufacturing process.

[2] ASTM D4439 Standard Terminology for Geosynthetics: typical value, *n—for geosynthetics,* the mean value calculated from documented manufacturing quality control test results for a defined population obtained from one test method associated with on specific property.

Made in USA

TENCATE materials that make a difference

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FGS000611
ETQR10

GAI-LAP-25-97

Testing Lab 1291.01 & 1291.02