AECOM Environment

Prepared for:
Superfund Standby Program
NYSDEC
Albany, NY

Prepared by:
AECOM
Chestnut Ridge, NY
60277021
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Groundwater Sampling Report (September 2017 Sampling Event) Dzus Fasteners Site Site #1-52-033 Work Assignment No. D007626-17.2

Final

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1.0 Introduction

AECOM Technical Services Northeast, Inc., (AECOM) has prepared this Groundwater Monitoring Report for the Dzus Fasteners facility (Site) in West Islip, New York (Site No. 1-52-033). This work was performed for the New York State Department of Environmental Conservation (NYSDEC) under Work Assignment D007626-17.2. This groundwater monitoring report provides the results of the groundwater sampling data and the surface water/sediment samples collected in September 2017.

AECOM collects groundwater samples from selected monitoring wells and surface water/sediment samples from Willetts Creek and Lake Capri at five-quarter (15 month) intervals as part of the Site's long-term monitoring plan. Four rounds of fish tissue samples were also collected from Lake Capri in July 2006, May 2007, October 2010 and September 2012. Fish tissue data results were documented in separate reports, the most recent of which was submitted in January 2013 for the September 2012 sampling event. Previous groundwater sampling events were conducted in June 2006, August 2007, November 2008, March 2010, May 2011, August 2012, November 2013, March/April 2015, and May 2016. This report presents the results from the latest round of sampling conducted in September 2017.

2.0 Background Information

The Dzus Fasteners Superfund site is located at 425 Union Boulevard, West Islip, Suffolk County, New York (Figure 1). The Site is bounded to the north by railroad tracks and Union Boulevard to the south and east. The Site is bounded to the west by Beach Street and commercial properties. A shopping plaza is located on the south side of Union Boulevard. Willetts Creek (a Class A surface water body) is located east of the Site. Willetts Creek flows south, paralleling Everdell Avenue past the Beach Street Middle School and West Islip Senior High School, eventually discharging into Lake Capri approximately 4,500 feet (ft) south of the Site.

The Dzus Fastener facility (the name was changed to DFCI Solutions, Inc. in 2001), a manufacturer of fastener and springs from 1932 to 2015, was responsible for the release of oils, heavy metals, and salts via onsite leaching pools used for the disposal of hazardous waste and formal discharge into Upper Willetts Creek. These operations led to soil and groundwater contamination at the Dzus facility and downstream groundwater, sediment, and surface water contamination of nearby Willetts Creek and Lake Capri, an 8-acre man-made lake.

An initial site inspection took place in August 1983. Contamination was discovered and a preliminary site assessment was completed in September 1984. A phase I investigation was completed and a phase II investigation was submitted by Dzus in August of 1990. Dzus then completed an Interim Remedial Measure (IRM) in October 1990. During the IRM, a leach field on the eastern side of the site was removed. A remedial investigation / feasibility study (RI/FS) was initiated at the site in 1992. The site was then broken up into the two Operable Units (OU), OU1, the Dzus facility; and OU2, the offsite localities including groundwater downgradient of the facility, Willetts Creek and Lake Capri. A Record of Decision (ROD) for OU1 was issued for the site in March 1995, and a ROD for OU2 was issued for the site in October 1997.

In response to the ROD for OU1, the remedy for contaminated groundwater in the vicinity of the Dzus facility consisted of source removal and ongoing natural attenuation.

The eastern parking lot at the Dzus facility was paved with asphalt to eliminate the potential for direct human contact with the underlying contaminated soils at the site, and to eliminate or reduce the mobility of soil contaminants that would cause further groundwater degradation. The selected remedy consisted of the following:

- In-situ stabilization/solidification for soils containing cadmium at concentrations greater than 10 parts per million (ppm). Three areas on the western portion of the facility were excavated and mixed with the soils to be treated on the eastern portion of the Site;

- Design and installation of a final topsoil/asphalt cover at the eastern portion of the Site, which would protect the treatment cells from erosion; and
- Implementation of institutional controls, such as deed restrictions at the Site.

The second operable unit, Operable Unit 2 (OU2) consisted of offsite contamination, including sediment and water contamination of Willetts Creek and Lake Capri. A ROD for OU2 was issued for the Site by NYSDEC in October 1997.

The selected remedy consisted of the following:

- The fish population of Lake Capri was eradicated using Rotenone, a NYSDEC approved fish eradicant, in July 1999 prior to dredging operations;
- Dredging, dewatering and off-site disposal of contaminated sediments from Lake Capri;
- Excavation and off-site disposal of approximately 100 cubic yards of sediment from Willetts Creek, corresponding to levels of cadmium exceeding 9 ppm (currently, the highest effects guidance value);
- Riprap was used to cover portions identified as having deeper zones of contamination in order to prevent future erosion;
- A long-term monitoring program to evaluate the effectiveness of the on-site remedy and to verify that existing groundwater plume does not impact public health or environment; and,
- The lake was restocked with silversides, bluegill (*Lepomis macrochirus*), and largemouth bass (*Microptera salmoides)* after completion of the remedial activities in 2000.

After these remedial actions were completed, the Site was classified as a Class 4 Site. On January 13, 2016, the Site was reclassified from a Class 4 (site properly closed-requires continued management) to a Class 2 (significant threat to the public health or environment-action required)

Activities at the Site are being conducted in accordance with the Site Management Plan (SMP) dated May 2014. As part of the OM&M, a long-term monitoring plan (LTMP) was developed for OU1 and OU2 with regard to monitoring of groundwater, surface water, sediment, and the asphalt cover (engineering control) in the manufacturing facility's eastern parking lot.

The ROD for OU1 (on-site soils) lists the metals contaminants of concern as cadmium, chromium and nickel. The ROD for OU2 (groundwater, and surface water and sediment in Willetts Creek and Lake Capri) lists the metals contaminants of concern for groundwater as cadmium and chromium, surface water as cadmium, and sediment as cadmium and lead. Several other metals, including antimony, arsenic, chromium, iron, lead, manganese, sodium, thallium and zinc, have been found in exceedance of published standards in groundwater at the Site and in the surface water and sediments of nearby Willetts Creek and Lake Capri.

A total of 14 wells and six surface water/sediment sample locations were identified for long term monitoring at the Site (Figure 2). Additional sediment samples and a surface water sample were collected April 2015 in the small cove at the northern end of the Lake.

A surface water sample collected at cove location SC-4 found exceedances of iron, manganese and sodium (Table 5). There were no other exceedances noted.

Five sediment samples were collected in the cove. Four were analyzed for cadmium only and one was analyzed for TAL metals (Table 6). Cadmium was not detected in two samples. The concentration exceeded the lowest effects criterion in three samples, one of which exceeded the highest effects level. There were no other metals exceedances noted in the cove samples.

During the periodic monitoring of Willetts Creek and Lake Capri sediment, anomalously high cadmium concentrations were noted in a few sediment samples. Additional sediment sampling was conducted in Lake Capri and Willetts Creek in April 2013. Another round of sampling was conducted in Willetts Creek in November 2013 to evaluate the horizontal and vertical extent of cadmium contamination in Willetts Creek. Further confirmation samples were collected in Willetts Creek in October 2014. A public meeting was held at the West Islip High School on March 23, 2016 to present the results of the Willetts Creek sediment sampling to the local residents.

NYSDEC established OU-3 to address this contamination. OU-3 encompasses the area of off-site impacted wetlands located behind the strip mall on Union Boulevard and includes a portion of the Willetts Creek channel upstream of Lake Capri, West Islip School properties, and low-lying residential property along Everdell Avenue. Additional sampling was conducted to delineate this contamination in the Fall of 2016. An interim remedial measure (IRM) was performed in June 2016 which consisted of installing a demarcation fence along Willetts Creek adjacent to the Beach Street Middle School athletic fields and the area behind the ACE Hardware Store. A second IRM was conducted in Willetts Creek in January 2017. Sediment and debris upstream of the two footbridges at Burling Lane and Edmore Lane was removed from the creek to enhance flow during rain events. NYSDEC issued a Proposed Remedial Action Plan (PRAP) for OU-3 dated July 2017.

RCRA closure activities are nearing completion at the Site. However, vapors above the mitigation level remain under the building slab. Because the vapors are above the mitigation level, a soil vapor extraction system is in operation and will continue to operate under levels fall below the mitigation level. Construction will commence at the Site once the RCRA closure activities are complete.

3.0 Field Activities

Groundwater sampling activities occurred on September 11, 12 and 13, 2017. Surface water and sediment sampling occurred on September 21, 2017. Sampling was conducted in accordance with the SMP (May 2014). Groundwater samples were collected using low flow techniques starting with the August 2012 sampling event; previous samples were collected using the volumetric method. All field work was performed in Level D personal protection. At the request of NYSDEC, groundwater sampling also included the collection of samples for 1,4-dioxane and perfluorinated compounds.

NYSDEC Monitoring Well Field Inspection Logs were prepared for each well and are presented in Appendix A. Monitoring well MW-1 was destroyed in December 2007 during snow removal and had not been sampling during subsequent sampling events. The well was replaced in August 2015 and is included in this sampling event.

3.1 Groundwater Level Survey

A summary of well construction data is presented in Table 1. Prior to the start of sampling, a synoptic round of water levels was collected from the 14 monitoring wells selected for sampling. Groundwater elevation readings were recorded on the NYSDEC Monitoring Well Field Inspection Forms and are included in Appendix B. Groundwater elevation data are presented on Table 2. A groundwater contour map was prepared for the September 11, 2017 synoptic event and is presented on Figure 3. As shown on the figure, the general direction of groundwater flow at the Site is to the south. A low hydraulic gradient of 0.0019 ft/ft was calculated. Groundwater hydrographs for the monitoring wells are presented in Figure 3A.

3.2 Groundwater Sampling

The 14 wells identified for long term monitoring at the Dzus Site are: MW-1, MW-2, MW-3, MW-9, MW-9B, MW-13A, MW-13B, MW-15A, MW-15B, MW-18, MW-22A, MW-22B, MW-23A and MW-23B. MW-17, northeast of the Dzus facility (Figure 2), was located in 2014 and included in this sampling event.

Groundwater sampling occurred on September 11, 12 and 13, 2017. A peristaltic pump with poly tubing was used to purge each monitoring well. The groundwater sampling procedures were modified to conform with the requirements to collect samples for perfluorinated compounds. The existing poly tubing was removed from the monitoring wells and replaced with HDPE tubing. The groundwater samples were collected using low-flow sampling methods with HDPE tubing and a GeoTech Geopump and after stabilization. The HDPE tubing was placed back into the monitoring wells after sampling.

The flow rate was set between 200 and 400 mL per minute. At approximately five-minute intervals, drawdown was measured. A flow cell was used to collect measurements of pH, dissolved oxygen (DO), specific conductance, oxygen reduction potential (ORP), temperature and turbidity. These readings were recorded on the Well Sampling Forms. Once the parameters had stabilized, a sample was collected directly from the discharge line. The sample was placed into laboratory supplied containers and packed in an ice-filled cooler. During this round, filtered metals samples were also collected. Groundwater samples were filtered in the field immediately upon collection using dedicated, disposable 0.45 micron filters. Filtered groundwater was then poured into a laboratory supplied container and placed in an ice filled cooler. The samples were then transported to Hampton Clarke Veritech via the laboratory's courier. Proper chain-of-custody procedures and requirements were maintained throughout the sampling event in accordance with the SMP.

Samples for 1,4-dioxane were collected on November 8 and 9, 2017. At each well, a HydraSleeve was placed within the well and allowed to remain for 24 hours. The sample was collected by rapidly pulling the HydraSleeve up at the depth of the screen. The HydraSleeve collects a sample from within the screen only. It excludes water from any other part of the water column in the well through the use of a self- sealing check valve at the top of the sampler. It is a single-use (disposable) sampler that is not intended for reuse, so there are no decontamination requirements for the sampler itself.

3.3 Surface Water / Sediment Sampling

Six paired surface water/sediment samples (plus a field duplicate for each matrix) were collected from Lake Capri and Willetts Creek on September 21, 2017. The sample locations are shown on Figure 2. A small boat was used to gain access to the lake. Each surface water sample was collected by dipping laboratory-supplied bottles into the lake and then transferring the water to the laboratory supplied preserved bottles. At each surface water location, a co-located sediment sample was also collected. Sediment samples were collected using an Eckman dredge to reach the lake bottom sediments. Excess water was decanted from the sediment sample prior to placement in the sample jars.

3.4 Surface Soil Sampling

During the RCRA cleanup activities at the DFCI Solutions Facility, excavated soils were stockpiled on-site prior to off-site removal. During the course of the cleanup, strong winds blew the tarps off the stockpiles and potentially allowed fugitive dust to travel off-site. At the request of NYSDEC, three surface soil samples were collected to evaluate whether dust from the soil stockpiles had contaminated off-site soils. One background sample was collected west of the Facility along Union Boulevard and two samples were collected downwind of the facility along Union Boulevard as shown on Figure 2A. The soil was scraped from the surface of a wide area. AECOM did not dig down to get the sample. Samples were analyzed for TAL metals.

3.5 Site Inspection

A Site inspection was performed on September 12, 2017 in accordance with the SMP. The completed Site Inspection form is in Appendix D. The Site was found to be in generally good condition. There was no evidence of illegal disposal activities or excessive weed growth. The asphalt cap on the DFCI property was inspected to determine if the engineering control was functioning properly. The asphalt cap in the eastern area of the property covers the contaminated soil that was stabilized through soil mixing with cement during the implementation of the ROD. The asphalt also serves as a parking lot for the facility. The inspection found that conditions in the parking area had not changed significantly since the last inspection in May 2016. There were some cracks noted in the asphalt but they do not appear to be detrimental to the cap.

Although the SMP calls for the inspection of the riprap in Willetts Creek, the field crews have not been able to locate the riprap.

Lake Capri was also inspected. Excessive weed growth was noted in the lake. Otherwise, the lake level appears to be the same as the last inspection.

4.0 Sampling Results

Groundwater, surface water, and sediment samples were analyzed for target analyte list (TAL) metals using USEPA Method 6010/7401/7471. Groundwater samples for hexavalent chromium were analyzed using Method SM-3500-Cr D. Groundwater samples for perfluorinated compounds were analyzed by Method 537 v1.1 and 1,4-dioxane by SW-846 Method 8270D. The analyses were performed by Hampton Clarke Veritech, Fairfield, New Jersey, a NYSDOH ELAP certified laboratory (ELAP certification number 11408). Perfluorinated compound analyses were subcontracted to SGS North America (ELAP certification number 11685). As specified in the work plan, formal data validation was not performed; however, an AECOM chemist provided a limited review of the data packages. The data quality evaluation for this sampling event is presented in Section 4.7.

4.1 Groundwater Data

Groundwater samples were collected from 13 monitoring wells during the September 2017 sampling event. During the first four sampling events, only total metals analyses were performed on the monitoring well samples. During the May 2011, August 2012, November 2013, March 2015, May 2016, and September 2017 sampling events, samples for both total and dissolved metals analyses were collected from each monitoring well. The laboratory data summary packages are included in Appendix C. A summary of the detections from all ten long-term sampling events is presented in Table 3. A summary of the exceedances from this groundwater sampling event is presented on Figure 4. A bar graph showing the cadmium concentrations for all ten rounds is presented on Figure 5.

One monitoring well, MW-17, is located upgradient of the Site along Orinoco Drive, immediately west of Willetts Creek. Five wells (MW-1, MW-2, MW-3, MW-9A and MW-9B) are located on Site and are considered source area monitoring wells. Five wells (MW-13A, MW-13B, MW-15A, MW-15B and MW-18) are located downgradient of the Site. Four wells (MW-22A, MW-22B, MW-23A and MW-23B) are located along Willetts Creek.

Ten metals have been detected at concentrations above their Class GA criteria at least once during the nine rounds of groundwater sampling at the Site. These metals include cadmium and chromium (contaminants of concern [COCs] listed in the OU1 ROD), and antimony, arsenic, lead, manganese, selenium, sodium, and thallium. Out of these metals, only cadmium, iron, manganese, and sodium were detected at concentrations above Class GA criteria in September 2017.

4.1.1 Upgradient Monitoring Well

Monitoring well MW-17 was first included in the long term monitoring program in Round 8 (March 2015). Cadmium and chromium were not detected in any of the unfiltered or filtered samples from

Rounds 8, 9 or 10 (September 2017). Concentrations of iron and manganese exceeded the criterion in unfiltered samples in rounds 8, 9 and 10, and in the filtered samples from Round 10.

4.1.2 Source Area Monitoring Wells

Ten TAL metals (antimony, arsenic, cadmium, chromium, iron, lead, manganese selenium, sodium and thallium) have been detected in the five wells included in the source area monitoring wells (MW-1, MW-2, MW-3, MW-9 and MW-9B).

Historically, concentrations of antimony, arsenic, lead, selenium and thallium have been sporadically detected above their respective criterion in source area monitoring wells during the ten sampling rounds. Each exceedance was in an unfiltered sample and the filtered samples were all not detected. None of these six metals were detected during the Round 10 sampling event.

Concentrations of iron, manganese and sodium were detected above their respective criteria during the Round 10 sampling event in both unfiltered and filtered samples.

Cadmium was detected in both the unfiltered and filtered samples from MW-3 at concentrations of 13.0 micrograms per liter (µg/L) and 9.5 µg/L (Figure 5A). Chromium was not detected in any of the source area monitoring wells.

4.1.3 Downgradient Monitoring Wells

Eight TAL metals (antimony, cadmium, iron, lead, manganese selenium, sodium and thallium) have been detected in the five wells are included the downgradient monitoring wells (MW-13A, MW-13B, MW-15A, MW-15B and MW-18).

Historically, concentrations of antimony, lead, selenium and thallium have been sporadically detected above their respective criterion in downgradient monitoring wells during the ten sampling rounds. None of these four metals were detected during the Round 10 sampling event.

Concentrations of iron, manganese and sodium were detected above their respective criteria during the Round 10 sampling event in both unfiltered and filtered samples.

Cadmium was detected in both the unfiltered and filtered samples at MW-13A and MW-15A. Cadmium in unfiltered samples exceeded the criterion at both locations with concentrations of 13 µg/L and 93.5 µg/L. Cadmium in filtered samples exceeded the criterion in both samples with concentrations of 11 µg/L and 64.4 µg/L (Figure 5A). Chromium was not detected in any of the downgradient monitoring wells during Round 10.

4.1.4 Willetts Creek Monitoring Wells

Nine TAL metals (antimony, cadmium, chromium, iron, lead, manganese selenium, sodium and thallium) have been detected in the four Willetts Creek monitoring wells (MW-22A, MW-22B, MW-23A,

and MW-23B). Samples could not be collected from monitoring wells MW-23A or MW-23B during Round 10 as the wells have been paved over.

Historically, concentrations of antimony, chromium, lead, selenium and thallium have been sporadically detected above their respective criterion in Willetts Creek monitoring wells during the ten sampling rounds. None of these five metals were detected during the Round 10 sampling event.

Concentrations of iron, manganese and sodium were detected above their respective criteria during the Round 10 sampling event in both unfiltered and filtered samples. Historically, concentrations of these three metals have exceeded their criterion in a majority of samples collected.

4.2 Filtered versus Unfiltered Metals Groundwater Samples

Concentrations of total metals in groundwater samples at the Site tended to be highly variable between sampling events, as did field measurements of turbidity at time of sample collection. *Turbidity is typically correlated with the presence of suspended matter (e.g., entrained soil particles in the sample)*. Therefore, both total metals (unfiltered) and dissolved metals (field filtered) groundwater samples were collected during this sampling event to evaluate the effect of turbidity on the metals concentrations.

The NYSDEC criterion for filtering groundwater samples is provided in DER-10 Section 2.1(g). At the Dzus Fasteners Site, the turbidity was below 50 nephelometric units (NTU) at the time of sampling in all 13 samples (Table 4). The turbidity ranged from 0.0 to 12.7 (MW-13A).

Table 4 presents a comparison of the total metals and the dissolved metals data for the 13 filtered/ unfiltered sample pairs collected at the Dzus Fasteners Site. The “percent dissolved” value shown on the table is the ratio of the filtered sample concentration to the total (unfiltered) sample concentration. Where a metal was not detected in the filtered sample, no calculation was made.

As expected, concentrations of metals that typically exist primarily in the dissolved phase (sodium, potassium, and calcium) were generally similar in the filtered and unfiltered samples, regardless of the sample turbidity.

Metals highly associated with particles (e.g., aluminum) would tend to be higher in the more turbid samples; however, no clear relationship between turbidity (ranging from 0.0 to 12.7 NTUs) and total metals concentrations was established, likely due to the relatively low turbidities (i.e., all 13 samples were significantly less than 50 NTUs). Iron and cadmium, which can be found as either dissolved or bound to particles, were to varying degrees found to be either about equal in filtered/unfiltered pairs, or lower in the filtered samples. Except for a few cases, even these metals were above 70 percent in the dissolved phase.

4.3 1,4-Dioxane and Perfluorinated Compounds Sampling Results

At the request of NYSDEC, all 13 monitoring wells sampled during Round 10 were analyzed for 1,4-dioxane and perfluorinated compounds.

1,4-Dioxane was not detected in any of the 13 monitoring wells.

Groundwater samples from all 13 monitoring wells were analyzed for 20 perfluorinated compounds, of which 19 were detected in at least one monitoring well. Perfluorinated compounds were detected in all 13 monitoring wells. Total concentrations of PFOA and PFOS ranged from not detected to 73 ng/L in MW-13A, which slightly exceeded the EPA Health Advisory value of 70 ng/L. A summary of the detections is shown in Table 4A.

4.4 Surface Water Samples

Six surface water samples were collected from Lake Capri and Willetts Creek at the locations shown on Figure 2. A summary of the detections is presented in Table 5. The results were compared to the NYSDEC Class A surface water criteria. The laboratory data package for the September 2017 sampling event is included in Appendix C. A summary of the exceedances is presented on Figure 7.

The OU2 ROD lists cadmium as the only metal COC for surface water in Lake Capri and Willetts Creek. Seven other metals, including antimony, iron, lead, manganese, selenium, sodium and thallium have been detected at concentrations above the surface water criteria. Of these, only five (cadmium, iron, lead, manganese, and sodium) were detected at concentrations above the Class A criteria in September 2017.

Cadmium was not detected above the criterion in any of the four lake samples collected during the September 2017 event. Historically, cadmium has been detected in the majority of the lake samples but none have exceeded the criterion. Cadmium was detected in one of the two creek samples collected during the September 2017 sampling event at a concentration that exceeded the criterion. Historically, cadmium concentrations at location SW-5 have exceeded the criterion in eight of ten samples collected at this location.

Antimony was not detected in any of the six surface water samples collected in September 2017. Historically, antimony concentrations and exceedances have been sporadically detected the creek and lake waters. Antimony does not appear to be a contaminant of concern at the Site.

Iron was detected above the criterion in one of four lake samples and both creek samples during the September 2017 sampling event. Historically, iron concentrations have exceeded the criterion in a majority of samples collected from the lake and creek. Iron is a naturally occurring metal in Long Island surface water is not considered to be Site-related.

Lead was not detected in any of the four lake samples. Lead was detected in one of the creek samples but below the criterion. Historically, lead has only been detected in 17 of 60 samples collected at the site during ten rounds of sampling and only one sample exceeded the criterion.

Manganese was detected above the criterion in one of four lake samples and both of the creek samples during the September 2017 sampling event. Historically, manganese concentrations have exceeded the criterion in a majority of the samples collected at the site. Manganese is a naturally occurring metal in Long Island surface water is not considered to be Site-related.

Sodium was detected above the criterion in five of six surface water samples collected during the September 2017 sampling event. Historically, sodium concentrations have exceeded the criterion in a majority of samples collected at the site. Sodium is a naturally occurring metal in Long Island surface water is not considered to be Site-related.

Selenium was not detected in any of the six surface water samples collected in September 2017. Historically, selenium has only been detected twice in surface water samples at the site and only one of these, SW-6, exceeded the criterion. Selenium does not appear to be a contaminant of concern at the Site.

Thallium was not detected in any of the surface water samples collected during the September 2017 sampling event. Historically, thallium has been detected sporadically in samples collected at the Site. Only four samples collected during the ten rounds of sampling have exceeded the thallium criterion, all of which were in lake samples. Thallium does not appear to be a contaminant of concern at the Site.

In summary, cadmium was detected above the criterion in SW-5. Iron exceeded the criterion in one lake sample and one creek sample; manganese exceeded the criterion in one lake sample and both creek samples; and sodium exceeded the criterion in all six samples.

4.5 Sediment Samples

Six co-located sediment samples were collected at the same locations as the surface water samples as shown on Figure 2. The data presented in Table 6 were compared to the NYSDEC Technical Guidance for Sediment Criteria lowest effects values. The laboratory data summary package is included in Appendix C. A summary of the exceedances is presented on Figure 8. The OU2 ROD lists cadmium and lead as COCs for sediments at the Site.

4.5.1 Lake Capri Sediment Samples

Four samples were collected from Lake Capri, two from the northern end of the Lake and two from the southern end of the Lake as shown on Figure 2.

Cadmium concentrations have exceeded the lowest effects criterion in all 40 lake sediment samples collected between 2006 and 2017 with concentrations ranging from 1.5 milligrams per kilogram (mg/kg) to 150 mg/kg (Figure 9). Of these, 37 samples also exceeded the highest effects level of 9 mg/kg.

Lead has been detected in all 40 sediment samples collected from Lake Capri at concentrations ranging from 9.2 mg/kg to 600 mg/kg. 35 of these samples exceeded the lowest effects level of 31 mg/kg and of these, 24 equaled or exceeded the highest effects level of 110 mg/kg (Figure 10).

Antimony has only exceeded the lowest effects criterion in two samples from the lake during the ten rounds of sampling. Antimony does not appear to be a contaminant of concern in Lake Capri.

Arsenic has been detected in 36 of 40 lake sediment samples, 15 of which exceeded the lowest effects criterion. Of these, 13 were from the two samples at the northern end of the Lake (Figure 9). None of the samples have exceeded the highest effects criterion of 33 mg/kg. Arsenic does not appear to be a contaminant of concern in lake sediment.

Chromium has been detected in 34 of 40 lake sediment samples at concentrations ranging from 1.5 mg/kg to 72.0 mg/kg, 16 of which have exceeded the lowest effects level of 26 mg/kg. None of the samples have exceeded the highest effects criterion of 110 mg/kg. Chromium does not appear to be a contaminant of concern in lake sediment.

Copper has been detected in all 40 lake sediment samples at concentrations ranging from 2.7 mg/kg to 160 mg/kg. 36 samples exceeded the lowest effects level of 16 mg/kg, and of these, 13 exceeded the highest effects level of 110 mg/kg (Figure 12). Copper was not found during on-site investigations and its presence is not considered site-related. The source of copper may be from residential pesticides use.

Iron has been detected in all 40 sediment samples collected during the nine rounds of lake sampling. However, only 12 samples have equaled or exceeded the 20,000 mg/kg criterion. Ten of the 12 exceedances were from the northern end of the lake. Iron is a naturally occurring metal in Long Island soils and is not considered to be Site-related.

Manganese has been detected in all 40 lake sediment samples at concentrations ranging from 89.8 mg/kg to 22,600 mg/kg. 29 samples have exceeded the lowest effects criterion of 460 mg/kg and 21 of these also equaled or exceeded the highest effects level of 1,100 mg/kg. Manganese is a naturally occurring metal in Long Island soils and is not considered to be Site-related.

Mercury has been detected in 28 of 40 lake sediment samples at concentrations ranging from 0.0071 mg/kg to 1.1 mg/kg. Of these, 16 exceeded the lowest effect level of 0.15 mg/kg. Eleven of these exceedances were noted in northern lake samples. None of the samples exceeded the highest

effects criterion of 1.3 mg//kg. Mercury was not found during on-site investigations and is not considered to be site-related.

Nickel has been detected in 28 of 40 Lake Capri sediment samples at concentrations ranging from 3 mg/kg to 38.0 mg/kg. Thirteen samples exceeded the lowest effects level of 16 mg/kg. Ten of these exceedances were noted in the two northern samples. None of the samples exceeded the highest effects criterion of 50 mg/kg. Nickel was not found during on-site investigations and is not considered to be Site-related.

Silver has only been detected in three Lake Capri sediment samples at concentrations ranging from 0.33 mg/kg to 2.7 mg/kg. Two samples exceeded the lowest effects level of 1 mg/kg and one exceeded the highest effects level of 2.2 mg/kg. Silver was not found during on-site investigations and is not considered to be a contaminant of concern in lake sediments.

Zinc was detected in all 40 Lake Capri sediment samples at concentrations ranging from 10 mg/kg to 770 mg/kg (Figure 13). Of these, 28 samples exceeded the lowest effect level of 120 mg/kg and 17 exceeded the highest effects level of 270 mg/kg. Thirteen of the highest effects level exceedances were noted in the two samples form the northern end of the lake. Zinc is a naturally occurring metal in Long Island sediments and is not considered to be Site-related.

4.5.2 Willetts Creek Sediment Samples

Sample SED-5 was collected near the Burling Lane footbridge and SED-6 was collected behind the Ace Hardware store on Union Boulevard. The sample locations are shown on Figure 2. As noted above, the OU2 ROD listed cadmium and lead as contaminants of concern for creek sediments.

During the nine rounds of sediment sampling in Willetts Creek, 11 TAL metals have been detected at concentrations that exceed the lowest effects level including antimony, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel and zinc.

Cadmium was detected in 17 of 20 creek sediment samples with concentrations ranging from 0.23 mg/kg to 140 mg/kg (Figure 9). Twelve samples exceeded the lowest effects level of 0.6 mg/kg and six also exceed the highest effects level of 9 mg/kg.

Lead has been detected in all 20 creek sediment samples at concentrations ranging from 4.9 mg/kg to 350 mg/kg. Twelve of these samples exceeded the lowest effects level of 31 mg/kg and of these, four also exceeded the highest effects level of 110 mg/kg (Figure 12).

Antimony has only exceeded the lowest effects criterion in one sample from the creek. Antimony is not a contaminant of concern in creek sediments.

Arsenic has been detected in 18 of 20 creek sediment samples at concentrations ranging from 0.56 mg/kg to 18.0 mg/kg. Six of these exceeded the lowest effects criterion of 6 mg/kg. None exceeded the highest effects level (Figure 9). Arsenic is not a contaminant of concern in creek sediment.

Chromium has been detected in 17 of 20 creek sediment samples at concentrations ranging from 1.4 mg/kg to 64 mg/kg. Seven samples equaled or exceeded the lowest effects level of 26 mg/kg. None of the samples exceeded the highest effects criterion of 110 mg/kg. Chromium is not a contaminant of concern for creek sediments.

Copper has been detected in all 20 creek sediment samples at concentrations ranging from 4.7 mg/kg to 210 mg/kg. Twelve samples exceeded the lowest effects level of 16 mg/kg, and of these, three also equaled or exceeded the highest effects level of 110 mg/kg (Figure 11). As noted above in the discussion of lake sediments, copper was not found during on-site investigations and is not considered to be Site-related. The presence of copper in creek sediments may be a result of residential pesticide use.

Iron has been detected in all 20 creek sediment samples. Eight samples exceeded the 20,000 mg/kg criterion. Iron is a naturally occurring metal in Long Island soils and is not considered to be site-related.

Manganese has been detected in all 20 creek sediment samples at concentrations ranging from 162 mg/kg to 3,750 mg/kg. Eight samples have exceeded the lowest effects criterion of 460 mg/kg and four of these also exceeded the highest effects level of 1,100 mg/kg. Manganese is a naturally occurring metal in Long Island soils and is not considered to be site-related.

Mercury has been detected in 13 of 20 creek sediment samples at concentrations ranging from 0.0055 mg/kg to 1.2 mg/kg. Of these, seven equaled or exceeded the lowest effect level of 0.15 mg/kg. None exceeded the highest effects criterion of 1.3 mg/kg. Mercury is not considered to be a contaminant of concern in creek sediment.

Nickel has been detected in 16 of 20 creek sediment samples at concentrations ranging from 1 mg/kg to 32.0 mg/kg. Four samples exceeded the lowest effects level of 16 mg/kg. None exceeded the highest effects criterion of 50 mg/kg. Nickel is not considered to be a contaminant of concern in creek sediment.

Zinc was detected in all 20 creek sediment samples at concentrations ranging from 13.2 mg/kg to 700 mg/kg (Figure 13). Nine samples exceeded the lowest effect level of 120 mg/kg and eight of these also exceeded the highest effects level of 270 mg/kg. Zinc is a naturally occurring metal in Long Island soil and is not considered to be Site-related.

4.6 Surface Soil Sampling

Three surface soil samples were collected during the Round 10 investigation (Figure 2A). The background sample, DSO-West, was collected near the intersection of Beach Street and Union Boulevard. Two other samples (DSO-East and DSO-East 100) were collected east of the Site along Union Boulevard. The samples were analyzed for TSL metals. The results were compared to the NYSDEC soil use categories (Table 10). At DSO-West , two metals, lead and zinc, were detected at concentrations in the Restricted Residential category. The remaining metals were all in the Unrestricted Use category. Downwind sample DSO-East reported concentrations of copper, lead and zinc in the Residential Use category. The chromium concentration of 37 mg/kg was classified as Restricted Residential Use category slightly above the 36 /mg/kg limit slight above the Residential Use criterion. Sample DSO-East 100 reported concentrations of chromium, lead and zinc classified as Residential Use. All other metals were in the Unrestricted Use category.

4.7 September 2017 Data Quality Review

In accordance with the project plans, data generated for this investigation were not subject to formal validation. However, AECOM's quality assurance officer (QAO) reviewed the data for reasonableness and the presence of any anomalies, including issues identified by the laboratory in the case narrative, and other items noted in review of shipping and handling documentation, inconsistencies with previous data, and review of the laboratory QA forms. The QAO also reviewed the field duplicate data.

4.7.1 Groundwater

Filtered and unfiltered groundwater samples were collected from 13 monitoring wells on September 11 and 12, 2017 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, NJ) on September 11, and 12, 2017. Three soil samples were also collected on September 11, 2017. A second set of samples were collected on November 8 and 9, 2017, and received at the laboratory on November 10, 2017 for analysis of 1,4-dioxane.

Samples were analyzed for target analyte list (TAL) metals (USEPA Method 6010/7401/7471) as sample delivery groups AC99975and AC99992. Unfiltered water samples were also analyzed for hexavalent chromium (Method SM-3500-Cr D), and perfluorinated compounds (PFAS, Method 537 v1.1). Samples DMW-22BF and 22B, (filtered and unfiltered) were designated as the QC samples (spike and duplicate analysis). Laboratory QC limits were met for holding times, initial and continuing calibrations, blanks, laboratory control sample (LCS) recovery, matrix spikes and spike duplicates, laboratory spike recovery, and laboratory duplicate recovery.

In AC99975, the serial dilutions for metals were outside control limits for antimony, barium, magnesium, and potassium, suggesting matrix interferences for these metals. In AC99992, the serial dilutions for metals were outside control limits for calcium, and potassium. The laboratory did not qualify any of these results.

In AC99975, the sub-contracted laboratory for the PFAS analysis reported all QA/QC limits were met except that one out the three surrogates (used to check instrument response in each sample) had low recoveries in all of the samples, suggesting a possible low bias in the results. In two of the samples an additional surrogate had low recoveries. The laboratory flagged between one and seven results with a "J" as estimated due to the results being above the detection limit but below the reporting limit.

In AC99992, the sub-contracted laboratory for the PFAS analysis reported all QA/QC limits were met except that one out the three surrogates (used to check instrument response in each sample) had low recoveries in all of the samples, suggesting a possible low bias in the results. In two of the samples an additional surrogate had low recoveries. The laboratory flagged between one and four results with a "J" as estimated due to the results being above the detection limit but below the reporting limit.

The 13 wells were sampled for 1,4-dioxane analysis as sample delivery group AD01097. Sample MW-18 unfiltered was designated as the QC samples (spike and duplicate analysis). Laboratory QC limits for 1,4-dioxane were met for holding times, initial and continuing calibrations, blanks, laboratory control sample (LCS) recovery, matrix spikes and spike duplicates, laboratory spike recovery, and laboratory duplicate recovery. One of the MS/MSD RPDs was slightly outside the control limit of 20% with a RPD of 21%. One sample had one surrogate out of three with a high recovery.

One filtered/unfiltered site-specific field duplicate groundwater sample pair (MW-13B and 13BF/MW-63B and 63BF) was collected from the Dzus site in September 2017. Precision for the field duplicates is presented in Table 7. In the unfiltered sample pair (13B/63B), relative percent difference (RPD) ranged from 5.4 percent for sodium to 12.8 percent for manganese. Precision for the filtered duplicate pair (13BF/653BF) had a RPD for sodium of 5.4 percent, and 0 percent for calcium.

The filtered/unfiltered data pairs (see Table 4) were reviewed for anomalies, using the USEPA Region II metals validation criteria (USEPA HW-2, revision 13; USEPA, 2006). Based on these criteria, if the dissolved (filtered sample) result exceeds the total (unfiltered) sample by more than 20 percent, the accuracy of the quantitation is suspect (i.e., the data would be flagged "J", for estimated), and if the filtered sample result exceeds the unfiltered sample result by more than 50 percent, the data may be unusable (flagged "R", rejected). Only in one sample (MW-15B) was there an exceedance of the 20 percent threshold with manganese at 153.8 %.

4.7.2 Surface Water

Surface water samples were collected from six locations (co-located with sediment samples, discussed below) plus a field duplicate on September 21, 2017 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, NJ) on September 21, 2017.

Surface water samples were analyzed for TAL metals as sample delivery group AD00167 (along with the sediment samples discussed below). Sample SW-01 was designated as the QC sample. Laboratory QC limits were met for holding times, initial and continuing calibrations, blanks, LCS

recovery, laboratory spike recovery, and replicates. The serial dilutions for barium and magnesium were outside the QC limits in one batch, while cadmium exceeded limits in another batch, suggesting matrix interference.

One site-specific field duplicate pair (SW-5 and SW-7) was collected in September 2017. Precision for the field duplicate (see Table 8) had RPDs ranging from 2.5 to 7.4 percent for the five metals (cadmium, calcium, iron, manganese, and sodium) detected in both samples.

4.7.3 Sediment

Sediment samples were collected from six locations (co-located with surface water samples) plus a field duplicate on September 21, 2017 and received in good condition by the laboratory (Hampton Clarke Veritech, Fairfield, NJ) on September 21, 2017.

Sediment samples (along with surface water samples) were analyzed for TAL metals as sample delivery group AD00167. Sample SED- 01 was designated as the QC sample. Laboratory QC limits were met for holding times, initial and continuing calibrations, blanks, and LCS recovery.

The matrix spike/ matrix spike duplicate had recoveries outside limits for aluminum, antimony, manganese, vanadium, and zinc. The RPD between the MS/MSD for aluminum, iron, and manganese were outside of limits. Serial dilution results for barium, chromium, and lead were outside of limits. These results suggest possible matrix interference; however the laboratory did not qualify any of the data.

One site-specific field duplicate pair (SED-3 and SED-7) was collected in September 2017. Precision for that sample pair (see Table 9) had RPDs ranging from 4.7 to 120 percent, with the field duplicate always containing substantially lower concentration of the metals. Nine out of fifteen metals detected in both samples were above 20 percent RPD, suggesting that the sample was very variable in composition.

4.7.4 Overall Round 10 Data Quality Assessment

Field and laboratory-reported QC associated with the three Dzus sample delivery groups (SDGs) (AD00167 for surface water/sediment, and AC9975, AC99992, and AD10197 for groundwater) was acceptable for the groundwater and surface water/sediment samples. Laboratory QC was acceptable for the sediment samples. The laboratory reported that the data quality was acceptable. The data are considered usable for their intended purpose.

5.0 Summary and Recommendations for Future Site Remediation Activities

5.1 Groundwater

Cadmium has been detected in every monitoring well sampled at the Site at least once during the ten sampling events. The majority of the exceedances of the 5 µg/L Class GA criterion are concentrated in six wells along the eastern side of the Site: MW-3, MW-9, MW-13A, MW-15A, MW-23A and MW-23B as shown on Figure 5A. As shown on Figures 6, 6A, 6B, 6C and 6D, the cadmium concentrations in deep monitoring well MW-23B are above 30 ug/L (screened at a depth of 35 to 45 ft below ground surface [bgs]). It is unlikely that Willetts Creek is capturing groundwater in the deep monitoring well. As shown on these four isoconcentration maps, the cadmium plume most likely extends east of the creek towards Everdell Avenue.

Chromium has been detected in less than half of the groundwater samples collected at the Site during the ten sampling rounds and has only exceeded the 50 µg/L criterion in two wells, MW-9 (four of ten samples) and MW-23B (three of nine samples).

Concentrations of iron, manganese, and sodium have exceeded the criterion in numerous wells but these compounds are typically found in groundwater on Long Island and are most likely representative of background conditions and not Site-related. There have been sporadic exceedances of antimony, arsenic, lead, selenium and thallium but the concentrations and locations of the exceedances have not been replicated during the ten sampling events and are most likely a result of entrained sediment in the samples and are not representative of the dissolved groundwater concentrations.

Perfluorinated compounds were detected in all 13 monitoring wells sampled during the Round 10 event. Only one location, MW-13B, exceeded the total PFOA/PFOS EPA Health Advisory limit of 70 ng/L.

1,4-Dioxane was not detected in any of the 13 monitoring wells sampled during the Round 10 sampling event.

5.2 Surface Water

Cadmium has been detected in almost every surface water sample collected from Lake Capri during the ten sampling events; however, none have exceeded the 5 µg/L criterion. Cadmium was also detected in Willetts Creek surface water sample SW-5 and exceeded the criterion in eight of ten samples. There was only one anomalous exceedance in Willetts Creek sample SW-6 during the ten sampling events; cadmium detected below the criterion in two samples, was not detected in six samples and the creek was dry during the November 2013 sampling event.

A majority of samples from Lake Capri and Willetts Creek had exceedances of iron, manganese and sodium. These most likely represent natural conditions and are not Site-related.

5.3 Sediments

The sediment sample data indicate that the surficial sediments in Lake Capri and Willetts Creek remain contaminated with metals concentrations above the applicable NYSDEC Technical Guidance for Sediment Criteria. Cadmium has been detected above the lowest effects criterion in 56 of 65 samples collected during the ten rounds of sampling and above the highest effects level in 44 of 65 samples as shown on Figure 5. The four lake samples indicate that cadmium is still a contaminant of concern for the lake bottom sediments. The lower Willetts Creek sample (SED-5) indicates that cadmium contamination is still present in the lower reach of the creek. Nine out of ten sediment samples from the location nearest the Site (SED-6), have been below the ROD cleanup criterion of 9 mg/kg for cadmium

Lead has been detected above the lowest effects criterion in 47 of 60 samples collected as shown on Figure 12. Of these, 28 were above the highest effects level. The highest concentrations appear to be along the southern end of the lake (SED-1 and SED-2).

Several other metals including antimony, arsenic, chromium, copper, iron, manganese, mercury, nickel, and zinc, have been detected sporadically at concentrations exceeding the criteria during the ten sampling events.

5.4 Surface Soils

Three surface soil samples were collected to evaluate whether wind-blown dust from on-site soil stockpiles possibly contaminated off-site soils. The results of the two samples indicate that wind-blown soils did not contaminate off-site soils. Chromium concentrations in the two down-wind locations were 37 mg/kg and 34 mg/kg. The Residential criterion is 30 to 36 mg/kg. Sample DSO-East falls into the Restricted Residential use category. The copper concentration in the downwind sample was at the upper limit for Unrestricted Use (50 mg/kg). Both the background and two down-wind samples contained concentrations of lead and zinc in the Residential category. The wind-blown dust from the soil stockpiles does not appear to have significantly contaminated off-site soils.

5.5 Recommendations

The collection of filtered metals samples can be discontinued for the next sampling round.

As mentioned above, it appears that the cadmium plume extends beneath Everdell Avenue, east of Willetts Creek. Geoprobe borings should be advanced along Everdell Avenue to collect groundwater samples to verify the concentrations downgradient of the MW-23A/MW-23B well cluster. Proposed geoprobe boring locations are shown on Figure 14. Hydropunch samples will be collected from two borings at the water table (approximately 5 ft bgs); 20 ft bgs; 30 ft bgs; 40 ft bgs; and 50 ft bgs.

Perfluorinated compounds and 1,4-dioxane do not appear to be an issue at the Site.

Incorporate the findings of the Willetts Creek sediment sampling into the long term monitoring program by potentially moving and/or adding new sampling locations in Willetts Creek and Lake Capri for long term monitoring.

The next five-quarter sampling event is scheduled for November 2018.

Tables

TABLE 1
DZUS FASTENERS SITE (1-52-033)
WELL CONSTRUCTION DATA

Well Number	Latitude	Longitude	Ground Elevation	Top of Riser Elevation	Top of Casing Elevation	Total Depth of Well
MW-1	40° 42.49	73° 18.10	22.44	22.03	22.44	15.3
MW-2	40° 42.45	73° 18.10	22.16	21.42	22.16	14.3
MW-3	40° 42.49	73° 18.02	20.23	19.71	20.23	15.0
MW-9	40° 42.50	73° 18.02	19.14	18.83	19.14	11.5
MW-9B	40° 42.49	73° 18.01	19.08	18.75	19.08	44.5
MW-13A	40° 42.44	73° 17.100	16.34	16.02	16.34	10.7
MW-13B	40° 42.43	73° 17.99	16.14	15.82	16.14	44.3
MW-15A	40° 42.49	73° 17.97	19.45	19.09	19.45	28.8
MW-15B	40° 42.50	73° 17.96	19.35	19.06	19.35	84.7
MW-17				21.82		16.0
MW-18			14.69	14.31	14.66	13.5
MW-22A	40° 42.491	73° 17.941	20.49	20.09	20.49	14.4
MW-22B	40° 42.491	73° 17.941	20.35	19.95	20.35	44.5
MW-23A	40° 42.402	73° 17.991	17.57	17.34	17.57	14.3
MW-23B	40° 42.403	73° 17.987	17.54	17.29	17.54	44.5

Notes:
All elevations and depths are in feet
Vertical datum: on-site benchmark from previous survey.
Latitude / Longitude taken from a previous report
Survey performed by YEC, Inc., on April 18, 2007

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-1	22.03	6/8/06	8.00	14.03	
		8/22/07	8.62	13.41	
		11/11/08	NC		could not be located, damaged during snow
		3/10/10	NC		removal not collected
		5/25/11	NC		
		8/22/12	NC		
		11/5/13	NC		
		3/18/15	NC		
		5/12/16	8.86	13.17	Well was replaced in August 2015
		9/12/17	9.62	12.41	
MW-2	21.42	6/8/06	8.15	13.27	
		8/22/07	8.50	12.92	
		11/11/08	8.30	13.12	
		3/10/10	7.43	13.99	
		5/25/11	7.77	13.65	
		8/22/12	8.33	13.09	
		11/5/13	9.66	11.76	
		3/18/15	7.43	13.99	
		5/12/16	8.51	12.91	
		9/12/17	9.20	12.22	
MW-3	19.71	6/8/06	5.77	13.94	
		8/22/07	6.30	13.41	
		11/11/08	6.25	13.46	
		3/10/10	5.36	14.35	
		5/25/11	5.62	14.09	
		8/22/12	6.23	13.48	
		11/5/13	7.53	12.18	
		3/18/15	5.34	14.37	
		5/12/16	6.31	13.40	
		9/12/17	6.90	12.81	
MW-9 (shallow)	18.83	6/8/06	4.59	14.24	
		8/22/07	5.15	13.68	
		11/11/08	5.01	13.82	
		3/10/10	4.19	14.64	
		5/25/11	4.45	14.38	
		8/22/12	5.05	13.78	
		11/5/13	6.50	12.33	
		3/18/15	4.20	14.63	
		5/12/16	5.24	13.59	
		9/12/17	5.80	13.03	

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-9B (deep)	18.75	6/8/06	4.50	14.25	
		8/22/07	5.05	13.70	
		11/11/08	4.93	13.82	
		3/10/10	4.11	14.64	
		5/25/11	4.36	14.39	
		8/22/12	5.00	13.75	
		11/5/13	5.52	13.23	
		3/18/15	4.09	14.66	
		5/12/16	5.20	13.55	
		9/12/17	5.74	13.01	
MW-13A (shallow)	16.02	6/8/06	2.59	13.43	
		8/22/07	3.02	13.00	
		11/11/08	2.90	13.12	
		3/10/10	2.27	13.75	
		5/25/11	2.51	13.51	
		8/22/12	2.93	13.09	
		11/5/13	4.41	11.61	
		3/17/15	2.22	13.80	
		5/12/16	3.02	13.00	
		9/11/17	3.54	12.48	
MW-13B (deep)	15.82	6/8/06	2.39	13.43	
		8/22/07	2.85	12.97	
		11/11/08	2.69	13.13	
		3/10/10	2.08	13.74	
		5/25/11	2.32	13.50	
		8/22/12	2.77	13.05	
		11/5/13	4.35	11.47	
		3/17/15	2.15	13.67	
		5/12/16	2.95	12.87	
		9/11/17	3.39	12.43	
MW-15A (shallow)	19.09	6/7/06	5.48	13.61	
		8/22/07	5.80	13.29	
		11/11/08	5.64	13.45	
		3/10/10	4.95	14.14	
		5/25/11	5.15	13.94	
		8/22/12	5.69	13.40	
		11/5/13	5.34	13.75	
		3/17/15	4.86	14.23	
		5/12/16	5.77	13.32	
		9/11/17	6.40	12.69	

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-15B (deep)	19.06	6/7/06	5.35	13.71	
		8/22/07	5.70	13.36	
		11/11/08	5.58	13.48	
		3/10/10	NC		unable to access, ACE Hardware
		5/25/11	5.10	13.96	
		8/22/12	5.65	13.41	
		11/5/13	5.21	13.85	
		3/17/15	4.60	14.46	
		5/12/16	5.72	13.34	
		9/11/17	6.38	12.68	
MW-17 (shallow)	21.82	5/25/11			Could not be located
		11/5/13			Could not be located
		3/17/15	6.14	15.68	
		5/12/16	7.68	14.14	
		9/12/17	8.52	13.30	
MW-18	14.31	6/8/06	7.93	6.38	
		8/23/07	5.05	9.26	
		11/11/08	4.98	9.33	
		3/10/10	4.52	9.79	
		5/25/11	4.70	9.61	
		8/22/12	4.92	9.39	
		11/5/13	5.41	8.90	
		3/17/15	4.35	9.96	
		5/12/16	4.95	9.36	
		9/12/17	5.41	8.90	
MW-22A (shallow)	20.09	6/7/06	6.00	14.09	
		8/22/07	6.44	13.65	
		11/11/08	6.38	13.71	
		3/10/10	5.78	14.31	
		5/25/11	5.92	14.17	
		8/22/12	6.45	13.64	
		11/5/13	7.70	12.39	
		3/17/15	5.72	14.37	
		5/12/16	6.52	13.57	
		9/11/17	7.09	13.00	

TABLE 2
DZUS FASTENERS SITE (1-52-033)
GROUNDWATER ELEVATIONS

Well #	Reference Elevation	Date	Depth To Water	Water Table Elevation	Comments
MW-22B (deep)	19.95	6/7/06	5.82	14.13	
		8/22/07	6.30	13.65	
		11/11/08	6.20	13.75	
		3/10/10	5.61	14.34	
		5/25/11	5.74	14.21	
		8/22/12	6.28	13.67	
		11/5/13	5.65	14.30	
		3/17/15	5.00	14.95	
		5/12/16	6.54	13.41	
		9/11/17	6.91	13.04	
MW-23A (shallow)	17.34	6/7/06	4.59	12.75	
		8/22/07	4.80	12.54	
		11/11/08	4.62	12.72	
		3/10/10	4.16	13.18	
		5/25/11	4.38	12.96	
		8/22/12	5.30	12.04	
		11/5/13	5.72	11.62	
		3/17/15	4.21	13.13	
		5/12/16	4.80	12.54	
		9/11/17	NC		paved over
MW-23B (deep)	17.29	6/7/06	4.51	12.78	
		8/22/07	5.05	12.24	
		11/11/08	4.59	12.70	
		3/10/10	4.06	13.23	
		5/25/11	4.31	12.98	
		8/22/12	4.62	12.67	
		11/5/13	6.51	10.78	
		3/17/15	4.10	13.19	
		5/12/16	4.71	12.58	
		9/11/17	NC		paved over

Notes:
All measurements in feet from top of casing
Reference elevations surveyed by YEC in 2007
NC - Not collected

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-17	MW-17	MW-17	MW-17	MW-17	MW-17
Sample ID	Class GA	DMW-17	DMW-17F	DMW-17	DMW-17	DMW-17	DMW-17F
Laboratory ID	Ground	AC83807-021	AC83807-022	AC91318-005	AC91318-006	AC99992-016	AC99992-017
Sample Date	Water	3/17/15	3/17/15	5/11/16	5/11/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	990	ND	400	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	2.1	ND	3.2	2.7
Barium	1,000	ND	ND	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	37,000	41,000	31,000	31,000	14,000	13,000
Chromium	50	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	***880***	ND	***1,900***	ND	***2,800***	***2,200***
Lead	25	6.5	ND	7.2	ND	6.6	3.3
Magnesium	35,000	11,000	12,000	9,800	9,700	ND	ND
Manganese	300	**520**	ND	***490***	52.0	***790***	***710***
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	7,100	8,400	12,000	11,000	10,000	9,800
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	56.0	ND
Hexavalent Chromium						ND	NA

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
Sample ID	Class GA	MW-1	DMW-1	DMW-1	DMW-1	DMW-1	DMW-1
Laboratory ID	Ground	E0773-05A	F1193-01A	destroyed	destroyed	destroyed	destroyed
Sample Date	Water	6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	8/22/12
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered				
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	4,180	3,160	NA	NA	NA	NA
Antimony	3	ND	ND	NA	NA	NA	NA
Arsenic	25	4.3 B	3.8 B	NA	NA	NA	NA
Barium	1,000	80.2 B	73.3 B	NA	NA	NA	NA
Beryllium	3	0.42 B	0.25 B	NA	NA	NA	NA
Cadmium	5	***23.9***	***5.1***	NA	NA	NA	NA
Calcium	NC	8,790	7,150	NA	NA	NA	NA
Chromium	50	8.0 B	5.0 B	NA	NA	NA	NA
Cobalt	NC	5.1 B	6.9 BE	NA	NA	NA	NA
Copper	200	18.3 B	16.0 B	NA	NA	NA	NA
Iron	300	***13,200***	***12,600***	NA	NA	NA	NA
Lead	25	3.9 B	9.8 B	NA	NA	NA	NA
Magnesium	35,000	3,010	2,420	NA	NA	NA	NA
Manganese	300	210	158	NA	NA	NA	NA
Mercury	0.7	ND	ND	NA	NA	NA	NA
Nickel	100	8.7 B	8.7 B	NA	NA	NA	NA
Potassium	NC	1,760	1,680	NA	NA	NA	NA
Selenium	10	ND	5.4 B	NA	NA	NA	NA
Silver	50	ND	ND	NA	NA	NA	NA
Sodium	20,000	***22,500***	***23,100***	NA	NA	NA	NA
Thallium	0.5	***1.9 B***	***5.5 B***	NA	NA	NA	NA
Vanadium	NC	7.8 B	8.2 B	NA	NA	NA	NA
Zinc	2,000	244	196	NA	NA	NA	NA
Hexavalent Chromium							

Notes:
All values in µg/L
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-1	MW-1	MW-1	MW-1	MW-1	MW-1
Sample ID	Class GA	DMW-1	DMW-1	DMW-1	DMW-1	DMW-1	DMW-1F
Laboratory ID	Ground	destroyed	destroyed	AC91318-020	AC91318-021	AC99992-003	AC99992-007
Sample Date	Water	11/5/13	3/18/15	5/12/16	5/12/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria			Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NA	NA	210	ND	ND	ND
Antimony	3	NA	NA	ND	ND	ND	ND
Arsenic	25	NA	NA	ND	ND	ND	ND
Barium	1,000	NA	NA	ND	ND	ND	ND
Beryllium	3	NA	NA	ND	ND	ND	ND
Cadmium	5	NA	NA	ND	ND	ND	ND
Calcium	NC	NA	NA	12,000	12,000	18,000	18,000
Chromium	50	NA	NA	ND	ND	ND	ND
Cobalt	NC	NA	NA	ND	ND	ND	ND
Copper	200	NA	NA	ND	ND	ND	ND
Iron	300	NA	NA	***340***	ND	***300***	ND
Lead	25	NA	NA	ND	ND	ND	ND
Magnesium	35,000	NA	NA	ND	ND	ND	ND
Manganese	300	NA	NA	ND	ND	ND	ND
Mercury	0.7	NA	NA	ND	ND	ND	ND
Nickel	100	NA	NA	ND	ND	ND	ND
Potassium	NC	NA	NA	ND	ND	ND	ND
Selenium	10	NA	NA	ND	ND	ND	ND
Silver	50	NA	NA	ND	ND	ND	ND
Sodium	20,000	NA	NA	***29,000***	***30,000***	***72,000***	***72,000***
Thallium	0.5	NA	NA	ND	ND	ND	ND
Vanadium	NC	NA	NA	ND	ND	ND	ND
Zinc	2,000	NA	NA	ND	ND	ND	ND
Hexavalent Chromium						ND	NA

Notes:
All values in µg/L
NC - No Criteria
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ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	MW-2	DMW-2	DMW-2	DMW-2	DMW-2	DMW-2
Laboratory ID	Ground	E0773-10A	F1193-04A	G2114-01	J0429-10A	K0942-01	K0942-02
Sample Date	Water	6/7/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	7,090	1,580	242	3,880 E	1,500	ND
Antimony	3	ND	***7.3*** B	ND	***9.4 B***	ND	ND
Arsenic	25	3.9 B	6.3 B	ND	7.7 B	12.4 B	5.0 B
Barium	1,000	96.5 B	212	38.7 B	47.9 B	51.1 B	34.2 B
Beryllium	3	0.4 B	0.71 B	0.27 B	0.51 B	0.33 B	ND
Cadmium	5	4.2 B	***8.6***	2.7 B	***10.4***	ND	ND
Calcium	NC	15,500	28,200	14,500	11,100	38,700	34,500
Chromium	50	8.8 B	3.1 B	ND	6.8 B	2.2 B	ND
Cobalt	NC	18.3 B	27 BE	13.8 B	9.3 B	11.4 B	7.6 B
Copper	200	19.3 B	8.3 B	12.6 B	34.9	7.9 B	ND
Iron	300	***14,900***	***25,200***	***23,300***	***12,000*** N	***88,900***	***17,600***
Lead	25	14.7	4.2 B	5.2 B	6.9 B	7.5 B	ND
Magnesium	35,000	3,740	4,690	2,700	2,810	3,690	3,510
Manganese	300	***518***	***989***	***2,150***	***768***	***882***	***655***
Mercury	0.7	ND	ND	ND	0.084 B	ND	ND
Nickel	100	13.3 B	9.0 B	4.7 B	13.5 B	6.5 B	2.8 B
Potassium	NC	2,140	2,780	1,880	1,450	2,470	2,410
Selenium	10	1.4 B	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***21,500***	***66,200***	18,600	18,200	***25,200***	***24,100***
Thallium	0.5	***2.3 B***	***6.3 B***	ND	ND	ND	ND
Vanadium	NC	11.9 B	4.0 B	ND	16.2 B	2.5 B	ND
Zinc	2,000	138	82.8	64.3	109	111	30.5 B
Hexavalent Chromium							

Notes:
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	DMW-2	DMW-2F	DMW-2	DMW-2F	DMW-2	DMW-2F
Laboratory ID	Ground	L1807-19	L1808-15	AC75646-005	AC75646-006	AC83807-027	AC83807-028
Sample Date	Water	8/22/12	8/22/12	11/6/13	11/6/13	3/18/15	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	328	ND	300	ND	7,200	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	3	ND	21.0	ND
Barium	1,000	20.4 B	18.4 B	ND	ND	65.0	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	***15.0***	ND
Calcium	NC	12,500 E	12,300	15,000	14,000	21,000	20,000
Chromium	50	0.73 B	ND	ND	ND	ND	ND
Cobalt	NC	1.2 B	1.0 B	2.6	ND	13.0	3.6
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	***1,590 E***	***1,060***	***9,200***	***3,300***	***98,000***	***4,200***
Lead	25	ND	ND	ND	ND	***29.0***	ND
Magnesium	35,000	1,850	1,790	ND	ND	ND	ND
Manganese	300	124	115	170	150	***410***	240
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.7 B	1.3 B	ND	ND	ND	ND
Potassium	NC	1,440	1,430	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***24,400 E***	***23,500***	***25,000***	***22,000***	***19,000***	***20,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	18.4 B	5.2 B	ND	ND	210	ND
Hexavalent Chromium							

Notes:
All values in µg/L
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-2	MW-2	MW-2	MW-2
Sample ID	Class GA	DMW-2	DMW-2	DMW-2	DMW-2F
Laboratory ID	Ground	AC91318-009	AC91318-010	AC99992-004	AC99992-008
Sample Date	Water	5/12/16	5/12/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	2.0	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND
Calcium	NC	18,000	23,000	13,000	14,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	5.0	5.8	3.0	2.6
Copper	200	ND	ND	ND	ND
Iron	300	***6,100***	***7,400***	***4,000***	***4,100***
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	200	240	87	88
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***35,000***	***38,000***	***20,000***	***21,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
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ND - Not Detected
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Upgradient Wells
Source Area Wells
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Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-3	MW-3	MW-3
Sample ID	Class GA	MW-3	DMW-3	DMW-3	DMW-3	DMW-3	DMW-3
Laboratory ID	Ground	E0773-07A	F1193-07A	G2114-04	J0429-11A	K0942-03	K0942-04
Sample Date	Water	6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	5,650	620	314	2,890 E	8,520	ND
Antimony	3	ND	ND	ND	***7.2 B***	ND	ND
Arsenic	25	2.9 B	ND	ND	3.2 B	7.1 B	6.3 B
Barium	1,000	90.9 B	37.2 B	28.3 B	35.3 B	59.7 B	20.3 B
Beryllium	3	0.26 B	ND	ND	0.25 B	0.7 B	ND
Cadmium	5	***77.4***	***74.4***	***70.8***	***98.4***	***73.5***	***13.1***
Calcium	NC	17,800	17,200	11,800	10,600	11,000	9,750
Chromium	50	9.2 B	1.6 B	ND	6.4 B	11.4 B	ND
Cobalt	NC	4.4 B	1.6 BE	ND	2.2 B	4.7 B	ND
Copper	200	16.1 B	5.4 B	ND	6.8 B	9.7 B	ND
Iron	300	***4,430***	***649***	253	***3,680 N***	***7,430***	ND
Lead	25	ND	3.8 B	2.7 B	3.9 B	7.5 B	ND
Magnesium	35,000	4,160	3,820	2,650	2,670	2,890	1,970
Manganese	300	***423***	***301***	262	***553***	***980***	ND
Mercury	0.7	ND	ND	ND	0.067 B	0.057 B	ND
Nickel	100	6.8 B	2.1 B	1.6 B	7.4 B	5.0 B	ND
Potassium	NC	2,630	2,050	1,420	1,500	2,170	1,790
Selenium	10	ND	8.4 B	ND	***10.6 B***	ND	ND
Silver	50	ND	3.5 B	ND	ND	ND	ND
Sodium	20,000	***27,700***	***31,000***	***25,000***	***20,700***	***20,400***	19,400
Thallium	0.5	***2.5 B***	ND	ND	ND	ND	ND
Vanadium	NC	8.1 B	1.1 B	ND	4 B	9.6 B	ND
Zinc	2,000	87.0	29.4 B	26.2 B	29.0 B	34.0 B	18.9 B
Hexavalent Chromium							

Notes:
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-3	MW-3
Sample ID	Class GA	DMW-3	DMW-3F	DMW-3	DMW-3F	DMW-3
Laboratory ID	Ground	L1807-20	L1808-17	AC75646-011	AC75646-012	AC83807-031
Sample Date	Water	8/22/12	8/22/12	11/6/13	11/6/13	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	330	ND	490
Antimony	3	***10.7*** B	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND
Barium	1,000	29.0 B	28.0 B	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND
Cadmium	5	***16.3***	***15.1***	***12.0***	***13.0***	***20.0***
Calcium	NC	11,100 E	10,700	9,000	9,700	9,300
Chromium	50	ND	0.90 B	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND
Iron	300	50.5 B	ND	ND	ND	***510***
Lead	25	ND	ND	ND	ND	ND
Magnesium	35,000	2,220	2,180	ND	ND	ND
Manganese	300	ND	ND	ND	ND	64
Mercury	0.7	ND	ND	ND	ND	ND
Nickel	100	0.92 B	ND	ND	ND	ND
Potassium	NC	2,420	2,400	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND
Sodium	20,000	***23,400 E***	***23,000***	***43,000***	***45,000***	18,000
Thallium	0.5	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND
Zinc	2,000	ND	7.1 B	ND	ND	ND
Hexavalent Chromium						

Notes:
All values in µg/L
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NA - Not analyzed
ND - Not Detected
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Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-3
Sample ID	Class GA	DMW-3	DMW-3F	DMW-3	DMW-3F
Laboratory ID	Ground	AC91318-022	AC91318-023	AC99992-011	AC99992-012
Sample Date	Water	5/12/16	5/12/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	220	ND	210	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	50.0	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	***11.0***	***9.4***	***13.0***	***9.5***
Calcium	NC	9,200	9,000	18,000	18,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	***980***	ND	***1,500***	ND
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	40.0	ND	78.0	ND
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***20,000***	***20,000***	***69,000***	***73,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
Sample ID	Class GA	MW-9	DMW-9	DMW-9	DMW-9	DMW-9	DMW-9
Laboratory ID	Ground	E0773-09A	F1193-06A	G2114-02	J0429-12A	K0942-05	K0942-06
Sample Date	Water	6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	16,800	3,520	611	2,300 E	2,850	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	***32.6***	16.2 B	ND	11.4 B	11.5 B	4.9 B
Barium	1,000	102 B	44.7 B	30.2 B	39.2 B	71.0 B	49.2 B
Beryllium	3	0.63 B	ND	0.21 B	0.29 B	0.42 B	ND
Cadmium	5	***32.8***	***22.4***	***15.5***	***17.5***	***18.7***	***9.5***
Calcium	NC	16,000	15,100	10,800	21,900	29,000	25,600
Chromium	50	***125***	***62.2***	35.3	***62.7***	***85.5***	2.9 B
Cobalt	NC	5.2 B	4.9 BE	1.5 B	2.0 B	2.5 B	ND
Copper	200	62.3	41.4	17.3 B	32.5	41.1	ND
Iron	300	***21,600***	***12,400***	***3,670***	***11,300 N***	***11,600***	***1,760***
Lead	25	11.6	10.6	5.9 B	8.1 B	9.9 B	ND
Magnesium	35,000	3,170	1,550	2,690	4,210	4,110	3,900
Manganese	300	151	117	62.6	124	149	15.3 B
Mercury	0.7	ND	ND	ND	0.088 B	ND	ND
Nickel	100	18.3 B	7.3 B	3.3 B	8.0 B	6.5 B	2.4 B
Potassium	NC	3,270	4,830	1,720	3,950	6,310	5,210
Selenium	10	2.7 B	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***25,500***	***52,100***	16,100	***29,100***	***72,800***	***68,700***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	33.1 B	13.4 B	5.5 B	10.4 B	12.8 B	ND
Zinc	2,000	170	73.1	55.9	82.8	90.9	36.6 B
Hexavalent Chromium							

Notes:
All values in µg/L
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9	MW-9	MW-9	MW-9	MW-9	MW-9
Sample ID	Class GA	DMW-9	DMW-9F	DMW-9	DMW-9F	DMW-9	DMW-9F
Laboratory ID	Ground	L1807-21	L1808-19	AC75646-031	AC75646-032	AC83807-029	AC83807-030
Sample Date	Water	8/22/12	8/22/12	11/7/13	11/7/13	3/18/15	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	163 B	ND	ND	ND	ND	ND
Antimony	3	***9.5 B***	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	17.8 B	17.0 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	4.9 B	4.4 B	3.4	3.0	ND	ND
Calcium	NC	13,900 E	13,700	12,000	12,000	13,000	14,000
Chromium	50	8.3 B	4.0 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	***556 E***	ND	ND	ND	***550***	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,300	3,220	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.4 B	2.3 B	ND	ND	ND	ND
Potassium	NC	1,420	1,390	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***26,300 E***	***25,900***	11,000	11,000	18,000	***21,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	12.9 B	11.8 B	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9	MW-9	MW-9	MW-9
Sample ID	Class GA	DMW-9	DMW-9F	DMW-9	DMW-9F
Laboratory ID	Ground	AC91318-012	AC91318-013	AC99992-001	AC99992-005
Sample Date	Water	5/12/16	5/12/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	430	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	3.0	ND	ND	ND
Calcium	NC	15,000	14,000	ND	ND
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	***1,200***	ND	ND	ND
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***39,000***	***40,000***	***50,000***	***51,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
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NA - Not analyzed
ND - Not Detected
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Upgradient Wells
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Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9B	MW-9B	MW-9B	MW-9B	MW-9B	MW-9B
Sample ID	Class GA	MW-9B	DMW-9B	DMW-9B	DMW-9B	DMW-9B	DMW-9B
Laboratory ID	Ground	E0773-08A	F1193-05A	G2114-03	J0429-14A	K0942-07	K0942-08
Sample Date	Water	6/8/06	8/22/07	11/11/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	213	177 B	ND	49.5 BE	99.1 B	ND
Antimony	3	1.8 B	***4.6 B***	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	6.2 B
Barium	1,000	45.5 B	25.5 B	27.1 B	17.1 B	14.4 B	12.8 B
Beryllium	3	ND	ND	ND	0.051 B	ND	ND
Cadmium	5	2.9 B	1.2 B	0.23 B	3.6 B	ND	ND
Calcium	NC	10,800	11,900	8,180	6,950	8,580	8,480
Chromium	50	2.2 B	3.4 B	ND	2.4 B	1.4 B	ND
Cobalt	NC	2.6 B	1.5 BE	ND	ND	ND	ND
Copper	200	28.8 B	14.8 B	ND	ND	ND	ND
Iron	300	***561***	***429***	134 B	286 N	528	31.8 B
Lead	25	ND	6.0 B	ND	ND	ND	ND
Magnesium	35,000	1,640	1,630	1,330	1,380	1,490	1,430
Manganese	300	211	***306***	171	69.5	92.4	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	8.6 B	2.9 B	ND	1.9 B	1.8 B	0.88 B
Potassium	NC	2,140	2,050	1,940	1,950	1,910	1,670
Selenium	10	ND	ND	ND	***12.7 B***	ND	ND
Silver	50	ND	2.2 B	ND	ND	ND	ND
Sodium	20,000	8,070	10,100	11,800	7,660	6,730	6,650
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	0.83 B	ND	ND	ND	ND
Zinc	2,000	83.7	36.0 B	35.3 B	23.3 B	27.1 B	25.4 B
Hexavalent Chromium							

Notes:
All values in µg/L
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9B	MW-9B	MW-9B	MW-9B	MW-9B	MW-9B
Sample ID	Class GA	DMW-9B	DMW-9BF	DMW-9B	DMW-9BF	DMW-9B	DMW-9BF
Laboratory ID	Ground	L1807-22	L1808-18	AC75646-013	AC75646-014	AC83807-023	AC83807-024
Sample Date	Water	8/22/12	8/22/12	11/6/13	11/6/13	3/18/15	3/18/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	22.2 B	21.1 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	9,300 E	8,330	11,000	10,000	6,400	6,700
Chromium	50	0.82 B	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	39.5 B	ND	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	1,680	1,480	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND	44	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium	NC	1,800	1,790	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***21,400 E***	19,700	10,000	9,000	13,000	14,000
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
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Upgradient Wells
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Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-9B	MW-9B	MW-9B	MW-9B
Sample ID	Class GA	DMW-9B	DMW-9B	DMW-9B	DMW-9BF
Laboratory ID	Ground	AC91318-014	AC91318-017	AC99992-002	AC99992-006
Sample Date	Water	5/12/16	5/12/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND
Calcium	NC	14,000	14,000	11,000	11,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	ND	ND	ND	***570***
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	ND	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	14,000	15,000	***20,000***	***20,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A
Sample ID	Class GA	MW-13A	DMW-13A	DMW-13A	DMW-13A	DMW-13A	DMW-13A
Laboratory ID	Ground	E0773-13A	F1193-14A	F1193-14A	J0429-15A	K0942-17	K0942-18
Sample Date	Water	6/8/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered conc. Q	Unfiltered conc.	Unfiltered conc.	Unfiltered conc.	Unfiltered conc.	Filtered conc.
Aluminum	NC	15,000	2,560	258	529 E	2,100	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	5.7 B	ND	ND	ND	13.1 B	ND
Barium	1,000	176 B	94.0 B	185 B	605	886	20.5 B
Beryllium	3	0.53 B	ND	ND	0.073 B	ND	ND
Cadmium	5	***174***	***94.1***	***67.7***	***267***	***373***	***10.3***
Calcium	NC	37,900	23,300	19,900	43,700	27,500	24,900
Chromium	50	12.9 B	2.7 B	ND	3.9 B	22.1	ND
Cobalt	NC	55.8	45.4 BE	35.4 B	144	268	1.1 B
Copper	200	34.3	ND	ND	17.9 B	20.8 B	ND
Iron	300	***12,700***	***3,490***	***300***	***749 N***	***2,310***	ND
Lead	25	5.7 B	2.5 B	ND	5.3 B	ND	ND
Magnesium	35,000	5,580	3,640	2,630	4,570	3,820	3,340
Manganese	300	***9,560***	***8,040***	***16,400***	***33,900***	***61,600***	***1,720***
Mercury	0.7	ND	ND	ND	0.063 B	ND	ND
Nickel	100	9.4 B	2.1 B	ND	2.6 B	3.3 B	ND
Potassium	NC	7,430	6,390	3,680	7,510	6,700 E	5,990 E
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.5 B	ND	ND	12.1 B	ND
Sodium	20,000	***94,500***	***77,500***	***21,700***	***247,000***	***38,400***	***37,500***
Thallium	0.5	***44***	ND	***11.7*** B	***88.2***	ND	ND
Vanadium	NC	17.6 B	3.7 B	ND	2.7 B	6.4 B	ND
Zinc	2,000	53.3	16.8 B	20.8 B	27.4 B	36.1 B	18.0 B
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A	MW-13A
Sample ID	Class GA	DMW-13A	DMW-13AF	DMW-13A	DMW-13AF	DMW-13A	DMW-13AF
Laboratory ID	Ground	L1807-15	L1808-25	AC75646-021	AC75646-022	AC83807-011	AC83807-012
Sample Date	Water	8/22/12	8/22/12	11/7/13	11/7/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc.	Unfiltered conc.	Filtered conc.	Unfiltered conc.	Filtered conc.
Aluminum	NC	204	ND	ND	ND	420	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	77.9 B	31.4 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	***93.5***	***64.4***	***120***	***120***	***9.6***	***9.0***
Calcium	NC	7,850	7,800	14,000	13,000	20,000	21,000
Chromium	50	2.8 B	1.9 B	ND	ND	ND	ND
Cobalt	NC	33.7 B	15.1 B	16.0	17.0	17.0	18.0
Copper	200	6.7 B	ND	ND	ND	ND	ND
Iron	300	***3,690***	***1,580***	***7,300***	***6,400***	***8,600***	***6,200***
Lead	25	ND	ND	ND	ND	ND	24.0
Magnesium	35,000	936	960	ND	ND	ND	ND
Manganese	300	***6,190***	***3,430***	***1,700***	***1,700***	***1,100***	***1,200***
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.1 B	2.7 B	ND	ND	ND	ND
Potassium	NC	2,250 E	2,140	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***47,000***	***46,900***	***31,000***	***31,000***	***43,000***	***47,000***
Thallium	0.5	***9.2*** B	ND	ND	ND	***ND***	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	9.5 B	ND	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
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ND - Not Detected
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13A	MW-13A	MW-13A	MW-13A
Sample ID	Class GA	DMW-13A	DMW-13A	DMW-13A	DMW-13AF
Laboratory ID	Ground	AC91350-001	AC91350-002	AC99975-001	AC99975-002
Sample Date	Water	5/12/16	5/12/16	9/11/17	9/11/17
Filtered/Unfiltered	Criteria	Unfiltered conc.	Filtered conc.	Unfiltered conc.	Filtered conc.
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	57.0	55.0	63.0	63.0
Beryllium	3	ND	ND	ND	ND
Cadmium	5	***10.0***	***8.5***	***14.0***	***15.0***
Calcium	NC	37,000	36,000	35,000	37,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	5.9	5.4	9.7	11.0
Copper	200	ND	ND	ND	ND
Iron	300	***3,200***	***1,700***	***6,000***	***4,600***
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	***360***	***350***	***430***	***430***
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	6,700	6,400	5,000	5,300
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***39,000***	***37,000***	***63,000***	***66,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B
Sample ID	Class GA	MW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B	DMW-13B
Laboratory ID	Ground	E0773-14A	F1193-13A	G2114-13	J0429-16A	K0942-19	K0942-20
Sample Date	Water	6/8/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	330	133 B	ND	114 BE	106 B	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	54.3 B	29.0 B	33.4 B	21.5 B	14.4 B	12.6 B
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	***15***	***9.8***	2.3 B	4.2 B	2.2 B	ND
Calcium	NC	10,700	9,840	11,700	8,880	10,900	10,900
Chromium	50	27.8	27.2	22.3	17.8 B	11.7 B	10.7 B
Cobalt	NC	3.9 B	1.9 BE	ND	ND	ND	ND
Copper	200	19.3 B	13.8 B	ND	ND	6.5 B	ND
Iron	300	***614***	***404***	106 B	286 N	***469***	ND
Lead	25	ND	7.7 B	3.1 B	ND	ND	ND
Magnesium	35,000	1,710	1,600	1,910	1,350	1,560	1,530
Manganese	300	***621***	***426***	153	243	148	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	9.8 B	4.2 B	ND	1.3 B	1.5 B	ND
Potassium	NC	2,410	1,820	2,100	1,570	1,910 E	1,680 E
Selenium	10	ND	6.2 B	ND	ND	ND	ND
Silver	50	ND	2.3 B	ND	ND	ND	ND
Sodium	20,000	7,880	6,710	9,280	8,060	6,720	6,880
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.3 B	0.96 B	ND	0.54 B	ND	ND
Zinc	2,000	45.9 B	33.2 B	24.3 B	24.3 B	32.7 B	32.5 B
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B	MW-13B
Sample ID	Class GA	DMW-13B	DMW-13BF	DMW-13B	DMW-13BF	DMW-13B	DMW-13BF
Laboratory ID	Ground	L1807-27	L1808-23	AC75646-023	AC75646-024	AC83807-013	AC83807-014
Sample Date	Water	8/22/12	8/22/12	11/7/13	11/7/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	1,800	ND	1,000	ND
Antimony	3	ND	ND	2.9	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	23.1 B	22.4 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	1.5 B	1.1 B	***10.0***	2.3	4.0	ND
Calcium	NC	11,300 E	10,600	29,000	12,000	12,000	13,000
Chromium	50	21.2	21.4	ND	ND	ND	ND
Cobalt	NC	ND	ND	3.1	ND	3.0	ND
Copper	200	ND	ND	57.0	ND	ND	ND
Iron	300	ND	ND	***4,900***	ND	2100	ND
Lead	25	ND	ND	13.0	ND	6.3	ND
Magnesium	35,000	1,630	1,550	9,000	ND	ND	ND
Manganese	300	54.3	19.7 B	240	57.0	780	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium	NC	1,340	1,360	9,400	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	9,260 E	8,950	***22,000***	13,000	12,000	13,000
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	350	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-13B	MW-13B	MW-13B	MW-13B
Sample ID	Class GA	DMW-13B	DMW-13B	DMW-13B	DMW-13BF
Laboratory ID	Ground	AC91350-004	AC91350-003	AC99975-003	AC99975-004
Sample Date	Water	5/12/16	5/12/16	9/11/17	9/11/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	98.0	94.0	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	***6.9***	***6.6***	3.0	ND
Calcium	NC	30,000	29,000	13,000	13,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	ND	ND	88.0	ND
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***43,000***	***41,000***	19,000	19,000
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Class GA	MW-15A	DMW-15A	DMW-15A	DMW-15A	DMW-15A	DMW-15A
Laboratory ID	Ground	E0773-03A	F1193-15A	G2114-08	J0429-17A	K0942-21	K0942-22
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	773	ND	ND	335 E	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	53.7 B	15.5 B	20.1 B	30.8 B	23.1 B	16.4 B
Beryllium	3	ND	ND	ND	0.074 B	ND	ND
Cadmium	5	***28.8***	***29.1***	***33.9***	***62.3***	***63.0***	***12.2***
Calcium	NC	18,900	13,700	12,100	14,800	16,300	16,600
Chromium	50	3.0 B	0.45 B	ND	4.6 B	1.3 B	ND
Cobalt	NC	3.2 B	1.3 BE	ND	0.9 B	ND	ND
Copper	200	38.0	4.8 B	ND	8.4 B	9.8 B	ND
Iron	300	***2,320***	158 B	ND	***1,000 N***	164 B	ND
Lead	25	9.9 B	1.7 B	ND	5.2 B	ND	ND
Magnesium	35,000	3,170	2,240	1,890	2,780	2,410	2,380
Manganese	300	***370***	***929***	***895***	***2,850***	***1,510***	55.7
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	7.1 B	0.85 B	ND	3.6 B	1.7 B	ND
Potassium	NC	2,090	1,960	1,610	2,140	2,290 E	2,290 E
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.4 B	ND	ND	ND	ND
Sodium	20,000	18,000	13,300	9,040	17,100	19,500	19,800
Thallium	0.5	***1.9 B***	ND	ND	***7.3 B***	ND	ND
Vanadium	NC	2.6 B	ND	ND	0.69 B	ND	ND
Zinc	2,000	155	18.8 B	24.3 B	33.5 B	31.7 B	25.9 B
Hexavalent Chromium							

Notes:
All values in µg/L
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ND - Not Detected
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Class GA	DMW-15A	DMW-15AF	DMW-15A	DMW-15AF	DMW-15A	DMW-15AF
Laboratory ID	Ground	L1807-25	L1808-21	AC75646-009	AC75646-010	AC83807-001	AC83807-002
Sample Date	Water	8/22/12	8/22/12	11/6/13	11/6/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	810	ND	820	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	15.9 B	15.0 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	***16.8***	***9.7***	***73.0***	***8.9***	***17.0***	***8.0***
Calcium	NC	13,500 E	13,400	14,000	14,000	12,000	14,000
Chromium	50	ND	1.2 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	ND	ND	***1,200***	ND	***1,100***	ND
Lead	25	ND	ND	7.9	ND	6.3	ND
Magnesium	35,000	2,460	2,440	ND	ND	ND	ND
Manganese	300	238	41.1 B	***2,100***	59.0	150	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	1.1 B	ND	ND	ND	ND
Potassium	NC	2,110	2,230	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***20,400 E***	***20,400***	***21,000***	***21,000***	***20,000***	***23,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15A	MW-15A	MW-15A	MW-15A
Sample ID	Class GA	DMW-15A	DMW-15A	DMW-15A	DMW-15A
Laboratory ID	Ground	AC91318-001	AC91318-002	AC99975-007	AC99975-008
Sample Date	Water	5/11/16	5/11/16	9/11/17	9/11/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	290	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	***11.0***	4.8	***13.0***	***11.0***
Calcium	NC	13,000	12,000	18,000	17,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	***360***	ND	ND	ND
Lead	25	3.2	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	140	ND	88.0	ND
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***25,000***	***25,000***	***24,000***	***23,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
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NA - Not analyzed
ND - Not Detected
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Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B
Sample ID	Class GA	MW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B	DMW-15B
Laboratory ID	Ground	E0773-04A	F1193-10A	G2114-07	Inaccessible	K0942-23	K0942-24
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	224	58.6 B	ND	NA	ND	ND
Antimony	3	ND	ND	ND	NA	ND	ND
Arsenic	25	1.7 B	ND	ND	NA	5.5 B	4.8 B
Barium	1,000	83.6 B	40.6 B	45.0 B	NA	34.6 B	34.4 B
Beryllium	3	ND	ND	0.19 B	NA	ND	ND
Cadmium	5	3.6 B	0.54 B	0.29 B	NA	ND	ND
Calcium	NC	16,400	13,700	13,700	NA	12,000	11,900
Chromium	50	2.1 B	0.56 B	ND	NA	ND	ND
Cobalt	NC	5.5 B	2.7 BE	1.9 B	NA	1.4 B	1.2 B
Copper	200	20.4 B	2.5 B	ND	NA	ND	ND
Iron	300	***4,780***	***1,320***	***875***	NA	***1,410***	***1,130***
Lead	25	3.3 B	ND	3.6 B	NA	ND	ND
Magnesium	35,000	5,930	5,290	5,240	NA	4,860	4,920
Manganese	300	239	228	267	NA	182	182
Mercury	0.7	ND	ND	ND	NA	ND	ND
Nickel	100	11.5 B	1.4 B	2.2 B	NA	1.9 B	2.0 B
Potassium	NC	2,450	1,500	1,980	NA	1,890 E	1,860 E
Selenium	10	ND	ND	ND	NA	ND	ND
Silver	50	ND	2.5 B	1.0 B	NA	ND	ND
Sodium	20,000	***46,600***	***45,200***	***43,900***	NA	***40,600***	***40,600***
Thallium	0.5	***3.0 B***	ND	ND	NA	ND	ND
Vanadium	NC	0.72 B	ND	ND	NA	ND	ND
Zinc	2,000	129	16.8 B	38.9 B	NA	37.3 B	33.7 B
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
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Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B	MW-15B
Sample ID	Class GA	DMW-15B	DMW-15BF	DMW-15B	DMW-15BF	DMW-15B	DMW-15BF
Laboratory ID	Ground	L1807-24	L1808-20	AC75646-001	AC75646-002	AC83807-003	AC83807-004
Sample Date	Water	8/22/12	8/22/12	11/6/13	11/6/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	4.3 B	ND	ND	ND	ND
Barium	1,000	32.4 B	29.4 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	12,200 E	11,500	12,000	12,000	9,900	11,000
Chromium	50	ND	ND	ND	ND	ND	ND
Cobalt	NC	1.5 B	1.4 B	ND	ND	ND	ND
Copper	200	ND	18.1 B	ND	ND	ND	ND
Iron	300	***1,510 E***	48.4 B	***3,300***	ND	***1,500***	ND
Lead	25	ND	ND	ND	ND	11	ND
Magnesium	35,000	4,700	4,490	ND	ND	ND	ND
Manganese	300	189	174	170	140	94	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	1.5 B	2.7 B	ND	ND	ND	ND
Potassium	NC	1,470	1,510	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***40,800 E***	***39,100***	***40,000***	***40,000***	***32,000***	***36,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	12.1 B	23.7 B	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
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Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-15B	MW-15B	MW-15B	MW-15B
Sample ID	Class GA	DMW-15B	DMW-15B	DMW-15B	DMW-15BF
Laboratory ID	Ground	AC91318-003	AC91318-004	AC99975-009	AC99975-010
Sample Date	Water	5/11/16	5/11/16	9/11/17	9/11/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND
Calcium	NC	7,200	8,000	13,000	12,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	3.8	4.1	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	***720***	***710***	***1,700***	***1,700***
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	ND	ND	78	120
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	5,500	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***20,000***	19,000	***26,000***	***28,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	61	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	MW-18	DMW-18	DMW-18	DMW-18	DMW-18	DMW-18
Laboratory ID	Ground	E0773-06A	F1193-16A	G2114-06	J0429-18A	K0942-25	K0942-26
Sample Date	Water	6/8/06	8/23/07	11/11/08	3/9/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	1,430	829	88.1 B	2,270	3,280	ND
Antimony	3	ND	ND	***5.1*** B	***12.2*** B	ND	ND
Arsenic	25	ND	ND U	ND	5.9 B	7.0 B	ND
Barium	1,000	168 B	71.3 B	166 B	283	109 B	13.4 B
Beryllium	3	ND	ND	ND	0.31 B	0.29 B	ND
Cadmium	5	3.0 B	1.2 B	***9.8***	***18.1***	1.3 B	ND
Calcium	NC	13,900	9,790	12,600	27,000	19,000	18,400
Chromium	50	2.2 B	0.63 B	ND	5 B	3.9 B	ND
Cobalt	NC	7.3 B	5.5 BE	2.0 B	11.6 B	9.2 B	ND
Copper	200	17.7 B	3.5 B	11.1 B	112	12.2 B	ND
Iron	300	***1,150***	***1,320***	114 B	***4,620***	***2,890***	ND
Lead	25	ND	1.9 B	ND	19.0	ND	ND
Magnesium	35,000	2,340	1,550	2,440	4,130	3,300	3,070
Manganese	300	***6,270***	***4,490***	***2,870***	***10,100*** *	***3,450***	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	17.5 B	13.0 B	29.3 B	48.0 BE	15.7 B	ND
Potassium	NC	1,520	1,180	1,540	4,120 E	2,050 E	1,860 E
Selenium	10	ND	ND	ND	***16.4 B***	ND	ND
Silver	50	ND	1.5 B	ND	ND	ND	ND
Sodium	20,000	7,870	6,020	12,100	10,600	16,800	17,300
Thallium	0.5	***26.5***	ND	ND	***64.5***	ND	ND
Vanadium	NC	2.6 B	1.4 B	ND	5.0 B	3.9 B	ND
Zinc	2,000	235	89.0	265	366	192	22.2 B
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	DMW-18	DMW-18F	DMW-18	DMW-18F	DMW-18	DMW-18F
Laboratory ID	Ground	L1807-18	L1808-28	AC75646-015	AC75646-016	AC83807-019	AC83807-020
Sample Date	Water	8/23/12	8/23/12	11/6/13	11/6/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	440	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	19.7 B	17.0 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	14,000	14,300	22,000	21,000	18,000	19,000
Chromium	50	0.75 B	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	35.3 B	ND	ND	ND	***520***	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	2,360	2,410	ND	ND	ND	ND
Manganese	300	113	23.4 B	***450***	ND	***720***	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium	NC	2,310 E	2,410	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	17,900	18,700	***26,000***	***25,000***	***37,000***	***39,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
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Upgradient Wells
Source Area Wells
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Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-18	MW-18	MW-18	MW-18
Sample ID	Class GA	DMW-18	DMW-18	DMW-18	DMW-18F
Laboratory ID	Ground	AC91318-007	AC91318-008	AC99992-013	AC99992-014
Sample Date	Water	5/11/16	5/11/16	9/12/17	9/12/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND
Calcium	NC	37,000	37,000	23,000	21,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND
Magnesium	35,000	ND	ND	ND	ND
Manganese	300	160	ND	190	ND
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***60,000***	***61,000***	17,000	16,000
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
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NA - Not analyzed
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Upgradient Wells
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TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A
Sample ID	Class GA	MW-22A	DMW-22A	DMW-22A	DMW-22A	DMW-22A	DMW-22A
Laboratory ID	Ground	E0773-11A	F1193-09A	G2114-09	J0429-19A	K0942-11	K0942-12
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	4,320	2,870	2,620	1,060	159 B	ND
Antimony	3	1.7 B	***5.2 B***	ND	***13.0 B***	ND	ND
Arsenic	25	16.0 B	3.8 B	7.2 B	15.4 B	7.5 B	4.5 B
Barium	1,000	167 B	76.9 B	69.6 B	109 B	106 B	111 B
Beryllium	3	0.15 B	ND	0.21 B	0.19 B	ND	ND
Cadmium	5	***38.9***	***22.1***	***13.5***	***13.7***	***6.8***	ND
Calcium	NC	52,100	37,500	55,700	104,000	114,000	96,400
Chromium	50	18.0 B	12.8 B	13.0 B	8.8 B	2.8 B	0.76 B
Cobalt	NC	2.2 B	5.2 BE	ND	1.4 B	ND	ND
Copper	200	32.3	24.0 B	19.3 B	21.5 B	7.9 B	ND
Iron	300	***70,400***	***22,400***	***22,000***	***61,100***	***16,700***	***2,260***
Lead	25	8.6 B	13.1	11.3	12.4	ND	ND
Magnesium	35,000	8,300	5,580	7,860	13,800	15,600	13,100
Manganese	300	***1,280***	***1,190***	***1,030***	***912*** *	***683***	***780***
Mercury	0.7	ND	ND	ND	0.094 B	ND	ND
Nickel	100	6.0 B	3.7 B	2.6 B	4.7 BE	2.4 B	1.4 B
Potassium	NC	4,560	3,530	3,980	3,430 E	4,520 E	5,120 E
Selenium	10	8.7 B	ND	ND	***24.3 B***	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***95,200***	***69,400***	***39,900***	***57,800***	***100,000***	***134,000***
Thallium	0.5	ND	***2.8 B***	ND	ND	ND	ND
Vanadium	NC	17.4 B	9.2 B	7.0 B	6.3 B	3.1 B	ND
Zinc	2,000	1,650	1,170	714	1,360	1,000	546
Hexavalent Chromium							

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Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A	MW-22A
Sample ID	Class GA	DMW-22A	DMW-22AF	DMW-22A	DMW-22AF	DMW-22A	DMW-22AF
Laboratory ID	Ground	L1807-17	L1808-27	AC75646-019	AC75646-020	AC83807-009	AC83807-010
Sample Date	Water	8/23/12	8/23/12	11/7/13	11/7/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	36.1 B	37.8 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	27,600	28,200	33,000	30,000	45,000	51,000
Chromium	50	2.2 B	1.7 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	***2,700***	***2,690***	***2,800***	***2,100***	***2,100***	***640***
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	4,060	4,210	ND	ND	7,200	8,200
Manganese	300	***437***	***443***	***440***	***380***	220	260
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium	NC	2,980 E	3,040	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***59,700***	***61,000***	***43,000***	***41,000***	***28,000***	***34,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	16.9 B	16.1 B	ND	ND	280	290
Hexavalent Chromium							

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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22A	MW-22A	MW-22A	MW-22A
Sample ID	Class GA	DMW-22A	DMW-22A	DMW-22A	DMW-22AF
Laboratory ID	Ground	AC91350-009	AC91350-010	AC99975-011	AC99975-012
Sample Date	Water	5/13/16	5/13/16	9/11/17	9/11/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND
Calcium	NC	54,000	49,000	22,000	23,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	***2,900***	***2,500***	***2,700***	***2,400***
Lead	25	ND	ND	ND	ND
Magnesium	35,000	8,900	8,100	ND	ND
Manganese	300	***450***	***420***	***560***	***610***
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	***41,000***	***39,000***	***51,000***	***54,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	310	270	ND	ND
Hexavalent Chromium				ND	NA

Notes:
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Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B
Sample ID	Class GA	MW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B	DMW-22B
Laboratory ID	Ground	E0773-12A	F1193-08A	G2114-11	J0429-20A	k0942-13	k0942-13
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/9/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	763 B	151 B	ND	56.3 B	ND	ND
Antimony	3	ND	***4.7 B***	ND	***8.7 B***	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	76.6 B	48.2 B	41.3 B	57.6 B	43.3 B	35.6 B
Beryllium	3	ND	ND	ND	0.039 B	ND	ND
Cadmium	5	***29.0*** B	4.4 B	1.2 B	1.7 B	ND	ND
Calcium	NC	12,800	20,400	27,200	21,400	19,500	19,700
Chromium	50	7.9 B	1.5 B	ND	1.6 B	0.66 B	ND
Cobalt	NC	17.4 B	3.9 BE	1.5 B	1.0 B	ND	ND
Copper	200	118 B	4.0 B	ND	ND	ND	ND
Iron	300	***4,600***	***1,120***	***518***	***358***	164 B	ND
Lead	25	8.6 B	3 B	2.4 B	3.3 B	ND	ND
Magnesium	35,000	2,660 B	3,130	5,090	3,510	3,230	3,300
Manganese	300	***2,310***	***2,440***	***775***	***940*** *	***589***	***342***
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	28.0 B	2.7 B	6.5 B	2.0 BE	0.85 B	ND
Potassium	NC	3,000 B	2,500	1,910	4,220 E	4,740 E	4,260 E
Selenium	10	ND	ND	ND	***19.0 B***	ND	ND
Silver	50	ND	4.2 B	ND	ND	ND	ND
Sodium	20,000	8,170 B	17,100	11,300	14,400	12,700	13,600
Thallium	0.5	***20.1*** B	***3.5 B***	ND	ND	ND	ND
Vanadium	NC	ND	0.49 B	ND	ND	ND	ND
Zinc	2,000	194 B	39.4 B	29.8 B	34.6 B	20.1 B	17.6 B
Hexavalent Chromium							

Notes:
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Upgradient Wells
Source Area Wells
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Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B	MW-22B
Sample ID	Class GA	DMW-22B	DMW-22BF	DMW-22B	DMW-22BF	DMW-22B	DMW-22BF
Laboratory ID	Ground	L1807-16	L1808-26	AC75646-029	AC75646-030	AC83807-007	AC83807-008
Sample Date	Water	8/23/12	8/23/12	11/7/13	11/7/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	39.6 B	40.5 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND
Calcium	NC	22,400	22,500	26,000	27,000	27,000	31,000
Chromium	50	ND	ND	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND	ND	ND
Iron	300	110 B	ND	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	3,860	3,950	ND	ND	5,100	5,900
Manganese	300	***748***	***726***	***610***	***600***	***550***	***590***
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND	ND	ND
Potassium	NC	4,470 E	4,270	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	19,200	19,000	13,000	13,000	15,000	17,000
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	5.7 B	ND	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
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NA - Not analyzed
ND - Not Detected
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Upgradient Wells
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Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-22B	MW-22B	MW-22B	MW-22B
Sample ID	Class GA	DMW-22B	DMW-22B	DMW-22B	DMW-22BF
Laboratory ID	Ground	AC91350-011	AC91350-012	AC99975-013	AC99975-016
Sample Date	Water	5/13/16	5/13/16	9/11/17	9/11/17
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	300	ND	ND
Antimony	3	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND
Barium	1,000	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND
Calcium	NC	30,000	31,000	32,000	31,000
Chromium	50	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND
Copper	200	ND	ND	ND	ND
Iron	300	ND	ND	ND	ND
Lead	25	ND	ND	ND	ND
Magnesium	35,000	5,900	6,200	6,000	5,300
Manganese	300	***500***	***500***	***410***	***350***
Mercury	0.7	ND	ND	ND	ND
Nickel	100	ND	ND	ND	ND
Potassium	NC	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND
Sodium	20,000	16,000	17,000	***22,000***	***21,000***
Thallium	0.5	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND
Zinc	2,000	ND	ND	ND	ND
Hexavalent Chromium				ND	NA

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A
Sample ID	Class GA	MW-23A	DMW-23A	DMW-23A	DMW-23A	DMW-23A	DMW-23A
Laboratory ID	Ground	E0773-01A	F1193-12A	G2114-14	J0429-21A	K0942-15	K0942-16
Sample Date	Water	6/7/06	8/22/07	11/12/08	3'10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	941	2,440	3,200	3,790	5,060	ND
Antimony	3	1.8 B	***5.8 B***	ND	***9.5 B***	ND	ND
Arsenic	25	2.0 B	4.1 B	5.8 B	7.9 B	7.4 B	ND
Barium	1,000	87.5 B	51.2 B	40.1 B	47.8 B	47.4 B	34.6 B
Beryllium	3	ND	ND	0.29 B	0.23 B	ND	ND
Cadmium	5	***110***	***702***	***1,080***	***704***	***924***	***9.5***
Calcium	NC	34,200	40,900	31,000	38,600	29,300	27,800
Chromium	50	3.6 B	4.9 B	3.6 B	6.4 B	6.4 B	0.97 B
Cobalt	NC	3.2 B	6.1 BE	ND	0.76 B	ND	ND
Copper	200	33.2	35.9	47.6	137	190	ND
Iron	300	***10,300***	***29,700***	***13,100***	***11,500***	***15,200***	***2,030***
Lead	25	ND	6.6 B	9.5 B	11.2	5.6 B	ND
Magnesium	35,000	6,660	6,280	9,020	8,010	5,160	5,100
Manganese	300	***1,100***	***612***	***1,390***	***1,410*** *	***1,600***	***1,480***
Mercury	0.7	0.065 B	ND	ND	0.12 B	0.035 B	ND
Nickel	100	9.3 B	7.1 B	2.2 B	6.3 BE	3.7 B	1.2 B
Potassium	NC	7,070	5,200	6,780	6,930 E	6,270 E	6,420 E
Selenium	10	1.3 B	6.1 B	ND	***13.5 B***	ND	ND
Silver	50	0.92 B	ND	ND	ND	ND	ND
Sodium	20,000	***60,200***	***32,400***	***37,800***	***64,600***	***67,900***	***70,800***
Thallium	0.5	***9.3*** B	ND	ND	***11.3 B***	ND	ND
Vanadium	NC	5.5 B	12.6 B	20.5 B	11.4 B	16.4 B	ND
Zinc	2,000	181	26.9 B	42.7 B	48.3 B	70.5	15.6 B
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
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* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A	MW-23A
Sample ID	Class GA	DMW-23A	DMW-23AF	DMW-23A	DMW-23AF	DMW-23A	DMW-23AF
Laboratory ID	Ground	L1807-28	L1808-24	AC75646-027	AC75646-028	AC83807-015	AC83807-016
Sample Date	Water	8/22/12	8/22/12	11/7/13	11/7/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	161 B	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	28.0 B	27.3 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	***31.7***	3.3 B	***24.0***	***13.0***	***10.0***	ND
Calcium	NC	26,700 E	26,400	20,000	20,000	41,000	40,000
Chromium	50	1.2 B	4.0 B	ND	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	6.7 B	ND	ND	ND	ND	ND
Iron	300	***1,860 E***	***602***	***900***	***650***	***8,000***	***6,400***
Lead	25	ND	ND	ND	ND	ND	ND
Magnesium	35,000	4,950	4,750	ND	ND	8,600	8,400
Manganese	300	***1,110***	***1,170***	***980***	***1,000***	***780***	***820***
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	ND	2.0 B	ND	ND	ND	ND
Potassium	NC	5,770	5,790	ND	ND	6,400	6,800
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	***74,100 E***	***73,400***	***27,000***	***29,000***	***91,000***	***95,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	1.1 B	ND	ND	ND	ND	ND
Zinc	2,000	ND	5.9 B	ND	ND	ND	ND
Hexavalent Chromium							

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23A	MW-23A	MW-23A	MW-23A
Sample ID	Class GA	DMW-23A	DMW-23A	DMW-23A	DMW-23A
Laboratory ID	Ground	AC91350-005	AC91350-006		
Sample Date	Water	5/13/16	5/13/16		
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	ND	ND		
Antimony	3	ND	ND	well was	well was
Arsenic	25	ND	ND	paved over	paved over
Barium	1,000	57.0	54.0		
Beryllium	3	ND	ND		
Cadmium	5	***8.9***	ND		
Calcium	NC	69,000	66,000		
Chromium	50	ND	ND		
Cobalt	NC	ND	ND		
Copper	200	ND	ND		
Iron	300	***11,000***	***10,000***		
Lead	25	ND	ND		
Magnesium	35,000	15,000	14,000		
Manganese	300	***930***	***920***		
Mercury	0.7	ND	ND		
Nickel	100	ND	ND		
Potassium	NC	8,900	8,000		
Selenium	10	ND	ND		
Silver	50	ND	ND		
Sodium	20,000	***130,000***	***130,000***		
Thallium	0.5	ND	ND		
Vanadium	NC	ND	ND		
Zinc	2,000	ND	ND		
Hexavalent Chromium					

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	MW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B	DMW-23B
Laboratory ID	Ground	E0773-02A	F1193-11A	G2114-15	J0429-22A	K0942-27	K0942-28
Sample Date	Water	6/7/06	8/22/07	11/12/08	3/10/10	5/25/11	5/25/11
Filtered/Unfiltered	Criteria	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	2,450	632	406	2,820	1,810	ND
Antimony	3	***3.2 B***	ND	ND	***6.2 B***	ND	ND
Arsenic	25	4.1 B	ND	ND	6.7 B	ND	ND
Barium	1,000	215	86.4 B	64.6 B	77.4 B	64.8 B	150 B
Beryllium	3	0.21 B	ND	0.13 B	0.3 B	ND	ND
Cadmium	5	***320***	***60.0***	***42.2***	***43.8***	***40.1***	***5.8***
Calcium	NC	21,500	25,100	15,700	24,400	24,800	21,700
Chromium	50	***74.9***	13.9 B	4.3 B	***61.6***	12.6 B	8.5 B
Cobalt	NC	4.8 B	2.4 BE	ND	3.5 B	1.7 B	0.91 B
Copper	200	94.6	19.8 B	24.6 B	54.8	25.6 B	13.9 B
Iron	300	***8,220***	***2,140***	***1,270***	***7,870***	***5,200***	***36,100***
Lead	25	***35.7***	10.3	17.7	***43.9***	22.6	ND
Magnesium	35,000	1,890	1,290	1,590	2,730	4,150	2,460
Manganese	300	***548***	***508***	52.1	***398*** *	126	169
Mercury	0.7	0.11 B	ND	ND	0.11 B	ND	ND
Nickel	100	68.8	16.7 B	20.5 B	23.2 BE	14.8 B	10 B
Potassium	NC	2,400	1,970	1,660	1,650 E	2,450 E	2,110 E
Selenium	10	ND	8.6 B	ND	***19.3 B***	ND	ND
Silver	50	ND	5.0 B	0.81 B	ND	ND	ND
Sodium	20,000	2,390	3,870	2,200	***84,400***	18,900	18,500
Thallium	0.5	***3.1 B***	ND	ND	***6.1 B***	ND	ND
Vanadium	NC	17.7 B	9.0 B	5.9 B	12.1 B	12.9 B	ND
Zinc	2,000	417	145	198	376	410	47 B
Hexavalent Chromium							

Notes:
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	DMW-23B	DMW-23BF	DMW-23B	DMW-23BF	DMW-23B	DMW-23BF
Laboratory ID	Ground	L1807-26	L1808-22	AC75646-025	AC75646-026	AC83807-017	AC83807-018
Sample Date	Water	8/22/12	8/22/12	11/7/13	11/7/13	3/17/15	3/17/15
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	103 B	ND	1,100	ND	730	ND
Antimony	3	ND	ND	ND	ND	ND	ND
Arsenic	25	ND	ND	ND	ND	ND	ND
Barium	1,000	29.0 B	26.8 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND
Cadmium	5	***69.6***	***33.1***	***45.0***	***35.0***	***27.0***	***31.0***
Calcium	NC	18,100 E	17,700	11,000	12,000	8,900	9,900
Chromium	50	10.7 B	7.8 B	***59.0***	ND	ND	ND
Cobalt	NC	ND	ND	ND	ND	ND	ND
Copper	200	4.1 B	ND	ND	ND	ND	ND
Iron	300	279 E	117 B	***2,400***	ND	***1,600***	ND
Lead	25	ND	ND	8.3	ND	5.6	ND
Magnesium	35,000	2,950	2,910	ND	ND	ND	ND
Manganese	300	138	135	52.0	ND	ND	ND
Mercury	0.7	ND	ND	ND	ND	ND	ND
Nickel	100	2.4 B	1.3 B	ND	ND	ND	ND
Potassium	NC	1,760	1,820	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
Sodium	20,000	15,000 E	14,700	11,000	11,000	***25,000***	***27,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	ND	ND	ND	ND
Zinc	2,000	17.7 B	ND	95.0	ND	61.0	ND
Hexavalent Chromium							

Notes:
All values in µg/L
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ND - Not Detected
BOLD/Italics - exceeds criterion
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Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 3
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN GROUNDWATER

Sample Location	NYSDEC	MW-23B	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	DMW-23B	DMW-23B	DMW-23B	DMW-23B
Laboratory ID	Ground	AC91350-007	AC91350-008		
Sample Date	Water	5/13/16	5/13/16		
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Unfiltered	Filtered
		conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	220	ND		
Antimony	3	ND	ND	well was	well was
Arsenic	25	ND	ND	paved over	paved over
Barium	1,000	ND	ND		
Beryllium	3	ND	ND		
Cadmium	5	***42.0***	***37.0***		
Calcium	NC	14,000	13,000		
Chromium	50	ND	ND		
Cobalt	NC	ND	ND		
Copper	200	ND	ND		
Iron	300	***420***	ND		
Lead	25	ND	ND		
Magnesium	35,000	ND	ND		
Manganese	300	ND	ND		
Mercury	0.7	ND	ND		
Nickel	100	ND	ND		
Potassium	NC	ND	ND		
Selenium	10	ND	ND		
Silver	50	ND	ND		
Sodium	20,000	16,000	15,000		
Thallium	0.5	ND	ND		
Vanadium	NC	ND	ND		
Zinc	2,000	ND	ND		
Hexavalent Chromium					

Notes:
All values in µg/L
NC - No Criteria
NA - Not analyzed
ND - Not Detected
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
N - Matrix spike recovery falls outside of the control limit
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells
Groundwater Contaminants of Concern

TABLE 4
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-17	MW-17	MW-17	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2
Sample ID	Class GA	DMW-17	DMW-17F		DMW-1	DMW-1F		DMW-2	DMW-2F	
Laboratory ID	Ground	AC99992-016	AC99992-017		AC99992-003	AC99992-007		AC99992-004	AC99992-008	
Sample Date	Water	9/12/17	9/12/17		9/12/17	9/12/17		9/12/17	9/12/17	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	400	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	3.2	2.7	84.4%	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Calcium	NC	14,000	13,000	92.9%	18,000	18,000	100.0%	13,000	14,000	107.7%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	3.0	2.6	86.7%
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	***2,800***	2,200.0	78.6%	***300***	ND	NC	***4,000***	***4,100***	102.5%
Lead	25	6.6	3.3	50.0%	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	***790***	710	89.9%	ND	ND	NC	87	88	101.1%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	10,000	9,800	98.0%	***72,000***	***72,000***	100.0%	***20,000***	***21,000***	105.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	56	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity	50 NTU	0.0			0.0			0.0		

Notes:
ND - Not Detected
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion
Groundwater Contaminants of Concern

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 4
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-3	MW-3	MW-3	MW-9	MW-9	MW-9	MW-9B	MW-9B	MW-9B
Sample ID	Class GA	DMW-3	DMW-3F		DMW-9	DMW-9F		DMW-9B	DMW-9BF	
Laboratory ID	Ground	AC99992-011	AC99992-012		AC99992-001	AC99992-005		AC99992-002	AC99992-006	
Sample Date	Water	9/12/17	9/12/17		9/12/17	9/12/17		9/12/17	9/12/17	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	210	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	50.0	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	***13.0***	***9.5***	73.1%	ND	ND	NC	ND	ND	NC
Calcium	NC	18,000	18,000	100.0%	ND	ND	NC	11,000	11,000	100.0%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	***1,500***	ND	NC	ND	ND	NC	ND	570	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	78	ND	NC	ND	ND	NC	ND	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	69,000	73,000	105.8%	***50,000***	***51,000***	102.0%	20,000	20,000	100.0%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity	50 NTU	0.6			0.0			0.0		

Notes:
ND - Not Detected
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion
Groundwater Contaminants of Concern

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 4
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-13A	MW-13A	MW-13A	MW-13B	MW-13B	MW-13B	MW-15A	MW-15A	MW-15A
Sample ID	Class GA	DMW-13A	DMW-13AF		DMW-13B	DMW-13BF		DMW-15A	DMW-15AF	
Laboratory ID	Ground	AC99975-001	AC99975-002		AC99975-003	AC99975-004		AC99975-007	AC99975-008	
Sample Date	Water	9/11/17	9/11/17		9/11/17	9/11/17		9/11/17	9/11/17	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc.	conc.	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	63	63	100.0%	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	***14.0***	***15.0***	107.1%	***3.0***	ND	NC	***13.0***	***11.0***	84.6%
Calcium	NC	35,000	37,000	105.7%	13,000	13,000	100.0%	18,000	17,000	94.4%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	9.7	11.0	113.4%	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	***6,000***	***4,600***	76.7%	ND	ND	NC	ND	ND	NC
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	***430***	***430***	100.0%	88	ND	NC	88	ND	NC
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	5,000	5,300	106.0%	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	***63,000***	***66,000***	104.8%	***19,000***	***19,000***	100.0%	***24,000***	***23,000***	95.8%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity	50 NTU	12.7			2.1			0.0		

Notes:
ND - Not Detected
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion
Groundwater Contaminants of Concern

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 4
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-15B	MW-15B	MW-15B	MW-18	MW-18	MW-18	MW-22A	MW-22A	MW-22A
Sample ID	Class GA	DMW-15B	DMW-15BF		DMW-18	DMW-18F		DMW-22A	DMW-22AF	
Laboratory ID	Ground	AC99975-009	AC99975-010		AC99992-013	AC99992-014		AC99975-011	AC99975-012	
Sample Date	Water	9/11/17	9/11/17		9/12/17	9/12/17		9/11/17	9/11/17	
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Antimony	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Arsenic	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Barium	1,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Beryllium	3	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cadmium	5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Calcium	NC	13,000	12,000	92.3%	23,000	21,000	91.3%	22,000	23,000	104.5%
Chromium	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Cobalt	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Copper	200	ND	ND	NC	ND	ND	NC	ND	ND	NC
Iron	300	***1,700***	***1,700***	100.0%	ND	ND	NC	***2,700***	***2,400***	88.9%
Lead	25	ND	ND	NC	ND	ND	NC	ND	ND	NC
Magnesium	35,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Manganese	300	78.0	120	153.8%	190	ND	NC	***560***	***610***	108.9%
Mercury	0.7	ND	ND	NC	ND	ND	NC	ND	ND	NC
Nickel	100	ND	ND	NC	ND	ND	NC	ND	ND	NC
Potassium	NC	5,500	ND	NC	ND	ND	NC	ND	ND	NC
Selenium	10	ND	ND	NC	ND	ND	NC	ND	ND	NC
Silver	50	ND	ND	NC	ND	ND	NC	ND	ND	NC
Sodium	20,000	26,000	28,000	107.7%	***17,000***	***16,000***	94.1%	***51,000***	***54,000***	105.9%
Thallium	0.5	ND	ND	NC	ND	ND	NC	ND	ND	NC
Vanadium	NC	ND	ND	NC	ND	ND	NC	ND	ND	NC
Zinc	2,000	ND	ND	NC	ND	ND	NC	ND	ND	NC
Turbidity	50 NTU	2.3			5.6			5.2		

Notes:
ND - Not Detected
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion
Groundwater Contaminants of Concern

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 4
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 SAMPLING EVENT
TOTAL VERSUS DISSOLVED METALS CONCENTRATIONS IN GROUNDWATER

Sample Location	NYSDEC	MW-22B	MW-22B	MW-22B	MW-23A	MW-23A	MW-23A	MW-23B	MW-23B	MW-23B
Sample ID	Class GA	DMW-22B	DMW-22BF		DMW-23A	DMW-23AF		DMW-23B	DMW-23BF	
Laboratory ID	Ground	AC99975-013	AC99975-016							
Sample Date	Water	9/11/17	9/11/17							
Filtered/Unfiltered	Criteria	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent	Unfiltered	Filtered	Percent
Metal		conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved	conc. Q	conc. Q	Dissolved
Aluminum	NC	ND	ND	NC						
Antimony	3	ND	ND	NC	well was			well was		
Arsenic	25	ND	ND	NC	paved over			paved over		
Barium	1,000	ND	ND	NC						
Beryllium	3	ND	ND	NC						
Cadmium	5	ND	ND	NC						
Calcium	NC	32,000	31,000	96.9%						
Chromium	50	ND	ND	NC						
Cobalt	NC	ND	ND	NC						
Copper	200	ND	ND	NC						
Iron	300	ND	ND	NC						
Lead	25	ND	ND	NC						
Magnesium	35,000	6,000	5,300	88.3%						
Manganese	300	***410***	***350***	85.4%						
Mercury	0.7	ND	ND	NC						
Nickel	100	ND	ND	NC						
Potassium	NC	ND	ND	NC						
Selenium	10	ND	ND	NC						
Silver	50	ND	ND	NC						
Sodium	20,000	22,000	21,000	95.5%						
Thallium	0.5	ND	ND	NC						
Vanadium	NC	ND	ND	NC						
Zinc	2,000	ND	ND	NC						
Turbidity	50 NTU	0.0								

Notes: ND - Not Detected
NC - both filtered and unfiltered result was "not detected"
BOLD/Italics - exceeds criterion
Groundwater Contaminants of Concern

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 4A
DZUS FASTENERS SITE (1-52-003)
SEPTEMBER AND NOVEMBER 2017 SAMPLING EVENTS
SUMMARY OF 1,4-DIOXANE AND PERFLUORINATED COMPOUNDS IN GROUNDWATER

Sample Location		MW-17		MW-1		MW-2		MW-3		MW-9		MW-9B	MW-13A
Sample ID	EPA	DMW-17		DMW-1		DMW-2		DMW-3		DMW-9		DMW-9B	DMW-13A
Laboratory IDs	Health	AD01097-012		AD01097-005		AD01097-001		AD01097-002		AD01097-003		AD01097-004	AD01097-016
	Advisory	AC99992-016		AC99992-003		AC99992-004		AC99992-011		AC99992-001		AC99992-002	AC99975-001
Sample Dates	Limit	11/9/17		11/8/17		11/8/17		11/8/17		11/8/17		11/8/17	11/9/17
		9/12/17		9/12/17		9/12/17		9/12/17		9/12/17		9/12/17	9/11/17
		conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc.	Q		conc.
1,4-Dioxane	350	ND		ND		ND		ND		ND		ND	ND
6:2 FTS		ND		ND		ND		ND		ND		ND	2.33
8:2 FTS		ND		ND		ND		ND		ND		ND	ND
NetFOSAA		ND		ND		ND		ND		ND		ND	18.4
NMeFOSAA		ND		ND		ND		ND		ND		ND	0.771 J
PFBA		4.82		6.58		ND		3.49		1.82 J		3.33	8.71
PFBS		5.9		23.3		4.07		3.52		9.44		5.37	4.65
PFDA		2.74		1.2 J		1.03 J		0.945 J		1.06 J		1.01 J	106
PFDoA		ND		ND		ND		ND		ND		ND	1.35 J
PFDS		ND		ND		ND		ND		ND		ND	6.62
PFHpA		5.36		8.61		2.96		4.15		2.72		3.18	14.6
PFHpS		0.522 J		0.442 J		ND		1.0 J		0.414 J		0.336 J	0.306 J
PFHxA		6.39		12.2		3.17		5.0		2.07 J		4.12	45.0
PFHxS		2.08 J		2.81		1.21 J		1.84 J		3.48		2.05	3.92
PFNA		6.19		2.79		2.02 J		1.96 J		2.2		1.49 J	17.3
PFOA	70	16.4		23.1		9.4		20.0		11.3		11.8	29.2
PFOS	70	29.4		24.0		8.75		34.9		29.8		21.3	23.4
PFPeA		6.03		11.1		ND		4.15		2.39		3.87	30.7
PFTreA		ND		ND		ND		ND		ND		ND	ND
PFTriA		ND		ND		ND		ND		ND		ND	0.207 J
PFuNA		1.05 J		ND		ND		ND		ND		ND	15.8
Total PFOA & PFOS	70	45.8		47.1		18.15		54.9		41.1		33.1	52.6

Notes:
All values in ng/L
ND - Not Detected
U - Undetected (reported as ND)
J - Estimated concentration

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 4A
DZUS FASTENERS SITE (1-52-003)
SEPTEMBER AND NOVEMBER 2017 SAMPLING EVENTS
SUMMARY OF 1,4-DIOXANE AND PERFLUORINATED COMPOUNDS IN GROUNDWATER

Sample Location		MW-13B		MW-15A		MW-15B		MW-18		MW-22A		MW-22B		MW-23A	MW-23B
Sample ID	EPA	DMW-13B		DMW-15A		DMW-15B		DMW-18		DMW-22A		DMW-22B		DMW-23A	DMW-23B
Laboratory IDs	Health	AD01097-017		AD01097-010		AD01097-011		AD01097-006		AD01097-013		AD01097-014			
	Advisory	AC99975-003		AC99975-007		AC99975-009		AC99992-013		AC99975-011		AC99975-013			
Sample Dates	Limit	11/9/17		11/9/17		11/9/17		11/8/17		11/9/17		11/9/17			
		9/11/17		9/11/17		9/11/17		9/12/17		9/11/17		9/11/17			
		conc.	Q	conc.	Q	conc.	Q	conc.	Q	conc.		conc.	Q		
1,4-Dioxane	350	ND		ND		ND		ND		ND		ND			
6:2 FTS		ND		ND		1.22	J	ND		ND		ND		well was	well was
8:2 FTS		ND		ND		0.352	J	ND		ND		ND		paved over	paved over
NetFOSAA		ND		ND		ND		ND		ND		ND			
NMeFOSAA		ND		ND		ND		ND		ND		ND			
PFBA		4.54		5.14		ND		1.7	J	5.05		3.65			
PFBS		7.91		6.6		ND		6.61		5.12		4.55			
PFDA		2.6		1.45	J	0.957	J	4.57		1.7	J	2.29			
PFDoA		ND		ND		ND		ND	U	ND		ND			
PFDS		ND		ND		ND		10.3		ND		ND			
PFHpA		14.2		5.77		1.7	J	2.21		7.17		7.52			
PFHpS		0.482	J	0.551	J	ND		ND	U	0.422	J	0.206	J		
PFHxA		9.48		7.77		3.49		2.27		8.55		7.21			
PFHxS		3.01		3.73		0.451	J	1.08	J	1.98	J	1.93	J		
PFNA		27.7		3.38		4.85		1.92	J	3.22		6.62			
PFOA	70	44.1		20.4		2.84		5.64		18.2		22.2			
PFOS	70	28.9		49.2		1.67	J	19.4		22.1		19.6			
PFPeA		6.79		6.53		ND		2.38		8.37		5.99			
PFTreA		ND		ND		ND		ND		ND		ND			
PFTriA		ND		ND		ND		ND		ND		ND			
PFuNA		ND		ND		0.536		0.434	J	0.59	J	ND			
Total PFOA & PFOS	70	***73.0***		69.6		4.51		25.04		40.3		41.8			

Notes:
All values in ng/L
ND - Not Detected
U - Undetected (reported as ND)
J - Estimated concentration

Upgradient Wells
Source Area Wells
Downgradient Wells
Willetts Creek Wells

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-1 E0868-01A 6/21/06 conc. Q	Lake Capri SW-1 F1193-20A 8/23/07 conc. Q	Lake Capri SW-1 G2136-11 11/14/08 conc. Q	Lake Capri SW-1 J0376-01A 3/4/10 conc. Q	Lake Capri SW-1 K0911-08 5/22/11 conc. Q	Lake Capri SW-1 L1949-01 09/17/12 conc. Q	Lake Capri SW-1 AC75648-158 11/8/13 conc. Q	Lake Capri SW-1 AC84282-012 4/11/15 conc. Q	Lake Capri SW-1 AC91487-001 5/20/16 conc. Q	Lake Capri SW-1 AD00167-008 9/21/17 conc. Q
Aluminum	NC	31.9 B	40.1 B	ND	29.6 B	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	***6.0 B***	ND	ND	ND	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	0.56 JB	ND	ND	ND
Barium	1,000	13.2 B	23.1 B	31.8 B	22.4 B	13.6 B	20.8 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND U	ND	ND	ND	ND	ND
Cadmium	5	1.1 B	2.3 B	1.5 B	2.6 B	1.6 B	ND	1.5 J	3.4	ND	2.7
Calcium	NC	15,100	14,100	14,300	15,300	13,900	14,900	16,000	15,000	15,000	16,000
Chromium	50	0.6 B	0.95 B	ND	0.52 B	1.3 B	ND	ND	ND	ND	ND
Cobalt	NC	0.94 B	1.4 BE	ND	0.76 B	0.77 B	ND	0.80 J	ND	ND	ND
Copper	200	8.9 B	3.1 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***691***	***738***	***598***	***387***	***416***	172 B	***1,100***	***370***	ND	***800***
Lead	50	ND	2.1 B	ND	ND	ND	ND	3.2	ND	ND	ND
Magnesium	35,000	3,500	2,860	3,570	3,420	2,960	3,420	ND	ND	ND	ND
Manganese	300	***1,050***	***862***	***1,610***	***996***	***1,000***	***552***	***1,700***	***760***	***540***	***1,400***
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	1.3 B	0.6 B	ND	1.6 B	ND	ND	ND	ND	ND	ND
Potassium	NC	2,000	1,930	2,250	2,070	2,040	2,300	ND	ND	ND	ND
Selenium	10	ND	6.0 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	1.8 B	2.8 B	0.98 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,500	15,800	19,000	***22,500***	18,700	***24,600***	***25,000***	***24,000***	***23,000***	***28,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.78 B	0.79 B	ND	2.6 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	22.4 B	22.8 B	22.3 B	38 B	22.3 B	10.1 B	ND	ND	ND	ND

Notes:
All values in µg/L
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
NC - No Criteria
ND - Not Detected
Surface Water Contaminants of Concern

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-2 E0868-03A 6/21/06 conc. Q	Lake Capri SW-2 F1194-02A 8/23/07 conc.	Lake Capri SW-2 G2136-09 11/14/08 conc. Q	Lake Capri SW-2 J0376-02A 3/4/10 conc. Q	Lake Capri SW-2 K0911-09 5/22/11 conc. Q	Lake Capri SW-2 L1949-02 09/17/12 conc. Q	Lake Capri SW-2 AC75648-159 11/8/13 conc. Q	Lake Capri SW-2 AC84282-013 4/11/15 conc. Q	Lake Capri SW-2 AC91487-002 5/20/16 conc. Q	Lake Capri SW-2 AD00167-010 9/21/17 conc. Q
Aluminum	NC	16.8 B	98.4 B	ND	33.2 B	ND	ND	ND	ND	300	ND
Antimony	3	ND	ND	ND	***5.7 B***	ND	ND	0.58 J	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	1.1 JB	ND	ND	ND
Barium	1,000	12.2 B	24.3 B	32.4 B	24.2 B	12.9 B	20.2 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	0.33 J	ND	ND	ND
Cadmium	5	1.0 B	2.1 B	2.0 B	2.8 B	1.7 B	ND	0.82 J	2.8	2.7	ND
Calcium	NC	14,900	13,300	14,300	16,100	13,900	14,700	15,000	15,000	14,000	17,000
Chromium	50	0.52 B	1.2 B	ND	0.86 B	0.72 B	ND	ND	ND	ND	ND
Cobalt	NC	0.92 B	1 B	ND	1 B	ND	ND	0.97 J	ND	ND	ND
Copper	200	ND	4.4 B	ND	6.2 B	ND	ND	ND	ND	ND	ND
Iron	300	***649***	***819***	***675***	***478***	***508***	176 B	***680***	***510***	***1,100***	ND
Lead	50	ND	3.1 B	2.4 B	ND	ND	ND	1.5 J	ND	9.1	ND
Magnesium	35,000	3,490	2,940	3,530	3,700	2,940	3,360	ND	ND	ND	ND
Manganese	300	***1,010***	***819 E***	***1,560***	***968***	***1,080***	***564***	***1,300***	***840***	***410***	250
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	1.1 B	0.81 B	ND	2.4 B	ND	ND	ND	ND	ND	ND
Potassium	NC	1,990	1,990	2,320	2,080	1,990	2,330	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	1.6 B	3.1 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,100	16,200 E	19,500	***22,000***	18,600	***23,800***	***21,000***	***24,000***	***21,000***	***28,000***
Thallium	0.5	ND	ND	ND	***7.2 B***	ND	ND	***0.74 J***	ND	ND	ND
Vanadium	NC	ND	0.88 B	1.1 B	3.3 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	15.6 B	27.4 B	21 B	34.5 B	20.3 B	5.3 B	ND	ND	ND	ND

Notes:
All values in µg/L
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
NC - No Criteria
ND - Not Detected
Surface Water Contaminants of Concern

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-3 E0868-05A 6/21/06 conc. Q	Lake Capri SW-3 F1194-04A 8/23/07 conc. Q	Lake Capri SW-3 G2136-13 11/14/08 conc. Q	Lake Capri SW-3 J0376-03A 3/4/10 conc. Q	Lake Capri SW-3 K0911-10 5/22/11 conc. Q	Lake Capri SW-3 L1949-03 09/17/12 conc. Q	Lake Capri SW-3 AC75648-165 11/8/13 conc. Q	Lake Capri SW-3 AC84282-014 4/11/15 conc. Q	Lake Capri SW-3 AC91487-003 5/20/16 conc. Q	Lake Capri SW-3 AD00167-012 9/21/17 conc. Q
Aluminum	NC	69.5 B	37 U	ND	27 B	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	***7.2 B***	ND	ND	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	0.62 JB	ND	ND	ND
Barium	1,000	7.9 B	12.6 B	38.6 B	19.6 B	10.1 B	17.2 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	1.9 B	0.32 B	0.97 B	2.8 B	1.4 B	ND	1.7 JB	ND	ND	ND
Calcium	NC	15,200	13,100	14,000	15,000	13,900	14,500	16,000	15,000	14,000	16,000
Chromium	50	0.58 B	0.7 B	ND	0.59 B	0.67 B	ND	ND	ND	ND	ND
Cobalt	NC	0.72 B	1.0 B	ND	ND	ND	ND	2.0	ND	ND	ND
Copper	200	ND	3.9 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***788***	280	***772***	***332***	***311***	144 B	***590***	ND	ND	ND
Lead	50	0.92 B	ND	ND	ND	ND	ND	3.5	ND	ND	ND
Magnesium	35,000	3,540	2,990	3,440	3,380	3,030	3,310	ND	ND	ND	ND
Manganese	300	***882***	73.9 E	***1,790***	***911***	***990***	***355***	***940***	***640***	130	180
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	0.96 B	ND	ND	1.3 B	ND	ND	ND	ND	ND	ND
Potassium	NC	2,000	2,020	2,290	2,000	2,000	2,210	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	1.3 B	3.4 B	0.64 B	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,300	16,800 E	17,700	***23,300***	18,800	***23,500***	***23,000***	***23,000***	***22,000***	***27,000***
Thallium	0.5	ND	ND	ND	***5.9 B***	ND	ND	ND	ND	ND	ND
Vanadium	NC	0.7 B	0.42 B	ND	2.8 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	21.5 B	14 B	16.4 B	33.4 B	18.9 B	ND	ND	ND	ND	ND

Notes:
All values in µg/L
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
NC - No Criteria
ND - Not Detected
Surface Water Contaminants of Concern

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Class A Surface Water Criteria	Lake Capri SW-4 E0868-07A 6/21/06 conc. Q	Lake Capri SW-4 F1194-06A 8/23/07 conc. Q	Lake Capri SW-4 G2136-15 11/14/08 conc. Q	Lake Capri SW-4 J0376-04A 3/4/10 conc. Q	Lake Capri SW-4 K0911-11 5/22/11 conc. Q	Lake Capri SW-4 L1949-04 09/17/12 conc. Q	Lake Capri SW-4 AC75648-164 11/8/13 conc. Q	Lake Capri SW-4 AC84282-015 4/11/15 conc. Q	Lake Capri SW-4 AC91487-004 5/20/16 conc. Q	Lake Capri SW-4 AD00167-014 9/21/17 conc. Q
Aluminum	NC	ND	ND	ND	27.4 B	ND	ND	ND	ND	ND	ND
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	0.50 JB	ND	ND	ND
Barium	1,000	5.7 B	14 B	31.9 B	20.2 B	9.8 B	19.6 B	ND	ND	ND	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	0.89 B	0.77 B	0.63 B	2.6 B	1.4 B	ND	0.93 J	ND	ND	ND
Calcium	NC	14,600	12,900	14,000	15,300	13,700	13,900	15,000	13,000	16,000	16,000
Chromium	50	ND	0.88 B	ND	0.51 B	0.75 B	ND	ND	ND	ND	ND
Cobalt	NC	0.37 B	1.2 B	ND	ND	ND	ND	0.44 J	3.1	ND	ND
Copper	200	11.7 B	4.9 B	ND	ND	ND	ND	ND	ND	ND	ND
Iron	300	***610***	***609***	***741***	***344***	***322***	152 B	***450***	***390***	ND	ND
Lead	50	ND	2.2 B	ND	ND	ND	ND	2.4 J	ND	ND	ND
Magnesium	35,000	3,510	2,950	3,490	3,420	2,980	3,190	ND	ND	ND	ND
Manganese	300	***786***	135 E	***1,630***	***943***	***918***	***463***	***910***	***550***	150	250
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	0.6 B	ND	ND	0.88 B	ND	ND	ND	ND	ND	ND
Potassium	NC	1,950	2,040	2,310	1,980	1,960	2,150	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	2.8 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	18,100	16,600 E	17,800	***22,900***	18,700	***23,900***	***22,000***	17,000	***23,000***	***27,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	***2.0***	ND	ND
Vanadium	NC	ND	ND	ND	2 B	ND	ND	ND	ND	ND	ND
Zinc	2,000	20.2 B	18 B	9.7 B	31.9 B	18.9 B	5.3 B	ND	ND	ND	ND

Notes:
All values in µg/L
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
NC - No Criteria
ND - Not Detected
Surface Water Contaminants of Concern

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Class A Surface Water Criteria	Willetts Creek SW-5 E0868-09A 6/21/06 conc. Q	Willetts Creek SW-5 F1193-18A 8/23/07 conc. Q	Willetts Creek SW-5 G2114-20 11/12/08 conc. Q	Willetts Creek SW-5 J0376-05A 3/4/10 conc. Q	Willetts Creek SW-5 K0911-12 5/22/11 conc. Q	Willetts Creek SW-5 L1949-05 09/18/12 conc. Q	Willetts Creek SW-5 AC75648-163 11/8/13 conc. Q	Willetts Creek SW-5 AC84282-003 4/11/15 conc. Q	Willetts Creek SW-5 AC91487-005 5/20/16 conc. Q	Willetts Creek SW-5 AD00167-004 9/21/17 conc. Q
Aluminum	NC	15.3 B	ND	ND	79.3 B	305	ND	1,200	ND	1,700	ND
Antimony	3	1.5 B	***4.4 B***	ND	ND	ND	ND	0.54 J	ND	ND	ND
Arsenic	50	ND	ND	ND	5.2 B	ND	ND	3.7 B	ND	5.3	ND
Barium	1,000	36.9 B	36.4 B	26.2 B	24.6 B	40.7 B	31.4 B	71.0	ND	82.0	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	***5.7***	***5.6***	3.0 B	***5.1***	***8.8***	4.1 B	***15.0***	***6.9***	***27.0***	***5.6***
Calcium	NC	14,400	16,100	12,500	17,800	19,200	15,200	12,000	15,000	16,000	13,000
Chromium	50	ND	0.39 B	ND	0.99 B	2.6 B	ND	ND	ND	ND	ND
Cobalt	NC	0.82 B	1.9 BE	ND	ND	1.8 B	ND	5.4	ND	5.2	ND
Copper	200	ND	1.7 B	ND	5.6 B	11.3 B	3.8 B	ND	ND	ND	ND
Iron	300	***632***	***599***	***1,060***	***959***	***4,080***	***690***	***14,000***	***460***	***24,000***	***390***
Lead	50	ND	ND	ND	ND	10.2	ND	38.0	ND	***53.0***	ND
Magnesium	35,000	3,550	3,420	3,100	3,960	4,020	3,510	ND	ND	ND	ND
Manganese	300	***1,420***	***1,110***	***956***	***450***	***923***	***519***	***3,000***	***280***	***3,100***	***590***
Mercury	0.7	ND	ND	ND	ND	ND	ND	0.16 J	ND	ND	ND
Nickel	100	0.98 B	0.85 B	ND	1.1 B	1.4 B	ND	ND	ND	ND	ND
Potassium	NC	2,080	2,040	1,780	2,070	2,340	2,240	ND	ND	ND	ND
Selenium	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	3.1 B	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	***21,100***	***21,800***	18,100	***20,300***	***26,900***	***28,100***	***22,000***	***24,000***	***24,000***	***24,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NC	ND	ND	0.99 B	12.1 B	6.9 B	ND	ND	ND	ND	ND
Zinc	2,000	22 B	21.2 B	10.4 B	38.5 B	98.7	15.9 B	78.0	ND	100	ND

Notes: All values in µg/L
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
NC - No Criteria
ND - Not Detected
Surface Water Contaminants of Concern

TABLE 5
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SURFACE WATER SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Class A Surface Water Criteria	Willetts Creek SW-6 E0868-11A 6/21/06 conc. Q	Willetts Creek SW-6 F1194-08A 8/23/07 conc. Q	Willetts Creek SW-6 G2114-16 11/12/08 conc. Q	Willetts Creek SW-6 J0376-06 3/4/10 conc. Q	Willetts Creek SW-6 K0911-13 5/22/11 conc. Q	Willetts Creek SW-6 L1949-06 09/17/12 conc. Q	Willetts Creek SW-6 11/8/13 conc. Q	Willetts Creek SW-6 AC84282-004 4/11/15 conc. Q	Willetts Creek SW-6 AC91487-006 5/20/16 conc. Q	Willetts Creek SW-6 AD00167-002 9/21/17 conc. Q	Lake Capri Cove SC-4 AC84282-005 4/11/15 conc. Q
Aluminum	NC	40.5 B	ND	190 B	63.9 B	103 B	84.4 B		ND	420	1,400	ND
Antimony	3	ND	***8.0 B***	ND	ND	ND	ND	creekbed	ND	ND	ND	ND
Arsenic	50	ND	ND	ND	ND	ND	ND	was dry	ND	4.7	3.6	ND
Barium	1,000	35.5 B	40.6 B	37.7 B	22.8 B	27.8 B	23.6 B	at the	ND	59.0	69.0	ND
Beryllium	3	ND	ND	ND	ND	ND	ND	time of	ND	ND	ND	ND
Cadmium	5	0.55 B	2.8 B	***75.4***	ND	ND	ND	sampling	ND	ND	ND	ND
Calcium	NC	26,700	27,200	20,100	19,200	25,100	21,400		21,000	30,000	29,000	15,000
Chromium	50	0.99 B	0.88 B	7.2 B	1.5 B	0.73 B	1.7 B		ND	ND	ND	ND
Cobalt	NC	3.1 B	2.8 B	ND	ND	ND	ND		ND	ND	3.3	ND
Copper	200	ND	2.8 B	ND	ND	ND	ND		ND	ND	ND	ND
Iron	300	***5,400***	***2,170***	***4,010***	***639***	***2,280***	***6,840***		***2,000***	***38,000***	***4,600***	ND
Lead	50	ND	2.5 B	9.8 B	ND	ND	ND		ND	4.4	39.0	ND
Magnesium	35,000	5,130	5,290	4,080	4,320	4,960	4,860		ND	5,000	6,900	ND
Manganese	300	***2,610***	***1,510 E***	***1,040***	***406***	***869***	***1,160***		***550***	***3,800***	***2,700***	***640***
Mercury	0.7	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND
Nickel	100	1.4 B	1.5 B	ND	1.8 B	ND	0.91 B		ND	ND	ND	ND
Potassium	NC	2,230	2,480	2,830	2,250	2,810	2,460		ND	ND	ND	ND
Selenium	10	ND	ND	ND	***10.5 B***	ND	ND		ND	ND	ND	ND
Silver	50	ND	5.9 B	ND	ND	ND	ND		ND	ND	ND	ND
Sodium	20,000	***29,200***	***33,600 E***	***26,000***	***20,500***	***33,800***	***32,100***		***28,000***	***33,000***	13,000	***23,000***
Thallium	0.5	ND	ND	ND	ND	ND	ND		ND	ND	ND	ND
Vanadium	NC	1.1 B	0.63 B	1.6 B	1.6 B	ND	ND		ND	ND	ND	ND
Zinc	2,000	35.6 B	32.2 B	48.2 B	43.3 B	35.8 B	21.3 B		ND	97.0	210	ND

Notes:
All values in µg/L
E - Estimated due to matrix interference
* - Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
B - Estimated value (greater than MDL but less than RL)
NC - No Criteria
ND - Not Detected
Surface Water Contaminants of Concern

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri
Sample ID			SED-1	SED-1	SED-1	SED-1	SED-1	SED-1	SED-1	SED-1	SED-1	SED-1
Laboratory ID			E0868-02A	F1193-19A	G2136-10	J0376-09A	K0911-01	L1949-09	AC75648-012	AC84282-006	AC91487-010	AD00167-007
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13	4/11/15	5/20/16	9/21/17
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	5,020	895	7630 *	6,730 E	9,620	10,800	4,200	2,600	7,800	2,500
Antimony	2.0	25	0.7 B	0.41 B	***2.2*** BN	***6.4***	ND	ND	ND	ND	ND	ND
Arsenic	6.0	33	***7.9***	1.5	***8.7***	***16.1***	***15.2*** *	***18.1***	ND	5.6	***17.0***	1.2
Barium	NC	NC	81.2	31.9	67.7 B*E	175	445	203	73.0	39.0	170.0	13.0
Beryllium	NC	NC	0.5 B	0.074 B	0.64 B	0.75 BE	0.87 B	0.34 B	ND	ND	ND	ND
Cadmium	0.6	9	***47.8***	***11.6***	***61.4*** N*E	***69.2***	***81.2*** *	***89.8***	***63.0***	***26.0***	***63.0***	***5.8***
Calcium	NC	NC	2,540	646	3,140 *	5,180 *	7,440 *	3,340	ND	ND	5,800	1,300
Chromium	26	110	20.7	2.8	***27.1*** E	***39.1*** *	***50.0*** *	***57.4***	ND	ND	***37.0***	7.0
Cobalt	NC	NC	7.6	3.7	20.2 E	20.9	29.4 E	19.7 B	ND	ND	17.0	ND
Copper	16	110	***38.6***	***86.3***	***65.7***	***127*** *	***121*** *	***144***	***61.0***	***220***	***96.0***	***18.0***
Iron	20,000	20,000	10,300	3,880	19,700 E	***36,000***	***44,600*** *	***26,700***	8,200	8,600	***33,000***	4,800
Lead	31	110	***170***	19.3	***176*** N*E	***225***	***226*** N*	***289***	***110***	***72***	***200***	22.0
Magnesium	NC	NC	1,300	217	1,260 *E	1,770	2,100 *E	2,170	ND	ND	2,600	770
Manganese	460	1,100	***1,290***	***1,200***	181 *	***2,250***	***22,600*** *	***3,620***	***3,600***	310	***2,500***	170
Mercury	0.15	1.3	***0.21***	0.0071 B	***0.34***	***0.38***	***0.33*** B	***0.52***	ND	ND	ND	ND
Nickel	16	50	11.4	3.0	***19.4***	***24.1 E***	***24.1 ****	***27.3***	ND	ND	***24.0***	ND
Potassium	NC	NC	514	91.9	465 *	429	748	660	ND	ND	ND	ND
Selenium	NC	NC	1.6 B	0.64 B	ND	5.0 B	ND	6.1 B	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	ND	ND	***2.7 B***	ND	ND	ND	ND	ND
Sodium	NC	NC	117	44.2 B	136 B	339	433	388 B	ND	ND	ND	ND
Thallium	NC	NC	5.8	ND	ND	12.7	3.8 B	8.6 B	ND	ND	ND	ND
Vanadium	NC	NC	29.4	5.1	39.9 E	78.7 E	99.2	90.5	ND	ND	70.0	ND
Zinc	120	270	***215***	71.6	***445*** *E	***493*** *	***572*** *	***642***	***210***	***140***	***410***	55.0

Notes:
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limts

All values in mg/kg
NC - No Criteria
ND - Not Detected
Sediment Contaminants of Concern

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri
Sample ID			SED-2	SED-2	SED-2	SED-2	SED-2	SED-2	SED-2	SED-2	SED-2	SED-2
Laboratory ID			E0868-04A	F1194-01A	G2136-08	J0376-10A	K0911-02	L1949-10	AC75648-012	AC84282-007	AC91487-011	AD00167-009
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13	4/11/15	5/20/16	9/21/17
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	15,500	1,850	2,800 *	9,050 E	8,310	8,300	9,100	12,000	13,000	8,500
Antimony	2.0	25	0.92 B	0.82 B	0.19 BN	1.3 B	ND	ND	ND	ND	ND	ND
Arsenic	6.0	33	***19.7***	2.0 B	1.8	***20.2***	***13.4*** *	***19.2***	ND	***15.0***	***25.0***	***17.0***
Barium	NC	NC	89.8	57.9	40.8 *E	173	108	209	270	91.0	230	360
Beryllium	NC	NC	1.2	0.16 B	0.16 B	0.89 E	0.75 B	0.40 B	ND	ND	ND	ND
Cadmium	0.6	9	***133***	***21.2***	***12.5*** N*E	***111***	***96.6*** *	***122***	***96.0***	***150***	***140***	***79.0***
Calcium	NC	NC	2,860	1,320	1,400 *	3,810 *	4,330 *	4,090	ND	ND	ND	ND
Chromium	26	110	***33.7***	7.7	6.5 E	***49.4*** *	***45.2*** *	***47.7***	***45.0***	***49.0***	***72.0***	ND
Cobalt	NC	NC	12.1	8.1	3 BE	17.8	11.1 E	16.5	20.0	13.0	19.0	ND
Copper	16	110	***210***	***19.6***	15.6	***97.7*** *	***80.2*** *	***91.0***	***130***	***130***	***140***	***120***
Iron	20,000	20,000	***20,300***	8,940	3,850 E	***27,500***	17,300 *	***25,400***	***42,000***	17,000	***24,000***	***61,000***
Lead	31	110	***315***	***40.7***	25.8 N*E	***375***	***315*** N*	***408***	***280***	***340***	***600***	***190***
Magnesium	NC	NC	1,510	404	305 *E	1,690	1,360 *E	1,500	ND	ND	ND	ND
Manganese	460	1,100	153	***1,300***	***769*** *	***3,510***	***1,480*** *	***3,790***	***6,800***	***1,900***	***2,600***	***14,000***
Mercury	0.15	1.3	***0.45***	0.047 BN	0.018 B	***0.35***	***0.5***	***0.49***	ND	***0.35***	***0.51***	ND
Nickel	16	50	***17.6***	6.8 E	3.2 B	***22.0*** E	***17.6*** *	***21.9***	ND	ND	***30.0***	ND
Potassium	NC	NC	555	200 E	123 *	373	389	428	ND	ND	ND	ND
Selenium	NC	NC	2.2 B	1.2 B	ND	ND	ND	6.2 B	ND	ND	ND	ND
Silver	1.0	2.2	0.33 B	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NC	NC	143	92.5 B	46.5 B	200	219	228	ND	ND	ND	ND
Thallium	NC	NC	0.39 B	ND	ND	20.5	2.5 B	9.8	ND	ND	ND	ND
Vanadium	NC	NC	55.9	11.9	5.8 E	61.3 E	54.0	60.8	84.0	ND	83.0	ND
Zinc	120	270	***402***	***138***	67.9 *E	***495*** *	***406*** *	***526***	***550***	***480***	***770***	***480***

Notes:
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limts

All values in mg/kg
NC - No Criteria
ND - Not Detected
Sediment Contaminants of Concern

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri
Sample ID			SED-3	SED-3	SED-3	SED-3	SED-3	SED-3	SED-3	SED-3	SED-3	SED-3
Laboratory ID			E0868-06A	F1194-03A	G2136-14	J0376-11A	K0911-03	L1949-11	AC75648-015	AC84282-008	AC91487-012	AD00167-011
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13	4/11/15	5/20/16	9/21/17
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	690	2,010	5,860 *	3,490 E	5,890	1,580	6,000	6,600	15,000	4,300
Antimony	2.0	25	ND	0.35 B	0.63 BN	ND	ND	ND	ND	ND	ND	ND
Arsenic	6.0	33	0.31 B	3.1	4.2 B	2.4	5.7 *	2.3	ND	4.2	***8.3***	5.1
Barium	NC	NC	6.7	29.7	88.2 *E	23.1	65.1	10.2 B	62.0	ND	130	47.0
Beryllium	NC	NC	0.047 B	0.18 B	0.30 B	0.29 BE	0.50	0.037 B	ND	ND	ND	ND
Cadmium	0.6	9	***1.5***	***27.7***	***1.7*** N*E	***22.3***	***16.1*** *	***14.1***	***53.0***	***64.0***	***90.0***	***53.0***
Calcium	NC	NC	104	605	11,700 *	1,260 *	2,940 *	199	ND	ND	ND	3,400
Chromium	26	110	1.5	7.9	9.6 E	13.7 *	9.1 *	3.7	21.0	ND	***57.0***	18.0
Cobalt	NC	NC	0.66 B	4.7	12.6 E	3.6	5.7 E	2.4 B	9.8	ND	32.0	9.1
Copper	16	110	2.7	***16.7***	***32.4***	***32.5*** *	10.9 *	8.5	***57.0***	***70.0***	***160***	***46.0***
Iron	20,000	20,000	920	5,730	10,900 E	3,770	6,240 *	1,830	9,100	9,200	***26,000***	9,600
Lead	31	110	9.2	***44.2***	***34.0*** N*E	***85.9***	***46.0*** N*	21.4	***130***	***150***	***350***	***100***
Magnesium	NC	NC	121	326	4,200 *E	527	675 *E	158	ND	ND	ND	ND
Manganese	460	1,100	89.8	***568***	***908*** *	357	***1,090*** *	132	***1,600***	370	***1,600***	390
Mercury	0.15	1.3	0.016 B	0.049 BN	0.074 B	0.11	0.061 B	0.032 B	ND	ND	ND	***0.29***
Nickel	16	50	1.6 B	5.0 E	8.5 B	7.4 E	5.8 *	2.4 B	ND	ND	***38.0***	ND
Potassium	NC	NC	115	168 E	1,010 *	173	254	68.7	ND	ND	ND	ND
Selenium	NC	NC	0.2 B	1.2 B	ND	ND	ND	ND	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NC	NC	13.7 B	51.5 B	528	90.5	103	21.8 B	ND	ND	ND	ND
Thallium	NC	NC	0.33 B	ND	ND	1.7	1.1 B	0.36 B	ND	ND	ND	ND
Vanadium	NC	NC	1.8	9.5	36.4 E	12.5 E	10.7	3.3	ND	ND	60	ND
Zinc	120	270	10.0	110	71.3 *E	106 *	73.5 *	44.7	***220***	***250***	***630***	***200***

Notes:
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limts

All values in mg/kg
NC - No Criteria
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Sediment Contaminants of Concern

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri	Lake Capri
Sample ID			SED-4	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4	SED-4
Laboratory ID			E0868-08A	F1194-05A	G2136-16	J0376-12A	K0911-04	L1949-12	AC75648-016	AC84282-009	AC91487-013	AD00167-013
Sample Date	Lowest Effect	Highest Effect	6/21/06	8/23/07	11/14/08	3/4/10	5/22/11	9/17/12	11/8/13	4/11/15	5/20/16	9/21/17
			conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q	conc. Q
Aluminum	NC	NC	2,730	3,290	1,790 *	2,170 E	5,850	11,700	13,000	4,800	1,900	13,000
Antimony	2.0	25	0.22 B	0.76 B	0.42 BN	0.3 B	ND	ND	ND	ND	ND	ND
Arsenic	6.0	33	3.4	4.0	3.9	1.9	4.4 *	***6.2 B***	ND	4.8	4.3	5.8
Barium	NC	NC	41.5	47.8	177 *E	18.7	64.8	103	110	66	19.0	110
Beryllium	NC	NC	0.2 B	0.22 B	0.13 B	0.19 BE	0.45 B	0.36 B	ND	ND	ND	ND
Cadmium	0.6	9	***32.3***	***32.3***	***15.8*** N*E	***14.8***	***47.3*** *	***79.5***	***98.0***	***57.0***	***49.0***	***74.0***
Calcium	NC	NC	588	1,240	8,090 *	758 *	2,560 *	3,200	ND	ND	ND	4,500
Chromium	26	110	8.6	12.5	6.8 E	8.1 *	21.7 *	***45.4***	***47.0***	ND	ND	***48.0***
Cobalt	NC	NC	4.9	10.0	7.0 E	3.1	9.5 E	13.3 B	ND	11	6.3	20.0
Copper	16	110	***21.6***	***35.7***	***17.1***	***22.6*** *	***49.5*** *	***117***	***140***	***54***	***21.0***	***140***
Iron	20,000	20,000	4,450	9,330	7,280 E	2,540	9,170 *	12,800	17,000	9,000	4,300	***20,000***
Lead	31	110	***71.2***	***193***	***34.3*** N*E	***60.6***	***129*** N*	***297***	***310***	***110***	***43.0***	***400***
Magnesium	NC	NC	352	519	653 *E	304	868 *E	1,650	ND	ND	ND	ND
Manganese	460	1,100	***837***	***845***	***11,700*** *	272	***1,150*** *	***1,820***	***2,300***	***1,100***	180	***830***
Mercury	0.15	1.3	0.096	0.059 BN	***0.21***	0.082	***0.18***	***0.39***	ND	ND	ND	***1.1***
Nickel	16	50	6.0	10.7 E	6.3	4.8 E	13 *	***25.3***	ND	ND	ND	***30.0***
Potassium	NC	NC	145	236 E	281 *	103	383	623	ND	ND	ND	ND
Selenium	NC	NC	0.76 B	1.9 B	3.3	ND	ND	4.6 B	ND	ND	ND	ND
Silver	1.0	2.2	ND	ND	***1.1 B***	ND	ND	ND	ND	ND	ND	ND
Sodium	NC	NC	35.4 B	87.0	131	56 B	145 B	312 B	ND	ND	ND	ND
Thallium	NC	NC	3.7	ND	2.8	1.6	1.7 B	4.6 B	ND	ND	ND	ND
Vanadium	NC	NC	9.2	16.9	7.4 E	7.2 E	26.6	41.2	ND	ND	ND	45.0
Zinc	120	270	***122***	***186***	110 *E	71.3 *	***232*** *	***323***	***330***	***250***	110	***510***

Notes:
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
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TABLE 6
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JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Technical Guidance for Sediment Criteria Lowest Effect	NYSDEC Technical Guidance for Sediment Criteria Highest Effect	Willetts Creek SED-5 E0868-10A 6/21/06 conc.	Q	Willetts Creek SED-5 F1193-17A 8/23/07 conc.	Q	Willetts Creek SED-5 G2114-21 11/14/08 conc.	Q	Willetts Creek SED-5 J0376-13A 3/4/10 conc.	Q	Willetts Creek SED-5 K0911-05 5/22/11 conc.	Q	Willetts Creek SED-5 L1949-13 9/18/12 conc.	Q	Willetts Creek SED-5 AC75648-017 11/8/13 conc.	Q	Willetts Creek SED-5 AC84282-010 4/11/15 conc.	Q	Willetts Creek SED-5 AC91487-014 5/20/16 conc.	Q	Willetts Creek SED-5 AD00167-003 9/21/17 conc.	Q
Aluminum	NC	NC	1,060		552		5,150		2,540	E	6,300		345		820		5,300		9,900		6,600	
Antimony	2.0	25	0.074	B	0.27	B	1.1	BN	0.68	B	1.4	BN	ND		ND		ND		ND		ND	
Arsenic	6.0	33	0.6	B	0.52	B	***8.2***		***6.5***		***9.3***	*	1.6		ND		***11.0***		***18.0***		1.4	
Barium	NC	NC	12.1		13.6		96.6		84.6		114		15.1		ND		120		150		42.0	
Beryllium	NC	NC	0.083	B	0.03	B	0.34	B	0.24	BE	0.57	B	0.010	B	ND		ND		ND		ND	
Cadmium	0.6	9	0.43		***1.6***		***52.0***		***28.8***		***73.5***	*	***1.7***		***7.1***		***62.0***		***140***		***8.6***	
Calcium	NC	NC	228		1,430		4,150		3,470	*	7,960	*	330		ND		4,300		13,000		15,000	
Chromium	26	110	3.8		2.7		***33.3***		18.5	*	***44.0***	*	3.5		ND		***35.0***		***64.0***		***26.0***	
Cobalt	NC	NC	1.2	B	1.1	B	7.8		7.4		13.3	E	1.1	B	ND		13.0		20.0		4.2	
Copper	16	110	4.7		4.7		***103***		***54.0***	*	***166***	*	9.0		***42.0***		***110***		***210***		***38.0***	
Iron	20,000	20,000	3,400		3,410		***23,900***		***25,800***		***39,900***	*	4,180		5,100		***32,000***		***42,000***		15,000	
Lead	31	110	7.9		4.9		***215***	E	***83.3***		***229***	N*	9.4		***37.0***		***190***		***350***		***100***	
Magnesium	NC	NC	604		864		1,370		701		1,370	*E	75.8		ND		ND		2,500		9,000	
Manganese	460	1,100	174		291		***2,140***		***3,750***		***1,210***	*	417		***610***		***3,500***		***670***		220	
Mercury	0.15	1.3	0.016	B	0.0055	B	***0.48***		***0.26***		***0.37***		0.023	B	ND		***1.2***		***0.73***		***0.15***	
Nickel	16	50	1.6		1.0	B	***19.2***		8.0	E	***22.5***	*	1.9	B	ND		ND		***32.0***		13.0	
Potassium	NC	NC	135		58.3		320		188		360		29.6	B	ND		ND		ND		730	
Selenium	NC	NC	0.28	B	0.56	B	ND		2.3	B	ND		0.87	B	ND		ND		ND		ND	
Silver	1.0	2.2	ND		ND		ND		0.52	B	ND		0.084	B	ND		ND		ND		ND	
Sodium	NC	NC	18.3	B	102		204		141		323		11.7	B	ND		ND		ND		ND	
Thallium	NC	NC	0.56	B	ND		2.1	B	20.1		1.9	B	0.76	B	ND		ND		ND		ND	
Vanadium	NC	NC	5.6		4.5		54.2		44.6	E	175		7.8		27.0		60.0		130		42.0	
Zinc	120	270	13.2		26.2		***290***	E	***171***	*	***440***	*	24.2		78.0		***360***		***700***		***340***	

Notes:
B - Estimated value (greater than MDL but less than RL)
BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
* - Percent recovery for duplicates were not within QC limits
N - Spike recoveries were not within QC limts

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NC - No Criteria
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Sediment Contaminants of Concern

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location / Sample ID / Laboratory ID / Sample Date	NYSDEC Technical Guidance for Sediment Criteria Lowest Effect	NYSDEC Technical Guidance for Sediment Criteria Highest Effect	Willetts Creek SED-6 E0868-12A 6/21/06 conc.	Q	Willetts Creek SED-6 F1194-07A 8/23/07 conc.	Q	Willetts Creek SED-6 G2114-17 11/14/08 conc.	Q	Willetts Creek SED-6 J0376-14 3/4/10 conc.	Q	Willetts Creek SED-6 K0911-06 5/22/11 conc.	Q	Willetts Creek SED-6 L1949-14 9/18/12 conc.	Q	Willetts Creek SED-6 AC75648-018 11/8/13 conc.	Q	Willetts Creek SED-6 AC84282-011 4/11/15 conc.	Q	Willetts Creek SED-6 AC91487-015 5/20/16 conc.	Q	Willetts Creek SED-6 AD00167-001 9/21/17 conc.	Q
Aluminum	NC	NC	1,030		775		7,700		802	E	1,370		574		1,000		810		3,700		4,800	
Antimony	2.0	25	0.076		0.38	B	***2.6***	N	0.38	B	0.44	BN	ND		ND		ND		ND		ND	
Arsenic	6.0	33	0.97		0.84	B	***6.4***		0.79		2.7	*	0.64	B	ND		0.56		2.7		3.0	
Barium	NC	NC	7.4		4.7	B	89.7		3.6	B	10.4		2.7	B	ND		ND		28.0		36.0	
Beryllium	NC	NC	0.094		0.049	B	0.36	B	0.069	BE	0.11	B	ND		ND		ND		ND		ND	
Cadmium	0.6	9	0.23		0.31		***101***		0.31		ND		0.30		ND		ND		***1.4***		***1.3***	
Calcium	NC	NC	4,760		599		7,690		2,450	*	4,670	*	299		ND		ND		5,200		5,800	
Chromium	26	110	2.4		3.4		***41.8***		4.4	*	15.9	*	5.4		ND		ND		***33.0***		***22.0***	
Cobalt	NC	NC	1.8		0.77	B	8.1		0.65	B	1.9	BE	0.50	B	3.3		ND		ND		ND	
Copper	16	110	***28.3***		6.3		***77.3***		9.4	*	***21.5***	*	8.0		11.0		8.7		***54.0***		***47.0***	
Iron	20,000	20,000	3,290		2,900		***25,600***		2,810		***36,900***	*	2,120		***27,000***		2,600		11,000		14,000	
Lead	31	110	7.9		10.3		***109***	E	9.5		***39.7***	N*	8.7		***88.0***		7.2		***57.0***		***85.0***	
Magnesium	NC	NC	2,930		468		1,980		1,410		1,290	*E	263		ND		ND		2,200		2,400	
Manganese	460	1,100	102		30.4		***978***		21.3		118	*	16.2		***610***		18.0		100		320	
Mercury	0.15	1.3	0.036	B	ND		***0.15***		ND		0.019	B	0.011	B	ND		ND		ND		ND	
Nickel	16	50	1.8		1.9	BE	***17.2***		1.8	BE	10.1	*	2.0	B	ND		ND		9.7		11.0	
Potassium	NC	NC	118		122	E	528		66.4		97.5		54.2	B	ND		ND		ND		ND	
Selenium	NC	NC	ND		0.69	B	ND		ND		ND		ND		ND		ND		ND		ND	
Silver	1.0	2.2	ND		ND		ND		ND		ND		0.080	B	ND		ND		ND		ND	
Sodium	NC	NC	24.9	B	70.7		414		47.7		51.8		22.0	B	ND		ND		ND		ND	
Thallium	NC	NC	0.25	B	0.36	B	0.98	B	ND		ND		ND		ND		ND		ND		ND	
Vanadium	NC	NC	9.9		6.0		42.4		4.2	E	8.5		3.2		18.0		ND		23.0		21.0	
Zinc	120	270	17.2		24.2		***409***	E	31.0	*	68.9	*	38.9		66.0		32.0		***300***		***290***	

Notes:
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BOLD/Italics - exceeds lowest effects criterion
E - Replicate RPDs were not within QC limits
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All values in mg/kg
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Sediment Contaminants of Concern

TABLE 6
DZUS FASTENERS SITE (1-52-033)
JUNE 2006 THROUGH SEPTEMBER 2017 SAMPLING EVENTS
SUMMARY OF TAL METALS IN WILLETTS CREEK AND LAKE CAPRI SEDIMENT SAMPLES

Sample Location	NYSDEC Technical Guidance for Sediment Criteria		Lake Capri Cove	Lake Capri Cove	Lake Capri Cove	Lake Capri Cove	Lake Capri Cove
Sample ID			SC-1	SC-2	SC-3	SC-4	SC-5
Laboratory ID			AC84282-016	AC84282-017	AC84282-018	AC84282-019	AC84282-020
Sample Date	Lowest Effect	Highest Effect	4/10/15 conc. Q	4/10/15 conc. Q	4/10/15 conc. Q	4/10/15 conc. Q	4/10/15 conc. Q
Aluminum	NC	NC	NC	NC	NC	600	NC
Antimony	2.0	25	NC	NC	NC	ND	NC
Arsenic	6.0	33	NC	NC	NC	0.52	NC
Barium	NC	NC	NC	NC	NC	ND	NC
Beryllium	NC	NC	NC	NC	NC	ND	NC
Cadmium	0.6	9	***12.0***	***0.82***	ND	ND	***1.4***
Calcium	NC	NC	NC	NC	NC	ND	NC
Chromium	26	110	NC	NC	NC	ND	NC
Cobalt	NC	NC	NC	NC	NC	ND	NC
Copper	16	110	NC	NC	NC	ND	NC
Iron	20,000	20,000	NC	NC	NC	1,400	NC
Lead	31	110	NC	NC	NC	ND	NC
Magnesium	NC	NC	NC	NC	NC	ND	NC
Manganese	460	1,100	NC	NC	NC	61.0	NC
Mercury	0.15	1.3	NC	NC	NC	ND	NC
Nickel	16	50	NC	NC	NC	ND	NC
Potassium	NC	NC	NC	NC	NC	ND	NC
Selenium	NC	NC	NC	NC	NC	ND	NC
Silver	1.0	2.2	NC	NC	NC	ND	NC
Sodium	NC	NC	NC	NC	NC	ND	NC
Thallium	NC	NC	NC	NC	NC	ND	NC
Vanadium	NC	NC	NC	NC	NC	ND	NC
Zinc	120	270	NC	NC	NC	ND	NC

Notes:
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BOLD/Italics - exceeds lowest effects criterion
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Sediment Contaminants of Concern

TABLE 7
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 (ROUND 10) SAMPLING EVENT
GROUNDWATER FIELD DUPLICATE DATA SUMMARY

Sample Location	MW-13B	MW-63B	Precision	MW-13BF	MW-63BF	Precision
Sample ID	DMW-13B	DMW-63B	as	DMW-13BF	DMW-63BF	as
Laboratory ID	AC99975-003	AC99975-005	Relative	AC99975-004	AC99975-006	Relative
Sample Date	9/11/17	9/11/17	Percent	9/11/17	9/11/17	Percent
Filtered/Unfiltered	Unfiltered	Unfiltered	Difference	Unfiltered	Filtered	Difference
Metal	conc. Q	conc. Q	(RPD)	conc. Q	conc. Q	(RPD)
Aluminum	ND	ND	NC	ND	ND	NC
Antimony	ND	ND	NC	ND	ND	NC
Arsenic	ND	ND	NC	ND	ND	NC
Barium	ND	ND	NC	ND	ND	NC
Beryllium	ND	ND	NC	ND	ND	NC
Cadmium	3.0	3.3	9.5%	ND	ND	NC
Calcium	13,000	13,000	0.0%	13,000	13,000	0.0%
Chromium	ND	ND	NC	ND	ND	NC
Cobalt	ND	ND	NC	ND	ND	NC
Copper	ND	ND	NC	ND	ND	NC
Iron	ND	ND	NC	ND	ND	NC
Lead	ND	ND	NC	ND	ND	NC
Magnesium	ND	ND	NC	ND	ND	NC
Manganese	88.0	100	12.8%	ND	ND	NC
Mercury	ND	ND	NC	ND	ND	NC
Nickel	ND	ND	NC	ND	ND	NC
Potassium	ND	ND	NC	ND	ND	NC
Selenium	ND	ND	NC	ND	ND	NC
Silver	ND	ND	NC	ND	ND	NC
Sodium	19,000	18,000	5.4%	19,000	18,000	5.4%
Thallium	ND	ND	NC	ND	ND	NC
Vanadium	ND	ND	NC	ND	ND	NC
Zinc	ND	ND	NC	ND	ND	NC
Hexavalent Chromium	ND	ND	NC	NA	NA	NC

Notes:
All values in µg/L
NC - Not Calculable (analyte not detected in one or both analyses)
ND - Not Detected
NA - Not Analyzed
BOLD/Italics - exceeds criterion
Groundwater Contaminants of Concern

TABLE 8
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 (ROUND 10) SAMPLING EVENT
SURFACE WATER FIELD DUPLICATE DATA SUMMARY

Sample Location Sample ID Laboratory ID Sample Date Metal	Lake Capri SW-5 AD00167-004 9/21/17 conc. Q	Lake Capri SW-7 AD00167-006 9/21/17 conc. Q	Precision as Relative Percent Difference (RPD)
Aluminum	ND	ND	NC
Antimony	ND	ND	NC
Arsenic	ND	ND	NC
Barium	ND	ND	NC
Beryllium	ND	ND	NC
Cadmium	***5.6***	***5.9***	5.2%
Calcium	13,000	14,000	7.4%
Chromium	ND	ND	NC
Cobalt	ND	ND	NC
Copper	ND	ND	NC
Iron	***390***	***400***	2.5%
Lead	ND	ND	NC
Magnesium	ND	ND	NC
Manganese	***590***	***630***	6.6%
Mercury	ND	ND	NC
Nickel	ND	ND	NC
Potassium	ND	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Sodium	***24,000***	***25,000***	4.1%
Thallium	ND	ND	NC
Vanadium	ND	ND	NC
Zinc	ND	ND	NC

All values in µg/L
NC - Not Calculable (analyte not detected in one or both analyses)
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
E - Estimated concentration due to interference based on serial dilution.
BOLD/Italics - exceeds criterion
Surface Water Contaminants of Concern

TABLE 9
DZUS FASTENERS SITE (1-52-033)
SEPTEMBER 2017 (ROUND 10) SAMPLING EVENT
SEDIMENT FIELD DUPLICATE DATA SUMMARY

Sample Location Field Sample ID Laboratory ID Sample Date Metal	Lake Capri SED-5 AD00167-003 9/21/17 conc. Q	Lake Capri SED-7 AD00167-005 9/21/17 conc. Q	Precision as Relative Percent Difference (RPD)
Aluminum	6,600	3,200	69.4%
Antimony	ND	ND	NC
Arsenic	1.4	1.2	15.4%
Barium	42.0	25.0	50.7%
Beryllium	ND	ND	NC
Cadmium	***8.6***	***6.1***	34.0%
Calcium	15,000	60,000	120.0%
Chromium	***26.0***	***28.0***	7.4%
Cobalt	4.2	4.4	4.7%
Copper	***38.0***	***22.0***	53.3%
Iron	15,000	16,000	6.5%
Lead	***100***	***91.0***	9.4%
Magnesium	9,000	34,000	116.3%
Manganese	220	130	51.4%
Mercury	***0.15***	ND	NC
Nickel	13.0	15.0	14.3%
Potassium	730	ND	NC
Selenium	ND	ND	NC
Silver	ND	ND	NC
Sodium	ND	ND	NC
Thallium	ND	ND	NC
Vanadium	42.0	23.0	58.5%
Zinc	***340***	***250***	30.5%

All values in mg/kg dry weight.
NC - Not Calculable (analyte not detected in one or both analyses)
ND - Not Detected
B - Estimated value (greater than MDL but less than RL)
E - Estimated concentration due to interference based on serial dilution
N - Laboratory spike recovery ouside control limit
* - Laboratory Replicate RPDs were not within QC limits
BOLD/Italics - exceeds criterion
Sediment Contaminants of Concern

TABLE 10
DZUS FASTENERS SITE (1-52-033)
SUMMARY OF TAL METALS IN SURFACE SOIL SAMPLES, SEPTEMBER 2017

Sample Location							Background		Downwind		100 ft Downwind	
Sample ID							DSO-WEST		DSO-EAST		DSO-EAST100	
Laboratory ID	ROD	Restricted Use Category					AC99992-015		AC99992-010		AC99992-009	
Sample Date	March 1991	Unrestricted	Residential	Restricted Residentail	Commercial	Industrial	9/12/17 conc.	Q	9/12/17 conc.	Q	9/12/17 conc.	Q
Aluminum							2,300		3700		6800	
Antimony							ND		1.1		ND	
Arsenic	NC	13	16	16	16	16	2.3		2.1		5.8	
Barium		350	350	400	400	10,000	26		57		58	
Beryllium		7	14	72	590	2700	ND		ND		0.24	
Cadmium	10	2.5	2.5	4.3	9.3	60	0.6		1.0		0.58	
Calcium							9,500		4,500		4,800	
Chromium		30	36	180	1,500	6,800	14		37		34	
Cobalt							ND		ND		3	
Copper	25	50	270	270	270	10,000	19		50		43	
Iron							5,700		12,000		13,000	
Lead	NC	63	400	400	1,000	3,900	80		69		120	
Magnesium							5,000		1,700		1,700	
Manganese		1,600	2,000	2,000	10,000	10,000	87		140		180	
Mercury	NC	0.18	0.81	0.81	2.8	5.7	ND		ND		ND	
Nickel	13	30	140	310	310	10,000	ND		10.0		9.5	
Potassium							ND		810		900	
Selenium		3.9	36	180	1,500	6,800	ND		ND		ND	
Silver		2.0	36.0	180	1,500	6,800	ND		ND		ND	
Sodium							ND		ND		ND	
Thallium							ND		ND		ND	
Vanadium			100				12		25		27	
Zinc	47	109	2,200	10,000	10,000	10,000	150		240		180	

Notes: All values in mg/kg
ND - Not Detected
NC - No Criteria

Figures





USGS NY Bay Shore West Quadrangle

U.S.G.S. 1:24 000 SCALE TOPOGRAPHIC MAP

Copyright:© 2011 National Geographic Society i-cubed

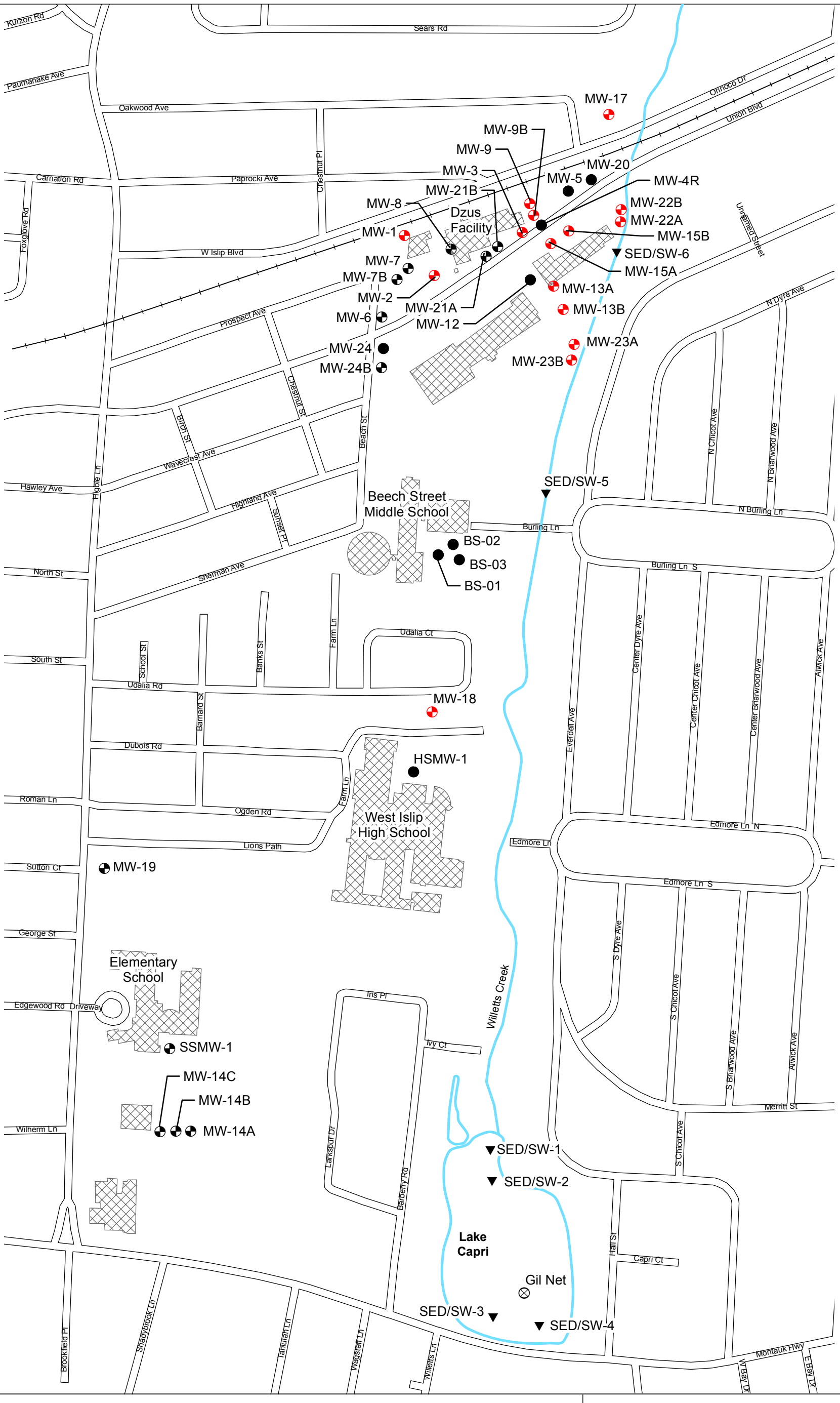
Prepared by: AECOM

Prepared for: NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Multi Site G
Operation, Maintenance & Monitoring

Site Location
Dzus Fasteners Site

Date:	Scale:	Figure No. :
January 2013	1 inch = 2,500 feet	1



Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- GIL NET

0 200 400 800 Feet

Prepared by: AECOM

SUBMITTED BY: PK	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033
DRAWN BY: CF	SITE PLAN
APPROVED BY: PK	DATE: JULY 2016 / SCALE: 1 " = 400 feet / DRAWING NO.: 2



Legend

- 2017 Surface Soil Sample
- Fencing

Sources:
1. Aerials, 2016 Half Foot 4 Band Long Island Zone New York Statewide Digital Orthoimagery Program

0 25 50 100 150 200 Feet

Prepared by: AECOM

Prepared for: New York State Department of Environmental Conservation

Multi Site G
Operation, Maintenance & Monitoring
Locations of Surface Soil Samples
September 2017
Dzus Fasteners Site

Date:	Scale:	Figure No. :
DEC 2017	As Shown	2A

MW-17 (13.30)
MW-9 (13.03)
MW-9B (13.01)
MW-3 (12.81)
MW-1 (12.41)
MW-15B (12.68)
MW-22B (13.04)
MW-22A (13.00)
MW-15A (12.69)
MW-13B (12.43)
MW-13A (12.48)
MW-2 (12.22)
MW-23A (Not Measured)
MW-23B (Not Measured)
MW-18 (8.90)
Dzus Facility
12.5
13.0
12.0
11.5
11.0
10.5
10.0
9.5
9.0
Kurzon Rd
Udall Rd
Alice Rd
Sears Rd
Patricia Ave
Paumanake Ave
Oakwood Ave
Chestnut Pl
Orinoco Dr
Union Blvd
Carnation Rd
Paprocki Ave
Foxglove Rd
W Islip Blvd
Unnamed Street
Prospect Ave
N Dyre Ave
Chestnut St
Beach St
Birch St
Wavecrest Ave
Higbie Ln
Hawley Ave
Highland Ave
Sunset Pl
Beech Street Middle School
Burling Ln
Willetts Creek
N Burling Ln
North St
Sherman Ave
Burling Ln S
Center Dyre Ave
Center Chicot Ave
Center Briarwood Ave
Atwick Ave
Everdell Ave
School St
Banks St
Farm Ln
Udalia Ct
South St
Udalia Rd
Barnard St
Dubois Rd
Roman Ln
Ogden Rd
Lions Path
West Islip High School
Edmore Ln
Edmore Ln N
Edmore Ln S
Sutton Ct
George St
Elementary School
Edgewood Rd
Driveway
La Grange Pl
Wilhelm Ln
Iris Pl
Ivy Ct
Larkspur Dr
Barberry Rd
S Dyre Ave
S Chicot Ave
S Briarwood Ave
Merritt St
Lake Capri
Hall St
Capri Ct
Keith Ln
Montauk Hwy
E Bay Dr
W Bay Dr
Secatogue Ln
Willetts Ln
Wagstaff Ln
Tahlulah Ln
Shadybrook Ln
Brookfield Pl
Unnamed Street

N

Legend

0 200 400 800 Feet

GROUNDWATER CONTOUR INTERVAL - 0.5 ft

(9.96) GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL

EXISTING WELLS INCLUDED IN LTM

EXISTING MONITORING WELLS

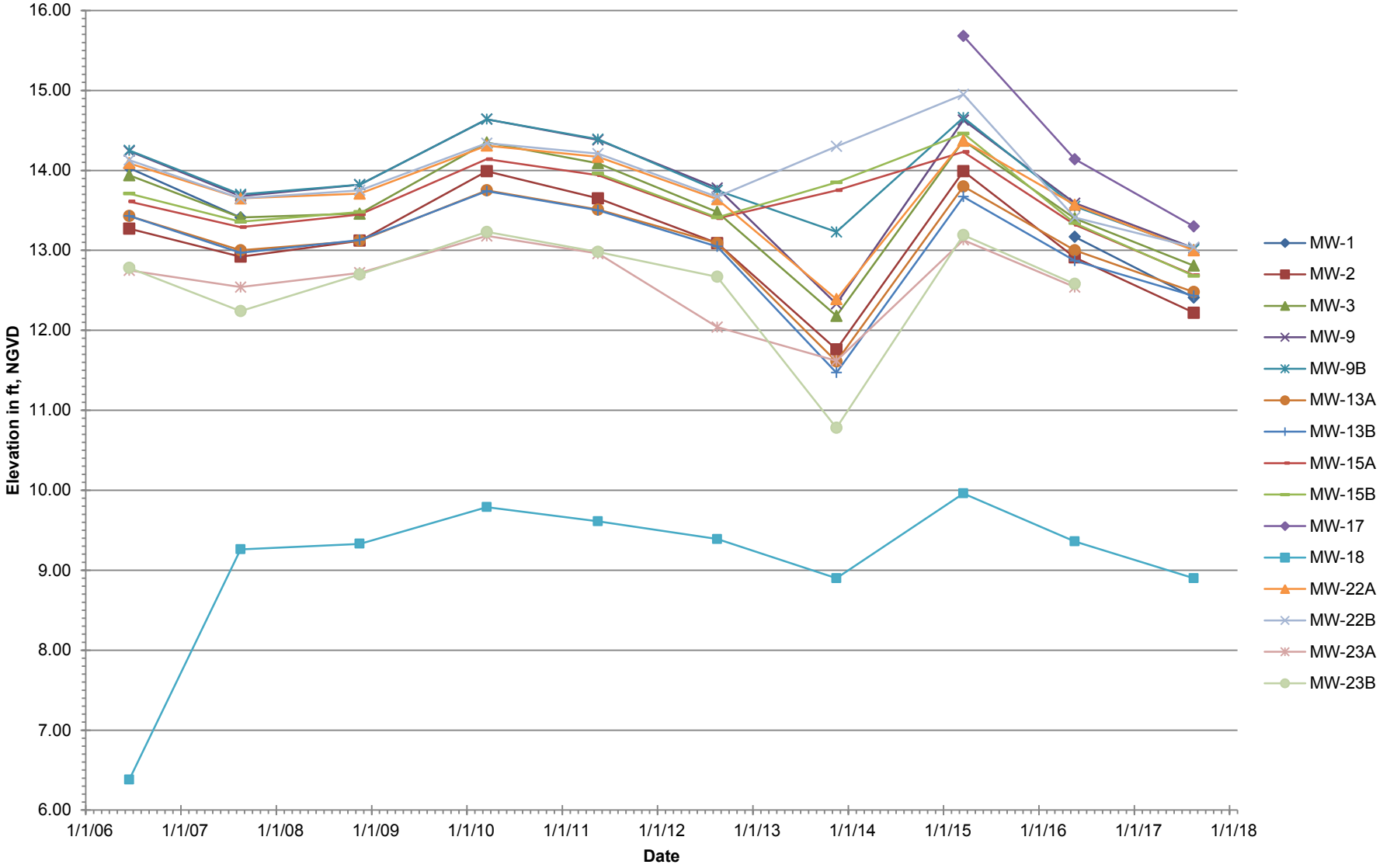
MISSING MONITORING WELLS

SURFACE WATER AND SEDIMENT SAMPLE LOCATION

Prepared by: AECOM

SUBMITTED BY: PK	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033 GROUNDWATER CONTOUR MAP SEPTEMBER 2017		
DRAWN BY: CF			
APPROVED BY: PK	DATE: DEC 2017	SCALE: 1 " = 416 feet	DRAWING NO.: 3

Figure 3A
Dzus Fasteners (1-52-077)
Groundwater Hydrograph



MW-1 was destroyed in December 2007, replaced in August 2015
MW-17 was added to the to the sampling program in 2015

Compound	MW-9 Sep-17 U	MW-9 Sep-17 F
Sodium	***50,000***	***51,000***

Compound	MW-9B Sep-17 U	MW-9B Sep-17 F
Sodium	***20,000***	***20,000***

Compound	MW-17 Sep-17 U	MW-17 Sep-17 F
Iron	***2,800***	***2,200***
Manganese	***790***	***710***

Compound	MW-3 Sep-17 U	MW-3 Sep-17 F
Cadmium	***13.0***	***9.5***
Iron	***1,500***	ND
Sodium	***69,000***	***73,000***

Compound	MW-22B Sep-17 U	MW-22B Sep-17 F
Manganese	***410***	***350***
Sodium	***22,000***	***21,000***

Compound	MW-1 Sep-17 U	MW-1 Sep-17 F
Iron	***300***	ND
Sodium	***72,000***	***72,000***

Compound	MW-22A Sep-17 U	MW-22A Sep-17 F
Iron	***2,700***	***2,400***
Manganese	***560***	***610***
Sodium	***51,000***	***54,000***

Compound	MW-2 Sep-17 U	MW-2 Sep-17 F
Iron	***4,000***	***4,100***
Sodium	***20,000***	***21,000***

Compound	MW-13A Sep-17 U	MW-13A Sep-17 F
Cadmium	***14.0***	***15.0***
Iron	***6,000***	***4,600***
Manganese	***430***	***430***
Sodium	***63,000***	***66,000***

Compound	MW-15A Sep-17 U	MW-15A Sep-17 F
Cadmium	***13.0***	***11.0***
Iron	ND	ND
Sodium	***24,000***	***23,000***

Compound	MW-15B Sep-17 U	MW-15B Sep-17 F
Iron	***1,700***	***1,700***
Sodium	***26,000***	***28,000***

MW-13B	
Sep-17 U	Sep-17 F
No Exceedances	

MW-18	
Sep-17 U	Sep-17 F
No Exceedances	

Dzus Facility

Beech Street Middle School

West Islip High School

Elementary School

Lake Capri

Willetts Creek

Kurzon Rd, Udall Rd, Alice Rd, Patricia Ave, Paumanake Ave, Oakwood Ave, Carnation Rd, Foxglove Rd, Union Blvd, Orinoco Dr, Wavecrest Ave, Hawley Ave, Higbie Ln, Birch St, Chestnut St, Beach St, Highland Ave, Sunset Pl, Sherman Ave, North St, Burling Ln, N Burling Ln, Burling Ln S, N Briarwood Ave, Center Dyre Ave, Center Chicot Ave, Center Briarwood Ave, Alwick Ave, Everdell Ave, Farm Ln, Udalia Ct, School St, Banks St, South St, Udalia Rd, Barnard St, Dubois Rd, Roman Ln, Ogden Rd, Lions Path, Sutton Ct, George St, Edgewood Rd, Iris Pl, Ivy Ct, Edmore Ln, Edmore Ln N, Edmore Ln S, S Dyre Ave, S Chicot Ave, S Briarwood Ave, Keith Ln, Merritt St, Wilherm Ln, Larkspur Dr, Barberry Rd, Hall St, Capri Ct, Brookfield Pl, adybrook Ln, Tahtulah Ln, Wagstaff Ln, Montauk Hwy

0 200 400 800 Feet

N

Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER/SEDIMENT SAMPLE LOCATION
- UPGRADIENT WELLS
- SOURCE AREA WELLS
- DOWNGRADIENT WELLS
- WILLETTS CREEK WELLS

Add to Legend

Compound	NYSDEC Criteria
Cadmium	5
Chromium	50
Iron	300
Manganese	300
Sodium	20,000
U - Unfiltered sample	
F - Filtered sample	

Notes:
Contaminants of Concern
All values in µg/L
BOLD/Italics exceeds criterion

Prepared by: AECOM

SUBMITTED BY: PK

DRAWN BY: CF

APPROVED BY: PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

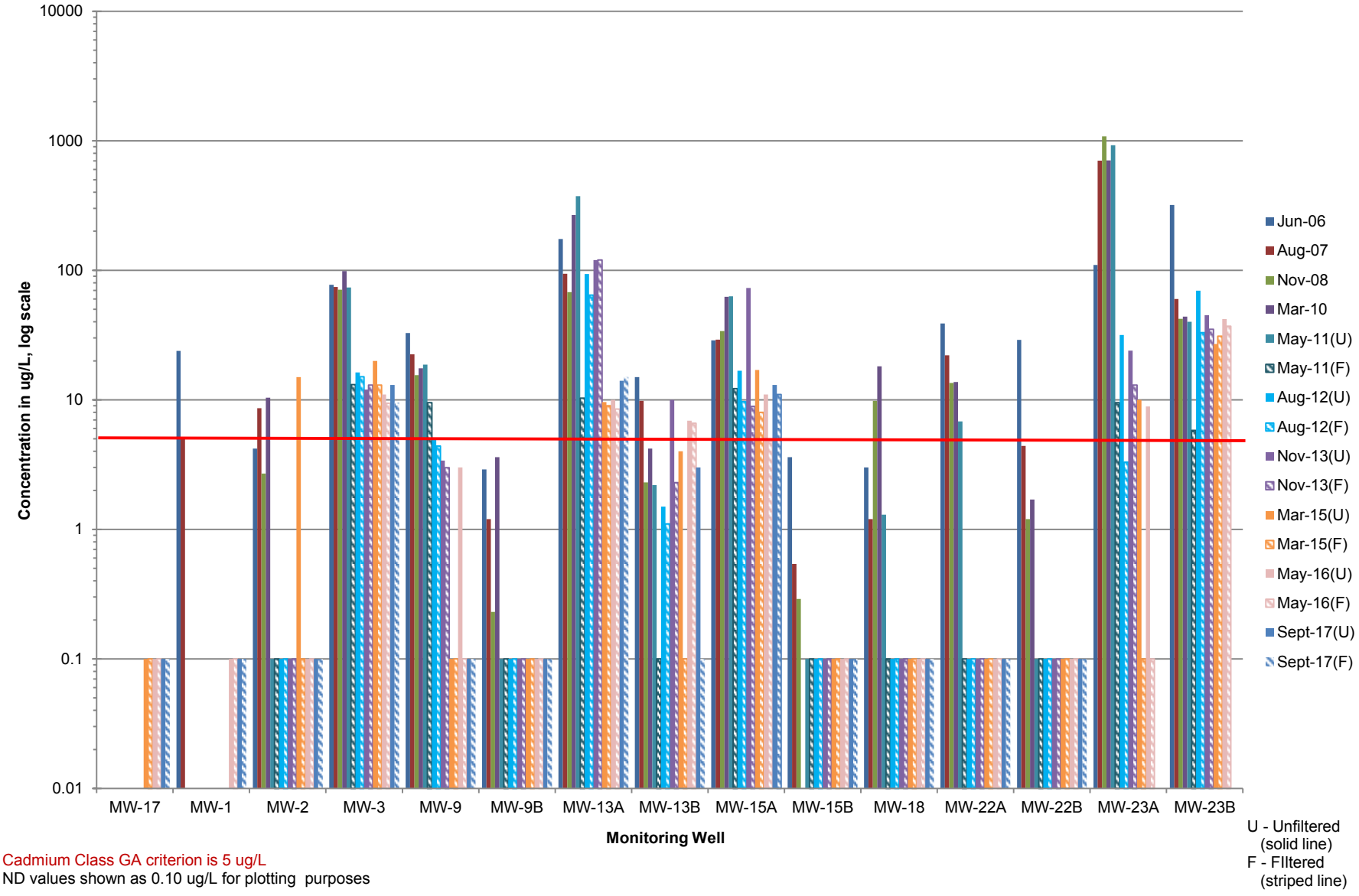
SUMMARY OF TAL METALS IN GROUNDWATER SEPTEMBER 2017

DATE: DEC 2017

SCALE: 1 " = 400 feet

DRAWING NO.: 4

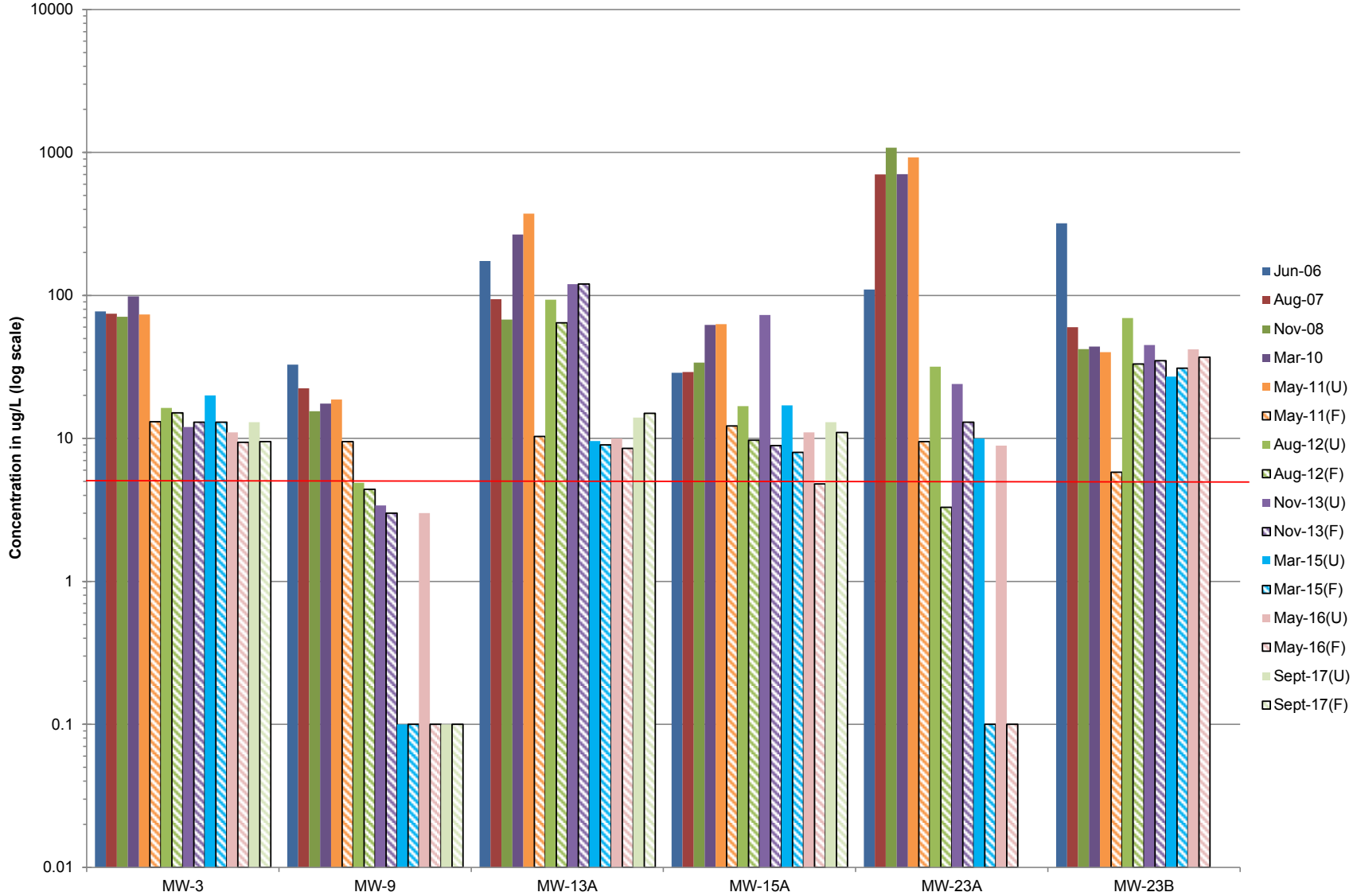
FIGURE 5
CADMIUM CONCENTRATIONS IN LONG TERM MONITORING WELLS
DZUS FASTRENERS SITE (1-52-033)



Cadmium Class GA criterion is 5 ug/L
ND values shown as 0.10 ug/L for plotting purposes

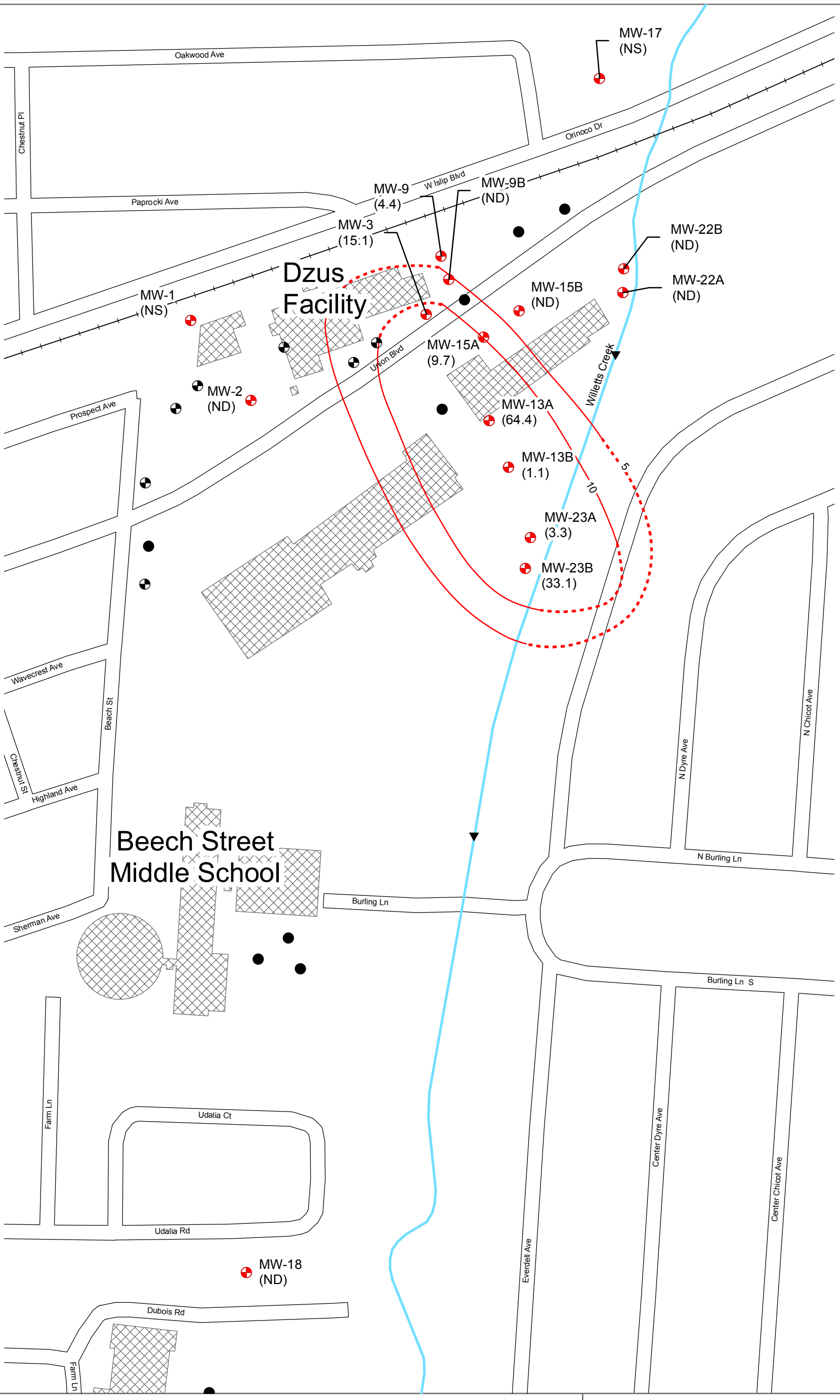
U - Unfiltered (solid line)
F - FIltered (striped line)

FIGURE 5A
CADMIUM CONCENTRATIONS IN SELECTED MONITORING WELLS
DZUS FASTENERS SITE (1-52-033)



Cadmium Class GA criterion is 5 ug/L
ND values shown as 0.10 ug/L for plotting purposes

U - unfiltered (solid liine)
F - filtered (striped line)



Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- NS Not Sampled
- ND Not Detected
- (13.0) FILTERED CADMIUM CONCENTRATION IN ug/L
- CADMIUM ISOCONCENTRATION LINE. CONTOUR INTERVAL IS 5ug/L. DASHED WHERE INFERRED

00 200 400 Feet

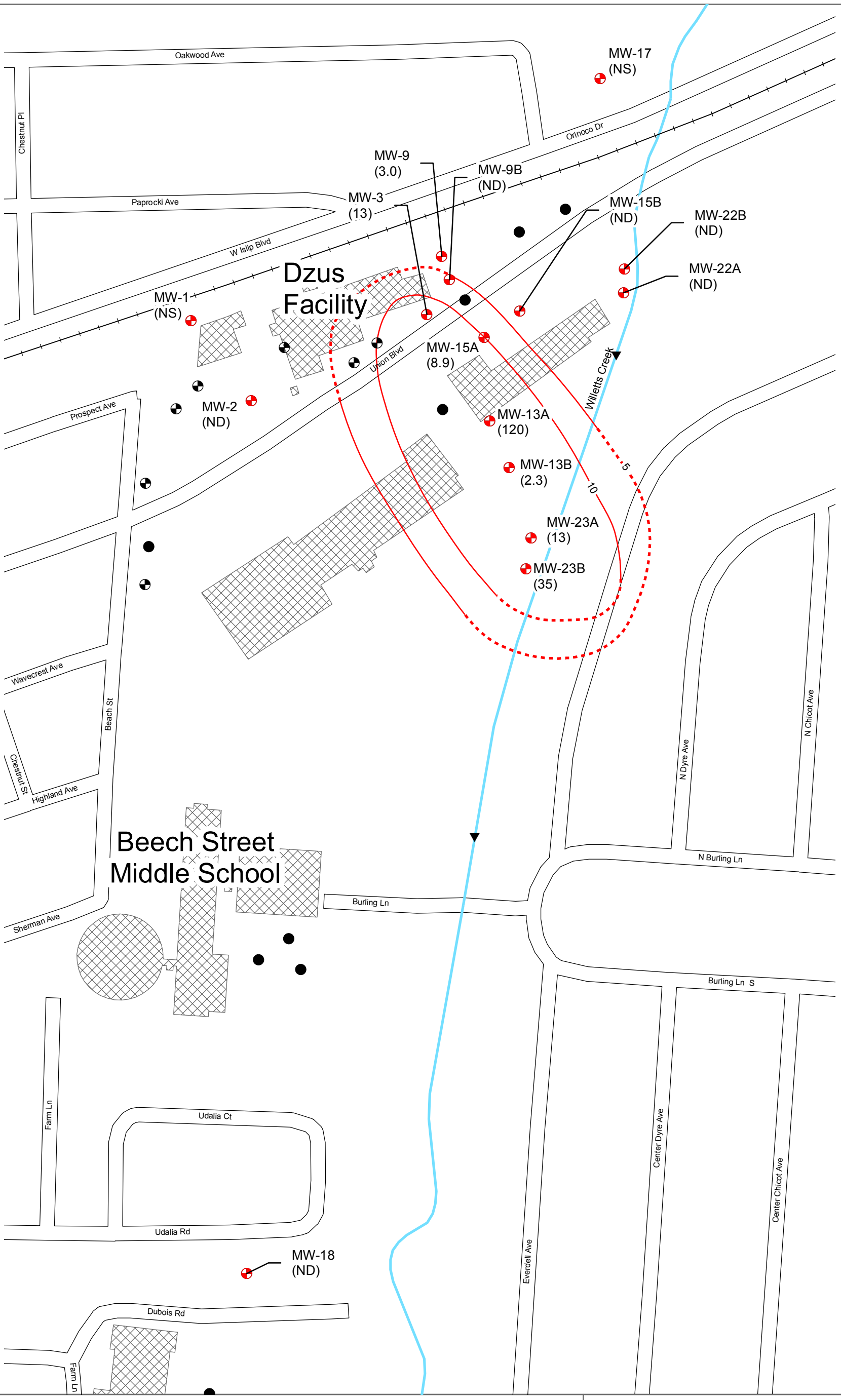
Prepared by: AECOM

SUBMITTED BY:	PK
DRAWN BY:	CF
APPROVED BY:	PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

FILTERED CADMIUM ISOCONCENTRATION MAP AUGUST 2012

DATE:	SCALE:	DRAWING NO.:
JULY 2015	1 " = 200 feet	6



Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- NS Not Sampled
- ND Not Detected
- (13.0) FILTERED CADMIUM CONCENTRATION IN ug/L
- CADMIUM ISOCONCENTRATION LINE. CONTOUR INTERVAL IS 5ug/L. DASHED WHERE INFERRED

00 200 400 Feet

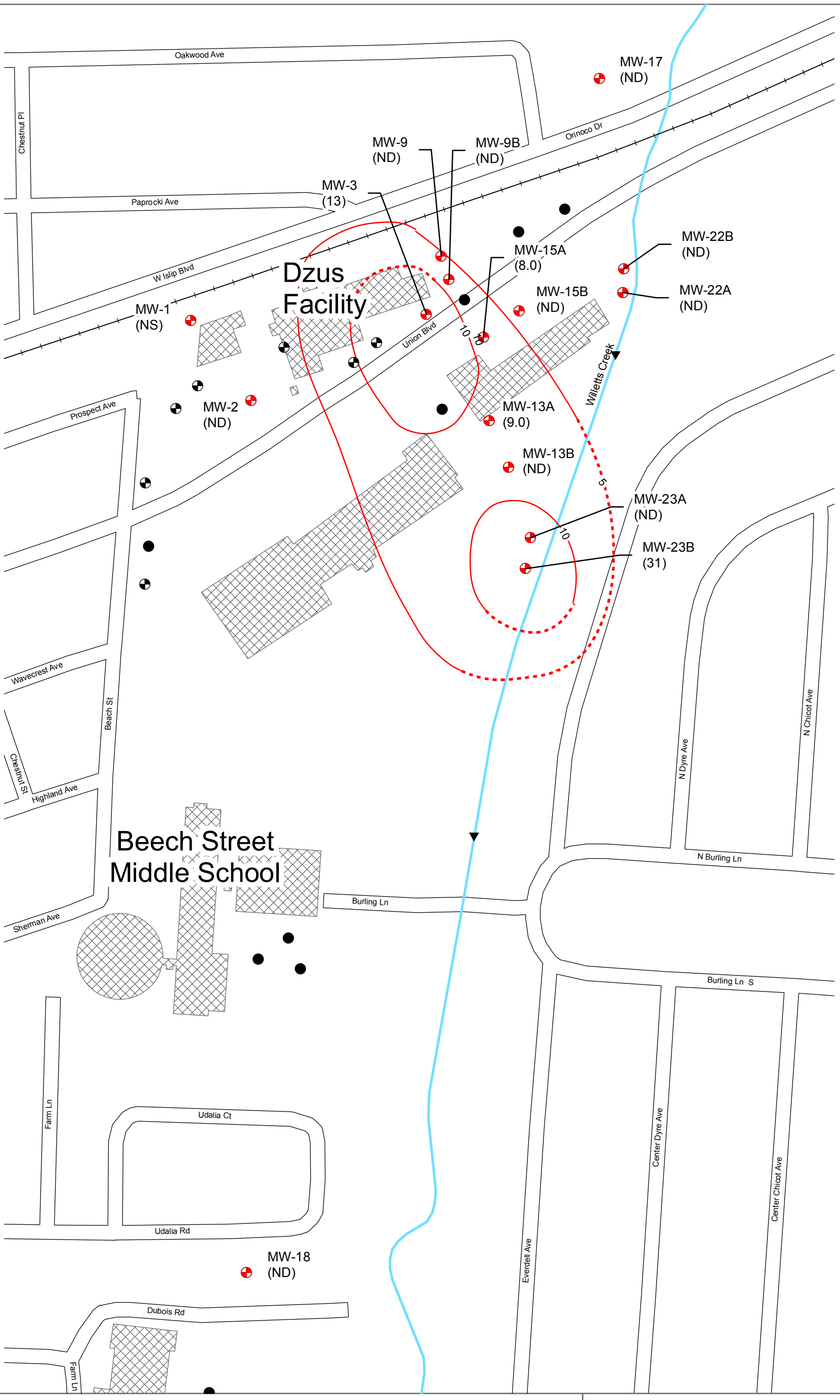
Prepared by: AECOM

SUBMITTED BY:	PK
DRAWN BY:	CF
APPROVED BY:	PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

FILTERED CADMIUM ISOCONCENTRATION MAP NOVEMBER 2013

DATE:	SCALE:	DRAWING NO.:
JULY 2015	1 " = 200 feet	6A



Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- NS Not Sampled
- ND Not Detected
- (13.0) FILTERED CADMIUM CONCENTRATION IN ug/L
- CADMIUM ISOCONCENTRATION LINE. CONTOUR INTERVAL IS 5ug/L. DASHED WHERE INFERRED

00 200 400 Feet

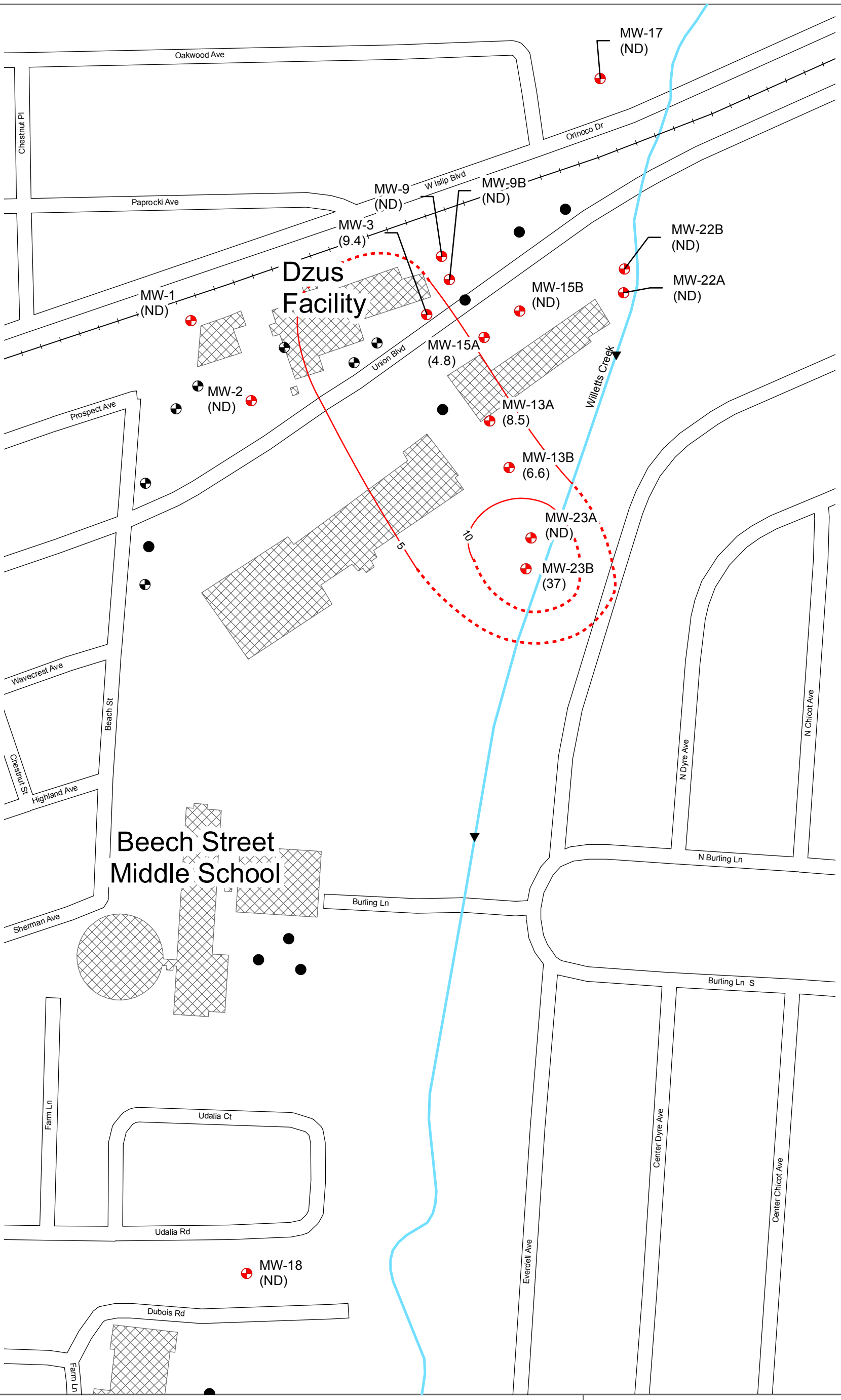
Prepared by: AECOM

SUBMITTED BY:	PK
DRAWN BY:	CF
APPROVED BY:	PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

FILTERED CADMIUM ISOCONCENTRATION MAP MARCH 2015

DATE:	SCALE:	DRAWING NO.:
MAY 2016	1 " = 200 feet	**6B**



Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- NS Not Sampled
- ND Not Detected
- (13.0) FILTERED CADMIUM CONCENTRATION IN ug/L
- CADMIUM ISOCONCENTRATION LINE. CONTOUR INTERVAL IS 5ug/L. DASHED WHERE INFERRED

00 200 400 Feet

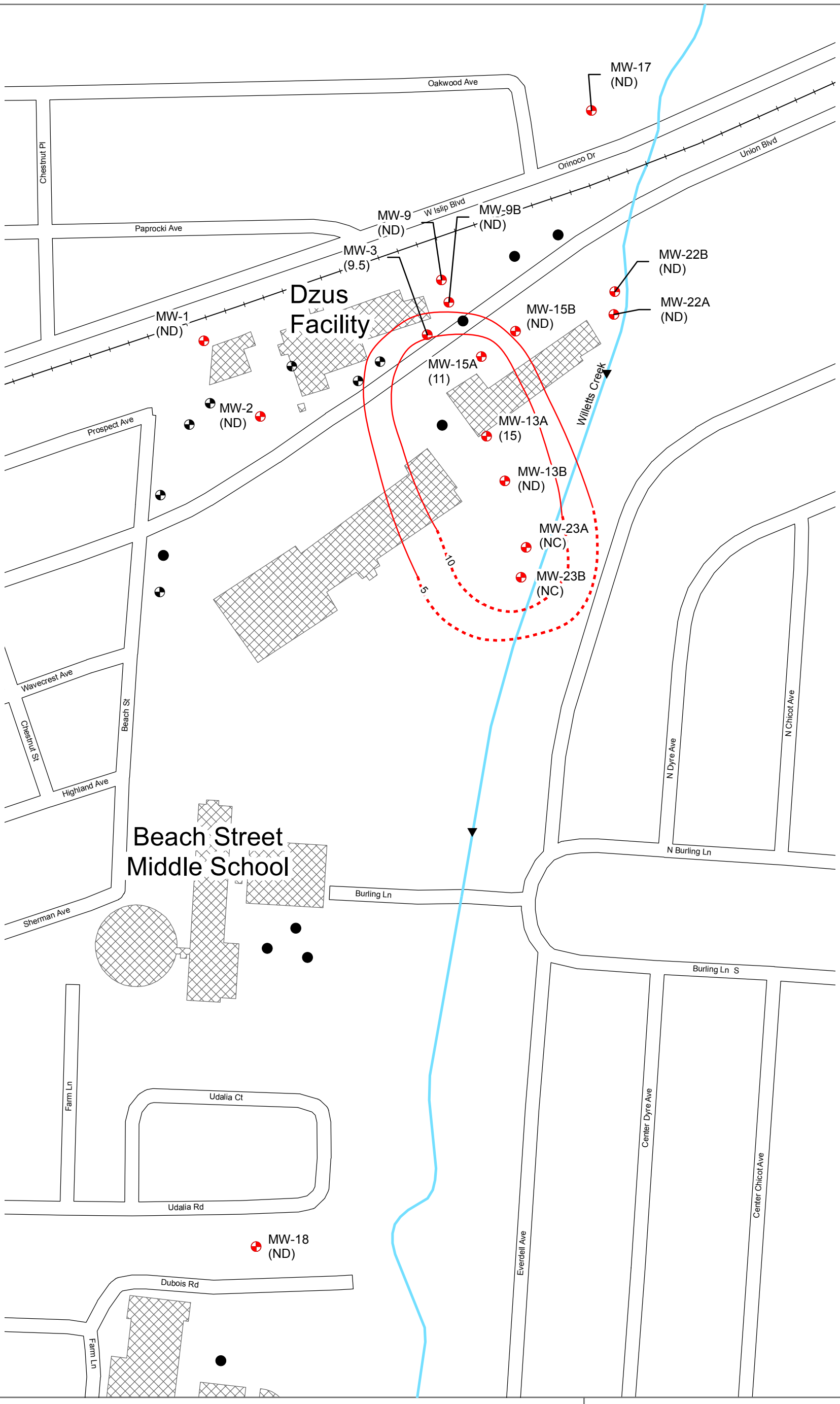
Prepared by: AECOM

SUBMITTED BY:	PK
DRAWN BY:	CF
APPROVED BY:	PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

FILTERED CADMIUM ISOCONCENTRATION MAP MAY 2016

DATE:	SCALE:	DRAWING NO.:
JULY 2015	1 " = 200 feet	6C



Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- NS Not Sampled
- ND Not Detected
- NC Not Collected

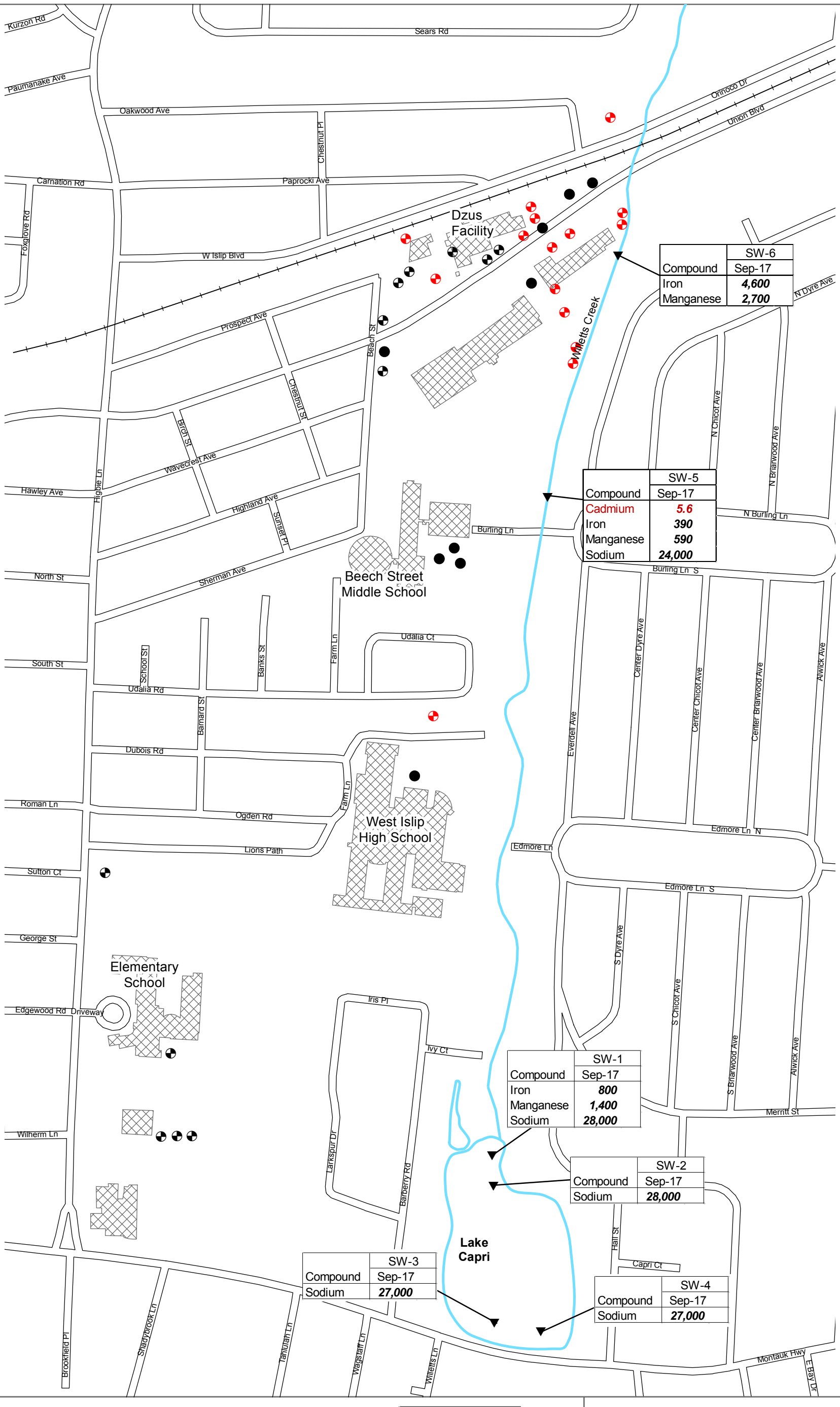
(13.0) FILTERED CADMIUM CONCENTRATION IN ug/L

CADMIUM ISOCONCENTRATION LINE. CONTOUR INTERVAL IS 5ug/L. DASHED WHERE INFERRED

00 200 400 Feet

Prepared by: AECOM

SUBMITTED BY: PK	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033
DRAWN BY: CF	FILTERED CADMIUM ISOCONCENTRATION MAP SEPTEMBER 2017
APPROVED BY: PK	DATE: DEC 2017 / SCALE: 1 " = 211 feet / DRAWING NO.: 6D



Compound	SW-6 Sep-17
Iron	***4,600***
Manganese	***2,700***

Compound	SW-5 Sep-17
Cadmium	***5.6***
Iron	***390***
Manganese	***590***
Sodium	***24,000***

Compound	SW-1 Sep-17
Iron	***800***
Manganese	***1,400***
Sodium	***28,000***

Compound	SW-2 Sep-17
Sodium	***28,000***

Compound	SW-3 Sep-17
Sodium	***27,000***

Compound	SW-4 Sep-17
Sodium	***27,000***

Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION

0 200 400 800 Feet

Compound	Surface Water Criteria
Cadmium	5
Iron	300
Manganese	300
Sodium	20,000

Notes:
Contaminants of Concern
All values in mg/L
BOLD/Italics exceeds criterion

Prepared by: AECOM

SUBMITTED BY: PK

DRAWN BY: CF

APPROVED BY: PK

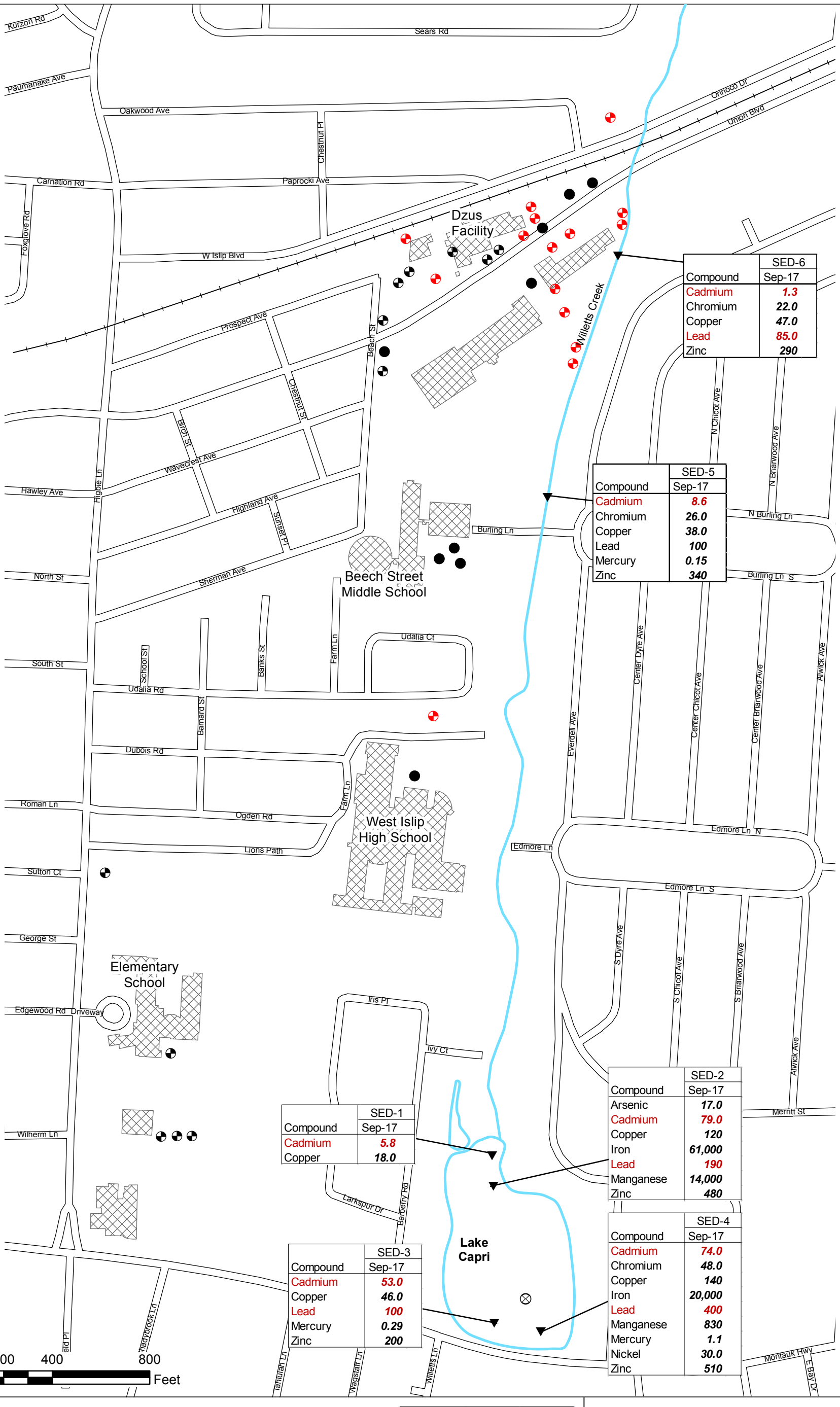
MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

SUMMARY OF TAL METALS IN SURFACE WATER SEPTEMBER 2017

DATE: DEC 2017

SCALE: 1 " = 400 feet

DRAWING NO.: 7



Compound	SED-6 Sep-17
Cadmium	1.3
Chromium	22.0
Copper	47.0
Lead	85.0
Zinc	290

Compound	SED-5 Sep-17
Cadmium	8.6
Chromium	26.0
Copper	38.0
Lead	100
Mercury	0.15
Zinc	340

Compound	SED-2 Sep-17
Arsenic	17.0
Cadmium	79.0
Copper	120
Iron	61,000
Lead	190
Manganese	14,000
Zinc	480

Compound	SED-1 Sep-17
Cadmium	5.8
Copper	18.0

Compound	SED-3 Sep-17
Cadmium	53.0
Copper	46.0
Lead	100
Mercury	0.29
Zinc	200

Compound	SED-4 Sep-17
Cadmium	74.0
Chromium	48.0
Copper	140
Iron	20,000
Lead	400
Manganese	830
Mercury	1.1
Nickel	30.0
Zinc	510

Legend

- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION

Notes:
All values in mg/kg
BOLD/Italics exceeds criterion
Contaminants of Concern

Compound	NYSDEC Sediment Criteria Lowest Effect	Highest Effect
Arsenic	6.0	33
Cadmium	0.6	9
Chromium	26	110
Copper	16	110
Iron	20,000	20,000
Lead	31	110
Manganese	460	1,100
Mercury	0.15	1.3
Nickel	16	50
Zinc	120	270

Prepared by: AECOM

SUBMITTED BY: PK

DRAWN BY: CF

APPROVED BY: PK

MULTI SITE G - Dzus Fasteners
SITE NO. 1-52-033

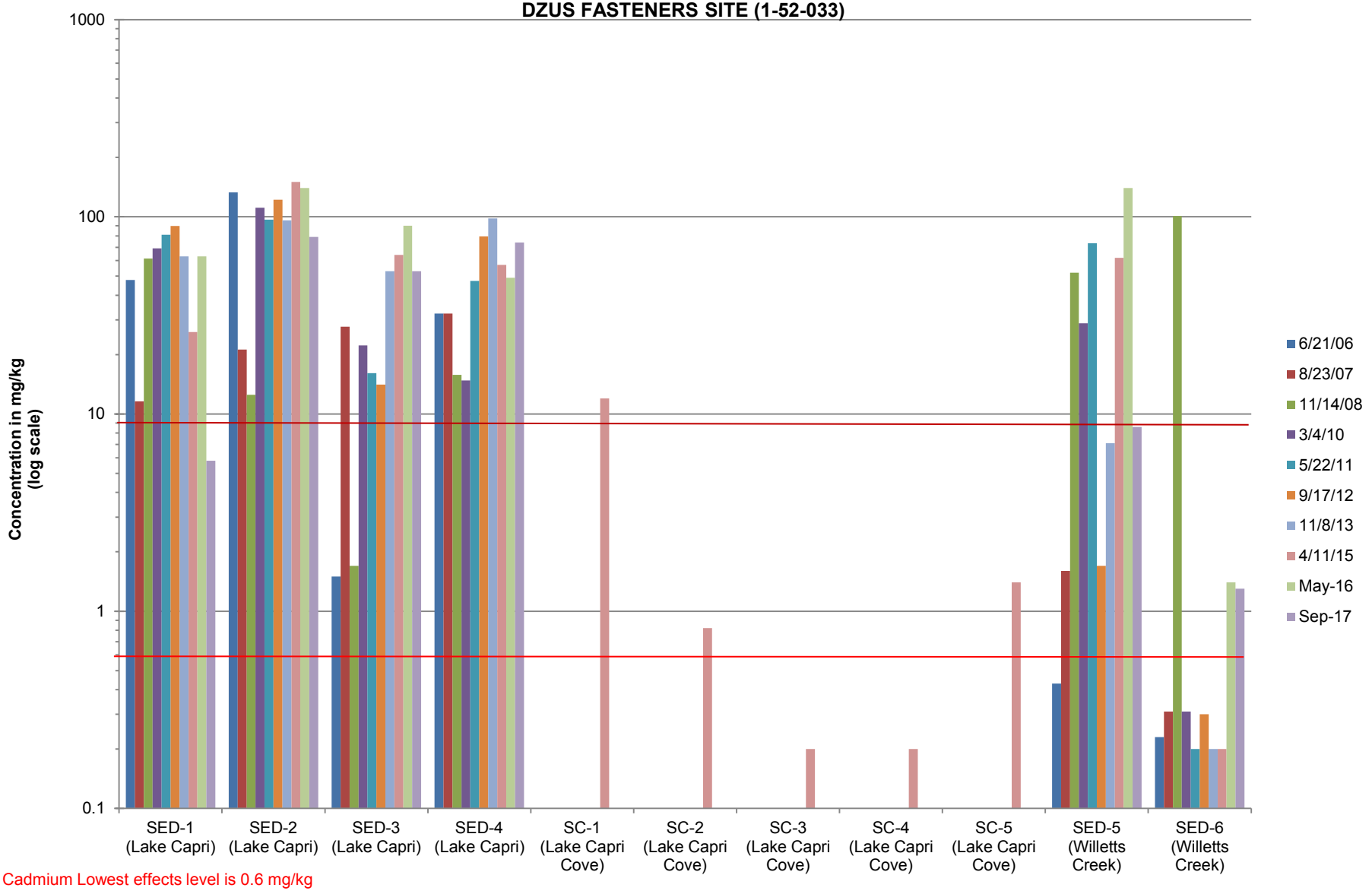
SUMMARY OF TAL METALS IN SEDIMENT SEPTEMBER 2017

DATE: DEC 2017

SCALE: 1 " = 400 feet

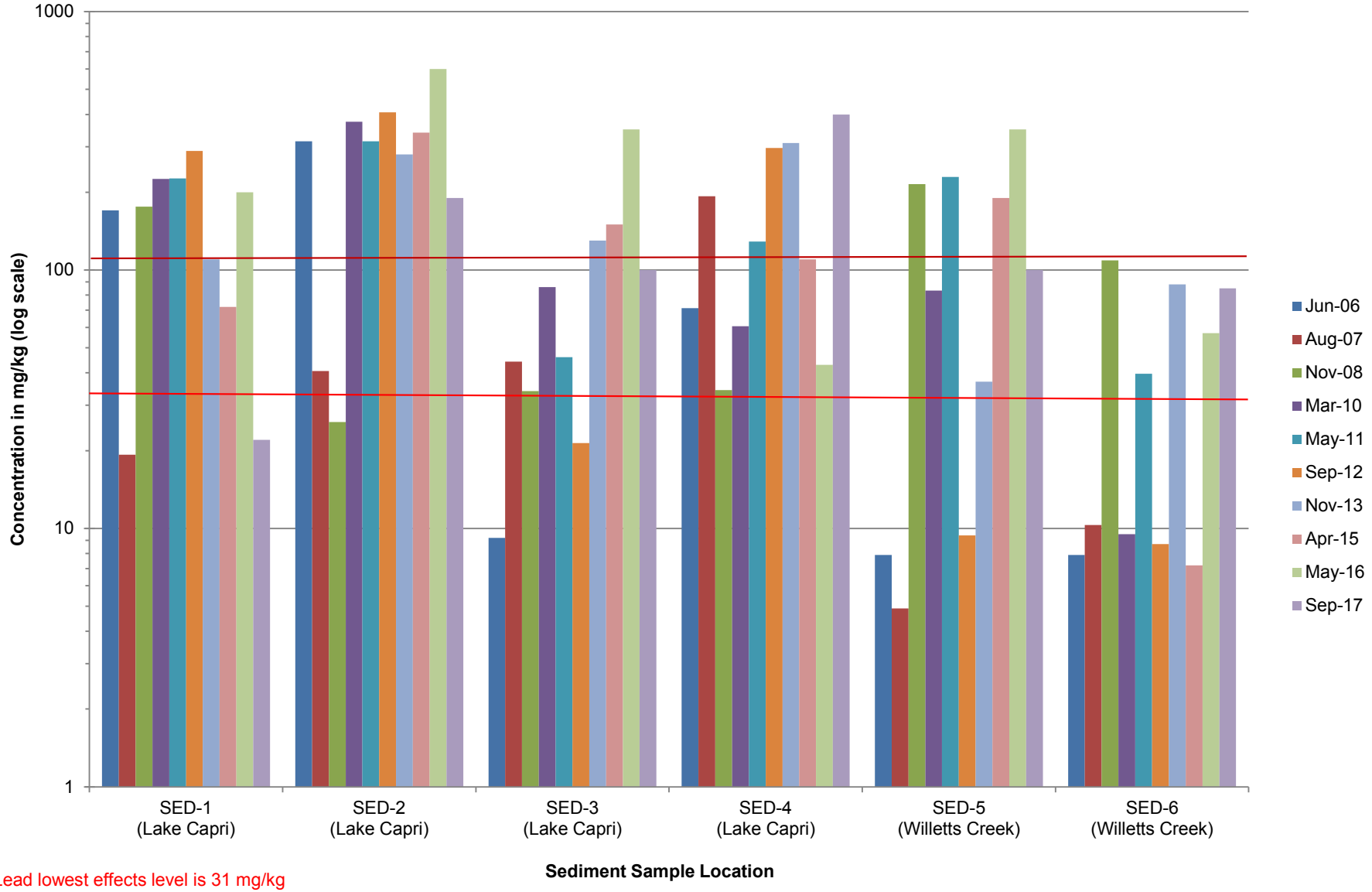
DRAWING NO.: 8

FIGURE 9
CADMIUM CONCENTRATIONS IN LAKE CAPRI AND WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



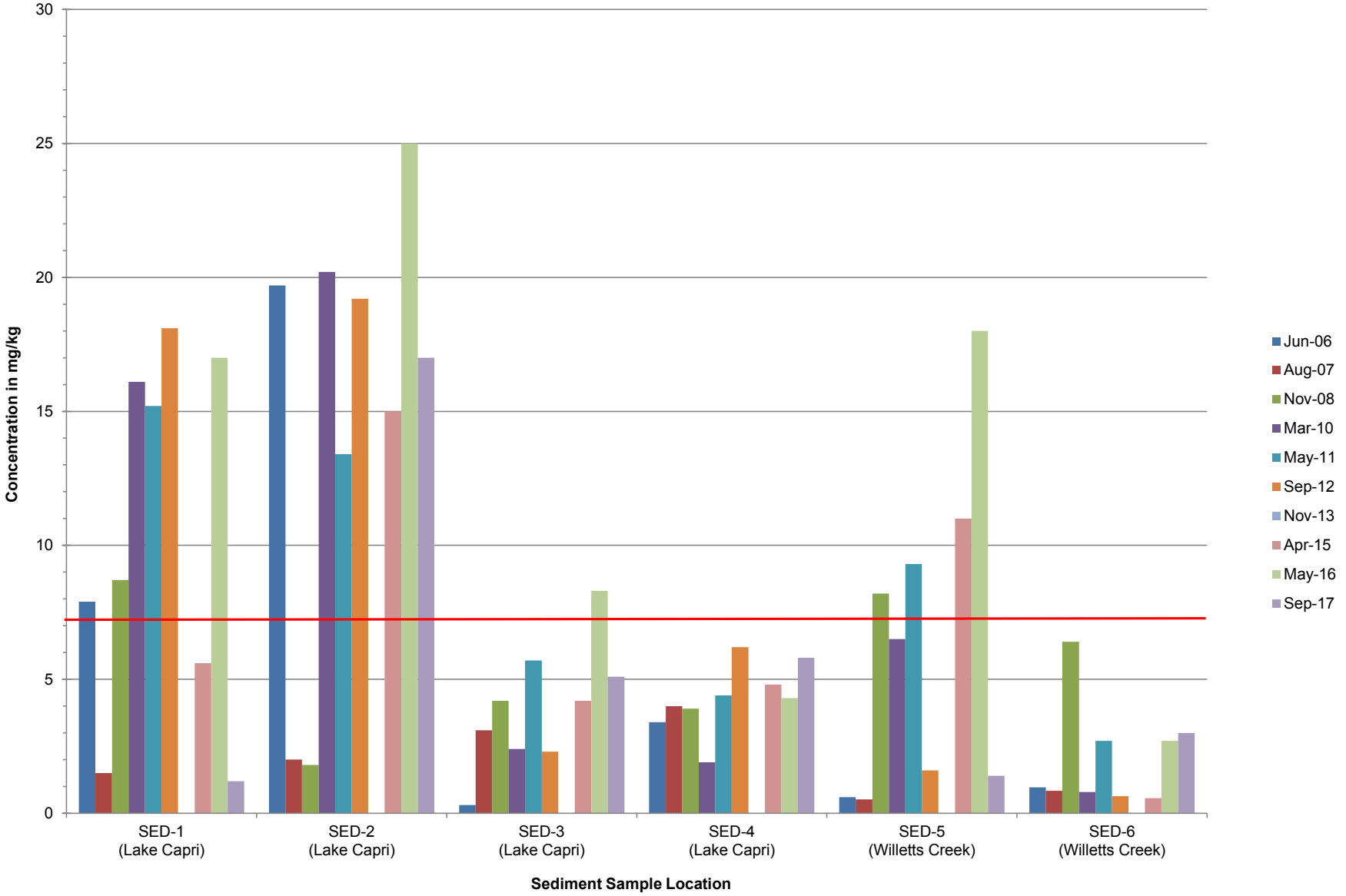
Cadmium Lowest effects level is 0.6 mg/kg
Highest effects level is 9 mg/kg (ROD cleanup criteria)
ND values set to 0.2 mg/kg for plotting purposes

FIGURE 10
LEAD CONCENTRATIONS IN LAKE CAPRI AND WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



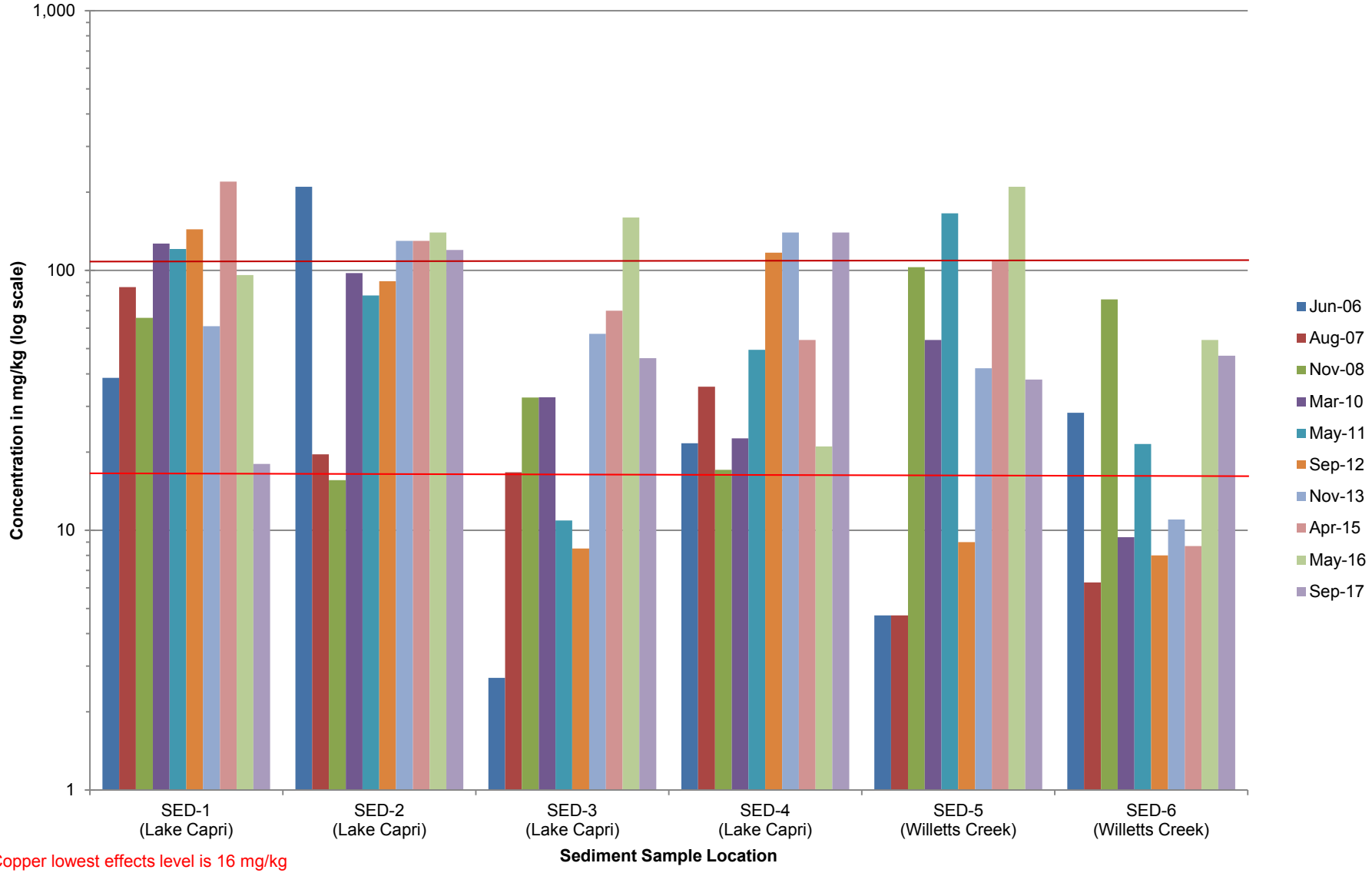
Lead lowest effects level is 31 mg/kg
Lead highest effects level is 110 mg/kg

FIGURE 11
ARSENIC CONCENTRATIONS IN LAKE CAPRI AND WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



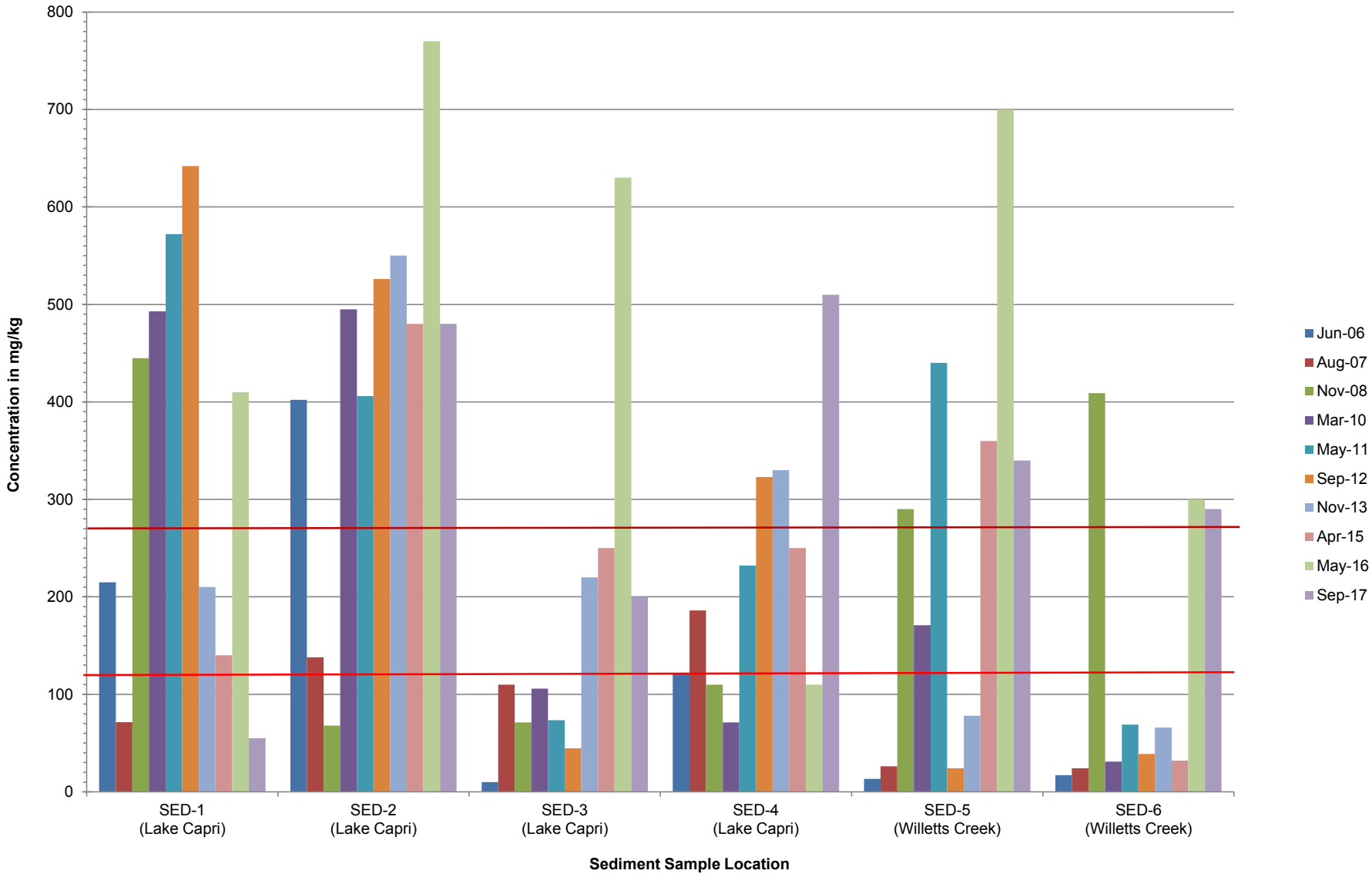
lowest effects level is 6 mg/kg
highest effects levell is 33 mg/kg

FIGURE 12
COPPER CONCENTRATIONS IN LAKE CAPRI AND WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)

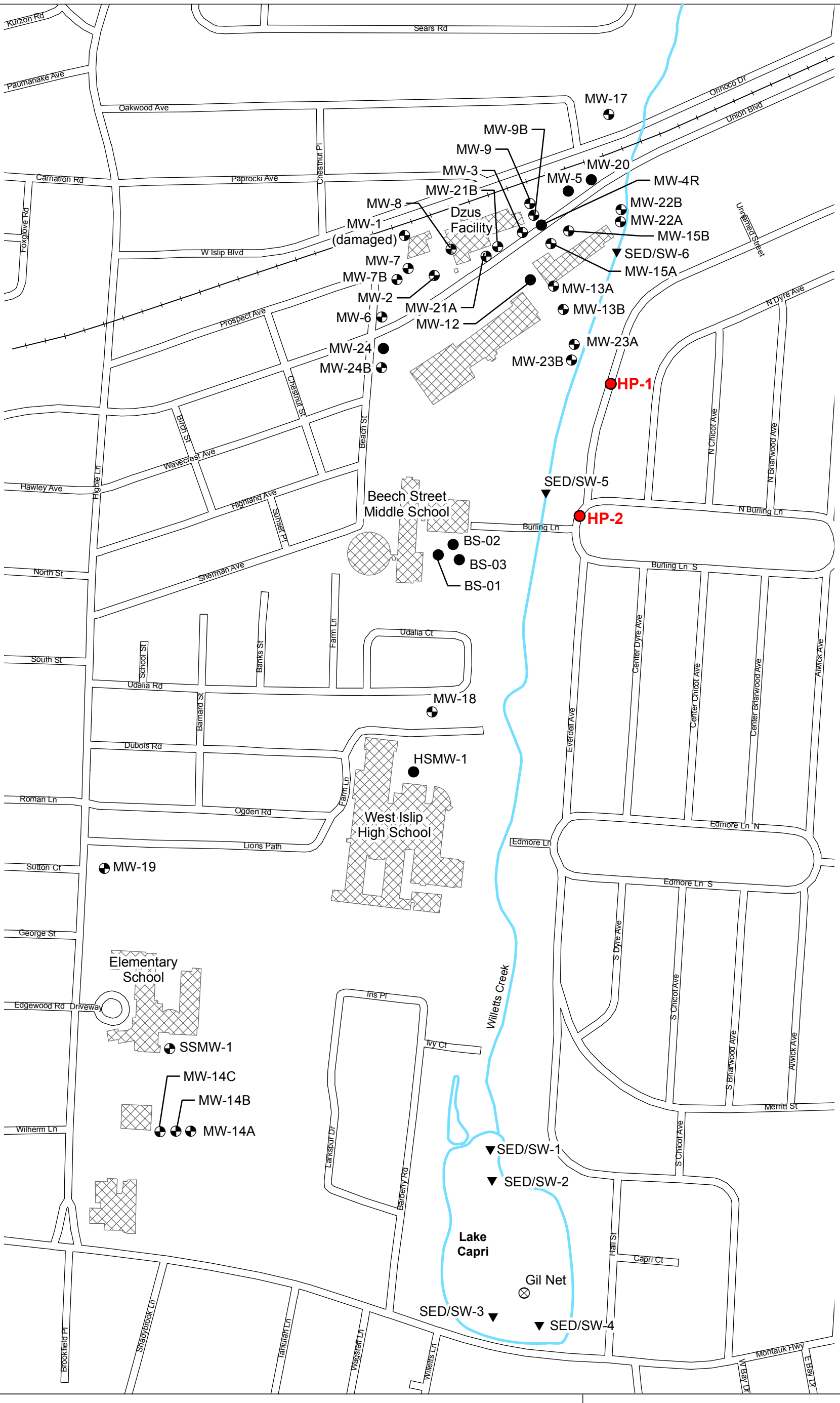


Copper lowest effects level is 16 mg/kg
Copper highest effects level is 110 mg/kg

FIGURE 13
ZINC CONCENTRATIONS IN LAKE CAPRI AND WILLETTS CREEK SEDIMENT SAMPLES
DZUS FASTENERS SITE (1-52-033)



lowest effects level is 120 mg/kg
highest effects level is 270 mg/kg



Legend

- Proposed Boring Location
- EXISTING WELLS INCLUDED IN LTM
- EXISTING MONITORING WELLS
- MISSING MONITORING WELLS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- GIL NET

0 200 400 800 Feet

Prepared by: AECOM

SUBMITTED BY: PK	MULTI SITE G - Dzus Fasteners SITE NO. 1-52-033
DRAWN BY: CF	PROPOSED GEOPROBE BORING LOCATIONS
APPROVED BY: PK	DATE: SEPT 2015 / SCALE: 1 " = 400 feet / DRAWING NO.: 14

Appendix A

NYSDEC Monitoring Well Field Inspection Logs

SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 0900
WELL ID.: MW-01

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.10 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	18.6
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	9.62
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	Good
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig. Overhear lines nearby

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Located just off of the parking lot, north west of main building

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

located on-site, train tracks nearby

REMARKS:

Well was reinstalled within the last year. Survey reflects damaged well.

1/4" OD poly tubing left in well

SKETCH







SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 0930
WELL ID.: MW-2

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40º 42.49 Longitude: 73º 18.10 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	14.0
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	9.2
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig. Located near the parking lot edge

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

well is in grassy area between parking lot and fence along union.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

parking lot and site

REMARKS:

1/4" OD poly tubing left in well. Concrete is all the way up above the PVC. Hard to keep dirt from falling in when opening.

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 1030
WELL ID.: MW-3

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.02 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000 0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flushmount
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		NA
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 15.0
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 6.90
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig over front lawn

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
In a grassy area on Dzus property along Union Blvd

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
Site and road

REMARKS:
1/4" OD poly tubing left in well.

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 0900
WELL ID.: MW-9

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.50 Longitude: 73° 18.02 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A wrongly numbered on road

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	11.5
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	5.80
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

pavement along east side of Dzus building

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

on-site, parking lot

REMARKS:

1/4" OD poly tubing left in well.

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 0900
WELL ID.: MW-9B

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 18.01 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE?		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back) Move back 30 ft	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A written on road

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	44.5
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	5.74
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
pavement along east side of Dzus building

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
on-site, parking lot

REMARKS:
1/4" OD poly tubing left in well. New bolts needed

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/11/17 1200
WELL ID.: MW-13A

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.44 Longitude: 73° 17.100 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On pavement (spray paint)		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	8

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	10.7
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	3.54
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In parking lot across the street from the site near liquor store.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

parking lot

REMARKS:

1/4" OD poly tubing left in well.

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/11/17 1200
WELL ID.: MW-13B

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.43 Longitude: 73° 17.99 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On pavement (spray paint)		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	44.3
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	3.39
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In parking lot across the street from the site near liquor store.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

parking lot

REMARKS:

1/4" OD poly tubing left in well. New bolt needed, new seal needed, silted up inside.

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/11/17 1230
WELL ID.: MW-15A

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.49 Longitude: 73° 17.97 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On pavement (spray paint)		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?		X
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		X
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		X

Cap is missing

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	30.0
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	6.40
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Asphalt parking lot in front of ACE hardware store toward Union Blvd.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

parking lot, mulch staged nearby

REMARKS:

1/4" OD poly tubing left in well.

SKETCH







SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/11/17 1245
WELL ID.: MW-15B

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.50 Longitude: 73° 17.96 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On asphalt pavement (spray paint)	X	
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	85
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	6.38
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
Asphalt parking lot in front of ACE hardware store toward Union Blvd.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
parking lot, mulch staged nearby

REMARKS:
1/4" OD poly tubing left in well. Bolts needed.

SKETCH







SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 1230
WELL ID.: MW-17

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: NM Longitude: NM See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On pavement (spray paint)		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)		X

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	3
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?		X
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	16.5
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	8.52
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig over grass

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

Grassy area

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

Creek and Road

REMARKS:

1/4" OD poly tubing left in well

creek was dry

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/12/17 1130
WELL ID.: MW-18

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 70.27 Longitude: 73° 30.14 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On pavement (spray paint)		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: X

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	16.0
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	5.41
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig over grass

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

By bushes across from street light on grassy area in high school parking lot.

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

none evident

REMARKS:

1/4" OD poly tubing left in well. New bolts needed

Passable obstruction in well at 8.2 feet

SKETCH



SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/11/17 1430
WELL ID.: MW-22A

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.491 Longitude: 73° 17.941 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On concrete pad (spray paint)		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000 0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable) Flushmount
PROTECTIVE CASING MATERIAL TYPE: SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches): 6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet): 14
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet): 7.09
MEASURE WELL DIAMETER (Inches): 2
WELL CASING MATERIAL: PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING: GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE -
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES -

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig over grass

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
In the grassy area around side of laundromat

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
creek and parking lot

REMARKS:
1/4" OD poly tubing left in well. New bolts needed

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC

MONITORING WELL FIELD INSPECTION LOG

DATE/TIME: 9/11/17 1430
WELL ID.: MW-22 B

	YES	NO
WELL VISIBLE? (If not, provide directions below)	X	

WELL COORDINATES? Latitude: 40° 42.491 Longitude: 73° 17.941 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On concrete pad		X
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)	X	

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL: N/A

	YES	NO
SURFACE SEAL PRESENT?	X	
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)	X	
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)	X	

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000	0.0 PID
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)	Flushmount
PROTECTIVE CASING MATERIAL TYPE:	SS
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):	6

	YES	NO
LOCK PRESENT?	X	
LOCK FUNCTIONAL?		X
DID YOU REPLACE THE LOCK?		X
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		X
WELL MEASURING POINT VISIBLE?	X	

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):	44.5
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):	6.91
MEASURE WELL DIAMETER (Inches):	2
WELL CASING MATERIAL:	PVC
PHYSICAL CONDITION OF VISIBLE WELL CASING:	GOOD
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE	-
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES	-

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.

Accessible by truck mounted rig over grass

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.

In the grassy area around side of laundromat

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):

creek and parking lot

REMARKS:

1/4" OD poly tubing left in well. New bolts needed

SKETCH





SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC
DATE/TIME: 9/11/17 1050
WELL ID.: MW-23A

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below) **WELL WAS PAVED OVER**		X

WELL COORDINATES? Latitude: 40° 42.402 Longitude: 73° 17.991 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On asphalt pavement (spray paint)		
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)		

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?		
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		
LOCK FUNCTIONAL?		
DID YOU REPLACE THE LOCK?		
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		
WELL MEASURING POINT VISIBLE?		

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL:
PHYSICAL CONDITION OF VISIBLE WELL CASING:
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
pavement behind building (currently liquor store)

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
parking lot

REMARKS:

SKETCH









Returned after Truck was moved to Confirm



SITE NAME: **Dzus Fasteners**

SITE ID.: 1-52-033
INSPECTOR: CF/JC
DATE/TIME: 9/11/17 1050
WELL ID.: MW-23B

MONITORING WELL FIELD INSPECTION LOG

	YES	NO
WELL VISIBLE? (If not, provide directions below) **WELL WAS PAVED OVER**		X

WELL COORDINATES? Latitude: 40° 42.403 Longitude: 73° 17.987 See Report
PDOP Reading from Trimble pathfinder: Satelites:
GPS Method (circle) Trimble And/Or Magellan

	YES	NO
WELL I.D. VISIBLE? On asphalt pavement (spray paint)		
WELL LOCATION MATCH SITE MAP? (if not, sketch actual location on back)		

WELL I.D. AS IT APPEARS ON PROTECTIVE CASING OR WELL:

	YES	NO
SURFACE SEAL PRESENT?		
SURFACE SEAL COMPETENT? (If cracked, heaved etc., describe below)		
PROTECTIVE CASING IN GOOD CONDITION? (If damaged, describe below)		

HEADSPACE READING (ppm) AND INSTRUMENT USED: Mini RAE 2000
TYPE OF PROTECTIVE CASING AND HEIGHT OF STICKUP IN FEET (If applicable)
PROTECTIVE CASING MATERIAL TYPE:
MEASURE PROTECTIVE CASING INSIDE DIAMETER (Inches):

	YES	NO
LOCK PRESENT?		
LOCK FUNCTIONAL?		
DID YOU REPLACE THE LOCK?		
IS THERE EVIDENCE THAT THE WELL IS DOUBLE CASED? (If yes,describe below)		
WELL MEASURING POINT VISIBLE?		

MEASURE WELL DEPTH FROM MEASURING POINT (Feet):
MEASURE DEPTH TO WATER FROM MEASURING POINT (Feet):
MEASURE WELL DIAMETER (Inches):
WELL CASING MATERIAL:
PHYSICAL CONDITION OF VISIBLE WELL CASING:
ATTACH ID MARKER (if well ID is confirmed) and IDENTIFY MARKER TYPE
PROXIMITY TO UNDERGROUND OR OVERHEAD UTILITIES

DESCRIBE ACCESS TO WELL: (Include accessibility to truck mounted rig, natural obstructions, overhead power lines, proximity to permanent structures, etc.); ADD SKETCH OF LOCATION ON BACK, IF NECESSARY.
Accessible by truck mounted rig

DESCRIBE WELL SETTING (For example, located in a field, in a playground, on pavement, in a garden, etc.) AND ASSESS THE TYPE OF RESTORATION REQUIRED.
pavement behind building (currently liquor store)

IDENTIFY ANY NEARBY POTENTIAL SOURCES OF CONTAMINATION, IF PRESENT (e.g. Gas station, salt pile, etc.):
parking lot

REMARKS:

SKETCH



Returned after Truck was moved to Confirm







Appendix B

Monitoring Well Sampling Forms

AECOM

WELL NO. MW-1

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1 SHEETS
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 1.46 gallons WELL TD: 18.6 ft PUMP INTAKE DEPTH: 16 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
8:45	9.62								Static water level
8:50									pump on
9:05	9.63	300	17.24	0.311	0.00	5.76	282		
9:10	9.61	300	17.20	0.310	0.00	5.78	279		
9:15	9.61	300	17.16	0.312	0.00	5.78	275		
9:20	9.61	300	17.23	0.311	0.00	5.79	274		
9:25	9.61	300	17.18	0.310	0.00	5.80	272		
9:30									Unfiltered Sample DMW-1 Collected
9:32									Filtered Sample DMW-1F Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-2

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1 SHEETS
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 0.78 gallons WELL TD: 14.0 ft PUMP INTAKE DEPTH: 12 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
9:00	9.20								Static water level
9:05									pump on
9:10	9.20	250	17.51	0.209	1.87	5.34	117	9.4	
9:15	9.20	250	17.38	0.192	1.12	5.80	55	1.7	
9:20	9.20	250	17.35	0.192	1.02	5.91	43	1.0	
9:30	9.20	250	17.48	0.198	2.00	5.87	20	0.0	
9:35	9.20	250	17.50	0.199	1.44	5.92	19	0.0	
9:45	9.20	250	17.51	0.202	0.83	5.65	13	0.0	
9:50	9.20	250	17.51	0.202	0.82	5.64	12	0.0	
9:55									Unfiltered Sample DMW-2 Collected
9:57									Filtered Sample DMW-2F Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-3

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1 SHEETS
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 1.32 gallons WELL TD: 15.0 ft PUMP INTAKE DEPTH: 10 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
10:09	6.9								Static water level
10:11		200							pump on
10:15	6.91	200	19.27	0.530	8.64	5.86	232	8.9	
10:20	6.91	200	18.49	0.495	8.24	5.82	233	4.2	
10:25	6.91	200	18.37	0.488	8.47	5.85	233	2.5	
10:30	6.91	200	18.30	0.550	8.47	5.82	233	0.0	
10:35	6.91	200	18.39	0.508	8.35	5.81	233	1.2	
10:40	6.91	200	18.44	0.501	8.19	5.82	230	1.3	
10:45	6.91	200	18.45	0.491	8.26	5.83	230	0.6	
10:45									Unfiltered Sample DMW-3 Collected
10:47									Filtered Sample DMW-3F Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-9A

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 0.93 gallons WELL TD: 11.50 ft PUMP INTAKE DEPTH: 8 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
8:33	5.80								Static water level
8:35									pump on
8:45	5.80	200	19.48	0.298	4.29	6.18	209	0.9	
8:55	5.80	200	19.52	0.299	4.20	6.10	209	0.6	
9:05	5.80	200	19.66	0.299	4.06	6.08	210	0.0	
9:10	5.80	200	19.71	0.296	4.01	6.07	211	0.0	
9:15	5.80	200	19.82	0.295	3.99	6.07	211	0.0	
9:15									Unfiltered Sample DMW-9 Collected
9:17									Filtered Sample DMW-9F Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-9B

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 6.32 gallons WELL TD: 44.5 ft PUMP INTAKE DEPTH: 40 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
8:33	5.74								Static water level
8:35									pump on
8:45	5.75	200	19.02	0.174	2.61	5.11	296	0.0	
8:55	5.75	200	19.17	0.174	2.49	5.17	296	0.0	
9:05	5.75	200	19.21	0.175	2.48	5.20	296	0.0	
9:10	5.75	200	19.26	0.173	2.40	5.19	299	0.0	
9:15	5.74	200	19.32	0.173	2.39	5.18	301	0.0	
9:20	5.74	200							
9:20									Unfiltered Sample DMW-9 Collected
9:22									Filtered Sample DMW-9F Collected
									1/4" HPDE tubing put back into the well.
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-13A

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/11/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 1.17 gallons WELL TD: 10.7 ft PUMP INTAKE DEPTH: 7.5 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
11:45	3.54								Static water level
11:51									pump on
11:55	3.55	200	23.61	0.507	1.11	6.40	69	379	
12:00	3.55	200	22.91	0.524	0.88	6.43	-1	286	
12:05	3.55	200	22.31	0.531	0.62	6.51	-18	134	
12:10	3.55	175	22.61	0.544	0.50	6.58	-32	86.2	
12:15	3.55	175	22.89	0.545	0.49	6.55	-31	79.5	
12:20	3.55	175	22.91	0.542	0.49	6.57	-32	71.2	
12:30	3.55	175	23.04	0.541	0.49	6.57	-36	68.4	
12:35	3.55	175	23.26	0.541	0.49	6.59	-37	55.3	
12:45	3.55	175	22.10	0.555	0.37	6.60	-44	44.4	
12:55	3.55	175	20.55	0.579	0.34	6.72	-59	24.3	
13:00	3.55	175	20.40	0.585	0.31	6.74	-63	17.9	
13:05	3.55	175	20.45	0.589	0.30	6.81	-70	14.0	
13:10	3.55	175	20.49	0.594	0.28	6.83	-71	12.7	
13:15									Unfiltered Sample DMW-13A Collected
13:17									Filtered Sample DMW-13AF Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-13B

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/11/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 6.67 gallons WELL TD: 44.3 ft PUMP INTAKE DEPTH: 40 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
12:00	3.39								Static water level
12:03									pump on
12:05	3.37	200	25.48	0.183	4.60	6.19	146	5.6	
12:10	3.36	200	23.75	0.185	4.32	5.11	230	4.6	
12:15	3.36	200	23.56	0.186	4.32	5.06	235	3.0	
12:20	3.36	200	23.61	0.186	4.28	5.04	249	3.1	
12:30	3.36	200	23.59	0.185	3.96	4.99	261	2.7	
12:35	3.36	200	23.57	0.185	3.93	4.93	266	2.8	
12:45	3.36	200	23.55	0.185	3.90	4.89	268	2.1	
12:50									Unfiltered Sample DMW-13B Collected
12:52									Filtered Sample DMW-13BF Collected
13:00								Duplicate	Unfiltered Sample DMW-63B Collected
13:02								Duplicate	Filtered Sample DMW-63BF Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-15A

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/11/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 3.85 gallons WELL TD: 30.0 ft PUMP INTAKE DEPTH: 25 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
12:20	6.40								Static water level
12:23									pump on
12:25	6.40	300							
12:30	6.40	250	19.64	0.155	1.43	5.83	247	>1000	
12:35	6.40	250	19.89	0.155	1.58	5.83	259	0.0	
12:45	6.40	250	19.38	0.163	1.56	5.79	275	0.0	
12:50	6.40	250	19.33	0.163	1.54	5.76	277	0.0	
12:55	6.40	250	19.23	0.164	1.51	5.75	282	0.0	
13:00	6.40	250	19.17	0.165	1.54	5.72	284	0.0	
13:05									Unfiltered Sample DMW-15A Collected
13:07									Filtered Sample DMW-15AF Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-15B

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/11/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 12.82 gallons WELL TD: 85.0 ft PUMP INTAKE DEPTH: 80 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
12:25	6.38								Static water level
12:27									pump on
12:35	6.38	250	17.60	0.245	0.96			>1000	Horiba screen malfunction
12:40	6.38	250	18.03	0.244	0.84	6.03	-73	8	
12:50	6.38	250	17.64	0.244	0.76	5.46	-83	3.5	
12:55	6.38	250	17.20	0.244	0.72	5.46	-88	22.3	
13:00	6.38	250	17.05	0.243	0.67	5.44	-91	4.8	
13:05	6.38	250	17.05	0.243	0.67	5.45	-92	3.3	
13:15	6.38	250	16.93	0.243	0.64	5.43	-94	1.9	
13:20	6.38	250	16.87	0.243	0.64	5.44	-95	3.1	
13:25	6.38	250	16.87	0.244	0.63	5.41	-95	2.3	
13:30									Unfiltered Sample DMW-15B Collected
13:32									Filtered Sample DMW-15BF Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-17

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1 SHEETS
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 1.30 gallons WELL TD*: 16.5 ft PUMP INTAKE DEPTH: 11.5 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS: Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	REMARKS
11:45	8.52								Static water level
11:50									pump on
teflon tubing, purged 5 gallons (>3 volumes), pump intake at top of water column during purging, then lowered									
12:30	8.52	250	18.91	0.088	1.16	6.22	54	127	
12:35	8.52	250	19.05	0.090	0.07	6.18	58	87.3	
12:40	8.52	250	18.92	0.093	0.00	6.22	55	22.5	
12:45	8.52	250	19.22	0.092	0.00	6.32	48	3.5	
12:05	8.52	250	19.07	0.092	0.00	6.35	44	0.0	
12:55	8.52	250	19.06	0.091	0.00	6.34	45	0.0	
13:00									Unfiltered Sample DMW-17 Collected
13:02									Filtered Sample DMW-17F Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-18

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1 SHEETS
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/12/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 1.73 gallons WELL TD*: 16.0 ft PUMP INTAKE DEPTH: 12 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
11:23	5.41								Static water level
11:24									pump on
11:25	5.41	200	20.78	0.224	8.12	6.15	216	16.7	
11:30	5.41	200	20.45	0.219	7.31	6.18	218	10.5	
11:35	5.42	200	20.13	0.211	6.92	6.18	219	12.3	
11:40	5.42	200	20.13	0.221	7.95	6.10	218	10.4	
11:45	5.42	200	20.07	0.223	7.50	6.14	219	9.1	
11:50	5.42	200	19.98	0.220	7.61	6.10	221	10.7	
11:55	5.42	200	19.96	0.219	7.68	6.09	221	5.6	
11:59									Unfiltered Sample DMW-18 Collected
12:01									Filtered Sample DMW-18F Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-22A

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/11/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 1.13 gallons WELL TD: 14.0 ft PUMP INTAKE DEPTH: 9 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
14:05	7.09								Static water level
14:07									pump on
14:10	7.09	200	21.08	0.351	0.73	6.12	-5	41.8	
14:20	7.09	200	19.73	0.413	0.29	6.15	6	21.7	
14:25	7.09	200	19.77	0.427	0.27	6.16	4	17.1	
14:35	7.09	200	19.78	0.434	0.25	6.16	3	14.1	
14:45	7.09	200	19.52	0.455	0.44	6.24	-2	9.2	
14:55	7.09	200	19.44	0.451	0.39	6.24	-3	6.1	
15:00	7.09	200	19.40	0.445	0.37	6.24	-3	5.2	
15:10									Unfiltered Sample DMW-22A Collected
15:12									Filtered Sample DMW-22AF Collected
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-22B

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1
LOCATION: West Islip, NY		DATE WELL SAMPLED: 9/11/2017	
CLIENT: NYSDEC		NAME OF INSPECTOR: Celeste Foster and James Christopher	

ONE WELL VOLUME : 6.13 gallons WELL TD: 44.50 ft PUMP INTAKE DEPTH: 40 ft

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
14:02	6.91								Static water level
14:03									pump on
14:05	6.93	200	27.14	0.247	1.74	5.37	245	4.9	
14:10	6.92	200	24.82	0.271	0.97	5.37	245	5.0	
14:20	6.92	200	22.27	0.292	0.54	5.42	240	3.2	
14:25	6.92	200	21.25	0.299	0.46	5.42	240	1.3	
14:35	6.92	200	20.26	0.306	0.42	5.41	240	1.1	
14:45	6.92	200	19.93	0.307	0.39	5.41	241	0.1	
14:55	6.92	200	19.72	0.310	0.37	5.38	242	0.0	
15:00									Unfiltered Sample DMW-22B Collected
									+MS/MSD
15:02									Filtered Sample DMW-22BF Collected
									+MS/MSD
									1/4" HPDE tubing put back into the well.

Pump Type: Peristaltic Pump

Analytical Parameters: TAL Metals (Total and Field Filtered), Hexavalent Chromium and PFAs

AECOM

WELL NO. MW-23A

WELL SAMPLING FORM	**PROJECT** Dzus Fasteners	**PROJECT No.** 60277021	**SHEET** 1 **OF** 1 **SHEETS**
LOCATION West Islip, NY		**DATE WELL SAMPLED**	
CLIENT NYSDEC		**NAME OF INSPECTOR**	

ONE WELL VOLUME : 0.00 gallons **WELL TD:** **PUMP INTAKE DEPTH:**

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS						REMARKS
			Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	
									Static water level
									pump on
Paved over not sampled									

Pump Type:

Analytical Parameters:

AECOM

WELL NO. MW-23B

WELL SAMPLING FORM	PROJECT: Dzus Fasteners	PROJECT No.: 60277021	SHEET: 1 OF 1 SHEETS
LOCATION: West Islip, NY		DATE WELL SAMPLED:	
CLIENT: NYSDEC		NAME OF INSPECTOR:	

ONE WELL VOLUME : 0.00 gallons WELL TD: PUMP INTAKE DEPTH:

Time	Depth to Water (ft)	Purge Rate (mL/min)	FIELD MEASUREMENTS: Temp. (°C)	Conduct. (µs/cm)	DO (mg/L)	pH	ORP	Turbidity (ntu)	REMARKS
									Static water level
									pump on
Paved over not sampled									

Pump Type:

Analytical Parameters:

Appendix C

Laboratory Data Packages

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Multi Site G Dzus

Client PO: 60277021

Report To: AECOM
100 Red School House Rd.
Suite B-1
Chestnut Ridge, NY 10977

Attn: Paul Kareth

Received Date: 9/11/2017

Report Date: 10/4/2017

Deliverables: NYDOH-CatA

Lab ID: AC99975

Lab Project No: 7091201

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR Jean Revolus - Laboratory Director

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

Hampton-Clarke
Analytical & Field Services

THIS CATEGORY “A” REPORT
IS NUMBERED FROM
1 to 90

(Subcontracted data is numbered as attached)

HC Case Narrative

Client: AECOM **HC Project:** 7091201
Project: Multi Site G Dzus

Hampton-Clarke (HC) received the following samples on 9/11/17:

Client ID	HC Sample ID	Matrix	Analysis
DMW-13A	AC99975-001	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr D), PFAs Mod 20 Compounds (537 Mod)*
DMW-13A F	AC99975-002	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-13B	AC99975-003	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-13B F	AC99975-004	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-63B	AC99975-005	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-63B F	AC99975-006	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-15A	AC99975-007	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-15A F	AC99975-008	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-15B	AC99975-009	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-15B F	AC99975-010	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-22A	AC99975-011	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-22A F	AC99975-012	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-22B	AC99975-013	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-22B MS	AC99975-014	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-22B MSD	AC99975-015	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-22B F	AC99975-016	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-22B F MS	AC99975-017	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-22B F MSD	AC99975-018	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DFB-20170911	AC99975-019	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*

* - Indicates analysis was performed by a subcontracted laboratory.

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

The serial dilution for batches 61376 and 61379 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

Data conforms to method requirements.

Subcontracted Analysis:

Please refer to attached subcontracted laboratory report. Samples AC99975-001, 003, 005, 007, 009, 011, 013, 014, 015, and 019 were submitted to SGS Accutest for PFAs Mod 20 Compounds analysis.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

10/4/2017
Date

7091201 0002

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 7091201

Page _____ of _____

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other	[X] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: 100 Red school house Rd
Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Paul Kareth
1d) Send Report to: Paul Kareth

Project Information

2a) Project: Multi Sit G
Dews
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): West Islip NY
2d) Quote/PO # (If Applicable): 60277021

FOR LAB USE ONLY ↓

Batch # AC9975

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL metals	Hex Chrome	PFAS	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: TR.ZMA	9) Comments
001	DMW-13A	GW	9/11/17	1315		✓	✓	✓	✓	/						/	2	
002	DMW-13AF		9/11/17	1317		✓	✓									/		Field Filtered
003	DMW-13B		1250	9/11/17		✓	✓	✓	✓	1						/	2	
004	DMW-13BF		1252			✓	✓									/		Field Filtered
005	Dmw-63B		1300			✓	✓	✓	✓	1						/	2	
006	Dmw-63BF		1302			✓	✓									/		Field Filtered
007	Dmw-15A		9/11/17	1305		✓	✓	✓	✓	1						/	2	
008	Dmw-15AF			1307		✓	✓									/		Field Filtered
009	Dmw-15B			1330		✓	✓	✓	✓	1						/	2	
010	Dmw-15BF			1332		✓	✓									/		Field Filtered

10) Relinquished by:	Accepted by:	Date	Time
		9/11/17	15:57
		9/11/17	18:30

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.6, 2.9, 2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 7091201

Page _____ of _____

7091201 0003

Customer Information

1a) Customer: AECOM
Address: 100 Red School House Rd
Chestnut Ridge, NY 10977
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Paul Kareth
1d) Send Report to: Paul Kareth

Project Information

2a) Project: Multi Site GWS
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): West Islip NY
2d) Quote/PO # (If Applicable): 60277021

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

FOR LAB USE ONLY ↓

Batch # AC99975

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL Metals	Hex Chrome	PFAS	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: 1L, 2MA	9) Comments
011	DMW-22A	GW	9/11/17	1510		✓	✓	✓	✓	1						1	2	
012	DMW-22AF	GW	9/11/17	1512		✓	✓			~~1~~						1		
013/014/015	DMW-22B	GW	9/11/17	1500		✓	✓	✓	✓	3						3	6	+MS/MSD
016/017/018	DMW-22BF	GW	9/11/17	1502		✓	✓									3		+MS/MSD Field Filtered
019	DFB-20170911	BLANK	9/11/17	1510		✓	✓	✓	✓	1						1	2	

10) Relinquished by:	Accepted by:	Date	Time
		9/11/17	15:57
		9/11/17	18:30

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.6/2.4/2.7

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

PROJECT MODIFICATIONS

Client: AECOM-CRNY **HC Project #:** 7091201

Project: Multi Site G Dzus

---

sherree192.168.1.210
9/14/2017 2:43:32 PM

Per Paul Kareth, Category A deliverables. SB 9/14/17

CONDITION UPON RECEIPT

Batch Number AC99975 Entered By: maxwell
Date Entered 9/12/2017 8:53:00 AM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	T0054	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.6,2.9,2.7
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AC99975 Entered By: maxwell

Date Entered 9/12/2017 8:54:00 AM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AC99975-001	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-002	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-003	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-004	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-005	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-006	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-007	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-008	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-009	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-010	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-011	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-012	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-013	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-014	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-015	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-016	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-017	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-018	1L	P	METALS	HNO3	169331	1	HC693124
AC99975-019	1L	P	METALS	HNO3	169331	1	HC693124

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC99975-001	09/11/17 18:30	MAXW	0	M	Received
AC99975-001	09/12/17 08:37	MAXW	0	M	Login
AC99975-001	09/12/17 15:05	R12	1	A	NONE
AC99975-001	09/14/17 16:27	SUB	1	A	none
AC99975-001	09/12/17 15:05	R12	2	A	NONE
AC99975-001	09/14/17 16:27	SUB	2	A	none
AC99975-001	09/12/17 09:06	BCT	3	A	CR6W
AC99975-001	09/12/17 14:26	R12	3	A	NONE
AC99975-001	09/12/17 15:05	R12	3	A	NONE
AC99975-001	09/12/17 15:05	R12	4	A	NONE
AC99975-001	09/14/17 11:40	AM	4	A	TDWI/HG
AC99975-001	09/14/17 11:41	R12	4	A	NONE
AC99975-001	09/15/17 10:53	AM	4	A	TDWI
AC99975-001	09/15/17 10:54	R12	4	A	NONE
AC99975-002	09/11/17 18:30	MAXW	0	M	Received
AC99975-002	09/12/17 08:37	MAXW	0	M	Login
AC99975-002	09/12/17 15:05	R12	1	A	NONE
AC99975-002	09/14/17 11:40	AM	1	A	TDWI/HG
AC99975-002	09/14/17 11:41	R12	1	A	NONE
AC99975-002	09/15/17 10:53	AM	1	A	TDWI
AC99975-002	09/15/17 10:54	R12	1	A	NONE
AC99975-003	09/11/17 18:30	MAXW	0	M	Received
AC99975-003	09/12/17 08:37	MAXW	0	M	Login
AC99975-003	09/12/17 15:05	R12	1	A	NONE
AC99975-003	09/14/17 16:27	SUB	1	A	none
AC99975-003	09/12/17 15:05	R12	2	A	NONE
AC99975-003	09/14/17 16:27	SUB	2	A	none
AC99975-003	09/12/17 15:05	R12	3	A	NONE
AC99975-003	09/14/17 11:40	AM	3	A	TDWI/HG
AC99975-003	09/14/17 11:41	R12	3	A	NONE
AC99975-003	09/15/17 10:53	AM	3	A	TDWI
AC99975-003	09/15/17 10:54	R12	3	A	NONE
AC99975-003	09/12/17 09:06	BCT	4	A	CR6W
AC99975-003	09/12/17 14:26	R12	4	A	NONE
AC99975-003	09/12/17 15:05	R12	4	A	NONE
AC99975-004	09/11/17 18:30	MAXW	0	M	Received
AC99975-004	09/12/17 08:37	MAXW	0	M	Login
AC99975-004	09/12/17 15:05	R12	1	A	NONE
AC99975-004	09/14/17 11:40	AM	1	A	TDWI/HG
AC99975-004	09/14/17 11:41	R12	1	A	NONE
AC99975-004	09/15/17 10:53	AM	1	A	TDWI
AC99975-004	09/15/17 10:54	R12	1	A	NONE
AC99975-005	09/11/17 18:30	MAXW	0	M	Received
AC99975-005	09/12/17 08:37	MAXW	0	M	Login
AC99975-005	09/12/17 15:05	R12	1	A	NONE
AC99975-005	09/14/17 16:27	SUB	1	A	none
AC99975-005	09/12/17 15:05	R12	2	A	NONE
AC99975-005	09/14/17 16:27	SUB	2	A	none
AC99975-005	09/12/17 15:05	R12	3	A	NONE
AC99975-005	09/14/17 11:40	AM	3	A	TDWI/HG
AC99975-005	09/14/17 11:41	R12	3	A	NONE
AC99975-005	09/15/17 10:53	AM	3	A	TDWI
AC99975-005	09/15/17 10:54	R12	3	A	NONE
AC99975-005	09/12/17 09:06	BCT	4	A	CR6W
AC99975-005	09/12/17 14:26	R12	4	A	NONE
AC99975-005	09/12/17 15:05	R12	4	A	NONE
AC99975-006	09/11/17 18:30	MAXW	0	M	Received
AC99975-006	09/12/17 08:37	MAXW	0	M	Login
AC99975-006	09/12/17 15:05	R12	1	A	NONE
AC99975-006	09/14/17 11:40	AM	1	A	TDWI/HG
AC99975-006	09/14/17 11:41	R12	1	A	NONE
AC99975-006	09/15/17 10:53	AM	1	A	TDWI
AC99975-006	09/15/17 10:54	R12	1	A	NONE
AC99975-007	09/11/17 18:30	MAXW	0	M	Received
AC99975-007	09/12/17 08:37	MAXW	0	M	Login
AC99975-007	09/12/17 15:05	R12	1	A	NONE
AC99975-007	09/14/17 16:27	SUB	1	A	none
AC99975-007	09/12/17 15:05	R12	2	A	NONE
AC99975-007	09/14/17 16:27	SUB	2	A	none
AC99975-007	09/12/17 15:05	R12	3	A	NONE
AC99975-007	09/14/17 11:40	AM	3	A	TDWI/HG
AC99975-007	09/14/17 11:41	R12	3	A	NONE
AC99975-007	09/15/17 10:53	AM	3	A	TDWI
AC99975-007	09/15/17 10:54	R12	3	A	NONE
AC99975-007	09/12/17 09:06	BCT	4	A	CR6W
AC99975-007	09/12/17 14:26	R12	4	A	NONE
AC99975-007	09/12/17 15:05	R12	4	A	NONE
AC99975-008	09/11/17 18:30	MAXW	0	M	Received
AC99975-008	09/12/17 08:37	MAXW	0	M	Login
AC99975-008	09/12/17 15:05	R12	1	A	NONE
AC99975-008	09/14/17 11:40	AM	1	A	TDWI/HG
AC99975-008	09/14/17 11:41	R12	1	A	NONE
AC99975-008	09/15/17 10:53	AM	1	A	TDWI
AC99975-008	09/15/17 10:54	R12	1	A	NONE
AC99975-009	09/11/17 18:30	MAXW	0	M	Received
AC99975-009	09/12/17 08:37	MAXW	0	M	Login
AC99975-009	09/12/17 15:05	R12	1	A	NONE
AC99975-009	09/14/17 16:27	SUB	1	A	none
AC99975-009	09/12/17 15:05	R12	2	A	NONE
AC99975-009	09/14/17 16:27	SUB	2	A	none
AC99975-009	09/12/17 15:05	R12	3	A	NONE
AC99975-009	09/14/17 11:40	AM	3	A	TDWI/HG
AC99975-009	09/14/17 11:41	R12	3	A	NONE
AC99975-009	09/15/17 10:54	R12	3	A	NONE
AC99975-009	09/12/17 09:06	BCT	4	A	CR6W
AC99975-009	09/12/17 14:26	R12	4	A	NONE
AC99975-009	09/12/17 15:05	R12	4	A	NONE
AC99975-010	09/11/17 18:30	MAXW	0	M	Received
AC99975-010	09/12/17 08:37	MAXW	0	M	Login
AC99975-010	09/12/17 15:05	R12	1	A	NONE
AC99975-010	09/14/17 11:40	AM	1	A	TDWI/HG
AC99975-010	09/14/17 11:41	R12	1	A	NONE
AC99975-010	09/15/17 10:53	AM	1	A	TDWI
AC99975-010	09/15/17 10:54	R12	1	A	NONE
AC99975-011	09/11/17 18:30	MAXW	0	M	Received
AC99975-011	09/12/17 08:37	MAXW	0	M	Login
AC99975-011	09/12/17 15:05	R12	1	A	NONE
AC99975-011	09/14/17 16:27	SUB	1	A	none
AC99975-011	09/12/17 15:05	R12	2	A	NONE
AC99975-011	09/14/17 16:27	SUB	2	A	none
AC99975-011	09/12/17 09:06	BCT	3	A	CR6W
AC99975-011	09/12/17 14:26	R12	3	A	NONE
AC99975-011	09/12/17 15:05	R12	3	A	NONE
AC99975-011	09/12/17 15:05	R12	4	A	NONE
AC99975-011	09/14/17 11:40	AM	4	A	TDWI/HG
AC99975-011	09/14/17 11:41	R12	4	A	NONE
AC99975-011	09/15/17 10:53	AM	4	A	TDWI
AC99975-011	09/15/17 10:54	R12	4	A	NONE
AC99975-012	09/11/17 18:30	MAXW	0	M	Received
AC99975-012	09/12/17 08:37	MAXW	0	M	Login
AC99975-012	09/12/17 15:05	R12	1	A	NONE
AC99975-012	09/14/17 11:40	AM	1	A	TDWI/HG
AC99975-012	09/14/17 11:41	R12	1	A	NONE
AC99975-012	09/15/17 10:53	AM	1	A	TDWI
AC99975-012	09/15/17 10:54	R12	1	A	NONE
AC99975-013	09/11/17 18:30	MAXW	0	M	Received
AC99975-013	09/12/17 08:37	MAXW	0	M	Login
AC99975-013	09/12/17 15:05	R12	1	A	NONE
AC99975-013	09/14/17 16:27	SUB	1	A	none
AC99975-013	09/12/17 15:05	R12	2	A	NONE
AC99975-013	09/14/17 16:27	SUB	2	A	none
AC99975-013	09/12/17 15:05	R12	3	A	NONE
AC99975-013	09/14/17 11:40	AM	3	A	TDWI/HG
AC99975-013	09/14/17 11:41	R12	3	A	NONE
AC99975-013	09/15/17 10:53	AM	3	A	TDWI
AC99975-013	09/15/17 10:54	R12	3	A	NONE
AC99975-013	09/12/17 09:06	BCT	4	A	CR6W
AC99975-013	09/12/17 14:26	R12	4	A	NONE
AC99975-013	09/12/17 15:05	R12	4	A	NONE
AC99975-014	09/11/17 18:30	MAXW	0	M	Received
AC99975-014	09/12/17 08:37	MAXW	0	M	Login
AC99975-014	09/12/17 15:05	R12	2	A	NONE
AC99975-014	09/14/17 11:40	AM	2	A	TDWI/HG
AC99975-014	09/14/17 11:41	R12	2	A	NONE
AC99975-014	09/15/17 10:53	AM	2	A	TDWI
AC99975-014	09/15/17 10:54	R12	2	A	NONE
AC99975-014	09/12/17 15:05	R12	3	A	NONE
AC99975-014	09/14/17 16:27	SUB	3	A	none
AC99975-014	09/12/17 15:05	R12	4	A	NONE
AC99975-014	09/14/17 16:27	SUB	4	A	none

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC99975-014	09/12/17 15:05	R12	5	A	NONE
AC99975-015	09/11/17 18:30	MAXW	0	M	Received
AC99975-015	09/12/17 08:37	MAXW	0	M	Login
AC99975-015	09/12/17 09:06	BCT	4	A	CR6W
AC99975-015	09/12/17 14:26	R12	4	A	NONE
AC99975-015	09/12/17 15:05	R12	5	A	NONE
AC99975-015	09/14/17 11:40	AM	5	A	TDWI/HG
AC99975-015	09/14/17 11:41	R12	5	A	NONE
AC99975-015	09/15/17 10:53	AM	5	A	TDWI
AC99975-015	09/15/17 10:54	R12	5	A	NONE
AC99975-015	09/12/17 15:05	R12	6	A	NONE
AC99975-015	09/14/17 16:27	SUB	6	A	none
AC99975-015	09/12/17 15:05	R12	7	A	NONE
AC99975-015	09/14/17 16:27	SUB	7	A	none
AC99975-015	09/12/17 14:26	R12	8	A	NONE
AC99975-015	09/12/17 15:05	R12	8	A	NONE
AC99975-016	09/11/17 18:30	MAXW	0	M	Received
AC99975-016	09/12/17 08:37	MAXW	0	M	Login
AC99975-016	09/12/17 15:05	R12	2	A	NONE
AC99975-016	09/14/17 12:38	OA	2	A	TDWI/HG
AC99975-016	09/14/17 21:23	R12	2	A	NONE
AC99975-017	09/11/17 18:30	MAXW	0	M	Received
AC99975-017	09/12/17 08:37	MAXW	0	M	Login
AC99975-017	09/12/17 09:06	BCT	3	A	CR6W
AC99975-017	09/12/17 15:05	R12	5	A	NONE
AC99975-017	09/14/17 12:38	OA	5	A	TDWI/HG
AC99975-017	09/14/17 21:23	R12	5	A	NONE
AC99975-018	09/11/17 18:30	MAXW	0	M	Received
AC99975-018	09/12/17 08:37	MAXW	0	M	Login
AC99975-018	09/12/17 15:05	R12	1	A	NONE
AC99975-018	09/14/17 12:38	OA	1	A	TDWI/HG
AC99975-018	09/14/17 21:23	R12	1	A	NONE
AC99975-019	09/11/17 18:30	MAXW	0	M	Received
AC99975-019	09/12/17 08:37	MAXW	0	M	Login
AC99975-019	09/12/17 15:05	R12	1	A	NONE
AC99975-019	09/14/17 12:38	OA	1	A	TDWI/HG
AC99975-019	09/14/17 21:23	R12	1	A	NONE
AC99975-019	09/12/17 09:06	BCT	2	A	CR6W
AC99975-019	09/12/17 14:26	R12	2	A	NONE
AC99975-019	09/12/17 15:05	R12	2	A	NONE
AC99975-019	09/12/17 15:05	R12	3	A	NONE
AC99975-019	09/14/17 16:27	SUB	3	A	none
AC99975-019	09/12/17 15:05	R12	4	A	NONE
AC99975-019	09/14/17 16:27	SUB	4	A	none

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Laboratory Chronicle

Client: AECOM
Project: Multi Site G Dzus

HC Project #: 7091201

Lab#: AC99975-001 **Sample ID: DMW-13A**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr D	SM 3500-Cr D	09/12/17	BCT	SM 3500-Cr D	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:34	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:06	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:42	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 18:57	PC

Lab#: AC99975-002 **Sample ID: DMW-13A F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:36	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:10	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:45	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:03	PC

Lab#: AC99975-003 **Sample ID: DMW-13B**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:37	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:13	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:49	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:09	PC

Lab#: AC99975-004 **Sample ID: DMW-13B F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:42	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:16	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:52	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:15	PC

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091201

Project: Multi Site G Dzus

Lab#: AC99975-005 **Sample ID: DMW-63B**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:43	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:55	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:20	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:21	PC

Lab#: AC99975-006 **Sample ID: DMW-63B F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:44	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:23	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:58	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:27	PC

Lab#: AC99975-007 **Sample ID: DMW-15A**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:46	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:49	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 21:19	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:32	PC

Lab#: AC99975-008 **Sample ID: DMW-15A F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:47	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 21:22	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:52	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:38	PC

Laboratory Chronicle

Client: AECOM
Project: Multi Site G Dzus

HC Project #: 7091201

Lab#: AC99975-009 **Sample ID: DMW-15B**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:49	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:56	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 21:25	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 19:44	PC

Lab#: AC99975-010 **Sample ID: DMW-15B F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:50	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 21:29	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 18:59	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 20:14	PC

Lab#: AC99975-011 **Sample ID: DMW-22A**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:51	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 19:02	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 21:32	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 20:20	PC

Lab#: AC99975-012 **Sample ID: DMW-22A F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:53	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 19:06	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 21:35	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 20:25	PC

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091201

Project: Multi Site G Dzus

Lab#: AC99975-013 **Sample ID: DMW-22B**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:28	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 17:29	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:15	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 17:58	PC

Lab#: AC99975-014 **Sample ID: DMW-22B MS**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:31	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 17:36	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:21	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 18:16	PC

Lab#: AC99975-015 **Sample ID: DMW-22B MSD**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 10:15	AADEWUSI	EPA 7470A	9/18/17 14:33	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 17:41	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:24	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/19/17 18:22	PC

Lab#: AC99975-016 **Sample ID: DMW-22B F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 13:55	olufemi	EPA 7470A	9/14/17 21:14	OA
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 18:45	SRB
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 21:25	SRB
TAL Metals 6020	3005&10/3050	09/14/17 13:55	olufemi	EPA 6020A	9/15/17 05:51	PC

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091201

Project: Multi Site G Dzus

Lab#: AC99975-017 **Sample ID: DMW-22B F MS**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 13:55	olufemi	EPA 7470A	9/14/17 21:17	OA
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 18:52	SRB
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 21:32	SRB
TAL Metals 6020	3005&10/3050	09/14/17 13:55	olufemi	EPA 6020A	9/15/17 06:08	PC

Lab#: AC99975-018 **Sample ID: DMW-22B F MSD**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/14/17 13:55	olufemi	EPA 7470A	9/14/17 21:19	OA
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 18:55	SRB
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 21:37	SRB
TAL Metals 6020	3005&10/3050	09/14/17 13:55	olufemi	EPA 6020A	9/15/17 06:14	PC

Lab#: AC99975-019 **Sample ID: DFB-20170911**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/12/17	BCT	SM 3500-Cr B	9/12/17 09:44	BCT
Mercury (Water) 7470A	EPA 7470A	09/14/17 13:55	olufemi	EPA 7470A	9/14/17 21:36	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 20:07	SRB
TAL Metals 6010	3005&10/3050	09/14/17 13:55	olufemi	EPA 6010C	9/14/17 22:48	SRB
TAL Metals 6020	3005&10/3050	09/14/17 13:55	olufemi	EPA 6020A	9/15/17 08:05	PC

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

HC Report of Analysis

Client: AECOM
Project: Multi Site G Dzus

HC Project #: 7091201

Sample ID: DMW-13A
Lab#: AC99975-001
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr D

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**63**
Calcium	**1**	**ug/l**	**5000**	**35000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**6000**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**430**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5000**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**63000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**14**
Cobalt	**1**	**ug/l**	**2.0**	**9.7**
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-13A F
Lab#: AC99975-002
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	**1**	**ug/l**	**50**	**63**
Calcium	**1**	**ug/l**	**5000**	**37000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**4600**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**430**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5300**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**66000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**15**
Cobalt	**1**	**ug/l**	**2.0**	**11**
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-13B
Lab#: AC99975-003
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**88**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**19000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**3.0**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-13B F | **Collection Date: 9/11/2017**
Lab#: AC99975-004 | **Receipt Date: 9/11/2017**
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**19000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-63B
Lab#: AC99975-005
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**100**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**18000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**3.3**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-63B F
Lab#: AC99975-006
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**18000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-15A | **Collection Date: 9/11/2017**
Lab#: AC99975-007 | **Receipt Date: 9/11/2017**
Matrix: Aqueous

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**18000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**88**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**24000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**13**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-15A F
Lab#: AC99975-008
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**17000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**23000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**11**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-15B
Lab#: AC99975-009
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1700**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**78**
Nickel	1	ug/l	50	ND
Potassium	**1**	**ug/l**	**5000**	**5500**
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**26000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-15B F | **Collection Date: 9/11/2017**
Lab#: AC99975-010 | **Receipt Date: 9/11/2017**
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**12000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1700**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**120**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**28000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-22A
Lab#: AC99975-011
Matrix: Aqueous
Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**22000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**2700**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**560**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**51000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-22A F
Lab#: AC99975-012
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**23000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**2400**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**610**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**54000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-22B
Lab#: AC99975-013
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**32000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	**1**	**ug/l**	**5000**	**6000**
Manganese	**1**	**ug/l**	**40**	**410**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**22000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-22B MS
Lab#: AC99975-014
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	0.46

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	10

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	1			Attached

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5200
Barium	1	ug/l	50	560
Calcium	1	ug/l	5000	86000
Chromium	1	ug/l	50	520
Copper	1	ug/l	50	530
Iron	1	ug/l	300	5300
Magnesium	1	ug/l	5000	58000
Manganese	1	ug/l	40	970
Nickel	1	ug/l	50	520
Potassium	1	ug/l	5000	55000
Silver	1	ug/l	20	100
Sodium	1	ug/l	5000	75000
Vanadium	1	ug/l	50	520
Zinc	1	ug/l	50	520

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	560
Arsenic	1	ug/l	2.0	570
Beryllium	1	ug/l	1.0	590
Cadmium	1	ug/l	2.0	550
Cobalt	1	ug/l	2.0	550
Lead	1	ug/l	3.0	550
Selenium	1	ug/l	10	530
Thallium	1	ug/l	2.0	540

Sample ID: DMW-22B MSD
Lab#: AC99975-015
Matrix: Aqueous
Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	0.46

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	9.4

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	1			Attached

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5300
Barium	1	ug/l	50	560
Calcium	1	ug/l	5000	84000
Chromium	1	ug/l	50	520
Copper	1	ug/l	50	530
Iron	1	ug/l	300	5400
Magnesium	1	ug/l	5000	59000
Manganese	1	ug/l	40	970
Nickel	1	ug/l	50	520
Potassium	1	ug/l	5000	54000
Silver	1	ug/l	20	100
Sodium	1	ug/l	5000	73000
Vanadium	1	ug/l	50	520
Zinc	1	ug/l	50	530

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	560
Arsenic	1	ug/l	2.0	560
Beryllium	1	ug/l	1.0	590
Cadmium	1	ug/l	2.0	550
Cobalt	1	ug/l	2.0	560
Lead	1	ug/l	3.0	530
Selenium	1	ug/l	10	520
Thallium	1	ug/l	2.0	530

Sample ID: DMW-22B F
Lab#: AC99975-016
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**31000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	**1**	**ug/l**	**5000**	**5300**
Manganese	**1**	**ug/l**	**40**	**350**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**21000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-22B F MS
Lab#: AC99975-017
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	9.8

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5100
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	82000
Chromium	1	ug/l	50	500
Copper	1	ug/l	50	500
Iron	1	ug/l	300	5100
Magnesium	1	ug/l	5000	56000
Manganese	1	ug/l	40	850
Nickel	1	ug/l	50	500
Potassium	1	ug/l	5000	50000
Silver	1	ug/l	20	93
Sodium	1	ug/l	5000	67000
Vanadium	1	ug/l	50	510
Zinc	1	ug/l	50	520

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	460
Arsenic	1	ug/l	2.0	460
Beryllium	1	ug/l	1.0	470
Cadmium	1	ug/l	2.0	450
Cobalt	1	ug/l	2.0	430
Lead	1	ug/l	3.0	450
Selenium	1	ug/l	10	440
Thallium	1	ug/l	2.0	440

Sample ID: DMW-22B F MSD
Lab#: AC99975-018
Matrix: Aqueous
Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	10

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5000
Barium	1	ug/l	50	530
Calcium	1	ug/l	5000	82000
Chromium	1	ug/l	50	500
Copper	1	ug/l	50	500
Iron	1	ug/l	300	5100
Magnesium	1	ug/l	5000	55000
Manganese	1	ug/l	40	890
Nickel	1	ug/l	50	500
Potassium	1	ug/l	5000	49000
Silver	1	ug/l	20	95
Sodium	1	ug/l	5000	66000
Vanadium	1	ug/l	50	510
Zinc	1	ug/l	50	530

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	460
Arsenic	1	ug/l	2.0	470
Beryllium	1	ug/l	1.0	500
Cadmium	1	ug/l	2.0	450
Cobalt	1	ug/l	2.0	470
Lead	1	ug/l	3.0	460
Selenium	1	ug/l	10	450
Thallium	1	ug/l	2.0	450

Sample ID: DFB-20170911
Lab#: AC99975-019
Matrix: Aqueous

Collection Date: 9/11/2017
Receipt Date: 9/11/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	1			Attached

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61376 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61376 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61376	A091417C	17	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61376 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61376 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-39-3	Barium	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-70-2	Calcium	5000	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-47-3	Chromium	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-50-8	Copper	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7439-89-6	Iron	300	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7439-95-4	Magnesium	5000	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7439-96-5	Manganese	40	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7439-97-6	Mercury	0.50	ND	1	25	25	09/14/17	61376	H21453SW	11	CV	HGCV2A
7439-98-7	Molybdenum	20	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-02-0	Nickel	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-09-7	Potassium	5000	ND	1	50	50	09/14/17	61376	SW21453B4	11	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-23-5	Sodium	5000	ND	1	50	50	09/14/17	61376	SW21453B4	11	P	PEICPRAD4A
7440-31-5	Tin	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-32-6	Titanium	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-62-2	Vanadium	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A
7440-66-6	Zinc	50	ND	1	50	50	09/14/17	61376	SW21453A4	12	P	PEICP4A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61379 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61379 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	17	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61379 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61379 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7439-92-1	Lead	12	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	11	CV	HGCV1A
7439-98-7	Molybdenum	20	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	SW21455D2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	09/15/17	61379	SW21455D2	11	P	PEICPRAD2A
7440-31-5	Tin	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	SW21455C2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13A	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-39-3	Barium	50	63	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-70-2	Calcium	5000	35000	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7439-89-6	Iron	300	6000	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7439-96-5	Manganese	40	430	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-09-7	Potassium	5000	5000	1	50	50	09/15/17	61379	W21455D2	23	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-23-5	Sodium	5000	63000	1	50	50	09/15/17	61379	W21455D2	23	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	27	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13A	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	14	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	9.7	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	30	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13A F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-39-3	Barium	50	63	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-70-2	Calcium	5000	37000	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7439-89-6	Iron	300	4600	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7439-96-5	Manganese	40	430	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-09-7	Potassium	5000	5300	1	50	50	09/15/17	61379	W21455D2	24	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-23-5	Sodium	5000	66000	1	50	50	09/15/17	61379	W21455D2	24	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	28	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13A F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	15	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	11	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	31	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7439-96-5	Manganese	40	88	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	25	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-23-5	Sodium	5000	19000	1	50	50	09/15/17	61379	W21455D2	25	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	29	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.0	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	32	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	26	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-23-5	Sodium	5000	19000	1	50	50	09/15/17	61379	W21455D2	26	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	30	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-13B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	33	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-63B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7439-96-5	Manganese	40	100	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	24	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	09/15/17	61379	W21455D2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	31	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-63B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	3.3	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	34	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-63B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	25	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	28	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-23-5	Sodium	5000	18000	1	50	50	09/15/17	61379	W21455D2	28	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	32	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-63B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	35	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15A	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7439-96-5	Manganese	40	88	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	26	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	34	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-23-5	Sodium	5000	24000	1	50	50	09/15/17	61379	W21455D2	34	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	38	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15A	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	13	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	36	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15A F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-70-2	Calcium	5000	17000	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	27	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	35	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-23-5	Sodium	5000	23000	1	50	50	09/15/17	61379	W21455D2	35	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	39	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15A F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	11	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	37	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7439-89-6	Iron	300	1700	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7439-96-5	Manganese	40	78	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	28	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-09-7	Potassium	5000	5500	1	50	50	09/15/17	61379	W21455D2	36	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-23-5	Sodium	5000	26000	1	50	50	09/15/17	61379	W21455D2	36	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	40	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-009	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	38	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-70-2	Calcium	5000	12000	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7439-89-6	Iron	300	1700	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7439-96-5	Manganese	40	120	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	29	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	37	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-23-5	Sodium	5000	28000	1	50	50	09/15/17	61379	W21455D2	37	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	41	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-15B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	43	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22A	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-70-2	Calcium	5000	22000	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7439-89-6	Iron	300	2700	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7439-96-5	Manganese	40	560	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	30	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	38	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-23-5	Sodium	5000	51000	1	50	50	09/15/17	61379	W21455D2	38	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	42	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22A	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	44	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22A F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-70-2	Calcium	5000	23000	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7439-89-6	Iron	300	2400	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7439-96-5	Manganese	40	610	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	31	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61379	W21455D2	39	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-23-5	Sodium	5000	54000	1	50	50	09/15/17	61379	W21455D2	39	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61379	W21455C2	43	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22A F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/19/17	61379	A091917B	45	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-70-2	Calcium	5000	32000	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7439-95-4	Magnesium	5000	6000	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7439-96-5	Manganese	40	410	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/18/17	61379	H21455SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	09/15/17	61379	W21455D2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-23-5	Sodium	5000	22000	1	100	100	09/15/17	61379	W21455D2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	09/15/17	61379	W21455C2	18	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	09/19/17	61379	A091917B	20	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5200	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-39-3	Barium	50	560	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-70-2	Calcium	5000	86000	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-47-3	Chromium	50	520	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-50-8	Copper	50	530	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7439-89-6	Iron	300	5300	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7439-95-4	Magnesium	5000	58000	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7439-96-5	Manganese	40	970	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7439-97-6	Mercury	0.50	10	1	25	25	09/18/17	61379	H21455SW	16	CV	HGCV1A
7440-02-0	Nickel	50	520	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-09-7	Potassium	5000	55000	1	50	50	09/15/17	61379	W21455D2	16	P	PEICPRAD2A
7440-22-4	Silver	20	100	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-23-5	Sodium	5000	75000	1	50	50	09/15/17	61379	W21455D2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	520	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A
7440-66-6	Zinc	50	520	1	50	50	09/15/17	61379	W21455C2	20	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	560	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	570	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	590	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	550	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	550	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	550	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	530	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	540	1	50	100	09/19/17	61379	A091917B	23	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-015	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5300	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-39-3	Barium	50	560	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-70-2	Calcium	5000	84000	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-47-3	Chromium	50	520	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-50-8	Copper	50	530	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7439-89-6	Iron	300	5400	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7439-95-4	Magnesium	5000	59000	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7439-96-5	Manganese	40	970	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7439-97-6	Mercury	0.50	9.4	1	25	25	09/18/17	61379	H21455SW	17	CV	HGCV1A
7440-02-0	Nickel	50	520	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-09-7	Potassium	5000	54000	1	50	50	09/15/17	61379	W21455D2	17	P	PEICPRAD2A
7440-22-4	Silver	20	100	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-23-5	Sodium	5000	73000	1	50	50	09/15/17	61379	W21455D2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	520	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A
7440-66-6	Zinc	50	530	1	50	50	09/15/17	61379	W21455C2	21	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-015	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	560	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	560	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	590	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	550	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	560	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7439-92-1	Lead	3.0	530	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7782-49-2	Selenium	10	520	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	530	1	50	100	09/19/17	61379	A091917B	24	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-016	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-39-3	Barium	50	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-70-2	Calcium	5000	31000	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-47-3	Chromium	50	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-50-8	Copper	50	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7439-89-6	Iron	300	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7439-95-4	Magnesium	5000	5300	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7439-96-5	Manganese	40	350	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7439-97-6	Mercury	0.50	ND	1	25	25	09/14/17	61376	H21453SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-09-7	Potassium	5000	ND	1	100	100	09/14/17	61376	W21453B4	14	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-23-5	Sodium	5000	21000	1	100	100	09/14/17	61376	W21453B4	14	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A
7440-66-6	Zinc	50	ND	1	100	100	09/14/17	61376	W21453A4	15	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-016	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	09/15/17	61376	A091417C	20	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B F MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5100	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-39-3	Barium	50	530	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-70-2	Calcium	5000	82000	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-47-3	Chromium	50	500	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-50-8	Copper	50	500	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7439-89-6	Iron	300	5100	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7439-95-4	Magnesium	5000	56000	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7439-96-5	Manganese	40	850	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7439-97-6	Mercury	0.50	9.8	1	25	25	09/14/17	61376	H21453SW	16	CV	HGCV2A
7440-02-0	Nickel	50	500	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-09-7	Potassium	5000	50000	1	50	50	09/14/17	61376	W21453B4	16	P	PEICPRAD4A
7440-22-4	Silver	20	93	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-23-5	Sodium	5000	67000	1	50	50	09/14/17	61376	W21453B4	16	P	PEICPRAD4A
7440-62-2	Vanadium	50	510	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A
7440-66-6	Zinc	50	520	1	50	50	09/14/17	61376	W21453A4	17	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B F MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	460	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	460	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	470	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	450	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	430	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	450	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	440	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	440	1	50	100	09/15/17	61376	A091417C	23	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-018	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B F MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5000	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-39-3	Barium	50	530	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-70-2	Calcium	5000	82000	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-47-3	Chromium	50	500	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-50-8	Copper	50	500	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7439-89-6	Iron	300	5100	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7439-95-4	Magnesium	5000	55000	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7439-96-5	Manganese	40	890	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7439-97-6	Mercury	0.50	10	1	25	25	09/14/17	61376	H21453SW	17	CV	HGCV2A
7440-02-0	Nickel	50	500	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-09-7	Potassium	5000	49000	1	50	50	09/14/17	61376	W21453B4	17	P	PEICPRAD4A
7440-22-4	Silver	20	95	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-23-5	Sodium	5000	66000	1	50	50	09/14/17	61376	W21453B4	17	P	PEICPRAD4A
7440-62-2	Vanadium	50	510	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A
7440-66-6	Zinc	50	530	1	50	50	09/14/17	61376	W21453A4	18	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-018	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-22B F MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	460	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	470	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	500	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	450	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	470	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7439-92-1	Lead	3.0	460	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7782-49-2	Selenium	10	450	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	450	1	50	100	09/15/17	61376	A091417C	24	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-019	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DFB-20170911	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-39-3	Barium	50	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-70-2	Calcium	5000	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-47-3	Chromium	50	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-50-8	Copper	50	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7439-89-6	Iron	300	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7439-95-4	Magnesium	5000	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7439-96-5	Manganese	40	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7439-97-6	Mercury	0.50	ND	1	25	25	09/14/17	61376	H21453SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-09-7	Potassium	5000	ND	1	50	50	09/14/17	61376	W21453B4	36	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-23-5	Sodium	5000	ND	1	50	50	09/14/17	61376	W21453B4	36	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A
7440-66-6	Zinc	50	ND	1	50	50	09/14/17	61376	W21453A4	38	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99975-019	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DFB-20170911	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/12/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61376	A091417C	43	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/17
Data File: SW21453B4
Prep Batch: 61376
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB-21	CCB-32	CCB-41	MB 61376 (1)-11			
Potassium	5 U	5 U	5 U	5 U	5 U			
Sodium	5 U	5 U	5 U	5 U	5 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/17
Data File: SW21453A4
Prep Batch: 61376
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB-22	CCB-33	CCB-43	MB 61376 (1)-12			
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U			
Barium	.05 U	.05 U	.05 U	.05 U	.05 U			
Calcium	5 U	5 U	5 U	5 U	5 U			
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U			
Copper	.05 U	.05 U	.05 U	.05 U	.05 U			
Iron	.3 U	.3 U	.3 U	.3 U	.3 U			
Magnesium	5 U	5 U	5 U	5 U	5 U			
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U			
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U			
Silver	.02 U	.02 U	.02 U	.02 U	.02 U			
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U			
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: A091417C
Prep Batch: 61376
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-263353-10	CCB V-263353-16	CCB V-263353-29	CCB V-263353-42	CCB V-263353-48	MB 61376-17
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1 U
Cadmium	1 U	1 U	1 U	1 U	1 U	2 U
Cobalt	1 U	1 U	1 U	1 U	1 U	2 U
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Selenium	5 U	5 U	5 U	5 U	5 U	10 U
Thallium	1 U	1 U	1 U	1 U	1 U	2 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: SW21455C2
Prep Batch: 61379
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB-14	CCB-25	CCB-37	CCB-48	MB 61379 (1)-15
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Calcium	5 U	5 U	5 U	5 U	5 U	5 U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U
Magnesium	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: SW21455D2
Prep Batch: 61379
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB-21	CCB-33	CCB-44	MB 61379 (1)-11			
Potassium	5 U	5 U	5 U	5 U	5 U			
Sodium	5 U	5 U	5 U	5 U	5 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/19/17
Data File: A091917B
Prep Batch: 61379
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-263353-10	CCB V-263353-16	CCB V-263353-29	CCB V-263353-42	CCB V-263353-49	MB 61379-17
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1 U
Cadmium	1 U	1 U	1 U	1 U	1 U	2 U
Cobalt	1 U	1 U	1 U	1 U	1 U	2 U
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Selenium	5 U	5 U	5 U	5 U	5 U	10 U
Thallium	1 U	1 U	1 U	1 U	1 U	2 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/14/17
Data File: H21453SW
Prep Batch: 61376
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	CCB-30	MB 61376 (1)-11				
Mercury	.5 U	.5 U	.5 U	.5 U				

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/18/17
Data File: H21455SW
Prep Batch: 61379
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091201

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-33	MB 61379 (1)-11				
Mercury	.5 U	.5 U	.5 U	.5 U				

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61376

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AC99975-016

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	61376	SW21453	23	SW21453	15	5	-0.0158	-0.0177	---		10
Barium	61376	SW21453	23	SW21453	15	5	0.0038	0.0297	35	a	10
Calcium	61376	SW21453	23	SW21453	15	5	5.7578	30.9551	7		10
Chromium	61376	SW21453	23	SW21453	15	5	-0.0039	-0.0028	---		10
Copper	61376	SW21453	23	SW21453	15	5	-0.0031	-0.0015	---		10
Iron	61376	SW21453	23	SW21453	15	5	-0.0342	0.0353	---		10
Magnesium	61376	SW21453	23	SW21453	15	5	0.5765	5.2693	45	a	10
Manganese	61376	SW21453	23	SW21453	15	5	0.0673	0.3527	4.6		10
Nickel	61376	SW21453	23	SW21453	15	5	-0.0048	-0.0041	---		10
Potassium	61376	SW21453	22	SW21453	14	5	0.9658	3.2450	49	a	10
Silver	61376	SW21453	23	SW21453	15	5	-0.0001	-0.0014	---		10
Sodium	61376	SW21453	22	SW21453	14	5	4.4907	20.6632	8.7		10
Vanadium	61376	SW21453	23	SW21453	15	5	-0.0027	-0.0008	---		10
Zinc	61376	SW21453	23	SW21453	15	5	0.0010	0.0172	71	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61376

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 61376

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	61376	A091417C	19	A091417C	18	222.3000	220.5000	.81	20
Arsenic	61376	A091417C	19	A091417C	18	228.0000	226.5000	.66	20
Beryllium	61376	A091417C	19	A091417C	18	237.2000	237.6000	.17	20
Cadmium	61376	A091417C	19	A091417C	18	222.4000	222.3000	.045	20
Cobalt	61376	A091417C	19	A091417C	18	223.9000	218.1000	2.6	20
Lead	61376	A091417C	19	A091417C	18	219.1000	223.2000	1.9	20
Selenium	61376	A091417C	19	A091417C	18	220.1000	217.9000	1	20
Thallium	61376	A091417C	19	A091417C	18	214.7000	218.1000	1.6	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AC99975-016

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	61376	A091417C	21	A091417C	20	1.5U	1.5U	---	20
Arsenic	61376	A091417C	21	A091417C	20	1U	1U	---	20
Beryllium	61376	A091417C	21	A091417C	20	0.5U	0.5U	---	20
Cadmium	61376	A091417C	21	A091417C	20	1U	1U	---	20
Cobalt	61376	A091417C	21	A091417C	20	1U	1U	---	20
Lead	61376	A091417C	21	A091417C	20	1.5U	1.5U	---	20
Selenium	61376	A091417C	21	A091417C	20	5U	5U	---	20
Thallium	61376	A091417C	21	A091417C	20	1U	1U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AC99975-018

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	61376	A091417C	24	A091417C	23	229.7000	229.4000	.13	20
Arsenic	61376	A091417C	24	A091417C	23	236.7000	230.3000	2.7	20
Beryllium	61376	A091417C	24	A091417C	23	247.6000	234.8000	5.3	20
Cadmium	61376	A091417C	24	A091417C	23	227.1000	225.9000	.53	20
Cobalt	61376	A091417C	24	A091417C	23	234.5000	215.1000	8.6	20
Lead	61376	A091417C	24	A091417C	23	228.2000	224.5000	1.6	20
Selenium	61376	A091417C	24	A091417C	23	223.6000	218.4000	2.4	20
Thallium	61376	A091417C	24	A091417C	23	223.7000	219.4000	1.9	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AC99975-016

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	61376	A091417C	22	A091417C	20	5	0.4450	0.1963	1030	a	10
Arsenic	61376	A091417C	22	A091417C	20	5	0.1005	0.3505	43	c	10
Beryllium	61376	A091417C	22	A091417C	20	5	0.0771	0.1073	259	c	10
Cadmium	61376	A091417C	22	A091417C	20	5	0.0739	0.1396	165	c	10
Cobalt	61376	A091417C	22	A091417C	20	5	0.0955	0.3215	---		10
Lead	61376	A091417C	22	A091417C	20	5	0.1339	0.1670	---		10
Selenium	61376	A091417C	22	A091417C	20	5	0.1931	0.3600	---		10
Thallium	61376	A091417C	22	A091417C	20	5	0.1038	0.3180	63	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61379

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD | Matrix: AQUEOUS | SampleID: AC99975-013

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	61379	SW21455	26	SW21455	18	5	-0.0009	0.0420	---		10
Barium	61379	SW21455	26	SW21455	18	5	0.0067	0.0325	3		10
Calcium	61379	SW21455	26	SW21455	18	5	6.3915	32.0046	0.15		10
Chromium	61379	SW21455	26	SW21455	18	5	-0.0008	0.0003	---		10
Copper	61379	SW21455	26	SW21455	18	5	0.0005	0.0013	---		10
Iron	61379	SW21455	26	SW21455	18	5	0.0061	0.0631	---		10
Magnesium	61379	SW21455	26	SW21455	18	5	1.0639	5.9784	11	a	10
Manganese	61379	SW21455	26	SW21455	18	5	0.0824	0.4120	0.063		10
Nickel	61379	SW21455	26	SW21455	18	5	0.0013	0.0010	569	c	10
Potassium	61379	SW21455	22	SW21455	14	5	0.6871	2.6644	29	a	10
Silver	61379	SW21455	26	SW21455	18	5	0.0005	0.0005	423	c	10
Sodium	61379	SW21455	22	SW21455	14	5	4.3366	21.7152	0.15		10
Vanadium	61379	SW21455	26	SW21455	18	5	-0.0002	0.0006	---		10
Zinc	61379	SW21455	26	SW21455	18	5	0.0017	0.0028	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC99975-001 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-13A | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-003 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-13B | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-005 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-63B | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-007 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-15A | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-009 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-15B | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-011 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-22A | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-013 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-22B | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Lab#: AC99975-014 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-22B MS | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	**1**	**0.46**	**mg/l**	**0.025**	09/12/17	09/12/17

Lab#: AC99975-015 | Project Number: 7091201
Matrix: Aqueous | Received Date: 9/11/2017
Client SampleID: DMW-22B MSD | Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	**1**	**0.46**	**mg/l**	**0.025**	09/12/17	09/12/17

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC99975-019
Matrix Aqueous
Client SampleID: DFB-20170911

Project Number: 7091201
Received Date: 9/11/2017
Collect Date: 9/11/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/12/17	09/12/17

Analysis Type: HEX-CR-W

Batch Number: HEX-CR-W-702

Units: mg/l

Calibration Curve Information

Cal Curve Date: 07/11/17

Concentration:	Abs/Area
0	0
0.025	0.032
0.05	0.062
0.25	0.306
0.5	0.588
0.75	0.864
1	1.117

Slope: 1.124976
Intercept: 0.0103123
Rsquared: 0.9995581
Date Performed: 07/11/17

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-09/12/17	0.5	90-110	NA	0.4806215	96	NA	
CAL-02	CAL-02-09/12/17	1	90-110	NA	0.9704098	97	NA	
CCV	CCV-4	0.5	90-110	NA	0.476177	95	NA	
CCV	CCV-3	0.5	90-110	NA	0.476177	95	NA	
CCV	CCV-2	0.5	90-110	NA	0.4770659	95	NA	
CCV	CCV	0.5	90-110	NA	0.4823994	96	NA	
DUP	AC99975-013	0	NA	20	-0.0091667	NA	NA	Nc
ICV	ICV-07/11/17	0.5	90-110	NA	0.4735103	95	NA	
LCS	LCS	0.5	75-125	NA	0.4832883	97	NA	
MSD-SAMP	AC99975-015	0.5	75-125	20	0.4610656	92	0	
MS-SAMPL	AC99975-014	0.5	75-125	NA	0.4610656	92	NA	

Analytical Method(s)

SM 3500-Cr B

Sam #	Type	MB	Result	RL	Per Sol	Full Result	ABS	Turb Abs	DF	Sam Vol	Fin Vol	Prep Date	Prep By	Anal Date	Anal By
CAL-01-09/12/17	CAL-01		0.48		100	0.48062	0.551	0	1	1	1			09/12/17	BCT
CAL-02-09/12/17	CAL-02		0.97		100	0.97041	1.102	0	1	1	1			09/12/17	BCT
MB-1-09/12/17	MB	MB-1-09/12/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/12/17	BCT	09/12/17	BCT
LCS	LCS	MB-1-09/12/17	0.48	0.025	100	0.48329	0.554	0	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99976-001	Sample	MB-1-09/12/17	ND	0.025	100	-0.0065	0.002	-0.001	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-013	NS-SAMP	MB-1-09/12/17	ND	0.025	100	-0.010945	0	0.002	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-013	DUP	MB-1-09/12/17	ND	0.025	100	-0.0091667	0.002	0.002	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-014	MS-SAMP	MB-1-09/12/17	0.46	0.025	100	0.46107	0.529	0	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-015	MSD-SA	MB-1-09/12/17	0.46	0.025	100	0.46107	0.527	-0.002	1	10	10	09/12/17	BCT	09/12/17	BCT
CCV	CCV	MB-1-09/12/17	0.48		100	0.4824	0.553	0	1	10	10	09/12/17	BCT	09/12/17	BCT
CCB	CCB	MB-1-09/12/17	ND	0.025	100	-0.010056	-0.001	0	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-001	Sample	MB-1-09/12/17	ND	0.025	100	-0.0082778	0.001	0	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-003	Sample	MB-1-09/12/17	ND	0.025	100	0.003278	0.013	-0.001	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-005	Sample	MB-1-09/12/17	ND	0.025	100	0.0015002	0.014	0.002	1	10	10	09/12/17	BCT	09/12/17	BCT
CCV-2	CCV	MB-1-09/12/17	0.48		100	0.47707	0.547	0	1	10	10	09/12/17	BCT	09/12/17	BCT
CCB-2	CCB	MB-1-09/12/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-009	Sample	MB-1-09/12/17	ND	0.025	100	-0.0091667	0.004	0.004	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-011	Sample	MB-1-09/12/17	ND	0.025	100	-0.0065	0.004	0.001	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-019	Sample	MB-1-09/12/17	ND	0.025	100	-0.0082778	-0.001	-0.002	1	10	10	09/12/17	BCT	09/12/17	BCT
CCV-3	CCV	MB-1-09/12/17	0.48		100	0.47618	0.546	0	1	10	10	09/12/17	BCT	09/12/17	BCT
CCB-3	CCB	MB-1-09/12/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/12/17	BCT	09/12/17	BCT
AC99975-007	Sample	MB-1-09/12/17	ND	0.025	100	-0.0002776	0.010	0	1	10	10	09/12/17	BCT	09/12/17	BCT
CCV-4	CCV	MB-1-09/12/17	0.48		100	0.47618	0.546	0	1	10	10	09/12/17	BCT	09/12/17	BCT
CCB-4	CCB	MB-1-09/12/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/12/17	BCT	09/12/17	BCT

9/13/17

9/13/17

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL) Rp - RPD failed specified criteria.
Na - Not Applicable Nc - Not Checked ..either one or both values =ND

Subcontracted Data

This is the last page of the data generated by Hampton-Clarke.
The following pages were submitted to HC by subcontracted laboratories.



FINAL LAB REPORT

7091201

31700821

28-Sep-2017

Prepared by

SGS NORTH AMERICA

Prepared for

Hampton-Clarke, Inc.

Sherree Baker

137-D Gaither Drive
Mount Laurel, NJ 08054
Phone: 856-780-6058
Email: SBaker@hcvlab.com

This report is approved by

Tamara Morgan

tamara.morgan@sgs.com

Project Manager

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Results reported relate only to the items tested.

SGS CERTIFICATIONS

Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-17-00055
DoD	2726.01
Florida (Primary NELAP)	E87634
ISO 17025/IEC	2726.01
Louisiana DEQ	4115
Louisiana DOH	LA170030
Maine	2016028
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	1179213
Mississippi	Reciprocity
Nebraska	NE-OS-33-17
New Hampshire	208317
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Virginia	8914
Washington	C913
West Virginia	293

Rev. 04-Aug-2017

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
J	Estimated Concentration.
E	Amount detected is greater than the Upper Calibration Limit
TIC	Tentatively Identified Compound
ND	Not Detected
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
AC99975-001	31700821001	09/11/2017 13:15	09/15/2017 14:04	Water
AC99975-003	31700821002	09/11/2017 12:50	09/15/2017 14:04	Water
AC99975-005	31700821003	09/11/2017 13:00	09/15/2017 14:04	Water
AC99975-007	31700821004	09/11/2017 13:05	09/15/2017 14:04	Water
AC99975-009	31700821005	09/11/2017 13:30	09/15/2017 14:04	Water
AC99975-011	31700821006	09/11/2017 15:10	09/15/2017 14:04	Water
AC99975-013	31700821007	09/11/2017 15:00	09/15/2017 14:04	Water
AC99975-019	31700821010	09/11/2017 15:10	09/15/2017 14:04	Water

Case Narrative

AC99975-014

PFC 537-A JS was inadvertently double spiked in sample.

AC99975-001 and AC99975-011

The reported recovery of 13C2-PFDA is below recommended limits

The reported recovery of d5-NEtFOSAA for all samples and MS/MSD is below recommended limits

Detectable Results Summary

Client Sample ID: **AC99975-001**
Lab Sample ID: 31700821001-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	8.71	ng/L	
PFPeA	30.7	ng/L	
PFHxA	45.0	ng/L	
PFHpA	14.6	ng/L	
PFOA	29.2	ng/L	
PFNA	17.3	ng/L	
PFDA	106	ng/L	
PFuNA	15.8	ng/L	
PFDoA	1.35	ng/L	J
PFTriA	0.207	ng/L	J
PFBS	4.65	ng/L	
PFHxS	3.92	ng/L	
PFHpS	0.306	ng/L	J
PFOS	23.4	ng/L	
PFDS	6.62	ng/L	
NMeFOSAA	0.771	ng/L	J
NetFOSAA	18.4	ng/L	
6:2 FTS	2.33	ng/L	

Client Sample ID: **AC99975-003**
Lab Sample ID: 31700821002-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	4.54	ng/L	
PFPeA	6.79	ng/L	
PFHxA	9.48	ng/L	
PFHpA	14.2	ng/L	
PFOA	44.1	ng/L	
PFNA	27.7	ng/L	
PFDA	2.60	ng/L	
PFBS	7.91	ng/L	
PFHxS	3.01	ng/L	
PFHpS	0.482	ng/L	J
PFOS	28.9	ng/L	

Client Sample ID: **AC99975-005**
Lab Sample ID: 31700821003-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	4.71	ng/L	
PFPeA	6.96	ng/L	
PFHxA	9.92	ng/L	
PFHpA	14.1	ng/L	
PFOA	41.8	ng/L	
PFNA	27.7	ng/L	
PFDA	2.53	ng/L	
PFBS	8.92	ng/L	
PFHxS	3.26	ng/L	
PFHpS	0.628	ng/L	J
PFOS	34.8	ng/L	
NetFOSAA	0.817	ng/L	J

Print Date: 09/28/2017

N.C. Certification # 481

Detectable Results Summary

Client Sample ID: **AC99975-007**
Lab Sample ID: 31700821004-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	5.14	ng/L	
PFPeA	6.53	ng/L	
PFHxA	7.77	ng/L	
PFHpA	5.77	ng/L	
PFOA	20.4	ng/L	
PFNA	3.38	ng/L	
PFDA	1.45	ng/L	J
PFBS	6.60	ng/L	
PFHxS	3.73	ng/L	
PFHpS	0.551	ng/L	J
PFOS	49.2	ng/L	

Client Sample ID: **AC99975-009**
Lab Sample ID: 31700821005-A
EPA 537 v1.1

Parameter	Result	Units	
PFHxA	3.49	ng/L	
PFHpA	1.70	ng/L	J
PFOA	2.84	ng/L	
PFNA	4.85	ng/L	
PFDA	0.957	ng/L	J
PFuNA	0.536	ng/L	J
PFHxS	0.451	ng/L	J
PFOS	1.67	ng/L	J
6:2 FTS	1.22	ng/L	J
8:2 FTS	0.352	ng/L	J

Client Sample ID: **AC99975-011**
Lab Sample ID: 31700821006-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	5.05	ng/L	
PFPeA	8.37	ng/L	
PFHxA	8.55	ng/L	
PFHpA	7.17	ng/L	
PFOA	18.2	ng/L	
PFNA	3.22	ng/L	
PFDA	1.70	ng/L	J
PFuNA	0.590	ng/L	J
PFBS	5.12	ng/L	
PFHxS	1.98	ng/L	J
PFHpS	0.422	ng/L	J
PFOS	22.1	ng/L	

Detectable Results Summary

Client Sample ID: **AC99975-013**
Lab Sample ID: 31700821007-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	3.65	ng/L	
PFPeA	5.99	ng/L	
PFHxA	7.21	ng/L	
PFHpA	7.52	ng/L	
PFOA	22.2	ng/L	
PFNA	6.62	ng/L	
PFDA	2.29	ng/L	
PFBS	4.55	ng/L	
PFHxS	1.93	ng/L	J
PFHpS	0.206	ng/L	J
PFOS	19.6	ng/L	

Client Sample ID: **AC99975-019**
Lab Sample ID: 31700821010-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	0.223	ng/L	J

Quality Control Samples

Client Sample ID: **MB for HBN 141056 [HXX/2055]**
Lab Sample ID: 212675
EPA 537 v1.1

Parameter	Result	Units	
PFOA	0.204	ng/L	J

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-001**

Client Sample ID: **AC99975-001**
Client Project ID: **7091201**
Lab Sample ID: 31700821001-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 13:15
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**8.71**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFPeA	**30.7**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFHxA	**45.0**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFHpA	**14.6**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFOA	**29.2**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFNA	**17.3**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFDA	**106**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFuNA	**15.8**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFDoA	**1.35**	J	0.197	1.97	ng/L	1	09/21/2017 19:10
PFTriA	**0.207**	J	0.197	1.97	ng/L	1	09/21/2017 19:10
PFTreA	ND	U	0.197	1.97	ng/L	1	09/21/2017 19:10
PFBS	**4.65**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFHxS	**3.92**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFHpS	**0.306**	J	0.197	1.97	ng/L	1	09/21/2017 19:10
PFOS	**23.4**		0.197	1.97	ng/L	1	09/21/2017 19:10
PFDS	**6.62**		0.197	1.97	ng/L	1	09/21/2017 19:10
NMeFOSAA	**0.771**	J	0.493	1.97	ng/L	1	09/21/2017 19:10
NetFOSAA	**18.4**		0.493	1.97	ng/L	1	09/21/2017 19:10
6:2 FTS	**2.33**		0.493	1.97	ng/L	1	09/21/2017 19:10
8:2 FTS	ND	U	0.197	1.97	ng/L	1	09/21/2017 19:10
Surrogates							
13C2-PFHxA	99.8			70.0-130	%	1	09/21/2017 19:10
13C2-PFDA	58.8*			70.0-130	%	1	09/21/2017 19:10
d5-NEtFOSAA	23.4*			70.0-130	%	1	09/21/2017 19:10

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **253.61 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-003**

Client Sample ID: **AC99975-003**
Client Project ID: **7091201**
Lab Sample ID: 31700821002-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 12:50
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**4.54**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFPeA	**6.79**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFHxA	**9.48**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFHpA	**14.2**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFOA	**44.1**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFNA	**27.7**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFDA	**2.60**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFuNA	ND	U	0.204	2.04	ng/L	1	09/21/2017 19:41
PFDoA	ND	U	0.204	2.04	ng/L	1	09/21/2017 19:41
PFTriA	ND	U	0.204	2.04	ng/L	1	09/21/2017 19:41
PFTreA	ND	U	0.204	2.04	ng/L	1	09/21/2017 19:41
PFBS	**7.91**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFHxS	**3.01**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFHpS	**0.482**	J	0.204	2.04	ng/L	1	09/21/2017 19:41
PFOS	**28.9**		0.204	2.04	ng/L	1	09/21/2017 19:41
PFDS	ND	U	0.204	2.04	ng/L	1	09/21/2017 19:41
NMeFOSAA	ND	U	0.510	2.04	ng/L	1	09/21/2017 19:41
NetFOSAA	ND	U	0.510	2.04	ng/L	1	09/21/2017 19:41
6:2 FTS	ND	U	0.510	2.04	ng/L	1	09/21/2017 19:41
8:2 FTS	ND	U	0.204	2.04	ng/L	1	09/21/2017 19:41
Surrogates							
13C2-PFHxA	88.1			70.0-130	%	1	09/21/2017 19:41
13C2-PFDA	90.4			70.0-130	%	1	09/21/2017 19:41
d5-NEtFOSAA	57.4*			70.0-130	%	1	09/21/2017 19:41

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **245.23 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-005**

Client Sample ID: **AC99975-005**
Client Project ID: **7091201**
Lab Sample ID: 31700821003-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 13:00
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**4.71**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFPeA	**6.96**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFHxA	**9.92**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFHpA	**14.1**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFOA	**41.8**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFNA	**27.7**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFDA	**2.53**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFuNA	ND	U	0.206	2.06	ng/L	1	09/21/2017 20:11
PFDoA	ND	U	0.206	2.06	ng/L	1	09/21/2017 20:11
PFTriA	ND	U	0.206	2.06	ng/L	1	09/21/2017 20:11
PFTreA	ND	U	0.206	2.06	ng/L	1	09/21/2017 20:11
PFBS	**8.92**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFHxS	**3.26**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFHpS	**0.628**	J	0.206	2.06	ng/L	1	09/21/2017 20:11
PFOS	**34.8**		0.206	2.06	ng/L	1	09/21/2017 20:11
PFDS	ND	U	0.206	2.06	ng/L	1	09/21/2017 20:11
NMeFOSAA	ND	U	0.516	2.06	ng/L	1	09/21/2017 20:11
NetFOSAA	**0.817**	J	0.516	2.06	ng/L	1	09/21/2017 20:11
6:2 FTS	ND	U	0.516	2.06	ng/L	1	09/21/2017 20:11
8:2 FTS	ND	U	0.206	2.06	ng/L	1	09/21/2017 20:11
Surrogates							
13C2-PFHxA	79.7			70.0-130	%	1	09/21/2017 20:11
13C2-PFDA	77.8			70.0-130	%	1	09/21/2017 20:11
d5-NEtFOSAA	52.1*			70.0-130	%	1	09/21/2017 20:11

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **242.45 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-007**

Client Sample ID: **AC99975-007**
Client Project ID: **7091201**
Lab Sample ID: 31700821004-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 13:05
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**5.14**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFPeA	**6.53**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFHxA	**7.77**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFHpA	**5.77**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFOA	**20.4**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFNA	**3.38**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFDA	**1.45**	J	0.209	2.09	ng/L	1	09/21/2017 20:42
PFuNA	ND	U	0.209	2.09	ng/L	1	09/21/2017 20:42
PFDoA	ND	U	0.209	2.09	ng/L	1	09/21/2017 20:42
PFTriA	ND	U	0.209	2.09	ng/L	1	09/21/2017 20:42
PFTreA	ND	U	0.209	2.09	ng/L	1	09/21/2017 20:42
PFBS	**6.60**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFHxS	**3.73**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFHpS	**0.551**	J	0.209	2.09	ng/L	1	09/21/2017 20:42
PFOS	**49.2**		0.209	2.09	ng/L	1	09/21/2017 20:42
PFDS	ND	U	0.209	2.09	ng/L	1	09/21/2017 20:42
NMeFOSAA	ND	U	0.521	2.09	ng/L	1	09/21/2017 20:42
NetFOSAA	ND	U	0.521	2.09	ng/L	1	09/21/2017 20:42
6:2 FTS	ND	U	0.521	2.09	ng/L	1	09/21/2017 20:42
8:2 FTS	ND	U	0.209	2.09	ng/L	1	09/21/2017 20:42
Surrogates							
13C2-PFHxA	88.3			70.0-130	%	1	09/21/2017 20:42
13C2-PFDA	88.7			70.0-130	%	1	09/21/2017 20:42
d5-NEtFOSAA	61.1*			70.0-130	%	1	09/21/2017 20:42

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **239.7 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-009**

Client Sample ID: **AC99975-009**
Client Project ID: **7091201**
Lab Sample ID: 31700821005-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 13:30
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFPeA	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFHxA	**3.49**		0.213	2.13	ng/L	1	09/21/2017 21:13
PFHpA	**1.70**	J	0.213	2.13	ng/L	1	09/21/2017 21:13
PFOA	**2.84**		0.213	2.13	ng/L	1	09/21/2017 21:13
PFNA	**4.85**		0.213	2.13	ng/L	1	09/21/2017 21:13
PFDA	**0.957**	J	0.213	2.13	ng/L	1	09/21/2017 21:13
PFuNA	**0.536**	J	0.213	2.13	ng/L	1	09/21/2017 21:13
PFDoA	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFTriA	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFTreA	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFBS	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFHxS	**0.451**	J	0.213	2.13	ng/L	1	09/21/2017 21:13
PFHpS	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
PFOS	**1.67**	J	0.213	2.13	ng/L	1	09/21/2017 21:13
PFDS	ND	U	0.213	2.13	ng/L	1	09/21/2017 21:13
NMeFOSAA	ND	U	0.531	2.13	ng/L	1	09/21/2017 21:13
NetFOSAA	ND	U	0.531	2.13	ng/L	1	09/21/2017 21:13
6:2 FTS	**1.22**	J	0.531	2.13	ng/L	1	09/21/2017 21:13
8:2 FTS	**0.352**	J	0.213	2.13	ng/L	1	09/21/2017 21:13
Surrogates							
13C2-PFHxA	94.1			70.0-130	%	1	09/21/2017 21:13
13C2-PFDA	75.7			70.0-130	%	1	09/21/2017 21:13
d5-NEtFOSAA	25.6*			70.0-130	%	1	09/21/2017 21:13

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **235.2 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-011**

Client Sample ID: **AC99975-011**
Client Project ID: **7091201**
Lab Sample ID: 31700821006-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 15:10
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**5.05**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFPeA	**8.37**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFHxA	**8.55**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFHpA	**7.17**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFOA	**18.2**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFNA	**3.22**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFDA	**1.70**	J	0.221	2.21	ng/L	1	09/21/2017 21:44
PFuNA	**0.590**	J	0.221	2.21	ng/L	1	09/21/2017 21:44
PFDoA	ND	U	0.221	2.21	ng/L	1	09/21/2017 21:44
PFTriA	ND	U	0.221	2.21	ng/L	1	09/21/2017 21:44
PFTreA	ND	U	0.221	2.21	ng/L	1	09/21/2017 21:44
PFBS	**5.12**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFHxS	**1.98**	J	0.221	2.21	ng/L	1	09/21/2017 21:44
PFHpS	**0.422**	J	0.221	2.21	ng/L	1	09/21/2017 21:44
PFOS	**22.1**		0.221	2.21	ng/L	1	09/21/2017 21:44
PFDS	ND	U	0.221	2.21	ng/L	1	09/21/2017 21:44
NMeFOSAA	ND	U	0.553	2.21	ng/L	1	09/21/2017 21:44
NetFOSAA	ND	U	0.553	2.21	ng/L	1	09/21/2017 21:44
6:2 FTS	ND	U	0.553	2.21	ng/L	1	09/21/2017 21:44
8:2 FTS	ND	U	0.221	2.21	ng/L	1	09/21/2017 21:44
Surrogates							
13C2-PFHxA	103			70.0-130	%	1	09/21/2017 21:44
13C2-PFDA	67.3*			70.0-130	%	1	09/21/2017 21:44
d5-NEtFOSAA	22.9*			70.0-130	%	1	09/21/2017 21:44

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **226.05 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-013**

Client Sample ID: **AC99975-013**
Client Project ID: **7091201**
Lab Sample ID: 31700821007-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 15:00
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**3.65**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFPeA	**5.99**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFHxA	**7.21**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFHpA	**7.52**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFOA	**22.2**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFNA	**6.62**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFDA	**2.29**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFuNA	ND	U	0.198	1.98	ng/L	1	09/21/2017 22:14
PFDoA	ND	U	0.198	1.98	ng/L	1	09/21/2017 22:14
PFTriA	ND	U	0.198	1.98	ng/L	1	09/21/2017 22:14
PFTreA	ND	U	0.198	1.98	ng/L	1	09/21/2017 22:14
PFBS	**4.55**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFHxS	**1.93**	J	0.198	1.98	ng/L	1	09/21/2017 22:14
PFHpS	**0.206**	J	0.198	1.98	ng/L	1	09/21/2017 22:14
PFOS	**19.6**		0.198	1.98	ng/L	1	09/21/2017 22:14
PFDS	ND	U	0.198	1.98	ng/L	1	09/21/2017 22:14
NMeFOSAA	ND	U	0.495	1.98	ng/L	1	09/21/2017 22:14
NetFOSAA	ND	U	0.495	1.98	ng/L	1	09/21/2017 22:14
6:2 FTS	ND	U	0.495	1.98	ng/L	1	09/21/2017 22:14
8:2 FTS	ND	U	0.198	1.98	ng/L	1	09/21/2017 22:14
Surrogates							
13C2-PFHxA	99.6			70.0-130	%	1	09/21/2017 22:14
13C2-PFDA	89.2			70.0-130	%	1	09/21/2017 22:14
d5-NEtFOSAA	54.2*			70.0-130	%	1	09/21/2017 22:14

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **252.68 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99975-019**

Client Sample ID: **AC99975-019**
Client Project ID: **7091201**
Lab Sample ID: 31700821010-A
Lab Project ID: 31700821

Collection Date: 09/11/2017 15:10
Received Date: 09/15/2017 14:04
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**0.223**	J	0.202	2.02	ng/L	1	09/21/2017 23:46
PFPeA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFHxA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFHpA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFOA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFNA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFDA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFuNA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFDoA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFTriA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFTreA	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFBS	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFHxS	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFHpS	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFOS	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
PFDS	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
NMeFOSAA	ND	U	0.505	2.02	ng/L	1	09/21/2017 23:46
NetFOSAA	ND	U	0.505	2.02	ng/L	1	09/21/2017 23:46
6:2 FTS	ND	U	0.505	2.02	ng/L	1	09/21/2017 23:46
8:2 FTS	ND	U	0.202	2.02	ng/L	1	09/21/2017 23:46
Surrogates							
13C2-PFHxA	106			70.0-130	%	1	09/21/2017 23:46
13C2-PFDA	93.6			70.0-130	%	1	09/21/2017 23:46
d5-NEtFOSAA	63.8*			70.0-130	%	1	09/21/2017 23:46

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **247.65 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Batch Summary

Analytical Method: EPA 537 v1.1

Prep Method: EPA 537 1.1 PREP
Prep Batch: HXX2055
Prep Date: 09/20/2017 18:45

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 141056 [HXX/2055]	212675	09/21/2017 14:03	XLC1069	TQS1	ADM
LCS for HBN 141056 [HXX/2055]	212676	09/21/2017 14:34	XLC1069	TQS1	ADM
AC99975-001	31700821001	09/21/2017 19:10	XLC1069	TQS1	ADM
AC99975-003	31700821002	09/21/2017 19:41	XLC1069	TQS1	ADM
AC99975-005	31700821003	09/21/2017 20:11	XLC1069	TQS1	ADM
AC99975-007	31700821004	09/21/2017 20:42	XLC1069	TQS1	ADM
AC99975-009	31700821005	09/21/2017 21:13	XLC1069	TQS1	ADM
AC99975-011	31700821006	09/21/2017 21:44	XLC1069	TQS1	ADM
AC99975-013	31700821007	09/21/2017 22:14	XLC1069	TQS1	ADM
AC99975-014	31700821008	09/21/2017 22:45	XLC1069	TQS1	ADM
AC99975-015	31700821009	09/21/2017 23:16	XLC1069	TQS1	ADM
AC99975-019	31700821010	09/21/2017 23:46	XLC1069	TQS1	ADM

Method Blank

Blank ID: MB for HBN 141056 [HXX/2055] Matrix: Water
Blank Lab ID: 212675
QC for Samples:
31700821001, 31700821002, 31700821003, 31700821004, 31700821005, 31700821006, 31700821007, 31700821010

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
6:2 FTS	ND	U	0.500	2.00	ng/L	1
8:2 FTS	ND	U	0.200	2.00	ng/L	1
NetFOSAA	ND	U	0.500	2.00	ng/L	1
NMeFOSAA	ND	U	0.500	2.00	ng/L	1
PFBA	ND	U	0.200	2.00	ng/L	1
PFBS	ND	U	0.200	2.00	ng/L	1
PFDA	ND	U	0.200	2.00	ng/L	1
PFDoA	ND	U	0.200	2.00	ng/L	1
PFDS	ND	U	0.200	2.00	ng/L	1
PFHpA	ND	U	0.200	2.00	ng/L	1
PFHpS	ND	U	0.200	2.00	ng/L	1
PFHxA	ND	U	0.200	2.00	ng/L	1
PFHxS	ND	U	0.200	2.00	ng/L	1
PFNA	ND	U	0.200	2.00	ng/L	1
PFOA	**0.204**	J	0.200	2.00	ng/L	1
PFOS	ND	U	0.200	2.00	ng/L	1
PFPeA	ND	U	0.200	2.00	ng/L	1
PFTreA	ND	U	0.200	2.00	ng/L	1
PFTriA	ND	U	0.200	2.00	ng/L	1
PFuNA	ND	U	0.200	2.00	ng/L	1
Surrogates						
13C2-PFDA	85.3			70.0-130	%	1
13C2-PFHxA	95.0			70.0-130	%	1
d5-NEtFOSAA	70.5			70.0-130	%	1

Batch Information

Analytical Batch: XLC1069
Analytical Method: EPA 537 v1.1
Instrument: TQS1
Analyst: ADM

Prep Batch: HXX2055
Prep Method: EPA 537 1.1 PREP
Prep Date/Time: 9/20/2017 6:45:16PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Print Date: 09/28/2017

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 141056 [HXX/2055]
Blank Spike Lab ID: 212676
Date Analyzed: 09/21/2017 14:34

Matrix: Water

QC for Samples: 31700821001, 31700821002, 31700821003, 31700821004, 31700821005, 31700821006, 31700821007, 31700821010

Results by **EPA 537 v1.1**

Blank Spike (ng/L)

Parameter	Spike	Result	Rec (%)	CL
6:2 FTS	100	111	111	70.0-130
8:2 FTS	100	103	103	70.0-130
NetFOSAA	100	104	104	70.0-130
NMeFOSAA	100	112	112	70.0-130
PFBA	100	103	103	70.0-130
PFBS	100	103	103	70.0-130
PFDA	100	106	106	70.0-130
PFDoA	100	95.9	95.9	70.0-130
PFDS	100	102	102	70.0-130
PFHpA	100	105	105	70.0-130
PFHpS	100	112	112	70.0-130
PFHxA	100	104	104	70.0-130
PFHxS	100	98.4	98.4	70.0-130
PFNA	100	111	111	70.0-130
PFOA	100	101	101	70.0-130
PFOS	100	102	102	70.0-130
PFPeA	100	102	102	70.0-130
PFTreA	100	100	100	70.0-130
PFTriA	100	105	105	70.0-130
PFuNA	100	113	113	70.0-130
Surrogates				
13C2-PFDA			95.6	70.0-130
13C2-PFHxA			100	70.0-130
d5-NEtFOSAA			81.7	70.0-130

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Spike Init Wt./Vol.: **250 mL** Extract Vol: **1 mL**
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 09/28/2017

N.C. Certification # 481

Matrix Spike Summary

Original Sample ID: 31700821007 (AC99975-013)
MS Sample ID: 31700821008
MSD Sample ID: 31700821009

Analysis Date: 09/21/2017 22:14
Analysis Date: 09/21/2017 22:45
Analysis Date: 09/21/2017 23:16
Matrix: Water

QC for Samples: 31700821001, 31700821002, 31700821003, 31700821004, 31700821005, 31700821006, 31700821007, 31700821010

Results by **EPA 537 v1.1**

		Matrix Spike (ng/L)			Spike Duplicate (ng/L)					
Parameter	Sample	Spike	Result	Rec (%)	Spike	Result	Rec (%)	CL	RPD (%)	RPD CL
PFBA	3.65	107	97.6	87.5	90.9	75.6	79.1	70.0-130	25	30.00
PFPeA	5.99	107	111	98.2	90.9	89.6	92	70.0-130	21	30.00
PFHxA	7.21	107	111	96.4	90.9	91.7	92.9	70.0-130	19	30.00
PFHpA	7.52	107	109	94.5	90.9	87.5	88	70.0-130	22	30.00
PFOA	22.2	107	117	88.5	90.9	98.9	84.4	70.0-130	17	30.00
PFNA	6.62	107	116	102	90.9	99.2	102	70.0-130	16	30.00
PFDA	2.29	107	106	96.2	90.9	90.5	97.1	70.0-130	16	30.00
PFuNA	ND	107	118	110	90.9	108	119	70.0-130	8.8	30.00
PFDoA	ND	107	88.9	82.7	90.9	71.7	78.8	70.0-130	21	30.00
PFTriA	ND	107	108	101	90.9	94.8	104	70.0-130	13	30.00
PFTreA	ND	107	106	99	90.9	92.8	102	70.0-130	13	30.00
PFBS	4.55	107	106	94.1	90.9	92.4	96.6	70.0-130	14	30.00
PFHxS	1.93	107	97.1	90.4	90.9	83.0	91.3	70.0-130	16	30.00
PFHpS	0.206	107	109	101	90.9	96.4	106	70.0-130	12	30.00
PFOS	19.6	107	113	86.5	90.9	107	95.8	70.0-130	5.5	30.00
PFDS	ND	107	109	101	90.9	98.7	109	70.0-130	9.9	30.00
NMeFOSAA	ND	107	156	145 *	90.9	126	138 *	70.0-130	21	30.00
NetFOSAA	ND	107	105	97.4	90.9	87.1	95.8	70.0-130	19	30.00
6:2 FTS	ND	107	113	105	90.9	100	110	70.0-130	12	30.00
8:2 FTS	ND	107	105	98.1	90.9	88.1	96.8	70.0-130	18	30.00
Surrogates										
13C2-PFHxA				112			97.7	70.0-130		
13C2-PFDA				107			92	70.0-130		
d5-NEtFOSAA				62.7 *			52.9 *	70.0-130		

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
MS Init Wt./Vol.: **232.65 mL** Extract Vol.: **1 mL**
MSD Init Wt./Vol.: **274.94 mL** Extract Vol.: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

CHAIN OF CUSTODY RECORD

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

317008 21

Report To:
Hampton-Clarke, Inc.:
Attn:Reporting
175 Route 46 West
Fairfield, New Jersey 07004

Invoice To:
Hampton-Clarke, Inc.:
Attn:Accounting
175 Route 46 West
Fairfield, New Jersey 07004

Project #: 7091201

CocID#: 5527

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: Standard
Report Type: NYDOH-CatA (STAND
Preliminary Due Date: 9/29/2017
Hard Copy Due Date: 10/4/2017

Use HCV ID's.
9/15/17

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
AC99975-001	DMW-13A	Aqueous	9/11/2017	1:15:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-003	DMW-13B	Aqueous	9/11/2017	12:50:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-005	DMW-63B	Aqueous	9/11/2017	1:00:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-007	DMW-15A	Aqueous	9/11/2017	1:05:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-009	DMW-15B	Aqueous	9/11/2017	1:30:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-011	DMW-22A	Aqueous	9/11/2017	3:10:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-013	DMW-22B	Aqueous	9/11/2017	3:00:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-014	DMW-22B MS	Aqueous	9/11/2017	3:00:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-015	DMW-22B MSD	Aqueous	9/11/2017	3:00:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99975-019	DFB-20170911	Aqueous	9/11/2017	3:10:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)

Relinquished By:	Accepted By:	Date:	Time:
	UPS	9/14/17	17:00
	Ashley Owens	9/15/17	11:51

Comments, Notes, Special Requirements, HAZARDS

AB 9/14/17

Cooler Temp: -0.1° (NOT FROZEN)

HC Lab Use Only: **Subcontracted Lab Id and Contact:** SGS LAB, Richard Sutler, (910) 350-1903, Lab ID: 11, 2500 Business Drive, , Wilmington, NC, 28405

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **Hampton-Clarke, Inc.** Work Order No.: **31700821**

Notes:

1. _x_ Shipped
   ___ Hand Delivered

2. _x_ COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. ___ Custody Tape on Container
   _x_ No Custody Tape

4. _x_ Samples Intact
   ___ Samples Broken / Leaking

5. _x_ Chilled on Receipt Actual Temp.(s) in °C: -0.1 (Not Frozen) Thermometer ID#: IR3
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Temperature Blank Present
   ___ WV samples-proxy not allowed

6. _x_ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   ___ HNO3 < 2
   ___ HCL < 2
   _x_ Additional Preservatives verified (see notes) Trizma

8. _x_ Received Within Holding Time
   ___ Not Received Within Holding Time

9. _x_ No Discrepancies Noted
   ___ Discrepancies Noted
   ___ NCDENR notified of Discrepancies*

10. ___ No Headspace present in VOC vials N/A
    ___ Headspace present in VOC vials >6mm

Comments:

Inspected and Logged in by: AMO

Date: 9/15/2017

*NCDENR must be notified when collection, holding time or preservation requirements are not met.

MI_11.11

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Multi Site G Dzus

Client PO: 60277021

Report To: AECOM
100 Red School House Rd.
Suite B-1
Chestnut Ridge, NY 10977

Attn: Paul Kareth

Received Date: 9/12/2017

Report Date: 10/3/2017

Deliverables: NYDOH-CatA

Lab ID: AC99992

Lab Project No: 7091218

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

Hampton-Clarke
Analytical & Field Services

THIS CATEGORY “A” REPORT
IS NUMBERED FROM
1 to 89

(Subcontracted data is numbered as attached)

HC Case Narrative

Client: AECOM **HC Project:** 7091218
Project: Multi Site G Dzus

Hampton-Clarke (HC) received the following samples on 9/12/17:

Client ID	HC Sample ID	Matrix	Analysis
DMW-9	AC99992-001	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-9B	AC99992-002	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-1	AC99992-003	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-2	AC99992-004	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-9F	AC99992-005	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-9BF	AC99992-006	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-1F	AC99992-007	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-2F	AC99992-008	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DSO-EAST100	AC99992-009	Soil	TAL Metals (6010C & 6020A), Mercury (7471B), % Solids (2540G)
DSO-EAST	AC99992-010	Soil	TAL Metals (6010C & 6020A), Mercury (7471B), % Solids (2540G)
DMW-3	AC99992-011	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-3F	AC99992-012	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DMW-18	AC99992-013	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-18F	AC99992-014	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)
DSO-WEST	AC99992-015	Soil	TAL Metals (6010C & 6020A), Mercury (7471B), % Solids (2540G)
DMW-17	AC99992-016	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A), Cr Hexavalent (3500-Cr B), PFAs Mod 20 Compounds (537 Mod)*
DMW-17F	AC99992-017	Aqueous	TAL Metals (6010C & 6020A), Mercury (7470A)

* - Indicates analysis was performed by a subcontracted laboratory.

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batches 61393 and 61394 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batches 61393 and 61394. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 61394. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batches 61392, 61393, and 61394 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Wet Chemistry Analysis:

Data conforms to method requirements.

Subcontracted Analysis:

Please refer to attached subcontracted laboratory report. Samples AC99992-001, 002, 003, 004, 011, 013, and 016 were submitted to SGS Accutest for PFAs Mod 20 Compounds analysis.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

10/4/2017
Date

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): ~~7091~~ 7091218

Page 1 of 2

7091218 NNN3

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: 100 Red Schoolhouse Rd Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Paul Kareth
1d) Send Report to: Paul Kareth

Project Information

2a) Project: Multi Site G DZ05
2b) Project Mgr: Paul Kareth / S. Baker
2c) Project Location (City/State): West Islip NY
2d) Quote/PO # (If Applicable): 60277025

FOR LAB USE ONLY ↓

Batch # AC99592

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL Metals	PFAs	Hex chrom.	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: TRIZMA	9) Comments
001	DMW-9	GW	9/12/17			✓	✓	✓	✓	1						1	2	
002	DMW-9B					✓	✓	✓	✓	1						1	2	
003	DMW-1					✓	✓	✓	✓	1						1	2	
004	DMW-2					✓	✓	✓	✓	1						1	2	
005	DMW-9F					✓	✓									1		Field Filtered
006	DMW-9BF					✓	✓									1		" "
007	DMW-1F					✓	✓									1		" "
008	DMW-2F					✓	✓									1		" "
009	DSO-EAST100	SO	9/12/17			✓	✓			1								
010	DSO-EAST	SO	9/12/17			✓	✓			1								

10) Relinquished by:	Accepted by:	Date	Time
		9/12/17	1510
		9/12/17	19:14

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9 3.5

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

7091218 0004

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 709218

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: 100 Redschoolhouse Rd Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom
1c) Send Invoice to: Paul Kareth
1d) Send Report to: Paul Kareth

Project Information

2a) Project: Multi Site GW DSO
2b) Project Mgr: Sherree Baker
2c) Project Location (City/State): West Islip NY
2d) Quote/PO # (If Applicable): 60277021

FOR LAB USE ONLY

Batch #: AC99552

===> Check If Contingent ===>

<=== Check If Contingent <===

Matrix Codes

DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL Metals	PFAS	Hex Chrome	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other: TRIZMA	9) Comments
011	DMW-3	9/12/17	GW	1045		✓	✓	✓	✓	1						1	2	
012	DMW-3F		GW	1047		✓	✓									1		Field Filt.
013	DMW-18		GW	1159		✓	✓	✓	✓	1						1	2	
014	DMW-18F		GW	1201		✓	✓									1		Field Filt
015	DSO-West		S	1140		✓	✓			1								
016	DMW-17		GW	1300		✓	✓	✓	✓	1						1	2	
017	DMW-17F	↓	GW	1302		✓	✓									1		Field Filt.

10) Relinquished by:	Accepted by:	Date	Time
		9/12/17	1510
		9/12/17	19:14

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.9 3.5

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

PROJECT MODIFICATIONS

Client: AECOM-CRNY **HC Project #:** 7091218

Project: Multi Site G Dzus

---

sherree192.168.1.210
9/14/2017 2:42:53 PM

Per Paul Kareth, report type is Category A. SB 9/14/17

CONDITION UPON RECEIPT

Batch Number AC99992 Entered By: Ricardo
Date Entered 9/13/2017 1:31:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	NO	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.9,3.5
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AC99992 Entered By: Ricardo

Date Entered 9/13/2017 1:33:00 PM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AC99992-001	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-002	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-003	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-004	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-005	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-006	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-007	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-008	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-009	NA	NA	NA	NA	NA	NA	NA
AC99992-010	NA	NA	NA	NA	NA	NA	NA
AC99992-011	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-012	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-013	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-014	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-015	NA	NA	NA	NA	NA	NA	NA
AC99992-016	1L	P	METALS	HNO3	169331	1	HC693124
AC99992-017	1L	P	METALS	HNO3	169331	1	HC693124

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AC99992-001	09/12/17 19:17	RICAR	0	M	Received
AC99992-001	09/12/17 19:50	RICAR	0	M	Login
AC99992-001	09/13/17 07:11	JW	1	A	cr6
AC99992-001	09/13/17 14:31	R12	1	A	NONE
AC99992-001	09/13/17 15:42	R12	2	A	NONE
AC99992-001	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-001	09/15/17 10:54	R12	2	A	NONE
AC99992-001	09/13/17 15:42	R12	3	A	NONE
AC99992-001	09/18/17 11:54	SUB	3	A	FD
AC99992-001	09/13/17 15:42	R12	4	A	NONE
AC99992-001	09/18/17 11:54	SUB	4	A	FD
AC99992-002	09/12/17 19:17	RICAR	0	M	Received
AC99992-002	09/12/17 19:50	RICAR	0	M	Login
AC99992-002	09/13/17 07:11	JW	1	A	cr6
AC99992-002	09/13/17 14:31	R12	1	A	NONE
AC99992-002	09/13/17 15:42	R12	2	A	NONE
AC99992-002	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-002	09/15/17 10:54	R12	2	A	NONE
AC99992-002	09/13/17 15:42	R12	3	A	NONE
AC99992-002	09/14/17 16:27	SUB	3	A	none
AC99992-002	09/13/17 15:42	R12	4	A	NONE
AC99992-002	09/14/17 16:27	SUB	4	A	none
AC99992-003	09/12/17 19:17	RICAR	0	M	Received
AC99992-003	09/12/17 19:50	RICAR	0	M	Login
AC99992-003	09/13/17 07:11	JW	1	A	cr6
AC99992-003	09/13/17 14:31	R12	1	A	NONE
AC99992-003	09/13/17 15:42	R12	2	A	NONE
AC99992-003	09/15/17 10:54	R12	2	A	NONE
AC99992-003	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-003	09/13/17 15:42	R12	3	A	NONE
AC99992-003	09/14/17 16:27	SUB	3	A	none
AC99992-003	09/13/17 15:42	R12	4	A	NONE
AC99992-003	09/14/17 16:27	SUB	4	A	none
AC99992-004	09/12/17 19:17	RICAR	0	M	Received
AC99992-004	09/12/17 19:50	RICAR	0	M	Login
AC99992-004	09/13/17 07:11	JW	1	A	cr6
AC99992-004	09/13/17 14:31	R12	1	A	NONE
AC99992-004	09/13/17 15:42	R12	2	A	NONE
AC99992-004	09/15/17 10:54	R12	2	A	NONE
AC99992-004	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-004	09/13/17 15:42	R12	3	A	NONE
AC99992-004	09/14/17 16:27	SUB	3	A	none
AC99992-004	09/13/17 15:42	R12	4	A	NONE
AC99992-004	09/14/17 16:27	SUB	4	A	none
AC99992-005	09/12/17 19:17	RICAR	0	M	Received
AC99992-005	09/12/17 19:50	RICAR	0	M	Login
AC99992-005	09/13/17 15:42	R12	1	A	NONE
AC99992-005	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-005	09/15/17 10:54	R12	1	A	NONE
AC99992-006	09/12/17 19:17	RICAR	0	M	Received
AC99992-006	09/12/17 19:50	RICAR	0	M	Login
AC99992-006	09/13/17 15:42	R12	1	A	NONE
AC99992-006	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-006	09/15/17 10:54	R12	1	A	NONE
AC99992-007	09/12/17 19:17	RICAR	0	M	Received
AC99992-007	09/12/17 19:50	RICAR	0	M	Login
AC99992-007	09/13/17 15:42	R12	1	A	NONE
AC99992-007	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-007	09/15/17 10:54	R12	1	A	NONE
AC99992-008	09/12/17 19:17	RICAR	0	M	Received
AC99992-008	09/12/17 19:50	RICAR	0	M	Login
AC99992-008	09/13/17 15:42	R12	1	A	NONE
AC99992-008	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-008	09/15/17 10:54	R12	1	A	NONE
AC99992-009	09/12/17 19:17	RICAR	0	M	Received
AC99992-009	09/12/17 19:50	RICAR	0	M	Login
AC99992-009	09/13/17 15:42	R12	1	A	NONE
AC99992-009	09/13/17 21:51	PA	1	A	mix
AC99992-009	09/13/17 21:52	R12	1	A	NONE
AC99992-009	09/14/17 05:30	JMP	1	A	solids
AC99992-009	09/14/17 08:48	R12	1	A	NONE
AC99992-009	09/15/17 10:52	AM	1	A	TDSI/HG
AC99992-009	09/15/17 10:54	R12	1	A	NONE
AC99992-010	09/12/17 19:17	RICAR	0	M	Received
AC99992-010	09/12/17 19:50	RICAR	0	M	Login
AC99992-010	09/13/17 15:42	R12	1	A	NONE
AC99992-010	09/13/17 21:51	PA	1	A	mix
AC99992-010	09/13/17 21:52	R12	1	A	NONE
AC99992-010	09/14/17 05:30	JMP	1	A	solids
AC99992-010	09/14/17 08:48	R12	1	A	NONE
AC99992-010	09/15/17 10:52	AM	1	A	TDSI/HG
AC99992-010	09/15/17 10:54	R12	1	A	NONE
AC99992-011	09/12/17 19:17	RICAR	0	M	Received
AC99992-011	09/12/17 19:50	RICAR	0	M	Login
AC99992-011	09/13/17 07:11	JW	1	A	cr6
AC99992-011	09/13/17 14:31	R12	1	A	NONE
AC99992-011	09/13/17 15:42	R12	2	A	NONE
AC99992-011	09/15/17 10:54	R12	2	A	NONE
AC99992-011	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-011	09/13/17 15:42	R12	3	A	NONE
AC99992-011	09/14/17 16:27	SUB	3	A	none
AC99992-011	09/13/17 15:42	R12	4	A	NONE
AC99992-011	09/14/17 16:27	SUB	4	A	none
AC99992-012	09/12/17 19:17	RICAR	0	M	Received
AC99992-012	09/12/17 19:50	RICAR	0	M	Login
AC99992-012	09/13/17 15:42	R12	1	A	NONE
AC99992-012	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-012	09/15/17 10:54	R12	1	A	NONE
AC99992-013	09/12/17 19:17	RICAR	0	M	Received
AC99992-013	09/12/17 19:50	RICAR	0	M	Login
AC99992-013	09/13/17 07:11	JW	1	A	cr6
AC99992-013	09/13/17 14:31	R12	1	A	NONE
AC99992-013	09/13/17 15:42	R12	2	A	NONE
AC99992-013	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-013	09/15/17 10:54	R12	2	A	NONE
AC99992-013	09/13/17 15:42	R12	3	A	NONE
AC99992-013	09/14/17 16:27	SUB	3	A	none
AC99992-013	09/13/17 15:42	R12	4	A	NONE
AC99992-013	09/14/17 16:27	SUB	4	A	none
AC99992-014	09/12/17 19:17	RICAR	0	M	Received
AC99992-014	09/12/17 19:50	RICAR	0	M	Login
AC99992-014	09/13/17 15:42	R12	1	A	NONE
AC99992-014	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-014	09/15/17 10:54	R12	1	A	NONE
AC99992-015	09/12/17 19:17	RICAR	0	M	Received
AC99992-015	09/12/17 19:50	RICAR	0	M	Login
AC99992-015	09/13/17 15:42	R12	1	A	NONE
AC99992-015	09/13/17 21:51	PA	1	A	mix
AC99992-015	09/13/17 21:52	R12	1	A	NONE
AC99992-015	09/14/17 05:30	JMP	1	A	solids
AC99992-015	09/14/17 08:48	R12	1	A	NONE
AC99992-015	09/15/17 10:52	AM	1	A	TDSI/HG
AC99992-015	09/15/17 10:54	R12	1	A	NONE
AC99992-016	09/12/17 19:17	RICAR	0	M	Received
AC99992-016	09/12/17 19:50	RICAR	0	M	Login
AC99992-016	09/13/17 07:11	JW	1	A	cr6
AC99992-016	09/13/17 14:31	R12	1	A	NONE
AC99992-016	09/13/17 15:42	R12	2	A	NONE
AC99992-016	09/15/17 10:54	R12	2	A	NONE
AC99992-016	09/15/17 10:54	AM	2	A	TDWI/HG
AC99992-016	09/13/17 15:42	R12	3	A	NONE
AC99992-016	09/14/17 16:27	SUB	3	A	none
AC99992-016	09/13/17 15:42	R12	4	A	NONE
AC99992-016	09/14/17 16:27	SUB	4	A	none
AC99992-017	09/12/17 19:17	RICAR	0	M	Received
AC99992-017	09/12/17 19:50	RICAR	0	M	Login
AC99992-017	09/13/17 15:42	R12	1	A	NONE
AC99992-017	09/15/17 10:54	AM	1	A	TDWI/HG
AC99992-017	09/15/17 10:54	R12	1	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091218

Project: Multi Site G Dzus

Lab#: AC99992-001 **Sample ID: DMW-9**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:27	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 13:50	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 14:55	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 15:24	PC

Lab#: AC99992-002 **Sample ID: DMW-9B**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:40	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 14:55	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:57	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 16:22	PC

Lab#: AC99992-003 **Sample ID: DMW-1**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:42	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 14:59	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:01	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 16:28	PC

Lab#: AC99992-004 **Sample ID: DMW-2**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:44	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:02	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:04	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 16:34	PC

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091218

Project: Multi Site G Dzus

Lab#: AC99992-005 **Sample ID: DMW-9F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:45	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:06	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:08	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 16:40	PC

Lab#: AC99992-006 **Sample ID: DMW-9BF**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:46	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:09	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:11	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:09	PC

Lab#: AC99992-007 **Sample ID: DMW-1F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:48	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:15	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:12	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:15	PC

Lab#: AC99992-008 **Sample ID: DMW-2F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:49	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:16	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:18	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:21	PC

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091218

Project: Multi Site G Dzus

Lab#: AC99992-009 **Sample ID: DSO-EAST100**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/14/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/15/17 09:20	aadewusi	EPA 7471B	9/18/17 16:23	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 23:05	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:36	SRB
TAL Metals 6020	3005&10/3050	09/15/17	aadewusi	EPA 6020A	9/18/17 16:11	PC

Lab#: AC99992-010 **Sample ID: DSO-EAST**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/14/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/15/17 09:20	aadewusi	EPA 7471B	9/18/17 16:24	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:40	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 23:09	SRB
TAL Metals 6020	3005&10/3050	09/15/17	aadewusi	EPA 6020A	9/18/17 16:17	PC

Lab#: AC99992-011 **Sample ID: DMW-3**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:51	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:31	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:33	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:27	PC

Lab#: AC99992-012 **Sample ID: DMW-3F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:52	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:34	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:36	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:33	PC

Laboratory Chronicle

Client: AECOM **HC Project #:** 7091218

Project: Multi Site G Dzus

Lab#: AC99992-013 **Sample ID: DMW-18**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:57	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:38	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:40	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:39	PC

Lab#: AC99992-014 **Sample ID: DMW-18F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 15:59	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:41	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:43	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:45	PC

Lab#: AC99992-015 **Sample ID: DSO-WEST**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/14/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/15/17 09:20	aadewusi	EPA 7471B	9/18/17 16:26	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 23:13	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 20:43	SRB
TAL Metals 6020	3005&10/3050	09/15/17	aadewusi	EPA 6020A	9/18/17 16:46	PC

Lab#: AC99992-016 **Sample ID: DMW-17**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Cr (Hexavalent) 3500-Cr B		09/13/17	JW	SM 3500-Cr B	9/13/17 07:30	JW
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 16:00	OA
PFAs EPA537 Mod 20 compounds	SolidPhase	09/20/17		EPA 537 mod	9/21/17 00:00	SGS Accutest
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:45	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:47	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:51	PC

Laboratory Chronicle

Client: AECOM
Project: Multi Site G Dzus

HC Project #: 7091218

Lab#: AC99992-017 **Sample ID: DMW-17F**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/15/17 09:20	aadewusi	EPA 7470A	9/15/17 16:02	OA
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 15:48	SRB
TAL Metals 6010	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6010C	9/15/17 16:50	SRB
TAL Metals 6020	3005&10/3050	09/15/17 09:20	aadewusi	EPA 6020A	9/15/17 17:57	PC

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

HC Report of Analysis

Client: AECOM
Project: Multi Site G Dzus

HC Project #: 7091218

Sample ID: DMW-9
Lab#: AC99992-001
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**50000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-9B
Lab#: AC99992-002
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**20000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-1 **Collection Date:** 9/12/2017
Lab#: AC99992-003 **Receipt Date:** 9/12/2017
Matrix: Aqueous

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**18000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**300**
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**72000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-2 **Collection Date:** 9/12/2017
Lab#: AC99992-004 **Receipt Date:** 9/12/2017
Matrix: Aqueous

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**4000**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**87**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**20000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	**1**	**ug/l**	**2.0**	**3.0**
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-9F
Lab#: AC99992-005
Matrix: Aqueous
Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**51000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-9BF
Lab#: AC99992-006
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**11000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**570**
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**20000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-1F
Lab#: AC99992-007
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**18000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**72000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-2F
Lab#: AC99992-008
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**14000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**4100**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**88**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**21000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	**1**	**ug/l**	**2.0**	**2.6**
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DSO-EAST100 **Collection Date:** 9/12/2017
Lab#: AC99992-009 **Receipt Date:** 9/12/2017
Matrix: Soil

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		86

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.097	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	230	6800
Barium	1	mg/kg	12	58
Calcium	1	mg/kg	1200	4800
Chromium	1	mg/kg	5.8	34
Cobalt	1	mg/kg	2.9	3.0
Copper	1	mg/kg	5.8	43
Iron	1	mg/kg	230	13000
Lead	1	mg/kg	5.8	120
Magnesium	1	mg/kg	580	1700
Manganese	1	mg/kg	12	180
Nickel	1	mg/kg	5.8	9.5
Potassium	1	mg/kg	580	900
Sodium	1	mg/kg	290	ND
Vanadium	1	mg/kg	12	27
Zinc	1	mg/kg	12	180

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.93	ND
Arsenic	1	mg/kg	0.23	5.8
Beryllium	1	mg/kg	0.23	0.24
Cadmium	1	mg/kg	0.47	0.58
Selenium	1	mg/kg	2.3	ND
Silver	1	mg/kg	0.23	ND
Thallium	1	mg/kg	0.47	ND

Sample ID: DSO-EAST
Lab#: AC99992-010
Matrix: Soil

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		81

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.10	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	250	3700
Barium	1	mg/kg	12	57
Calcium	1	mg/kg	1200	4500
Chromium	1	mg/kg	6.2	37
Cobalt	1	mg/kg	3.1	ND
Copper	1	mg/kg	6.2	50
Iron	1	mg/kg	250	12000
Lead	1	mg/kg	6.2	69
Magnesium	1	mg/kg	620	1700
Manganese	1	mg/kg	12	140
Nickel	1	mg/kg	6.2	10
Potassium	1	mg/kg	620	810
Sodium	1	mg/kg	310	ND
Vanadium	1	mg/kg	12	25
Zinc	1	mg/kg	12	240

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.99	1.1
Arsenic	1	mg/kg	0.25	2.1
Beryllium	1	mg/kg	0.25	ND
Cadmium	1	mg/kg	0.49	1.0
Selenium	1	mg/kg	2.5	ND
Silver	1	mg/kg	0.25	ND
Thallium	1	mg/kg	0.49	ND

Sample ID: DMW-3 **Collection Date:** 9/12/2017
Lab#: AC99992-011 **Receipt Date:** 9/12/2017
Matrix: Aqueous

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**210**
Barium	**1**	**ug/l**	**50**	**50**
Calcium	**1**	**ug/l**	**5000**	**18000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**1500**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**78**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**69000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**13**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-3F
Lab#: AC99992-012
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**18000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**73000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**9.5**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-18 | **Collection Date:** 9/12/2017
Lab#: AC99992-013 | **Receipt Date:** 9/12/2017
Matrix: Aqueous

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**23000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**190**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**17000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-18F
Lab#: AC99992-014
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**21000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**16000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DSO-WEST
Lab#: AC99992-015
Matrix: Soil

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		89

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.094	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	220	2300
Barium	1	mg/kg	11	26
Calcium	1	mg/kg	1100	9500
Chromium	1	mg/kg	5.6	14
Cobalt	1	mg/kg	2.8	ND
Copper	1	mg/kg	5.6	19
Iron	1	mg/kg	220	5700
Lead	1	mg/kg	5.6	80
Magnesium	1	mg/kg	560	5000
Manganese	1	mg/kg	11	87
Nickel	1	mg/kg	5.6	ND
Potassium	1	mg/kg	560	ND
Sodium	1	mg/kg	280	ND
Vanadium	1	mg/kg	11	12
Zinc	1	mg/kg	11	150

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	0.90	ND
Arsenic	1	mg/kg	0.22	2.3
Beryllium	1	mg/kg	0.22	ND
Cadmium	1	mg/kg	0.45	0.60
Selenium	1	mg/kg	2.2	ND
Silver	1	mg/kg	0.22	ND
Thallium	1	mg/kg	0.45	ND

Sample ID: DMW-17 | **Collection Date:** 9/12/2017
Lab#: AC99992-016 | **Receipt Date:** 9/12/2017
Matrix: Aqueous

Cr (Hexavalent) 3500-Cr B

Analyte	DF	Units	RL	Result
Cr (Hexavalent)	1	mg/l	0.025	ND

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

PFAs EPA537 Mod 20 compounds

Analyte	DF	Units	RL	Result
Perfluoro-n-undeconoic acid	**1**			**Attached**

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**400**
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**14000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**2800**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**790**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**10000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**56**

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	**1**	**ug/l**	**2.0**	**3.2**
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**6.6**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: DMW-17F
Lab#: AC99992-017
Matrix: Aqueous

Collection Date: 9/12/2017
Receipt Date: 9/12/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**2200**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**710**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**9800**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	**1**	**ug/l**	**2.0**	**2.7**
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	**1**	**ug/l**	**3.0**	**3.3**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61392 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61392 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	14	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61392 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61392 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	11	CV	HGCV2A
7439-98-7	Molybdenum	20	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	SW21465B4	11	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	09/15/17	61392	SW21465B4	11	P	PEICPRAD4A
7440-31-5	Tin	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	SW21465A2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61393 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61393 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	09/15/17	61393	S21466B4	11	P	PEICPRAD4A
7440-39-3	Barium	10	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-70-2	Calcium	1000	ND	1	0.5	50	09/15/17	61393	S21466B4	11	P	PEICPRAD4A
7440-47-3	Chromium	5.0	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-50-8	Copper	5.0	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7439-89-6	Iron	200	ND	1	0.5	50	09/15/17	61393	S21466B4	11	P	PEICPRAD4A
7439-92-1	Lead	5.0	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7439-95-4	Magnesium	500	ND	1	0.5	50	09/15/17	61393	S21466B4	11	P	PEICPRAD4A
7439-96-5	Manganese	10	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-02-0	Nickel	5.0	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-09-7	Potassium	500	ND	1	0.5	50	09/15/17	61393	S21466B4	11	P	PEICPRAD4A
7440-23-5	Sodium	250	ND	1	0.5	50	09/15/17	61393	S21466B4	11	P	PEICPRAD4A
7440-31-5	Tin	20	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-32-6	Titanium	10	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-62-2	Vanadium	10	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A
7440-66-6	Zinc	10	ND	1	0.5	50	09/15/17	61393	S21466A4	12	P	PEICP4A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61394 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61394 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.80	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA
7440-38-2	Arsenic	0.20	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA
7440-41-7	Beryllium	0.20	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA
7440-43-9	Cadmium	0.40	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA
7782-49-2	Selenium	2.0	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA
7440-22-4	Silver	0.20	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA
7440-28-0	Thallium	0.40	ND	1	0.5	100	09/18/17	61394	S091817B	14	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61393 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61393 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	09/18/17	61393	H21466S	11	CV	HGCV1A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7439-89-6	Iron	300	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7439-96-5	Manganese	40	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	14	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	09/15/17	61392	W21465B4	14	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-23-5	Sodium	5000	50000	1	100	100	09/15/17	61392	W21465B4	14	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	09/15/17	61392	W21465A2	18	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-001	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	09/15/17	61392	A091517A	19	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	22	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	30	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-23-5	Sodium	5000	20000	1	50	50	09/15/17	61392	W21465B4	30	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	34	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9B	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	29	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-1	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7439-89-6	Iron	300	300	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	23	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	31	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-23-5	Sodium	5000	72000	1	50	50	09/15/17	61392	W21465B4	31	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	35	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-003	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-1	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	30	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-2	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7439-89-6	Iron	300	4000	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7439-96-5	Manganese	40	87	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	24	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	32	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-23-5	Sodium	5000	20000	1	50	50	09/15/17	61392	W21465B4	32	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	36	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-2	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	3.0	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	31	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	33	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-23-5	Sodium	5000	51000	1	50	50	09/15/17	61392	W21465B4	33	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	37	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-005	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	32	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9BF	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-70-2	Calcium	5000	11000	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7439-89-6	Iron	300	570	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	26	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	34	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-23-5	Sodium	5000	20000	1	50	50	09/15/17	61392	W21465B4	34	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	38	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-9BF	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	37	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-1F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	27	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	35	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-23-5	Sodium	5000	72000	1	50	50	09/15/17	61392	W21465B4	35	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	39	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-007	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-1F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	38	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-2F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7439-89-6	Iron	300	4100	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7439-96-5	Manganese	40	88	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	28	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	36	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-23-5	Sodium	5000	21000	1	50	50	09/15/17	61392	W21465B4	36	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	40	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-2F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	2.6	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	39	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-009	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DSO-EAST100	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	230	6800	1	0.5	50	09/15/17	61393	S21466B4	32	P	PEICPRAD4A
7440-39-3	Barium	12	58	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7440-70-2	Calcium	1200	4800	1	0.5	50	09/15/17	61393	S21466B4	32	P	PEICPRAD4A
7440-47-3	Chromium	5.8	34	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7440-48-4	Cobalt	2.9	3.0	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7440-50-8	Copper	5.8	43	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7439-89-6	Iron	230	13000	1	0.5	50	09/15/17	61393	S21466B4	32	P	PEICPRAD4A
7439-92-1	Lead	5.8	120	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7439-95-4	Magnesium	580	1700	1	0.5	50	09/15/17	61393	S21466B4	32	P	PEICPRAD4A
7439-96-5	Manganese	12	180	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7439-97-6	Mercury	0.097	ND	1	0.15	25	09/18/17	61393	H21466S	40	CV	HGCV1A
7440-02-0	Nickel	5.8	9.5	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7440-09-7	Potassium	580	900	1	0.5	50	09/15/17	61393	S21466B4	32	P	PEICPRAD4A
7440-23-5	Sodium	290	ND	1	0.5	50	09/15/17	61393	S21466B4	32	P	PEICPRAD4A
7440-62-2	Vanadium	12	27	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A
7440-66-6	Zinc	12	180	1	0.5	50	09/15/17	61393	S21466A4	48	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-009	% Solid:	86	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DSO-EAST100	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.93	ND	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA
7440-38-2	Arsenic	0.23	5.8	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA
7440-41-7	Beryllium	0.23	0.24	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA
7440-43-9	Cadmium	0.47	0.58	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA
7782-49-2	Selenium	2.3	ND	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA
7440-22-4	Silver	0.23	ND	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA
7440-28-0	Thallium	0.47	ND	1	0.5	100	09/18/17	61394	S091817B	51	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-010	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DSO-EAST	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	250	3700	1	0.5	50	09/15/17	61393	S21466B4	33	P	PEICPRAD4A
7440-39-3	Barium	12	57	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7440-70-2	Calcium	1200	4500	1	0.5	50	09/15/17	61393	S21466B4	33	P	PEICPRAD4A
7440-47-3	Chromium	6.2	37	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7440-48-4	Cobalt	3.1	ND	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7440-50-8	Copper	6.2	50	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7439-89-6	Iron	250	12000	1	0.5	50	09/15/17	61393	S21466B4	33	P	PEICPRAD4A
7439-92-1	Lead	6.2	69	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7439-95-4	Magnesium	620	1700	1	0.5	50	09/15/17	61393	S21466B4	33	P	PEICPRAD4A
7439-96-5	Manganese	12	140	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7439-97-6	Mercury	0.10	ND	1	0.15	25	09/18/17	61393	H21466S	41	CV	HGCV1A
7440-02-0	Nickel	6.2	10	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7440-09-7	Potassium	620	810	1	0.5	50	09/15/17	61393	S21466B4	33	P	PEICPRAD4A
7440-23-5	Sodium	310	ND	1	0.5	50	09/15/17	61393	S21466B4	33	P	PEICPRAD4A
7440-62-2	Vanadium	12	25	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A
7440-66-6	Zinc	12	240	1	0.5	50	09/15/17	61393	S21466A4	49	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-010	% Solid:	81	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DSO-EAST	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.99	1.1	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA
7440-38-2	Arsenic	0.25	2.1	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA
7440-41-7	Beryllium	0.25	ND	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA
7440-43-9	Cadmium	0.49	1.0	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA
7782-49-2	Selenium	2.5	ND	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA
7440-22-4	Silver	0.25	ND	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA
7440-28-0	Thallium	0.49	ND	1	0.5	100	09/18/17	61394	S091817B	52	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-3	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	210	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-39-3	Barium	50	50	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7439-89-6	Iron	300	1500	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7439-96-5	Manganese	40	78	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	29	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	40	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-23-5	Sodium	5000	69000	1	50	50	09/15/17	61392	W21465B4	40	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	44	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-011	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-3	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	13	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	40	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-3F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-70-2	Calcium	5000	18000	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	30	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	41	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-23-5	Sodium	5000	73000	1	50	50	09/15/17	61392	W21465B4	41	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	45	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-3F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	9.5	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	41	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-18	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-70-2	Calcium	5000	23000	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7439-96-5	Manganese	40	190	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	33	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	42	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-23-5	Sodium	5000	17000	1	50	50	09/15/17	61392	W21465B4	42	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	46	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-013	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-18	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	42	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-18F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-70-2	Calcium	5000	21000	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	34	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	43	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-23-5	Sodium	5000	16000	1	50	50	09/15/17	61392	W21465B4	43	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	47	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-18F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	43	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-015	% Solid:	89	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DSO-WEST	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	220	2300	1	0.5	50	09/15/17	61393	S21466B4	34	P	PEICPRAD4A
7440-39-3	Barium	11	26	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7440-70-2	Calcium	1100	9500	1	0.5	50	09/15/17	61393	S21466B4	34	P	PEICPRAD4A
7440-47-3	Chromium	5.6	14	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7440-48-4	Cobalt	2.8	ND	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7440-50-8	Copper	5.6	19	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7439-89-6	Iron	220	5700	1	0.5	50	09/15/17	61393	S21466B4	34	P	PEICPRAD4A
7439-92-1	Lead	5.6	80	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7439-95-4	Magnesium	560	5000	1	0.5	50	09/15/17	61393	S21466B4	34	P	PEICPRAD4A
7439-96-5	Manganese	11	87	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7439-97-6	Mercury	0.094	ND	1	0.15	25	09/18/17	61393	H21466S	42	CV	HGCV1A
7440-02-0	Nickel	5.6	ND	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7440-09-7	Potassium	560	ND	1	0.5	50	09/15/17	61393	S21466B4	34	P	PEICPRAD4A
7440-23-5	Sodium	280	ND	1	0.5	50	09/15/17	61393	S21466B4	34	P	PEICPRAD4A
7440-62-2	Vanadium	11	12	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A
7440-66-6	Zinc	11	150	1	0.5	50	09/15/17	61393	S21466A4	50	P	PEICP4A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-015	% Solid:	89	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DSO-WEST	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.90	ND	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA
7440-38-2	Arsenic	0.22	2.3	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA
7440-41-7	Beryllium	0.22	ND	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA
7440-43-9	Cadmium	0.45	0.60	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA
7782-49-2	Selenium	2.2	ND	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA
7440-22-4	Silver	0.22	ND	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA
7440-28-0	Thallium	0.45	ND	1	0.5	100	09/18/17	61394	S091817B	57	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-016	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-17	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	400	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7439-89-6	Iron	300	2800	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7439-96-5	Manganese	40	790	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	35	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	44	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-23-5	Sodium	5000	10000	1	50	50	09/15/17	61392	W21465B4	44	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A
7440-66-6	Zinc	50	56	1	50	50	09/15/17	61392	W21465A2	48	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-016	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-17	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	3.2	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7439-92-1	Lead	3.0	6.6	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	44	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-17F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7439-89-6	Iron	300	2200	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7439-96-5	Manganese	40	710	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/15/17	61392	H21465SW	36	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/15/17	61392	W21465B4	45	P	PEICPRAD4A
7440-22-4	Silver	20	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-23-5	Sodium	5000	9800	1	50	50	09/15/17	61392	W21465B4	45	P	PEICPRAD4A
7440-62-2	Vanadium	50	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/15/17	61392	W21465A2	49	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AC99992-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	DMW-17F	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/13/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	2.7	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7439-92-1	Lead	3.0	3.3	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/15/17	61392	A091517A	45	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: A091517A
Prep Batch: 61392
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-263353-10	CCB V-263353-23	CCB V-263353-36	CCB V-263353-49	CCB V-263353-53	MB 61392-14		
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U		
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U		
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1 U		
Cadmium	1 U	1 U	1 U	1 U	1 U	2 U		
Cobalt	1 U	1 U	1 U	1 U	1 U	2 U		
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U		
Selenium	5 U	5 U	5 U	5 U	5 U	10 U		
Thallium	1 U	1 U	1 U	1 U	1 U	2 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: SW21465A2
Prep Batch: 61392
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB-14	CCB-25	CCB-33	CCB-43	CCB-54	MB 61392 (1)-15
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Calcium	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U
Magnesium	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: SW21465B4
Prep Batch: 61392
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB-21	CCB-29	CCB-39	CCB-50	MB 61392 (1)-11		
Potassium	5 U	5 U	5 U	5 U	5 U	5 U		
Sodium	5 U	5 U	5 U	5 U	5 U	5 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: S21466A4
Prep Batch: 61393
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB-22	CCB-34	CCB-44	CCB-55	MB 61393 (100)-12		
Barium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Cobalt	.025 U	.025 U	.025 U	.025 U	.025 U	2.5 U		
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Lead	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Manganese	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	5 U		
Vanadium	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		
Zinc	.1 U	.1 U	.1 U	.1 U	.1 U	10 U		

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: S21466B4
Prep Batch: 61393
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD4A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB-21	CCB-28	CCB-39	MB 61393 (100)-11			
Aluminum	2 U	2 U	2 U	2 U	200 U			
Calcium	10 U	10 U	10 U	10 U	1000 U			
Iron	2 U	2 U	2 U	2 U	200 U			
Magnesium	5 U	5 U	5 U	5 U	500 U			
Potassium	5 U	5 U	5 U	5 U	500 U			
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	250 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/18/17
Data File: S091817B
Prep Batch: 61394
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-263353-10	CCB V-263353-23	CCB V-263353-30	CCB V-263353-43	CCB V-263353-56	CCB V-263353-62	MB 61394-14	
Antimony	4 U	4 U	4 U	4 U	4 U	4 U	800 U	
Arsenic	1 U	1 U	1 U	1 U	1 U	1 U	200 U	
Beryllium	1 U	1 U	1 U	1 U	1 U	1 U	200 U	
Cadmium	2 U	2 U	2 U	2 U	2 U	2 U	400 U	
Selenium	10 U	10 U	10 U	10 U	10 U	10 U	2000 U	
Silver	1 U	1 U	1 U	1 U	1 U	1 U	200 U	
Thallium	2 U	2 U	2 U	2 U	2 U	2 U	400 U	

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/15/17
Data File: H21465SW
Prep Batch: 61392
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-21	CCB-32	CCB-38	MB 61392 (1)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/18/17
Data File: H21466S
Prep Batch: 61393
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7091218

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-44	MB 61393 (167)-11			
Mercury	.5 U	.5 U	.5 U	.5 U	83 U			

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61393

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61393

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61393	1	S21466B4	13	69.0890	80.80	86		49	151
Barium	61393	1	S21466A4	14	1.0222	1.10	93		82	118
Calcium	61393	1	S21466B4	13	61.9557	64.50	96		82	118
Chromium	61393	1	S21466A4	14	0.6383	0.650	98		79	121
Cobalt	61393	1	S21466A4	14	0.5481	0.588	93		84	116
Copper	61393	1	S21466A4	14	0.5382	0.564	95		80	120
Iron	61393	1	S21466B4	13	156.3390	147.00	106		46	154
Lead	61393	1	S21466A4	14	0.7891	0.856	92		82	118
Magnesium	61393	1	S21466B4	13	24.8928	27.10	92		76	124
Manganese	61393	1	S21466A4	14	2.5232	2.73	92		81	119
Mercury	61393	5	H21466S	15	13.1008	73.8	89		64	136
Nickel	61393	1	S21466A4	14	0.5627	0.613	92		83	117
Potassium	61393	1	S21466B4	13	23.2149	24.20	96		69	131
Sodium	61393	1	S21466B4	13	9.0773	9.14	99		72	128
Vanadium	61393	1	S21466A4	14	0.5614	0.563	100		77	123
Zinc	61393	1	S21466A4	14	1.8746	1.98	95		82	117

TxtQcType: LCS Matrix: SOIL SampleID: LCS 61393

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61393	1	S21466B4	12	68.4217	80.80	85		49	151
Barium	61393	1	S21466A4	13	1.0079	1.10	92		82	118
Calcium	61393	1	S21466B4	12	64.2189	64.50	100		82	118
Chromium	61393	1	S21466A4	13	0.6357	0.650	98		79	121
Cobalt	61393	1	S21466A4	13	0.5494	0.588	93		84	116
Copper	61393	1	S21466A4	13	0.5438	0.564	96		80	120
Iron	61393	1	S21466B4	12	155.7860	147.00	106		46	154
Lead	61393	1	S21466A4	13	0.7873	0.856	92		82	118
Magnesium	61393	1	S21466B4	12	24.7455	27.10	91		76	124
Manganese	61393	1	S21466A4	13	2.5457	2.73	93		81	119
Mercury	61393	5	H21466S	14	13.2353	73.8	90		64	136
Nickel	61393	1	S21466A4	13	0.5634	0.613	92		83	117
Potassium	61393	1	S21466B4	12	23.1419	24.20	96		69	131
Sodium	61393	1	S21466B4	12	9.0765	9.14	99		72	128
Vanadium	61393	1	S21466A4	13	0.5624	0.563	100		77	123
Zinc	61393	1	S21466A4	13	1.8835	1.98	95		82	117

TxtQcType: MSD Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61393	1	S21466B4	17	S21466B4	14	123.2310	130.9630	5.0	-150	b	75	125
Barium	61393	1	S21466A4	18	S21466A4	15	1.0397	0.6968	0.5	69	a	75	125
Calcium	61393	1	S21466B4	17	S21466B4	14	147.5750	159.5810	50	-24	a	75	125
Chromium	61393	1	S21466A4	18	S21466A4	15	0.6813	0.2361	0.5	89		75	125
Cobalt	61393	1	S21466A4	18	S21466A4	15	0.5530	0.1040	0.5	90		75	125
Copper	61393	1	S21466A4	18	S21466A4	15	0.7066	0.2443	0.5	92		75	125
Iron	61393	1	S21466B4	17	S21466B4	14	256.4920	275.6720	5.0	-380	b	75	125
Lead	61393	1	S21466A4	18	S21466A4	15	0.8310	0.5321	0.5	60	a	75	125
Magnesium	61393	1	S21466B4	17	S21466B4	14	116.2050	99.7299	50	33	a	75	125
Manganese	61393	1	S21466A4	18	S21466A4	15	4.1833	4.2782	0.5	-19	b	75	125
Mercury	61393	1	H21466S	19	H21466S	16	10.0974	.5U	10	101		75	125
Nickel	61393	1	S21466A4	18	S21466A4	15	0.5999	0.1555	0.5	89		75	125
Potassium	61393	1	S21466B4	17	S21466B4	14	62.2092	17.3417	50	90		75	125
Sodium	61393	1	S21466B4	17	S21466B4	14	49.9630	2.5U	50	100		75	125
Vanadium	61393	1	S21466A4	18	S21466A4	15	0.7489	0.3228	0.5	85		75	125
Zinc	61393	1	S21466A4	18	S21466A4	15	1.0122	0.6907	0.5	64	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61393

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61393	1	S21466B4	16	S21466B4	14	112.5380	130.9630	5.0	-370	b	75	125
Barium	61393	1	S21466A4	17	S21466A4	15	0.9376	0.6968	0.5	48	a	75	125
Calcium	61393	1	S21466B4	16	S21466B4	14	144.2280	159.5810	50	-31	a	75	125
Chromium	61393	1	S21466A4	17	S21466A4	15	0.6461	0.2361	0.5	82		75	125
Cobalt	61393	1	S21466A4	17	S21466A4	15	0.5343	0.1040	0.5	86		75	125
Copper	61393	1	S21466A4	17	S21466A4	15	0.6430	0.2443	0.5	80		75	125
Iron	61393	1	S21466B4	16	S21466B4	14	230.3670	275.6720	5.0	-910	b	75	125
Lead	61393	1	S21466A4	17	S21466A4	15	0.7471	0.5321	0.5	43	a	75	125
Magnesium	61393	1	S21466B4	16	S21466B4	14	112.4390	99.7299	50	25	a	75	125
Manganese	61393	1	S21466A4	17	S21466A4	15	3.4569	4.2782	0.5	-160	b	75	125
Mercury	61393	1	H21466S	18	H21466S	16	9.8056	.5U	10	98		75	125
Nickel	61393	1	S21466A4	17	S21466A4	15	0.5736	0.1555	0.5	84		75	125
Potassium	61393	1	S21466B4	16	S21466B4	14	60.4587	17.3417	50	86		75	125
Sodium	61393	1	S21466B4	16	S21466B4	14	48.5402	2.5U	50	97		75	125
Vanadium	61393	1	S21466A4	17	S21466A4	15	0.7170	0.3228	0.5	79		75	125
Zinc	61393	1	S21466A4	17	S21466A4	15	0.9403	0.6907	0.5	50	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61394

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61394

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61394	1	S091817B	16	40.2900	88.2	46		0.02	197.3
Arsenic	61394	1	S091817B	16	54.1800	57	95		75.1	124.9
Beryllium	61394	1	S091817B	16	65.0400	67.5	96		82.8	117.2
Cadmium	61394	1	S091817B	16	81.7200	77.8	105		82.8	117.2
Selenium	61394	1	S091817B	16	74.1700	78.9	94		77.6	122.4
Silver	61394	1	S091817B	16	53.2600	54.2	98		74.7	125.3
Thallium	61394	1	S091817B	16	184.5000	178	104		79.2	120.2

TxtQcType: LCS Matrix: SOIL SampleID: LCS 61394

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61394	1	S091817B	15	39.6500	88.2	45		0.02	197.3
Arsenic	61394	1	S091817B	15	53.7900	57	94		75.1	124.9
Beryllium	61394	1	S091817B	15	64.9900	67.5	96		82.8	117.2
Cadmium	61394	1	S091817B	15	80.7800	77.8	104		82.8	117.2
Selenium	61394	1	S091817B	15	74.0000	78.9	94		77.6	122.4
Silver	61394	1	S091817B	15	53.0300	54.2	98		74.7	125.3
Thallium	61394	1	S091817B	15	184.5000	178	104		79.2	120.2

TxtQcType: MSD Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61394	1	S091817B	35	S091817B	31	57.9400	4U	250	23	a	75	125
Arsenic	61394	1	S091817B	35	S091817B	31	204.4000	26.2600	250	71	a	75	125
Beryllium	61394	1	S091817B	35	S091817B	31	174.8000	2.2250	250	69	a	75	125
Cadmium	61394	1	S091817B	35	S091817B	31	200.2000	2U	250	80		75	125
Selenium	61394	1	S091817B	35	S091817B	31	162.5000	10U	250	65	a	75	125
Silver	61394	1	S091817B	35	S091817B	31	33.0600	1U	50	66	a	75	125
Thallium	61394	1	S091817B	35	S091817B	31	190.8000	2U	250	76		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61394	1	S091817B	34	S091817B	31	40.1000	4U	250	16	a	75	125
Arsenic	61394	1	S091817B	34	S091817B	31	230.3000	26.2600	250	82		75	125
Beryllium	61394	1	S091817B	34	S091817B	31	170.9000	2.2250	250	67	a	75	125
Cadmium	61394	1	S091817B	34	S091817B	31	220.0000	2U	250	88		75	125
Selenium	61394	1	S091817B	34	S091817B	31	169.1000	10U	250	68	a	75	125
Silver	61394	1	S091817B	34	S091817B	31	35.6400	1U	50	71	a	75	125
Thallium	61394	1	S091817B	34	S091817B	31	207.8000	2U	250	83		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 61394

Instrument Type: ICPMS
Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD00001-002

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	S091817B	36	S091817B	31	48.1600	4U	50	96		80	120
Arsenic	1	S091817B	36	S091817B	31	71.9400	26.2600	50	91		80	120
Beryllium	1	S091817B	36	S091817B	31	38.9300	2.2250	50	73	a	80	120
Cadmium	1	S091817B	36	S091817B	31	46.7900	2U	50	94		80	120
Selenium	1	S091817B	36	S091817B	31	219.1000	10U	250	88		80	120
Silver	1	S091817B	36	S091817B	31	44.0700	1U	50	88		80	120
Thallium	1	S091817B	36	S091817B	31	47.1300	2U	50	94		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61392

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AC99992-001

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	61392	SW21465	26	SW21465	18	5	0.0181	0.1996	55	c	10
Barium	61392	SW21465	26	SW21465	18	5	0.0010	0.0097	49	c	10
Calcium	61392	SW21465	26	SW21465	18	5	0.7245	4.9478	27	a	10
Chromium	61392	SW21465	26	SW21465	18	5	-0.0014	0.0027	---		10
Copper	61392	SW21465	26	SW21465	18	5	-0.0009	0.0005	---		10
Iron	61392	SW21465	26	SW21465	18	5	-0.0011	0.1021	---		10
Magnesium	61392	SW21465	26	SW21465	18	5	-0.1558	0.6633	---		10
Manganese	61392	SW21465	26	SW21465	18	5	-0.0015	-0.0006	---		10
Nickel	61392	SW21465	26	SW21465	18	5	-0.0028	-0.0022	---		10
Potassium	61392	SW21465	22	SW21465	14	5	0.7235	1.8592	95	a	10
Silver	61392	SW21465	26	SW21465	18	5	-0.0002	-0.0005	---		10
Sodium	61392	SW21465	22	SW21465	14	5	10.3649	50.1958	3.2		10
Vanadium	61392	SW21465	26	SW21465	18	5	-0.0013	0.0000	---		10
Zinc	61392	SW21465	26	SW21465	18	5	-0.0010	0.0064	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61393

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61393

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	61393	S21466B4	13	S21466B4	12	69.0890	68.4217	.97		20
Barium	61393	S21466A4	14	S21466A4	13	1.0222	1.0079	1.4		20
Calcium	61393	S21466B4	13	S21466B4	12	61.9557	64.2189	3.6		20
Chromium	61393	S21466A4	14	S21466A4	13	0.6383	0.6357	.41		20
Cobalt	61393	S21466A4	14	S21466A4	13	0.5481	0.5494	.23		20
Copper	61393	S21466A4	14	S21466A4	13	0.5382	0.5438	1		20
Iron	61393	S21466B4	13	S21466B4	12	156.3390	155.7860	.35		20
Lead	61393	S21466A4	14	S21466A4	13	0.7891	0.7873	.23		20
Magnesium	61393	S21466B4	13	S21466B4	12	24.8928	24.7455	.59		20
Manganese	61393	S21466A4	14	S21466A4	13	2.5232	2.5457	.89		20
Mercury	61393	H21466S	15	H21466S	14	13.1008	13.2353	1		20
Nickel	61393	S21466A4	14	S21466A4	13	0.5627	0.5634	.11		20
Potassium	61393	S21466B4	13	S21466B4	12	23.2149	23.1419	.31		20
Sodium	61393	S21466B4	13	S21466B4	12	9.0773	9.0765	.0091		20
Vanadium	61393	S21466A4	14	S21466A4	13	0.5614	0.5624	.17		20
Zinc	61393	S21466A4	14	S21466A4	13	1.8746	1.8835	.47		20

TxtQcType: MR Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	61393	S21466B4	15	S21466B4	14	97.6716	130.9630	29	a	20
Barium	61393	S21466A4	16	S21466A4	15	0.5119	0.6968	31	a	20
Calcium	61393	S21466B4	15	S21466B4	14	155.0130	159.5810	2.9		20
Chromium	61393	S21466A4	16	S21466A4	15	0.2031	0.2361	15		20
Cobalt	61393	S21466A4	16	S21466A4	15	0.0785	0.1040	28	b	20
Copper	61393	S21466A4	16	S21466A4	15	0.1951	0.2443	22	b	20
Iron	61393	S21466B4	15	S21466B4	14	216.3180	275.6720	24	a	20
Lead	61393	S21466A4	16	S21466A4	15	0.4257	0.5321	22	a	20
Magnesium	61393	S21466B4	15	S21466B4	14	74.7383	99.7299	29	a	20
Manganese	61393	S21466A4	16	S21466A4	15	3.3272	4.2782	25	a	20
Mercury	61393	H21466S	17	H21466S	16	.5U	.5U	---		20
Nickel	61393	S21466A4	16	S21466A4	15	0.1359	0.1555	13		20
Potassium	61393	S21466B4	15	S21466B4	14	13.0224	17.3417	28	b	20
Sodium	61393	S21466B4	15	S21466B4	14	2.5U	2.5U	---		20
Vanadium	61393	S21466A4	16	S21466A4	15	0.2495	0.3228	26	b	20
Zinc	61393	S21466A4	16	S21466A4	15	0.4862	0.6907	35	b	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61393

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	61393	S21466B4	17	S21466B4	16	123.2310	112.5380	9.1		20
Barium	61393	S21466A4	18	S21466A4	17	1.0397	0.9376	10		20
Calcium	61393	S21466B4	17	S21466B4	16	147.5750	144.2280	2.3		20
Chromium	61393	S21466A4	18	S21466A4	17	0.6813	0.6461	5.3		20
Cobalt	61393	S21466A4	18	S21466A4	17	0.5530	0.5343	3.4		20
Copper	61393	S21466A4	18	S21466A4	17	0.7066	0.6430	9.4		20
Iron	61393	S21466B4	17	S21466B4	16	256.4920	230.3670	11		20
Lead	61393	S21466A4	18	S21466A4	17	0.8310	0.7471	11		20
Magnesium	61393	S21466B4	17	S21466B4	16	116.2050	112.4390	3.3		20
Manganese	61393	S21466A4	18	S21466A4	17	4.1833	3.4569	19		20
Mercury	61393	H21466S	19	H21466S	18	10.0974	9.8056	2.9		20
Nickel	61393	S21466A4	18	S21466A4	17	0.5999	0.5736	4.5		20
Potassium	61393	S21466B4	17	S21466B4	16	62.2092	60.4587	2.9		20
Sodium	61393	S21466B4	17	S21466B4	16	49.9630	48.5402	2.9		20
Vanadium	61393	S21466A4	18	S21466A4	17	0.7489	0.7170	4.4		20
Zinc	61393	S21466A4	18	S21466A4	17	1.0122	0.9403	7.4		20

TxtQcType: SD Matrix: SOIL SampleID: AD00001-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	61393	S21466B4	22	S21466B4	14	5	27.5544	130.9630	5.2		10
Barium	61393	S21466A4	23	S21466A4	15	5	0.1529	0.6968	9.7		10
Calcium	61393	S21466B4	22	S21466B4	14	5	33.3765	159.5810	4.6		10
Chromium	61393	S21466A4	23	S21466A4	15	5	0.0482	0.2361	2.1		10
Cobalt	61393	S21466A4	23	S21466A4	15	5	0.0186	0.1040	11	a	10
Copper	61393	S21466A4	23	S21466A4	15	5	0.0499	0.2443	2		10
Iron	61393	S21466B4	22	S21466B4	14	5	58.4338	275.6720	6		10
Lead	61393	S21466A4	23	S21466A4	15	5	0.1245	0.5321	17	a	10
Magnesium	61393	S21466B4	22	S21466B4	14	5	21.4538	99.7299	7.6		10
Manganese	61393	S21466A4	23	S21466A4	15	5	0.9612	4.2782	12	a	10
Nickel	61393	S21466A4	23	S21466A4	15	5	0.0293	0.1555	5.9		10
Potassium	61393	S21466B4	22	S21466B4	14	5	3.7821	17.3417	9		10
Sodium	61393	S21466B4	22	S21466B4	14	5	0.5358	2.0512	31	a	10
Vanadium	61393	S21466A4	23	S21466A4	15	5	0.0680	0.3228	5.4		10
Zinc	61393	S21466A4	23	S21466A4	15	5	0.1515	0.6907	9.7		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61394

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR | Matrix: SOIL | SampleID: LCS MR 61394

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	61394	S091817B	16	S091817B	15	40.2900	39.6500	1.6		20
Arsenic	61394	S091817B	16	S091817B	15	54.1800	53.7900	.72		20
Beryllium	61394	S091817B	16	S091817B	15	65.0400	64.9900	.077		20
Cadmium	61394	S091817B	16	S091817B	15	81.7200	80.7800	1.2		20
Selenium	61394	S091817B	16	S091817B	15	74.1700	74.0000	.23		20
Silver	61394	S091817B	16	S091817B	15	53.2600	53.0300	.43		20
Thallium	61394	S091817B	16	S091817B	15	184.5000	184.5000	0		20

TxtQcType: MR | Matrix: SOIL | SampleID: AD00001-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	61394	S091817B	32	S091817B	31	4U	4U	---		20
Arsenic	61394	S091817B	32	S091817B	31	21.2800	26.2600	21	a	20
Beryllium	61394	S091817B	32	S091817B	31	2.1290	2.2250	4.4		20
Cadmium	61394	S091817B	32	S091817B	31	2U	2U	---		20
Selenium	61394	S091817B	32	S091817B	31	10U	10U	---		20
Silver	61394	S091817B	32	S091817B	31	1U	1U	---		20
Thallium	61394	S091817B	32	S091817B	31	2U	2U	---		20

TxtQcType: MSD | Matrix: SOIL | SampleID: AD00001-002

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	61394	S091817B	35	S091817B	34	57.9400	40.1000	36	a	20
Arsenic	61394	S091817B	35	S091817B	34	204.4000	230.3000	12		20
Beryllium	61394	S091817B	35	S091817B	34	174.8000	170.9000	2.3		20
Cadmium	61394	S091817B	35	S091817B	34	200.2000	220.0000	9.4		20
Selenium	61394	S091817B	35	S091817B	34	162.5000	169.1000	4		20
Silver	61394	S091817B	35	S091817B	34	33.0600	35.6400	7.5		20
Thallium	61394	S091817B	35	S091817B	34	190.8000	207.8000	8.5		20

TxtQcType: SD | Matrix: SOIL | SampleID: AD00001-002

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	61394	S091817B	33	S091817B	31	5	0.2539	1.5050	16	a	10
Arsenic	61394	S091817B	33	S091817B	31	5	5.5550	26.2600	5.8		10
Beryllium	61394	S091817B	33	S091817B	31	5	0.6226	2.2250	40	c	10
Cadmium	61394	S091817B	33	S091817B	31	5	0.2264	0.9079	25	a	10
Selenium	61394	S091817B	33	S091817B	31	5	1.1800	5.1670	14	c	10
Silver	61394	S091817B	33	S091817B	31	5	0.0529	0.2310	15	c	10
Thallium	61394	S091817B	33	S091817B	31	5	0.0834	0.4542	8.1		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

VERITECH Wet Chem Form1 Analysis Summary

Lab#: AC99992-001 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-9 | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Lab#: AC99992-002 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-9B | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Lab#: AC99992-003 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-1 | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Lab#: AC99992-004 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-2 | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Lab#: AC99992-011 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-3 | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Lab#: AC99992-013 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-18 | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Lab#: AC99992-016 | Project Number: 7091218
Matrix: Aqueous | Received Date: 9/12/2017
Client SampleID: DMW-17 | Collect Date: 9/12/2017

Analysis	TestGroup	Dilution:	Result	Units:	RL	Prep Date:	Analysis Date:
Cr (Hexavalent)	CR6-WATER	1	ND	mg/l	0.025	09/13/17	09/13/17

Analysis Type: HEX-CR-W

Batch Number: HEX-CR-W-703

Units: mg/l

Calibration Curve Information

Cal Curve Date: 07/11/17

Concentration:	Abs/Area
0	0
0.025	0.032
0.05	0.062
0.25	0.306
0.5	0.588
0.75	0.864
1	1.117

Slope: 1.124976
Intercept: 0.0103123
Rsquared: 0.9995581
Date Performed: 07/11/17

Analytical Method(s)

SM 3500-Cr B

Qc Summary Results

Qc Type	Qc Name	SpkAmt	Rec Lim	Rpd Lim	Raw Result	Recov	Rpd	Flags
CAL-01	CAL-01-09/13/17	0.5	90-110	NA	0.4912884	98	NA	
CAL-02	CAL-02-09/13/17	1	90-110	NA	0.9979659	100	NA	
CCV	CCV-5	0.5	90-110	NA	0.4681768	94	NA	
CCV	CCV-4	0.5	90-110	NA	0.4610656	92	NA	
CCV	CCV-3	0.5	90-110	NA	0.4690657	94	NA	
CCV	CCV-2	0.5	90-110	NA	0.4690657	94	NA	
CCV	CCV	0.5	90-110	NA	0.4690657	94	NA	
DUP	AC99992-001	0	NA	20	-0.0056111	NA	NA	Nc
ICV	ICV-07/11/17	0.5	90-110	NA	0.4735103	95	NA	
LCS	LCS	0.5	75-125	NA	0.4948441	99	NA	
MS	AC99992-001	0.5	75-125	NA	0.4592878	92	NA	
MSD	AC99992-001	0.5	75-125	20	0.4628434	93	0.77	

Sam #	Type	MB	Result	RL	Per Sol	Full Result	ABS	Turb Abs	DF	Sam Vol	Fin Vol	Prep Date	Prep By	Anal Date	Anal By
CAL-01-09/13/17	CAL-01		0.49		100	0.49129	0.563	0	1	1	1			09/13/17	JW
CAL-02-09/13/17	CAL-02		1		100	0.99797	1.133	0	1	1	1			09/13/17	JW
MB-1-09/13/17	MB	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
LCS	LCS	MB-1-09/13/17	0.49	0.025	100	0.49484	0.567	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-001	Sample	MB-1-09/13/17	ND	0.025	100	-0.0056111	0.004	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-001	DUP	MB-1-09/13/17	ND	0.025	100	-0.0056111	0.004	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-001	MS	MB-1-09/13/17	0.46	0.025	100	0.45929	0.527	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-001	MSD	MB-1-09/13/17	0.46	0.025	100	0.46284	0.531	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-002	Sample	MB-1-09/13/17	ND	0.025	100	-0.0091667	0.001	0.001	1	10	10	09/13/17	JW	09/13/17	JW
CCV	CCV	MB-1-09/13/17	0.47		100	0.46907	0.538	0	1	10	10	09/13/17	JW	09/13/17	JW
CCB	CCB	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-003	Sample	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-004	Sample	MB-1-09/13/17	ND	0.025	100	-0.0065	0.003	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-011	Sample	MB-1-09/13/17	ND	0.025	100	-0.0082778	0.002	0.001	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-013	Sample	MB-1-09/13/17	ND	0.025	100	-0.0073889	0.003	0.001	1	10	10	09/13/17	JW	09/13/17	JW
AC99992-016	Sample	MB-1-09/13/17	ND	0.025	100	-0.0073889	0.005	0.003	1	10	10	09/13/17	JW	09/13/17	JW
CCV-2	CCV	MB-1-09/13/17	0.47		100	0.46907	0.538	0	1	10	10	09/13/17	JW	09/13/17	JW
CCB-2	CCB	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99993-001	Sample	MB-1-09/13/17	ND	0.025	100	-0.0073889	0.002	0	1	10	10	09/13/17	JW	09/13/17	JW
AC99993-003	Sample	MB-1-09/13/17	ND	0.025	100	-0.0091667	0.002	0.002	1	10	10	09/13/17	JW	09/13/17	JW
AC99993-005	Sample	MB-1-09/13/17	ND	0.025	100	-0.0082778	0.001	0	1	10	10	09/13/17	JW	09/13/17	JW
CCV-3	CCV	MB-1-09/13/17	0.47		100	0.46907	0.538	0	1	10	10	09/13/17	JW	09/13/17	JW
CCB-3	CCB	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
CCV-4	CCV	MB-1-09/13/17	0.46		100	0.46107	0.529	0	1	10	10	09/13/17	JW	09/13/17	JW
CCB-4	CCB	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
AD00015-001	Sample	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW
CCV-5	CCV	MB-1-09/13/17	0.47		100	0.46818	0.537	0	1	10	10	09/13/17	JW	09/13/17	JW
CCB-5	CCB	MB-1-09/13/17	ND	0.025	100	-0.0091667	0	0	1	10	10	09/13/17	JW	09/13/17	JW

137
9/19/17

JW 9/14/17

Flag Codes: Ra - Recovery failed specified criteria (PVS/LCS/MS/MSD/ICV/CAL)
Na - Not Applicable
Rp - RPD failed specified criteria.
Nc - Not Checked ..either one or both values =ND

Subcontracted Data

This is the last page of the data generated by Hampton-Clarke.
The following pages were submitted to HC by subcontracted laboratories.



FINAL LAB REPORT

7091218

31700822

28-Sep-2017

Prepared by

SGS NORTH AMERICA

Prepared for

Hampton-Clarke, Inc.

Sherree Baker

137-D Gaither Drive
Mount Laurel, NJ 08054
Phone: 856-780-6058
Email: SBaker@hcvlab.com

This report is approved by

Tamara Morgan

tamara.morgan@sgs.com

Project Manager

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Results reported relate only to the items tested.

SGS CERTIFICATIONS

Arkansas	88-0682
California (ELAP)	ELAP Cert #2914
CLIA	34D1013708
Connecticut	PH-0258
USDA Soil Permit	P330-17-00055
DoD	2726.01
Florida (Primary NELAP)	E87634
ISO 17025/IEC	2726.01
Louisiana DEQ	4115
Louisiana DOH	LA170030
Maine	2016028
Massachusetts	M-NC919
Minnesota (Primary NELAP For Method 23)	1179213
Mississippi	Reciprocity
Nebraska	NE-OS-33-17
New Hampshire	208317
New Jersey	NC100
New York	11685
North Carolina DEQ	481
North Dakota	R-197
Oregon	NC200002
Pennsylvania	68-03675
South Carolina	99029002
Texas	T104704260
US Coast Guard	16714/159.317/SGS
Virginia	8914
Washington	C913
West Virginia	293

Rev. 04-Aug-2017

Laboratory Qualifiers

Report Definitions

DL	Method, Instrument, or Estimated Detection Limit per Analytical Method
CL	Control Limits for the recovery result of a parameter
LOQ	Reporting Limit
DF	Dilution Factor
RPD	Relative Percent Difference
LCS(D)	Laboratory Control Spike (Duplicate)
MS(D)	Matrix Spike (Duplicate)
MB	Method Blank

Qualifier Definitions

*	Recovery or RPD outside of control limits
B	Analyte was detected in the Lab Method Blank at a level above the LOQ
U	Undetected (Reported as ND or < DL)
J	Estimated Concentration.
E	Amount detected is greater than the Upper Calibration Limit
TIC	Tentatively Identified Compound
ND	Not Detected
P	RPD > 40% between results of dual columns
D	Spike or surrogate was diluted out in order to achieve a parameter result within instrument calibration range

Samples requiring manual integrations for various congeners and/or standards are marked and dated by the analyst. A code definition is provided below:

M1	Mis-identified peak
M2	Software did not integrate peak
M3	Incorrect baseline construction (i.e. not all of peak included; two peaks integrated as one)
M4	Pattern integration required (i.e. DRO, GRO, PCB, Toxaphene and Technical Chlordane)
M5	Other - Explained in case narrative

Note Results pages that include a value for "Solids (%)" have been adjusted for moisture content.

Sample Summary

Client Sample ID	Lab Sample ID	Collected	Received	Matrix
AC99992-002	31700822001	09/12/2017 09:20	09/15/2017 11:51	Water
AC99992-003	31700822002	09/12/2017 09:30	09/15/2017 11:51	Water
AC99992-004	31700822003	09/12/2017 09:55	09/15/2017 11:51	Water
AC99992-011	31700822004	09/12/2017 10:45	09/15/2017 11:51	Water
AC99992-013	31700822005	09/12/2017 11:59	09/15/2017 11:51	Water
AC99992-016	31700822006	09/12/2017 13:00	09/15/2017 11:51	Water
AC99992-001	31700822007	09/12/2017 09:15	09/19/2017 10:15	Water

Case Narrative

The reported recovery of d5-NEtFOSAA for all samples is below recommended limits

AC99992-004 and AC99992-016

The reported recovery of 13C2-PFDA is below recommended limits

Detectable Results Summary

Client Sample ID: **AC99992-002**
Lab Sample ID: 31700822001-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	3.33	ng/L	
PFPeA	3.87	ng/L	
PFHxA	4.12	ng/L	
PFHpA	3.18	ng/L	
PFOA	11.8	ng/L	
PFNA	1.49	ng/L	J
PFDA	1.01	ng/L	J
PFBS	5.37	ng/L	
PFHxS	2.05	ng/L	
PFHpS	0.336	ng/L	J
PFOS	21.3	ng/L	

Client Sample ID: **AC99992-003**
Lab Sample ID: 31700822002-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	6.58	ng/L	
PFPeA	11.1	ng/L	
PFHxA	12.2	ng/L	
PFHpA	8.61	ng/L	
PFOA	23.1	ng/L	
PFNA	2.79	ng/L	
PFDA	1.20	ng/L	J
PFBS	23.3	ng/L	
PFHxS	2.81	ng/L	
PFHpS	0.442	ng/L	J
PFOS	24.0	ng/L	

Client Sample ID: **AC99992-004**
Lab Sample ID: 31700822003-A
EPA 537 v1.1

Parameter	Result	Units	
PFHxA	3.17	ng/L	
PFHpA	2.96	ng/L	
PFOA	9.40	ng/L	
PFNA	2.02	ng/L	J
PFDA	1.03	ng/L	J
PFBS	4.07	ng/L	
PFHxS	1.21	ng/L	J
PFOS	8.75	ng/L	

Client Sample ID: **AC99992-011**
Lab Sample ID: 31700822004-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	3.49	ng/L	
PFPeA	4.15	ng/L	
PFHxA	5.00	ng/L	
PFHpA	4.15	ng/L	
PFOA	20.0	ng/L	
PFNA	1.96	ng/L	J
PFDA	0.945	ng/L	J
PFBS	3.52	ng/L	
PFHxS	1.84	ng/L	J
PFHpS	1.00	ng/L	J
PFOS	34.9	ng/L	

Print Date: 09/28/2017

N.C. Certification # 481

Detectable Results Summary

Client Sample ID: **AC99992-013**
Lab Sample ID: 31700822005-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	1.70	ng/L	J
PFPeA	2.38	ng/L	
PFHxA	2.27	ng/L	
PFHpA	2.21	ng/L	
PFOA	5.64	ng/L	
PFNA	1.92	ng/L	J
PFDA	4.57	ng/L	
PFuNA	0.434	ng/L	J
PFBS	6.61	ng/L	
PFHxS	1.08	ng/L	J
PFOS	19.4	ng/L	
PFDS	10.3	ng/L	

Client Sample ID: **AC99992-016**
Lab Sample ID: 31700822006-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	4.82	ng/L	
PFPeA	6.03	ng/L	
PFHxA	6.39	ng/L	
PFHpA	5.36	ng/L	
PFOA	16.4	ng/L	
PFNA	6.19	ng/L	
PFDA	2.74	ng/L	
PFuNA	1.05	ng/L	J
PFBS	5.90	ng/L	
PFHxS	2.08	ng/L	J
PFHpS	0.522	ng/L	J
PFOS	29.4	ng/L	

Client Sample ID: **AC99992-001**
Lab Sample ID: 31700822007-A
EPA 537 v1.1

Parameter	Result	Units	
PFBA	1.82	ng/L	J
PFPeA	2.39	ng/L	
PFHxA	2.07	ng/L	J
PFHpA	2.72	ng/L	
PFOA	11.3	ng/L	
PFNA	2.20	ng/L	
PFDA	1.06	ng/L	J
PFBS	9.44	ng/L	
PFHxS	3.48	ng/L	
PFHpS	0.414	ng/L	J
PFOS	29.8	ng/L	

Quality Control Samples

Client Sample ID: **MB for HBN 141056 [HXX/2055]**
Lab Sample ID: 212675
EPA 537 v1.1

Parameter	Result	Units	
PFOA	0.204	ng/L	J

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99992-002**

Client Sample ID: **AC99992-002**
Client Project ID: **7091218**
Lab Sample ID: 31700822001-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 09:20
Received Date: 09/15/2017 11:51
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**3.33**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFPeA	**3.87**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFHxA	**4.12**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFHpA	**3.18**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFOA	**11.8**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFNA	**1.49**	J	0.202	2.02	ng/L	1	09/21/2017 15:05
PFDA	**1.01**	J	0.202	2.02	ng/L	1	09/21/2017 15:05
PFuNA	ND	U	0.202	2.02	ng/L	1	09/21/2017 15:05
PFDoA	ND	U	0.202	2.02	ng/L	1	09/21/2017 15:05
PFTriA	ND	U	0.202	2.02	ng/L	1	09/21/2017 15:05
PFTreA	ND	U	0.202	2.02	ng/L	1	09/21/2017 15:05
PFBS	**5.37**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFHxS	**2.05**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFHpS	**0.336**	J	0.202	2.02	ng/L	1	09/21/2017 15:05
PFOS	**21.3**		0.202	2.02	ng/L	1	09/21/2017 15:05
PFDS	ND	U	0.202	2.02	ng/L	1	09/21/2017 15:05
NMeFOSAA	ND	U	0.504	2.02	ng/L	1	09/21/2017 15:05
NetFOSAA	ND	U	0.504	2.02	ng/L	1	09/21/2017 15:05
6:2 FTS	ND	U	0.504	2.02	ng/L	1	09/21/2017 15:05
8:2 FTS	ND	U	0.202	2.02	ng/L	1	09/21/2017 15:05
Surrogates							
13C2-PFHxA	101			70.0-130	%	1	09/21/2017 15:05
13C2-PFDA	90.7			70.0-130	%	1	09/21/2017 15:05
d5-NEtFOSAA	53.3*			70.0-130	%	1	09/21/2017 15:05

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **247.94 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99992-003**

Client Sample ID: **AC99992-003**
Client Project ID: **7091218**
Lab Sample ID: 31700822002-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 09:30
Received Date: 09/15/2017 11:51
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**6.58**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFPeA	**11.1**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFHxA	**12.2**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFHpA	**8.61**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFOA	**23.1**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFNA	**2.79**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFDA	**1.20**	J	0.214	2.14	ng/L	1	09/21/2017 15:35
PFuNA	ND	U	0.214	2.14	ng/L	1	09/21/2017 15:35
PFDoA	ND	U	0.214	2.14	ng/L	1	09/21/2017 15:35
PFTriA	ND	U	0.214	2.14	ng/L	1	09/21/2017 15:35
PFTreA	ND	U	0.214	2.14	ng/L	1	09/21/2017 15:35
PFBS	**23.3**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFHxS	**2.81**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFHpS	**0.442**	J	0.214	2.14	ng/L	1	09/21/2017 15:35
PFOS	**24.0**		0.214	2.14	ng/L	1	09/21/2017 15:35
PFDS	ND	U	0.214	2.14	ng/L	1	09/21/2017 15:35
NMeFOSAA	ND	U	0.535	2.14	ng/L	1	09/21/2017 15:35
NetFOSAA	ND	U	0.535	2.14	ng/L	1	09/21/2017 15:35
6:2 FTS	ND	U	0.535	2.14	ng/L	1	09/21/2017 15:35
8:2 FTS	ND	U	0.214	2.14	ng/L	1	09/21/2017 15:35
Surrogates							
13C2-PFHxA	105			70.0-130	%	1	09/21/2017 15:35
13C2-PFDA	87.9			70.0-130	%	1	09/21/2017 15:35
d5-NEtFOSAA	46.4*			70.0-130	%	1	09/21/2017 15:35

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **233.74 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

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Results of **AC99992-004**

Client Sample ID: **AC99992-004**
Client Project ID: **7091218**
Lab Sample ID: 31700822003-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 09:55
Received Date: 09/15/2017 11:51
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFPeA	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFHxA	**3.17**		0.214	2.14	ng/L	1	09/21/2017 16:06
PFHpA	**2.96**		0.214	2.14	ng/L	1	09/21/2017 16:06
PFOA	**9.40**		0.214	2.14	ng/L	1	09/21/2017 16:06
PFNA	**2.02**	J	0.214	2.14	ng/L	1	09/21/2017 16:06
PFDA	**1.03**	J	0.214	2.14	ng/L	1	09/21/2017 16:06
PFuNA	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFDoA	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFTriA	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFTreA	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFBS	**4.07**		0.214	2.14	ng/L	1	09/21/2017 16:06
PFHxS	**1.21**	J	0.214	2.14	ng/L	1	09/21/2017 16:06
PFHpS	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
PFOS	**8.75**		0.214	2.14	ng/L	1	09/21/2017 16:06
PFDS	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
NMeFOSAA	ND	U	0.534	2.14	ng/L	1	09/21/2017 16:06
NetFOSAA	ND	U	0.534	2.14	ng/L	1	09/21/2017 16:06
6:2 FTS	ND	U	0.534	2.14	ng/L	1	09/21/2017 16:06
8:2 FTS	ND	U	0.214	2.14	ng/L	1	09/21/2017 16:06
Surrogates							
13C2-PFHxA	81.6			70.0-130	%	1	09/21/2017 16:06
13C2-PFDA	66.7*			70.0-130	%	1	09/21/2017 16:06
d5-NEtFOSAA	27.4*			70.0-130	%	1	09/21/2017 16:06

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **234.05 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

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Results of **AC99992-011**

Client Sample ID: **AC99992-011**
Client Project ID: **7091218**
Lab Sample ID: 31700822004-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 10:45
Received Date: 09/15/2017 11:51
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**3.49**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFPeA	**4.15**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFHxA	**5.00**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFHpA	**4.15**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFOA	**20.0**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFNA	**1.96**	J	0.207	2.07	ng/L	1	09/21/2017 16:37
PFDA	**0.945**	J	0.207	2.07	ng/L	1	09/21/2017 16:37
PFuNA	ND	U	0.207	2.07	ng/L	1	09/21/2017 16:37
PFDoA	ND	U	0.207	2.07	ng/L	1	09/21/2017 16:37
PFTriA	ND	U	0.207	2.07	ng/L	1	09/21/2017 16:37
PFTreA	ND	U	0.207	2.07	ng/L	1	09/21/2017 16:37
PFBS	**3.52**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFHxS	**1.84**	J	0.207	2.07	ng/L	1	09/21/2017 16:37
PFHpS	**1.00**	J	0.207	2.07	ng/L	1	09/21/2017 16:37
PFOS	**34.9**		0.207	2.07	ng/L	1	09/21/2017 16:37
PFDS	ND	U	0.207	2.07	ng/L	1	09/21/2017 16:37
NMeFOSAA	ND	U	0.517	2.07	ng/L	1	09/21/2017 16:37
NetFOSAA	ND	U	0.517	2.07	ng/L	1	09/21/2017 16:37
6:2 FTS	ND	U	0.517	2.07	ng/L	1	09/21/2017 16:37
8:2 FTS	ND	U	0.207	2.07	ng/L	1	09/21/2017 16:37
Surrogates							
13C2-PFHxA	107			70.0-130	%	1	09/21/2017 16:37
13C2-PFDA	97.7			70.0-130	%	1	09/21/2017 16:37
d5-NEtFOSAA	57.7*			70.0-130	%	1	09/21/2017 16:37

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **241.9 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

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Results of **AC99992-013**

Client Sample ID: **AC99992-013**
Client Project ID: **7091218**
Lab Sample ID: 31700822005-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 11:59
Received Date: 09/15/2017 11:51
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**1.70**	J	0.196	1.96	ng/L	1	09/21/2017 17:07
PFPeA	**2.38**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFHxA	**2.27**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFHpA	**2.21**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFOA	**5.64**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFNA	**1.92**	J	0.196	1.96	ng/L	1	09/21/2017 17:07
PFDA	**4.57**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFuNA	**0.434**	J	0.196	1.96	ng/L	1	09/21/2017 17:07
PFDoA	ND	U	0.196	1.96	ng/L	1	09/21/2017 17:07
PFTriA	ND	U	0.196	1.96	ng/L	1	09/21/2017 17:07
PFTreA	ND	U	0.196	1.96	ng/L	1	09/21/2017 17:07
PFBS	**6.61**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFHxS	**1.08**	J	0.196	1.96	ng/L	1	09/21/2017 17:07
PFHpS	ND	U	0.196	1.96	ng/L	1	09/21/2017 17:07
PFOS	**19.4**		0.196	1.96	ng/L	1	09/21/2017 17:07
PFDS	**10.3**		0.196	1.96	ng/L	1	09/21/2017 17:07
NMeFOSAA	ND	U	0.490	1.96	ng/L	1	09/21/2017 17:07
NetFOSAA	ND	U	0.490	1.96	ng/L	1	09/21/2017 17:07
6:2 FTS	ND	U	0.490	1.96	ng/L	1	09/21/2017 17:07
8:2 FTS	ND	U	0.196	1.96	ng/L	1	09/21/2017 17:07
Surrogates							
13C2-PFHxA	94.4			70.0-130	%	1	09/21/2017 17:07
13C2-PFDA	79.2			70.0-130	%	1	09/21/2017 17:07
d5-NEtFOSAA	35.7*			70.0-130	%	1	09/21/2017 17:07

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **254.93 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99992-016**

Client Sample ID: **AC99992-016**
Client Project ID: **7091218**
Lab Sample ID: 31700822006-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 13:00
Received Date: 09/15/2017 11:51
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**4.82**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFPeA	**6.03**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFHxA	**6.39**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFHpA	**5.36**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFOA	**16.4**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFNA	**6.19**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFDA	**2.74**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFuNA	**1.05**	J	0.215	2.15	ng/L	1	09/21/2017 17:38
PFDoA	ND	U	0.215	2.15	ng/L	1	09/21/2017 17:38
PFTriA	ND	U	0.215	2.15	ng/L	1	09/21/2017 17:38
PFTreA	ND	U	0.215	2.15	ng/L	1	09/21/2017 17:38
PFBS	**5.90**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFHxS	**2.08**	J	0.215	2.15	ng/L	1	09/21/2017 17:38
PFHpS	**0.522**	J	0.215	2.15	ng/L	1	09/21/2017 17:38
PFOS	**29.4**		0.215	2.15	ng/L	1	09/21/2017 17:38
PFDS	ND	U	0.215	2.15	ng/L	1	09/21/2017 17:38
NMeFOSAA	ND	U	0.538	2.15	ng/L	1	09/21/2017 17:38
NetFOSAA	ND	U	0.538	2.15	ng/L	1	09/21/2017 17:38
6:2 FTS	ND	U	0.538	2.15	ng/L	1	09/21/2017 17:38
8:2 FTS	ND	U	0.215	2.15	ng/L	1	09/21/2017 17:38
Surrogates							
13C2-PFHxA	91.2			70.0-130	%	1	09/21/2017 17:38
13C2-PFDA	68.7*			70.0-130	%	1	09/21/2017 17:38
d5-NEtFOSAA	23.8*			70.0-130	%	1	09/21/2017 17:38

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **232.4 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Results of **AC99992-001**

Client Sample ID: **AC99992-001**
Client Project ID: **7091218**
Lab Sample ID: 31700822007-A
Lab Project ID: 31700822

Collection Date: 09/12/2017 09:15
Received Date: 09/19/2017 10:15
Matrix: Water

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF	Date Analyzed
PFBA	**1.82**	J	0.211	2.11	ng/L	1	09/21/2017 18:09
PFPeA	**2.39**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFHxA	**2.07**	J	0.211	2.11	ng/L	1	09/21/2017 18:09
PFHpA	**2.72**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFOA	**11.3**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFNA	**2.20**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFDA	**1.06**	J	0.211	2.11	ng/L	1	09/21/2017 18:09
PFuNA	ND	U	0.211	2.11	ng/L	1	09/21/2017 18:09
PFDoA	ND	U	0.211	2.11	ng/L	1	09/21/2017 18:09
PFTriA	ND	U	0.211	2.11	ng/L	1	09/21/2017 18:09
PFTreA	ND	U	0.211	2.11	ng/L	1	09/21/2017 18:09
PFBS	**9.44**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFHxS	**3.48**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFHpS	**0.414**	J	0.211	2.11	ng/L	1	09/21/2017 18:09
PFOS	**29.8**		0.211	2.11	ng/L	1	09/21/2017 18:09
PFDS	ND	U	0.211	2.11	ng/L	1	09/21/2017 18:09
NMeFOSAA	ND	U	0.527	2.11	ng/L	1	09/21/2017 18:09
NetFOSAA	ND	U	0.527	2.11	ng/L	1	09/21/2017 18:09
6:2 FTS	ND	U	0.527	2.11	ng/L	1	09/21/2017 18:09
8:2 FTS	ND	U	0.211	2.11	ng/L	1	09/21/2017 18:09
Surrogates							
13C2-PFHxA	109			70.0-130	%	1	09/21/2017 18:09
13C2-PFDA	103			70.0-130	%	1	09/21/2017 18:09
d5-NEtFOSAA	67.3*			70.0-130	%	1	09/21/2017 18:09

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Prep Initial Wt./Vol.: **237.27 mL**
Prep Extract Vol: **1 mL**

Print Date: 09/28/2017

N.C. Certification # 481

Batch Summary

Analytical Method: EPA 537 v1.1

Prep Method: EPA 537 1.1 PREP
Prep Batch: HXX2055
Prep Date: 09/20/2017 18:45

Client Sample ID	Lab Sample ID	Analysis Date	Analytical Batch	Instrument	Analyst
MB for HBN 141056 [HXX/2055]	212675	09/21/2017 14:03	XLC1069	TQS1	ADM
LCS for HBN 141056 [HXX/2055]	212676	09/21/2017 14:34	XLC1069	TQS1	ADM
AC99992-002	31700822001	09/21/2017 15:05	XLC1069	TQS1	ADM
AC99992-003	31700822002	09/21/2017 15:35	XLC1069	TQS1	ADM
AC99992-004	31700822003	09/21/2017 16:06	XLC1069	TQS1	ADM
AC99992-011	31700822004	09/21/2017 16:37	XLC1069	TQS1	ADM
AC99992-013	31700822005	09/21/2017 17:07	XLC1069	TQS1	ADM
AC99992-016	31700822006	09/21/2017 17:38	XLC1069	TQS1	ADM
AC99992-001	31700822007	09/21/2017 18:09	XLC1069	TQS1	ADM

Method Blank

Blank ID: MB for HBN 141056 [HXX/2055] Matrix: Water
Blank Lab ID: 212675
QC for Samples:
31700822001, 31700822002, 31700822003, 31700822004, 31700822005, 31700822006, 31700822007

Results by **EPA 537 v1.1**

Parameter	Result	Qual	DL	LOQ/CL	Units	DF
6:2 FTS	ND	U	0.500	2.00	ng/L	1
8:2 FTS	ND	U	0.200	2.00	ng/L	1
NetFOSAA	ND	U	0.500	2.00	ng/L	1
NMeFOSAA	ND	U	0.500	2.00	ng/L	1
PFBA	ND	U	0.200	2.00	ng/L	1
PFBS	ND	U	0.200	2.00	ng/L	1
PFDA	ND	U	0.200	2.00	ng/L	1
PFDoA	ND	U	0.200	2.00	ng/L	1
PFDS	ND	U	0.200	2.00	ng/L	1
PFHpA	ND	U	0.200	2.00	ng/L	1
PFHpS	ND	U	0.200	2.00	ng/L	1
PFHxA	ND	U	0.200	2.00	ng/L	1
PFHxS	ND	U	0.200	2.00	ng/L	1
PFNA	ND	U	0.200	2.00	ng/L	1
PFOA	**0.204**	J	0.200	2.00	ng/L	1
PFOS	ND	U	0.200	2.00	ng/L	1
PFPeA	ND	U	0.200	2.00	ng/L	1
PFTreA	ND	U	0.200	2.00	ng/L	1
PFTriA	ND	U	0.200	2.00	ng/L	1
PFuNA	ND	U	0.200	2.00	ng/L	1
Surrogates						
13C2-PFDA	85.3			70.0-130	%	1
13C2-PFHxA	95.0			70.0-130	%	1
d5-NEtFOSAA	70.5			70.0-130	%	1

Batch Information

Analytical Batch: XLC1069
Analytical Method: EPA 537 v1.1
Instrument: TQS1
Analyst: ADM

Prep Batch: HXX2055
Prep Method: EPA 537 1.1 PREP
Prep Date/Time: 9/20/2017 6:45:16PM
Prep Initial Wt./Vol.: 250 mL
Prep Extract Vol: 1 mL

Print Date: 09/28/2017

N.C. Certification # 481

Blank Spike Summary

Blank Spike ID: LCS for HBN 141056 [HXX/2055]
Blank Spike Lab ID: 212676
Date Analyzed: 09/21/2017 14:34

Matrix: Water

QC for Samples: 31700822001, 31700822002, 31700822003, 31700822004, 31700822005, 31700822006, 31700822007

Results by **EPA 537 v1.1**

	Blank Spike (ng/L)			
Parameter	Spike	Result	Rec (%)	CL
6:2 FTS	100	111	111	70.0-130
8:2 FTS	100	103	103	70.0-130
NetFOSAA	100	104	104	70.0-130
NMeFOSAA	100	112	112	70.0-130
PFBA	100	103	103	70.0-130
PFBS	100	103	103	70.0-130
PFDA	100	106	106	70.0-130
PFDoA	100	95.9	95.9	70.0-130
PFDS	100	102	102	70.0-130
PFHpA	100	105	105	70.0-130
PFHpS	100	112	112	70.0-130
PFHxA	100	104	104	70.0-130
PFHxS	100	98.4	98.4	70.0-130
PFNA	100	111	111	70.0-130
PFOA	100	101	101	70.0-130
PFOS	100	102	102	70.0-130
PFPeA	100	102	102	70.0-130
PFTreA	100	100	100	70.0-130
PFTriA	100	105	105	70.0-130
PFuNA	100	113	113	70.0-130
Surrogates				
13C2-PFDA			95.6	70.0-130
13C2-PFHxA			100	70.0-130
d5-NEtFOSAA			81.7	70.0-130

Batch Information

Analytical Batch: **XLC1069**
Analytical Method: **EPA 537 v1.1**
Instrument: **TQS1**
Analyst: **ADM**

Prep Batch: **HXX2055**
Prep Method: **EPA 537 1.1 PREP**
Prep Date/Time: **09/20/2017 18:45**
Spike Init Wt./Vol.: **250 mL** Extract Vol: **1 mL**
Dupe Init Wt./Vol.: Extract Vol:

Print Date: 09/28/2017

N.C. Certification # 481

CHAIN OF CUSTODY RECORD

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Add for prg
31700822 eeAo 9/15/17

Report To:	Invoice To:	Project #:	CocID#: 31700822
Hampton-Clarke, Inc.: Attn:Reporting 175 Route 46 West Fairfield, New Jersey 07004	Hampton-Clarke, Inc.: Attn:Accounting 175 Route 46 West Fairfield, New Jersey 07004	7091218	5531

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: Standard **Preliminary Due Date:** 9/29/2017
Report Type: NYDOH-CatA (STAND **Hard Copy Due Date:** 10/4/2017

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
AC99992-001	DMW-9	Aqueous	9/12/2017	9:15:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod) * NOT Recd.
AC99992-002	DMW-9B	Aqueous	9/12/2017	9:20:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99992-003	DMW-1	Aqueous	9/12/2017	9:30:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99992-004	DMW-2	Aqueous	9/12/2017	9:55:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99992-011	DMW-3	Aqueous	9/12/2017	10:45:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99992-013	DMW-18	Aqueous	9/12/2017	11:59:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)
AC99992-016	DMW-17	Aqueous	9/12/2017	1:00:00 PM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
UPS	UPS	9/14/17	17:00	AB 9/14/17
UPS	Ashley Owens	9/15/17	11:51	

Cooler Temp: -0.1° (NOT FROZEN)

HC Lab Use Only: **Subcontracted Lab Id and Contact:** SGS LAB, Richard Sutler, (910) 350-1903, LabID: H, 5500 Business Drive, , Wilmington, NC, 28405

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **Hampton-Clarke, Inc.** Work Order No.: **31700822**

1. ___x___ Shipped
   ___ Hand Delivered

2. ___x___ COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. ___ Custody Tape on Container
   ___x___ No Custody Tape

4. ___x___ Samples Intact
   ___ Samples Broken / Leaking

5. ___x___ Chilled on Receipt Actual Temp.(s) in °C: -0.1 (Not Frozen) Thermometer ID#: IR3
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Temperature Blank Present
   ___ WV samples-proxy not allowed

6. ___x___ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   ___ HNO3 < 2
   ___ HCL < 2
   ___x___ Additional Preservatives verified (see notes) Trizma

8. ___x___ Received Within Holding Time
   ___ Not Received Within Holding Time

9. ___ No Discrepancies Noted
   ___x___ Discrepancies Noted *
   ___ NCDENR notified of Discrepancies*

10. ___ No Headspace present in VOC vials N/A
    ___ Headspace present in VOC vials >6mm

Notes:

Comments:

* = Sample -001 "AC9992-001 DMW-9" not received with remaining shipment.

Inspected and Logged in by: AMO

Date: 9/15/2017

*NCDENR must be notified when collection, holding time or preservation requirements are not met. MI_11.11

31700822

CHAIN OF CUSTODY RECORD

Hampton-Clarke, Inc.
175 US Hwy 46 West
Fairfield, New Jersey, 07004
Ph:800-426-9992 Fax:973-439-1458

Report To:	Invoice To:	Project #:	CocID#:
Hampton-Clarke, Inc.:	Hampton-Clarke, Inc.:	7091218	5537
Attn:Reporting	Attn:Accounting		
175 Route 46 West	175 Route 46 West		
Fairfield, New Jersey 07004	Fairfield, New Jersey 07004		

FINAL RESULTS TO: subresults@hcvlab.com
PRELIM/VERBAL RESULTS TO: subresults@hcvlab.com

EDD: NEW JERSEY HAZRESULT OR EQUIS EZEDD REQUIRED FOR ALL DATA SUBMITTALS!

Turn Around Time: Standard **Preliminary Due Date:** 9/29/2017
Report Type: NYDOH-CatA (STAND **Hard Copy Due Date:** 10/4/2017

Sample Number:	Client ID	Matrix:	Date Collected:	Time Collected:	Analysis Requested
AC99992-001	DMW-9	Aqueous	9/12/2017	9:15:00 AM	PFAs EPA537 Mod 20 compounds:(Analysis Method:EPA 537 mod)

Relinquished By:	Accepted By:	Date:	Time:	Comments, Notes, Special Requirements, HAZARDS
		9/18/17	1700	9/18/17 Please report with SGS project 31700822. on ice
		9/19/17	1015	Cooler Temp: 0.4 °C

HC Lab Use Only: **Subcontracted Lab Id and Contact:** Richard Sutler, (910) 350-1903, LabID: H, 5500 Business Drive, , Wilmington, NC, 28405

SGS North America Inc.

Sample Receipt Checklist (SRC)

Client: **Hampton-Clarke** Work Order No.: **31700822**

1. _x_ Shipped
   ___ Hand Delivered

2. _x_ COC Present on Receipt
   ___ No COC
   ___ Additional Transmittal Forms

3. ___ Custody Tape on Container
   _x_ No Custody Tape

4. _x_ Samples Intact
   ___ Samples Broken / Leaking

5. _x_ Chilled on Receipt Actual Temp.(s) in °C: 0.4 Thermometer ID#:
   ___ Ambient on Receipt
   ___ Walk-in on Ice; Coming down to temp.
   ___ Temperature Blank Present
   ___ WV samples-proxy not allowed

6. _x_ Sufficient Sample Submitted
   ___ Insufficient Sample Submitted

7. ___ Chlorine absent
   ___ HNO3 < 2
   ___ HCL < 2
   _x_ Additional Preservatives verified (see notes) pre-preserved w/ TRIZMA

8. _x_ Received Within Holding Time
   ___ Not Received Within Holding Time

9. _x_ No Discrepancies Noted
   ___ Discrepancies Noted
   ___ NCDENR notified of Discrepancies*

10. ___ No Headspace present in VOC vials n/a
    ___ Headspace present in VOC vials >6mm

Notes: sample that was inadvertantly left out of shipment originally.

Comments:

Inspected and Logged in by: ajb
Date: 9/19/2017

*NCDENR must be notified when collection, holding time or preservation requirements are not met.

MI_11.11

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Dzus

Client PO: 77415, line 2 Proj#60277021

Report To: AECOM
100 Red School House Rd.
Suite B-1
Chestnut Ridge, NY 10977

Attn: Paul Kareth

Received Date: 11/10/2017

Report Date: 11/29/2017

Deliverables: NYDOH-CatB

Lab ID: AD01097

Lab Project No: 7111018

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

NELAP ACCREDITED TNI LABORATORY

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SDG Narrative

HC Case Narrative

Client: AECOM
Project: Dzus

HC Project: 7111018

Hampton-Clarke (HC) received the following samples on 11/10/17:

Client ID	HC Sample ID	Matrix	Analysis
DMW-2	AD01097-001	Aqueous	1,4-Dioxane (8270D)
DMW-3	AD01097-002	Aqueous	1,4-Dioxane (8270D)
DMW-9	AD01097-003	Aqueous	1,4-Dioxane (8270D)
DMW-9B	AD01097-004	Aqueous	1,4-Dioxane (8270D)
DMW-1	AD01097-005	Aqueous	1,4-Dioxane (8270D)
DMW-18	AD01097-006	Aqueous	1,4-Dioxane (8270D)
DMW-18 MS	AD01097-007	Aqueous	1,4-Dioxane (8270D)
DMW-18 MSD	AD01097-008	Aqueous	1,4-Dioxane (8270D)
DMW-68	AD01097-009	Aqueous	1,4-Dioxane (8270D)
DMW-15A	AD01097-010	Aqueous	1,4-Dioxane (8270D)
DMW-15B	AD01097-011	Aqueous	1,4-Dioxane (8270D)
DMW-17	AD01097-012	Aqueous	1,4-Dioxane (8270D)
DMW-22A	AD01097-013	Aqueous	1,4-Dioxane (8270D)
DMW-22B	AD01097-014	Aqueous	1,4-Dioxane (8270D)
DFB-20171109	AD01097-015	Aqueous	1,4-Dioxane (8270D)
DMW-13A	AD01097-016	Aqueous	1,4-Dioxane (8270D)
DMW-13B	AD01097-017	Aqueous	1,4-Dioxane (8270D)

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Base Neutral Analysis:

The Method Blank Spike, MS/MSD RPD, Matrix Spike and Matrix Spike Duplicate for batches 63402 and 63412 had recoveries outside QC limits. Please refer to the applicable Form 3 for the recoveries.

Samples AD01097-006, AD01106-002MS and MSD had a surrogate recovery outside QC limits, but the recovery is greater than 10%, therefore, no corrective action was necessary. Please refer to the applicable Form 2 for the recoveries.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

11/29/2017
Date

Reporting Limit Definitions

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

Data Package Summary Forms

HC Report of Analysis

Client: AECOM
HC Project #: 7111018
Project: Dzus

Sample ID: DMW-2
Lab#: AD01097-001
Matrix: Aqueous
Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-3
Lab#: AD01097-002
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-9
Lab#: AD01097-003
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-9B
Lab#: AD01097-004
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-1
Lab#: AD01097-005
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-18
Lab#: AD01097-006
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-18 MS
Lab#: AD01097-007
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.50	48

Sample ID: DMW-18 MSD
Lab#: AD01097-008
Matrix: Aqueous

Collection Date: 11/8/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.51	60

Sample ID: DMW-68
Lab#: AD01097-009
Matrix: Aqueous
Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-15A
Lab#: AD01097-010
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-15B
Lab#: AD01097-011
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-17
Lab#: AD01097-012
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-22A
Lab#: AD01097-013
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-22B
Lab#: AD01097-014
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DFB-20171109
Lab#: AD01097-015
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-13A
Lab#: AD01097-016
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Sample ID: DMW-13B
Lab#: AD01097-017
Matrix: Aqueous

Collection Date: 11/9/2017
Receipt Date: 11/10/2017

Base Neutrals (no search) 8270

Analyte	DF	Units	RL	Result
1,4-Dioxane	1	ug/l	0.25	ND

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-001
Client Id: DMW-2
Data File: 7M87655.D
Analysis Date: 11/15/17 11:46
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-002
Client Id: DMW-3
Data File: 7M87656.D
Analysis Date: 11/15/17 12:09
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-003
Client Id: DMW-9
Data File: 7M87657.D
Analysis Date: 11/15/17 12:33
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-004
Client Id: DMW-9B
Data File: 7M87658.D
Analysis Date: 11/15/17 12:56
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-005
Client Id: DMW-1
Data File: 7M87659.D
Analysis Date: 11/15/17 13:20
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-006
Client Id: DMW-18
Data File: 7M87652.D
Analysis Date: 11/15/17 10:36
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-007(MS:AD01
Client Id: DMW-18 MS
Data File: 7M87653.D
Analysis Date: 11/15/17 11:00
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	**1,4-Dioxane**	**0.50**	**48**				

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-008(MSD:AD
Client Id: DMW-18 MSD
Data File: 7M87654.D
Analysis Date: 11/15/17 11:23
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 980ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	**1,4-Dioxane**	**0.51**	**60**				

Worksheet #: 444635 *Total Target Concentration* 60 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-009
Client Id: DMW-68
Data File: 10M66061.D
Analysis Date: 11/15/17 19:21
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-010
Client Id: DMW-15A
Data File: 10M66062.D
Analysis Date: 11/15/17 19:44
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-011
Client Id: DMW-15B
Data File: 10M66063.D
Analysis Date: 11/15/17 20:06
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-012
Client Id: DMW-17
Data File: 10M66064.D
Analysis Date: 11/15/17 20:28
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635 *Total Target Concentration* 0 ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-013
Client Id: DMW-22A
Data File: 10M66065.D
Analysis Date: 11/15/17 20:50
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-014
Client Id: DMW-22B
Data File: 10M66069.D
Analysis Date: 11/16/17 10:32
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-015
Client Id: DFB-20171109
Data File: 10M66070.D
Analysis Date: 11/16/17 10:54
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-016
Client Id: DMW-13A
Data File: 10M66071.D
Analysis Date: 11/16/17 11:16
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-017
Client Id: DMW-13B
Data File: 10M66072.D
Analysis Date: 11/16/17 11:39
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Chain of Custody Forms

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 7111018

Page 1 of 2

7111018 0041

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Was.e)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[X] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[X] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: 100 Red Schoolhouse Rd Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kaveth@aecom.com
1c) Send Invoice to: Same
1d) Send Report to: Same

Project Information

2a) Project: Dmos
2b) Project Mgr: Paul Kaveth
2c) Project Location (City/State): West Islip NY
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # ADO1097

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	1,4 Dioxane	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	DMW-2	GW	11/8/17	1317		G	✓	✓								
002	DMW-3			1303		G	✓	✓								
003	DMW-9			1243		G	✓	✓								
004	DMW-9B			1220		G	✓	✓								
005	DMW-1			1332		G	✓	✓								
006/007/008	DMW-18			1402		G	✓	✓								+MS/MSD
009	DMW-6B			1410		G	✓	✓								
010	DMW-15A	GW	11/9/17	0830		G	✓	✓								
011	DMW-15B			0855		G	✓	✓								
012	DMW-17			0930		G	✓	✓								

10) Relinquished by:	Accepted by:	Date	Time
		11-10-17	15:20
		11-10-17	14:10

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2.3, 2.4, 2.5

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

7111018 0042

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke
WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 7111018

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other	[✓] 4-File [ ] EZ
~~5 Business Days (25%)~~	NJ Full / NY ASP CatB	[✓] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: 100 Red Schoolhouse Rd Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kareth@aecom.com
1c) Send Invoice to: Same
1d) Send Report to: Same

Project Information

2a) Project: Davis
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): West Islip NY
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # A501097

===> Check If Contingent ===>

Matrix Codes
DW - Drinking Water S - Soil A - Air
GW - Ground Water SL - Sludge
WW - Waste Water OL - Oil
OT - Other (please specify under item 9, Comments)

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	1,4-Dioxane	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
013	DMW-22A	GW	11/9/17	1010		✓	✓	2								
014	DMW-22B	GW		1110		✓	✓	2								
015	DFB-20171109	FB		1125		✓	✓	2								Field Blank
016	DMW-15A	GW		1220		✓	✓	2								
017	DMW-15B	GW		1300		✓	✓	2								

10) Relinquished by:	Accepted by:	Date	Time
[signature]	[signature]	11-10-17	12:20
		11-10-17	14:10

11) Sampler (print name): Date:

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

PROJECT MODIFICATIONS

Client: AECOM-CRNY **HC Project #:** 7111018

Project: Dzus

---

sherree192.168.1.210
11/13/2017 11:00:55 AM

Per Celeste Foster, the pg 2 samples labeled DMW-15 should be DMW-13. SB 11/13/17

CONDITION UPON RECEIPT

Batch Number AD01097 Entered By: Frantz

Date Entered 11/10/2017 2:53:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	NO	Are the COC seals intact?
4	T0056	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.7,2.1,2.9
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	NO	Do the contents match the COC? If no, specify Samples DMW-13A (12:20) and DMW-13B (13:00) were received but not on the COC. DMW-15A and DMW-15B were listed twice on the COC.
10	NO	Is there enough sample sent for the analyses listed on the COC? If no, specify: Only one liter received for MS and MSD.
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD01097-001	11/10/17 14:10	FRAN	0	M	Received
AD01097-001	11/10/17 14:53	FRAN	0	M	Login
AD01097-001	11/10/17 15:39	R12	1	A	NONE
AD01097-001	11/14/17 10:54	LV	1	A	bn/bna
AD01097-001	11/10/17 15:39	R12	2	A	NONE
AD01097-002	11/10/17 14:10	FRAN	0	M	Received
AD01097-002	11/10/17 14:53	FRAN	0	M	Login
AD01097-002	11/10/17 15:39	R12	1	A	NONE
AD01097-002	11/14/17 10:54	LV	1	A	bn/bna
AD01097-002	11/10/17 15:39	R12	2	A	NONE
AD01097-003	11/10/17 14:10	FRAN	0	M	Received
AD01097-003	11/10/17 14:53	FRAN	0	M	Login
AD01097-003	11/10/17 15:39	R12	1	A	NONE
AD01097-003	11/14/17 10:54	LV	1	A	bn/bna
AD01097-003	11/10/17 15:39	R12	2	A	NONE
AD01097-004	11/10/17 14:10	FRAN	0	M	Received
AD01097-004	11/10/17 14:53	FRAN	0	M	Login
AD01097-004	11/10/17 15:39	R12	1	A	NONE
AD01097-004	11/14/17 10:54	LV	1	A	bn/bna
AD01097-004	11/10/17 15:39	R12	2	A	NONE
AD01097-005	11/10/17 14:10	FRAN	0	M	Received
AD01097-005	11/10/17 14:53	FRAN	0	M	Login
AD01097-005	11/10/17 15:39	R12	1	A	NONE
AD01097-005	11/14/17 10:54	LV	1	A	bn/bna
AD01097-005	11/10/17 15:39	R12	2	A	NONE
AD01097-006	11/10/17 14:10	FRAN	0	M	Received
AD01097-006	11/10/17 14:53	FRAN	0	M	Login
AD01097-006	11/10/17 15:39	R12	1	A	NONE
AD01097-006	11/10/17 15:39	R12	2	A	NONE
AD01097-006	11/14/17 10:54	LV	2	A	bn/bna
AD01097-007	11/10/17 14:10	FRAN	0	M	Received
AD01097-007	11/10/17 14:53	FRAN	0	M	Login
AD01097-007	11/10/17 15:39	R12	1	A	NONE
AD01097-007	11/14/17 10:54	LV	1	A	bn/bna
AD01097-008	11/10/17 14:10	FRAN	0	M	Received
AD01097-008	11/10/17 14:53	FRAN	0	M	Login
AD01097-008	11/10/17 15:39	R12	1	A	NONE
AD01097-008	11/14/17 10:54	LV	1	A	bn/bna
AD01097-009	11/10/17 14:10	FRAN	0	M	Received
AD01097-009	11/10/17 14:53	FRAN	0	M	Login
AD01097-009	11/10/17 15:39	R12	1	A	NONE
AD01097-009	11/10/17 15:39	R12	2	A	NONE
AD01097-009	11/15/17 10:34	LV	2	A	bn
AD01097-010	11/10/17 14:10	FRAN	0	M	Received
AD01097-010	11/10/17 14:53	FRAN	0	M	Login
AD01097-010	11/10/17 15:39	R12	3	A	NONE
AD01097-010	11/10/17 15:39	R12	4	A	NONE
AD01097-010	11/15/17 10:34	LV	4	A	bn
AD01097-011	11/10/17 14:10	FRAN	0	M	Received
AD01097-011	11/10/17 14:53	FRAN	0	M	Login
AD01097-011	11/10/17 15:39	R12	3	A	NONE
AD01097-011	11/10/17 15:39	R12	4	A	NONE
AD01097-011	11/15/17 10:34	LV	4	A	bn
AD01097-012	11/10/17 14:10	FRAN	0	M	Received
AD01097-012	11/10/17 14:53	FRAN	0	M	Login
AD01097-012	11/10/17 15:39	R12	1	A	NONE
AD01097-012	11/10/17 15:39	R12	2	A	NONE
AD01097-012	11/15/17 10:34	LV	2	A	bn
AD01097-013	11/10/17 14:10	FRAN	0	M	Received
AD01097-013	11/10/17 14:53	FRAN	0	M	Login
AD01097-013	11/10/17 15:39	R12	1	A	NONE
AD01097-013	11/15/17 10:34	LV	1	A	bn
AD01097-013	11/10/17 15:39	R12	2	A	NONE
AD01097-014	11/10/17 14:10	FRAN	0	M	Received
AD01097-014	11/10/17 14:53	FRAN	0	M	Login
AD01097-014	11/10/17 15:39	R12	1	A	NONE
AD01097-014	11/10/17 15:39	R12	2	A	NONE
AD01097-014	11/15/17 10:34	LV	2	A	bn
AD01097-015	11/10/17 14:10	FRAN	0	M	Received
AD01097-015	11/10/17 14:53	FRAN	0	M	Login
AD01097-015	11/10/17 15:39	R12	1	A	NONE
AD01097-015	11/10/17 15:39	R12	2	A	NONE
AD01097-015	11/15/17 10:34	LV	2	A	bn
AD01097-016	11/10/17 14:10	FRAN	0	M	Received
AD01097-016	11/10/17 14:53	FRAN	0	M	Login
AD01097-016	11/10/17 15:39	R12	5	A	NONE
AD01097-016	11/10/17 15:39	R12	6	A	NONE
AD01097-016	11/15/17 10:34	LV	6	A	bn
AD01097-017	11/10/17 14:10	FRAN	0	M	Received
AD01097-017	11/10/17 14:53	FRAN	0	M	Login
AD01097-017	11/10/17 15:39	R12	5	A	NONE
AD01097-017	11/10/17 15:39	R12	6	A	NONE
AD01097-017	11/15/17 10:34	LV	6	A	bn

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

GC/MS Base Neutral/Acid Extractable Data

GC/MS Base Neutral/Acid Extractable Data
QC Summary

FORM2

Surrogate Recovery

Method: EPA 8270D

Dfile	Sample#	Matrix	Date/Time	Surr Dil	Dilute Out Flag	Column1 S1 Recov	Column1 S2 Recov	Column1 S3 Recov	Column1 S4 Recov	Column1 S5 Recov	Column1 S6 Recov
10M66053.D	WMB63412	A	11/15/17 16:23	1		NA	NA	85	88	NA	112
7M87639.D	WMB63402	A	11/14/17 16:09	1		NA	NA	80	82	NA	96
7M87655.D	AD01097-001	A	11/15/17 11:46	1		NA	NA	76	82	NA	94
7M87656.D	AD01097-002	A	11/15/17 12:09	1		NA	NA	73	79	NA	97
7M87657.D	AD01097-003	A	11/15/17 12:33	1		NA	NA	79	81	NA	98
7M87658.D	AD01097-004	A	11/15/17 12:56	1		NA	NA	88	91	NA	112
7M87659.D	AD01097-005	A	11/15/17 13:20	1		NA	NA	85	85	NA	101
7M87652.D	AD01097-006	A	11/15/17 10:36	1		NA	NA	134	129	NA	148*
7M87653.D	AD01097-007(MS:AD01	A	11/15/17 11:00	1		NA	NA	109	102	NA	126
7M87654.D	AD01097-008(MSD:AD0	A	11/15/17 11:23	1		NA	NA	108	100	NA	124
10M66061.D	AD01097-009	A	11/15/17 19:21	1		NA	NA	103	103	NA	136
10M66062.D	AD01097-010	A	11/15/17 19:44	1		NA	NA	120	124	NA	143
10M66063.D	AD01097-011	A	11/15/17 20:06	1		NA	NA	108	122	NA	142
10M66064.D	AD01097-012	A	11/15/17 20:28	1		NA	NA	101	105	NA	128
10M66065.D	AD01097-013	A	11/15/17 20:50	1		NA	NA	99	104	NA	122
10M66069.D	AD01097-014	A	11/16/17 10:32	1		NA	NA	102	104	NA	122
10M66070.D	AD01097-015	A	11/16/17 10:54	1		NA	NA	81	84	NA	98
10M66071.D	AD01097-016	A	11/16/17 11:16	1		NA	NA	100	105	NA	123
10M66072.D	AD01097-017	A	11/16/17 11:39	1		NA	NA	104	109	NA	132
5M101521.D	WMB63402(MS)	A	11/14/17 16:03	1		NA	NA	107	104	NA	111
7M87665.D	WMB63412(MS)	A	11/15/17 15:42	1		NA	NA	102	75	NA	135
7M87669.D	AD01106-002	A	11/15/17 17:15	1		NA	NA	111	106	NA	140
7M87670.D	AD01106-002(MS)	A	11/15/17 17:39	1		NA	NA	109	109	NA	148*
7M87671.D	AD01106-002(MSD)	A	11/15/17 18:02	1		NA	NA	117	114	NA	147*

Flags: SD=Surrogate diluted out

*=Surrogate out

Method: EPA 8270D

Aqueous Laboratory Limits

Compound	Spike Amt	Limits
S1=2-Fluorophenol	100	29-113
S2=Phenol-d5	100	27-115
S3=Nitrobenzene-d5	50	51-139
S4=2-Fluorobiphenyl	50	53-129
S5=2,4,6-Tribromophenol	100	54-149
S6=Terphenyl-d14	50	55-146

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M101521.D	WMB63402(MS)	11/14/2017 4:03:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8270D | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	49.9529	0	100	50	20	160
Pyridine	1	19.0685	0	100	19	5	150
N-Nitrosodimethylamine	1	58.6835	0	100	59	50	150
Benzaldehyde	1	153.3343	0	100	153*	20	150
Aniline	1	58.7328	0	100	59	20	150
Pentachloroethane	1	73.3319	0	100	73	50	130
bis(2-Chloroethyl)ether	1	68.7274	0	100	69	50	130
N-Decane	1	72.9829	0	100	73	40	130
1,3-Dichlorobenzene	1	67.5967	0	100	68	50	130
1,4-Dichlorobenzene	1	72.62	0	100	73	50	130
1,2-Dichlorobenzene	1	71.8741	0	100	72	50	130
Benzyl alcohol	1	79.4509	0	100	79	70	130
bis(2-chloroisopropyl)ether	1	66.8501	0	100	67	40	130
Acetophenone	1	80.5303	0	100	81	50	130
Hexachloroethane	1	70.3293	0	100	70	50	130
N-Nitroso-di-n-propylamine	1	73.5566	0	100	74	50	130
Nitrobenzene	1	84.4794	0	100	84	70	130
Isophorone	1	80.2206	0	100	80	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	80.8099	0	100	81	70	130
1,2,4-Trichlorobenzene	1	77.4962	0	100	77	50	130
Naphthalene	1	79.3445	0	100	79	70	130
4-Chloroaniline	1	104.4723	0	100	104	50	150
Hexachlorobutadiene	1	74.5177	0	100	75	70	130
Caprolactam	1	44.4522	0	100	44	20	130
2-Methylnaphthalene	1	85.4268	0	100	85	70	130
1-Methylnaphthalene	1	83.5029	0	100	84	70	130
1,1'-Biphenyl	1	89.2628	0	100	89	70	130
1,2,4,5-Tetrachlorobenzene	1	79.3569	0	100	79	70	130
Hexachlorocyclopentadiene	1	71.1393	0	100	71	20	130
2-Chloronaphthalene	1	83.3392	0	100	83	70	130
1,4-Dimethylnaphthalene	1	86.5972	0	100	87	70	130
Diphenyl Ether	1	85.1721	0	100	85	70	130
2-Nitroaniline	1	94.5187	0	100	95	50	150
Coumarin	1	97.8607	0	100	98	70	130
Acenaphthylene	1	87.3458	0	100	87	70	130
Dimethylphthalate	1	80.5363	0	100	81	70	130
2,6-Dinitrotoluene	1	84.2459	0	100	84	70	130
Acenaphthene	1	85.7503	0	100	86	70	130
3-Nitroaniline	1	107.5075	0	100	108	50	150
Dibenzofuran	1	93.7978	0	100	94	70	130
2,4-Dinitrotoluene	1	86.2501	0	100	86	40	130
Fluorene	1	86.0013	0	100	86	70	130
4-Chlorophenyl-phenylether	1	83.9435	0	100	84	70	130
Diethylphthalate	1	87.7048	0	100	88	50	130
4-Nitroaniline	1	97.1829	0	100	97	50	150
Atrazine	1	100.5962	0	100	101	50	130
n-Nitrosodiphenylamine	1	71.2806	0	100	71	50	130
1,2-Diphenylhydrazine	1	92.7447	0	100	93	70	130
4-Bromophenyl-phenylether	1	85.9169	0	100	86	70	130
Hexachlorobenzene	1	85.082	0	100	85	70	130
N-Octadecane	1	90.7742	0	100	91	70	130
Phenanthrene	1	83.8456	0	100	84	70	130
Anthracene	1	83.0623	0	100	83	70	130
Carbazole	1	92.2082	0	100	92	70	130
Di-n-butylphthalate	1	91.7287	0	100	92	70	130
Fluoranthene	1	87.3598	0	100	87	70	130
Pyrene	1	82.1346	0	100	82	70	130
Benzidine	1	12.5592	0	100	13	1	130
Butylbenzylphthalate	1	84.5783	0	100	85	50	130
3,3'-Dichlorobenzidine	1	86.0023	0	100	86	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63402

Benzo[a]anthracene	1	86.4387	0	100	86	70	130
Chrysene	1	85.9827	0	100	86	50	130
bis(2-Ethylhexyl)phthalate	1	88.7645	0	100	89	70	130
Di-n-octylphthalate	1	89.0383	0	100	89	70	130
Benzo[b]fluoranthene	1	85.0336	0	100	85	70	130
Benzo[k]fluoranthene	1	84.0297	0	100	84	70	130
Benzo[a]pyrene	1	81.4479	0	100	81	70	130
Indeno[1,2,3-cd]pyrene	1	96.7298	0	100	97	70	130
Dibenzo[a,h]anthracene	1	93.8976	0	100	94	70	130
Benzo[g,h,i]perylene	1	93.2974	0	100	93	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M87665.D	WMB63412(MS)	11/15/2017 3:42:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8270D | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	33.946	0	100	34	20	160
Pyridine	1	51.0353	0	100	51	5	150
N-Nitrosodimethylamine	1	42.5783	0	100	43*	50	150
Benzaldehyde	1	137.5595	0	100	138	20	150
Aniline	1	93.0788	0	100	93	20	150
Pentachloroethane	1	11.4651	0	100	11*	50	130
bis(2-Chloroethyl)ether	1	73.0584	0	100	73	50	130
N-Decane	1	70.1459	0	100	70	40	130
1,3-Dichlorobenzene	1	56.723	0	100	57	50	130
1,4-Dichlorobenzene	1	56.6261	0	100	57	50	130
1,2-Dichlorobenzene	1	57.6614	0	100	58	50	130
Benzyl alcohol	1	65.3234	0	100	65*	70	130
bis(2-chloroisopropyl)ether	1	59.6235	0	100	60	40	130
Acetophenone	1	79.313	0	100	79	50	130
Hexachloroethane	1	55.7262	0	100	56	50	130
N-Nitroso-di-n-propylamine	1	81.5422	0	100	82	50	130
Nitrobenzene	1	76.8755	0	100	77	70	130
Isophorone	1	77.7909	0	100	78	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	79.0411	0	100	79	70	130
1,2,4-Trichlorobenzene	1	62.7875	0	100	63	50	130
Naphthalene	1	68.3769	0	100	68*	70	130
4-Chloroaniline	1	130.4469	0	100	130	50	150
Hexachlorobutadiene	1	59.4151	0	100	59*	70	130
Caprolactam	1	21.9953	0	100	22	20	130
2-Methylnaphthalene	1	83.8934	0	100	84	70	130
1-Methylnaphthalene	1	81.5339	0	100	82	70	130
1,1'-Biphenyl	1	84.5998	0	100	85	70	130
1,2,4,5-Tetrachlorobenzene	1	79.2693	0	100	79	70	130
Hexachlorocyclopentadiene	1	53.6572	0	100	54	20	130
2-Chloronaphthalene	1	74.2267	0	100	74	70	130
1,4-Dimethylnaphthalene	1	84.5753	0	100	85	70	130
Diphenyl Ether	1	80.7512	0	100	81	70	130
2-Nitroaniline	1	94.5229	0	100	95	50	150
Coumarin	1	0	0	100	0*	70	130
Acenaphthylene	1	84.8652	0	100	85	70	130
Dimethylphthalate	1	47.7943	0	100	48*	70	130
2,6-Dinitrotoluene	1	88.6559	0	100	89	70	130
Acenaphthene	1	81.0976	0	100	81	70	130
3-Nitroaniline	1	106.9424	0	100	107	50	150
Dibenzofuran	1	93.2757	0	100	93	70	130
2,4-Dinitrotoluene	1	83.9362	0	100	84	40	130
Fluorene	1	86.2784	0	100	86	70	130
4-Chlorophenyl-phenylether	1	86.1633	0	100	86	70	130
Diethylphthalate	1	63.7373	0	100	64	50	130
4-Nitroaniline	1	89.2172	0	100	89	50	150
Atrazine	1	101.1125	0	100	101	50	130
n-Nitrosodiphenylamine	1	74.4213	0	100	74	50	130
1,2-Diphenylhydrazine	1	86.3793	0	100	86	70	130
4-Bromophenyl-phenylether	1	90.4347	0	100	90	70	130
Hexachlorobenzene	1	88.7527	0	100	89	70	130
N-Octadecane	1	90.4632	0	100	90	70	130
Phenanthrene	1	84.9428	0	100	85	70	130
Anthracene	1	86.3803	0	100	86	70	130
Carbazole	1	89.1311	0	100	89	70	130
Di-n-butylphthalate	1	93.9531	0	100	94	70	130
Fluoranthene	1	87.9	0	100	88	70	130
Pyrene	1	97.8351	0	100	98	70	130
Benzidine	1	69.7955	0	100	70	1	130
Butylbenzylphthalate	1	95.5714	0	100	96	50	130
3,3'-Dichlorobenzidine	1	118.0559	0	100	118	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63412

Benzo[a]anthracene	1	90.9995	0	100	91	70	130
Chrysene	1	88.5502	0	100	89	50	130
bis(2-Ethylhexyl)phthalate	1	106.1241	0	100	106	70	130
Di-n-octylphthalate	1	105.9058	0	100	106	70	130
Benzo[b]fluoranthene	1	100.6541	0	100	101	70	130
Benzo[k]fluoranthene	1	98.3743	0	100	98	70	130
Benzo[a]pyrene	1	87.3509	0	100	87	70	130
Indeno[1,2,3-cd]pyrene	1	95.6063	0	100	96	70	130
Dibenzo[a,h]anthracene	1	96.2243	0	100	96	70	130
Benzo[g,h,i]perylene	1	89.318	0	100	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87653.D	AD01097-007(MS:AD01097-006	11/15/2017 11:00:00 A
Non Spike(If applicable):	7M87652.D	AD01097-006	11/15/2017 10:36:00 A
Inst Blank(If applicable):			

Method: 8270D | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	47.6012	0	100	48	20	160
Pyridine	1	2.0492	0	100	2*	5	150
N-Nitrosodimethylamine	1	62.2184	0	100	62	50	150
Benzaldehyde	1	159.1943	0	100	159*	20	150
Aniline	1	0	0	100	0*	20	150
Pentachloroethane	1	76.156	0	100	76	50	130
bis(2-Chloroethyl)ether	1	73.4713	0	100	73	50	130
N-Decane	1	73.0773	0	100	73	40	130
1,3-Dichlorobenzene	1	69.9701	0	100	70	50	130
1,4-Dichlorobenzene	1	75.6101	0	100	76	50	130
1,2-Dichlorobenzene	1	76.4888	0	100	76	50	130
Benzyl alcohol	1	90.3944	0	100	90	70	130
bis(2-chloroisopropyl)ether	1	70.0213	0	100	70	40	130
Acetophenone	1	84.8418	0	100	85	50	130
Hexachloroethane	1	75.9796	0	100	76	50	130
N-Nitroso-di-n-propylamine	1	85.9558	0	100	86	50	130
Nitrobenzene	1	86.833	0	100	87	70	130
Isophorone	1	84.4526	0	100	84	70	130
Benzoic Acid	1	13.5785	0	100	14*	20	130
bis(2-Chloroethoxy)methane	1	85.6772	0	100	86	70	130
1,2,4-Trichlorobenzene	1	84.2663	0	100	84	50	130
Naphthalene	1	89.6997	0	100	90	70	130
4-Chloroaniline	1	2.4127	0	100	2.4*	50	150
Hexachlorobutadiene	1	84.4307	0	100	84	70	130
Caprolactam	1	46.5972	0	100	47	20	130
2-Methylnaphthalene	1	92.4686	0	100	92	70	130
1-Methylnaphthalene	1	90.2074	0	100	90	70	130
1,1'-Biphenyl	1	92.9831	0	100	93	70	130
1,2,4,5-Tetrachlorobenzene	1	88.4855	0	100	88	70	130
Hexachlorocyclopentadiene	1	88.1685	0	100	88	20	130
2-Chloronaphthalene	1	86.7289	0	100	87	70	130
1,4-Dimethylnaphthalene	1	89.6622	0	100	90	70	130
Diphenyl Ether	1	88.7189	0	100	89	70	130
2-Nitroaniline	1	86.7517	0	100	87	50	150
Coumarin	1	98.5572	0	100	99	70	130
Acenaphthylene	1	92.1028	0	100	92	70	130
Dimethylphthalate	1	88.0173	0	100	88	70	130
2,6-Dinitrotoluene	1	91.0547	0	100	91	70	130
Acenaphthene	1	88.0361	0	100	88	70	130
3-Nitroaniline	1	13.1901	0	100	13*	50	150
Dibenzofuran	1	99.9194	0	100	100	70	130
2,4-Dinitrotoluene	1	90.3367	0	100	90	40	130
Fluorene	1	90.4678	0	100	90	70	130
4-Chlorophenyl-phenylether	1	89.0641	0	100	89	70	130
Diethylphthalate	1	89.8258	0	100	90	50	130
4-Nitroaniline	1	41.9601	0	100	42*	50	150
Atrazine	1	102.1942	0	100	102	50	130
n-Nitrosodiphenylamine	1	64.4279	0	100	64	50	130
1,2-Diphenylhydrazine	1	88.0194	0	100	88	70	130
4-Bromophenyl-phenylether	1	93.0396	0	100	93	70	130
Hexachlorobenzene	1	91.8499	0	100	92	70	130
N-Octadecane	1	93.7872	0	100	94	70	130
Phenanthrene	1	87.6054	0	100	88	70	130
Anthracene	1	87.9642	0	100	88	70	130
Carbazole	1	89.3249	0	100	89	70	130
Di-n-butylphthalate	1	99.7149	0	100	100	70	130
Fluoranthene	1	90.5933	0	100	91	70	130
Pyrene	1	93.6447	0	100	94	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	96.0896	0	100	96	50	130
3,3'-Dichlorobenzidine	1	0	0	100	0*	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63402

Benzo[a]anthracene	1	91.7672	0	100	92	70	130
Chrysene	1	88.8218	0	100	89	50	130
bis(2-Ethylhexyl)phthalate	1	107.4277	0	100	107	70	130
Di-n-octylphthalate	1	105.6345	0	100	106	70	130
Benzo[b]fluoranthene	1	99.146	0	100	99	70	130
Benzo[k]fluoranthene	1	95.5071	0	100	96	70	130
Benzo[a]pyrene	1	85.746	0	100	86	70	130
Indeno[1,2,3-cd]pyrene	1	94.7625	0	100	95	70	130
Dibenzo[a,h]anthracene	1	93.8522	0	100	94	70	130
Benzo[g,h,i]perylene	1	87.0451	0	100	87	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M87654.D	AD01097-008(MSD:AD01097-0	11/15/2017 11:23:00 A
Non Spike(If applicable): 7M87652.D	AD01097-006	11/15/2017 10:36:00 A
Inst Blank(If applicable):		

Method: 8270D | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	58.4903	0	100	58	20	160
Pyridine	1	0	0	100	0*	5	150
N-Nitrosodimethylamine	1	67.3296	0	100	67	50	150
Benzaldehyde	1	178.3723	0	100	178*	20	150
Aniline	1	1.4643	0	100	1.5*	20	150
Pentachloroethane	1	85.7446	0	100	86	50	130
bis(2-Chloroethyl)ether	1	78.2146	0	100	78	50	130
N-Decane	1	83.5563	0	100	84	40	130
1,3-Dichlorobenzene	1	73.5825	0	100	74	50	130
1,4-Dichlorobenzene	1	77.8937	0	100	78	50	130
1,2-Dichlorobenzene	1	78.811	0	100	79	50	130
Benzyl alcohol	1	88.3807	0	100	88	70	130
bis(2-chloroisopropyl)ether	1	70.8922	0	100	71	40	130
Acetophenone	1	87.76	0	100	88	50	130
Hexachloroethane	1	79.5882	0	100	80	50	130
N-Nitroso-di-n-propylamine	1	87.8445	0	100	88	50	130
Nitrobenzene	1	87.9251	0	100	88	70	130
Isophorone	1	86.1424	0	100	86	70	130
Benzoic Acid	1	25.6777	0	100	26	20	130
bis(2-Chloroethoxy)methane	1	85.879	0	100	86	70	130
1,2,4-Trichlorobenzene	1	86.2695	0	100	86	50	130
Naphthalene	1	88.6396	0	100	89	70	130
4-Chloroaniline	1	4.9487	0	100	4.9*	50	150
Hexachlorobutadiene	1	85.195	0	100	85	70	130
Caprolactam	1	48.3733	0	100	48	20	130
2-Methylnaphthalene	1	91.2653	0	100	91	70	130
1-Methylnaphthalene	1	91.2307	0	100	91	70	130
1,1'-Biphenyl	1	94.5087	0	100	95	70	130
1,2,4,5-Tetrachlorobenzene	1	88.5043	0	100	89	70	130
Hexachlorocyclopentadiene	1	87.0945	0	100	87	20	130
2-Chloronaphthalene	1	85.4362	0	100	85	70	130
1,4-Dimethylnaphthalene	1	91.5309	0	100	92	70	130
Diphenyl Ether	1	89.9842	0	100	90	70	130
2-Nitroaniline	1	88.7918	0	100	89	50	150
Coumarin	1	98.8806	0	100	99	70	130
Acenaphthylene	1	92.0117	0	100	92	70	130
Dimethylphthalate	1	87.6965	0	100	88	70	130
2,6-Dinitrotoluene	1	91.8517	0	100	92	70	130
Acenaphthene	1	87.9207	0	100	88	70	130
3-Nitroaniline	1	24.5155	0	100	25*	50	150
Dibenzofuran	1	97.8762	0	100	98	70	130
2,4-Dinitrotoluene	1	88.3371	0	100	88	40	130
Fluorene	1	89.2221	0	100	89	70	130
4-Chlorophenyl-phenylether	1	88.394	0	100	88	70	130
Diethylphthalate	1	89.4268	0	100	89	50	130
4-Nitroaniline	1	53.9939	0	100	54	50	150
Atrazine	1	98.679	0	100	99	50	130
n-Nitrosodiphenylamine	1	64.37	0	100	64	50	130
1,2-Diphenylhydrazine	1	89.1523	0	100	89	70	130
4-Bromophenyl-phenylether	1	92.7427	0	100	93	70	130
Hexachlorobenzene	1	91.7205	0	100	92	70	130
N-Octadecane	1	96.1115	0	100	96	70	130
Phenanthrene	1	87.1157	0	100	87	70	130
Anthracene	1	87.2546	0	100	87	70	130
Carbazole	1	93.2798	0	100	93	70	130
Di-n-butylphthalate	1	99.9258	0	100	100	70	130
Fluoranthene	1	91.3109	0	100	91	70	130
Pyrene	1	92.9766	0	100	93	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	96.4049	0	100	96	50	130
3,3'-Dichlorobenzidine	1	0	0	100	0*	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63402

Benzo[a]anthracene	1	93.0883	0	100	93	70	130
Chrysene	1	90.2358	0	100	90	50	130
bis(2-Ethylhexyl)phthalate	1	106.3575	0	100	106	70	130
Di-n-octylphthalate	1	101.8316	0	100	102	70	130
Benzo[b]fluoranthene	1	95.0438	0	100	95	70	130
Benzo[k]fluoranthene	1	97.5839	0	100	98	70	130
Benzo[a]pyrene	1	82.0759	0	100	82	70	130
Indeno[1,2,3-cd]pyrene	1	98.6388	0	100	99	70	130
Dibenzo[a,h]anthracene	1	98.0034	0	100	98	70	130
Benzo[g,h,i]perylene	1	90.3737	0	100	90	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB63402

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87654.D	AD01097-008(MSD:AD01097-0	11/15/2017 11:23:00 A
Duplicate(If applicable):	7M87653.D	AD01097-007(MS:AD01097-006	11/15/2017 11:00:00 A
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	58.4903	47.6012	21*	20
Pyridine	1	0	2.0492	200*	40
N-Nitrosodimethylamine	1	67.3296	62.2184	7.9	20
Benzaldehyde	1	178.3723	159.1943	11	20
Aniline	1	1.4643	0	200*	20
Pentachloroethane	1	85.7446	76.156	12	20
bis(2-Chloroethyl)ether	1	78.2146	73.4713	6.3	20
N-Decane	1	83.5563	73.0773	13	20
1,3-Dichlorobenzene	1	73.5825	69.9701	5	20
1,4-Dichlorobenzene	1	77.8937	75.6101	3	40
1,2-Dichlorobenzene	1	78.811	76.4888	3	20
Benzyl alcohol	1	88.3807	90.3944	2.3	20
bis(2-chloroisopropyl)ether	1	70.8922	70.0213	1.2	20
Acetophenone	1	87.76	84.8418	3.4	20
Hexachloroethane	1	79.5882	75.9796	4.6	40
N-Nitroso-di-n-propylamine	1	87.8445	85.9558	2.2	40
Nitrobenzene	1	87.9251	86.833	1.2	40
Isophorone	1	86.1424	84.4526	2	20
Benzoic Acid	1	25.6777	13.5785	62*	20
bis(2-Chloroethoxy)methane	1	85.879	85.6772	0.24	20
1,2,4-Trichlorobenzene	1	86.2695	84.2663	2.3	40
Naphthalene	1	88.6396	89.6997	1.2	40
4-Chloroaniline	1	4.9487	2.4127	69*	20
Hexachlorobutadiene	1	85.195	84.4307	0.9	40
Caprolactam	1	48.3733	46.5972	3.7	20
2-Methylnaphthalene	1	91.2653	92.4686	1.3	20
1-Methylnaphthalene	1	91.2307	90.2074	1.1	20
1,1'-Biphenyl	1	94.5087	92.9831	1.6	20
1,2,4,5-Tetrachlorobenzene	1	88.5043	88.4855	0.02	20
Hexachlorocyclopentadiene	1	87.0945	88.1685	1.2	20
2-Chloronaphthalene	1	85.4362	86.7289	1.5	20
1,4-Dimethylnaphthalene	1	91.5309	89.6622	2.1	20
Diphenyl Ether	1	89.9842	88.7189	1.4	20
2-Nitroaniline	1	88.7918	86.7517	2.3	20
Coumarin	1	98.8806	98.5572	0.33	20
Acenaphthylene	1	92.0117	92.1028	0.1	20
Dimethylphthalate	1	87.6965	88.0173	0.37	20
2,6-Dinitrotoluene	1	91.8517	91.0547	0.87	20
Acenaphthene	1	87.9207	88.0361	0.13	40
3-Nitroaniline	1	24.5155	13.1901	60*	20
Dibenzofuran	1	97.8762	99.9194	2.1	20
2,4-Dinitrotoluene	1	88.3371	90.3367	2.2	40
Fluorene	1	89.2221	90.4678	1.4	40
4-Chlorophenyl-phenylether	1	88.394	89.0641	0.76	20
Diethylphthalate	1	89.4268	89.8258	0.45	20
4-Nitroaniline	1	53.9939	41.9601	25*	20
Atrazine	1	98.679	102.1942	3.5	20
n-Nitrosodiphenylamine	1	64.37	64.4279	0.09	20
1,2-Diphenylhydrazine	1	89.1523	88.0194	1.3	20
4-Bromophenyl-phenylether	1	92.7427	93.0396	0.32	20
Hexachlorobenzene	1	91.7205	91.8499	0.14	40
N-Octadecane	1	96.1115	93.7872	2.4	20
Phenanthrene	1	87.1157	87.6054	0.56	20
Anthracene	1	87.2546	87.9642	0.81	20
Carbazole	1	93.2798	89.3249	4.3	20
Di-n-butylphthalate	1	99.9258	99.7149	0.21	20
Fluoranthene	1	91.3109	90.5933	0.79	20
Pyrene	1	92.9766	93.6447	0.72	40
Benzidine	1	0	0	NA	20
Butylbenzylphthalate	1	96.4049	96.0896	0.33	40
3,3'-Dichlorobenzidine	1	0	0	NA	20
Benzo[a]anthracene	1	93.0883	91.7672	1.4	20
Chrysene	1	90.2358	88.8218	1.6	20

Form3
RPD Data Laboratory Limits
QC Batch: WMB63402

bis(2-Ethylhexyl)phthalate	1	106.3575	107.4277	1	20
Di-n-octylphthalate	1	101.8316	105.6345	3.7	20
Benzo[b]fluoranthene	1	95.0438	99.146	4.2	20
Benzo[k]fluoranthene	1	97.5839	95.5071	2.2	20
Benzo[a]pyrene	1	82.0759	85.746	4.4	20
Indeno[1,2,3-cd]pyrene	1	98.6388	94.7625	4	20
Dibenzo[a,h]anthracene	1	98.0034	93.8522	4.3	20
Benzo[g,h,i]perylene	1	90.3737	87.0451	3.8	20

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87670.D	AD01106-002(MS)	11/15/2017 5:39:00 PM
Non Spike(If applicable):	7M87669.D	AD01106-002	11/15/2017 5:15:00 PM
Inst Blank(If applicable):			

Method: 8270D | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	49.1249	0	100	49	20	160
Pyridine	1	62.364	0	100	62	5	150
N-Nitrosodimethylamine	1	65.1646	0	100	65	50	150
Benzaldehyde	1	120.2079	0	100	120	20	150
Aniline	1	103.4236	0	100	103	20	150
Pentachloroethane	1	12.6847	0	100	13*	50	130
bis(2-Chloroethyl)ether	1	82.0178	0	100	82	50	130
N-Decane	1	80.8959	0	100	81	40	130
1,3-Dichlorobenzene	1	79.9482	0	100	80	50	130
1,4-Dichlorobenzene	1	77.9992	0	100	78	50	130
1,2-Dichlorobenzene	1	78.4051	0	100	78	50	130
Benzyl alcohol	1	83.6258	0	100	84	70	130
bis(2-chloroisopropyl)ether	1	70.1621	0	100	70	40	130
Acetophenone	1	83.5527	0	100	84	50	130
Hexachloroethane	1	77.2022	0	100	77	50	130
N-Nitroso-di-n-propylamine	1	89.0725	0	100	89	50	130
Nitrobenzene	1	86.9945	0	100	87	70	130
Isophorone	1	86.999	0	100	87	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	85.8825	0	100	86	70	130
1,2,4-Trichlorobenzene	1	86.1755	0	100	86	50	130
Naphthalene	1	88.7435	0	100	89	70	130
4-Chloroaniline	1	144.6091	0	100	145	50	150
Hexachlorobutadiene	1	85.6276	0	100	86	70	130
Caprolactam	1	66.3657	0	100	66	20	130
2-Methylnaphthalene	1	87.8947	0	100	88	70	130
1-Methylnaphthalene	1	86.714	0	100	87	70	130
1,1'-Biphenyl	1	89.0926	0	100	89	70	130
1,2,4,5-Tetrachlorobenzene	1	87.9569	0	100	88	70	130
Hexachlorocyclopentadiene	1	69.2201	0	100	69	20	130
2-Chloronaphthalene	1	88.5592	0	100	89	70	130
1,4-Dimethylnaphthalene	1	91.5503	0	100	92	70	130
Diphenyl Ether	1	87.8989	0	100	88	70	130
2-Nitroaniline	1	100.3509	0	100	100	50	150
Coumarin	1	0	0	100	0*	70	130
Acenaphthylene	1	96.6794	0	100	97	70	130
Dimethylphthalate	1	33.1725	0	100	33*	70	130
2,6-Dinitrotoluene	1	95.1851	0	100	95	70	130
Acenaphthene	1	93.0356	0	100	93	70	130
3-Nitroaniline	1	116.357	0	100	116	50	150
Dibenzofuran	1	102.3912	0.7708	100	102	70	130
2,4-Dinitrotoluene	1	89.0259	0	100	89	40	130
Fluorene	1	93.2749	0	100	93	70	130
4-Chlorophenyl-phenylether	1	94.2477	0	100	94	70	130
Diethylphthalate	1	85.3094	0	100	85	50	130
4-Nitroaniline	1	97.6711	0	100	98	50	150
Atrazine	1	110.9832	0	100	111	50	130
n-Nitrosodiphenylamine	1	82.2332	0	100	82	50	130
1,2-Diphenylhydrazine	1	98.5364	0	100	99	70	130
4-Bromophenyl-phenylether	1	98.4999	0	100	98	70	130
Hexachlorobenzene	1	97.3868	0	100	97	70	130
N-Octadecane	1	95.3569	0	100	95	70	130
Phenanthrene	1	91.6151	0	100	92	70	130
Anthracene	1	93.2148	0	100	93	70	130
Carbazole	1	97.4695	0	100	97	70	130
Di-n-butylphthalate	1	103.2912	0	100	103	70	130
Fluoranthene	1	93.3533	0	100	93	70	130
Pyrene	1	107.8872	0	100	108	70	130
Benzidine	1	81.4218	0	100	81	1	130
Butylbenzylphthalate	1	107.8208	0	100	108	50	130
3,3'-Dichlorobenzidine	1	134.5762	0	100	135	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63412

Benzo[a]anthracene	1	99.9205	0	100	100	70	130
Chrysene	1	96.6953	0	100	97	50	130
bis(2-Ethylhexyl)phthalate	1	119.3419	0	100	119	70	130
Di-n-octylphthalate	1	115.7467	0	100	116	70	130
Benzo[b]fluoranthene	1	101.9743	0	100	102	70	130
Benzo[k]fluoranthene	1	103.6268	0	100	104	70	130
Benzo[a]pyrene	1	93.3832	0	100	93	70	130
Indeno[1,2,3-cd]pyrene	1	104.851	0	100	105	70	130
Dibenzo[a,h]anthracene	1	104.2351	0	100	104	70	130
Benzo[g,h,i]perylene	1	98.047	0	100	98	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M87671.D	AD01106-002(MSD)	11/15/2017 6:02:00 PM
Non Spike(If applicable): 7M87669.D	AD01106-002	11/15/2017 5:15:00 PM
Inst Blank(If applicable):		
Method: 8270D	Matrix: Aqueous	QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	55.7739	0	100	56	20	160
Pyridine	1	69.3472	0	100	69	5	150
N-Nitrosodimethylamine	1	72.1297	0	100	72	50	150
Benzaldehyde	1	133.7563	0	100	134	20	150
Aniline	1	110.0364	0	100	110	20	150
Pentachloroethane	1	21.7164	0	100	22*	50	130
bis(2-Chloroethyl)ether	1	85.7483	0	100	86	50	130
N-Decane	1	85.6248	0	100	86	40	130
1,3-Dichlorobenzene	1	86.1281	0	100	86	50	130
1,4-Dichlorobenzene	1	84.0014	0	100	84	50	130
1,2-Dichlorobenzene	1	83.4467	0	100	83	50	130
Benzyl alcohol	1	89.0216	0	100	89	70	130
bis(2-chloroisopropyl)ether	1	72.5409	0	100	73	40	130
Acetophenone	1	84.5341	0	100	85	50	130
Hexachloroethane	1	83.4242	0	100	83	50	130
N-Nitroso-di-n-propylamine	1	91.0211	0	100	91	50	130
Nitrobenzene	1	89.8486	0	100	90	70	130
Isophorone	1	88.574	0	100	89	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	90.0079	0	100	90	70	130
1,2,4-Trichlorobenzene	1	90.8525	0	100	91	50	130
Naphthalene	1	93.3116	0	100	93	70	130
4-Chloroaniline	1	157.9141	0	100	158*	50	150
Hexachlorobutadiene	1	91.0525	0	100	91	70	130
Caprolactam	1	64.3214	0	100	64	20	130
2-Methylnaphthalene	1	93.4019	0	100	93	70	130
1-Methylnaphthalene	1	87.7694	0	100	88	70	130
1,1'-Biphenyl	1	89.9139	0	100	90	70	130
1,2,4,5-Tetrachlorobenzene	1	87.4594	0	100	87	70	130
Hexachlorocyclopentadiene	1	70.8443	0	100	71	20	130
2-Chloronaphthalene	1	89.4621	0	100	89	70	130
1,4-Dimethylnaphthalene	1	90.1394	0	100	90	70	130
Diphenyl Ether	1	87.8	0	100	88	70	130
2-Nitroaniline	1	102.477	0	100	102	50	150
Coumarin	1	22.3039	0	100	22*	70	130
Acenaphthylene	1	98.043	0	100	98	70	130
Dimethylphthalate	1	56.2682	0	100	56*	70	130
2,6-Dinitrotoluene	1	96.3629	0	100	96	70	130
Acenaphthene	1	94.0647	0	100	94	70	130
3-Nitroaniline	1	119.0321	0	100	119	50	150
Dibenzofuran	1	104.4842	0.7708	100	104	70	130
2,4-Dinitrotoluene	1	88.7366	0	100	89	40	130
Fluorene	1	93.9313	0	100	94	70	130
4-Chlorophenyl-phenylether	1	95.4996	0	100	95	70	130
Diethylphthalate	1	90.1595	0	100	90	50	130
4-Nitroaniline	1	98.5837	0	100	99	50	150
Atrazine	1	108.4895	0	100	108	50	130
n-Nitrosodiphenylamine	1	83.1316	0	100	83	50	130
1,2-Diphenylhydrazine	1	100.5225	0	100	101	70	130
4-Bromophenyl-phenylether	1	98.8326	0	100	99	70	130
Hexachlorobenzene	1	97.9843	0	100	98	70	130
N-Octadecane	1	109.5299	0	100	110	70	130
Phenanthrene	1	91.7767	0	100	92	70	130
Anthracene	1	94.897	0	100	95	70	130
Carbazole	1	95.4251	0	100	95	70	130
Di-n-butylphthalate	1	105.6941	0	100	106	70	130
Fluoranthene	1	93.5711	0	100	94	70	130
Pyrene	1	106.5616	0	100	107	70	130
Benzidine	1	77.5976	0	100	78	1	130
Butylbenzylphthalate	1	107.3826	0	100	107	50	130
3,3'-Dichlorobenzidine	1	136.7419	0	100	137	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63412

Benzo[a]anthracene	1	98.608	0	100	99	70	130
Chrysene	1	95.4047	0	100	95	50	130
bis(2-Ethylhexyl)phthalate	1	118.2437	0	100	118	70	130
Di-n-octylphthalate	1	115.9018	0	100	116	70	130
Benzo[b]fluoranthene	1	103.4736	0	100	103	70	130
Benzo[k]fluoranthene	1	102.2652	0	100	102	70	130
Benzo[a]pyrene	1	93.7946	0	100	94	70	130
Indeno[1,2,3-cd]pyrene	1	103.7129	0	100	104	70	130
Dibenzo[a,h]anthracene	1	103.5436	0	100	104	70	130
Benzo[g,h,i]perylene	1	98.0843	0	100	98	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB63412

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87671.D	AD01106-002(MSD)	11/15/2017 6:02:00 PM
Duplicate(If applicable):	7M87670.D	AD01106-002(MS)	11/15/2017 5:39:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	55.7739	49.1249	13	20
Pyridine	1	69.3472	62.364	11	40
N-Nitrosodimethylamine	1	72.1297	65.1646	10	20
Benzaldehyde	1	133.7563	120.2079	11	20
Aniline	1	110.0364	103.4236	6.2	20
Pentachloroethane	1	21.7164	12.6847	53*	20
bis(2-Chloroethyl)ether	1	85.7483	82.0178	4.4	20
N-Decane	1	85.6248	80.8959	5.7	20
1,3-Dichlorobenzene	1	86.1281	79.9482	7.4	20
1,4-Dichlorobenzene	1	84.0014	77.9992	7.4	40
1,2-Dichlorobenzene	1	83.4467	78.4051	6.2	20
Benzyl alcohol	1	89.0216	83.6258	6.3	20
bis(2-chloroisopropyl)ether	1	72.5409	70.1621	3.3	20
Acetophenone	1	84.5341	83.5527	1.2	20
Hexachloroethane	1	83.4242	77.2022	7.7	40
N-Nitroso-di-n-propylamine	1	91.0211	89.0725	2.2	40
Nitrobenzene	1	89.8486	86.9945	3.2	40
Isophorone	1	88.574	86.999	1.8	20
Benzoic Acid	1	0	0	NA	20
bis(2-Chloroethoxy)methane	1	90.0079	85.8825	4.7	20
1,2,4-Trichlorobenzene	1	90.8525	86.1755	5.3	40
Naphthalene	1	93.3116	88.7435	5	40
4-Chloroaniline	1	157.9141	144.6091	8.8	20
Hexachlorobutadiene	1	91.0525	85.6276	6.1	40
Caprolactam	1	64.3214	66.3657	3.1	20
2-Methylnaphthalene	1	93.4019	87.8947	6.1	20
1-Methylnaphthalene	1	87.7694	86.714	1.2	20
1,1'-Biphenyl	1	89.9139	89.0926	0.92	20
1,2,4,5-Tetrachlorobenzene	1	87.4594	87.9569	0.57	20
Hexachlorocyclopentadiene	1	70.8443	69.2201	2.3	20
2-Chloronaphthalene	1	89.4621	88.5592	1	20
1,4-Dimethylnaphthalene	1	90.1394	91.5503	1.6	20
Diphenyl Ether	1	87.8	87.8989	0.11	20
2-Nitroaniline	1	102.477	100.3509	2.1	20
Coumarin	1	22.3039	0	200*	20
Acenaphthylene	1	98.043	96.6794	1.4	20
Dimethylphthalate	1	56.2682	33.1725	52*	20
2,6-Dinitrotoluene	1	96.3629	95.1851	1.2	20
Acenaphthene	1	94.0647	93.0356	1.1	40
3-Nitroaniline	1	119.0321	116.357	2.3	20
Dibenzofuran	1	104.4842	102.3912	2	20
2,4-Dinitrotoluene	1	88.7366	89.0259	0.33	40
Fluorene	1	93.9313	93.2749	0.7	40
4-Chlorophenyl-phenylether	1	95.4996	94.2477	1.3	20
Diethylphthalate	1	90.1595	85.3094	5.5	20
4-Nitroaniline	1	98.5837	97.6711	0.93	20
Atrazine	1	108.4895	110.9832	2.3	20
n-Nitrosodiphenylamine	1	83.1316	82.2332	1.1	20
1,2-Diphenylhydrazine	1	100.5225	98.5364	2	20
4-Bromophenyl-phenylether	1	98.8326	98.4999	0.34	20
Hexachlorobenzene	1	97.9843	97.3868	0.61	40
N-Octadecane	1	109.5299	95.3569	14	20
Phenanthrene	1	91.7767	91.6151	0.18	20
Anthracene	1	94.897	93.2148	1.8	20
Carbazole	1	95.4251	97.4695	2.1	20
Di-n-butylphthalate	1	105.6941	103.2912	2.3	20
Fluoranthene	1	93.5711	93.3533	0.23	20
Pyrene	1	106.5616	107.8872	1.2	40
Benzidine	1	77.5976	81.4218	4.8	20
Butylbenzylphthalate	1	107.3826	107.8208	0.41	40
3,3'-Dichlorobenzidine	1	136.7419	134.5762	1.6	20
Benzo[a]anthracene	1	98.608	99.9205	1.3	20
Chrysene	1	95.4047	96.6953	1.3	20

Form3
RPD Data Laboratory Limits
QC Batch: WMB63412

bis(2-Ethylhexyl)phthalate	1	118.2437	119.3419	0.92	20
Di-n-octylphthalate	1	115.9018	115.7467	0.13	20
Benzo[b]fluoranthene	1	103.4736	101.9743	1.5	20
Benzo[k]fluoranthene	1	102.2652	103.6268	1.3	20
Benzo[a]pyrene	1	93.7946	93.3832	0.44	20
Indeno[1,2,3-cd]pyrene	1	103.7129	104.851	1.1	20
Dibenzo[a,h]anthracene	1	103.5436	104.2351	0.67	20
Benzo[g,h,i]perylene	1	98.0843	98.047	0.04	20

* - Indicates outside of limits

NA - Both concentrations=0... no result can be calculated

FORM 4
Blank Summary

Blank Number: WMB63402
Blank Data File: 7M87639.D
Matrix: Aqueous

Blank Analysis Date: 11/14/17 16:09
Blank Extraction Date: 11/14/17
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD01097-001	7M87655.D	11/15/17 11:46
AD01097-002	7M87656.D	11/15/17 12:09
AD01097-003	7M87657.D	11/15/17 12:33
AD01097-004	7M87658.D	11/15/17 12:56
AD01097-005	7M87659.D	11/15/17 13:20
AD01097-006	7M87652.D	11/15/17 10:36
AD01097-007(MS:	7M87653.D	11/15/17 11:00
AD01097-008(MSD	7M87654.D	11/15/17 11:23
WMB63402(MS)	5M101521.D	11/14/17 16:03

FORM 4
Blank Summary

Blank Number: WMB63412
Blank Data File: 10M66053.D
Matrix: Aqueous

Blank Analysis Date: 11/15/17 16:23
Blank Extraction Date: 11/15/17
(If Applicable)
Method: EPA 8270D

Sample Number	Data File	Analysis Date
AD01097-009	10M66061.D	11/15/17 19:21
AD01097-010	10M66062.D	11/15/17 19:44
AD01097-011	10M66063.D	11/15/17 20:06
AD01097-012	10M66064.D	11/15/17 20:28
AD01097-013	10M66065.D	11/15/17 20:50
AD01097-014	10M66069.D	11/16/17 10:32
AD01097-015	10M66070.D	11/16/17 10:54
AD01097-016	10M66071.D	11/16/17 11:16
AD01097-017	10M66072.D	11/16/17 11:39
WMB63412(MS)	7M87665.D	11/15/17 15:42
AD01106-002	7M87669.D	11/15/17 17:15
AD01106-002(MSD	7M87671.D	11/15/17 18:02
AD01106-002(MS)	7M87670.D	11/15/17 17:39

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10
Data File: 10M65424.D
Analysis Date: 10/11/17 11:02
Method: EPA 8270D

Tune Scan/Time Range: Scan 1462

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	34.6	42912	PASS
68	69	0.00	2	1.4	631	PASS
69	198	0.00	100	35.2	43728	PASS
70	69	0.00	2	0.9	411	PASS
127	198	40	60	48.5	60160	PASS
197	198	0.00	1	0.6	725	PASS
198	198	100	100	100.0	124112	PASS
199	198	5	9	6.8	8409	PASS
275	198	10	30	25.0	31000	PASS
365	198	1	100	2.7	3295	PASS
441	443	0.01	100	66.6	10632	PASS
442	198	40	100	63.5	78752	PASS
443	442	17	23	20.3	15957	PASS

Data File	Sample Number	Analysis Date:
10M65425.D	CAL BNA@10PPM	10/11/17 12:08
10M65426.D	CAL BNA@2PPM	10/11/17 12:48
10M65427.D	CAL BNA@196PP	10/11/17 13:10
10M65428.D	CAL BNA@160PP	10/11/17 13:33
10M65429.D	CAL BNA@120PP	10/11/17 13:55
10M65430.D	CAL BNA@80PPM	10/11/17 14:17
10M65431.D	CAL BNA@50PPM	10/11/17 14:39
10M65432.D	CAL BNA@20PPM	10/11/17 15:01
10M65433.D	CAL BNA@.5PPM	10/11/17 15:24
10M65434.D	CAL BNA@10PPM	10/11/17 15:51
10M65435.D	CAL BNA@50PPM	10/11/17 16:13
10M65436.D	ICV BNA@50PPM	10/11/17 16:35

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7
Data File: 7M87268.D
Analysis Date: 10/19/17 09:03
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.003 to 10.009 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	44.7	41608	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.0	45560	PASS
70	69	0.00	2	0.6	275	PASS
127	198	40	60	58.3	54188	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93004	PASS
199	198	5	9	6.8	6361	PASS
275	198	10	30	21.3	19815	PASS
365	198	1	100	2.4	2198	PASS
441	443	0.01	100	73.9	6922	PASS
442	198	40	100	50.0	46472	PASS
443	442	17	23	20.2	9368	PASS

Data File	Sample Number	Analysis Date:
7M87269.D	CAL BNA@10PPM	10/19/17 09:26
7M87270.D	CAL BNA@2PPM	10/19/17 10:27
7M87271.D	CAL BNA@10PPM	10/19/17 10:51
7M87272.D	CAL BNA@196PP	10/19/17 11:15
7M87273.D	CAL BNA@160PP	10/19/17 11:38
7M87274.D	CAL BNA@120PP	10/19/17 12:02
7M87275.D	CAL BNA@80PPM	10/19/17 12:25
7M87276.D	CAL BNA@20PPM	10/19/17 12:48
7M87277.D	CAL BNA@.5PPM	10/19/17 13:11
7M87278.D	CAL BNA@50PPM	10/19/17 13:35
7M87279.D	ICV BNA@50PPM	10/19/17 13:58

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5
Data File: 5M101319.D
Analysis Date: 10/20/17 08:27
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.907 to 9.907 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	37.7	46456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	48400	PASS
70	69	0.00	2	0.6	282	PASS
127	198	40	60	49.1	60544	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	123224	PASS
199	198	5	9	6.5	8056	PASS
275	198	10	30	22.4	27568	PASS
365	198	1	100	2.3	2868	PASS
441	443	0.01	100	78.9	10002	PASS
442	198	40	100	52.9	65168	PASS
443	442	17	23	19.5	12677	PASS

Data File	Sample Number	Analysis Date:
5M101320.D	CAL BNA@50PPM	10/20/17 08:56
5M101321.D	CAL BNA@10PPM	10/20/17 09:25
5M101322.D	CAL BNA@2PPM	10/20/17 09:48
5M101323.D	CAL BNA@196PP	10/20/17 10:26
5M101324.D	CAL BNA@160PP	10/20/17 10:49
5M101325.D	CAL BNA@120PP	10/20/17 11:12
5M101326.D	CAL BNA@80PPM	10/20/17 11:34
5M101327.D	CAL BNA@20PPM	10/20/17 11:57
5M101328.D	CAL BNA@.5PPM	10/20/17 12:20
5M101329.D	CAL BNA@50PPM	10/20/17 12:43
5M101330.D	ICV BNA@50PPM	10/20/17 13:06

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7
Data File: 7M87623.D
Analysis Date: 11/14/17 08:38
Method: EPA 8270D

Tune Scan/Time Range: Scan 1434

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	35.7	57184	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.4	67792	PASS
70	69	0.00	2	0.8	571	PASS
127	198	40	60	53.6	85744	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	160000	PASS
199	198	5	9	6.9	11004	PASS
275	198	10	30	26.0	41544	PASS
365	198	1	100	2.7	4302	PASS
441	443	0.01	100	77.6	16488	PASS
442	198	40	100	69.9	111872	PASS
443	442	17	23	19.0	21248	PASS

Data File	Sample Number	Analysis Date:
7M87624.D	CAL BNA@50PPM	11/14/17 09:03
7M87625.D	WMB63390	11/14/17 09:33
7M87626.D	AD00971-001(T)	11/14/17 09:56
7M87627.D	AD00920-009(T)	11/14/17 10:20
7M87628.D	AD01015-001(T)	11/14/17 10:43
7M87629.D	AD00920-009(10X)	11/14/17 11:06
7M87630.D	WMB63390	11/14/17 11:30
7M87631.D	AD01071-001	11/14/17 11:53
7M87632.D	AD01071-002	11/14/17 12:17
7M87633.D	AD01071-003	11/14/17 12:40
7M87634.D	AD01071-004	11/14/17 13:04
7M87635.D	AD01071-005	11/14/17 13:27
7M87636.D	AD01071-006	11/14/17 13:50
7M87637.D	WMB63394	11/14/17 14:14
7M87638.D	AD00920-009(T)(R)	11/14/17 15:45
7M87639.D	WMB63402	11/14/17 16:09
7M87640.D	SMB63407(MS)	11/14/17 16:33
7M87641.D	SMB63407	11/14/17 16:57
7M87642.D	AD01063-001	11/14/17 17:21
7M87643.D	AD01063-002(10X)	11/14/17 17:44
7M87644.D	AD01063-003	11/14/17 18:08
7M87645.D	AD01063-004	11/14/17 18:31
7M87646.D	AD01063-006	11/14/17 18:55
7M87647.D	AD01063-008	11/14/17 19:19
7M87648.D	AD01063-011	11/14/17 19:42
7M87649.D	AD01063-013	11/14/17 20:05

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5
Data File: 5M101507.D
Analysis Date: 11/14/17 08:38
Method: EPA 8270D

Tune Scan/Time Range: Scan 1416

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.2	34928	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.4	36024	PASS
70	69	0.00	2	0.8	274	PASS
127	198	40	60	50.2	45952	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91496	PASS
199	198	5	9	7.1	6473	PASS
275	198	10	30	22.0	20168	PASS
365	198	1	100	2.3	2065	PASS
441	443	0.01	100	75.9	7035	PASS
442	198	40	100	50.1	45816	PASS
443	442	17	23	20.2	9263	PASS

Data File	Sample Number	Analysis Date:
5M101508.D	CAL BNA@50PPM	11/14/17 09:01
5M101509.D	EF-1 V-266631(11/	11/14/17 09:37
5M101510.D	EF-1 V-266631(11/	11/14/17 10:00
5M101511.D	AD01055-009	11/14/17 10:23
5M101512.D	AD01028-013(R)	11/14/17 10:46
5M101513.D	AD01050-005(R)	11/14/17 11:09
5M101514.D	AD01066-001	11/14/17 11:47
5M101515.D	WMB63387(MS)	11/14/17 12:10
5M101516.D	WMB63394(MS)	11/14/17 12:33
5M101517.D	WMB63394	11/14/17 12:57
5M101518.D	AD01067-001	11/14/17 13:20
5M101519.D	AD01067-002	11/14/17 13:43
5M101520.D	AD01063-014(10X)	11/14/17 15:39
5M101521.D	WMB63402(MS)	11/14/17 16:03
5M101522.D	WMB63402	11/14/17 16:27
5M101523.D	AD01063-017(10X)	11/14/17 16:52
5M101524.D	AD01063-018(10X)	11/14/17 17:15
5M101525.D	AD01063-015	11/14/17 17:38
5M101526.D	AD01063-016	11/14/17 18:02
5M101527.D	AD01063-019	11/14/17 18:25
5M101528.D	AD01063-020	11/14/17 18:49
5M101529.D	AD01063-021	11/14/17 19:12
5M101530.D	AD01063-022	11/14/17 19:36
5M101531.D	AD01063-023	11/14/17 19:59
5M101532.D	AD01063-024	11/14/17 20:23

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7
Data File: 7M87650.D
Analysis Date: 11/15/17 09:04
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.987 to 9.993 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	39.5	54340	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.8	63036	PASS
70	69	0.00	2	0.6	352	PASS
127	198	40	60	56.0	77120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	137712	PASS
199	198	5	9	6.7	9201	PASS
275	198	10	30	23.3	32148	PASS
365	198	1	100	2.5	3392	PASS
441	443	0.01	100	74.1	12178	PASS
442	198	40	100	59.7	82224	PASS
443	442	17	23	20.0	16442	PASS

Data File	Sample Number	Analysis Date:
7M87651.D	CAL BNA@50PPM	11/15/17 09:29
7M87652.D	AD01097-006	11/15/17 10:36
7M87653.D	AD01097-007(MS:	11/15/17 11:00
7M87654.D	AD01097-008(MSD	11/15/17 11:23
7M87655.D	AD01097-001	11/15/17 11:46
7M87656.D	AD01097-002	11/15/17 12:09
7M87657.D	AD01097-003	11/15/17 12:33
7M87658.D	AD01097-004	11/15/17 12:56
7M87659.D	AD01097-005	11/15/17 13:20
7M87660.D	AD01063-010(50X)	11/15/17 13:43
7M87661.D	WMB63410(MS)	11/15/17 14:06
7M87662.D	WMB63410	11/15/17 14:31
7M87663.D	AD01096-017	11/15/17 14:55
7M87664.D	AD01080-017	11/15/17 15:18
7M87665.D	WMB63412(MS)	11/15/17 15:42
7M87666.D	WMB63412	11/15/17 16:05
7M87667.D	WMB63410	11/15/17 16:28
7M87668.D	AD01106-001	11/15/17 16:52
7M87669.D	AD01106-002	11/15/17 17:15
7M87670.D	AD01106-002(MS)	11/15/17 17:39
7M87671.D	AD01106-002(MSD	11/15/17 18:02
7M87672.D	AD01082-013	11/15/17 18:26
7M87673.D	AD01082-022(MS:	11/15/17 18:49
7M87674.D	AD01082-024(MSD	11/15/17 19:12
7M87675.D	AD01082-020	11/15/17 19:36
7M87676.D	AD01082-021	11/15/17 19:59
7M87677.D	AD01082-026	11/15/17 20:23
7M87678.D	AD01082-027	11/15/17 20:46
7M87679.D	AD01083-001	11/15/17 21:09
7M87680.D	AD01083-002	11/15/17 21:33
7M87681.D	AD01083-003	11/15/17 21:56

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10
Data File: 10M66038.D
Analysis Date: 11/15/17 10:42
Method: EPA 8270D

Tune Scan/Time Range: Scan 1459

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	42.9	66792	PASS
68	69	0.00	2	1.9	1263	PASS
69	198	0.00	100	43.1	66952	PASS
70	69	0.00	2	0.6	415	PASS
127	198	40	60	52.9	82320	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	155520	PASS
199	198	5	9	6.5	10053	PASS
275	198	10	30	25.7	39928	PASS
365	198	1	100	3.6	5549	PASS
441	443	0.01	100	73.9	13468	PASS
442	198	40	100	61.1	94968	PASS
443	442	17	23	19.2	18216	PASS

Data File	Sample Number	Analysis Date:
10M66039.D	CAL BNA@50PPM	11/15/17 11:11
10M66040.D	AD01055-002	11/15/17 11:35
10M66041.D	AD01055-004	11/15/17 11:57
10M66042.D	AD01055-006	11/15/17 12:19
10M66043.D	AD01055-008	11/15/17 12:41
10M66044.D	AD01055-001	11/15/17 13:03
10M66045.D	SMB63406(MS)	11/15/17 13:25
10M66046.D	OMB63405(MS)	11/15/17 13:48
10M66047.D	AD01111-001(3X)(	11/15/17 14:10
10M66048.D	AD01111-006(3X)(	11/15/17 14:32
10M66049.D	AD01111-010(3X)(	11/15/17 14:54
10M66050.D	SMB63406	11/15/17 15:17
10M66051.D	OMB63405	11/15/17 15:39
10M66052.D	WMB63410	11/15/17 16:01
10M66053.D	WMB63412	11/15/17 16:23
10M66054.D	AD01055-003	11/15/17 16:46
10M66055.D	AD01055-005	11/15/17 17:08
10M66056.D	AD01055-007	11/15/17 17:30
10M66057.D	AD01145-002(MS)	11/15/17 17:52
10M66058.D	AD01145-002(MSD	11/15/17 18:15
10M66059.D	AD01145-002	11/15/17 18:37
10M66060.D	AD01080-002(R)	11/15/17 18:59
10M66061.D	AD01097-009	11/15/17 19:21
10M66062.D	AD01097-010	11/15/17 19:44
10M66063.D	AD01097-011	11/15/17 20:06
10M66064.D	AD01097-012	11/15/17 20:28
10M66065.D	AD01097-013	11/15/17 20:50
10M66066.D	AD01096-015(5X)(	11/15/17 21:12

Form 5

Tune Name: CAL DFTPP **Data File:** 10M66067.D
Instrument: GCMS 10 **Analysis Date:** 11/16/17 09:10
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.985 to 9.990 min

Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	42.9	35052	PASS
68	69	0.00	2	0.8	302	PASS
69	198	0.00	100	45.2	37000	PASS
70	69	0.00	2	0.8	292	PASS
127	198	40	60	54.1	44216	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	81788	PASS
199	198	5	9	6.8	5588	PASS
275	198	10	30	26.0	21305	PASS
365	198	1	100	3.6	2932	PASS
441	443	0.01	100	84.8	8675	PASS
442	198	40	100	67.0	54836	PASS
443	442	17	23	18.6	10225	PASS

Data File	Sample Number	Analysis Date:
10M66068.D	CAL BNA@50PPM	11/16/17 09:32
10M66069.D	AD01097-014	11/16/17 10:32
10M66070.D	AD01097-015	11/16/17 10:54
10M66071.D	AD01097-016	11/16/17 11:16
10M66072.D	AD01097-017	11/16/17 11:39
10M66073.D	AD01119-004(5X)	11/16/17 12:01
10M66074.D	AD01119-002	11/16/17 12:23
10M66075.D	AD01119-008	11/16/17 12:46
10M66076.D	AD01119-003	11/16/17 13:09
10M66077.D	AD01119-005	11/16/17 13:31
10M66078.D	AD01119-006	11/16/17 13:53
10M66079.D	AD01119-007	11/16/17 14:16
10M66080.D	AD01179-001	11/16/17 14:38
10M66081.D	AD01179-003	11/16/17 15:00
10M66082.D	AD01179-004	11/16/17 15:23
10M66083.D	SMB63420	11/16/17 15:45
10M66084.D	AD01119-001	11/16/17 16:08
10M66085.D	AD01055-005	11/16/17 16:30
10M66086.D	AD01145-002(MSD	11/16/17 16:52

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FORM8

Internal Standard Areas

Evaluation Std Data File: 10M65435.D Method: EPA 8270D

Analysis Date/Time: 10/11/17 16:13

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	33882	2.60	80006	5.83	313413	6.84	183517	8.26	322810	9.72	359198	12.77	321946	14.38
Eval File Area Limit:	16941-67764		40003-160012		156706-626826		91758-367034		161405-645620		179599-718396		160973-643892	
Eval File Rt Limit:	2.1-3.1		5.33-6.33		6.34-7.34		7.76-8.76		9.22-10.22		12.27-13.27		13.88-14.88	

Data File	Sample													
10M65426.D	CAL BNA@2PPM	38350	2.59	81219	5.83	313189	6.84	196803	8.26	349781	9.72	392993	12.77	369787	14.38
10M65427.D	CAL BNA@196PPM	33418	2.59	80231	5.83	298751	6.84	179421	8.27	308588	9.73	350214	12.78	309769	14.39
10M65428.D	CAL BNA@160PPM	36197	2.60	81920	5.83	310531	6.84	190542	8.27	323755	9.73	359216	12.78	319956	14.39
10M65429.D	CAL BNA@120PPM	35608	2.60	82961	5.83	315332	6.84	193828	8.27	333927	9.73	367703	12.77	327547	14.39
10M65430.D	CAL BNA@80PPM	37964	2.59	88373	5.83	332936	6.84	199190	8.27	334028	9.72	376074	12.77	329816	14.38
10M65432.D	CAL BNA@20PPM	34701	2.60	79941	5.83	312842	6.83	183746	8.26	327149	9.72	364074	12.77	344269	14.38
10M65433.D	CAL BNA@.5PPM	36149	2.60	83752	5.83	318277	6.83	195240	8.26	345745	9.72	386495	12.77	364714	14.38
10M65434.D	CAL BNA@10PPM	34604	2.59	82858	5.83	312202	6.83	188948	8.26	329666	9.72	377792	12.77	341767	14.38
10M65435.D	CAL BNA@50PPM	33882	2.60	80006	5.83	313413	6.84	183517	8.26	322810	9.72	359198	12.77	321946	14.38
10M65436.D	ICV BNA@50PPM	34933	2.60	81394	5.83	315720	6.84	188413	8.26	322768	9.72	359935	12.77	318447	14.38

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 7M87278.D Method: EPA 8270D

Analysis Date/Time: 10/19/17 13:35

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	47969	2.57	90204	5.82	354748	6.83	215271	8.26	396811	9.72	450319	12.77	446458	14.41
Eval File Area Limit:	23984-95938		45102-180408		177374-709496		107636-430542		198406-793622		225160-900638		223229-892916	
Eval File Rt Limit:	2.07-3.07		5.32-6.32		6.33-7.33		7.76-8.76		9.22-10.22		12.27-13.27		13.91-14.91	

Data File	Sample													
7M87270.D	CAL BNA@2PPM	48164	2.57	90071	5.82	367923	6.83	221522	8.26	400067	9.71	432992	12.77	407354	14.39
7M87271.D	CAL BNA@10PPM	45704	2.57	83537	5.82	337736	6.83	201429	8.26	361587	9.72	397913	12.77	375050	14.39
7M87272.D	CAL BNA@196PPM	42028	2.56	75799	5.82	307691	6.84	194093	8.27	366659	9.73	387188	12.78	373478	14.39
7M87273.D	CAL BNA@160PPM	51053	2.57	91334	5.82	369177	6.84	223992	8.27	417905	9.73	432828	12.78	412194	14.41
7M87274.D	CAL BNA@120PPM	45566	2.57	85420	5.82	353649	6.83	221886	8.26	417488	9.72	454475	12.78	448390	14.39
7M87275.D	CAL BNA@80PPM	43489	2.57	85499	5.82	347381	6.83	216607	8.26	407932	9.71	459088	12.77	459411	14.39
7M87276.D	CAL BNA@20PPM	50976	2.57	92669	5.82	353750	6.83	204711	8.26	363279	9.71	405369	12.77	384315	14.39
7M87277.D	CAL BNA@.5PPM	46605	2.57	87656	5.82	355993	6.83	215585	8.26	390883	9.72	429139	12.77	402635	14.39
7M87278.D	CAL BNA@50PPM	47969	2.57	90204	5.82	354748	6.83	215271	8.26	396811	9.72	450319	12.77	446458	14.41
7M87279.D	ICV BNA@50PPM	44984	2.57	85821	5.82	342078	6.83	203728	8.26	379411	9.72	428982	12.77	401313	14.41

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 5M101329.D Method: EPA 8270D

Analysis Date/Time: 10/20/17 12:43

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	38907	2.43	78662	5.71	327254	6.73	207026	8.15	376951	9.60	445075	12.64	401167	14.25
Eval File Area Limit:	19454-77814		39331-157324		163627-654508		103513-414052		188476-753902		222538-890150		200584-802334	
Eval File Rt Limit:	1.93-2.93		5.21-6.21		6.23-7.23		7.65-8.65		9.1-10.1		12.14-13.14		13.75-14.75	

Data File	Sample													
5M101321.D	CAL BNA@10PPM	34776	2.43	70328	5.71	288262	6.73	178968	8.15	340868	9.60	416531	12.64	389436	14.25
5M101322.D	CAL BNA@2PPM	36548	2.43	72363	5.71	299029	6.73	184095	8.15	384490	9.60	466759	12.64	393641	14.25
5M101323.D	CAL BNA@196PPM	32780	2.43	78163	5.72	332760	6.74	217665	8.16	356516	9.61	412279	12.66	375753	14.26
5M101324.D	CAL BNA@160PPM	36817	2.43	75426	5.72	336425	6.73	199804	8.16	362989	9.60	423719	12.65	419436	14.25
5M101325.D	CAL BNA@120PPM	36545	2.43	77243	5.71	307881	6.73	201651	8.16	380998	9.60	434740	12.65	400127	14.25
5M101326.D	CAL BNA@80PPM	35532	2.43	74916	5.71	344094	6.73	222542	8.15	372915	9.60	448310	12.65	425587	14.25
5M101327.D	CAL BNA@20PPM	36316	2.43	76446	5.71	320786	6.73	206107	8.15	381862	9.60	463803	12.64	469140	14.25
5M101328.D	CAL BNA@.5PPM	35960	2.43	72588	5.71	298763	6.73	188904	8.15	376428	9.60	422689	12.64	397888	14.24
5M101329.D	CAL BNA@50PPM	38907	2.43	78662	5.71	327254	6.73	207026	8.15	376951	9.60	445075	12.64	401167	14.25
5M101330.D	ICV BNA@50PPM	37539	2.43	78008	5.71	316916	6.73	225026	8.15	419522	9.60	439175	12.64	385923	14.25

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 5M101508.D Method: EPA 8270D

Analysis Date/Time: 11/14/17 09:01

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	31105	2.43	69520	5.71	292823	6.73	190142	8.15	361044	9.60	450922	12.64	427480	14.25
Eval File Area Limit:	15552-62210		34760-139040		146412-585646		95071-380284		180522-722088		225461-901844		213740-854960	
Eval File Rt Limit:	1.93-2.93		5.21-6.21		6.23-7.23		7.65-8.65		9.1-10.1		12.14-13.14		13.75-14.75	

Data File	Sample													
5M101509.D	EF-1 V-266631(11/07)	30723	2.44	60353	5.71	243701	6.73	146313	8.15	277317	9.60	333127	12.64	339321	14.25
5M101510.D	EF-1 V-266631(11/09)	25916	2.44	52432	5.71	214257	6.73	137053	8.14	272091	9.60	370274	12.64	365795	14.24
5M101511.D	AD01055-009	27402	2.43	61267	5.71	253039	6.73	160134	8.14	288112	9.60	373939	12.64	357297	14.24
5M101512.D	AD01028-013(R)	24011	2.43	49211	5.71	196432	6.73	111131	8.14	193939	9.60	248488	12.63	248266	14.24
5M101513.D	AD01050-005(R)	26557	2.43	52936	5.71	206494	6.73	124229	8.14	226256	9.60	272630	12.64	265143	14.24
5M101514.D	AD01066-001	29731	2.43	57461	5.71	229033	6.73	136380	8.15	241180	9.60	294227	12.64	287288	14.25
5M101515.D	WMB63387(MS)	32191	2.43	67560	5.71	271750	6.73	173010	8.15	324944	9.60	383084	12.64	359784	14.25
5M101516.D	WMB63394(MS)	31895	2.43	68257	5.71	269777	6.73	162888	8.15	293573	9.60	368035	12.64	342661	14.25
5M101517.D	WMB63394	28640	2.43	54774	5.71	219628	6.73	134276	8.14	244606	9.60	304931	12.64	302535	14.24
5M101518.D	AD01067-001	27107	2.43	56570	5.71	227762	6.73	139718	8.14	257496	9.60	330260	12.64	320550	14.24
5M101519.D	AD01067-002	27679	2.43	53316	5.71	216511	6.73	132439	8.14	251614	9.59	325819	12.64	314719	14.24
5M101520.D	AD01063-014(10X)	32288	2.43	62095	5.71	257562	6.73	165042	8.15	320276	9.60	412350	12.64	410924	14.25
5M101521.D	WMB63402(MS)	29228	2.43	57459	5.71	227963	6.73	143535	8.15	268148	9.60	334234	12.64	320891	14.25
5M101522.D	WMB63402	28167	2.43	58468	5.71	224921	6.73	137248	8.14	238186	9.60	287740	12.64	282134	14.24
5M101523.D	AD01063-017(10X)(M	33564	2.43	66578	5.71	266787	6.73	164362	8.14	294911	9.60	360605	12.64	349612	14.24
5M101524.D	AD01063-018(10X)(M	27462	2.43	57661	5.71	236666	6.73	148575	8.14	294510	9.60	396495	12.64	392426	14.24
5M101525.D	AD01063-015	21400	2.43	43137	5.71	180114	6.73	110895	8.14	207090	9.60	273720	12.64	273584	14.24
5M101526.D	AD01063-016	30727	2.43	59147	5.71	238347	6.73	146417	8.14	266327	9.60	319471	12.64	307792	14.24
5M101527.D	AD01063-019	30360	2.43	60662	5.71	238350	6.73	144930	8.14	261366	9.59	310295	12.64	294563	14.24
5M101528.D	AD01063-020	30708	2.43	61154	5.71	241772	6.73	149301	8.14	279254	9.60	344649	12.64	336470	14.24
5M101529.D	AD01063-021	29341	2.43	55103	5.71	229511	6.73	145546	8.14	277936	9.60	351798	12.64	335574	14.24
5M101530.D	AD01063-022	27459	2.43	55762	5.71	232216	6.73	154866	8.14	295708	9.60	395975	12.64	393101	14.24
5M101531.D	AD01063-023	29091	2.43	52366	5.71	217140	6.73	134893	8.14	259726	9.59	296845	12.64	298154	14.24
5M101532.D	AD01063-024	29783	2.43	58287	5.71	242057	6.73	152528	8.14	298142	9.60	381559	12.64	367502	14.24

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 7M87624.D Method: EPA 8270D

Analysis Date/Time: 11/14/17 09:03

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	56796	2.56	106395	5.82	432005	6.82	261982	8.26	469374	9.71	478725	12.77	444662	14.39
Eval File Area Limit:	28398-113592		53198-212790		216002-864010		130991-523964		234687-938748		239362-957450		222331-889324	
Eval File Rt Limit:	2.06-3.06		5.32-6.32		6.32-7.32		7.76-8.76		9.21-10.21		12.27-13.27		13.89-14.89	

Data File	Sample													
7M87625.D	WMB63390	55549	2.56	102271	5.82	423980	6.83	257086	8.26	461781	9.72	464613	12.77	368417	14.38
7M87626.D	AD00971-001(T)	48090	2.58	87960	5.81	350545	6.83	210935	8.26	383996	9.71	403978	12.76	363389	14.39
7M87627.D	AD00920-009(T)	55257	2.58	94070	5.82	373610	6.83	214007	8.26	415033	9.71	427415	12.77	330922	14.40
7M87628.D	AD01015-001(T)	41683	2.57	82017	5.81	338924	6.83	207429	8.26	372288	9.71	383271	12.77	342854	14.39
7M87629.D	AD00920-009(10X)(T)	65331	2.57	118990	5.82	475569	6.82	282790	8.25	515408	9.71	521957	12.76	470262	14.39
7M87630.D	WMB63390	54409	2.56	100549	5.82	412138	6.82	251327	8.25	449751	9.71	458677	12.76	417537	14.39
7M87631.D	AD01071-001	51062	2.57	92296	5.82	371343	6.82	220249	8.25	385743	9.71	383795	12.76	325695	14.38
7M87632.D	AD01071-002	55458	2.56	99586	5.82	400157	6.82	238227	8.26	420475	9.72	421666	12.76	365712	14.38
7M87633.D	AD01071-003	50173	2.57	92525	5.82	374916	6.82	221735	8.25	400440	9.71	399875	12.76	339186	14.39
7M87634.D	AD01071-004	51882	2.57	96509	5.81	374418	6.82	218264	8.26	374507	9.71	370988	12.77	311887	14.42
7M87635.D	AD01071-005	55646	2.57	101292	5.82	403009	6.83	237670	8.26	409910	9.71	412283	12.76	354204	14.39
7M87636.D	AD01071-006	47574	2.57	89462	5.82	365991	6.82	220876	8.25	395362	9.71	395833	12.76	332390	14.40
7M87637.D	WMB63394	47335	2.57	88586	5.81	356407	6.82	215502	8.25	387764	9.71	401440	12.76	344611	14.41
7M87638.D	AD00920-009(T)(R)	56327	2.57	90785	5.82	359137	6.84	206828	8.28	395924	9.73	395397	12.77	322776	14.41
7M87639.D	WMB63402	45857	2.56	85399	5.82	351354	6.82	214997	8.25	383411	9.71	381701	12.76	327915	14.38
7M87640.D	SMB63407(MS)	53420	2.56	96642	5.81	390784	6.82	239783	8.25	429767	9.71	438146	12.77	387620	14.39
7M87641.D	SMB63407	56940	2.56	104981	5.81	423564	6.82	254924	8.25	446718	9.71	428542	12.76	366023	14.38
7M87642.D	AD01063-001	43183	2.57	79100	5.82	317826	6.82	189644	8.25	342543	9.71	342466	12.76	299591	14.38
7M87643.D	AD01063-002(10X)	52400	2.57	94703	5.81	395968	6.82	242157	8.25	441262	9.71	435047	12.76	376806	14.38
7M87644.D	AD01063-003	51337	2.57	94663	5.82	386016	6.82	232829	8.25	420366	9.71	414784	12.76	360856	14.38
7M87645.D	AD01063-004	54200	2.57	95900	5.82	390278	6.82	233958	8.25	415967	9.71	410062	12.76	356836	14.38
7M87646.D	AD01063-006	56127	2.56	101859	5.82	408465	6.82	247979	8.25	450806	9.71	462931	12.76	404958	14.38
7M87647.D	AD01063-008	46383	2.57	84289	5.82	346646	6.82	210593	8.25	376865	9.71	374724	12.76	324078	14.38
7M87648.D	AD01063-011	50845	2.57	89932	5.82	353078	6.82	211111	8.25	373688	9.71	379824	12.76	331230	14.38
7M87649.D	AD01063-013	50489	2.57	89121	5.82	356342	6.82	211778	8.25	372922	9.71	373382	12.76	328203	14.38

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 7M87651.D Method: EPA 8270D

Analysis Date/Time: 11/15/17 09:29

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	59711	2.56	104269	5.82	405274	6.82	240221	8.25	436161	9.71	453883	12.77	424969	14.39
Eval File Area Limit:	29856-119422		52134-208538		202637-810548		120110-480442		218080-872322		226942-907766		212484-849938	
Eval File Rt Limit:	2.06-3.06		5.32-6.32		6.32-7.32		7.75-8.75		9.21-10.21		12.27-13.27		13.89-14.89	

Data File	Sample														
7M87652.D	AD01097-006	57391	2.56	102837	5.82	401749	6.84	235195	8.29	409841	9.74	428043	12.77	393491	14.42
7M87653.D	AD01097-007(MS:AD	55528	2.57	93838	5.82	373239	6.82	223617	8.25	403323	9.71	412846	12.77	370778	14.39
7M87654.D	AD01097-008(MSD:A	46786	2.57	82271	5.82	328138	6.83	198180	8.25	354265	9.71	365129	12.77	340932	14.41
7M87655.D	AD01097-001	50181	2.57	94703	5.82	379281	6.82	219908	8.25	379058	9.71	367486	12.76	312457	14.38
7M87656.D	AD01097-002	50855	2.57	97467	5.82	384390	6.82	228105	8.25	403417	9.71	400151	12.76	334576	14.38
7M87657.D	AD01097-003	50482	2.56	98381	5.82	414165	6.82	250658	8.25	449316	9.71	432300	12.76	350882	14.38
7M87658.D	AD01097-004	51530	2.57	98150	5.82	393965	6.82	237817	8.25	404237	9.71	371899	12.76	308761	14.38
7M87659.D	AD01097-005	48531	2.57	95092	5.82	401264	6.84	244929	8.26	431700	9.72	379394	12.77	320440	14.39
7M87660.D	AD01063-010(50X)	67548	2.57	126665	5.82	499421	6.82	299777	8.25	530294	9.71	498844	12.76	414609	14.39
7M87661.D	WMB63410(MS)	56656	2.57	108209	5.81	439858	6.84	263971	8.27	477900	9.72	438822	12.77	362160	14.40
7M87662.D	WMB63410	49735	2.56	92885	5.82	376420	6.83	225534	8.26	404075	9.71	353616	12.77	319317	14.38
7M87663.D	AD01096-017	44514	2.57	83214	5.82	339914	6.83	205432	8.26	367072	9.71	335442	12.76	279320	14.39
7M87664.D	AD01080-017	52184	2.57	95321	5.82	382609	6.83	230930	8.26	411739	9.71	404920	12.76	344716	14.38
7M87665.D	WMB63412(MS)	47880	2.57	88965	5.81	362309	6.83	217694	8.26	389731	9.71	371357	12.77	319901	14.38
7M87666.D	WMB63412	45045	2.57	88333	5.82	356015	6.82	220029	8.25	394443	9.71	372977	12.76	294903	14.38
7M87667.D	WMB63410	53720	2.57	100229	5.82	406606	6.82	245378	8.25	440527	9.71	411960	12.76	337272	14.38
7M87668.D	AD01106-001	45695	2.57	84791	5.82	345083	6.82	205265	8.25	364391	9.71	346353	12.76	287924	14.38
7M87669.D	AD01106-002	47498	2.57	89464	5.82	340307	6.82	191738	8.25	340795	9.71	338585	12.76	276648	14.38
7M87670.D	AD01106-002(MS)	45998	2.57	87930	5.81	345766	6.82	201018	8.25	366055	9.71	337575	12.77	296804	14.38
7M87671.D	AD01106-002(MSD)	48775	2.57	94016	5.81	367800	6.82	218939	8.25	393795	9.71	368477	12.77	323667	14.38
7M87672.D	AD01082-013	47071	2.57	89982	5.82	255025	6.84	217829	8.25	395400	9.71	383779	12.76	319532	14.38
7M87673.D	AD01082-022(MS:AD	57833	2.57	104535	5.82	296769	6.84	250497	8.25	442994	9.71	419397	12.77	373467	14.38
7M87674.D	AD01082-024(MSD:A	53527	2.57	96363	5.82	280155	6.84	229490	8.25	409794	9.71	393472	12.77	350623	14.38
7M87675.D	AD01082-020	39025	2.57	77229	5.82	315166	6.82	198104	8.25	365188	9.71	346140	12.76	275645	14.38
7M87676.D	AD01082-021	55913	2.57	102914	5.81	274843	6.84	246483	8.25	444724	9.71	428470	12.76	360396	14.38
7M87677.D	AD01082-026	55156	2.57	105681	5.81	428951	6.82	260115	8.25	465481	9.71	431299	12.76	346265	14.38
7M87678.D	AD01082-027	58200	2.57	107279	5.82	433080	6.82	261378	8.25	461998	9.71	426018	12.76	357469	14.38

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 10M66039.D Method: EPA 8270D

Analysis Date/Time: 11/15/17 11:11

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	45100	2.58	102757	5.82	410276	6.83	245443	8.26	428658	9.72	523383	12.76	497060	14.38
Eval File Area Limit:	22550-90200		51378-205514		205138-820552		122722-490886		214329-857316		261692-1046766		248530-994120	
Eval File Rt Limit:	2.08-3.08		5.32-6.32		6.33-7.33		7.76-8.76		9.22-10.22		12.26-13.26		13.88-14.88	

Data File	Sample													
10M66040.D	AD01055-002	59943	2.59	135672	5.82	507576	6.83	290529	8.26	486308	9.72	453481	12.76	362804	14.37
10M66041.D	AD01055-004	44505	2.59	102368	5.82	378476	6.83	228332	8.26	383728	9.72	382667	12.76	319122	14.38
10M66042.D	AD01055-006	46638	2.60	103739	5.82	390016	6.83	229017	8.26	374830	9.71	330920	12.76	261863	14.37
10M66043.D	AD01055-008	68164	2.60	153246	5.82	568133	6.83	326175	8.26	522791	9.72	450850	12.76	359178	14.37
10M66044.D	AD01055-001	52867	2.59	116927	5.82	447262	6.83	251681	8.26	399680	9.72	361082	12.76	354980	14.38
10M66045.D	SMB63406(MS)	71026	2.60	161837	5.82	572366	6.83	337242	8.26	498413	9.72	433017	12.76	347922	14.38
10M66046.D	OMB63405(MS)	37972	2.58	88317	5.82	353125	6.83	206289	8.26	368947	9.72	410873	12.76	391188	14.38
10M66047.D	AD01111-001(3X)(R)	49106	2.59	102526	5.83	376875	6.83	211885	8.26	322883	9.72	354177	12.76	350370	14.38
10M66048.D	AD01111-006(3X)(R)	47411	2.58	110492	5.85	365610	6.84	209823	8.26	350202	9.72	399778	12.76	362376	14.38
10M66049.D	AD01111-010(3X)(R)	50513	2.58	106280	5.85	390948	6.84	220520	8.26	357658	9.72	380074	12.76	377748	14.38
10M66050.D	SMB63406	75219	2.61	150719	5.82	532997	6.83	288049	8.26	430135	9.72	332494	12.76	287954	14.37
10M66051.D	OMB63405	37870	2.58	80367	5.82	305859	6.83	179126	8.26	297122	9.72	324850	12.76	318681	14.38
10M66052.D	WMB63410	36596	2.58	78490	5.82	305793	6.83	187892	8.26	323165	9.72	357446	12.76	327132	14.38
10M66053.D	WMB63412	29139	2.59	66640	5.82	266975	6.83	165397	8.26	286643	9.72	321672	12.76	309863	14.38
10M66054.D	AD01055-003	74050	2.61	153491	5.82	536666	6.83	285049	8.26	420235	9.72	303986	12.76	268695	14.37
10M66055.D	AD01055-005	91577A	2.61	190727	5.82	683603	6.83	362150	8.26	505564	9.72	375046	12.76	362879	14.38
10M66056.D	AD01055-007	64401	2.61	137956	5.82	468943	6.83	252822	8.26	363358	9.72	269999	12.76	262101	14.38
10M66057.D	AD01145-002(MS)	70108	2.61	148536	5.82	521930	6.83	283061	8.26	400651	9.72	315256	12.76	310458	14.38
10M66058.D	AD01145-002(MSD)	101705A	2.61	210794A	5.82	742267	6.83	391860	8.26	557467	9.72	402730	12.76	359384	14.38
10M66059.D	AD01145-002	54949	2.59	115255	5.82	421221	6.83	229651	8.26	351777	9.72	309435	12.76	338849	14.38
10M66060.D	AD01080-002(R)	86414	2.61	178849	5.82	631190	6.83	330383	8.26	463301	9.72	332565	12.76	292197	14.37
10M66061.D	AD01097-009	33141	2.58	72741	5.82	270829	6.83	165617	8.26	284655	9.72	305858	12.76	304333	14.38
10M66062.D	AD01097-010	35622	2.58	74709	5.82	282579	6.83	168489	8.26	277586	9.72	302526	12.76	290270	14.38
10M66063.D	AD01097-011	32808	2.58	67911	5.82	268378	6.83	159855	8.26	276826	9.72	286609	12.76	276279	14.38
10M66064.D	AD01097-012	32845	2.58	69628	5.82	266102	6.83	160603	8.26	271243	9.72	293830	12.76	291625	14.38
10M66065.D	AD01097-013	33795	2.58	71179	5.82	269487	6.83	160014	8.26	278845	9.72	292419	12.76	288253	14.38
10M66066.D	AD01096-015(5X)(R)	41525	2.58	89323	5.82	333457	6.83	207365	8.26	352644	9.72	382960	12.76	375773	14.38

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

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FORM8

Internal Standard Areas

Evaluation Std Data File: 10M66068.D Method: EPA 8270D

Analysis Date/Time: 11/16/17 09:32

Lab File ID: CAL BNA@50PPM

	I1		I2		I3		I4		I5		I6		I7	
	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT	Area	RT
Eval File Area/RT:	43249	2.58	99891	5.82	383208	6.83	230016	8.26	408639	9.72	477463	12.76	449006	14.38
Eval File Area Limit:	21624-86498		49946-199782		191604-766416		115008-460032		204320-817278		238732-954926		224503-898012	
Eval File Rt Limit:	2.08-3.08		5.32-6.32		6.33-7.33		7.76-8.76		9.22-10.22		12.26-13.26		13.88-14.88	

Data File	Sample													
10M66069.D	AD01097-014	33938	2.59	71542	5.82	278089	6.83	170056	8.26	292752	9.72	350887	12.76	330459	14.38
10M66070.D	AD01097-015	31879	2.59	69319	5.82	270121	6.83	166043	8.26	294814	9.72	344061	12.76	350548	14.38
10M66071.D	AD01097-016	34111	2.59	74913	5.82	293317	6.83	180470	8.26	313132	9.72	351248	12.76	333771	14.38
10M66072.D	AD01097-017	32794	2.59	72112	5.82	281924	6.83	173079	8.26	296094	9.72	322694	12.76	296922	14.38
10M66073.D	AD01119-004(5X)	42899	2.59	93757	5.82	364200	6.83	218550	8.26	384926	9.72	410353	12.76	402649	14.38
10M66074.D	AD01119-002	36289	2.59	72801	5.82	288749	6.83	174639	8.26	302748	9.72	331786	12.76	307340	14.38
10M66075.D	AD01119-008	28640	2.59	62780	5.82	239845	6.83	149034	8.26	265435	9.72	290659	12.76	265337	14.38
10M66076.D	AD01119-003	30069	2.59	64233	5.82	246591	6.83	154584	8.26	276732	9.72	308103	12.76	278614	14.38
10M66077.D	AD01119-005	31525	2.59	67565	5.82	262430	6.83	164319	8.26	285171	9.72	313450	12.76	287331	14.38
10M66078.D	AD01119-006	33049	2.59	71699	5.82	284641	6.83	167678	8.26	298589	9.72	338294	12.76	311813	14.38
10M66079.D	AD01119-007	35912	2.59	76922	5.82	301903	6.83	183232	8.26	320637	9.72	354557	12.76	328004	14.38
10M66080.D	AD01179-001	44132	2.59	98068	5.82	356674	6.83	209069	8.26	335737	9.72	307598	12.76	294541	14.38
10M66081.D	AD01179-003	43645	2.59	96452	5.82	356416	6.83	201039	8.26	329662	9.72	309300	12.76	303803	14.38
10M66082.D	AD01179-004	48731	2.59	108936	5.82	412087	6.83	228755	8.26	372417	9.72	339925	12.76	323766	14.38
10M66083.D	SMB63420	45749	2.59	101269	5.82	366215	6.83	206419	8.26	333004	9.72	312606	12.76	303179	14.38
10M66084.D	AD01119-001	37051	2.59	80744	5.82	312113	6.83	187890	8.26	331182	9.72	362285	12.76	336994	14.38
10M66085.D	AD01055-005	62134	2.59	144774	5.82	526727	6.83	299289	8.26	472729	9.72	432449	12.76	433199	14.38
10M66086.D	AD01145-002(MSD)	56703	2.59	130481	5.82	507320	6.83	292226	8.26	464951	9.72	455246	12.76	434352	14.38

I1 =	1,4-Dioxane-d8(INT)	I4 =	Acenaphthene-d10	I7 =	Perylene-d12
I2 =	1,4-Dichlorobenzene-d4	I5 =	Phenanthrene-d10		
I3 =	Naphthalene-d8	I6 =	Chrysene-d12		

625/8270 Internal Standard concentration = 40 mg/L (in final extract)
624/8260 Internal Standard concentration = 30ug/L
524 Internal Standard concentration =5ug/L

Internal Standard Areas

Upper Limit = + 100% of internal standard area from daily cal or mid pt.

Lower Limit = - 50% of internal standard area from daily cal or mid pt.

Flags:

A - Indicates the compound failed the internal standard area criteria

R - Indicates the compound failed the internal standard retention time criteria.

Retention Times: Limit = within +/- 0.5 min of internal standard retention time from the daily cal or mid pt.

GC/MS Base Neutral/Acid Extractable Data
Sample Data

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-001
Client Id: DMW-2
Data File: 7M87655.D
Analysis Date: 11/15/17 11:46
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0085

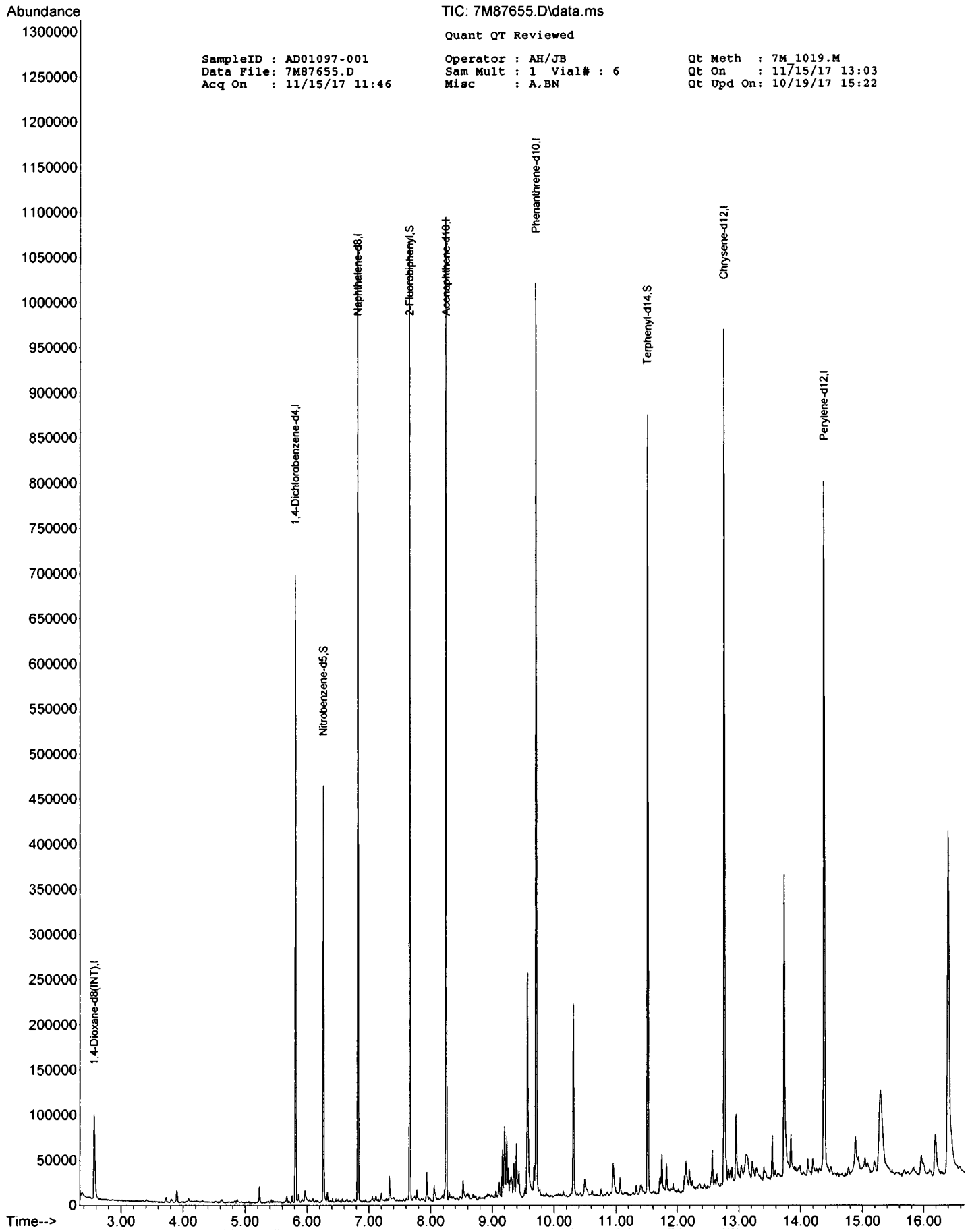
SampleID : AD01097-001 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87655.D Sam Mult : 1 Vial# : 6 Qt On : 11/15/17 13:03
Acq On : 11/15/17 11:46 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	50181	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	94703	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	379281	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	219908	40.00	ng	-0.01
77) Phenanthrene-d10	9.710	188	379058	40.00	ng	-0.01
91) Chrysene-d12	12.760	240	367486	40.00	ng	-0.01
103) Perylene-d12	14.384	264	312457	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.264	128	58365	38.19	ng	0.00
Spiked Amount 50.000			Recovery =	76.38%		
55) 2-Fluorobiphenyl	7.664	172	280389	41.00	ng	-0.01
Spiked Amount 50.000			Recovery =	82.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	266829	46.96	ng	0.00
Spiked Amount 50.000			Recovery =	93.92%		

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87655.D\data.ms
Quant QT Reviewed
SampleID : AD01097-001
Data File: 7M87655.D
Acq On : 11/15/17 11:46
Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/15/17 13:03
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-002
Client Id: DMW-3
Data File: 7M87656.D
Analysis Date: 11/15/17 12:09
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0088

SampleID : AD01097-002 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87656.D Sam Mult : 1 Vial# : 7 Qt On : 11/15/17 13:03
Acq On : 11/15/17 12:09 Misc : A,BN Qt Upd On: 10/19/17 15:22

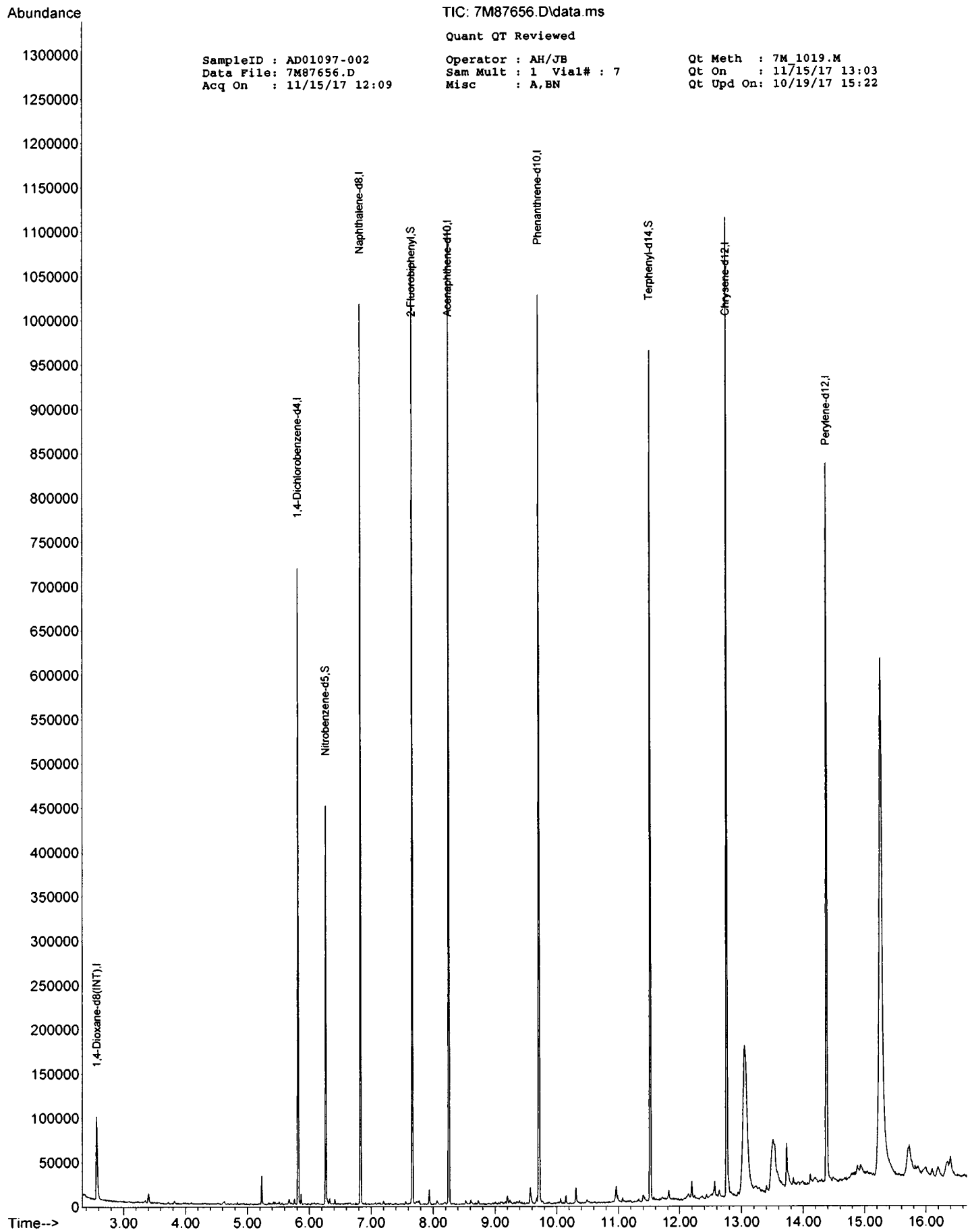
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	50855	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	97467	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	384390	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	228105	40.00	ng	-0.01
77) Phenanthrene-d10	9.710	188	403417	40.00	ng	-0.01
91) Chrysene-d12	12.760	240	400151	40.00	ng	-0.01
103) Perylene-d12	14.384	264	334576	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.264	128	56681	36.60	ng	0.00
Spiked Amount 50.000			Recovery =	73.20%		
55) 2-Fluorobiphenyl	7.663	172	280935	39.61	ng	-0.01
Spiked Amount 50.000			Recovery =	79.22%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	299967	48.48	ng	0.00
Spiked Amount 50.000			Recovery =	96.96%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 7M87656.D\data.ms
Quant QT Reviewed
SampleID : AD01097-002
Data File: 7M87656.D
Acq On : 11/15/17 12:09
Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/15/17 13:03
Qt Upd On: 10/19/17 15:22
1.4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-003
Client Id: DMW-9
Data File: 7M87657.D
Analysis Date: 11/15/17 12:33
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0091

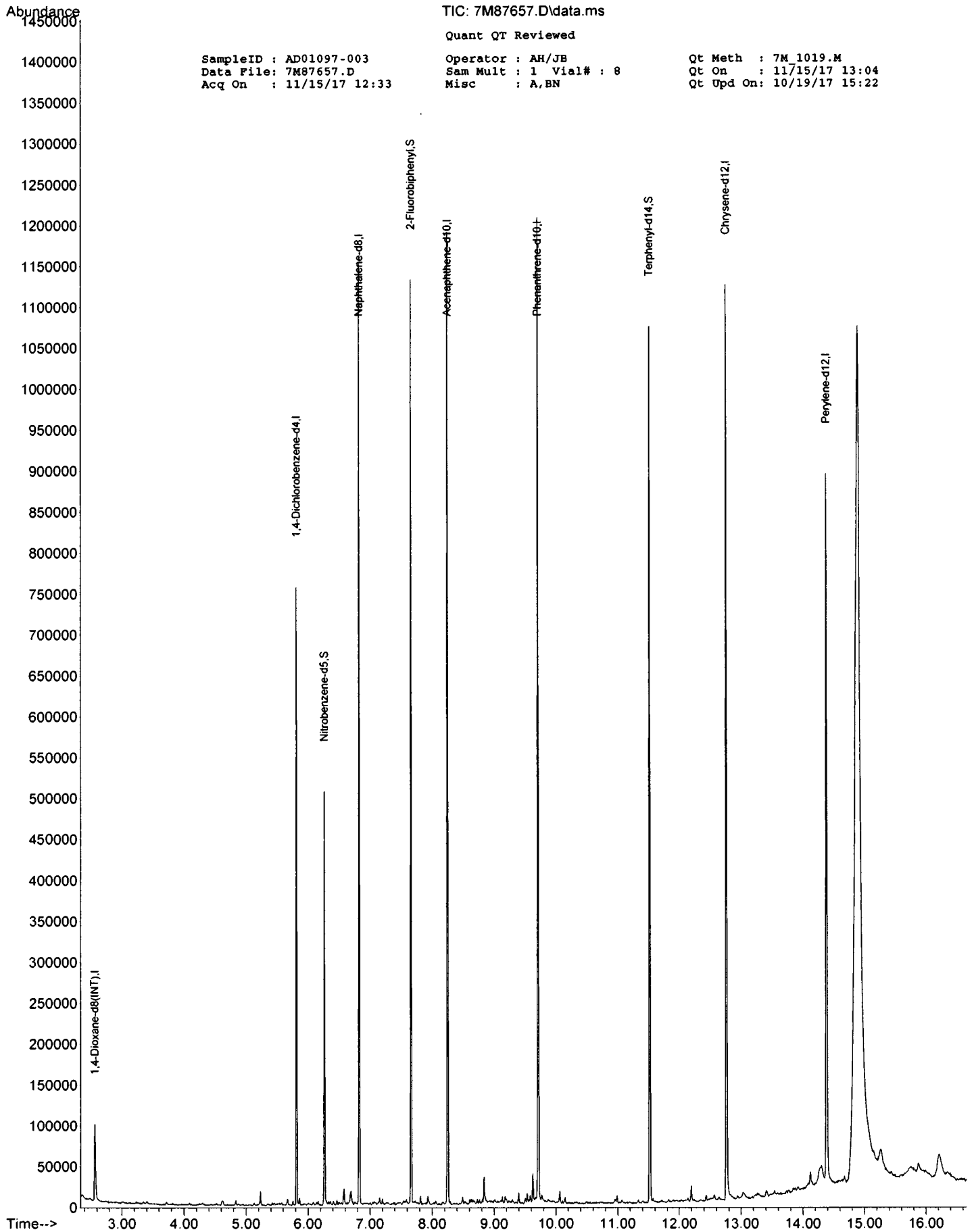
SampleID : AD01097-003 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87657.D Sam Mult : 1 Vial# : 8 Qt On : 11/15/17 13:04
Acq On : 11/15/17 12:33 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.562	96	50482	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	98381	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	414165	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	250658	40.00	ng	-0.01
77) Phenanthrene-d10	9.710	188	449316	40.00	ng	-0.01
91) Chrysene-d12	12.760	240	432300	40.00	ng	-0.01
103) Perylene-d12	14.384	264	350882	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
32) Nitrobenzene-d5	6.264	128	65562	39.29	ng	0.00
Spiked Amount 50.000			Recovery = 78.58%			
55) 2-Fluorobiphenyl	7.663	172	317245	40.70	ng	-0.01
Spiked Amount 50.000			Recovery = 81.40%			
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
94) Terphenyl-d14	11.515	244	328301	49.11	ng	0.00
Spiked Amount 50.000			Recovery = 98.22%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87657.D\data.ms
Quant QT Reviewed
SampleID : AD01097-003
Data File: 7M87657.D
Acq On : 11/15/17 12:33
Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/15/17 13:04
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-004
Client Id: DMW-9B
Data File: 7M87658.D
Analysis Date: 11/15/17 12:56
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0094

SampleID : AD01097-004 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87658.D Sam Mult : 1 Vial# : 9 Qt On : 11/15/17 14:33
Acq On : 11/15/17 12:56 Misc : A,BN Qt Upd On: 10/19/17 15:22

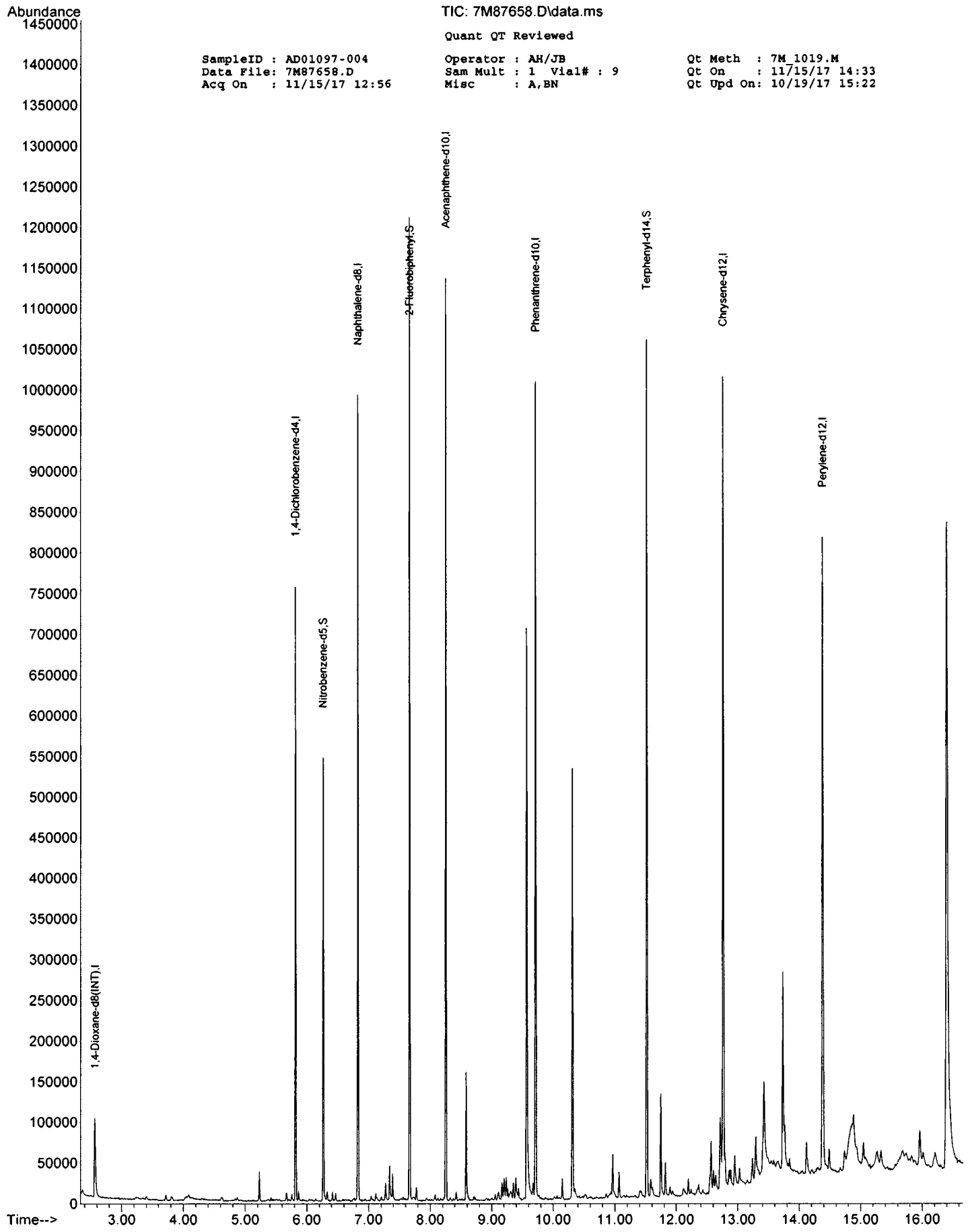
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	51530	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	98150	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	393965	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	237817	40.00	ng	-0.01
77) Phenanthrene-d10	9.715	188	404237	40.00	ng	0.00
91) Chrysene-d12	12.760	240	371899	40.00	ng	-0.01
103) Perylene-d12	14.384	264	308761	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.264	128	69988	44.09	ng	0.00
Spiked Amount 50.000			Recovery =	88.18%		
55) 2-Fluorobiphenyl	7.664	172	335748	45.40	ng	-0.01
Spiked Amount 50.000			Recovery =	90.80%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	321340	55.88	ng	0.00
Spiked Amount 50.000			Recovery =	111.76%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




TIC: 7M87658.D\data.ms
Quant QT Reviewed
SampleID : AD01097-004
Data File: 7M87658.D
Acq On : 11/15/17 12:56
Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/15/17 14:33
Qt Upd On: 10/19/17 15:22
Abundance
Time-->
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-005
Client Id: DMW-1
Data File: 7M87659.D
Analysis Date: 11/15/17 13:20
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

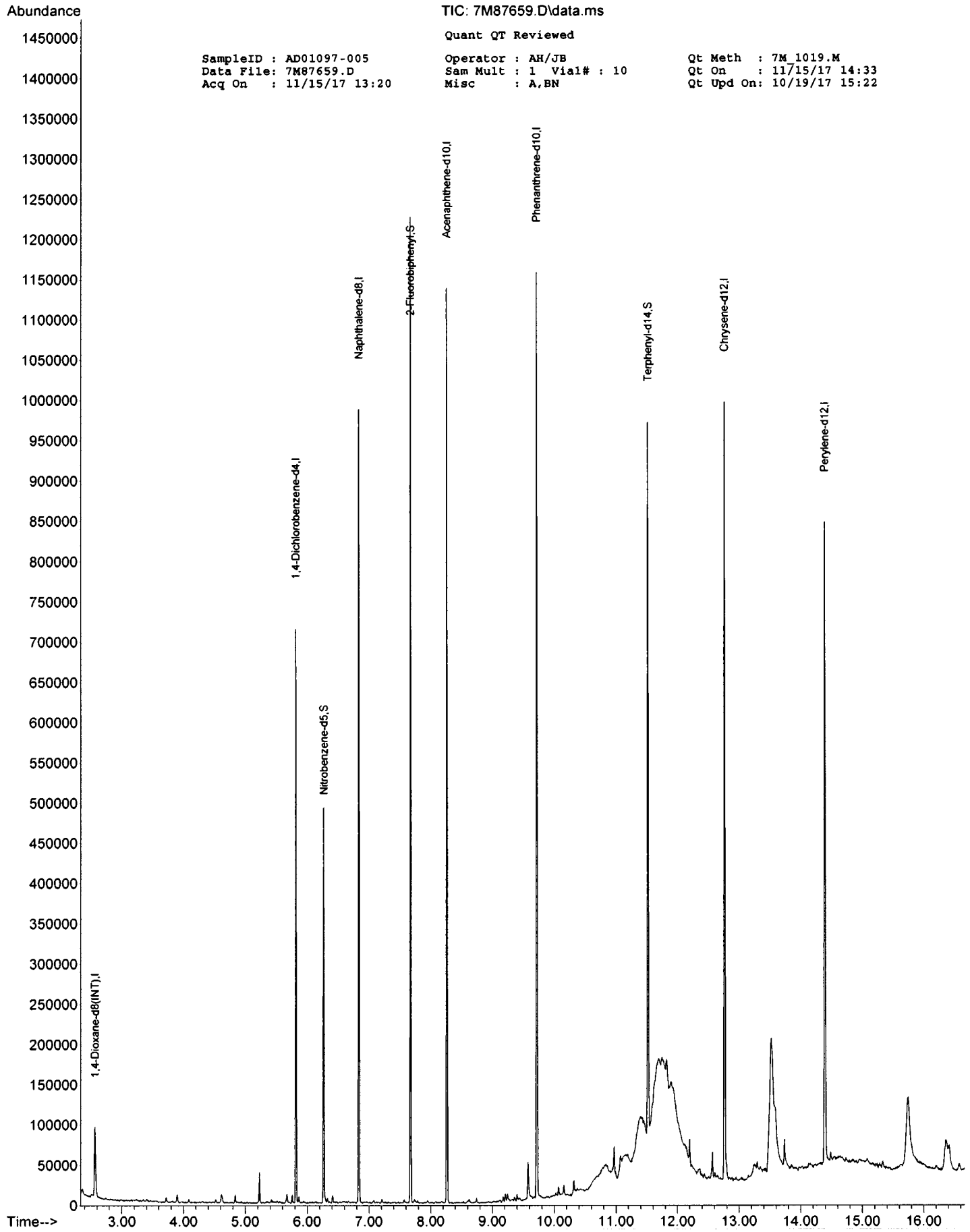
7111018 0097

SampleID : AD01097-005 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87659.D Sam Mult : 1 Vial# : 10 Qt On : 11/15/17 14:33
Acq On : 11/15/17 13:20 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	48531	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	95092	40.00	ng	0.00
31) Naphthalene-d8	6.835	136	401264	40.00	ng	0.00
50) Acenaphthene-d10	8.262	164	244929	40.00	ng	0.00
77) Phenanthrene-d10	9.720	188	431700	40.00	ng	0.00
91) Chrysene-d12	12.765	240	379394	40.00	ng	0.00
103) Perylene-d12	14.395	264	320440	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.269	128	68547	42.40	ng	0.00
Spiked Amount 50.000			Recovery =	84.80%		
55) 2-Fluorobiphenyl	7.674	172	325036	42.68	ng	0.00
Spiked Amount 50.000			Recovery =	85.36%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.521	244	295294	50.33	ng	0.00
Spiked Amount 50.000			Recovery =	100.66%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87659.D\data.ms
Quant QT Reviewed
SampleID : AD01097-005
Data File: 7M87659.D
Acq On : 11/15/17 13:20
Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/15/17 14:33
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-006
Client Id: DMW-18
Data File: 7M87652.D
Analysis Date: 11/15/17 10:36
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0100

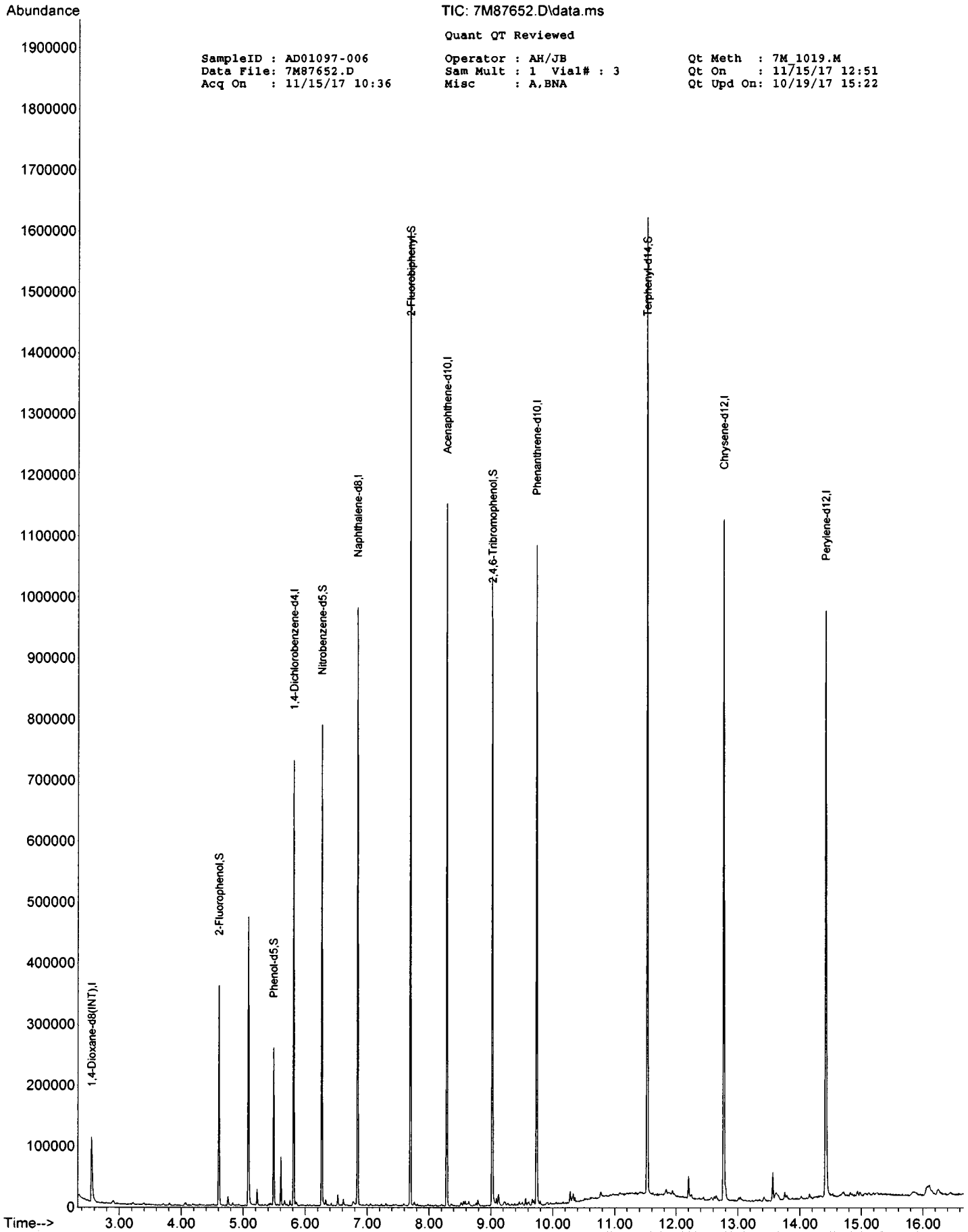
SampleID : AD01097-006 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87652.D Sam Mult : 1 Vial# : 3 Qt On : 11/15/17 12:51
Acq On : 11/15/17 10:36 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.556	96	57391	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.815	152	102837	40.00	ng	0.00
31) Naphthalene-d8	6.841	136	401749	40.00	ng	0.01
50) Acenaphthene-d10	8.289	164	235195	40.00	ng	0.03
77) Phenanthrene-d10	9.736	188	409841	40.00	ng	0.02
91) Chrysene-d12	12.771	240	428043	40.00	ng	0.00
103) Perylene-d12	14.421	264	393491	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.608	112	103706	29.85	ng	0.00
Spiked Amount 100.000			Recovery = 29.85%			
16) Phenol-d5	5.489	99	82495	18.56	ng	0.00
Spiked Amount 100.000			Recovery = 18.56%			
32) Nitrobenzene-d5	6.269	128	108153	66.82	ng	0.00
Spiked Amount 50.000			Recovery = 133.64%			
55) 2-Fluorobiphenyl	7.696	172	470727	64.37	ng	0.02
Spiked Amount 50.000			Recovery = 128.74%			
80) 2,4,6-Tribromophenol	9.026	330	107318	119.13	ng	0.03
Spiked Amount 100.000			Recovery = 119.13%			
94) Terphenyl-d14	11.526	244	489534	73.96	ng	0.00
Spiked Amount 50.000			Recovery = 147.92%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87652.D\data.ms
Quant QT Reviewed
SampleID : AD01097-006
Data File: 7M87652.D
Acq On : 11/15/17 10:36
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 12:51
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-007(MS:AD01
Client Id: DMW-18 MS
Data File: 7M87653.D
Analysis Date: 11/15/17 11:00
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	**1,4-Dioxane**	**0.50**	**48**				

Worksheet #: 444635

Total Target Concentration 48

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0103

SampleID : AD01097-007(MS:AD01 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87653.D Sam Mult : 1 Vial# : 4 Qt On : 11/15/17 12:52
Acq On : 11/15/17 11:00 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	55528	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	93838	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	373239	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	223617	40.00	ng	-0.01
77) Phenanthrene-d10	9.715	188	403323	40.00	ng	0.00
91) Chrysene-d12	12.765	240	412846	40.00	ng	0.00
103) Perylene-d12	14.395	264	370778	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	37569	11.18	ng	0.00
Spiked Amount 100.000			Recovery = 11.18%			
16) Phenol-d5	5.495	99	28442	6.61	ng	0.00
Spiked Amount 100.000			Recovery = 6.61%			
32) Nitrobenzene-d5	6.264	128	81642	54.29	ng	0.00
Spiked Amount 50.000			Recovery = 108.58%			
55) 2-Fluorobiphenyl	7.664	172	353422	50.83	ng	-0.01
Spiked Amount 50.000			Recovery = 101.66%			
80) 2,4,6-Tribromophenol	8.994	330	81054	93.29	ng	0.00
Spiked Amount 100.000			Recovery = 93.29%			
94) Terphenyl-d14	11.515	244	400675	62.76	ng	0.00
Spiked Amount 50.000			Recovery = 125.52%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	68516	47.6012	ng	97
9) Pyridine	3.197	79	8046	2.0492	ng	85
10) N-Nitrosodimethylamine	2.994	74	145265	62.2184	ng	70
12) Benzaldehyde	5.441	77	254038	159.1943	ng	75
14) Pentachloroethane	5.575	117	85377	76.1560	ng	86
15) bis(2-Chloroethyl)ether	5.591	93	276025	73.4713	ng	80
17) Phenol	5.505	94	29530	5.8792	ng	82
18) 2-Chlorophenol	5.633	128	164490	46.3170	ng	80
19) N-Decane	5.676	57	239443	73.0773	ng	93
20) 1,3-Dichlorobenzene	5.767	146	252813	69.9701	ng	99
22) 1,4-Dichlorobenzene	5.831	146	253251	75.6101	ng	97
23) 1,2-Dichlorobenzene	5.954	146	246410	76.4888	ng	97
24) Benzyl alcohol	5.927	108	194983	90.3944	ng	73
25) bis(2-chloroisopropyl)...	6.040	45	280215	70.0213	ng	96
26) 2-Methylphenol	6.018	108	21623	7.1544	ng	98
27) Acetophenone	6.141	105	394848	84.8418	ng	61
28) Hexachloroethane	6.232	117	99307	75.9796	ng	86
29) N-Nitroso-di-n-propyla...	6.141	70	182128	85.9558	ng	85
30) 3&4-Methylphenol	6.141	108	12827	4.2899	ng	70
33) Nitrobenzene	6.280	77	289454	86.8330	ng	79
34) Isophorone	6.467	82	525253	84.4526	ng	85
35) 2-Nitrophenol	6.531	139	166639	98.7511	ng	84
36) 2,4-Dimethylphenol	6.552	107	15527	4.9309	ng	96
37) Benzoic Acid	6.606	105	41388	13.5785	ng	38
38) bis(2-Chloroethoxy)met...	6.632	93	336543	85.6772	ng	94
39) 2,4-Dichlorophenol	6.713	162	169204	70.1692	ng	89
40) 1,2,4-Trichlorobenzene	6.782	180	230225	84.2663	ng	96
41) Naphthalene	6.846	128	807349	89.6997	ng	99
42) 4-Chloroaniline	6.878	127	8935	2.4127	ng	79
43) Hexachlorobutadiene	6.932	225	117967	84.4307	ng	97
44) Caprolactam	7.140	113	56840	46.5972	ng	70
45) 4-Chloro-3-methylphenol	7.236	107	97248	34.9410	ng	86
46) 2-Methylnaphthalene	7.375	142	596964	92.4686	ng	99
47) 1-Methylnaphthalene	7.455	142	557550	90.2074	ng	92
48) Methylnaphthalenes (To...	7.375	142	1154562m	182.7769	ng	
49) 1,1'-Biphenyl	7.749	154	705330	92.9831	ng	96
51) 1,2,4,5-Tetrachloroben...	7.509	216	249251	88.4855	ng	98
52) Hexachlorocyclopentadiene	7.498	237	139288	88.1685	ng	99
53) 2,4,6-Trichlorophenol	7.594	196	146158m	78.7988	ng	
54) 2,4,5-Trichlorophenol	7.626	196	179769	99.5063	ng	98
56) 2-Chloronaphthalene	7.776	162	516714	86.7289	ng	91
57) 1,4-Dimethylnaphthalene	8.054	156	414214	89.6622	ng	85
58) Dimethylnaphthalenes (...	8.054	156	414214	89.6622	ng	85
59) Diphenyl Ether	7.834	170	393489	88.7189	ng	79
60) 2-Nitroaniline	7.851	65	180601	86.7517	ng	55
61) Coumarin	8.037	146	243702	98.5572	ng	79
62) Acenaphthylene	8.134	152	853090	92.1028	ng	99
63) Dimethylphthalate	7.995	163	604620	88.0173	ng	98
64) 2,6-Dinitrotoluene	8.054	165	135959	91.0547	ng	64
65) Acenaphthene	8.283	153	533842	88.0361	ng	98
66) 3-Nitroaniline	8.203	138	23210	13.1901	ng	77

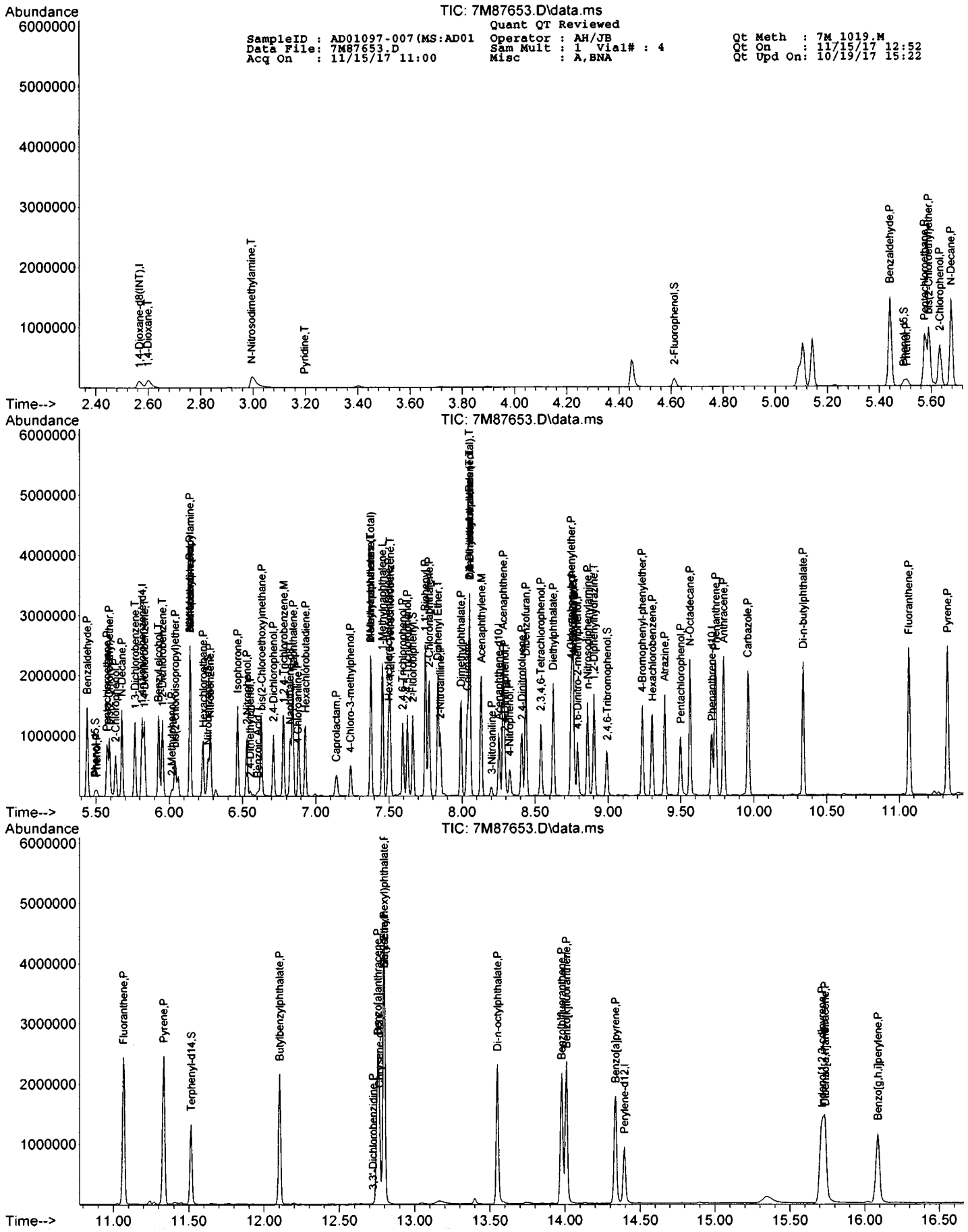
Quantitation Report (QT Reviewed)

SampleID : AD01097-007(MS:AD01 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87653.D Sam Mult : 1 Vial# : 4 Qt On : 11/15/17 12:52
Acq On : 11/15/17 11:00 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	2,4-Dinitrophenol	8.294	184	89773	106.3182	ng	37
68)	Dibenzofuran	8.438	168	834425	99.9194	ng	84
69)	2,4-Dinitrotoluene	8.411	165	199395	90.3367	ng	60
70)	4-Nitrophenol	8.326	65	71879	51.6508	ng	90
71)	2,3,4,6-Tetrachlorophenol	8.540	232	134566	79.6577	ng	86
72)	Fluorene	8.759	166	631548	90.4678	ng	97
73)	4-Chlorophenyl-phenyle...	8.748	204	288846	89.0641	ng	84
74)	Diethylphthalate	8.625	149	640390	89.8258	ng	97
75)	4-Nitroaniline	8.764	138	84522	41.9601	ng	70
76)	Atrazine	9.389	200	179878	102.1942	ng	94
78)	4,6-Dinitro-2-methylph...	8.791	198	131570	110.8636	ng	65
79)	n-Nitrosodiphenylamine	8.860	169	390936	64.4279	ng	98
81)	1,2-Diphenylhydrazine	8.903	77	641545	88.0194	ng	86
82)	4-Bromophenyl-phenylether	9.234	248	176893	93.0396	ng	85
83)	Hexachlorobenzene	9.304	284	184102	91.8499	ng	63
84)	N-Octadecane	9.565	57	376704	93.7872	ng	77
85)	Pentachlorophenol	9.501	266	119829	95.3873	ng	99
86)	Phenanthrene	9.742	178	929519	87.6054	ng	99
87)	Anthracene	9.795	178	935511	87.9642	ng	100
88)	Carbazole	9.961	167	909304	89.3249	ng	98
89)	Di-n-butylphthalate	10.340	149	1153386	99.7149	ng	97
90)	Fluoranthene	11.067	202	1066098	90.5933	ng	97
92)	Pyrene	11.334	202	1076359	93.6447	ng	92
97)	Butylbenzylphthalate	12.103	149	527141	96.0896	ng	74
99)	3,3'-Dichlorobenzidine	12.723	252	3523	1.0645	ng	90
100)	Benzo[a]anthracene	12.755	228	993448	91.7672	ng	100
101)	Chrysene	12.797	228	893614	88.8218	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.797	149	718580	107.4277	ng	92
104)	Di-n-octylphthalate	13.551	149	1274579	105.6345	ng	99
105)	Benzo[b]fluoranthene	13.978	252	965691m	99.1460	ng	
106)	Benzo[k]fluoranthene	14.010	252	938240	95.5071	ng	95
107)	Benzo[a]pyrene	14.336	252	813298	85.7460	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.714	276	934816	94.7625	ng	88
109)	Dibenzo[a,h]anthracene	15.736	278	765794	93.8522	ng	91
110)	Benzo[g,h,i]perylene	16.088	276	732289	87.0451	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87653.D\data.ms
Quant QT Reviewed
SampleID : AD01097-007(MS:AD01
Data File: 7M87653.D
Acq On : 11/15/17 11:00
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 12:52
Qt Upd On: 10/19/17 15:22
Abundance
Time-->
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Phenol-d5,S
2-Chlorophenol,P
N-Decane,P
Benzaldehyde,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Acenaphthylene,M
Acenaphthene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Pyrene,P
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Butylbenzylphthalate,P
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-008(MSD:AD
Client Id: DMW-18 MSD
Data File: 7M87654.D
Analysis Date: 11/15/17 11:23
Date Rec/Extracted: 11/10/17-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 980ml
Final Vol: 1ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	**1,4-Dioxane**	**0.51**	**60**				

Worksheet #: 444635

Total Target Concentration 60

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7111018 0107

Sample ID : AD01097-008(MSD:AD0 Operator : AH/JB Qt Meth : 7M_1015.M
Data File: 7M87654.D Sam Mult : 1 Vial# : 5 Qt On : 11/15/17 13:02
Acq On : 11/15/17 11:23 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	46786	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	82271	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	328138	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	198180	40.00	ng	-0.01
77) Phenanthrene-d10	9.715	188	354265	40.00	ng	0.00
91) Chrysene-d12	12.765	240	365129	40.00	ng	0.00
103) Perylene-d12	14.405	264	340932	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	79706	28.14	ng	0.00
Spiked Amount 100.000			Recovery = 28.14%			
16) Phenol-d5	5.495	99	61730	17.03	ng	0.00
Spiked Amount 100.000			Recovery = 17.03%			
32) Nitrobenzene-d5	6.264	128	71323	53.95	ng	0.00
Spiked Amount 50.000			Recovery = 107.90%			
55) 2-Fluorobiphenyl	7.664	172	308790	50.11	ng	-0.01
Spiked Amount 50.000			Recovery = 100.22%			
80) 2,4,6-Tribromophenol	8.994	330	77790	101.29	ng	0.00
Spiked Amount 100.000			Recovery = 101.29%			
94) Terphenyl-d14	11.515	244	349808	61.96	ng	0.00
Spiked Amount 50.000			Recovery = 123.92%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.604	88	71137	58.4903	ng	98
9) Pyridine	3.240	79	1961m	0.5928	ng	
10) N-Nitrosodimethylamine	3.000	74	132450	67.3296	ng	74
12) Benzaldehyde	5.441	77	231822	178.3723	ng	76
13) Aniline	5.537	93	6158m	1.4643	ng	
14) Pentachloroethane	5.575	117	80993	85.7446	ng	85
15) bis(2-Chloroethyl)ether	5.591	93	247584	78.2146	ng	79
17) Phenol	5.505	94	64858	15.3255	ng	83
18) 2-Chlorophenol	5.633	128	202427	67.6496	ng	81
19) N-Decane	5.676	57	230676	83.5563	ng	92
20) 1,3-Dichlorobenzene	5.767	146	224009	73.5825	ng	98
22) 1,4-Dichlorobenzene	5.831	146	228740	77.8937	ng	97
23) 1,2-Dichlorobenzene	5.954	146	222595	78.8110	ng	99
24) Benzyl alcohol	5.927	108	167140	88.3807	ng	74
25) bis(2-chloroisopropyl)...	6.040	45	248730	70.8922	ng	99
26) 2-Methylphenol	6.018	108	68195	25.7361	ng	95
27) Acetophenone	6.146	105	358084	87.7600	ng	56
28) Hexachloroethane	6.232	117	91201	79.5882	ng	86
29) N-Nitroso-di-n-propyla...	6.141	70	162999	87.8445	ng	84
30) 3&4-Methylphenol	6.141	108	33411	12.7450	ng	84
33) Nitrobenzene	6.280	77	257678	87.9251	ng	80
34) Isophorone	6.467	82	471023	86.1424	ng	87
35) 2-Nitrophenol	6.531	139	152871	102.8777	ng	84
36) 2,4-Dimethylphenol	6.552	107	26834	9.6929	ng	97
37) Benzoic Acid	6.606	105	70272	25.6777	ng	45
38) bis(2-Chloroethoxy)met...	6.633	93	296573	85.8790	ng	92
39) 2,4-Dichlorophenol	6.713	162	185288	87.4004	ng	90
40) 1,2,4-Trichlorobenzene	6.782	180	207217	86.2695	ng	97
41) Naphthalene	6.846	128	701584	88.6396	ng	99
42) 4-Chloroaniline	6.884	127	16033	4.9487	ng	77
43) Hexachlorobutadiene	6.932	225	104651	85.1950	ng	96
44) Caprolactam	7.145	113	52010	48.3733	ng	69
45) 4-Chloro-3-methylphenol	7.242	107	158046	64.5905	ng	81
46) 2-Methylnaphthalene	7.380	142	517999	91.2653	ng	99
47) 1-Methylnaphthalene	7.455	142	495738	91.2307	ng	92
48) Methylnaphthalenes (To...	7.380	142	1016768m	183.0865	ng	
49) 1,1'-Biphenyl	7.749	154	630274	94.5087	ng	96
51) 1,2,4,5-Tetrachloroben...	7.509	216	220945	88.5043	ng	98
52) Hexachlorocyclopentadiene	7.498	237	121940	87.0945	ng	99
53) 2,4,6-Trichlorophenol	7.599	196	146416m	88.7828	ng	
54) 2,4,5-Trichlorophenol	7.626	196	170377	106.4123	ng	98
56) 2-Chloronaphthalene	7.776	162	451111	85.4362	ng	92
57) 1,4-Dimethylnaphthalene	8.054	156	374747	91.5309	ng	85
58) Dimethylnaphthalenes (...	8.054	156	374747	91.5309	ng	85
59) Diphenyl Ether	7.835	170	353702	89.9842	ng	79
60) 2-Nitroaniline	7.851	65	163821	88.7918	ng	54
61) Coumarin	8.038	146	216689	98.8806	ng	78
62) Acenaphthylene	8.134	152	755301	92.0117	ng	99
63) Dimethylphthalate	7.995	163	533890	87.6965	ng	98
64) 2,6-Dinitrotoluene	8.054	165	121548	91.8517	ng	63
65) Acenaphthene	8.283	153	472496	87.9207	ng	99

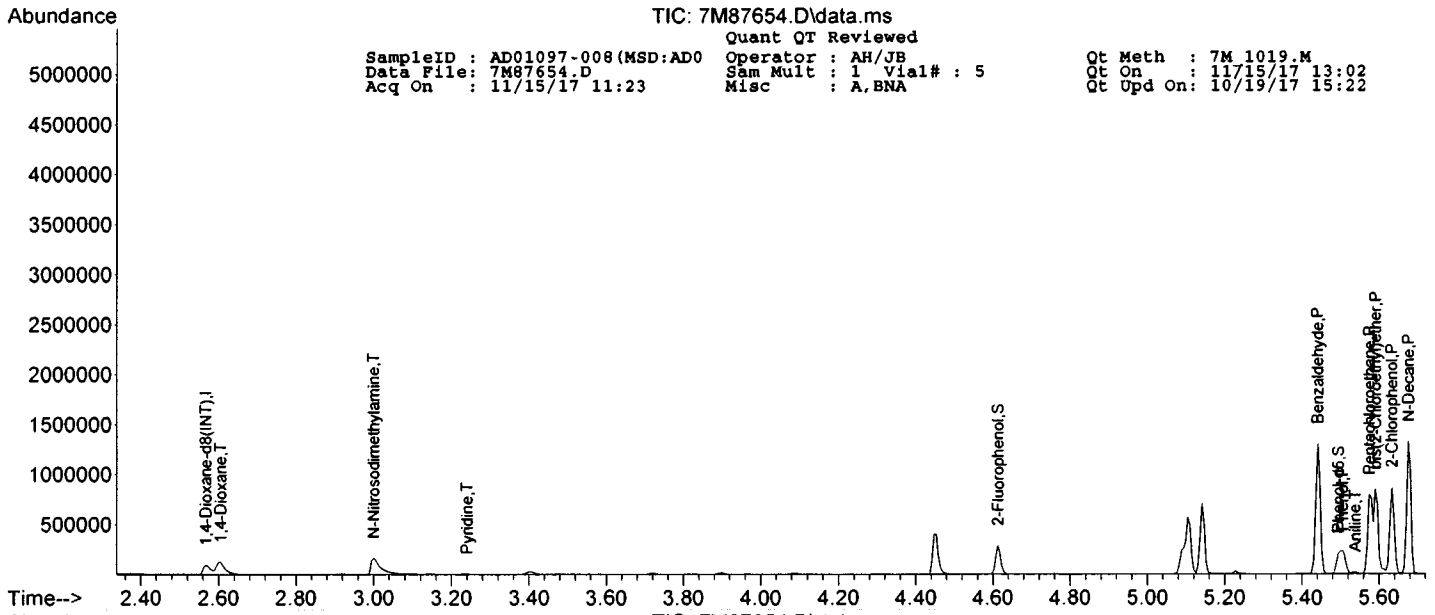
Quantitation Report (QT Reviewed)

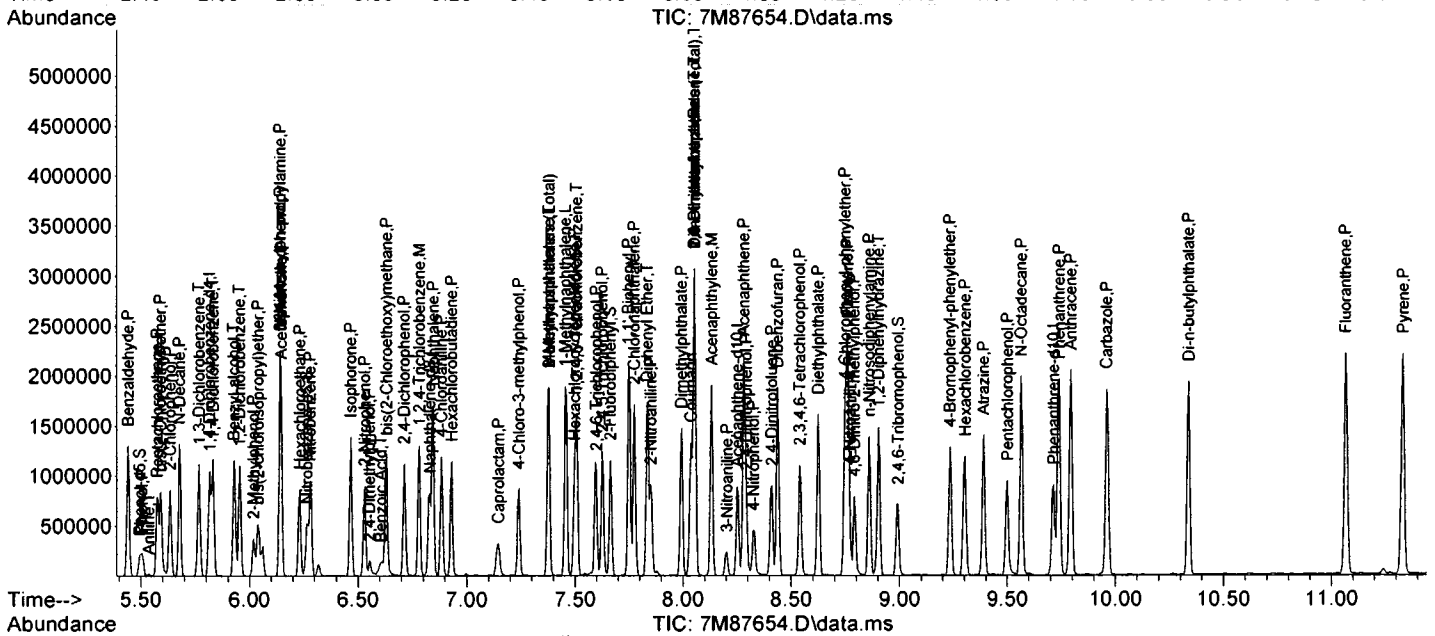
SampleID : AD01097-008(MSD:AD0 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87654.D Sam Mult : 1 Vial# : 5 Qt On : 11/15/17 13:02
Acq On : 11/15/17 11:23 Misc : A,BNA Qt Upd On: 10/19/17 15:22

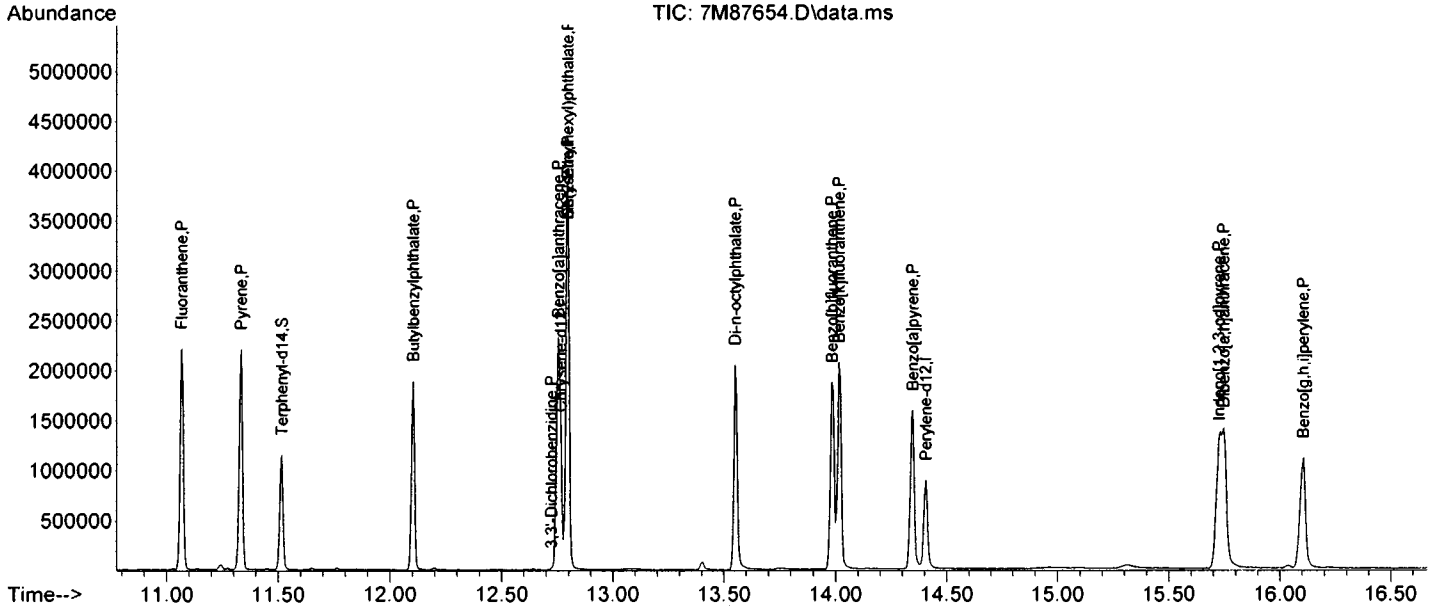
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.203	138	38018	24.5155	ng	77
67)	2,4-Dinitrophenol	8.294	184	79586	106.3456	ng	40
68)	Dibenzofuran	8.438	168	724593	97.8762	ng	84
69)	2,4-Dinitrotoluene	8.411	165	172669	88.3371	ng	60
70)	4-Nitrophenol	8.326	65	75887	61.2496	ng	93
71)	2,3,4,6-Tetrachlorophenol	8.540	232	129263	86.0723	ng	86
72)	Fluorene	8.759	166	552001	89.2221	ng	96
73)	4-Chlorophenyl-phenyle...	8.748	204	254063	88.3940	ng	85
74)	Diethylphthalate	8.625	149	565023	89.4268	ng	98
75)	4-Nitroaniline	8.769	138	96958	53.9939	ng	72
76)	Atrazine	9.389	200	153933	98.6790	ng	96
78)	4,6-Dinitro-2-methylph...	8.791	198	117219	112.2392	ng	61
79)	n-Nitrosodiphenylamine	8.860	169	343076	64.3700	ng	98
81)	1,2-Diphenylhydrazine	8.903	77	570764	89.1523	ng	86
82)	4-Bromophenyl-phenylether	9.234	248	154881	92.7427	ng	86
83)	Hexachlorobenzene	9.304	284	161481	91.7205	ng	64
84)	N-Octadecane	9.565	57	339084	96.1115	ng	76
85)	Pentachlorophenol	9.501	266	111373	100.3606	ng	99
86)	Phenanthrene	9.742	178	811894	87.1157	ng	99
87)	Anthracene	9.795	178	815092	87.2546	ng	99
88)	Carbazole	9.961	167	834064	93.2798	ng	97
89)	Di-n-butylphthalate	10.340	149	1015237	99.9258	ng	97
90)	Fluoranthene	11.067	202	943841	91.3109	ng	96
92)	Pyrene	11.334	202	945162	92.9766	ng	91
97)	Butylbenzylphthalate	12.103	149	467854	96.4049	ng	73
99)	3,3'-Dichlorobenzidine	12.723	252	3854	1.3169	ng	98
100)	Benzo[a]anthracene	12.755	228	891274	93.0883	ng	99
101)	Chrysene	12.797	228	802911	90.2358	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.797	149	629195	106.3575	ng	93
104)	Di-n-octylphthalate	13.551	149	1125569	101.8316	ng	100
105)	Benzo[b]fluoranthene	13.983	252	851217	95.0438	ng	96
106)	Benzo[k]fluoranthene	14.015	252	881475m	97.5839	ng	
107)	Benzo[a]pyrene	14.347	252	715822	82.0759	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.725	276	894729	98.6388	ng	89
109)	Dibenzo[a,h]anthracene	15.746	278	735297	98.0034	ng	94
110)	Benzo[g,h,i]perylene	16.104	276	699091	90.3737	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87654.D\data.ms
Quant QT Reviewed
SampleID : AD01097-008(MSD:AD0
Data File: 7M87654.D
Acq On : 11/15/17 11:23
Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 13:02
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Phenol-d6,S
Aniline,T
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 7M87654.D\data.ms
Time-->


Abundance
TIC: 7M87654.D\data.ms
Fluoranthene,P
Pyrene,P
Terphenyl-d14,S
Butylbenzylphthalate,P
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,T
Benzo[g,h,i]perylene,P
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-009
Client Id: DMW-68
Data File: 10M66061.D
Analysis Date: 11/15/17 19:21
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

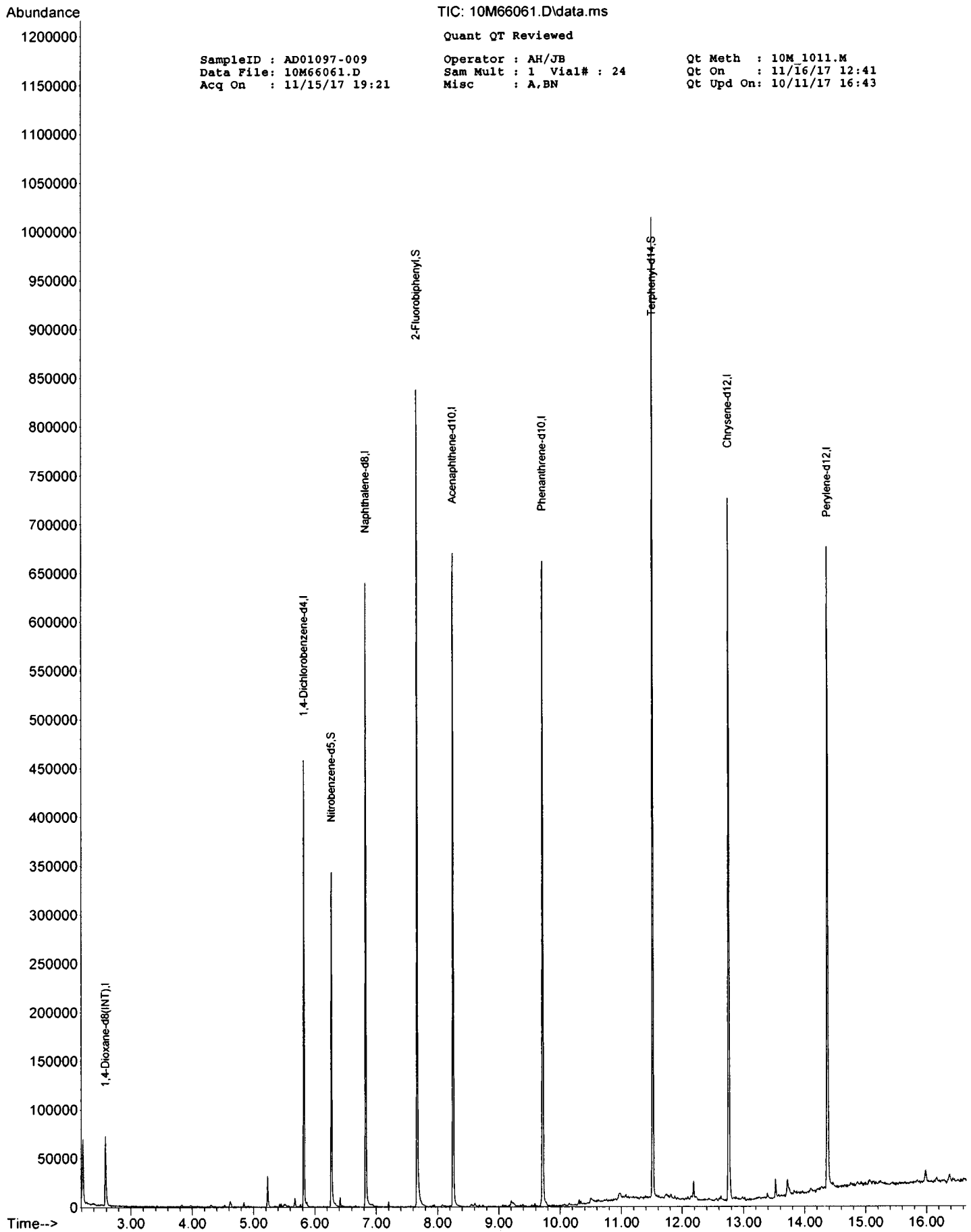
7111018 0111

SampleID : AD01097-009 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66061.D Sam Mult : 1 Vial# : 24 Qt On : 11/16/17 12:41
Acq On : 11/15/17 19:21 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	33141	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	72741	40.00	ng	-0.01
31) Naphthalene-d8	6.830	136	270829	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	165617	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	284655	40.00	ng	0.00
91) Chrysene-d12	12.756	240	305858	40.00	ng	-0.01
103) Perylene-d12	14.377	264	304333	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
32) Nitrobenzene-d5	6.273	128	54349	51.57	ng	0.00
Spiked Amount 50.000			Recovery = 103.14%			
55) 2-Fluorobiphenyl	7.664	172	267571	51.63	ng	-0.01
Spiked Amount 50.000			Recovery = 103.26%			
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
94) Terphenyl-d14	11.515	244	318727	68.16	ng	0.00
Spiked Amount 50.000			Recovery = 136.32%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M66061.D\data.ms
Quant QT Reviewed
SampleID : AD01097-009
Data File: 10M66061.D
Acq On : 11/15/17 19:21
Operator : AH/JB
Sam Mult : 1 Vial# : 24
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:41
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-010
Client Id: DMW-15A
Data File: 10M66062.D
Analysis Date: 11/15/17 19:44
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea

Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0114

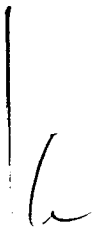
SampleID : AD01097-010 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66062.D Sam Mult : 1 Vial# : 25 Qt On : 11/16/17 12:41
Acq On : 11/15/17 19:44 Misc : A,BN Qt Upd On: 10/11/17 16:43

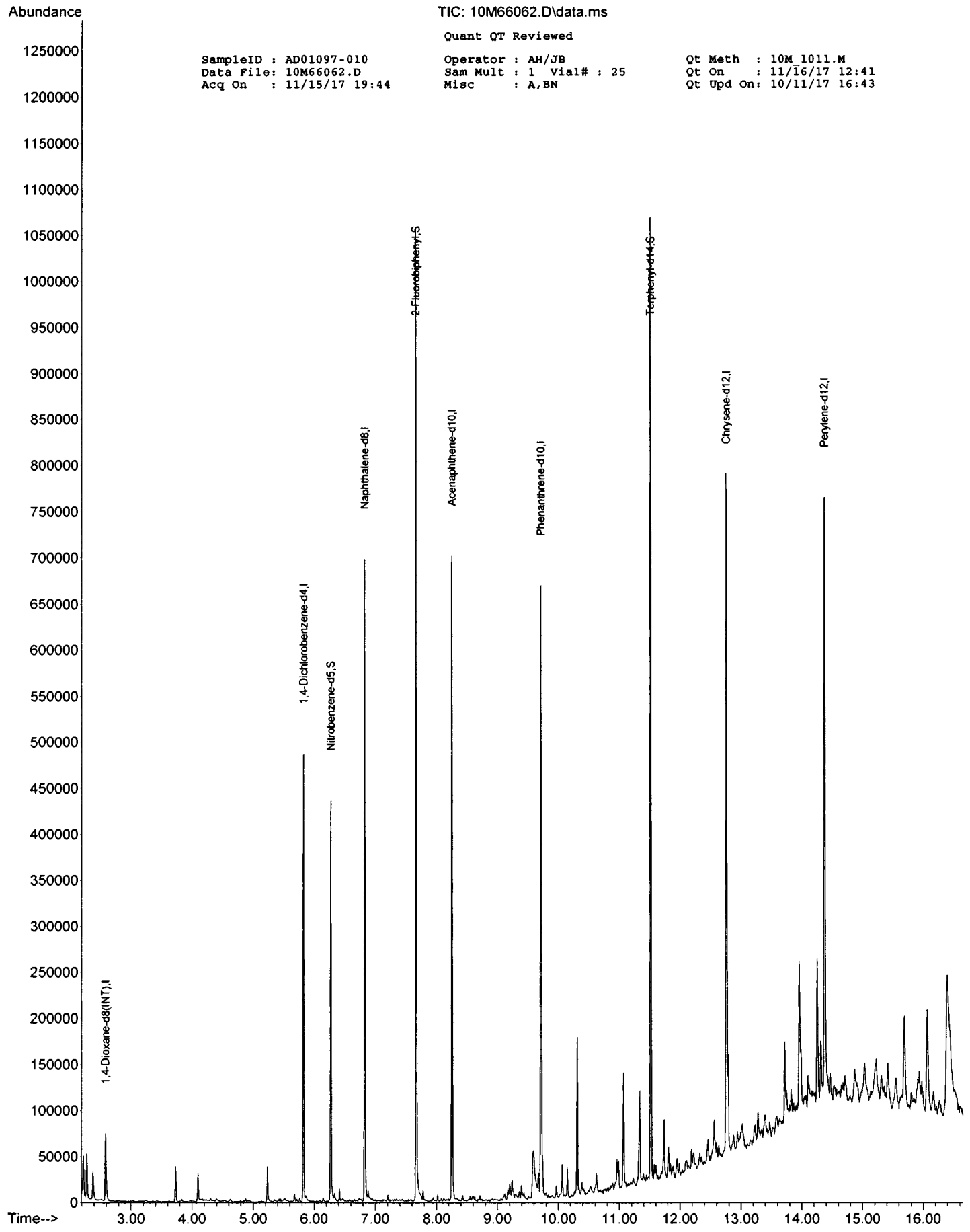
Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	35622	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	74709	40.00	ng	-0.01
31) Naphthalene-d8	6.830	136	282579	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	168489	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	277586	40.00	ng	0.00
91) Chrysene-d12	12.761	240	302526	40.00	ng	0.00
103) Perylene-d12	14.376	264	290270	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	65812	59.85	ng	0.00
Spiked Amount 50.000			Recovery =	119.70%		
55) 2-Fluorobiphenyl	7.664	172	326858	61.99	ng	-0.01
Spiked Amount 50.000			Recovery =	123.98%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	331607	71.70	ng	0.00
Spiked Amount 50.000			Recovery =	143.40%		

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 10M66062.D\data.ms
Quant QT Reviewed
SampleID : AD01097-010
Data File: 10M66062.D
Acq On : 11/15/17 19:44
Operator : AH/JB
Sam Mult : 1 Vial# : 25
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:41
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-011
Client Id: DMW-15B
Data File: 10M66063.D
Analysis Date: 11/15/17 20:06
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0117

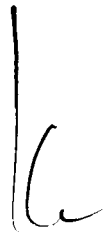
SampleID : AD01097-011 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66063.D Sam Mult : 1 Vial# : 26 Qt On : 11/16/17 12:41
Acq On : 11/15/17 20:06 Misc : A,BN Qt Upd On: 10/11/17 16:43

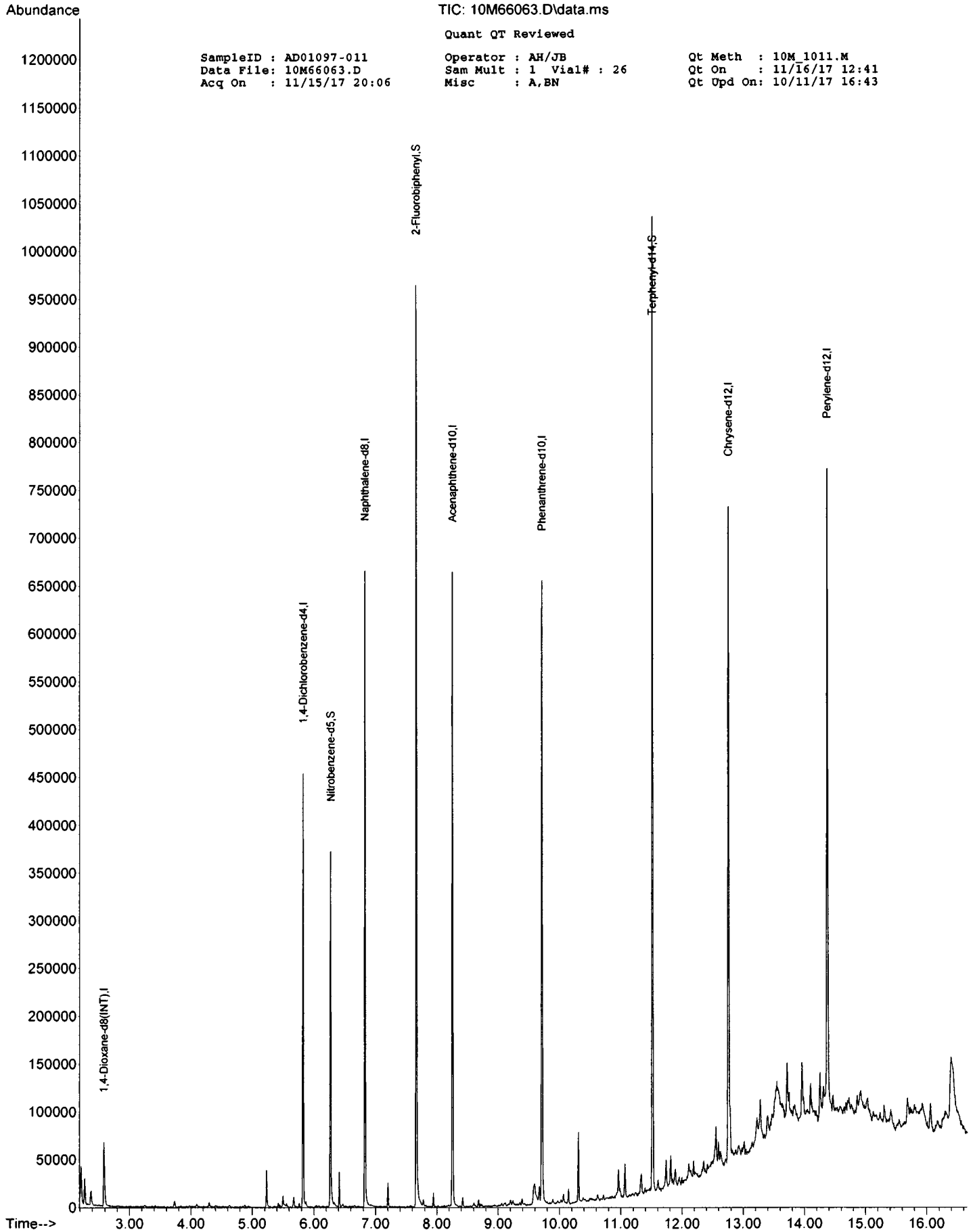
Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	32808	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	67911	40.00	ng	-0.01
31) Naphthalene-d8	6.829	136	268378	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	159855	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	276826	40.00	ng	0.00
91) Chrysene-d12	12.761	240	286609	40.00	ng	0.00
103) Perylene-d12	14.376	264	276279	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	56655	54.25	ng	0.00
Spiked Amount 50.000			Recovery =	108.50%		
55) 2-Fluorobiphenyl	7.664	172	305445	61.06	ng	-0.01
Spiked Amount 50.000			Recovery =	122.12%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	312017	71.21	ng	0.00
Spiked Amount 50.000			Recovery =	142.42%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 10M66063.D\data.ms
Quant QT Reviewed
SampleID : AD01097-011
Data File: 10M66063.D
Acq On : 11/15/17 20:06
Operator : AH/JB
Sam Mult : 1 Vial# : 26
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:41
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-012
Client Id: DMW-17
Data File: 10M66064.D
Analysis Date: 11/15/17 20:28
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

7111018 0120

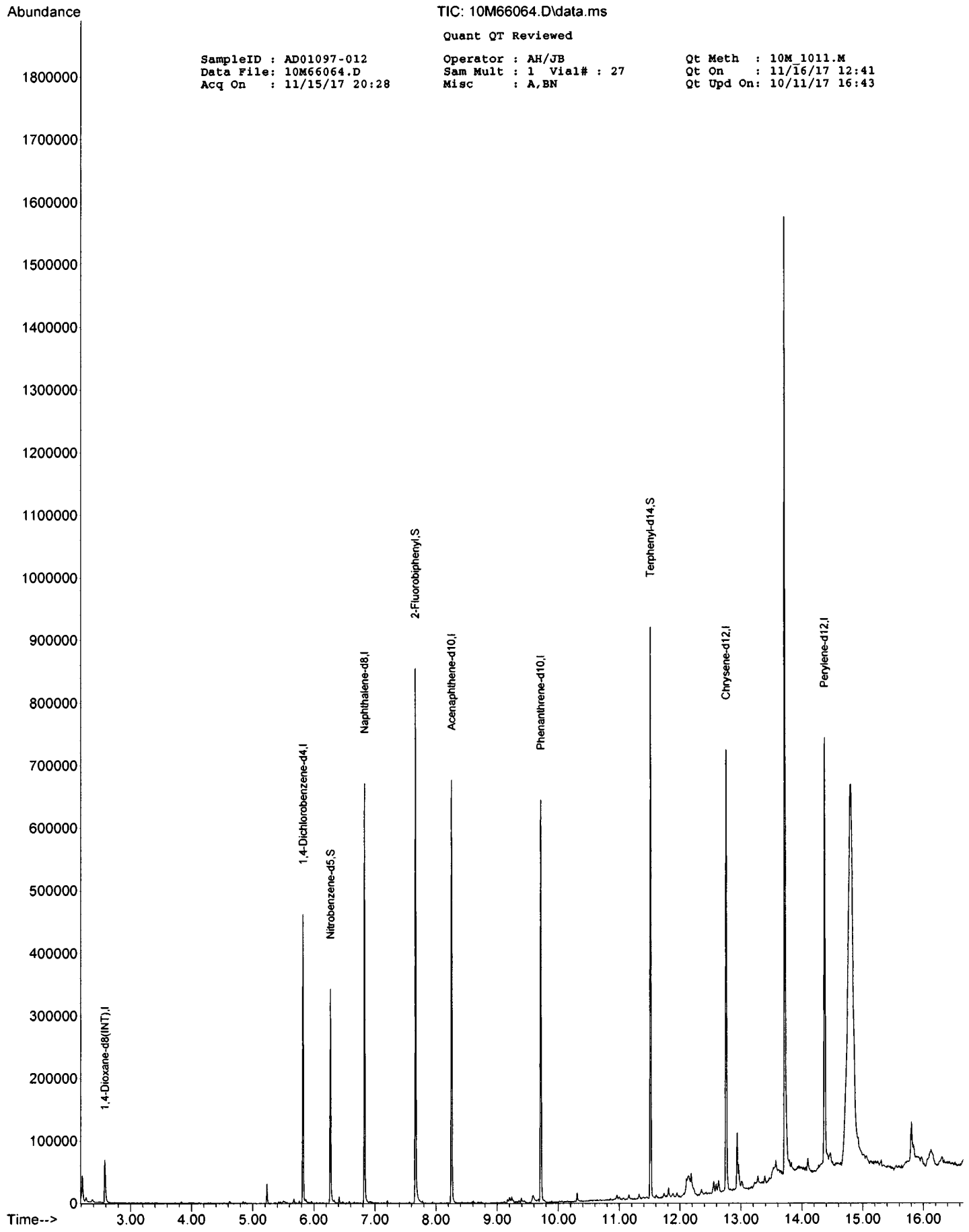
SampleID : AD01097-012 Operator : AH/JB Qt Meth : 10M_10711M
Data File: 10M66064.D Sam Mult : 1 Vial# : 27 Qt On : 11/16/17 12:41
Acq On : 11/15/17 20:28 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	32845	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	69628	40.00	ng	-0.01
31) Naphthalene-d8	6.829	136	266102	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	160603	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	271243	40.00	ng	0.00
91) Chrysene-d12	12.761	240	293830	40.00	ng	0.00
103) Perylene-d12	14.376	264	291625	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	52280	50.49	ng	0.00
Spiked Amount 50.000			Recovery =	100.98%		
55) 2-Fluorobiphenyl	7.664	172	264294	52.59	ng	-0.01
Spiked Amount 50.000			Recovery =	105.18%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	287087	63.91	ng	0.00
Spiked Amount 50.000			Recovery =	127.82%		

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M66064.D\data.ms
Quant QT Reviewed
SampleID : AD01097-012
Data File: 10M66064.D
Acq On : 11/15/17 20:28
Operator : AH/JB
Sam Mult : 1 Vial# : 27
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:41
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-013
Client Id: DMW-22A
Data File: 10M66065.D
Analysis Date: 11/15/17 20:50
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

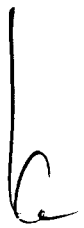
7111018 0123

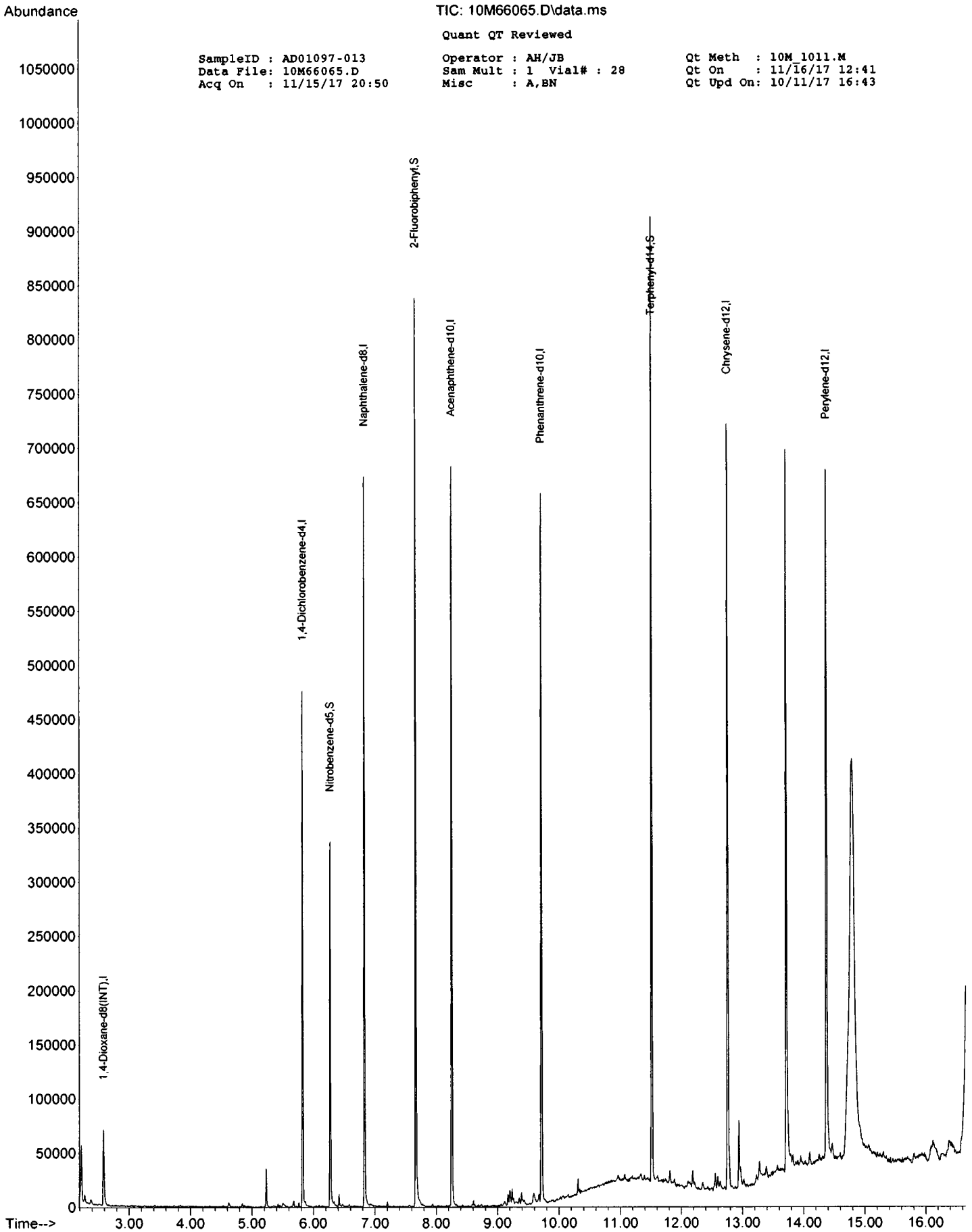
SampleID : AD01097-013 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66065.D Sam Mult : 1 Vial# : 28 Qt On : 11/16/17 12:41
Acq On : 11/15/17 20:50 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	33795	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	71179	40.00	ng	-0.01
31) Naphthalene-d8	6.830	136	269487	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	160014	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	278845	40.00	ng	0.00
91) Chrysene-d12	12.756	240	292419	40.00	ng	-0.01
103) Perylene-d12	14.376	264	288253	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	52001	49.58	ng	0.00
Spiked Amount 50.000			Recovery =	99.16%		
55) 2-Fluorobiphenyl	7.664	172	261031	52.13	ng	-0.01
Spiked Amount 50.000			Recovery =	104.26%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	273094	61.09	ng	0.00
Spiked Amount 50.000			Recovery =	122.18%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 10M66065.D\data.ms
Quant QT Reviewed
SampleID : AD01097-013
Data File: 10M66065.D
Acq On : 11/15/17 20:50
Operator : AH/JB
Sam Mult : 1 Vial# : 28
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:41
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
1050000
1000000
950000
900000
850000
800000
750000
700000
650000
600000
550000
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
Time-->
3.00
4.00
5.00
6.00
7.00
8.00
9.00
10.00
11.00
12.00
13.00
14.00
15.00
16.00

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-014
Client Id: DMW-22B
Data File: 10M66069.D
Analysis Date: 11/16/17 10:32
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration used
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0126

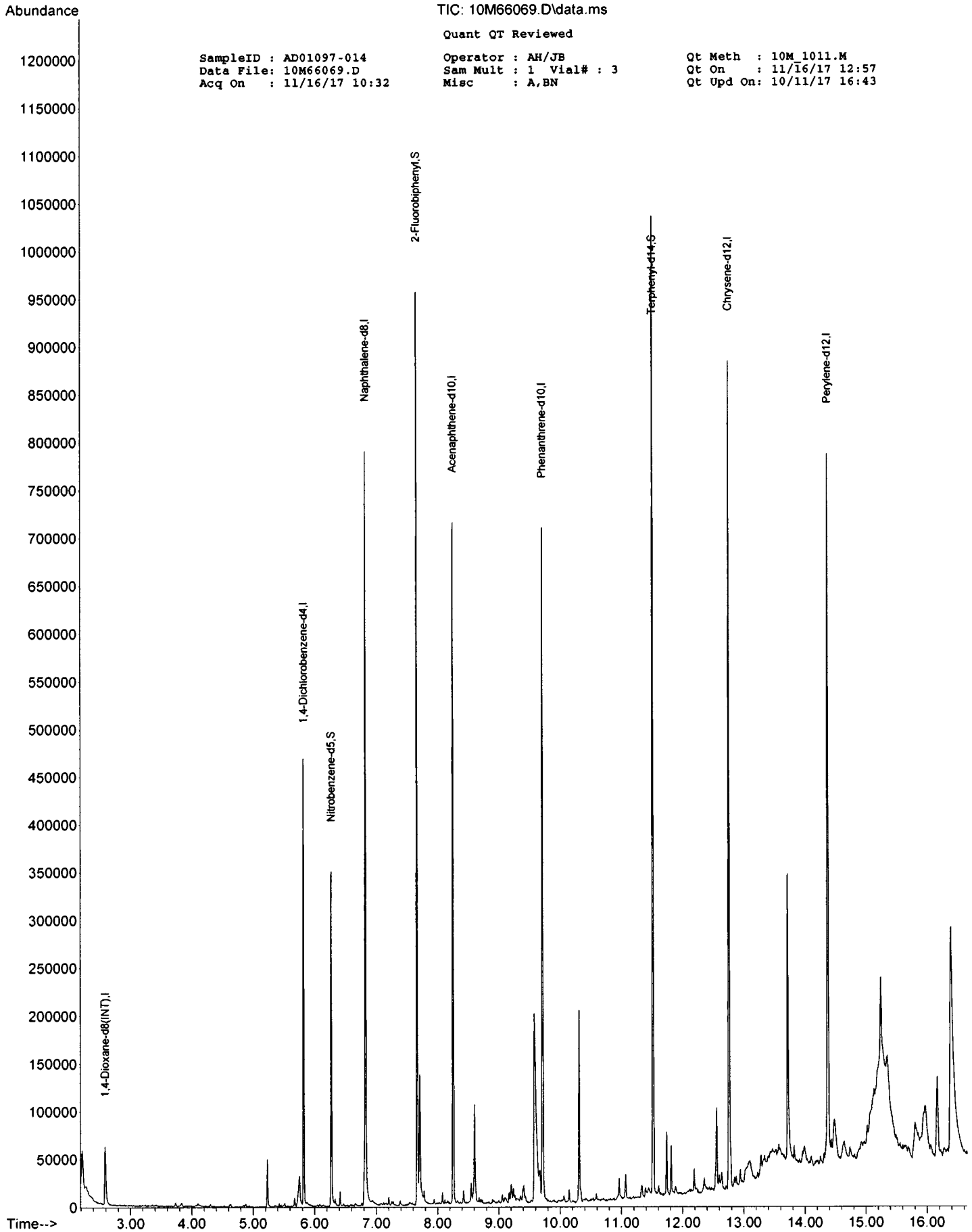
SampleID : AD01097-014 Operator : AH/JB Qt Meth : 10M_1011-M
Data File: 10M66069.D Sam Mult : 1 Vial# : 3 Qt On : 11/16/17 12:57
Acq On : 11/16/17 10:32 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.588	96	33938	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.824	152	71542	40.00	ng	-0.01
31) Naphthalene-d8	6.830	136	278089	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	170056	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	292752	40.00	ng	0.00
91) Chrysene-d12	12.761	240	350887	40.00	ng	0.00
103) Perylene-d12	14.377	264	330459	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	55197	51.00	ng	0.00
Spiked Amount 50.000			Recovery =	102.00%		
55) 2-Fluorobiphenyl	7.664	172	276545	51.97	ng	-0.01
Spiked Amount 50.000			Recovery =	103.94%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	327113	60.98	ng	0.00
Spiked Amount 50.000			Recovery =	121.96%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 10M66069.D\data.ms
Quant QT Reviewed
SampleID : AD01097-014
Data File: 10M66069.D
Acq On : 11/16/17 10:32
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:57
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-015
Client Id: DFB-20171109
Data File: 10M66070.D
Analysis Date: 11/16/17 10:54
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0129

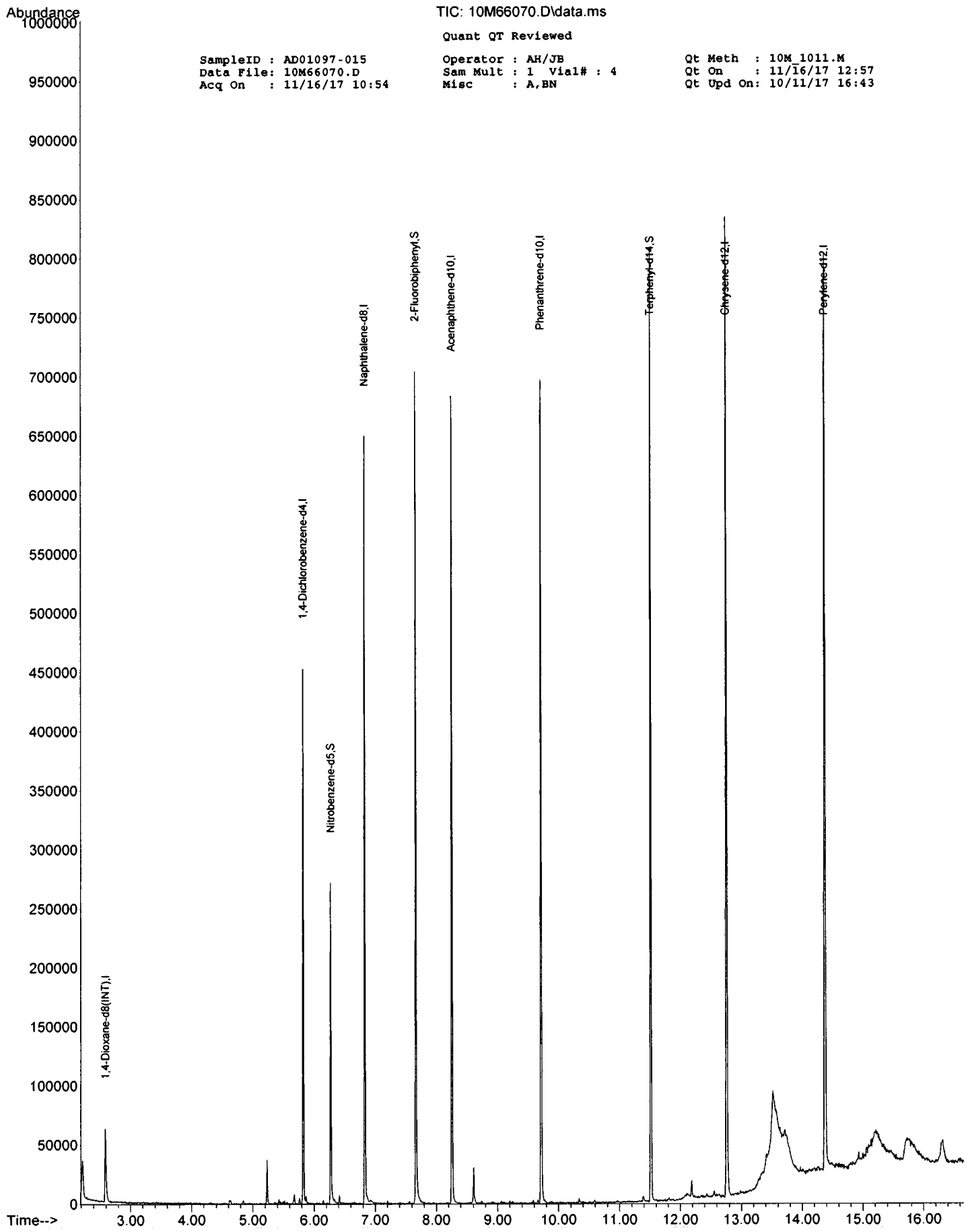
SampleID : AD01097-015 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66070.D Sam Mult : 1 Vial# : 4 Qt On : 11/16/17 12:57
Acq On : 11/16/17 10:54 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.588	96	31879	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.824	152	69319	40.00	ng	-0.01
31) Naphthalene-d8	6.829	136	270121	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	166043	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	294814	40.00	ng	0.00
91) Chrysene-d12	12.756	240	344061	40.00	ng	-0.01
103) Perylene-d12	14.376	264	350548	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	42826	40.74	ng	0.00
Spiked Amount 50.000			Recovery =	81.48%		
55) 2-Fluorobiphenyl	7.664	172	217464	41.85	ng	-0.01
Spiked Amount 50.000			Recovery =	83.70%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	257307	48.92	ng	0.00
Spiked Amount 50.000			Recovery =	97.84%		

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M66070.D\data.ms
Quant QT Reviewed
SampleID : AD01097-015
Data File: 10M66070.D
Acq On : 11/16/17 10:54
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:57
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-016
Client Id: DMW-13A
Data File: 10M66071.D
Analysis Date: 11/16/17 11:16
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0132

SampleID : AD01097-016 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66071.D Sam Mult : 1 Vial# : 5 Qt On : 11/16/17 12:57
Acq On : 11/16/17 11:16 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.588	96	34111	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.824	152	74913	40.00	ng	-0.01
31) Naphthalene-d8	6.829	136	293317	40.00	ng	-0.01
50) Acenaphthene-d10	8.257	164	180470	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	313132	40.00	ng	0.00
91) Chrysene-d12	12.761	240	351248	40.00	ng	0.00
103) Perylene-d12	14.376	264	333771	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	57076	50.00	ng	0.00
Spiked Amount 50.000			Recovery =	100.00%		
55) 2-Fluorobiphenyl	7.664	172	297110	52.61	ng	-0.01
Spiked Amount 50.000			Recovery =	105.22%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	329902	61.43	ng	0.00
Spiked Amount 50.000			Recovery =	122.86%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed

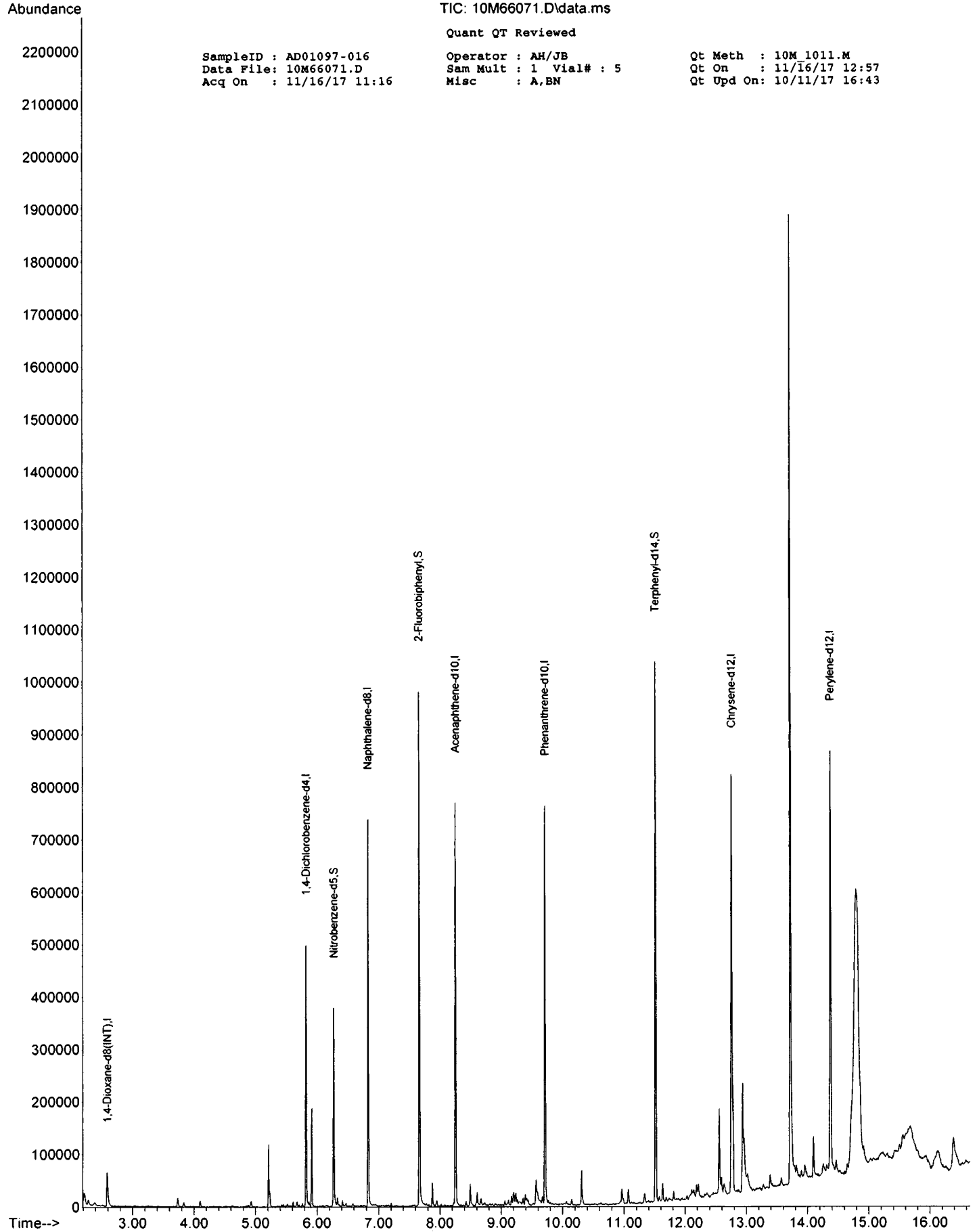
TIC: 10M66071.D\data.ms

Quant QT Reviewed

SampleID : AD01097-016
Data File: 10M66071.D
Acq On : 11/16/17 11:16

Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BN

Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:57
Qt Upd On: 10/11/17 16:43



Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: AD01097-017
Client Id: DMW-13B
Data File: 10M66072.D
Analysis Date: 11/16/17 11:39
Date Rec/Extracted: 11/10/17-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0135

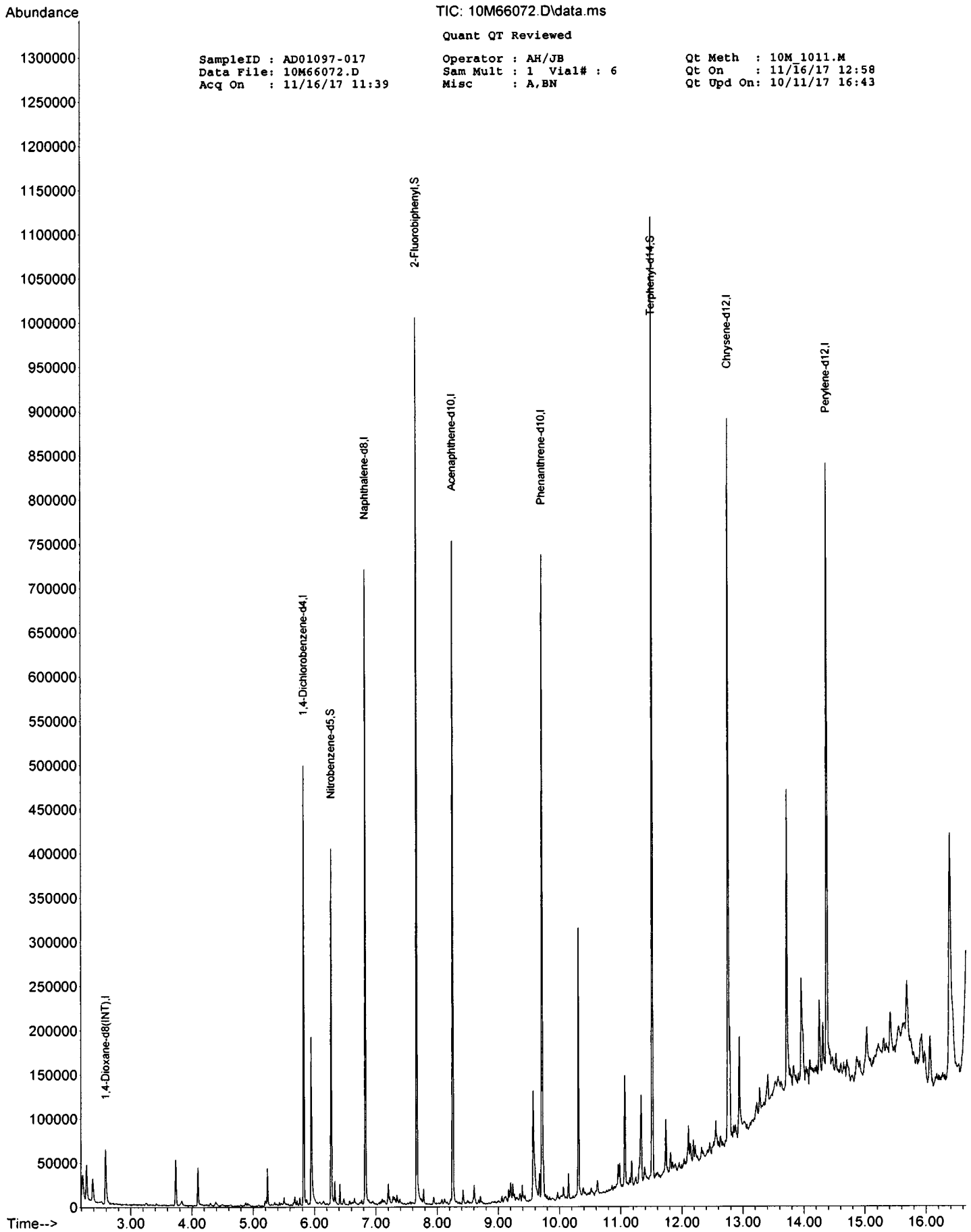
SampleID : AD01097-017 Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66072.D Sam Mult : 1 Vial# : 6 Qt On : 11/16/17 12:58
Acq On : 11/16/17 11:39 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.588	96	32794	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.824	152	72112	40.00	ng	-0.01
31) Naphthalene-d8	6.830	136	281924	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	173079	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	296094	40.00	ng	0.00
91) Chrysene-d12	12.761	240	322694	40.00	ng	0.00
103) Perylene-d12	14.377	264	296922	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	57030	51.98	ng	0.00
Spiked Amount 50.000			Recovery =	103.96%		
55) 2-Fluorobiphenyl	7.664	172	296003	54.65	ng	-0.01
Spiked Amount 50.000			Recovery =	109.30%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	326031	66.08	ng	0.00
Spiked Amount 50.000			Recovery =	132.16%		
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 10M66072.D\data.ms
Quant QT Reviewed
SampleID : AD01097-017
Data File: 10M66072.D
Acq On : 11/16/17 11:39
Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BN
Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:58
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

GC/MS Base Neutral/Acid Extractable Data
Standards Data

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M65435.D	CAL BNA@50PPM	10/11/17 16:13	2	10M65426.D	CAL BNA@2PPM	10/11/17 12:48
3	10M65434.D	CAL BNA@10PPM	10/11/17 15:51	4	10M65432.D	CAL BNA@20PPM	10/11/17 15:01
5	10M65430.D	CAL BNA@80PPM	10/11/17 14:17	6	10M65429.D	CAL BNA@120PPM	10/11/17 13:55
7	10M65428.D	CAL BNA@160PPM	10/11/17 13:33	8	10M65427.D	CAL BNA@196PPM	10/11/17 13:10
9	10M65433.D	CAL BNA@.5PPM	10/11/17 15:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	1.0726	1.3877	0.9869	1.0685	1.0231	1.0342	1.0201	1.0850	2.1909	1.21	2.63	0.998	0.999	32		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Ava	2.5799	2.5595	2.1896	2.4763	2.7021	2.6162	2.6412	2.7316	-----	2.56	3.10	0.999	0.999	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Ava	1.4715	1.3616	1.2429	1.3962	1.5060	1.5072	1.4806	1.5801	-----	1.44	3.03	0.998	0.999	7.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Ava	2.5935	2.8422	2.2331	2.5194	2.6686	2.6303	2.5953	2.8060	-----	2.61	4.63	0.998	0.999	7.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Ava	1.3067	1.5937	1.2048	1.3608	1.2673	1.0621	0.9375	0.9002	-----	1.20	5.46	0.977	0.998	19	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Qua	4.1666	2.6044	2.2558	3.1830	4.1778	4.0454	4.1347	4.1310	2.8105	3.50	5.55	0.999	0.999	22		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Ava	0.9697	0.9955	0.7932	0.9122	0.9692	0.9513	0.9560	0.9862	-----	0.942	5.59	0.999	1.00	6.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Ava	2.6831	2.9554	2.4775	2.6387	2.6779	2.6129	2.7152	2.6608	3.3085	2.75	5.61	1.00	1.00	8.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Ava	3.2756	3.2500	2.7786	3.0976	3.3085	3.2122	3.2895	3.4848	-----	3.21	5.51	0.998	0.999	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Ava	3.7510	4.0224	3.2041	3.5541	3.7355	3.6347	3.7457	3.8026	-----	3.68	5.52	0.999	1.00	6.4	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Ava	3.0961	3.2203	2.7549	3.0604	3.0732	3.0766	3.1224	3.2268	-----	3.08	5.65	0.999	1.00	4.7	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Ava	3.1313	3.4748	2.8730	3.1100	3.1116	2.9887	3.0457	2.9985	-----	3.09	5.70	1.00	1.00	5.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Ava	3.3670	3.9222	3.0144	3.2786	3.3529	3.3139	3.2401	3.4822	-----	3.37	5.78	0.998	0.998	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Ava	1.4681	1.8402	1.3267	1.4824	1.4911	1.4720	1.4528	1.5093	-----	1.51	5.85	0.999	1.00	9.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Ava	1.3966	1.7779	1.2381	1.4011	1.4069	1.3909	1.3871	1.3902	-----	1.42	5.97	1.00	1.00	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Ava	0.8391	0.9611	0.7267	0.8144	0.8234	0.8351	0.8338	0.8406	-----	0.834	5.94	1.00	1.00	7.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Ava	1.9758	2.5250	1.7727	2.0044	1.9480	1.8932	1.8323	1.9103	-----	1.98	6.05	0.999	0.999	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Ava	1.1361	1.3221	0.9896	1.1137	1.1308	1.1346	1.1315	1.1511	1.4337	1.17	6.03	1.00	1.00	11	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Ava	1.7744	2.2044	1.6053	1.8363	1.7236	1.6873	1.6349	1.6255	-----	1.76	6.16	0.999	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Ava	0.5336	0.6271	0.4495	0.5319	0.5375	0.5380	0.5330	0.5485	-----	0.537	6.25	1.00	1.00	8.9	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Ava	0.8053	0.9441	0.7166	0.8320	0.7939	0.7677	0.7396	0.7488	0.9275	0.808	6.16	0.999	1.00	9.9	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Ava	1.1841	1.3740	1.0380	1.2145	1.1877	1.1648	1.1200	1.1138	1.3793	1.20	6.16	0.999	1.00	9.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Ava	0.1523	0.1660	0.1303	0.1454	0.1588	0.1602	0.1614	0.1706	-----	0.156	6.28	0.998	1.00	8.2		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Ava	0.2963	0.3650	0.2650	0.2981	0.3106	0.2966	0.2998	0.3163	-----	0.306	6.29	0.998	0.999	9.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Ava	0.5566	0.6692	0.4931	0.5523	0.5612	0.5533	0.5651	0.6010	-----	0.569	6.48	0.998	0.999	8.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Ava	0.1801	0.1760	0.1476	0.1777	0.1908	0.1914	0.1935	0.2022	-----	0.182	6.55	0.998	0.999	9.1	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Ava	0.3066	0.3531	0.2747	0.3103	0.3116	0.3082	0.3132	0.3260	0.3722	0.320	6.57	0.999	1.00	8.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2661	-----	0.0537	0.1961	0.3258	0.3417	0.3596	0.3613	-----	0.272	6.64	0.999	0.999	42		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Ava	0.3612	0.4355	0.3288	0.3710	0.3628	0.3557	0.3579	0.3694	-----	0.368	6.64	0.999	1.00	8.2	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Ava	0.2846	0.3060	0.2453	0.2807	0.2954	0.2922	0.3013	0.3123	0.3003	0.291	6.72	0.999	1.00	6.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Ava	0.3053	0.3768	0.2797	0.3110	0.3168	0.3121	0.3169	0.3412	-----	0.320	6.79	0.997	0.999	8.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Qua	1.0368	1.2320	0.9299	1.0440	1.0124	1.0039	1.0014	0.9895	1.4204	1.07	6.86	1.00	1.00	14	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3811	0.3173	0.2215	0.2995	0.3633	0.3251	0.2900	-----	0.3403	0.317	6.89	0.983	0.998	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0		0.50
Hexachlorobutadiene	1	0	Ava	0.1699	0.2072	0.1564	0.1693	0.1749	0.1730	0.1783	0.1792	-----	0.176	6.94	1.00	1.00	8.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Qua	0.1148	0.1190	0.0981	0.1130	0.1189	0.1141	0.1302	0.1297	-----	0.117	7.17	0.995	0.998	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Ava	0.2620	0.2999	0.2246	0.2585	0.2780	0.2634	0.2733	0.2752	-----	0.267	7.25	0.999	0.999	8.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Ava	0.6974	0.8354	0.6153	0.7108	0.7122	0.7045	0.7056	0.6898	-----	0.709	7.39	1.00	1.00	8.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Ava	0.6490	0.7877	0.6202	0.6649	0.7000	0.6780	0.6796	0.6673	-----	0.681	7.47	0.999	1.00	7.2	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (	1	0	Ava	0.6743	0.8115	0.6166	0.6909	0.7024	0.6876	0.6899	0.6762	-----	0.694	7.39	1.00	1.00	7.8		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Ava	0.8207	0.9593	0.7396	0.8171	0.8031	0.8302	0.8151	0.8092	-----	0.824	7.76	1.00	1.00	7.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Ava	0.5865	0.6649	0.4950	0.5590	0.5757	0.5512	0.5500	0.5618	-----	0.568	7.52	0.999	0.999	8.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.59

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M65435.D	CAL BNA@50PPM	10/11/17 16:13	2	10M65426.D	CAL BNA@2PPM	10/11/17 12:48
3	10M65434.D	CAL BNA@10PPM	10/11/17 15:51	4	10M65432.D	CAL BNA@20PPM	10/11/17 15:01
5	10M65430.D	CAL BNA@80PPM	10/11/17 14:17	6	10M65429.D	CAL BNA@120PPM	10/11/17 13:55
7	10M65428.D	CAL BNA@160PPM	10/11/17 13:33	8	10M65427.D	CAL BNA@196PPM	10/11/17 13:10
9	10M65433.D	CAL BNA@.5PPM	10/11/17 15:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Avg	0.3347	0.2998	0.2534	0.3121	0.3605	0.3452	0.3597	0.3646	-----	0.329	7.51	0.999	0.999	12	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3505	0.3713	0.2945	0.3439	0.3555	0.3413	0.3544	0.3672	-----	0.347	7.60	0.999	0.999	6.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3738	0.3910	0.3190	0.3652	0.3829	0.3754	0.3839	0.3952	-----	0.373	7.64	0.999	1.00	6.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2658	1.3955	1.1023	1.2645	1.2431	1.2167	1.2433	1.2824	-----	1.25	7.67	0.999	0.999	6.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0651	1.1951	0.9342	1.0674	1.0654	1.0219	1.0288	1.0611	-----	1.05	7.79	0.999	0.999	6.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8603	0.9967	0.7621	0.8803	0.8759	0.8453	0.8286	0.8168	-----	0.858	8.06	0.999	0.999	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8603	0.9967	0.7621	0.8803	0.8759	0.8453	0.8286	0.8168	-----	0.858	8.06	0.999	0.999	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.8230	0.9363	0.7239	0.8187	0.8361	0.8081	0.8049	0.8330	-----	0.823	7.85	0.999	0.999	7.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3603	0.3698	0.2977	0.3571	0.3679	0.3474	0.3427	0.3494	-----	0.349	7.86	0.999	0.999	6.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4363	0.4817	0.3873	0.4538	0.4339	0.4276	0.4325	0.4294	-----	0.435	8.05	1.00	1.00	6.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.7180	1.9233	1.5118	1.6971	1.7152	1.7207	1.6756	1.7225	-----	1.71	8.15	1.00	1.00	6.5	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2002	1.3820	1.0548	1.2113	1.2074	1.1828	1.2075	1.2280	-----	1.21	8.01	1.00	1.00	7.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Qua	0.2835	0.2599	0.2413	0.2864	0.2910	0.2867	0.2824	0.2777	-----	0.276	8.06	0.999	1.00	6.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.1152	1.3269	1.0147	1.1124	1.1101	1.0797	1.0792	1.0970	-----	1.12	8.29	1.00	1.00	8.1	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3182	0.2766	0.2280	0.2819	0.3141	0.2871	0.2671	0.2511	-----	0.278	8.21	0.988	0.999	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1179	-----	0.0126	0.0644	0.1477	0.1628	0.1765	0.1809	-----	0.123	8.30	0.997	0.999	51	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Avg	1.5688	1.7968	1.3919	1.5908	1.5862	1.5595	1.5507	1.5816	1.9602	1.62	8.45	1.00	1.00	10	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Qua	0.3718	0.3267	0.2932	0.3641	0.3812	0.3732	0.3813	0.3898	-----	0.360	8.42	0.999	1.00	9.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2370	0.1929	0.1649	0.2179	0.2307	0.2274	0.2229	0.2247	-----	0.215	8.33	0.999	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3373	0.3218	0.2709	0.3227	0.3209	0.3310	0.3284	0.3474	-----	0.323	8.55	0.999	0.999	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2831	1.4515	1.1370	1.2789	1.2714	1.2907	1.2709	1.2788	-----	1.28	8.77	1.00	1.00	6.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6014	0.6358	0.5250	0.5939	0.5923	0.6112	0.6091	0.6241	-----	0.599	8.76	1.00	1.00	5.6	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2221	1.5396	1.0774	1.2305	1.1820	1.2086	1.2180	1.2591	-----	1.24	8.64	0.999	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Qua	0.3688	0.3424	0.3071	0.3583	0.3604	0.3726	0.3710	0.3822	-----	0.358	8.78	0.999	1.00	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3344	0.3359	0.2731	0.3303	0.3239	0.3289	0.3355	0.3507	-----	0.327	9.40	0.998	1.00	7.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1078	-----	0.0382	0.0794	0.1230	0.1288	0.1400	0.1413	-----	0.108	8.80	0.998	0.999	35	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6139	0.7046	0.5420	0.6240	0.6370	0.6371	0.6326	0.6500	-----	0.630	8.87	0.999	1.00	7.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.1088	0.1032	0.0879	0.1079	0.1129	0.1153	0.1178	0.1198	-----	0.109	9.00	0.999	1.00	9.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.6246	0.6818	0.5745	0.6255	0.6350	0.6903	0.6853	0.6856	-----	0.650	8.92	0.998	0.999	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2048	0.2346	0.1754	0.2032	0.2120	0.2025	0.2124	0.2195	-----	0.208	9.25	0.998	0.999	8.1	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2187	0.2363	0.1948	0.2086	0.2249	0.2171	0.2286	0.2332	-----	0.220	9.31	0.996	0.999	6.2	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4531	0.4888	0.3900	0.4492	0.4614	0.4371	0.4291	0.4222	-----	0.441	9.58	0.999	1.00	6.6	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1308	-----	0.0739	0.1067	0.1462	0.1456	0.1564	0.1627	-----	0.132	9.51	0.997	1.00	24	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0984	1.3303	0.9904	1.0872	1.1149	1.1065	1.1062	1.1118	-----	1.12	9.75	1.00	1.00	8.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.1409	1.2744	0.9897	1.1013	1.1390	1.1378	1.1322	1.1583	-----	1.13	9.80	1.00	1.00	6.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0317	1.1659	0.9108	1.0276	1.0430	1.0566	1.0503	1.0490	-----	1.04	9.97	1.00	1.00	6.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Qua	1.2023	1.2595	1.0055	1.1737	1.2469	1.1893	1.2462	1.2440	1.2092	1.20	10.35	0.999	1.00	6.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1830	1.3021	1.0266	1.1526	1.2114	1.1488	1.1847	1.2015	-----	1.18	11.08	0.999	0.999	6.5	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1279	1.2380	0.9503	1.1075	1.1632	1.1333	1.1212	1.0991	-----	1.12	11.34	0.999	1.00	7.2	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.5932	0.3014	0.2310	0.4063	0.5807	0.5025	0.4536	-----	-----	0.438	11.23	0.976	0.996	31		50.00	2.00	10.00	20.00	80.00	120.0	160.0		
Terphenyl-d14	1	0	Avg	0.6037	0.6592	0.5194	0.6049	0.6208	0.5982	0.6351	0.6507	-----	0.612	11.52	0.998	0.999	7.1		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Avg Rsd: 9.59

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

7111018 0140

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_10

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	10M65435.D	CAL BNA@50PPM	10/11/17 16:13	2	10M65426.D	CAL BNA@2PPM	10/11/17 12:48
3	10M65434.D	CAL BNA@10PPM	10/11/17 15:51	4	10M65432.D	CAL BNA@20PPM	10/11/17 15:01
5	10M65430.D	CAL BNA@80PPM	10/11/17 14:17	6	10M65429.D	CAL BNA@120PPM	10/11/17 13:55
7	10M65428.D	CAL BNA@160PPM	10/11/17 13:33	8	10M65427.D	CAL BNA@196PPM	10/11/17 13:10
9	10M65433.D	CAL BNA@.5PPM	10/11/17 15:24				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2183	0.2414	0.1876	0.2125	0.2323	0.2272	0.2365	0.2316	-----	0.223	11.46	0.999	0.999	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4249	0.4290	0.3600	0.4288	0.4365	0.4221	0.4473	0.4404	-----	0.424	11.86	0.999	0.999	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.4978	0.4978	0.3860	0.4840	0.5104	0.4944	0.5235	0.5144	-----	0.489	12.11	0.999	0.999	8.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3705	0.3172	0.2950	0.3556	0.3970	0.3700	0.3850	0.3786	-----	0.359	12.21	0.999	0.999	9.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3257	0.2634	0.2002	0.2290	0.3206	0.2868	0.2744	0.2658	-----	0.271	12.73	0.991	0.998	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0446	1.2089	0.8798	0.9913	1.0366	0.9994	1.0317	1.0200	-----	1.03	12.76	1.00	1.00	8.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9659	1.1314	0.8748	0.9986	0.9978	0.9296	0.9491	0.9511	-----	0.975	12.80	0.999	0.999	7.7	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7097	0.6748	0.5681	0.6864	0.7344	0.6901	0.7057	0.6939	-----	0.683	12.80	0.999	0.999	7.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2939	1.1421	0.9681	1.1644	1.3296	1.3038	1.3804	1.3746	-----	1.24	13.55	0.999	1.00	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.1059	1.1651	0.8842	0.9929	1.1655	1.0662	1.1951	1.1637	-----	1.09	13.96	0.997	0.998	9.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0641	1.1905	0.9771	1.0577	1.1375	1.0462	1.1359	1.0948	-----	1.09	14.00	0.998	0.998	6.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0542	1.1111	0.8700	0.9898	1.0700	1.0593	1.0906	1.0993	-----	1.04	14.32	1.00	1.00	7.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1662	1.1991	0.9575	1.0756	1.1503	1.1483	1.1980	1.2375	-----	1.14	15.70	0.998	0.999	7.7	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9849	0.9979	0.8101	0.9037	0.9825	0.9691	1.0224	1.0551	-----	0.966	15.72	0.998	1.00	7.9	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9648	1.0971	0.8431	0.9150	0.9734	0.9510	1.0170	1.0388	-----	0.975	16.08	0.998	0.999	8.0	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags	*Note:* Avg Rsd: 9.59
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65435.D Sam Mult : 1 Vial# : 3 Qt On : 10/11/17 16:30
Acq On : 10/11/17 16:13 Misc : A,BNA Qt Upd On: 10/11/17 16:29

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	33882	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.835	152	80006	40.00	ng	0.00
31) Naphthalene-d8	6.840	136	313413	40.00	ng	0.00
50) Acenaphthene-d10	8.263	164	183517	40.00	ng	0.00
77) Phenanthrene-d10	9.723	188	322810	40.00	ng	0.00
91) Chrysene-d12	12.766	240	359198	40.00	ng	0.00
103) Perylene-d12	14.382	264	321946	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.631	112	109841	49.68	ng	0.00
Spiked Amount 100.000			Recovery = 49.68%			
16) Phenol-d5	5.508	99	138732	51.41	ng	0.00
Spiked Amount 100.000			Recovery = 51.41%			
32) Nitrobenzene-d5	6.278	128	29834	24.26	ng	0.00
Spiked Amount 50.000			Recovery = 48.52%			
55) 2-Fluorobiphenyl	7.674	172	145188	25.40	ng	0.00
Spiked Amount 50.000			Recovery = 50.80%			
80) 2,4,6-Tribromophenol	9.001	330	43921	49.65	ng	0.00
Spiked Amount 100.000			Recovery = 49.65%			
94) Terphenyl-d14	11.520	244	135534	24.65	ng	0.00
Spiked Amount 50.000			Recovery = 49.30%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.631	88	45431	53.5714	ng	78
9) Pyridine	3.101	79	109269	49.8659	ng	85
10) N-Nitrosodimethylamine	3.032	74	62324	51.0198	ng	93
12) Benzaldehyde	5.460	77	55342	54.4976	ng	60
13) Aniline	5.551	93	176467	52.3037	ng	34
14) Pentachloroethane	5.594	117	41072	51.5659	ng	76
15) bis(2-Chloroethyl)ether	5.610	93	113638	49.4828	ng	82
17) Phenol	5.519	94	158867	51.5076	ng	86
18) 2-Chlorophenol	5.647	128	131131	50.8445	ng	79
19) N-Decane	5.695	57	132622	51.3034	ng	93
20) 1,3-Dichlorobenzene	5.781	146	142604	50.2991	ng	97
22) 1,4-Dichlorobenzene	5.845	146	146823	48.7356	ng	97
23) 1,2-Dichlorobenzene	5.968	146	139678	48.8545	ng	95
24) Benzyl alcohol	5.942	108	83923	50.3547	ng	68
25) bis(2-chloroisopropyl)...	6.054	45	197601	49.7979	ng	99
26) 2-Methylphenol	6.027	108	113623	48.3525	ng	93
27) Acetophenone	6.161	105	177454	50.2214	ng	62
28) Hexachloroethane	6.246	117	53368	49.2379	ng	88
29) N-Nitroso-di-n-propyla...	6.161	70	80542	49.6720	ng	86
30) 3&4-Methylphenol	6.155	108	118421	49.1822	ng	97
33) Nitrobenzene	6.295	77	116088	48.1316	ng	74
34) Isophorone	6.482	82	218079	48.7059	ng	79
35) 2-Nitrophenol	6.546	139	70578	48.9176	ng	79
36) 2,4-Dimethylphenol	6.567	107	120127	47.9454	ng	85
37) Benzoic Acid	6.642	105	104272	43.5343	ng	81
38) bis(2-Chloroethoxy)met...	6.642	93	141511	49.0018	ng	96
39) 2,4-Dichlorophenol	6.722	162	111521	48.6233	ng	84
40) 1,2,4-Trichlorobenzene	6.792	180	119629	47.6668	ng	97
41) Naphthalene	6.856	128	406200	50.7854	ng	99
42) 4-Chloroaniline	6.888	127	149319m	51.0998	ng	
43) Hexachlorobutadiene	6.942	225	66573	48.3900	ng	96
44) Caprolactam	7.166	113	45010	51.0658	ng	70
45) 4-Chloro-3-methylphenol	7.247	107	102641	48.7487	ng	67
46) 2-Methylnaphthalene	7.391	142	273240	48.7409	ng	99
47) 1-Methylnaphthalene	7.466	142	254271	47.4988	ng	92
48) Methylnaphthalenes (To...	7.391	142	528352m	96.6458	ng	
49) 1,1'-Biphenyl	7.760	154	321524	49.8844	ng	93
51) 1,2,4,5-Tetrachloroben...	7.519	216	134545	51.8835	ng	96
52) Hexachlorocyclopentadiene	7.509	237	76786	50.8216	ng	99
53) 2,4,6-Trichlorophenol	7.605	196	80421m	50.3649	ng	
54) 2,4,5-Trichlorophenol	7.637	196	85749m	50.1246	ng	
56) 2-Chloronaphthalene	7.787	162	244345m	45.0250	ng	
57) 1,4-Dimethylnaphthalene	8.065	156	197352	49.9059	ng	86
58) Dimethylnaphthalenes (...	8.065	156	197352	49.9059	ng	86
59) Diphenyl Ether	7.846	170	188812	50.2054	ng	75
60) 2-Nitroaniline	7.862	65	82659	51.8349	ng	42
61) Coumarin	8.049	146	100099	49.9278	ng	85
62) Acenaphthylene	8.145	152	394123	50.4983	ng	100
63) Dimethylphthalate	8.006	163	275323	49.6450	ng	98
64) 2,6-Dinitrotoluene	8.065	165	65034	50.9590	ng	57
65) Acenaphthene	8.295	153	255826	50.2736	ng	98

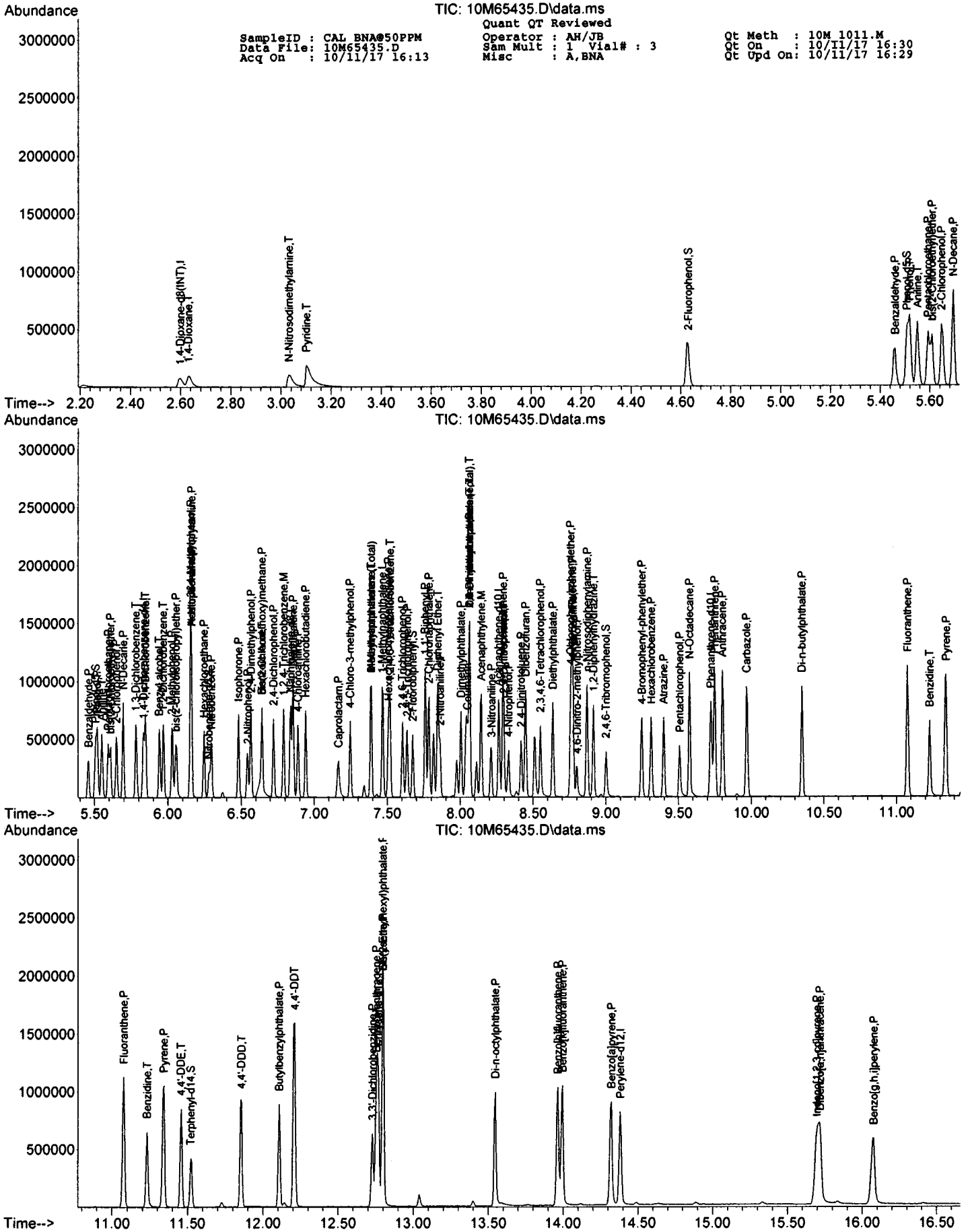
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65435.D Sam Mult : 1 Vial# : 3 Qt On : 10/11/17 16:30
Acq On : 10/11/17 16:13 Misc : A,BNA Qt Upd On: 10/11/17 16:29

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.215	138	73007	57.3101	ng	65
67)	2,4-Dinitrophenol	8.300	184	27060	44.4485	ng	58
68)	Dibenzofuran	8.450	168	359884	48.4881	ng	83
69)	2,4-Dinitrotoluene	8.418	165	85294	51.3739	ng	61
70)	4-Nitrophenol	8.332	65	54368	51.7745	ng	87
71)	2,3,4,6-Tetrachlorophenol	8.552	232	77380	52.2473	ng	77
72)	Fluorene	8.771	166	294341	49.8936	ng	99
73)	4-Chlorophenyl-phenyle...	8.760	204	137964	50.4307	ng	82
74)	Diethylphthalate	8.637	149	280364	49.3391	ng	96
75)	4-Nitroaniline	8.776	138	84610	51.5839	ng	69
76)	Atrazine	9.397	200	76710	50.9908	ng	96
78)	4,6-Dinitro-2-methylph...	8.803	198	43534	47.1848	ng	72
79)	n-Nitrosodiphenylamine	8.873	169	247727	48.5560	ng	99
81)	1,2-Diphenylhydrazine	8.915	77	252047	48.5171	ng	76
82)	4-Bromophenyl-phenylether	9.247	248	82641	49.2850	ng	84
83)	Hexachlorobenzene	9.311	284	88261	49.7715	ng	66
84)	N-Octadecane	9.579	57	182840	51.5536	ng	93
85)	Pentachlorophenol	9.509	266	52785	48.9785	ng	96
86)	Phenanthrene	9.750	178	443220	49.1285	ng	98
87)	Anthracene	9.803	178	460403	50.4782	ng	99
88)	Carbazole	9.969	167	416316	49.4284	ng	97
89)	Di-n-butylphthalate	10.349	149	485149	50.3307	ng	97
90)	Fluoranthene	11.076	202	477363	50.1515	ng	89
92)	Pyrene	11.344	202	506466	50.4668	ng	84
93)	Benzidine	11.231	184	266367	50.8516	ng	84
95)	4,4'-DDE	11.456	246	98043	48.6812	ng	92
96)	4,4'-DDD	11.857	235	190795	49.9275	ng	96
97)	Butylbenzylphthalate	12.108	149	223521	50.0430	ng	68
98)	4,4'-DDT	12.210	235	166355	51.6369	ng	97
99)	3,3'-Dichlorobenzidine	12.729	252	146269	52.4998	ng	96
100)	Benzo[a]anthracene	12.756	228	469030	50.8718	ng	100
101)	Chrysene	12.798	228	433720	49.5559	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.798	149	318654	51.7532	ng	95
104)	Di-n-octylphthalate	13.547	149	520714	50.3890	ng	100
105)	Benzo[b]fluoranthene	13.964	252	445050	50.6967	ng	94
106)	Benzo[k]fluoranthene	13.997	252	428235m	49.3434	ng	
107)	Benzo[a]pyrene	14.323	252	424255	50.4801	ng	91
108)	Indeno[1,2,3-cd]pyrene	15.697	276	469353	51.3075	ng	83
109)	Dibenzo[a,h]anthracene	15.719	278	396369	51.2756	ng	89
110)	Benzo[g,h,i]perylene	16.077	276	388303	49.7823	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M65435.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 10M65435.D
Acq On : 10/11/17 16:13
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 16:30
Qt Upd On: 10/11/17 16:29
1,4-Dioxane-d8(INT),I
1,4-Dioxane,I
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Aniline,I
2-Chlorophenol,P
N-Decane,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65426.D Sam Mult : 1 Vial# : 3 Qt On : 10/11/17 14:04
Acq On : 10/11/17 12:48 Misc : A,BNA Qt Upd On: 10/11/17 14:04

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.593	96	38350	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.829	152	81219	40.00	ng	0.00
31) Naphthalene-d8	6.840	136	313189	40.00	ng	0.00
50) Acenaphthene-d10	8.263	164	196803	40.00	ng	0.00
77) Phenanthrene-d10	9.723	188	349781	40.00	ng	0.00
91) Chrysene-d12	12.766	240	392993	40.00	ng	-0.01
103) Perylene-d12	14.382	264	369787	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.626	112	5450m	2.21	ng	0.00
Spiked Amount 100.000			Recovery = 2.21%			
16) Phenol-d5	5.503	99	6232	1.89	ng	-0.01
Spiked Amount 100.000			Recovery = 1.89%			
32) Nitrobenzene-d5	6.279	128	1300	0.97	ng	0.00
Spiked Amount 50.000			Recovery = 1.94%			
55) 2-Fluorobiphenyl	7.675	172	6866	1.02	ng	0.00
Spiked Amount 50.000			Recovery = 2.04%			
80) 2,4,6-Tribromophenol	9.001	330	1805	1.88	ng	0.00
Spiked Amount 100.000			Recovery = 1.88%			
94) Terphenyl-d14	11.520	244	6477	1.07	ng	0.00
Spiked Amount 50.000			Recovery = 2.14%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.641	88	2661	2.7081	ng	72
9) Pyridine	3.182	79	4908	1.9214	ng	89
10) N-Nitrosodimethylamine	3.080	74	2611	1.8312	ng	95
12) Benzaldehyde	5.455	77	3056	6.9680	ng	74
13) Aniline	5.551	93	4994	1.3931	ng	30
14) Pentachloroethane	5.594	117	1909	1.9334	ng	68
15) bis(2-Chloroethyl)ether	5.605	93	5667	2.0717	ng	82
17) Phenol	5.514	94	7713	2.0959	ng	83
18) 2-Chlorophenol	5.647	128	6175	2.1073	ng	75
19) N-Decane	5.690	57	6663	2.4105	ng	97
20) 1,3-Dichlorobenzene	5.781	146	7521	2.3239	ng	95
22) 1,4-Dichlorobenzene	5.845	146	7473	2.2659	ng	95
23) 1,2-Dichlorobenzene	5.968	146	7220	2.3258	ng	96
24) Benzyl alcohol	5.942	108	3903	2.1514	ng	66
25) bis(2-chloroisopropyl)...	6.054	45	10254	2.9261	ng	91
26) 2-Methylphenol	6.027	108	5369	2.0070	ng	94
27) Acetophenone	6.156	105	8952	2.5195	ng	67
28) Hexachloroethane	6.246	117	2547	2.1687	ng	81
29) N-Nitroso-di-n-propyla...	6.156	70	3834	2.1317	ng	87
30) 3&4-Methylphenol	6.150	108	5580	2.1310	ng	95
33) Nitrobenzene	6.295	77	5716	2.1171	ng	75
34) Isophorone	6.476	82	10480	2.1429	ng	87
35) 2-Nitrophenol	6.541	139	2757	1.8499	ng	90
36) 2,4-Dimethylphenol	6.562	107	5530	1.9542	ng	82
37) Benzoic Acid	0.000		0	N.D.		
38) bis(2-Chloroethoxy)met...	6.642	93	6821	2.1689	ng	94
39) 2,4-Dichlorophenol	6.722	162	4793	1.8331	ng	80
40) 1,2,4-Trichlorobenzene	6.792	180	5901	2.2160	ng	94
41) Naphthalene	6.851	128	19293m	2.1599	ng	
42) 4-Chloroaniline	6.888	127	4969	1.3890	ng	93
43) Hexachlorobutadiene	6.942	225	3245	2.1364	ng	94
44) Caprolactam	7.140	113	1864	2.1253	ng	65
45) 4-Chloro-3-methylphenol	7.241	107	4697	1.9722	ng	74
46) 2-Methylnaphthalene	7.386	142	13082	2.2044	ng	97
47) 1-Methylnaphthalene	7.466	142	12336	2.1517	ng	88
48) Methylnaphthalenes (To...	7.386	142	25418m	4.3657	ng	
49) 1,1'-Biphenyl	7.760	154	15023	1.9317	ng	93
51) 1,2,4,5-Tetrachloroben...	7.519	216	6543	2.4241	ng	95
52) Hexachlorocyclopentadiene	7.509	237	2951	1.8852	ng	88
53) 2,4,6-Trichlorophenol	7.605	196	3654m	2.0662	ng	
54) 2,4,5-Trichlorophenol	7.632	196	3848m	2.0715	ng	
56) 2-Chloronaphthalene	7.782	162	11760m	2.1082	ng	
57) 1,4-Dimethylnaphthalene	8.060	156	9808	2.0564	ng	83
58) Dimethylnaphthalenes (...	8.060	156	9808	2.0564	ng	83
59) Diphenyl Ether	7.846	170	9214	2.3320	ng	75
60) 2-Nitroaniline	7.856	65	3639	2.1322	ng	62
61) Coumarin	8.044	146	4740	1.8771	ng	82
62) Acenaphthylene	8.140	152	18926	2.1948	ng	97
63) Dimethylphthalate	8.001	163	13600	2.1265	ng	98
64) 2,6-Dinitrotoluene	8.060	165	2558	1.8370	ng	70
65) Acenaphthene	8.295	153	13057	2.3259	ng	93

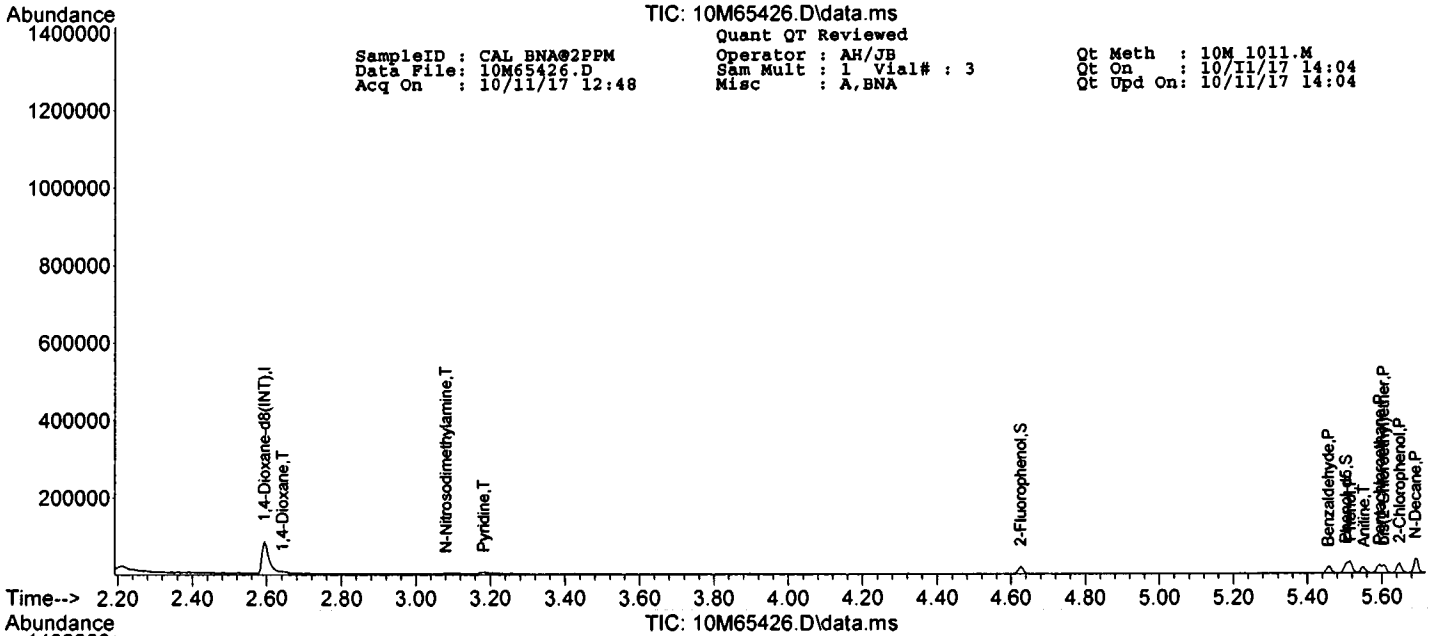
Quantitation Report (QT Reviewed)

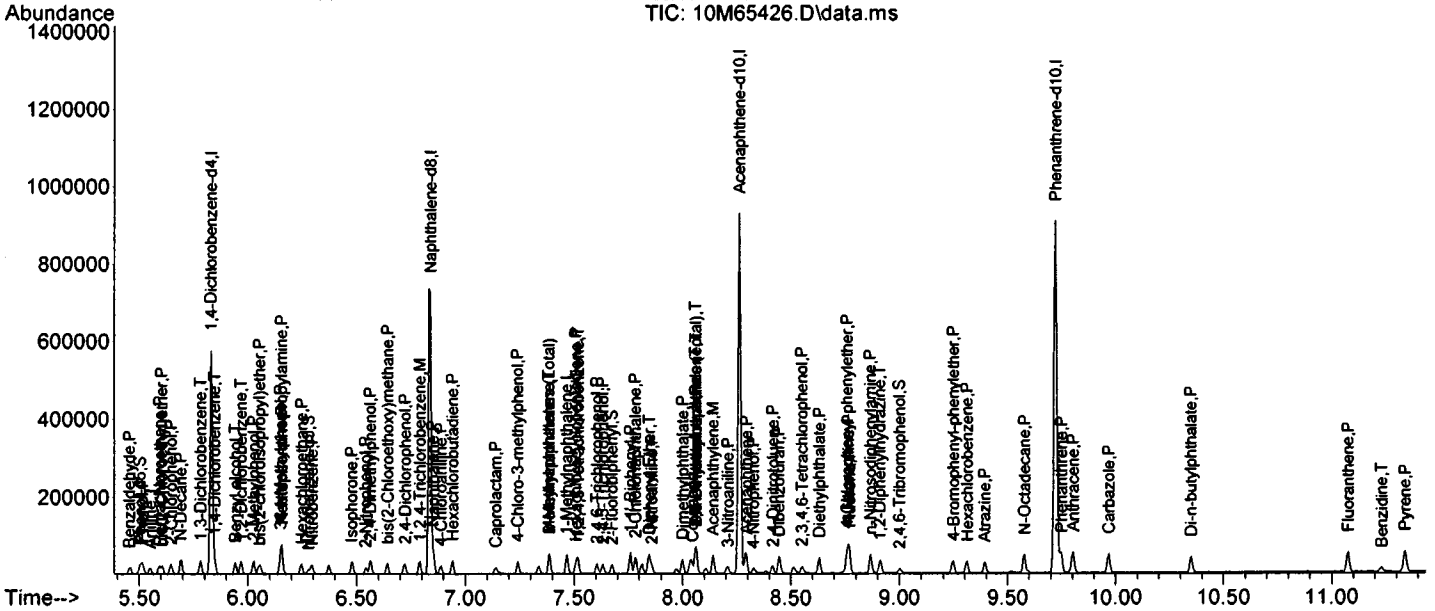
SampleID : CAL BNA@2PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65426.D Sam Mult : 1 Vial# : 3 Qt On : 10/11/17 14:04
Acq On : 10/11/17 12:48 Misc : A,BNA Qt Upd On: 10/11/17 14:04

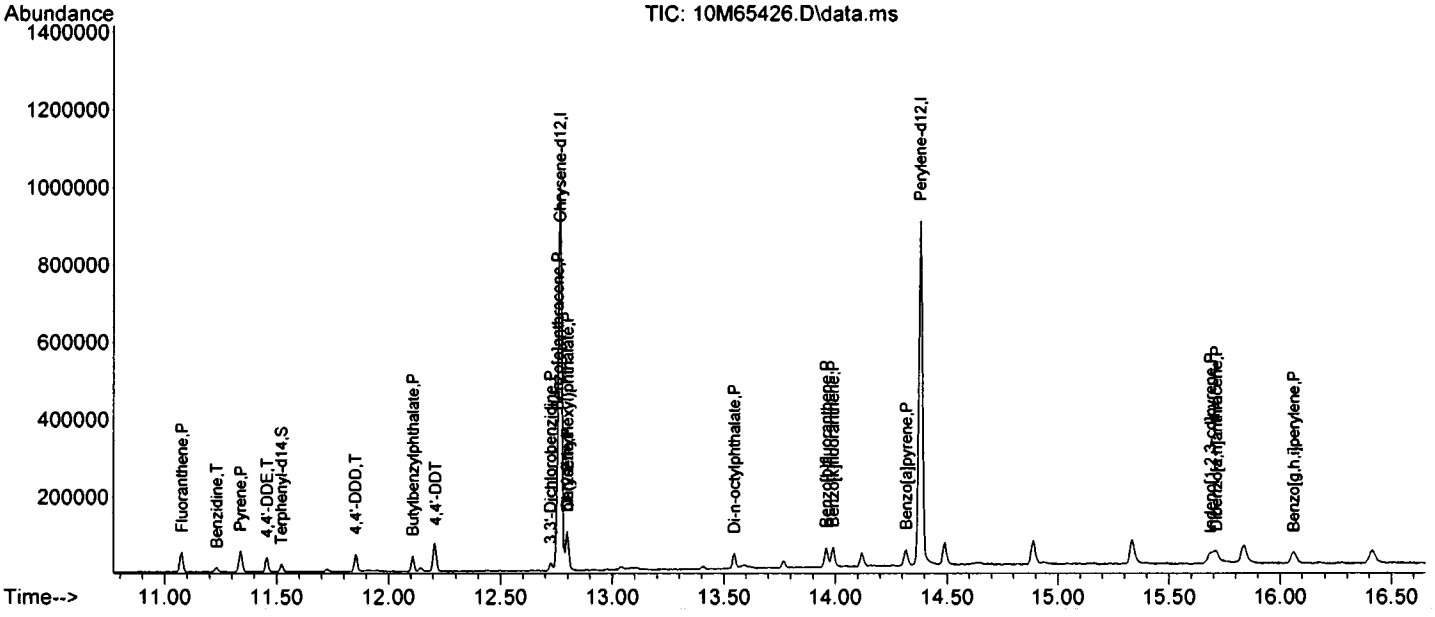
Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.209	138	2722	1.9354	ng	65
67)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.445	168	17681	2.1377	ng	89
69)	2,4-Dinitrotoluene	8.418	165	3215	1.6668	ng	62
70)	4-Nitrophenol	8.327	65	1899	1.6190	ng	95
71)	2,3,4,6-Tetrachlorophenol	8.552	232	3167	1.9081	ng	80
72)	Fluorene	8.771	166	14283	2.1959	ng	98
73)	4-Chlorophenyl-phenyle...	8.760	204	6257	1.9648	ng	84
74)	Diethylphthalate	8.632	149	15150	2.4061	ng	93
75)	4-Nitroaniline	8.766	138	3370	1.8938	ng	78
76)	Atrazine	9.391	200	3306	2.5806	ng	94
78)	4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79)	n-Nitrosodiphenylamine	8.867	169	12324	2.1570	ng	98
81)	1,2-Diphenylhydrazine	8.910	77	11924	2.0040	ng	85
82)	4-Bromophenyl-phenylether	9.247	248	4103	2.0788	ng	77
83)	Hexachlorobenzene	9.311	284	4133	1.9203	ng	61
84)	N-Octadecane	9.579	57	8549	2.3558	ng	95
85)	Pentachlorophenol	0.000		0	N.D. d		
86)	Phenanthrene	9.750	178	23266	2.3138	ng	95
87)	Anthracene	9.803	178	22289	2.2153	ng	99
88)	Carbazole	9.969	167	20391	2.1656	ng	96
89)	Di-n-butylphthalate	10.349	149	22029	1.9775	ng	97
90)	Fluoranthene	11.076	202	22774	2.1062	ng	92
92)	Pyrene	11.338	202	24327	2.1613	ng	87
93)	Benzidine	11.231	184	5923	0.9835	ng	89
95)	4,4'-DDE	11.456	246	4745	1.8917	ng	91
96)	4,4'-DDD	11.852	235	8431	1.8385	ng	93
97)	Butylbenzylphthalate	12.109	149	9782	1.9472	ng	70
98)	4,4'-DDT	12.210	235	6234	1.5901	ng	99
99)	3,3'-Dichlorobenzidine	12.724	252	5177	1.4779	ng	96
100)	Benzo[a]anthracene	12.756	228	23755	2.2118	ng	99
101)	Chrysene	12.799	228	22233	2.1238	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.799	149	13261	2.1208	ng	98
104)	Di-n-octylphthalate	13.547	149	21117	1.7612	ng	98
105)	Benzo[b]fluoranthene	13.959	252	21542	2.0177	ng	96
106)	Benzo[k]fluoranthene	13.991	252	22012m	2.0898	ng	
107)	Benzo[a]pyrene	14.318	252	20545	1.9890	ng	90
108)	Indeno[1,2,3-cd]pyrene	15.687	276	22172	1.8849	ng	81
109)	Dibenzo[a,h]anthracene	15.714	278	18451	1.8460	ng	86
110)	Benzo[g,h,i]perylene	16.061	276	20285	2.0158	ng	78

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 10M65426.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@2PPM
Data File: 10M65426.D
Acq On : 10/11/17 12:48
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 14:04
Qt Upd On: 10/11/17 14:04
Abundance
Time-->


TIC: 10M65426.D\data.ms
Abundance
Time-->


TIC: 10M65426.D\data.ms
Abundance
Time-->

SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65434.D Sam Mult : 1 Vial# : 2 Qt On : 10/11/17 16:10
Acq On : 10/11/17 15:51 Misc : A,BNA Qt Upd On: 10/11/17 15:27

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.593	96	34604	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.829	152	82858	40.00	ng	0.00
31) Naphthalene-d8	6.835	136	312202	40.00	ng	0.00
50) Acenaphthene-d10	8.263	164	188948	40.00	ng	0.00
77) Phenanthrene-d10	9.723	188	329666	40.00	ng	0.00
91) Chrysene-d12	12.767	240	377792	40.00	ng	0.00
103) Perylene-d12	14.382	264	341767	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.626	112	19319	8.68	ng	0.00
Spiked Amount 100.000			Recovery = 8.68%			
16) Phenol-d5	5.503	99	24038	8.09	ng	0.00
Spiked Amount 100.000			Recovery = 8.09%			
32) Nitrobenzene-d5	6.279	128	5086	3.80	ng	0.00
Spiked Amount 50.000			Recovery = 7.60%			
55) 2-Fluorobiphenyl	7.675	172	26035	4.04	ng	0.00
Spiked Amount 50.000			Recovery = 8.08%			
80) 2,4,6-Tribromophenol	9.001	330	7246	7.95	ng	0.00
Spiked Amount 100.000			Recovery = 7.95%			
94) Terphenyl-d14	11.520	244	24531	4.22	ng	0.00
Spiked Amount 50.000			Recovery = 8.44%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.636	88	8538	9.6319	ng	73
9) Pyridine	3.134	79	18943	8.2185	ng	85
10) N-Nitrosodimethylamine	3.048	74	10753	8.3274	ng	95
12) Benzaldehyde	5.455	77	10423	26.3381	ng	74
13) Aniline	5.551	93	19515	6.0331	ng	34
14) Pentachloroethane	5.594	117	6862	7.7022	ng	70
15) bis(2-Chloroethyl)ether	5.605	93	21433	8.6834	ng	83
17) Phenol	5.514	94	27719	8.3475	ng	85
18) 2-Chlorophenol	5.648	128	23833	9.0138	ng	78
19) N-Decane	5.690	57	24855	9.9654	ng	95
20) 1,3-Dichlorobenzene	5.781	146	26078	8.9302	ng	97
22) 1,4-Dichlorobenzene	5.845	146	27483	8.1684	ng	96
23) 1,2-Dichlorobenzene	5.968	146	25648	8.0986	ng	96
24) Benzyl alcohol	5.942	108	15055	8.1343	ng	65
25) bis(2-chloroisopropyl)...	6.054	45	36722	10.2716	ng	96
26) 2-Methylphenol	6.027	108	20501	7.5260	ng	92
27) Acetophenone	6.156	105	33253	9.1738	ng	66
28) Hexachloroethane	6.247	117	9313	7.7730	ng	91
29) N-Nitroso-di-n-propyla...	6.156	70	14844	8.0899	ng	89
30) 3&4-Methylphenol	6.150	108	21502	8.0492	ng	97
33) Nitrobenzene	6.295	77	20686	7.6860	ng	73
34) Isophorone	6.477	82	38492	7.8956	ng	82
35) 2-Nitrophenol	6.541	139	11522	7.7557	ng	86
36) 2,4-Dimethylphenol	6.562	107	21441	7.6188	ng	86
37) Benzoic Acid	6.605	105	4192m	1.4183	ng	
38) bis(2-Chloroethoxy)met...	6.642	93	25666	8.1868	ng	97
39) 2,4-Dichlorophenol	6.723	162	19147	7.3710	ng	84
40) 1,2,4-Trichlorobenzene	6.792	180	21836	8.2261	ng	96
41) Naphthalene	6.851	128	72582	8.1895	ng	99
42) 4-Chloroaniline	6.888	127	17291	4.8852	ng	93
43) Hexachlorobutadiene	6.942	225	12207	8.0622	ng	97
44) Caprolactam	7.145	113	7663	8.7296	ng	70
45) 4-Chloro-3-methylphenol	7.241	107	17533	7.3851	ng	78
46) 2-Methylnaphthalene	7.386	142	48031	8.1193	ng	97
47) 1-Methylnaphthalene	7.466	142	48413	8.4712	ng	96
48) Methylnaphthalenes (To...	7.466	142	96263m	16.5860	ng	
49) 1,1'-Biphenyl	7.760	154	57732	7.4470	ng	93
51) 1,2,4,5-Tetrachloroben...	7.520	216	23385	9.0240	ng	97
52) Hexachlorocyclopentadiene	7.509	237	11971	7.9466	ng	98
53) 2,4,6-Trichlorophenol	7.605	196	13913m	8.1942	ng	
54) 2,4,5-Trichlorophenol	7.632	196	15071m	8.4505	ng	
56) 2-Chloronaphthalene	7.782	162	44129m	8.2399	ng	
57) 1,4-Dimethylnaphthalene	8.065	156	36000	7.8617	ng	84
58) Dimethylnaphthalenes (...	8.065	156	36000	7.8617	ng	84
59) Diphenyl Ether	7.846	170	34197	9.0150	ng	73
60) 2-Nitroaniline	7.856	65	14063	8.5825	ng	48
61) Coumarin	8.044	146	18295	7.5464	ng	84
62) Acenaphthylene	8.140	152	71414	8.6261	ng	99
63) Dimethylphthalate	8.001	163	49827	8.1148	ng	98
64) 2,6-Dinitrotoluene	8.060	165	11400	8.5271	ng	57
65) Acenaphthene	8.295	153	47932	8.8933	ng	97

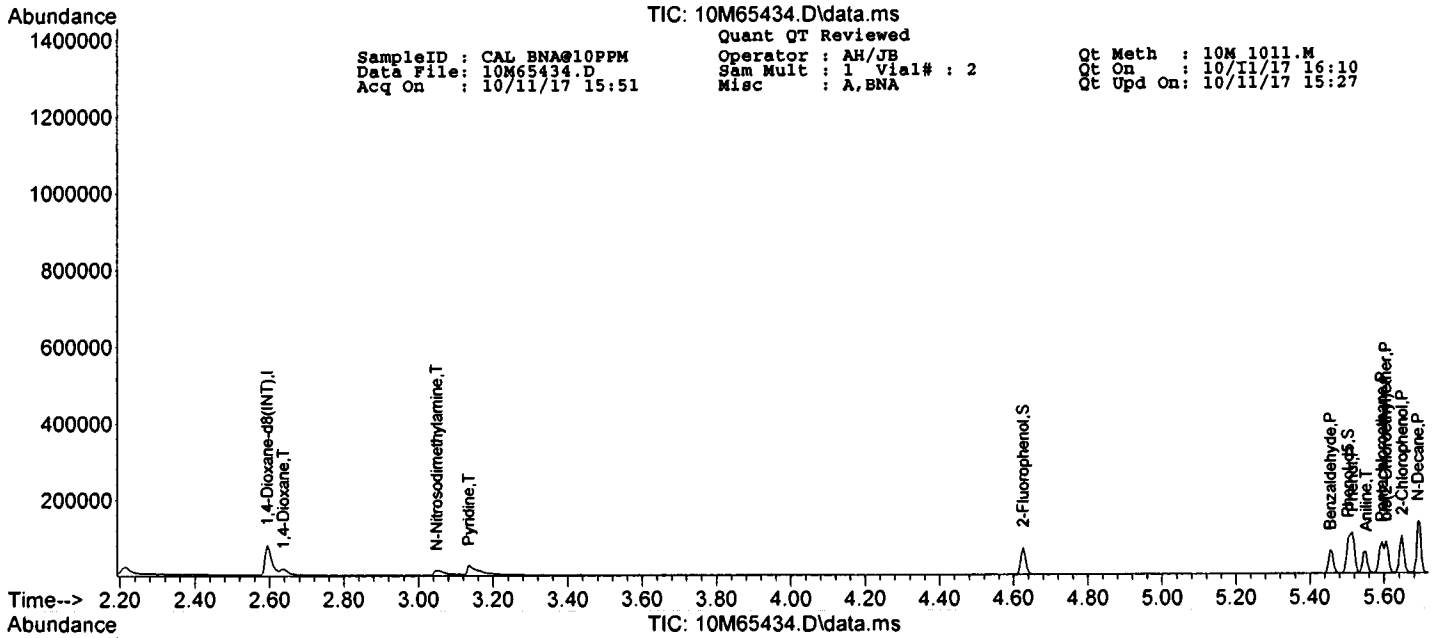
Quantitation Report (QT Reviewed)

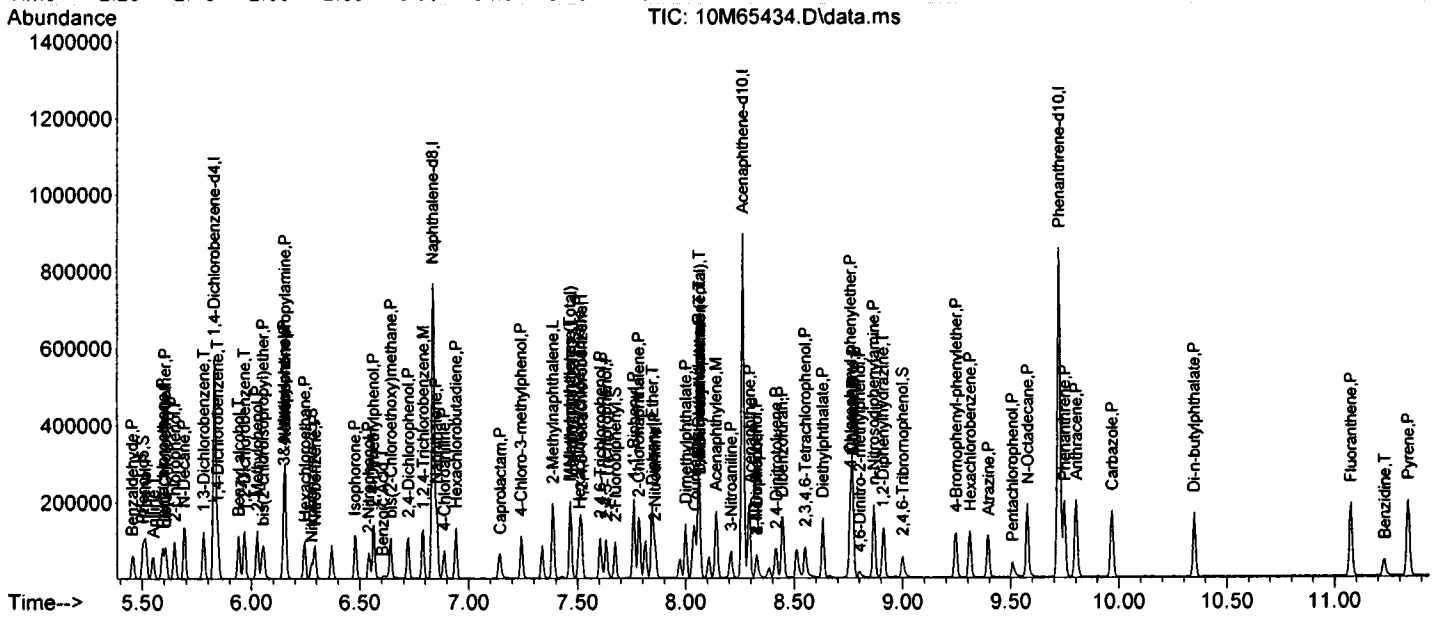
SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65434.D Sam Mult : 1 Vial# : 2 Qt On : 10/11/17 16:10
Acq On : 10/11/17 15:51 Misc : A,BNA Qt Upd On: 10/11/17 15:27

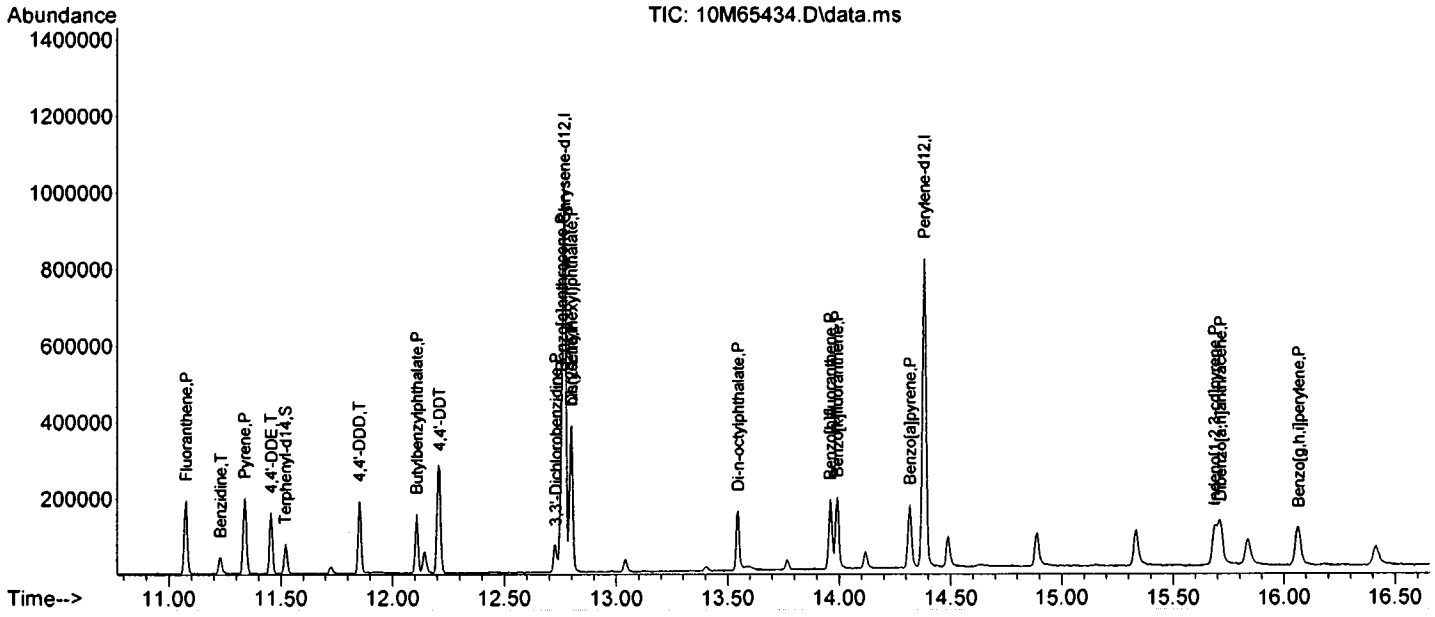
Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.210	138	10770	7.9759	ng	73
67)	2,4-Dinitrophenol	8.327	184	597	0.8994	ng	1
68)	Dibenzofuran	8.445	168	65750	8.3043	ng	86
69)	2,4-Dinitrotoluene	8.418	165	13852	7.4802	ng	55
70)	4-Nitrophenol	8.327	65	7792	6.9254	ng	92
71)	2,3,4,6-Tetrachlorophenol	8.552	232	12797	8.0307	ng	81
72)	Fluorene	8.771	166	53711	8.6011	ng	97
73)	4-Chlorophenyl-phenyle...	8.760	204	24801	8.1117	ng	82
74)	Diethylphthalate	8.632	149	50896	8.4193	ng	96
75)	4-Nitroaniline	8.771	138	14509	8.4925	ng	66
76)	Atrazine	9.397	200	12901	10.4889	ng	92
78)	4,6-Dinitro-2-methylph...	8.803	198	3151	3.0658	ng	79
79)	n-Nitrosodiphenylamine	8.867	169	44670	8.2952	ng	97
81)	1,2-Diphenylhydrazine	8.910	77	47356	8.4445	ng	80
82)	4-Bromophenyl-phenylether	9.247	248	14460	7.7733	ng	85
83)	Hexachlorobenzene	9.311	284	16056	7.9152	ng	64
84)	N-Octadecane	9.579	57	32146	9.3989	ng	93
85)	Pentachlorophenol	9.509	266	6098	5.7813	ng	94
86)	Phenanthrene	9.750	178	81631	8.6134	ng	99
87)	Anthracene	9.803	178	81574	8.6022	ng	100
88)	Carbazole	9.969	167	75067	8.4587	ng	97
89)	Di-n-butylphthalate	10.349	149	82870	7.9104	ng	97
90)	Fluoranthene	11.076	202	84610	8.3025	ng	88
92)	Pyrene	11.338	202	89759	8.2956	ng	86
93)	Benzidine	11.231	184	21818	3.7808	ng	91
95)	4,4'-DDE	11.456	246	17721	7.3491	ng	92
96)	4,4'-DDD	11.852	235	34004	7.7136	ng	95
97)	Butylbenzylphthalate	12.109	149	36461	7.5567	ng	70
98)	4,4'-DDT	12.210	235	27863	7.3929	ng	98
99)	3,3'-Dichlorobenzidine	12.729	252	18912	5.6437	ng	98
100)	Benzo[a]anthracene	12.756	228	83098	8.0484	ng	98
101)	Chrysene	12.799	228	82624	8.2101	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.799	149	53664	8.9275	ng	95
104)	Di-n-octylphthalate	13.547	149	82721	7.4703	ng	100
105)	Benzo[b]fluoranthene	13.959	252	75554m	7.6570	ng	
106)	Benzo[k]fluoranthene	13.991	252	83492	8.5766	ng	93
107)	Benzo[a]pyrene	14.318	252	74334	7.7863	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.687	276	81812	7.5253	ng	80
109)	Dibenzo[a,h]anthracene	15.714	278	69224	7.4934	ng	91
110)	Benzo[g,h,i]perylene	16.067	276	72041	7.7458	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 10M65434.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@10PPM
Data File: 10M65434.D
Acq On : 10/11/17 15:51
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 16:10
Qt Upd On: 10/11/17 15:27
Abundance
Time-->


TIC: 10M65434.D\data.ms
Abundance
Time-->


TIC: 10M65434.D\data.ms
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65432.D Sam Mult : 1 Vial# : 9 Qt On : 10/11/17 15:28
Acq On : 10/11/17 15:01 Misc : A,BNA Qt Upd On: 10/11/17 15:27

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	34701	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.835	152	79941	40.00	ng	0.00
31) Naphthalene-d8	6.835	136	312842	40.00	ng	0.00
50) Acenaphthene-d10	8.263	164	183746	40.00	ng	0.00
77) Phenanthrene-d10	9.723	188	327149	40.00	ng	0.00
91) Chrysene-d12	12.766	240	364074	40.00	ng	0.00
103) Perylene-d12	14.382	264	344269	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.626	112	43714	19.59	ng	0.00
Spiked Amount 100.000			Recovery = 19.59%			
16) Phenol-d5	5.508	99	53746	18.04	ng	0.00
Spiked Amount 100.000			Recovery = 18.04%			
32) Nitrobenzene-d5	6.279	128	11379	8.48	ng	0.00
Spiked Amount 50.000			Recovery = 16.96%			
55) 2-Fluorobiphenyl	7.675	172	58088	9.27	ng	0.00
Spiked Amount 50.000			Recovery = 18.54%			
80) 2,4,6-Tribromophenol	9.001	330	17664	19.37	ng	0.00
Spiked Amount 100.000			Recovery = 19.37%			
94) Terphenyl-d14	11.520	244	55065	9.83	ng	0.00
Spiked Amount 50.000			Recovery = 19.66%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.636	88	18539	20.8634	ng	78
9) Pyridine	3.118	79	42966	18.5890	ng	91
10) N-Nitrosodimethylamine	3.043	74	24225	18.6014	ng	86
12) Benzaldehyde	5.455	77	23612	59.4988	ng	69
13) Aniline	5.551	93	55228	17.0261	ng	36
14) Pentachloroethane	5.594	117	15828	17.7164	ng	70
15) bis(2-Chloroethyl)ether	5.610	93	45783	18.4967	ng	82
17) Phenol	5.519	94	61667	18.5188	ng	85
18) 2-Chlorophenol	5.647	128	53100	20.0267	ng	77
19) N-Decane	5.696	57	53961	21.5747	ng	94
20) 1,3-Dichlorobenzene	5.781	146	56886	19.4258	ng	96
22) 1,4-Dichlorobenzene	5.845	146	59256	18.2545	ng	97
23) 1,2-Dichlorobenzene	5.968	146	56005	18.3294	ng	98
24) Benzyl alcohol	5.942	108	32555	18.2315	ng	67
25) bis(2-chloroisopropyl)...	6.054	45	80120	23.2284	ng	97
26) 2-Methylphenol	6.027	108	44518	16.9928	ng	99
27) Acetophenone	6.156	105	73399	20.9882	ng	68
28) Hexachloroethane	6.247	117	21263	18.3945	ng	91
29) N-Nitroso-di-n-propyla...	6.156	70	33257	18.7864	ng	89
30) 3&4-Methylphenol	6.150	108	48547	18.8364	ng	98
33) Nitrobenzene	6.295	77	46637	17.2927	ng	74
34) Isophorone	6.482	82	86404	17.6873	ng	76
35) 2-Nitrophenol	6.541	139	27802	18.6758	ng	84
36) 2,4-Dimethylphenol	6.567	107	48543	17.2829	ng	84
37) Benzoic Acid	6.616	105	30682	10.2401	ng	83
38) bis(2-Chloroethoxy)met...	6.642	93	58036	18.4740	ng	96
39) 2,4-Dichlorophenol	6.723	162	43910	16.9699	ng	79
40) 1,2,4-Trichlorobenzene	6.792	180	48649	18.2897	ng	95
41) Naphthalene	6.856	128	163306	18.5365	ng	99
42) 4-Chloroaniline	6.888	127	46855	13.4608	ng	95
43) Hexachlorobutadiene	6.942	225	26483	17.4551	ng	98
44) Caprolactam	7.150	113	17685	19.9691	ng	70
45) 4-Chloro-3-methylphenol	7.247	107	40445	17.0011	ng	60
46) 2-Methylnaphthalene	7.386	142	111187	18.7569	ng	98
47) 1-Methylnaphthalene	7.466	142	104017	18.1635	ng	91
48) Methylnaphthalenes (To...	7.386	142	216154m	37.1669	ng	
49) 1,1'-Biphenyl	7.760	154	127821	16.4542	ng	93
51) 1,2,4,5-Tetrachloroben...	7.519	216	51361	20.3808	ng	97
52) Hexachlorocyclopentadiene	7.509	237	28681	19.4909	ng	100
53) 2,4,6-Trichlorophenol	7.605	196	31596m	19.1355	ng	
54) 2,4,5-Trichlorophenol	7.632	196	33556m	19.3480	ng	
56) 2-Chloronaphthalene	7.782	162	98071m	18.8306	ng	
57) 1,4-Dimethylnaphthalene	8.065	156	80884	18.1636	ng	82
58) Dimethylnaphthalenes (...	8.065	156	80884	18.1636	ng	82
59) Diphenyl Ether	7.846	170	75222	20.3913	ng	74
60) 2-Nitroaniline	7.856	65	32814	20.5930	ng	56
61) Coumarin	8.044	146	41693	17.6846	ng	86
62) Acenaphthylene	8.140	152	155925	19.3674	ng	99
63) Dimethylphthalate	8.001	163	111286	18.6371	ng	98
64) 2,6-Dinitrotoluene	8.060	165	26321	20.2451	ng	58
65) Acenaphthene	8.295	153	102208	19.5005	ng	96

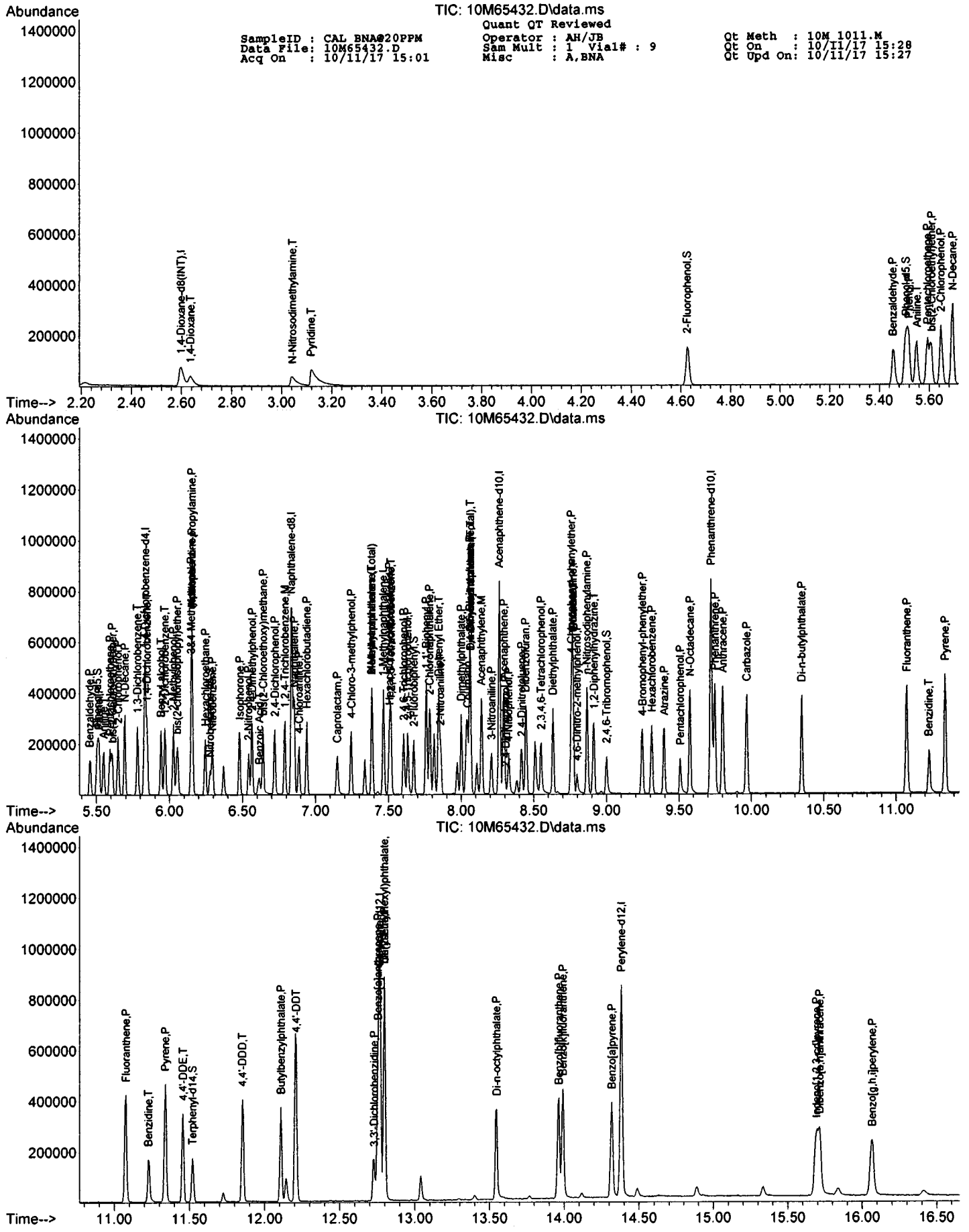
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65432.D Sam Mult : 1 Vial# : 9 Qt On : 10/11/17 15:28
Acq On : 10/11/17 15:01 Misc : A,BNA Qt Upd On: 10/11/17 15:27

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.209	138	25902	19.7252	ng	66
67)	2,4-Dinitrophenol	8.306	184	5923	9.0385	ng	30
68)	Dibenzofuran	8.445	168	146156	19.0815	ng	85
69)	2,4-Dinitrotoluene	8.418	165	33458	18.5791	ng	57
70)	4-Nitrophenol	8.327	65	20025	18.3382	ng	84
71)	2,3,4,6-Tetrachlorophenol	8.552	232	29653	19.1354	ng	79
72)	Fluorene	8.771	166	117499	19.3486	ng	99
73)	4-Chlorophenyl-phenyle...	8.760	204	54563	18.3512	ng	80
74)	Diethylphthalate	8.632	149	113057	19.2315	ng	97
75)	4-Nitroaniline	8.771	138	32924	19.8168	ng	68
76)	Atrazine	9.397	200	30350	25.3741	ng	94
78)	4,6-Dinitro-2-methylph...	8.798	198	12994	12.5902	ng	60
79)	n-Nitrosodiphenylamine	8.867	169	102076	19.1014	ng	99
81)	1,2-Diphenylhydrazine	8.915	77	102321	18.3862	ng	75
82)	4-Bromophenyl-phenylether	9.247	248	33247	18.0102	ng	81
83)	Hexachlorobenzene	9.311	284	34126	16.9526	ng	66
84)	N-Octadecane	9.579	57	73492	21.6531	ng	92
85)	Pentachlorophenol	9.509	266	17466	16.4540	ng	95
86)	Phenanthrene	9.750	178	177850	18.9106	ng	99
87)	Anthracene	9.803	178	180150	19.1434	ng	99
88)	Carbazole	9.969	167	168097	19.0872	ng	97
89)	Di-n-butylphthalate	10.349	149	191998	18.5415	ng	97
90)	Fluoranthene	11.076	202	188538	18.6430	ng	90
92)	Pyrene	11.338	202	201614	19.3353	ng	86
93)	Benzidine	11.226	184	73963	13.4494	ng	87
95)	4,4'-DDE	11.456	246	38695	16.6519	ng	91
96)	4,4'-DDD	11.852	235	78060	18.3746	ng	95
97)	Butylbenzylphthalate	12.109	149	88122	18.9867	ng	69
98)	4,4'-DDT	12.210	235	64737	17.8239	ng	98
99)	3,3'-Dichlorobenzidine	12.729	252	41690	13.0227	ng	96
100)	Benzo[a]anthracene	12.756	228	180461	18.1370	ng	97
101)	Chrysene	12.799	228	181790	18.7447	ng	96
102)	bis(2-Ethylhexyl)phtha...	12.799	149	124951	21.5700	ng	96
104)	Di-n-octylphthalate	13.547	149	200433	17.9941	ng	100
105)	Benzo[b]fluoranthene	13.965	252	170925m	17.1965	ng	
106)	Benzo[k]fluoranthene	13.991	252	182067	18.5667	ng	93
107)	Benzo[a]pyrene	14.318	252	170388	17.7179	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.692	276	185149	16.9068	ng	82
109)	Dibenzo[a,h]anthracene	15.714	278	155573	16.7182	ng	90
110)	Benzo[g,h,i]perylene	16.067	276	157519	16.8132	ng	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 10M65432.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@20PPM
Data File: 10M65432.D
Acq On : 10/11/17 15:01
Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 15:28
Qt Upd On: 10/11/17 15:27
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65430.D Sam Mult : 1 Vial# : 7 Qt On : 10/11/17 14:35
Acq On : 10/11/17 14:17 Misc : A,BNA Qt Upd On: 10/11/17 14:04

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.593	96	37964	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.835	152	88373	40.00	ng	0.00
31) Naphthalene-d8	6.840	136	332936	40.00	ng	0.00
50) Acenaphthene-d10	8.268	164	199190	40.00	ng	0.00
77) Phenanthrene-d10	9.723	188	334028	40.00	ng	0.00
91) Chrysene-d12	12.772	240	376074	40.00	ng	0.00
103) Perylene-d12	14.382	264	329816	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.631	112	202626	82.99	ng	0.00
Spiked Amount 100.000			Recovery = 82.99%			
16) Phenol-d5	5.514	99	251212	77.08	ng	0.00
Spiked Amount 100.000			Recovery = 77.08%			
32) Nitrobenzene-d5	6.284	128	52879	37.02	ng	0.00
Spiked Amount 50.000			Recovery = 74.04%			
55) 2-Fluorobiphenyl	7.675	172	247621	36.46	ng	0.00
Spiked Amount 50.000			Recovery = 72.92%			
80) 2,4,6-Tribromophenol	9.006	330	75422	77.71	ng	0.00
Spiked Amount 100.000			Recovery = 77.71%			
94) Terphenyl-d14	11.526	244	233490	40.34	ng	0.00
Spiked Amount 50.000			Recovery = 80.68%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.631	88	77689	80.0673	ng	78
9) Pyridine	3.096	79	205171	81.1365	ng	87
10) N-Nitrosodimethylamine	3.032	74	114352	77.7103	ng	89
12) Benzaldehyde	5.460	77	96228	221.6395	ng	66
13) Aniline	5.551	93	317219	89.3890	ng	33
14) Pentachloroethane	5.594	117	73596	75.2963	ng	75
15) bis(2-Chloroethyl)ether	5.610	93	203334	75.0878	ng	84
17) Phenol	5.524	94	283633	77.8552	ng	84
18) 2-Chlorophenol	5.653	128	233345	80.4419	ng	75
19) N-Decane	5.696	57	236262	86.3435	ng	94
20) 1,3-Dichlorobenzene	5.787	146	254582	79.4641	ng	96
22) 1,4-Dichlorobenzene	5.845	146	263554	73.4442	ng	97
23) 1,2-Dichlorobenzene	5.968	146	248668	73.6191	ng	96
24) Benzyl alcohol	5.947	108	145541	73.7294	ng	67
25) bis(2-chloroisopropyl)...	6.054	45	344312	90.2984	ng	99
26) 2-Methylphenol	6.033	108	199870	70.2685	ng	96
27) Acetophenone	6.161	105	304642	78.7998	ng	67
28) Hexachloroethane	6.247	117	95011	74.3513	ng	87
29) N-Nitroso-di-n-propyla...	6.161	70	140329	71.7062	ng	83
30) 3&4-Methylphenol	6.156	108	209930	73.6819	ng	98
33) Nitrobenzene	6.300	77	206857	72.0719	ng	68
34) Isophorone	6.482	82	373717	71.8844	ng	82
35) 2-Nitrophenol	6.546	139	127088	80.2181	ng	80
36) 2,4-Dimethylphenol	6.567	107	207493	70.9987	ng	86
37) Benzoic Acid	6.664	105	216991	63.6117	ng	79
38) bis(2-Chloroethoxy)met...	6.642	93	241605	72.2661	ng	95
39) 2,4-Dichlorophenol	6.723	162	196750	74.0768	ng	85
40) 1,2,4-Trichlorobenzene	6.792	180	210977	74.5302	ng	97
41) Naphthalene	6.856	128	674178m	75.2302	ng	
42) 4-Chloroaniline	6.888	127	241917m	75.6972	ng	
43) Hexachlorobutadiene	6.942	225	116512	72.1589	ng	97
44) Caprolactam	7.177	113	79182	81.0308	ng	68
45) 4-Chloro-3-methylphenol	7.252	107	185142	73.1275	ng	66
46) 2-Methylnaphthalene	7.391	142	474242	75.1746	ng	98
47) 1-Methylnaphthalene	7.471	142	466121	76.4820	ng	94
48) Methylnaphthalenes (To...	7.391	142	935438m	151.1377	ng	
49) 1,1'-Biphenyl	7.760	154	534809	64.6901	ng	93
51) 1,2,4,5-Tetrachloroben...	7.519	216	229352	83.9537	ng	97
52) Hexachlorocyclopentadiene	7.509	237	143636	87.7355	ng	98
53) 2,4,6-Trichlorophenol	7.605	196	141627	79.1233	ng	100
54) 2,4,5-Trichlorophenol	7.637	196	152549	81.1383	ng	98
56) 2-Chloronaphthalene	7.787	162	424471	75.1833	ng	89
57) 1,4-Dimethylnaphthalene	8.065	156	348958	72.2876	ng	88
58) Dimethylnaphthalenes (...	8.065	156	348958	72.2876	ng	88
59) Diphenyl Ether	7.846	170	333101	83.2965	ng	77
60) 2-Nitroaniline	7.862	65	146572	84.8521	ng	51
61) Coumarin	8.049	146	172891	67.6479	ng	85
62) Acenaphthylene	8.145	152	683339	78.2966	ng	100
63) Dimethylphthalate	8.006	163	481037	74.3135	ng	98
64) 2,6-Dinitrotoluene	8.065	165	115933	82.2576	ng	59
65) Acenaphthene	8.295	153	442272	77.8395	ng	98

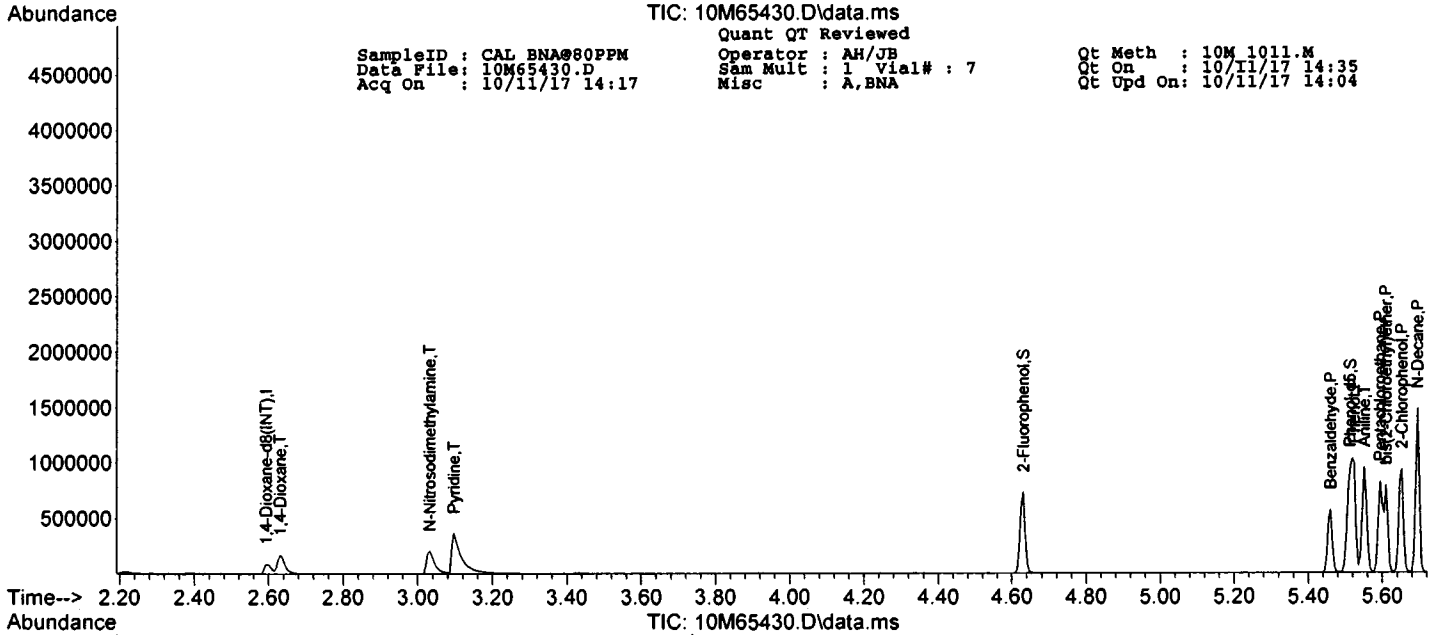
Quantitation Report (QT Reviewed)

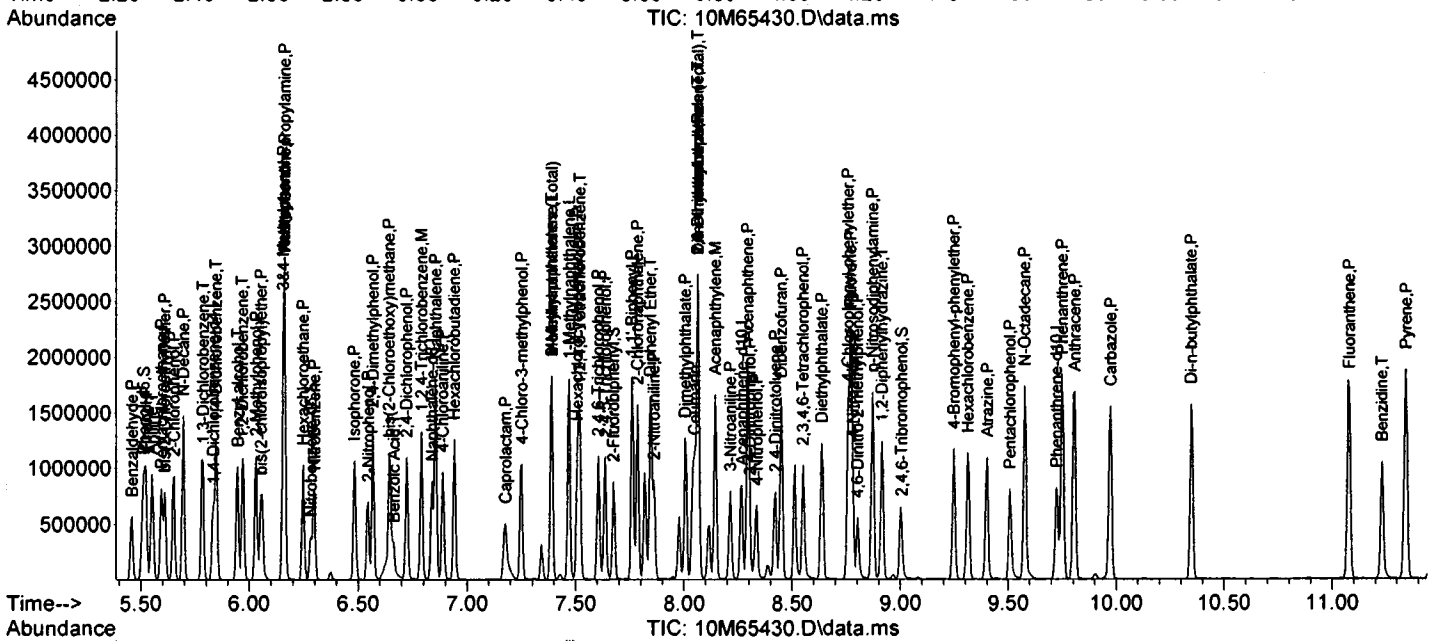
SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65430.D Sam Mult : 1 Vial# : 7 Qt On : 10/11/17 14:35
Acq On : 10/11/17 14:17 Misc : A,BNA Qt Upd On: 10/11/17 14:04

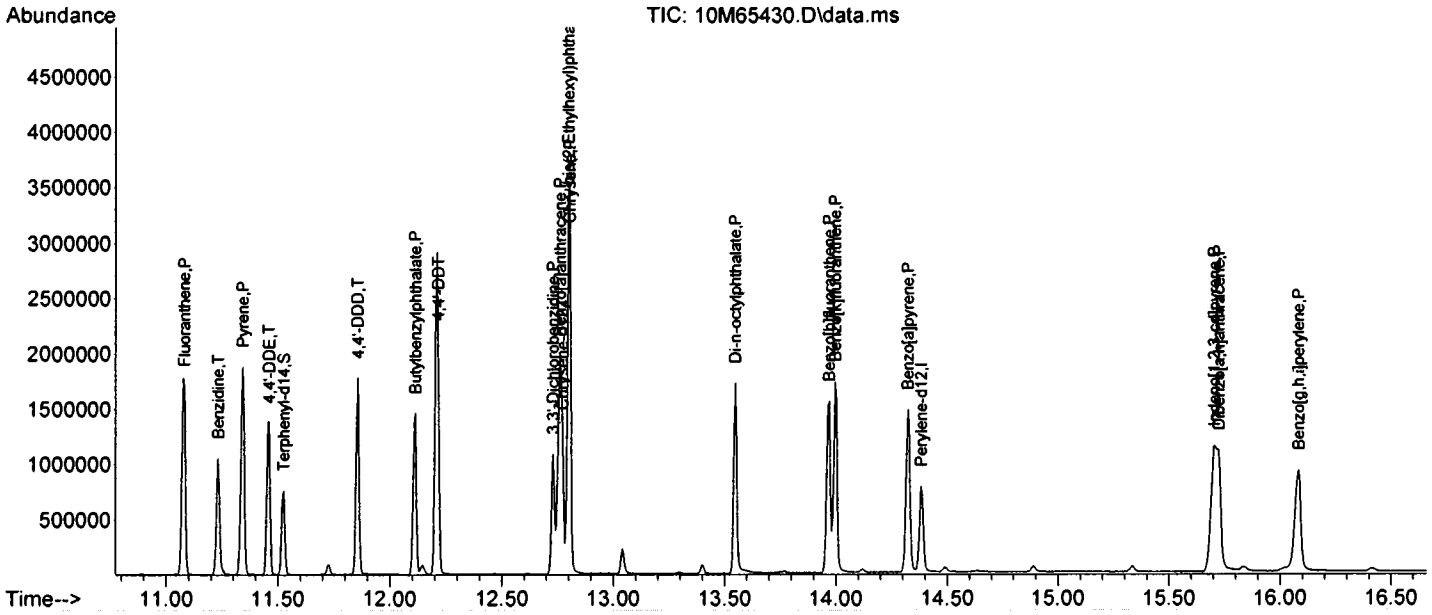
Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.215	138	125140	87.9094	ng	68
67)	2,4-Dinitrophenol	8.306	184	58846	74.0140	ng	37
68)	Dibenzofuran	8.450	168	631943	78.3557	ng	85
69)	2,4-Dinitrotoluene	8.423	165	151871	77.7947	ng	58
70)	4-Nitrophenol	8.338	65	91941m	78.4891	ng	
71)	2,3,4,6-Tetrachlorophenol	8.552	232	127855	76.1091	ng	82
72)	Fluorene	8.771	166	506533	76.9437	ng	98
73)	4-Chlorophenyl-phenyle...	8.760	204	235985	73.2153	ng	82
74)	Diethylphthalate	8.637	149	470909	73.8930	ng	96
75)	4-Nitroaniline	8.782	138	143600	79.7308	ng	70
76)	Atrazine	9.402	200	129061	99.5352	ng	94
78)	4,6-Dinitro-2-methylph...	8.803	198	82223	72.6425	ng	63
79)	n-Nitrosodiphenylamine	8.873	169	425600	78.0020	ng	97
81)	1,2-Diphenylhydrazine	8.915	77	424245	74.6630	ng	78
82)	4-Bromophenyl-phenylether	9.247	248	141654	75.1551	ng	83
83)	Hexachlorobenzene	9.311	284	150308	73.1300	ng	67
84)	N-Octadecane	9.579	57	308248	88.9494	ng	95
85)	Pentachlorophenol	9.509	266	97703	82.9487	ng	99
86)	Phenanthrene	9.750	178	744836	77.5664	ng	99
87)	Anthracene	9.809	178	760927	79.1938	ng	100
88)	Carbazole	9.975	167	696822	77.4939	ng	97
89)	Di-n-butylphthalate	10.349	149	832997	80.6549	ng	97
90)	Fluoranthene	11.082	202	809317	78.3788	ng	87
92)	Pyrene	11.344	202	874962	81.2336	ng	85
93)	Benzidine	11.231	184	436819	83.7502	ng	85
95)	4,4'-DDE	11.461	246	174728	72.7928	ng	92
96)	4,4'-DDD	11.857	235	328359	74.8263	ng	95
97)	Butylbenzylphthalate	12.114	149	383893	80.8819	ng	65
98)	4,4'-DDT	12.216	235	298646	79.6019	ng	98
99)	3,3'-Dichlorobenzidine	12.729	252	241206	79.1335	ng	95
100)	Benzo[a]anthracene	12.761	228	779679	75.8602	ng	99
101)	Chrysene	12.804	228	750545	74.9205	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.799	149	552382	92.3135	ng	95
104)	Di-n-octylphthalate	13.547	149	877080	82.9078	ng	100
105)	Benzo[b]fluoranthene	13.970	252	768851	80.7427	ng	93
106)	Benzo[k]fluoranthene	13.997	252	750387	79.8757	ng	94
107)	Benzo[a]pyrene	14.323	252	705803	76.6096	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.703	276	758837	72.3294	ng	96
109)	Dibenzo[a,h]anthracene	15.724	278	648119	72.7003	ng	90
110)	Benzo[g,h,i]perylene	16.083	276	642137	71.5436	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M65430.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@80PPM
Data File: 10M65430.D
Acq On : 10/11/17 14:17
Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 14:35
Qt Upd On: 10/11/17 14:04
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 10M65430.D\data.ms
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
Hexachlorobutadiene,P
Dimethylphthalate,P
Acenaphthylene,M
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 10M65430.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65429.D Sam Mult : 1 Vial# : 6 Qt On : 10/11/17 14:22
Acq On : 10/11/17 13:55 Misc : A,BNA Qt Upd On: 10/11/17 14:04

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	35608	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.835	152	82961	40.00	ng	0.00
31) Naphthalene-d8	6.840	136	315332	40.00	ng	0.00
50) Acenaphthene-d10	8.268	164	193828	40.00	ng	0.00
77) Phenanthrene-d10	9.729	188	333927	40.00	ng	0.00
91) Chrysene-d12	12.772	240	367703	40.00	ng	0.00
103) Perylene-d12	14.387	264	327547	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.631	112	280981	122.70	ng	0.00
Spiked Amount 100.000			Recovery = 122.70%			
16) Phenol-d5	5.514	99	343150	112.26	ng	0.00
Spiked Amount 100.000			Recovery = 112.26%			
32) Nitrobenzene-d5	6.284	128	75790	56.02	ng	0.00
Spiked Amount 50.000			Recovery = 112.04%			
55) 2-Fluorobiphenyl	7.675	172	353769	53.53	ng	0.00
Spiked Amount 50.000			Recovery = 107.06%			
80) 2,4,6-Tribromophenol	9.006	330	115532	115.97	ng	0.00
Spiked Amount 100.000			Recovery = 115.97%			
94) Terphenyl-d14	11.526	244	329961	58.31	ng	0.00
Spiked Amount 50.000			Recovery = 116.62%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.631	88	110487	121.5659	ng	77
9) Pyridine	3.091	79	279482	117.8362	ng	87
10) N-Nitrosodimethylamine	3.032	74	161013	114.4039	ng	92
12) Benzaldehyde	5.460	77	113460	278.6204	ng	63
13) Aniline	5.551	93	432148	129.8320	ng	33
14) Pentachloroethane	5.594	117	101624	110.8512	ng	74
15) bis(2-Chloroethyl)ether	5.610	93	279128	109.8974	ng	84
17) Phenol	5.525	94	388274	113.6302	ng	87
18) 2-Chlorophenol	5.653	128	328656	120.7952	ng	76
19) N-Decane	5.696	57	319275	124.4014	ng	92
20) 1,3-Dichlorobenzene	5.787	146	354004	117.8083	ng	96
22) 1,4-Dichlorobenzene	5.845	146	366379	108.7587	ng	96
23) 1,2-Dichlorobenzene	5.974	146	346193	109.1778	ng	98
24) Benzyl alcohol	5.947	108	207852	112.1645	ng	66
25) bis(2-chloroisopropyl)...	6.059	45	471199	131.6370	ng	99
26) 2-Methylphenol	6.033	108	282393	107.1057	ng	95
27) Acetophenone	6.161	105	419963	115.7156	ng	75
28) Hexachloroethane	6.247	117	133903	111.6222	ng	87
29) N-Nitroso-di-n-propyla...	6.161	70	191070	104.0034	ng	82
30) 3&4-Methylphenol	6.161	108	289918	108.3944	ng	98
33) Nitrobenzene	6.300	77	280653	103.2425	ng	69
34) Isophorone	6.487	82	523483	106.3131	ng	77
35) 2-Nitrophenol	6.546	139	181122	120.7069	ng	80
36) 2,4-Dimethylphenol	6.568	107	291588	106.9778	ng	88
37) Benzoic Acid	6.674	105	323336	96.2414	ng	82
38) bis(2-Chloroethoxy)met...	6.648	93	336518	106.2747	ng	95
39) 2,4-Dichlorophenol	6.728	162	276496	112.7181	ng	82
40) 1,2,4-Trichlorobenzene	6.792	180	295277	110.1335	ng	97
41) Naphthalene	6.856	128	949754m	115.7184	ng	
42) 4-Chloroaniline	6.888	127	307630m	112.0476	ng	
43) Hexachlorobutadiene	6.942	225	163740	107.0697	ng	96
44) Caprolactam	7.188	113	108025	114.4919	ng	72
45) 4-Chloro-3-methylphenol	7.252	107	249240	103.9408	ng	70
46) 2-Methylnaphthalene	7.391	142	666540	111.5553	ng	99
47) 1-Methylnaphthalene	7.471	142	641439	111.1241	ng	94
48) Methylnaphthalenes (To...	7.391	142	1300929m	221.9239	ng	
49) 1,1'-Biphenyl	7.766	154	785390	100.3037	ng	92
51) 1,2,4,5-Tetrachloroben...	7.520	216	320539	120.5783	ng	98
52) Hexachlorocyclopentadiene	7.509	237	200766	124.3161	ng	99
53) 2,4,6-Trichlorophenol	7.605	196	198495	113.9617	ng	99
54) 2,4,5-Trichlorophenol	7.637	196	218308	119.3265	ng	97
56) 2-Chloronaphthalene	7.787	162	594217	108.1607	ng	90
57) 1,4-Dimethylnaphthalene	8.070	156	491564	104.6457	ng	86
58) Dimethylnaphthalenes (...	8.070	156	491564	104.6457	ng	86
59) Diphenyl Ether	7.846	170	469910	120.7582	ng	76
60) 2-Nitroaniline	7.867	65	202054	120.2071	ng	35
61) Coumarin	8.054	146	248692	99.9988	ng	85
62) Acenaphthylene	8.145	152	1000588	117.8184	ng	99
63) Dimethylphthalate	8.012	163	687782	109.1920	ng	98
64) 2,6-Dinitrotoluene	8.065	165	166711	121.5582	ng	66
65) Acenaphthene	8.300	153	627869	113.5614	ng	98

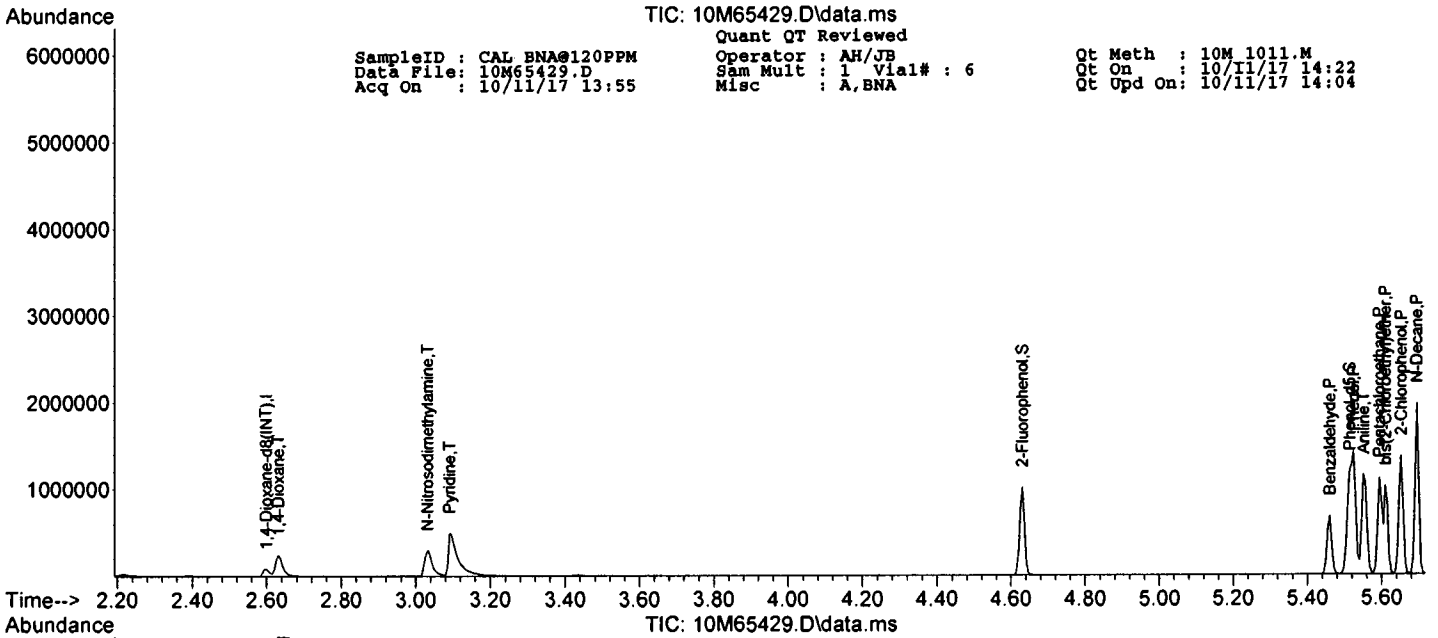
Quantitation Report (QT Reviewed)

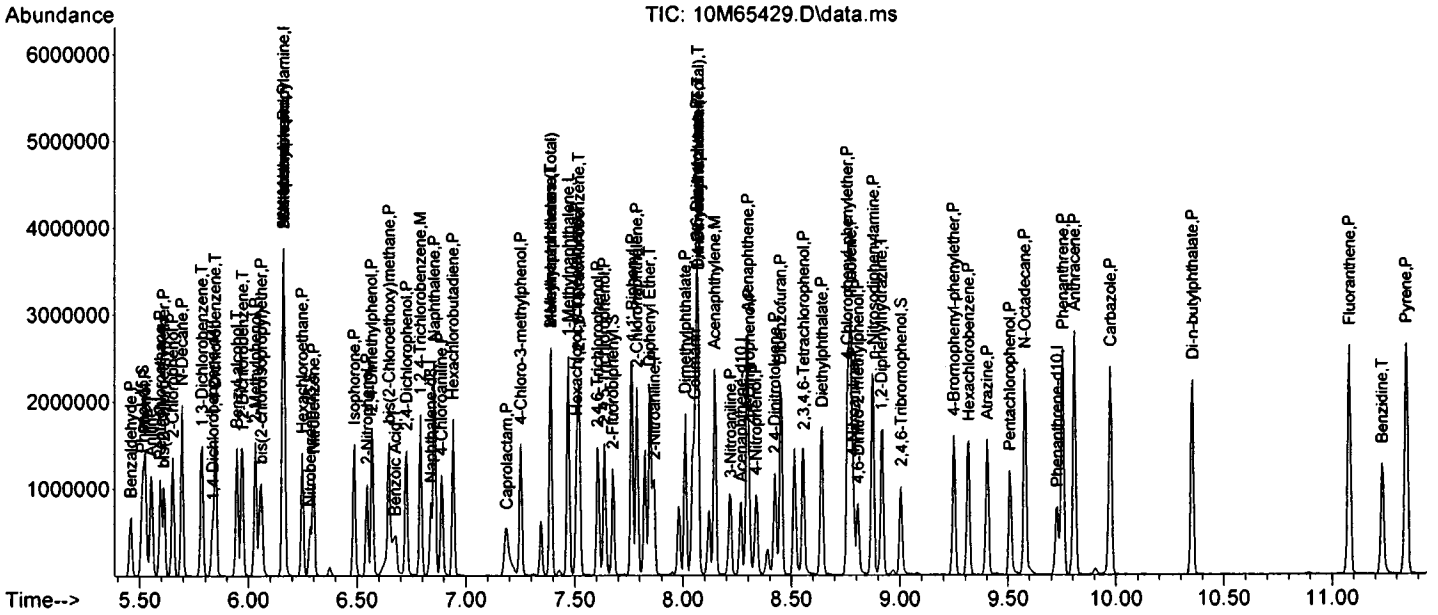
SampleID : CAL BNA@120PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65429.D Sam Mult : 1 Vial# : 6 Qt On : 10/11/17 14:22
Acq On : 10/11/17 13:55 Misc : A,BNA Qt Upd On: 10/11/17 14:04

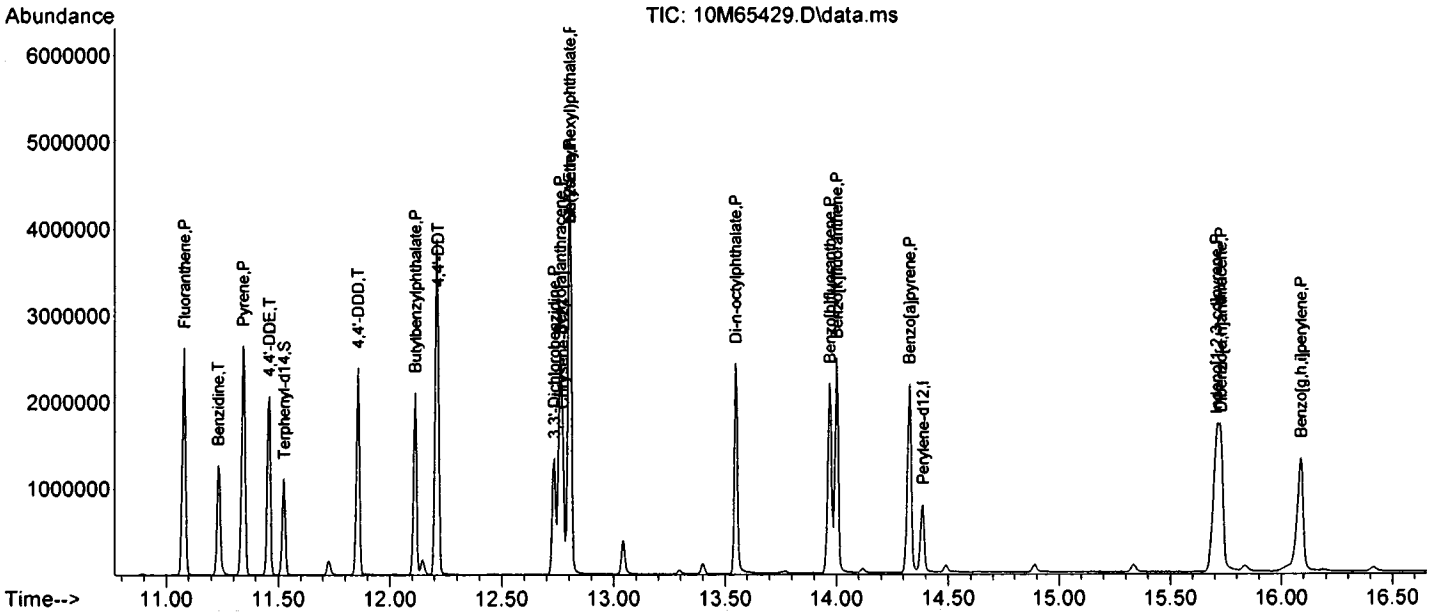
Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.220	138	166997	120.5588	ng	65
67)	2,4-Dinitrophenol	8.306	184	94702	114.7462	ng	41
68)	Dibenzofuran	8.450	168	906849	117.8747	ng	85
69)	2,4-Dinitrotoluene	8.423	165	217060	114.2631	ng	62
70)	4-Nitrophenol	8.338	65	132275m	116.8327	ng	
71)	2,3,4,6-Tetrachlorophenol	8.557	232	192493	117.7564	ng	82
72)	Fluorene	8.777	166	750570	117.1676	ng	98
73)	4-Chlorophenyl-phenyle...	8.760	204	355422	113.3216	ng	85
74)	Diethylphthalate	8.643	149	702788	113.3291	ng	96
75)	4-Nitroaniline	8.787	138	216660	123.6237	ng	71
76)	Atrazine	9.402	200	191251	151.5780	ng	96
78)	4,6-Dinitro-2-methylph...	8.809	198	129034	109.4109	ng	68
79)	n-Nitrosodiphenylamine	8.878	169	638268	117.0142	ng	97
81)	1,2-Diphenylhydrazine	8.916	77	691590	121.7500	ng	81
82)	4-Bromophenyl-phenylether	9.247	248	202880	107.6714	ng	85
83)	Hexachlorobenzene	9.317	284	217574	105.8892	ng	62
84)	N-Octadecane	9.579	57	437968	126.4202	ng	92
85)	Pentachlorophenol	9.509	266	145894	118.7878	ng	97
86)	Phenanthrene	9.755	178	1108534	115.4765	ng	99
87)	Anthracene	9.809	178	1139844	118.6656	ng	99
88)	Carbazole	9.975	167	1058548	117.7573	ng	97
89)	Di-n-butylphthalate	10.354	149	1191419	117.0183	ng	97
90)	Fluoranthene	11.082	202	1150892	111.4925	ng	88
92)	Pyrene	11.344	202	1250257	118.7195	ng	86
93)	Benzidine	11.232	184	554317	112.8632	ng	86
95)	4,4'-DDE	11.462	246	250668	106.8073	ng	93
96)	4,4'-DDD	11.857	235	465634	108.5241	ng	95
97)	Butylbenzylphthalate	12.114	149	545382	118.2417	ng	66
98)	4,4'-DDT	12.216	235	408241	111.2908	ng	99
99)	3,3'-Dichlorobenzidine	12.734	252	316372	110.6310	ng	95
100)	Benzo[a]anthracene	12.761	228	1102492	109.7109	ng	99
101)	Chrysene	12.804	228	1025499	104.6973	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.804	149	761268	130.1186	ng	92
104)	Di-n-octylphthalate	13.547	149	1281180	122.5984	ng	100
105)	Benzo[b]fluoranthene	13.970	252	1047722m	110.7911	ng	
106)	Benzo[k]fluoranthene	14.002	252	1028090	110.1942	ng	94
107)	Benzo[a]pyrene	14.328	252	1040946	113.7696	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.708	276	1128416	108.3013	ng	98
109)	Dibenzo[a,h]anthracene	15.730	278	952274	107.5577	ng	89
110)	Benzo[g,h,i]perylene	16.088	276	934519	104.8405	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M65429.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@120PPM
Data File: 10M65429.D
Acq On : 10/11/17 13:55
Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 14:22
Qt Upd On: 10/11/17 14:04
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Aniline,T
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 10M65429.D\data.ms
Benzaldehyde,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
Benzoic Acid,P
Naphthalene,P
Hexachlorobutadiene,P
Dimethylphthalate,P
Acenaphthylene,M
Acenaphthene,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
Fluorene,P
2,4,6-Tribromophenol,S
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 10M65429.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65428.D Sam Mult : 1 Vial# : 5 Qt On : 10/11/17 14:08
Acq On : 10/11/17 13:33 Misc : A,BNA Qt Upd On: 10/11/17 14:04

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	36197	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.835	152	81920	40.00	ng	0.00
31) Naphthalene-d8	6.840	136	310531	40.00	ng	0.00
50) Acenaphthene-d10	8.268	164	190542	40.00	ng	0.00
77) Phenanthrene-d10	9.728	188	323755	40.00	ng	0.00
91) Chrysene-d12	12.777	240	359216	40.00	ng	0.00
103) Perylene-d12	14.387	264	319956	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.631	112	375778	161.43	ng	0.00
Spiked Amount 100.000			Recovery = 161.43%			
16) Phenol-d5	5.514	99	476284	153.28	ng	0.00
Spiked Amount 100.000			Recovery = 153.28%			
32) Nitrobenzene-d5	6.284	128	100288	75.27	ng	0.00
Spiked Amount 50.000			Recovery = 150.54%			
55) 2-Fluorobiphenyl	7.675	172	473822	72.94	ng	0.00
Spiked Amount 50.000			Recovery = 145.88%			
80) 2,4,6-Tribromophenol	9.006	330	152552	153.96	ng	0.00
Spiked Amount 100.000			Recovery = 153.96%			
94) Terphenyl-d14	11.526	244	456332	82.54	ng	0.00
Spiked Amount 50.000			Recovery = 165.08%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.631	88	147702	160.0669	ng	78
9) Pyridine	3.091	79	382427	158.6165	ng	86
10) N-Nitrosodimethylamine	3.032	74	214386	147.2953	ng	91
12) Benzaldehyde	5.460	77	135748	327.9280	ng	67
13) Aniline	5.556	93	598665	176.9327	ng	34
14) Pentachloroethane	5.594	117	138426	148.5377	ng	74
15) bis(2-Chloroethyl)ether	5.615	93	393140	152.2671	ng	81
17) Phenol	5.530	94	542346	156.1374	ng	84
18) 2-Chlorophenol	5.653	128	452098	163.4616	ng	78
19) N-Decane	5.696	57	440990	169.0301	ng	93
20) 1,3-Dichlorobenzene	5.786	146	469134	153.5818	ng	96
22) 1,4-Dichlorobenzene	5.851	146	476080	143.1190	ng	98
23) 1,2-Dichlorobenzene	5.974	146	454530	145.1652	ng	98
24) Benzyl alcohol	5.947	108	273228	149.3174	ng	68
25) bis(2-chloroisopropyl)...	6.059	45	600408	169.8651	ng	99
26) 2-Methylphenol	6.032	108	370789	144.2749	ng	96
27) Acetophenone	6.166	105	535726	149.4884	ng	66
28) Hexachloroethane	6.246	117	174653	147.4416	ng	87
29) N-Nitroso-di-n-propyla...	6.166	70	242370	133.6035	ng	78
30) 3&4-Methylphenol	6.161	108	367010	138.9612	ng	99
33) Nitrobenzene	6.300	77	372457	139.1323	ng	72
34) Isophorone	6.487	82	702000	144.7720	ng	80
35) 2-Nitrophenol	6.546	139	240438	162.7148	ng	82
36) 2,4-Dimethylphenol	6.573	107	389119	147.5477	ng	85
37) Benzoic Acid	6.690	105	446717	129.8864	ng	81
38) bis(2-Chloroethoxy)met...	6.648	93	444576	142.5708	ng	94
39) 2,4-Dichlorophenol	6.728	162	374277	159.9254	ng	84
40) 1,2,4-Trichlorobenzene	6.792	180	393627	149.0863	ng	98
41) Naphthalene	6.856	128	1243872m	159.8453	ng	
42) 4-Chloroaniline	6.894	127	360212m	148.4743	ng	
43) Hexachlorobutadiene	6.942	225	221504	147.0810	ng	97
44) Caprolactam	7.193	113	161753	168.8533	ng	69
45) 4-Chloro-3-methylphenol	7.257	107	339469	143.7579	ng	66
46) 2-Methylnaphthalene	7.391	142	876526	148.9676	ng	98
47) 1-Methylnaphthalene	7.471	142	844243	148.5196	ng	95
48) Methylnaphthalenes (To...	7.391	142	1714050m	296.9183	ng	
49) 1,1'-Biphenyl	7.765	154	1012553	131.3144	ng	93
51) 1,2,4,5-Tetrachloroben...	7.525	216	419234	160.4245	ng	98
52) Hexachlorocyclopentadiene	7.509	237	274212	169.8569	ng	98
53) 2,4,6-Trichlorophenol	7.610	196	270162	157.7827	ng	99
54) 2,4,5-Trichlorophenol	7.642	196	292620	162.7036	ng	98
56) 2-Chloronaphthalene	7.787	162	784177	145.1993	ng	92
57) 1,4-Dimethylnaphthalene	8.070	156	631563	136.7678	ng	87
58) Dimethylnaphthalenes (...	8.070	156	631563	136.7678	ng	87
59) Diphenyl Ether	7.851	170	613537	160.3867	ng	72
60) 2-Nitroaniline	7.867	65	261212	158.0818	ng	38
61) Coumarin	8.060	146	329666	134.8445	ng	86
62) Acenaphthylene	8.151	152	1277085	152.9690	ng	100
63) Dimethylphthalate	8.017	163	920338	148.6323	ng	98
64) 2,6-Dinitrotoluene	8.070	165	215246	159.6544	ng	62
65) Acenaphthene	8.300	153	822548	151.3382	ng	99

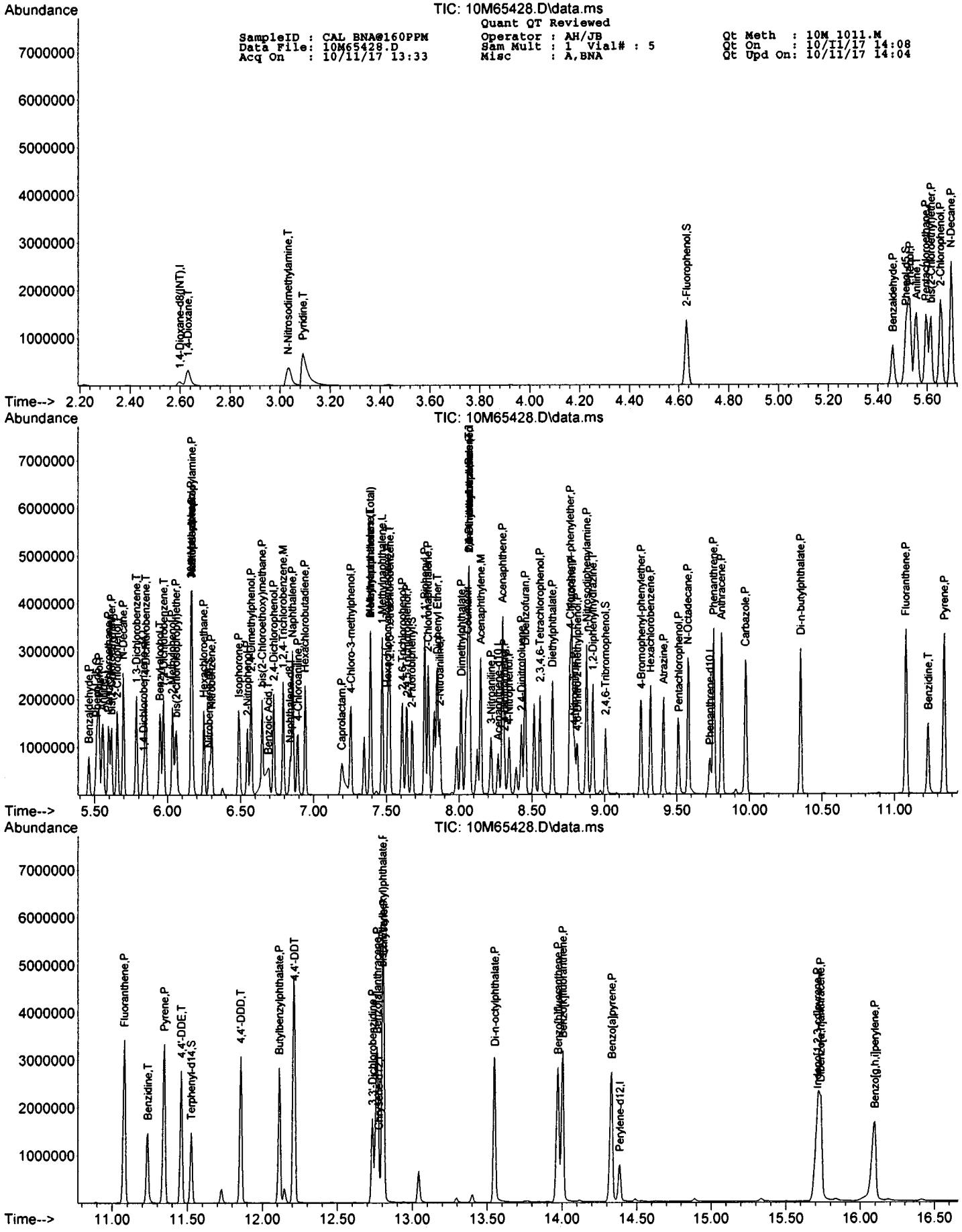
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65428.D Sam Mult : 1 Vial# : 5 Qt On : 10/11/17 14:08
Acq On : 10/11/17 13:33 Misc : A,BNA Qt Upd On: 10/11/17 14:04

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.220	138	203581	149.5042	ng	67
67) 2,4-Dinitrophenol	8.311	184	134543	155.9559	ng	32
68) Dibenzofuran	8.455	168	1181915	159.6720	ng	84
69) 2,4-Dinitrotoluene	8.429	165	290663	155.6473	ng	58
70) 4-Nitrophenol	8.343	65	169935m	153.6866	ng	
71) 2,3,4,6-Tetrachlorophenol	8.557	232	250309	155.7657	ng	83
72) Fluorene	8.776	166	968681	153.8235	ng	98
73) 4-Chlorophenyl-phenyle...	8.766	204	464287	150.5846	ng	79
74) Diethylphthalate	8.643	149	928365	152.2866	ng	95
75) 4-Nitroaniline	8.792	138	282826	164.1603	ng	71
76) Atrazine	9.407	200	255736	206.1818	ng	95
78) 4,6-Dinitro-2-methylph...	8.814	198	181411	151.6031	ng	71
79) n-Nitrosodiphenylamine	8.878	169	819258	154.9142	ng	98
81) 1,2-Diphenylhydrazine	8.921	77	887580	161.1621	ng	72
82) 4-Bromophenyl-phenylether	9.252	248	275131	150.6037	ng	79
83) Hexachlorobenzene	9.317	284	296080	148.6239	ng	65
84) N-Octadecane	9.579	57	555693	165.4414	ng	91
85) Pentachlorophenol	9.514	266	202588	162.0583	ng	94
86) Phenanthrene	9.755	178	1432665	153.9303	ng	99
87) Anthracene	9.809	178	1466259	157.4436	ng	99
88) Carbazole	9.974	167	1360249	156.0740	ng	98
89) Di-n-butylphthalate	10.354	149	1613859	166.6950	ng	97
90) Fluoranthene	11.082	202	1534319	153.3069	ng	89
92) Pyrene	11.349	202	1611074	156.5957	ng	84
93) Benzidine	11.237	184	651765	141.0804	ng	83
95) 4,4'-DDE	11.461	246	339911	148.2548	ng	93
96) 4,4'-DDD	11.857	235	642712	153.3343	ng	96
97) Butylbenzylphthalate	12.114	149	752249	168.3276	ng	69
98) 4,4'-DDT	12.216	235	553285	154.3949	ng	99
99) 3,3'-Dichlorobenzidine	12.734	252	394277	148.7083	ng	95
100) Benzo[a]anthracene	12.766	228	1482437	151.0053	ng	99
101) Chrysene	12.809	228	1363738	142.5189	ng	99
102) bis(2-Ethylhexyl)phtha...	12.804	149	1014017	177.4143	ng	91
104) Di-n-octylphthalate	13.553	149	1766738	174.2894	ng	99
105) Benzo[b]fluoranthene	13.975	252	1529589	165.5835	ng	93
106) Benzo[k]fluoranthene	14.007	252	1453817	159.5221	ng	92
107) Benzo[a]pyrene	14.334	252	1395830	156.1758	ng	91
108) Indeno[1,2,3-cd]pyrene	15.714	276	1533324	150.6544	ng	99
109) Dibenzo[a,h]anthracene	15.735	278	1308558	151.3059	ng	90
110) Benzo[g,h,i]perylene	16.099	276	1301590	149.4854	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 10M65428.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@160PPM
Data File: 10M65428.D
Acq On : 10/11/17 13:33
Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 14:08
Qt Upd On: 10/11/17 14:04
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65427.D Sam Mult : 1 Vial# : 4 Qt On : 10/11/17 14:06
Acq On : 10/11/17 13:10 Misc : A,BNA Qt Upd On: 10/11/17 14:04

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.593	96	33418	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.835	152	80231	40.00	ng	0.00
31) Naphthalene-d8	6.840	136	298751	40.00	ng	0.00
50) Acenaphthene-d10	8.268	164	179421	40.00	ng	0.00
77) Phenanthrene-d10	9.728	188	308588	40.00	ng	0.00
91) Chrysene-d12	12.777	240	350214	40.00	ng	0.00
103) Perylene-d12	14.387	264	309769	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.631	112	459485	213.80	ng	0.00
Spiked Amount 100.000			Recovery = 213.80%			
16) Phenol-d5	5.519	99	570644	198.92	ng	0.00
Spiked Amount 100.000			Recovery = 198.92%			
32) Nitrobenzene-d5	6.284	128	124872	97.42	ng	0.00
Spiked Amount 50.000			Recovery = 194.84%			
55) 2-Fluorobiphenyl	7.680	172	563746	92.16	ng	0.00
Spiked Amount 50.000			Recovery = 184.32%			
80) 2,4,6-Tribromophenol	9.012	330	181140	187.61	ng	0.00
Spiked Amount 100.000			Recovery = 187.61%			
94) Terphenyl-d14	11.526	244	546926	101.47	ng	0.00
Spiked Amount 50.000			Recovery = 202.94%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.631	88	177681	208.8976	ng	77
9) Pyridine	3.091	79	447304	200.9531	ng	87
10) N-Nitrosodimethylamine	3.037	74	258746	188.5300	ng	87
12) Benzaldehyde	5.460	77	147411	385.7155	ng	68
13) Aniline	5.556	93	676451	216.5472	ng	34
14) Pentachloroethane	5.594	117	161502	187.7107	ng	74
15) bis(2-Chloroethyl)ether	5.615	93	435701	182.7846	ng	83
17) Phenol	5.530	94	622671	194.1696	ng	86
18) 2-Chlorophenol	5.658	128	528393	206.9343	ng	74
19) N-Decane	5.696	57	491002	203.8499	ng	92
20) 1,3-Dichlorobenzene	5.786	146	570211	202.1950	ng	96
22) 1,4-Dichlorobenzene	5.851	146	593369	182.1335	ng	98
23) 1,2-Dichlorobenzene	5.974	146	546551	178.2290	ng	98
24) Benzyl alcohol	5.952	108	330466	184.3994	ng	65
25) bis(2-chloroisopropyl)...	6.059	45	751013	216.9466	ng	99
26) 2-Methylphenol	6.038	108	452565	182.2249	ng	96
27) Acetophenone	6.166	105	639045	182.0723	ng	71
28) Hexachloroethane	6.246	117	215666	185.8975	ng	87
29) N-Nitroso-di-n-propyla...	6.166	70	294393	165.6969	ng	79
30) 3&4-Methylphenol	6.161	108	437900	169.2928	ng	97
33) Nitrobenzene	6.300	77	463072	179.8026	ng	72
34) Isophorone	6.492	82	879882	188.6112	ng	76
35) 2-Nitrophenol	6.546	139	296109	208.2913	ng	83
36) 2,4-Dimethylphenol	6.573	107	477336	191.8661	ng	86
37) Benzoic Acid	6.701	105	528900	155.3697	ng	81
38) bis(2-Chloroethoxy)met...	6.648	93	540821	180.2743	ng	94
39) 2,4-Dichlorophenol	6.728	162	457183	210.2699	ng	84
40) 1,2,4-Trichlorobenzene	6.792	180	499527	196.6561	ng	97
41) Naphthalene	6.856	128	1448515m	200.6556	ng	
43) Hexachlorobutadiene	6.942	225	262423	181.1225	ng	96
44) Caprolactam	7.199	113	189922	202.3304	ng	69
45) 4-Chloro-3-methylphenol	7.257	107	402984	177.3842	ng	69
46) 2-Methylnaphthalene	7.391	142	1009798	178.3845	ng	98
47) 1-Methylnaphthalene	7.471	142	976931	178.6387	ng	94
48) Methylnaphthalenes (To...	7.391	142	1979779m	356.4723	ng	
49) 1,1'-Biphenyl	7.765	154	1184676	159.6944	ng	93
51) 1,2,4,5-Tetrachloroben...	7.525	216	493914	200.7165	ng	98
52) Hexachlorocyclopentadiene	7.509	237	320610	208.0152	ng	99
53) 2,4,6-Trichlorophenol	7.610	196	322903	200.2741	ng	98
54) 2,4,5-Trichlorophenol	7.642	196	347478	205.1814	ng	98
56) 2-Chloronaphthalene	7.792	162	932924	183.4485	ng	89
57) 1,4-Dimethylnaphthalene	8.070	156	718125	165.1524	ng	90
58) Dimethylnaphthalenes (...	8.070	156	718125	165.1524	ng	90
59) Diphenyl Ether	7.851	170	732349	203.3121	ng	72
60) 2-Nitroaniline	7.867	65	307208	197.4416	ng	42
61) Coumarin	8.060	146	377521	163.9901	ng	83
62) Acenaphthylene	8.151	152	1514386	192.6361	ng	100
63) Dimethylphthalate	8.017	163	1079613	185.1618	ng	98
64) 2,6-Dinitrotoluene	8.070	165	244208	192.3637	ng	73
65) Acenaphthene	8.300	153	964518	188.4582	ng	98
66) 3-Nitroaniline	8.220	138	220755	172.1647	ng	69

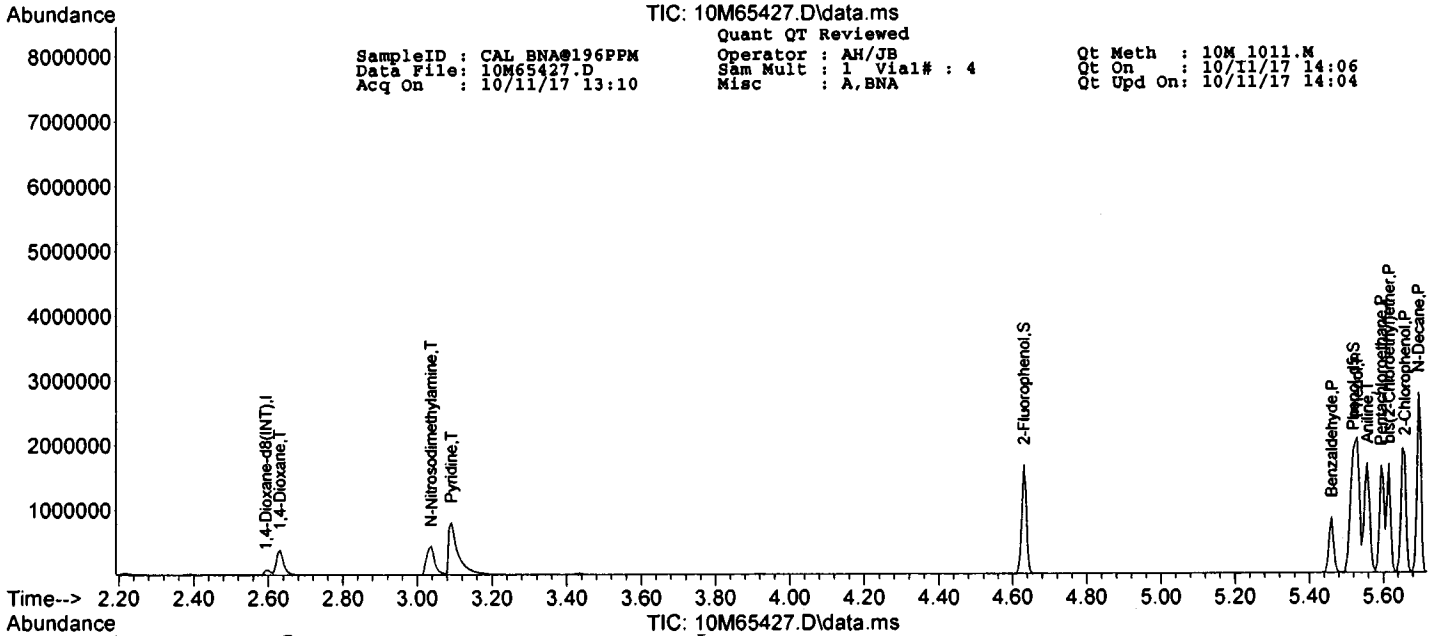
Quantitation Report (QT Reviewed)

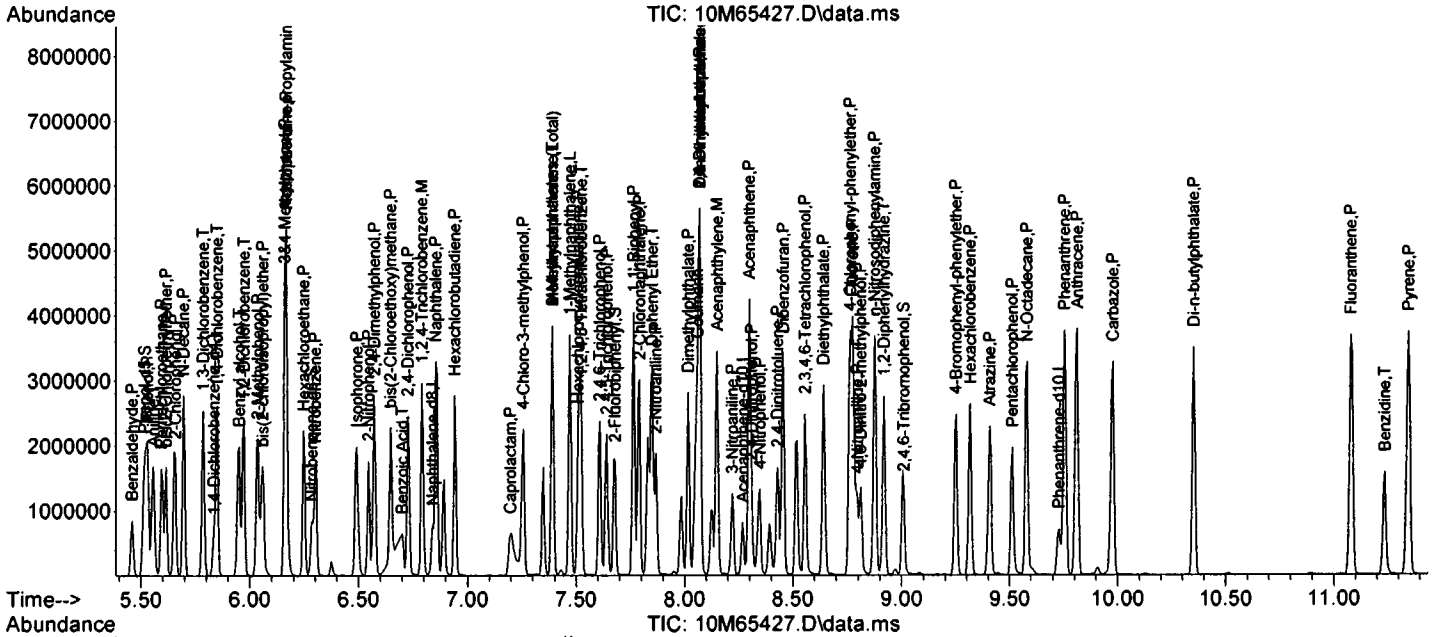
SampleID : CAL BNA@196PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65427.D Sam Mult : 1 Vial# : 4 Qt On : 10/11/17 14:06
Acq On : 10/11/17 13:10 Misc : A,BNA Qt Upd On: 10/11/17 14:04

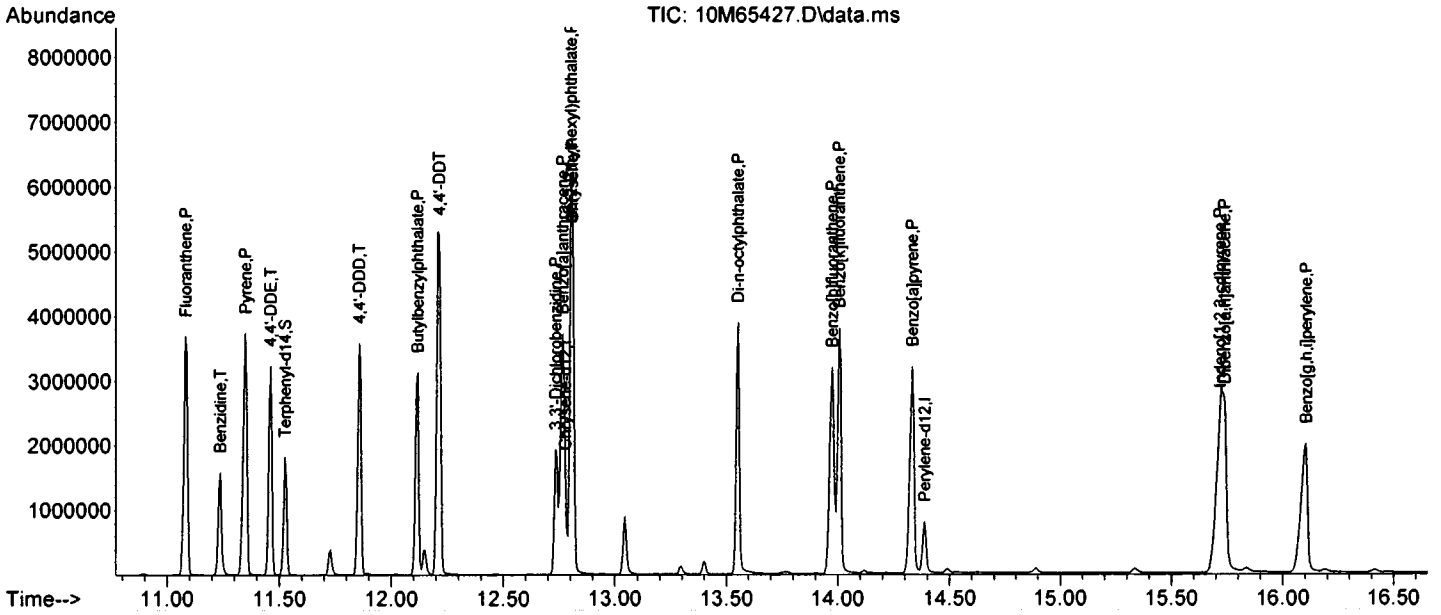
Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	2,4-Dinitrophenol	8.311	184	159120	187.3709	ng	34
68)	Dibenzofuran	8.455	168	1390561	204.2320	ng	85
69)	2,4-Dinitrotoluene	8.429	165	342761	194.9220	ng	61
70)	4-Nitrophenol	8.348	65	197629m	191.0833	ng	
71)	2,3,4,6-Tetrachlorophenol	8.557	232	305438	201.8534	ng	83
72)	Fluorene	8.776	166	1124310	189.6031	ng	99
73)	4-Chlorophenyl-phenyle...	8.766	204	548760	189.0140	ng	81
74)	Diethylphthalate	8.643	149	1106998	192.8445	ng	95
75)	4-Nitroaniline	8.798	138	336081	207.1620	ng	69
76)	Atrazine	9.408	200	308334	263.9959	ng	96
78)	4,6-Dinitro-2-methylph...	8.814	198	213785	181.6815	ng	68
79)	n-Nitrosodiphenylamine	8.878	169	982868	194.9859	ng	98
81)	1,2-Diphenylhydrazine	8.921	77	1036769	197.5035	ng	72
82)	4-Bromophenyl-phenylether	9.252	248	332012	190.6722	ng	82
83)	Hexachlorobenzene	9.317	284	352674	185.7336	ng	66
84)	N-Octadecane	9.584	57	638526	199.4460	ng	88
85)	Pentachlorophenol	9.514	266	246030	198.5399	ng	97
86)	Phenanthrene	9.755	178	1681182	189.5098	ng	100
87)	Anthracene	9.814	178	1751504	197.3163	ng	99
88)	Carbazole	9.980	167	1586222	190.9473	ng	97
89)	Di-n-butylphthalate	10.354	149	1881132	207.1599	ng	97
90)	Fluoranthene	11.082	202	1816874	190.4620	ng	90
92)	Pyrene	11.349	202	1886252	188.0556	ng	85
93)	Benzidine	11.237	184	684213	154.8191	ng	84
95)	4,4'-DDE	11.461	246	397495	177.8268	ng	93
96)	4,4'-DDD	11.857	235	755766	184.9407	ng	95
97)	Butylbenzylphthalate	12.119	149	882796	203.8131	ng	64
98)	4,4'-DDT	12.216	235	649817	185.9933	ng	98
99)	3,3'-Dichlorobenzidine	12.734	252	456206	186.3934	ng	96
100)	Benzo[a]anthracene	12.766	228	1750423	182.8862	ng	99
101)	Chrysene	12.809	228	1632138	174.9527	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.804	149	1190898	213.7175	ng	92
104)	Di-n-octylphthalate	13.553	149	2086531	213.7528	ng	99
105)	Benzo[b]fluoranthene	13.975	252	1766412	197.5089	ng	94
106)	Benzo[k]fluoranthene	14.007	252	1661799m	188.3397	ng	
107)	Benzo[a]pyrene	14.334	252	1668686	192.8449	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.719	276	1878405	190.6292	ng	86
109)	Dibenzo[a,h]anthracene	15.740	278	1601564	191.2756	ng	88
110)	Benzo[g,h,i]perylene	16.104	276	1576896	187.0595	ng	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M65427.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@196PPM
Data File: 10M65427.D
Acq On : 10/11/17 13:10
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 14:06
Qt Upd On: 10/11/17 14:04
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Aniline,T
N-Decane,P
Time-->


Abundance
TIC: 10M65427.D\data.ms
Benzaldehyde,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Hexachlorobutadiene,P
Acenaphthene,P
Diethylphthalate,P
2,4,6-Tribromophenol,S
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 10M65427.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo(a)pyrene,P
Perylene-d12,I
Benzo(g,h,i)perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65433.D Sam Mult : 1 Vial# : 10 Qt On : 10/11/17 15:49
Acq On : 10/11/17 15:24 Misc : A,BNA Qt Upd On: 10/11/17 15:27

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.599	96	36149	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.829	152	83752	40.00	ng	0.00
31) Naphthalene-d8	6.835	136	318277	40.00	ng	0.00
50) Acenaphthene-d10	8.263	164	195240	40.00	ng	0.00
77) Phenanthrene-d10	9.723	188	345745	40.00	ng	0.00
91) Chrysene-d12	12.767	240	386495	40.00	ng	0.00
103) Perylene-d12	14.382	264	364714	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.663	88	990m	1.0688	ng	
9) Pyridine	0.000		0	N.D. d		
10) N-Nitrosodimethylamine	0.000		0	N.D.		
12) Benzaldehyde	0.000		0	N.D. d		
13) Aniline	5.551	93	1270	0.3758	ng	49
14) Pentachloroethane	0.000		0	N.D. d		
15) bis(2-Chloroethyl)ether	5.605	93	1495	0.5798	ng	78
17) Phenol	0.000		0	N.D. d		
18) 2-Chlorophenol	0.000		0	N.D. d		
19) N-Decane	0.000		0	N.D. d		
20) 1,3-Dichlorobenzene	0.000		0	N.D. d		
22) 1,4-Dichlorobenzene	0.000		0	N.D. d		
23) 1,2-Dichlorobenzene	0.000		0	N.D. d		
24) Benzyl alcohol	0.000		0	N.D. d		
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d		
26) 2-Methylphenol	6.027	108	1501	0.5439	ng	89
27) Acetophenone	0.000		0	N.D. d		
28) Hexachloroethane	0.000		0	N.D. d		
29) N-Nitroso-di-n-propyla...	6.156	70	971	0.5235	ng	94
30) 3&4-Methylphenol	6.150	108	1444	0.5348	ng	81
33) Nitrobenzene	0.000		0	N.D. d		
34) Isophorone	0.000		0	N.D. d		
35) 2-Nitrophenol	0.000		0	N.D. d		
36) 2,4-Dimethylphenol	6.562	107	1481	0.5147	ng	98
37) Benzoic Acid	0.000		0	N.D.		
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d		
39) 2,4-Dichlorophenol	6.723	162	1195	0.4493	ng	85
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d		
41) Naphthalene	6.851	128	5651	0.6218	ng	98
42) 4-Chloroaniline	6.888	127	1354	0.3716	ng	91
43) Hexachlorobutadiene	0.000		0	N.D. d		
44) Caprolactam	0.000		0	N.D.		
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d		
46) 2-Methylnaphthalene	0.000		0	N.D. d		
47) 1-Methylnaphthalene	0.000		0	N.D. d		
48) Methylnaphthalenes (To...	0.000		0	N.D. d		
49) 1,1'-Biphenyl	0.000		0	N.D. d		
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d		
52) Hexachlorocyclopentadiene	0.000		0	N.D. d		
53) 2,4,6-Trichlorophenol	0.000		0	N.D. d		
54) 2,4,5-Trichlorophenol	0.000		0	N.D. d		
56) 2-Chloronaphthalene	0.000		0	N.D. d		
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d		
58) Dimethylnaphthalenes (...	0.000		0	N.D. d		
59) Diphenyl Ether	0.000		0	N.D. d		
60) 2-Nitroaniline	0.000		0	N.D. d		
61) Coumarin	0.000		0	N.D. d		
62) Acenaphthylene	0.000		0	N.D. d		
63) Dimethylphthalate	0.000		0	N.D. d		
64) 2,6-Dinitrotoluene	0.000		0	N.D. d		
65) Acenaphthene	0.000		0	N.D. d		

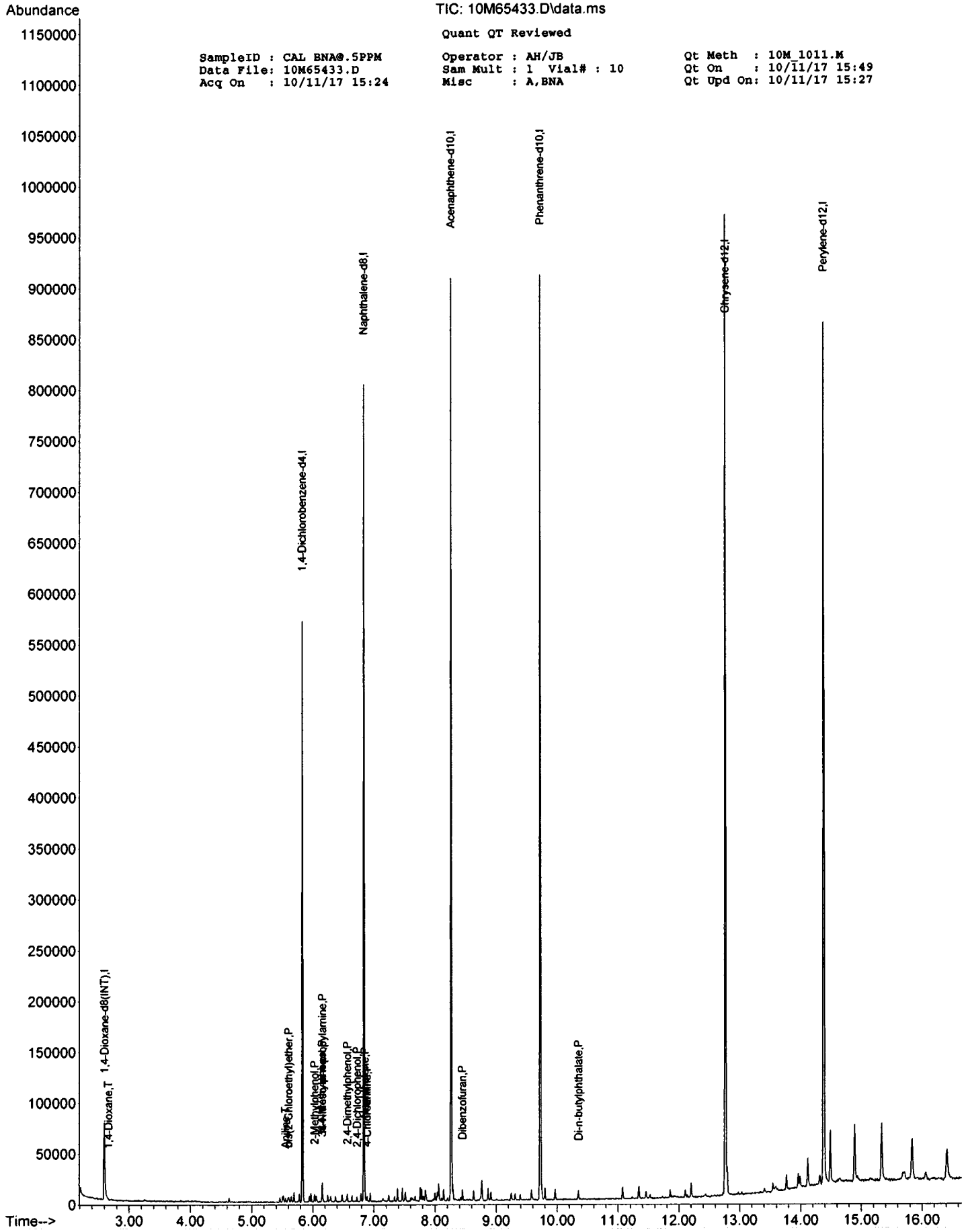
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M65433.D Sam Mult : 1 Vial# : 10 Qt On : 10/11/17 15:49
Acq On : 10/11/17 15:24 Misc : A,BNA Qt Upd On: 10/11/17 15:27

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
66)	3-Nitroaniline	0.000		0	N.D.	d		
67)	2,4-Dinitrophenol	0.000		0	N.D.			
68)	Dibenzofuran	8.445	168	4784	0.5826	ng		91
69)	2,4-Dinitrotoluene	0.000		0	N.D.	d		
70)	4-Nitrophenol	0.000		0	N.D.	d		
71)	2,3,4,6-Tetrachlorophenol	0.000		0	N.D.			
72)	Fluorene	0.000		0	N.D.	d		
73)	4-Chlorophenyl-phenyle...	0.000		0	N.D.	d		
74)	Diethylphthalate	0.000		0	N.D.	d		
75)	4-Nitroaniline	0.000		0	N.D.	d		
76)	Atrazine	0.000		0	N.D.	d		
78)	4,6-Dinitro-2-methylph...	0.000		0	N.D.			
79)	n-Nitrosodiphenylamine	0.000		0	N.D.	d		
81)	1,2-Diphenylhydrazine	0.000		0	N.D.	d		
82)	4-Bromophenyl-phenylether	0.000		0	N.D.	d		
83)	Hexachlorobenzene	0.000		0	N.D.	d		
84)	N-Octadecane	0.000		0	N.D.	d		
85)	Pentachlorophenol	0.000		0	N.D.			
86)	Phenanthrene	0.000		0	N.D.	d		
87)	Anthracene	0.000		0	N.D.	d		
88)	Carbazole	0.000		0	N.D.	d		
89)	Di-n-butylphthalate	10.349	149	5226	0.4743	ng		95
90)	Fluoranthene	0.000		0	N.D.	d		
92)	Pyrene	0.000		0	N.D.	d		
93)	Benzidine	0.000		0	N.D.	d		
95)	4,4'-DDE	0.000		0	N.D.	d		
96)	4,4'-DDD	0.000		0	N.D.	d		
97)	Butylbenzylphthalate	0.000		0	N.D.	d		
98)	4,4'-DDT	0.000		0	N.D.	d		
99)	3,3'-Dichlorobenzidine	0.000		0	N.D.	d		
100)	Benzo[a]anthracene	0.000		0	N.D.	d		
101)	Chrysene	0.000		0	N.D.	d		
102)	bis(2-Ethylhexyl)phtha...	0.000		0	N.D.	d		
104)	Di-n-octylphthalate	0.000		0	N.D.	d		
105)	Benzo[b]fluoranthene	0.000		0	N.D.	d		
106)	Benzo[k]fluoranthene	0.000		0	N.D.	d		
107)	Benzo[a]pyrene	0.000		0	N.D.	d		
108)	Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d		
109)	Dibenzo[a,h]anthracene	0.000		0	N.D.	d		
110)	Benzo[g,h,i]perylene	0.000		0	N.D.	d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M65433.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@.5PPM
Data File: 10M65433.D
Acq On : 10/11/17 15:24
Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 10/11/17 15:49
Qt Upd On: 10/11/17 15:27
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Naphthalene-d8,I
Acenaphthene-d10,I
Phenanthrene-d10,I
Chrysene-d12,I
Perylene-d12,I
1,4-Dioxane,T
Dibenzofuran,P
Di-n-butylphthalate,P
Time-->

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M87278.D	CAL BNA@50PPM	10/19/17 13:35	2	7M87270.D	CAL BNA@2PPM	10/19/17 10:27
3	7M87271.D	CAL BNA@10PPM	10/19/17 10:51	4	7M87276.D	CAL BNA@20PPM	10/19/17 12:48
5	7M87275.D	CAL BNA@80PPM	10/19/17 12:25	6	7M87274.D	CAL BNA@120PPM	10/19/17 12:02
7	7M87273.D	CAL BNA@160PPM	10/19/17 11:38	8	7M87272.D	CAL BNA@196PPM	10/19/17 11:15
9	7M87277.D	CAL BNA@.5PPM	10/19/17 13:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	1.0923	1.3063	1.1581	1.0889	1.0643	1.0658	1.0119	1.1027	1.6513	1.17	2.60	0.997	0.998	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	2.7887	2.8652	2.6218	2.6276	2.9927	3.0072	2.7592	2.9642	-----	2.83	3.07	0.997	0.997	5.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.6573	1.7220	1.5402	1.5714	1.7584	1.7767	1.6325	1.7961	-----	1.68	3.00	0.996	0.996	5.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.4008	2.2871	2.1368	2.2841	2.6257	2.6402	2.3929	2.6028	-----	2.42	4.61	0.995	0.997	7.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Qua	1.3321	1.5181	1.3438	1.2917	1.3710	1.2779	1.0644	1.1062	-----	1.29	5.45	0.984	0.994	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Aniline	1	0	Qua	3.4325	2.4698	2.1437	2.4437	3.7632	3.8441	3.4517	3.6944	2.9387	3.13	5.54	0.996	0.996	21		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.7950	0.8998	0.7717	0.7719	0.8475	0.8175	0.7514	0.8054	-----	0.808	5.58	0.997	0.997	5.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	2.5993	2.9852	2.6114	2.5674	2.6998	2.5994	2.2897	2.4855	3.5189	2.71	5.60	0.995	0.995	13	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	3.1606	3.0720	2.8289	2.8689	3.3558	3.3456	2.9311	3.2247	-----	3.10	5.49	0.994	0.994	6.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	3.7161	3.7177	3.3678	3.4021	3.9126	3.8163	3.3551	3.6576	-----	3.62	5.51	0.994	0.994	6.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.6243	2.4740	2.3956	2.4245	2.7780	2.7238	2.4214	2.6243	-----	2.56	5.63	0.995	0.995	5.8	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.3754	2.8980	2.4423	2.4439	2.3474	2.2578	2.0156	2.1016	-----	2.36	5.68	0.995	0.997	11	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.5823	3.0458	2.6215	2.5413	2.6456	2.5933	2.3102	2.4816	-----	2.60	5.77	0.995	0.996	8.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.3971	1.6515	1.4453	1.4386	1.3769	1.3991	1.3236	1.3897	-----	1.43	5.83	0.999	0.999	6.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.3440	1.6287	1.3999	1.3719	1.3235	1.3304	1.2629	1.3242	-----	1.37	5.96	0.999	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9243	0.9086	0.8474	0.8708	0.9445	0.9894	0.9045	0.9659	-----	0.919	5.93	0.998	0.999	5.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.6856	2.0466	1.7767	1.6529	1.6470	1.6785	1.5210	1.6383	-----	1.71	6.04	0.997	0.997	9.1	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2875	1.2781	1.2382	1.2525	1.3090	1.3379	1.2270	1.3136	1.3507	1.29	6.02	0.998	0.998	3.4	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.0040	2.3332	2.1629	2.0378	1.9567	1.9138	1.6935	1.7683	-----	1.98	6.15	0.995	0.997	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5365	0.6255	0.5579	0.5490	0.5430	0.5562	0.5295	0.5593	-----	0.557	6.23	0.999	0.999	5.3	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Qua	0.9450	1.1000	0.9947	0.9535	0.9304	0.9059	0.8067	0.8661	1.1590	0.962	6.15	0.996	0.996	11	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3115	1.3069	1.2895	1.2843	1.3327	1.2924	1.1316	1.1774	1.3443	1.27	6.14	0.994	0.997	5.6		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1615	0.1623	0.1518	0.1564	0.1615	0.1641	0.1603	0.1710	-----	0.161	6.27	0.998	0.999	3.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3641	0.3808	0.3564	0.3624	0.3509	0.3536	0.3326	0.3567	-----	0.357	6.29	0.998	0.998	3.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6858	0.6721	0.6470	0.6638	0.6696	0.6733	0.6328	0.6877	-----	0.667	6.47	0.997	0.997	2.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Qua	0.1762	0.1401	0.1436	0.1664	0.1808	0.1882	0.1788	0.1897	-----	0.171	6.54	0.998	0.999	11	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3447	0.3362	0.3334	0.3411	0.3435	0.3448	0.3235	0.3483	0.3213	0.337	6.56	0.998	0.998	2.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.3001	-----	0.0657	0.1873	0.3774	0.4148	0.4032	0.4292	-----	0.311	6.63	0.998	0.998	44		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4228	0.4650	0.4263	0.4318	0.4139	0.4121	0.3840	0.4114	-----	0.421	6.63	0.998	0.998	5.4	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2738	0.2328	0.2419	0.2677	0.2757	0.2786	0.2619	0.2791	0.2139	0.258	6.72	0.998	0.998	9.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.2906	0.3331	0.2976	0.2975	0.2832	0.2845	0.2685	0.2870	-----	0.293	6.79	0.998	0.998	6.4		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Qua	1.0120	1.2420	1.0644	1.0601	0.9805	0.9713	0.8974	0.9623	1.4272	1.07	6.85	0.998	0.998	16	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3619	0.2561	0.2370	0.2702	0.3553	0.3195	0.2562	0.2540	0.3013	0.290	6.88	0.967	0.993	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1465	0.1678	0.1498	0.1531	0.1451	0.1469	0.1401	0.1482	-----	0.150	6.94	0.999	0.999	5.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Qua	0.1374	0.1091	0.1048	0.1187	0.1431	0.1458	0.1444	0.1625	-----	0.133	7.16	0.994	0.997	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3077	0.2703	0.2805	0.2833	0.3134	0.3174	0.2920	0.3212	-----	0.298	7.24	0.996	0.996	6.4	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.6950	0.7869	0.7051	0.7085	0.6781	0.6729	0.6230	0.6651	-----	0.692	7.39	0.998	0.998	6.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6646	0.7513	0.6920	0.6554	0.6517	0.6509	0.5937	0.6391	-----	0.662	7.47	0.997	0.997	6.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (	1	0	Avg	0.6795	0.7692	0.6985	0.6818	0.6645	0.6620	0.6081	0.6518	-----	0.677	7.39	0.997	0.997	6.8		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8091	0.9254	0.8326	0.7928	0.8035	0.8015	0.7363	0.8020	-----	0.813	7.76	0.997	0.997	6.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.4983	0.5992	0.5136	0.5198	0.4831	0.4827	0.4593	0.4745	-----	0.504	7.51	0.999	1.00	8.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Avg Rsd: 9.32

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

7111018 0169

Form 6
Initial Calibration

Method: EPA 8270D

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M87278.D	CAL BNA@50PPM	10/19/17 13:35	2	7M87270.D	CAL BNA@2PPM	10/19/17 10:27
3	7M87271.D	CAL BNA@10PPM	10/19/17 10:51	4	7M87276.D	CAL BNA@20PPM	10/19/17 12:48
5	7M87275.D	CAL BNA@80PPM	10/19/17 12:25	6	7M87274.D	CAL BNA@120PPM	10/19/17 12:02
7	7M87273.D	CAL BNA@160PPM	10/19/17 11:38	8	7M87272.D	CAL BNA@196PPM	10/19/17 11:15
9	7M87277.D	CAL BNA@.5PPM	10/19/17 13:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Avg	0.2794	0.2732	0.2565	0.2791	0.2872	0.2957	0.2920	0.2972	----	0.283	7.50	1.00	1.00	4.8	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Qua	0.3257	0.2311	0.2994	0.3130	0.3215	0.3523	0.3323	0.3458	----	0.315	7.60	0.998	0.999	12	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3393	0.2778	0.2879	0.3443	0.3093	0.3360	0.3363	0.3541	----	0.323	7.63	0.997	0.999	8.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2294	1.4543	1.2428	1.2621	1.1836	1.1901	1.1659	1.2219	----	1.24	7.67	1.00	1.00	7.3		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.1363	1.1959	1.0739	1.0997	1.0455	1.0136	0.9583	1.0022	----	1.07	7.78	0.998	0.998	7.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8347	0.9951	0.8972	0.8724	0.7968	0.7690	0.7140	0.7314	----	0.826	8.06	0.997	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8347	0.9951	0.8972	0.8724	0.7968	0.7690	0.7140	0.7314	----	0.826	8.06	0.997	0.999	11		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7804	0.9236	0.8255	0.8290	0.7567	0.7555	0.7210	0.7551	----	0.793	7.85	0.999	0.999	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3871	0.3546	0.3552	0.3794	0.3788	0.3839	0.3573	0.3825	----	0.372	7.86	0.998	0.998	3.8	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4532	0.4820	0.4627	0.4558	0.4404	0.4318	0.3976	0.4146	----	0.442	8.04	0.997	0.998	6.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.6634	1.7748	1.7033	1.7184	1.6269	1.6184	1.5293	1.6199	----	1.66	8.14	0.999	0.999	4.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2274	1.3358	1.2475	1.2428	1.2178	1.2012	1.1446	1.2125	----	1.23	8.00	0.998	0.998	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2808	0.2700	0.2765	0.2835	0.2736	0.2644	0.2388	0.2487	----	0.267	8.06	0.996	0.998	5.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0842	1.2750	1.1281	1.1048	1.0458	1.0314	0.9784	1.0295	----	1.08	8.29	0.998	0.998	8.3	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Qua	0.3059	0.2343	0.2474	0.2678	0.3180	0.3061	0.2776	0.2915	----	0.281	8.21	0.996	0.997	11	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1159	-----	0.0291	0.0665	0.1449	0.1682	0.1638	0.1777	----	0.124	8.30	0.996	0.998	46	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.5664	1.8362	1.6291	1.5826	1.5185	1.5064	1.4118	1.5049	2.1485	1.63	8.44	0.998	0.998	14	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Qua	0.3904	0.2962	0.3331	0.3633	0.4036	0.4095	0.3868	0.4178	----	0.375	8.42	0.998	0.998	11	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2507	0.1264	0.1932	0.2198	0.2656	0.2648	0.2440	0.2730	----	0.230	8.33	0.995	0.995	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Qua	0.2963	0.2155	0.2463	0.2711	0.3098	0.3155	0.3023	0.3233	----	0.285	8.55	0.998	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2600	1.3902	1.3101	1.2680	1.2211	1.2140	1.1238	1.2023	----	1.25	8.77	0.997	0.997	6.3	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.5730	0.6379	0.5923	0.5828	0.5741	0.5766	0.5334	0.5704	----	0.580	8.76	0.998	0.998	5.0	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2791	1.3248	1.2405	1.2753	1.2775	1.2866	1.2060	1.3120	----	1.28	8.64	0.997	0.997	3.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Qua	0.3726	0.2447	0.3227	0.3437	0.3786	0.3831	0.3583	0.3968	----	0.350	8.77	0.996	0.997	14	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3244	0.2612	0.2769	0.3056	0.3338	0.3388	0.3235	0.3542	----	0.315	9.39	0.997	0.998	10	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1021	-----	0.0489	0.0755	0.1173	0.1240	0.1215	0.1321	----	0.103	8.80	0.997	0.998	29	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.6121	0.6129	0.6165	0.6316	0.5957	0.5928	0.5601	0.5921	----	0.602	8.87	0.999	0.999	3.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0824	0.0465	0.0640	0.0768	0.0857	0.0906	0.0881	0.0939	----	0.0786	9.00	0.998	0.999	20		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.7245	0.7885	0.7697	0.7587	0.6847	0.6754	0.7017	0.6794	----	0.723	8.91	0.999	0.999	6.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.1886	0.1980	0.1802	0.1876	0.1870	0.1898	0.1825	0.1943	----	0.189	9.24	0.998	0.999	3.1	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.1921	0.2277	0.1986	0.2006	0.1912	0.1950	0.1866	0.1980	----	0.199	9.31	1.00	1.00	6.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4158	0.4160	0.4321	0.4373	0.3903	0.3787	0.3526	0.3636	----	0.398	9.58	0.997	0.998	7.9	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1129	-----	0.0676	0.0867	0.1252	0.1332	0.1304	0.1395	----	0.114	9.51	0.998	0.999	24	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0419	1.2304	1.1071	1.0852	1.0181	0.9953	0.9355	1.0044	----	1.05	9.75	0.999	0.999	8.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0697	1.1298	1.0759	1.0966	1.0430	1.0333	0.9553	1.0341	----	1.05	9.80	0.997	0.997	4.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	1.0453	0.9632	1.0289	1.0460	1.0235	1.0109	0.9448	1.0139	----	1.01	9.97	0.997	0.997	3.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.2268	1.0134	1.1054	1.1862	1.2271	1.2230	1.1462	1.2312	0.9647	1.15	10.35	0.998	0.998	8.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.1987	1.1743	1.1595	1.1974	1.1790	1.1691	1.0852	1.1733	----	1.17	11.07	0.997	0.997	3.1	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.1063	1.1446	1.1316	1.1296	1.0903	1.1031	1.0624	1.1408	----	1.11	11.34	0.998	0.998	2.5	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.4004	0.0716	0.0816	0.1880	0.4832	0.4946	0.4285	0.4243	----	0.322	11.23	0.987	0.993	55		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Terphenyl-d14	1	0	Avg	0.6020	0.5710	0.5724	0.6005	0.6181	0.6414	0.6338	0.7086	----	0.619	11.52	0.996	0.999	7.2		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Flags	*Note:* Avg Rsd: 9.32
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_7

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	7M87278.D	CAL BNA@50PPM	10/19/17 13:35	2	7M87270.D	CAL BNA@2PPM	10/19/17 10:27
3	7M87271.D	CAL BNA@10PPM	10/19/17 10:51	4	7M87276.D	CAL BNA@20PPM	10/19/17 12:48
5	7M87275.D	CAL BNA@80PPM	10/19/17 12:25	6	7M87274.D	CAL BNA@120PPM	10/19/17 12:02
7	7M87273.D	CAL BNA@160PPM	10/19/17 11:38	8	7M87272.D	CAL BNA@196PPM	10/19/17 11:15
9	7M87277.D	CAL BNA@.5PPM	10/19/17 13:11				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2042	0.2158	0.2049	0.2093	0.2091	0.2205	0.2150	0.2321	-----	0.214	11.46	0.997	0.999	4.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4175	0.3539	0.3849	0.4166	0.4223	0.4306	0.4194	0.4473	-----	0.412	11.85	0.999	1.00	7.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.5234	0.3514	0.4434	0.4967	0.5348	0.5504	0.5355	0.5801	-----	0.502	12.11	0.997	0.999	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3423	0.2404	0.2950	0.3255	0.3494	0.3512	0.3390	0.3595	-----	0.325	12.21	0.999	0.999	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3023	0.1467	0.1930	0.2385	0.3168	0.3102	0.2746	0.2851	-----	0.258	12.73	0.994	0.997	24	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0385	1.0903	1.0591	1.0580	1.0319	1.0421	0.9912	1.0797	-----	1.05	12.76	0.997	0.998	2.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	0.9844	1.1113	1.0485	1.0233	0.9460	0.9167	0.8499	0.9176	-----	0.975	12.80	0.998	0.998	8.6	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Avg	0.7000	0.4647	0.6166	0.6988	0.6925	0.6769	0.6454	0.6894	-----	0.648	12.80	0.998	0.998	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2329	0.6583	0.9456	1.1463	1.2859	1.3421	1.3389	1.4285	-----	1.17	13.56	0.998	0.999	22	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0629	0.9497	1.0063	1.0846	1.0659	1.0534	1.0520	1.1310	-----	1.05	13.98	0.999	0.999	5.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0662	1.0404	1.1169	1.1024	1.0344	1.0593	0.9859	1.0726	-----	1.06	14.02	0.997	0.997	3.9	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0452	0.9242	0.9776	1.0516	1.0430	1.0508	1.0016	1.0918	-----	1.02	14.34	0.997	0.998	5.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.1022	0.9939	1.0316	1.0710	1.1125	1.1016	1.0130	1.0877	-----	1.06	15.72	0.999	0.999	4.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9136	0.8034	0.8546	0.8834	0.9237	0.9091	0.8451	0.9089	-----	0.880	15.74	0.997	0.997	4.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9236	0.8930	0.9035	0.9130	0.9463	0.9284	0.8479	0.9045	-----	0.908	16.10	0.997	0.997	3.2	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags
a - failed the min rf criteria
c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 9.32
Corr 1 = Correlation Coefficient for linear Eq.
Corr 2 = Correlation Coefficient for quad Eq.
Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87278.D Sam Mult : 1 Vial# : 2 Qt On : 10/19/17 14:27
Acq On : 10/19/17 13:35 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	47969	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.821	152	90204	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	354748	40.00	ng	0.00
50) Acenaphthene-d10	8.262	164	215271	40.00	ng	0.00
77) Phenanthrene-d10	9.720	188	396811	40.00	ng	0.00
91) Chrysene-d12	12.771	240	450319	40.00	ng	0.00
103) Perylene-d12	14.405	264	446458	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	143960	49.88	ng	0.00
Spiked Amount 100.000			Recovery = 49.88%			
16) Phenol-d5	5.495	99	189515	52.43	ng	0.00
Spiked Amount 100.000			Recovery = 52.43%			
32) Nitrobenzene-d5	6.269	128	35812	24.84	ng	0.00
Spiked Amount 50.000			Recovery = 49.68%			
55) 2-Fluorobiphenyl	7.674	172	165410	24.64	ng	0.00
Spiked Amount 50.000			Recovery = 49.28%			
80) 2,4,6-Tribromophenol	8.999	330	40887	48.82	ng	0.00
Spiked Amount 100.000			Recovery = 48.82%			
94) Terphenyl-d14	11.521	244	169441	23.61	ng	0.00
Spiked Amount 50.000			Recovery = 47.22%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.604	88	65499	47.3167	ng	99
9) Pyridine	3.075	79	167219	48.9404	ng	71
10) N-Nitrosodimethylamine	3.000	74	99375	50.6547	ng	72
12) Benzaldehyde	5.447	77	79876	69.9776	ng	71
13) Aniline	5.537	93	205818m	48.3236	ng	
14) Pentachloroethane	5.580	117	47670	48.7966	ng	85
15) bis(2-Chloroethyl)ether	5.596	93	155859	52.1251	ng	79
17) Phenol	5.505	94	222823	52.2663	ng	82
18) 2-Chlorophenol	5.634	128	157358	51.9144	ng	82
19) N-Decane	5.682	57	142432	50.0777	ng	93
20) 1,3-Dichlorobenzene	5.767	146	154841	51.6687	ng	99
22) 1,4-Dichlorobenzene	5.831	146	157534	50.2201	ng	97
23) 1,2-Dichlorobenzene	5.959	146	151549	51.5237	ng	99
24) Benzyl alcohol	5.933	108	104223	50.0461	ng	67
25) bis(2-chloroisopropyl)...	6.045	45	190060	51.4685	ng	97
26) 2-Methylphenol	6.018	108	145176	48.8661	ng	98
27) Acetophenone	6.146	105	225964	50.2940	ng	66
28) Hexachloroethane	6.232	117	60494	47.4458	ng	81
29) N-Nitroso-di-n-propyla...	6.146	70	106560	49.3143	ng	83
30) 3&4-Methylphenol	6.141	108	147886	50.8409	ng	97
33) Nitrobenzene	6.285	77	161484	50.6410	ng	77
34) Isophorone	6.472	82	304107	50.8005	ng	87
35) 2-Nitrophenol	6.536	139	78162	49.0524	ng	82
36) 2,4-Dimethylphenol	6.558	107	152886	49.0280	ng	91
37) Benzoic Acid	6.627	105	133111	44.9424	ng	41
38) bis(2-Chloroethoxy)met...	6.633	93	187515	50.0534	ng	97
39) 2,4-Dichlorophenol	6.718	162	121449	51.5187	ng	87
40) 1,2,4-Trichlorobenzene	6.787	180	128872	49.4985	ng	96
41) Naphthalene	6.852	128	448787	50.9416	ng	99
42) 4-Chloroaniline	6.884	127	160504	51.9515	ng	94
43) Hexachlorobutadiene	6.937	225	64984	47.9182	ng	95
44) Caprolactam	7.156	113	60964	52.0666	ng	70
45) 4-Chloro-3-methylphenol	7.242	107	136476	51.8659	ng	84
46) 2-Methylnaphthalene	7.386	142	308200	50.3823	ng	99
47) 1-Methylnaphthalene	7.466	142	294741	50.5426	ng	91
48) Methylnaphthalenes (To...	7.386	142	602656m	100.8910	ng	
49) 1,1'-Biphenyl	7.760	154	358793	50.3037	ng	95
51) 1,2,4,5-Tetrachloroben...	7.514	216	134110	48.7503	ng	97
52) Hexachlorocyclopentadiene	7.503	237	75198	51.6329	ng	99
53) 2,4,6-Trichlorophenol	7.605	196	87653	49.9819	ng	98
54) 2,4,5-Trichlorophenol	7.632	196	91315	51.0270	ng	98
56) 2-Chloronaphthalene	7.781	162	305788	50.4663	ng	93
57) 1,4-Dimethylnaphthalene	8.064	156	224624	50.2351	ng	84
58) Dimethylnaphthalenes (...	8.064	156	224624	50.2351	ng	84
59) Diphenyl Ether	7.845	170	210002	48.5728	ng	77
60) 2-Nitroaniline	7.856	65	104169	51.3481	ng	60
61) Coumarin	8.043	146	121967	51.6809	ng	75
62) Acenaphthylene	8.139	152	447610	49.7434	ng	99
63) Dimethylphthalate	8.000	163	330297	49.8358	ng	98
64) 2,6-Dinitrotoluene	8.059	165	75573	52.7863	ng	66
65) Acenaphthene	8.289	153	291761	50.0184	ng	96

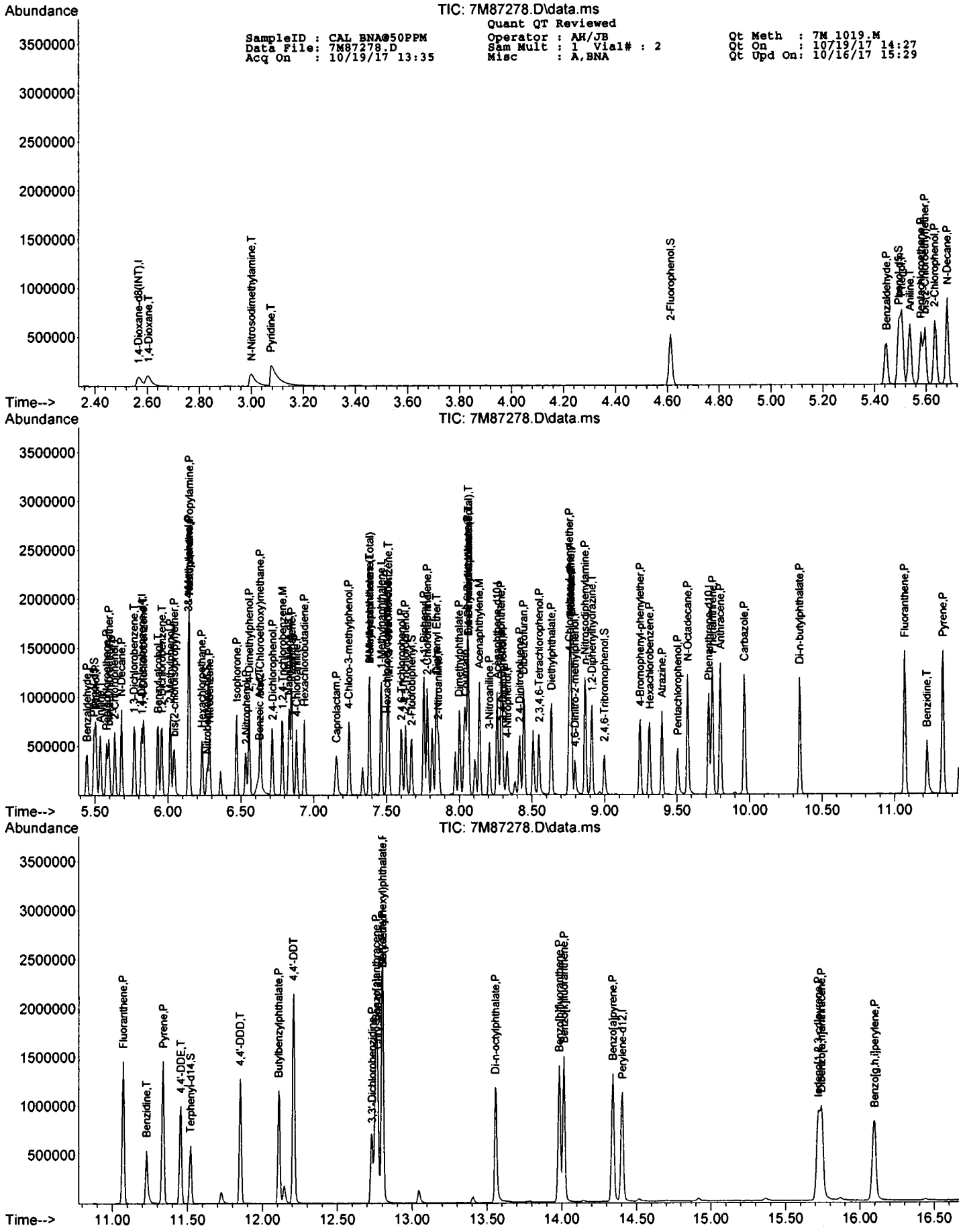
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87278.D Sam Mult : 1 Vial# : 2 Qt On : 10/19/17 14:27
Acq On : 10/19/17 13:35 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.208	138	82339	45.1902	ng	77
67)	2,4-Dinitrophenol	8.299	184	31202	43.8131	ng	52
68)	Dibenzofuran	8.444	168	421525	51.0774	ng	85
69)	2,4-Dinitrotoluene	8.417	165	105074	50.3109	ng	64
70)	4-Nitrophenol	8.331	65	67467	49.8285	ng	84
71)	2,3,4,6-Tetrachlorophenol	8.550	232	79741	51.1603	ng	82
72)	Fluorene	8.769	166	339072	50.3890	ng	97
73)	4-Chlorophenyl-phenyle...	8.759	204	154190	49.5639	ng	83
74)	Diethylphthalate	8.636	149	344205	50.0120	ng	97
75)	4-Nitroaniline	8.769	138	100268	51.1160	ng	75
76)	Atrazine	9.394	200	87301	51.3681	ng	95
78)	4,6-Dinitro-2-methylph...	8.796	198	50670	47.9152	ng	56
79)	n-Nitrosodiphenylamine	8.866	169	303614	49.4796	ng	98
81)	1,2-Diphenylhydrazine	8.914	77	359380	47.6460	ng	82
82)	4-Bromophenyl-phenylether	9.245	248	93569	49.5157	ng	81
83)	Hexachlorobenzene	9.309	284	95314	48.5790	ng	67
84)	N-Octadecane	9.576	57	206245	49.8885	ng	78
85)	Pentachlorophenol	9.507	266	56014	46.3798	ng	99
86)	Phenanthrene	9.747	178	516841	48.9881	ng	98
87)	Anthracene	9.800	178	530603	50.5686	ng	99
88)	Carbazole	9.966	167	518510	51.0175	ng	97
89)	Di-n-butylphthalate	10.345	149	608508	51.6174	ng	97
90)	Fluoranthene	11.072	202	594572	51.7233	ng	96
92)	Pyrene	11.339	202	622778	47.9398	ng	91
93)	Benzidine	11.227	184	225394	44.9007	ng	90
95)	4,4'-DDE	11.457	246	114967	45.1348	ng	95
96)	4,4'-DDD	11.852	235	235056	48.7182	ng	95
97)	Butylbenzylphthalate	12.108	149	294631	48.2135	ng	76
98)	4,4'-DDT	12.210	235	192700	51.2565	ng	98
99)	3,3'-Dichlorobenzidine	12.733	252	170187	42.7772	ng	96
100)	Benzo[a]anthracene	12.760	228	584592	48.2583	ng	99
101)	Chrysene	12.803	228	554154	50.5484	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.803	149	394047	50.0554	ng	95
104)	Di-n-octylphthalate	13.556	149	688067	44.2281	ng	99
105)	Benzo[b]fluoranthene	13.983	252	593228	48.2122	ng	97
106)	Benzo[k]fluoranthene	14.015	252	595049m	49.2269	ng	
107)	Benzo[a]pyrene	14.341	252	583305	49.6642	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.720	276	615120	51.5032	ng	91
109)	Dibenzo[a,h]anthracene	15.741	278	509882	51.6808	ng	93
110)	Benzo[g,h,i]perylene	16.099	276	515479	50.8641	ng	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87278.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 7M87278.D
Acq On : 10/19/17 13:35
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:27
Qt Upd On: 10/16/17 15:29
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Aniline,P
2-Chlorophenol,P
N-Decane,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87270.D Sam Mult : 1 Vial# : 3 Qt On : 10/19/17 10:44
Acq On : 10/19/17 10:27 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	48164	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	90071	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	367923	40.00	ng	0.00
50) Acenaphthene-d10	8.256	164	221522	40.00	ng	0.00
77) Phenanthrene-d10	9.715	188	400067	40.00	ng	0.00
91) Chrysene-d12	12.765	240	432992	40.00	ng	0.00
103) Perylene-d12	14.389	264	407354	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	5508m	1.90	ng	0.00
Spiked Amount 100.000			Recovery	=	1.90%	
16) Phenol-d5	5.495	99	7398	2.04	ng	0.00
Spiked Amount 100.000			Recovery	=	2.04%	
32) Nitrobenzene-d5	6.269	128	1493	1.00	ng	0.00
Spiked Amount 50.000			Recovery	=	2.00%	
55) 2-Fluorobiphenyl	7.669	172	8054	1.17	ng	0.00
Spiked Amount 50.000			Recovery	=	2.34%	
80) 2,4,6-Tribromophenol	8.994	330	932	1.14	ng	0.00
Spiked Amount 100.000			Recovery	=	1.14%	
94) Terphenyl-d14	11.515	244	6181	0.90	ng	0.00
Spiked Amount 50.000			Recovery	=	1.80%	
Target Compounds						Qvalue
8) 1,4-Dioxane	2.615	88	3146	2.2635	ng	98
9) Pyridine	3.171	79	6900	2.0113	ng	67
10) N-Nitrosodimethylamine	3.058	74	4147	2.1053	ng	60
12) Benzaldehyde	5.446	77	3656	2.0463	ng	72
13) Aniline	5.537	93	5948m	1.3909	ng	
14) Pentachloroethane	5.580	117	2167	2.2092	ng	83
15) bis(2-Chloroethyl)ether	5.596	93	7189	2.3417	ng	79
17) Phenol	5.505	94	8953	2.0916	ng	81
18) 2-Chlorophenol	5.633	128	5958	1.9577	ng	83
19) N-Decane	5.682	57	6979	2.4438	ng	96
20) 1,3-Dichlorobenzene	5.767	146	7335	2.3862	ng	99
22) 1,4-Dichlorobenzene	5.831	146	7438	2.3515	ng	97
23) 1,2-Dichlorobenzene	5.954	146	7335	2.4873	ng	90
24) Benzyl alcohol	5.927	108	4092	1.9678	ng	64
25) bis(2-chloroisopropyl)...	6.039	45	9217	2.4666	ng	99
26) 2-Methylphenol	6.018	108	5756	1.9403	ng	86
27) Acetophenone	6.146	105	10508	2.3423	ng	63
28) Hexachloroethane	6.232	117	2817	2.2127	ng	80
29) N-Nitroso-di-n-propyla...	6.141	70	4954	2.2960	ng	80
30) 3&4-Methylphenol	6.136	108	5886	2.0265	ng	98
33) Nitrobenzene	6.280	77	7007	2.1187	ng	83
34) Isophorone	6.467	82	12365	1.9916	ng	93
35) 2-Nitrophenol	6.531	139	2578	1.5781	ng	90
36) 2,4-Dimethylphenol	6.552	107	6185	1.9124	ng	87
37) Benzoic Acid	0.000		0	N.D.	d	
38) bis(2-Chloroethoxy)met...	6.632	93	8555	2.2018	ng	96
39) 2,4-Dichlorophenol	6.713	162	4284	1.7522	ng	87
40) 1,2,4-Trichlorobenzene	6.782	180	6128	2.2694	ng	100
41) Naphthalene	6.846	128	22848	2.4386	ng	98
42) 4-Chloroaniline	6.884	127	4712	1.4706	ng	92
43) Hexachlorobutadiene	6.932	225	3087	2.1948	ng	97
44) Caprolactam	7.129	113	2007	1.6527	ng	69
45) 4-Chloro-3-methylphenol	7.236	107	4974	1.8226	ng	84
46) 2-Methylnaphthalene	7.380	142	14477	2.2818	ng	95
47) 1-Methylnaphthalene	7.460	142	13821	2.2852	ng	91
48) Methylnaphthalenes (To...	7.380	142	28302m	4.5684	ng	
49) 1,1'-Biphenyl	7.754	154	17024	2.3013	ng	95
51) 1,2,4,5-Tetrachloroben...	7.509	216	6637	2.3445	ng	96
52) Hexachlorocyclopentadiene	7.498	237	3026	2.0191	ng	90
53) 2,4,6-Trichlorophenol	7.599	196	2560	1.4186	ng	87
54) 2,4,5-Trichlorophenol	7.626	196	3077	1.6709	ng	94
56) 2-Chloronaphthalene	7.776	162	13246m	2.1244	ng	
57) 1,4-Dimethylnaphthalene	8.053	156	11022	2.3954	ng	87
58) Dimethylnaphthalenes (...	8.053	156	11022	2.3954	ng	87
59) Diphenyl Ether	7.840	170	10230	2.2994	ng	76
60) 2-Nitroaniline	7.850	65	3928	1.8816	ng	61
61) Coumarin	8.032	146	5339	2.1984	ng	72
62) Acenaphthylene	8.134	152	19658	2.1230	ng	96
63) Dimethylphthalate	7.995	163	14796	2.1694	ng	96
64) 2,6-Dinitrotoluene	8.053	165	2991	2.0302	ng	67
65) Acenaphthene	8.283	153	14123	2.3529	ng	93

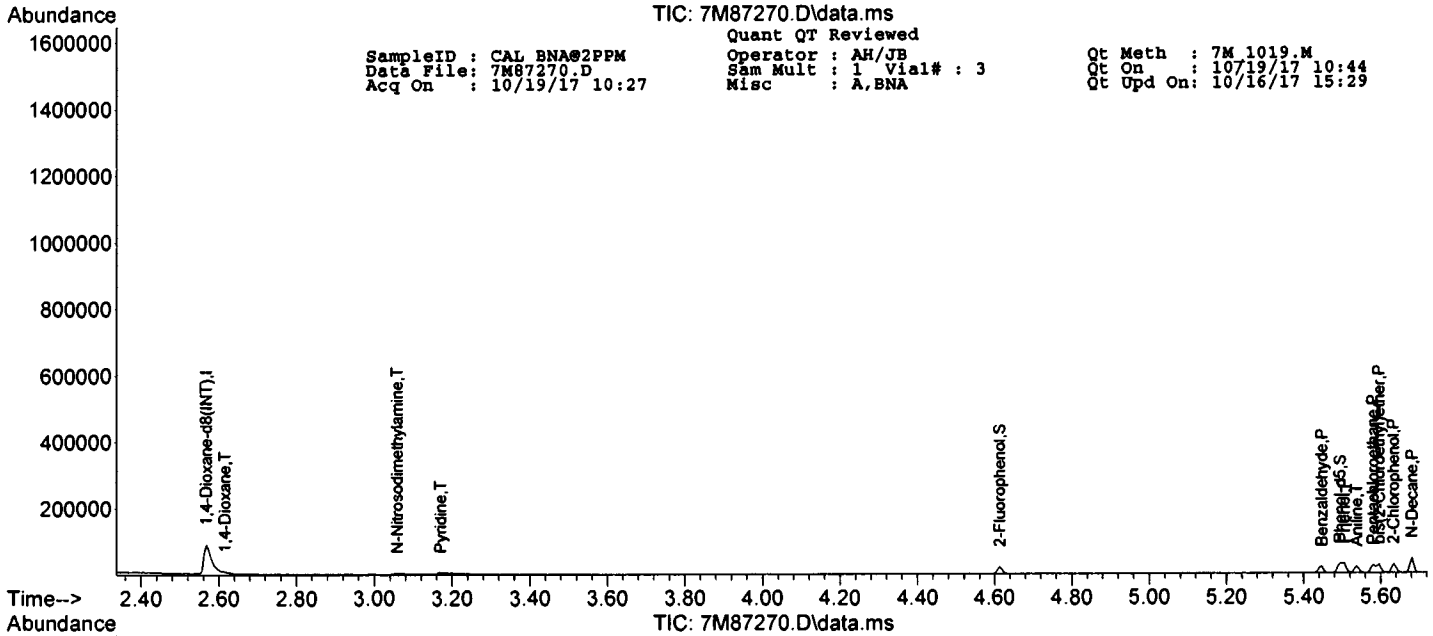
Quantitation Report (QT Reviewed)

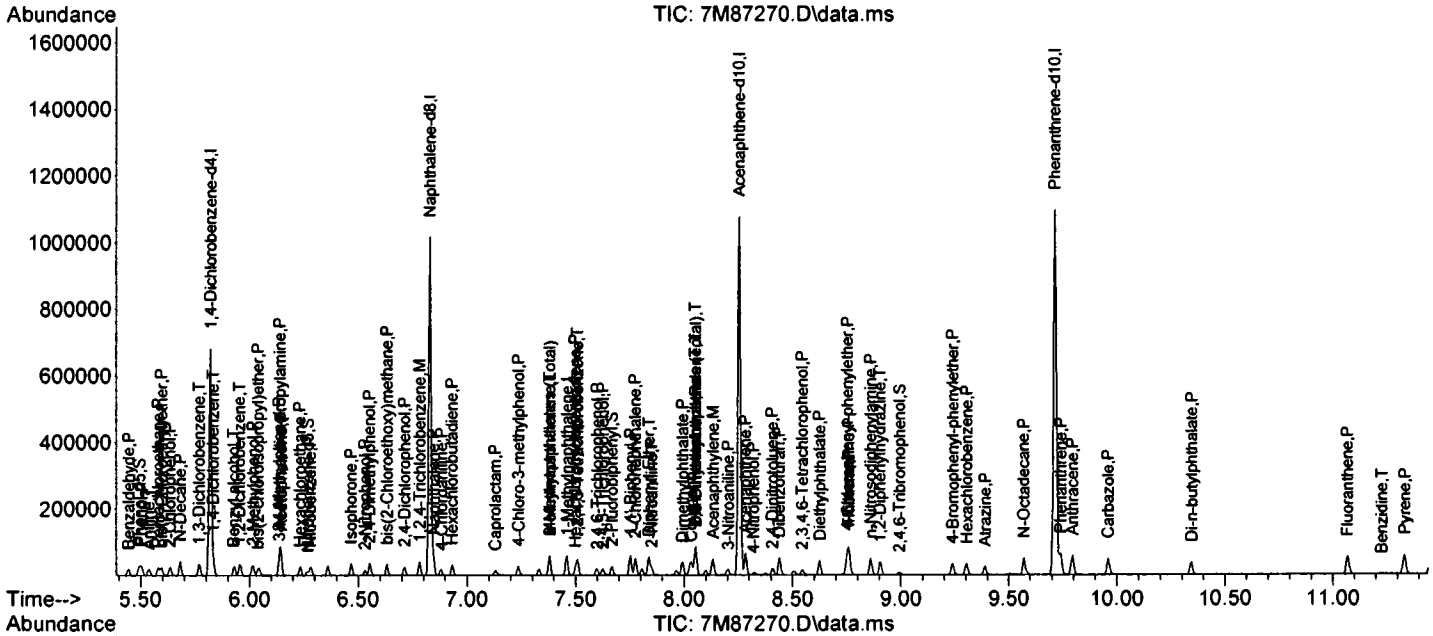
SampleID : CAL BNA@2PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87270.D Sam Mult : 1 Vial# : 3 Qt On : 10/19/17 10:44
Acq On : 10/19/17 10:27 Misc : A,BNA Qt Upd On: 10/16/17 15:29

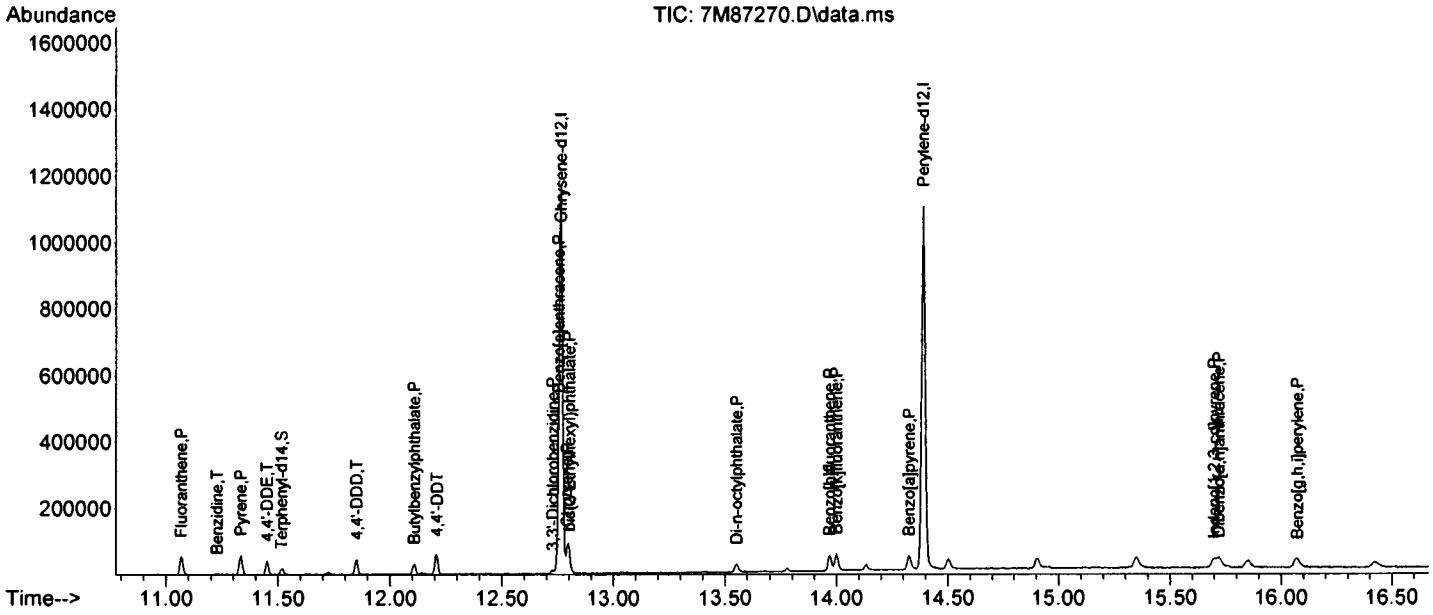
Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.203	138	2596	1.3309	ng	74
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.438	168	20338	2.3378	ng	84
69) 2,4-Dinitrotoluene	8.406	165	3281	1.5340	ng	69
70) 4-Nitrophenol	8.321	65	1401	1.0215	ng	87
71) 2,3,4,6-Tetrachlorophenol	8.545	232	2387	1.4882	ng	86
72) Fluorene	8.759	166	15398	2.2237	ng	96
73) 4-Chlorophenyl-phenyle...	8.753	204	7066	2.2073	ng	82
74) Diethylphthalate	8.625	149	14674	2.0719	ng	97
75) 4-Nitroaniline	8.759	138	2711	1.3440	ng	74
76) Atrazine	9.389	200	2894	1.6548	ng	92
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	8.860	169	12261	1.9819	ng	93
81) 1,2-Diphenylhydrazine	8.903	77	15774	2.0743	ng	89
82) 4-Bromophenyl-phenylether	9.239	248	3962	2.0796	ng	86
83) Hexachlorobenzene	9.304	284	4556	2.3032	ng	70
84) N-Octadecane	9.571	57	8323	1.9969	ng	78
85) Pentachlorophenol	0.000		0	N.D. d		
86) Phenanthrene	9.742	178	24614	2.3140	ng	97
87) Anthracene	9.795	178	22600	2.1363	ng	98
88) Carbazole	9.961	167	19268	1.8804	ng	96
89) Di-n-butylphthalate	10.345	149	20272	1.7056	ng	96
90) Fluoranthene	11.067	202	23491	2.0269	ng	95
92) Pyrene	11.334	202	24782	1.9840	ng	94
93) Benzidine	11.227	184	1552	0.2926	ng	64
95) 4,4'-DDE	11.451	246	4674	1.9084	ng	95
96) 4,4'-DDD	11.852	235	7662	1.6516	ng	93
97) Butylbenzylphthalate	12.108	149	7609	1.2950	ng	73
98) 4,4'-DDT	12.210	235	5205	1.4399	ng	93
99) 3,3'-Dichlorobenzidine	12.728	252	3178	0.7967	ng	93
100) Benzo[a]anthracene	12.755	228	23605	2.0266	ng	95
101) Chrysene	12.792	228	24061	2.2826	ng	97
102) bis(2-Ethylhexyl)phtha...	12.803	149	10062	1.3293	ng	95
104) Di-n-octylphthalate	13.551	149	13408	0.9620	ng	97
105) Benzo[b]fluoranthene	13.967	252	19344	1.7230	ng	100
106) Benzo[k]fluoranthene	13.999	252	21192	1.9215	ng	96
107) Benzo[a]pyrene	14.325	252	18824	1.7566	ng	95
108) Indeno[1,2,3-cd]pyrene	15.698	276	20244	1.8577	ng	95
109) Dibenzo[a,h]anthracene	15.720	278	16365	1.8180	ng	92
110) Benzo[g,h,i]perylene	16.072	276	18190	1.9672	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87270.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@2PPM
Data File: 7M87270.D
Acq On : 10/19/17 10:27
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 10:44
Qt Upd On: 10/16/17 15:29
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 7M87270.D\data.ms
1,4-Dichlorobenzene-d4,I
Naphthalene-d8,I
Acenaphthene-d10,I
Phenanthrene-d10,I
1,4-Dichlorobenzene,T
Isophorone,P
bis(2-Chloroethoxy)methane,P
2,4-Dichlorophenol,P
1,2,4-Trichlorobenzene,M
Hexachlorobutadiene,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Acenaphthylene,M
3-Nitroaniline,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 7M87270.D\data.ms
Perylene-d12,I
Chrysene-d12,I
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Benzo[g,h,i]perylene,P
Time-->

SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87271.D Sam Mult : 1 Vial# : 4 Qt On : 10/19/17 11:10
Acq On : 10/19/17 10:51 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	45704	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	83537	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	337736	40.00	ng	0.00
50) Acenaphthene-d10	8.262	164	201429	40.00	ng	0.00
77) Phenanthrene-d10	9.720	188	361587	40.00	ng	0.00
91) Chrysene-d12	12.765	240	397913	40.00	ng	0.00
103) Perylene-d12	14.389	264	375050	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	24416	8.88	ng	0.00
Spiked Amount 100.000			Recovery =	8.88%		
16) Phenol-d5	5.494	99	32324	9.38	ng	0.00
Spiked Amount 100.000			Recovery =	9.38%		
32) Nitrobenzene-d5	6.269	128	6410	4.67	ng	0.00
Spiked Amount 50.000			Recovery =	9.34%		
55) 2-Fluorobiphenyl	7.674	172	31293	4.98	ng	0.00
Spiked Amount 50.000			Recovery =	9.96%		
80) 2,4,6-Tribromophenol	8.999	330	5789	7.81	ng	0.00
Spiked Amount 100.000			Recovery =	7.81%		
94) Terphenyl-d14	11.520	244	28475	4.49	ng	0.00
Spiked Amount 50.000			Recovery =	8.98%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.610	88	13233	10.0333	ng	98
9) Pyridine	3.117	79	29957	9.2021	ng	67
10) N-Nitrosodimethylamine	3.021	74	17599	9.4154	ng	72
12) Benzaldehyde	5.446	77	15355	9.4238	ng	69
13) Aniline	5.537	93	24495m	6.0362	ng	
14) Pentachloroethane	5.580	117	8818	9.4737	ng	83
15) bis(2-Chloroethyl)ether	5.596	93	29838	10.2785	ng	81
17) Phenol	5.505	94	38481	9.4736	ng	80
18) 2-Chlorophenol	5.633	128	27373	9.4782	ng	81
19) N-Decane	5.681	57	27906	10.2977	ng	94
20) 1,3-Dichlorobenzene	5.767	146	29954	10.3040	ng	98
22) 1,4-Dichlorobenzene	5.831	146	30184	10.3056	ng	100
23) 1,2-Dichlorobenzene	5.959	146	29236	10.6966	ng	96
24) Benzyl alcohol	5.927	108	17699	9.1770	ng	73
25) bis(2-chloroisopropyl)...	6.045	45	37107	10.7308	ng	96
26) 2-Methylphenol	6.018	108	25859	9.3988	ng	96
27) Acetophenone	6.146	105	45172	10.8566	ng	61
28) Hexachloroethane	6.232	117	11652	9.8681	ng	78
29) N-Nitroso-di-n-propyla...	6.141	70	20774	10.3812	ng	81
30) 3&4-Methylphenol	6.141	108	26931	9.9974	ng	97
33) Nitrobenzene	6.285	77	30096	9.9134	ng	77
34) Isophorone	6.467	82	54630	9.5855	ng	90
35) 2-Nitrophenol	6.531	139	12129	8.0756	ng	88
36) 2,4-Dimethylphenol	6.558	107	28155	9.4836	ng	94
37) Benzoic Acid	6.595	105	5552	2.1412	ng	57
38) bis(2-Chloroethoxy)met...	6.632	93	36000	10.0935	ng	95
39) 2,4-Dichlorophenol	6.712	162	20425	9.1007	ng	92
40) 1,2,4-Trichlorobenzene	6.782	180	25133	10.1396	ng	96
41) Naphthalene	6.846	128	89873m	10.4929	ng	
42) 4-Chloroaniline	6.883	127	20017	6.8054	ng	90
43) Hexachlorobutadiene	6.937	225	12656	9.8024	ng	98
44) Caprolactam	7.140	113	8851	7.9400	ng	65
45) 4-Chloro-3-methylphenol	7.241	107	23691	9.4570	ng	84
46) 2-Methylnaphthalene	7.386	142	59541	10.2236	ng	98
47) 1-Methylnaphthalene	7.466	142	58432	10.5247	ng	95
48) Methylnaphthalenes (To...	7.386	142	117955m	20.7416	ng	
49) 1,1'-Biphenyl	7.760	154	70301	10.3529	ng	95
51) 1,2,4,5-Tetrachloroben...	7.514	216	25868	10.0495	ng	97
52) Hexachlorocyclopentadiene	7.503	237	12921	9.4816	ng	94
53) 2,4,6-Trichlorophenol	7.605	196	15079	9.1893	ng	98
54) 2,4,5-Trichlorophenol	7.631	196	14499	8.6588	ng	98
56) 2-Chloronaphthalene	7.781	162	54082m	9.5389	ng	
57) 1,4-Dimethylnaphthalene	8.059	156	45181	10.7987	ng	85
58) Dimethylnaphthalenes (...	8.059	156	45181	10.7987	ng	85
59) Diphenyl Ether	7.845	170	41570	10.2757	ng	76
60) 2-Nitroaniline	7.856	65	17888	9.4235	ng	59
61) Coumarin	8.043	146	23305	10.5536	ng	76
62) Acenaphthylene	8.139	152	85775	10.1873	ng	100
63) Dimethylphthalate	8.000	163	62824	10.1304	ng	97
64) 2,6-Dinitrotoluene	8.059	165	13924	10.3940	ng	66
65) Acenaphthene	8.288	153	56809	10.4084	ng	95

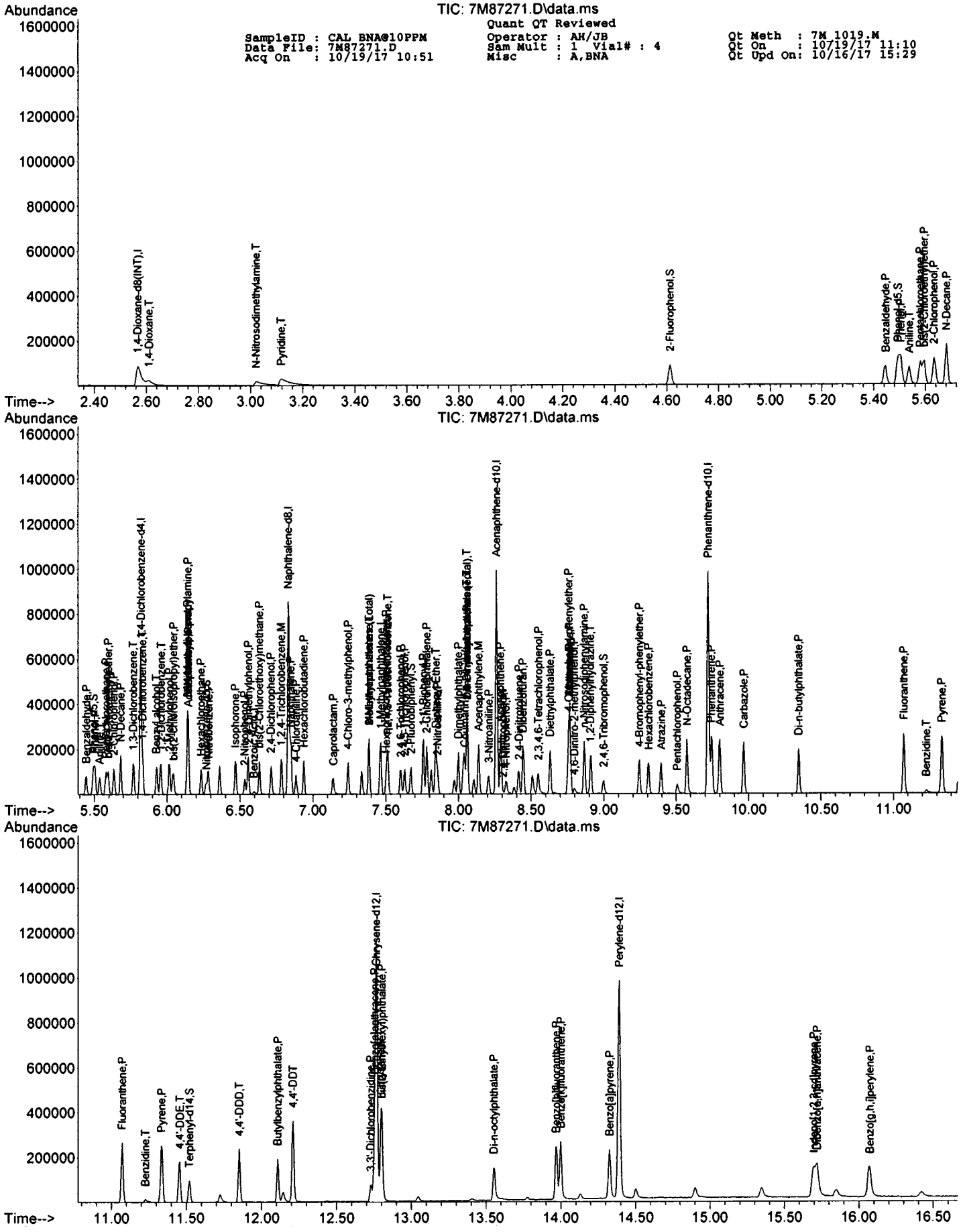
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87271.D Sam Mult : 1 Vial# : 4 Qt On : 10/19/17 11:10
Acq On : 10/19/17 10:51 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.208	138	12463	7.0626	ng	73
67)	2,4-Dinitrophenol	8.304	184	1466	2.4157	ng	36
68)	Dibenzofuran	8.443	168	82038	10.4117	ng	84
69)	2,4-Dinitrotoluene	8.417	165	16777	8.6202	ng	58
70)	4-Nitrophenol	8.326	65	9732	7.7868	ng	94
71)	2,3,4,6-Tetrachlorophenol	8.550	232	12403	8.5044	ng	87
72)	Fluorene	8.764	166	65974	10.4780	ng	97
73)	4-Chlorophenyl-phenyle...	8.759	204	29831	10.2480	ng	82
74)	Diethylphthalate	8.630	149	62468	9.7001	ng	98
75)	4-Nitroaniline	8.764	138	16255	8.8616	ng	75
76)	Atrazine	9.394	200	13948	8.7710	ng	90
78)	4,6-Dinitro-2-methylph...	8.796	198	4421	4.8806	ng	57
79)	n-Nitrosodiphenylamine	8.865	169	55737	9.9683	ng	97
81)	1,2-Diphenylhydrazine	8.908	77	69580	10.1234	ng	91
82)	4-Bromophenyl-phenylether	9.245	248	16298	9.4649	ng	86
83)	Hexachlorobenzene	9.309	284	17961	10.0460	ng	64
84)	N-Octadecane	9.576	57	39064	10.3697	ng	77
85)	Pentachlorophenol	9.506	266	6114	5.7540	ng	93
86)	Phenanthrene	9.742	178	100080	10.4100	ng	99
87)	Anthracene	9.800	178	97260	10.1722	ng	99
88)	Carbazole	9.966	167	93012	10.0432	ng	96
89)	Di-n-butylphthalate	10.345	149	99925	9.3020	ng	97
90)	Fluoranthene	11.072	202	104821	10.0069	ng	97
92)	Pyrene	11.333	202	112572	9.8068	ng	95
93)	Benzidine	11.227	184	8123	1.6713	ng	89
95)	4,4'-DDE	11.456	246	20392	9.0600	ng	97
96)	4,4'-DDD	11.852	235	38295	8.9824	ng	93
97)	Butylbenzylphthalate	12.108	149	44115	8.1698	ng	77
98)	4,4'-DDT	12.210	235	29350	8.8350	ng	95
99)	3,3'-Dichlorobenzidine	12.728	252	19202	5.2613	ng	97
100)	Benzo[a]anthracene	12.755	228	105357	9.8427	ng	98
101)	Chrysene	12.797	228	104303	10.7673	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.803	149	61338	8.8179	ng	95
104)	Di-n-octylphthalate	13.551	149	88667	6.8925	ng	100
105)	Benzo[b]fluoranthene	13.967	252	94357	9.1285	ng	99
106)	Benzo[k]fluoranthene	13.999	252	104724m	10.3131	ng	
107)	Benzo[a]pyrene	14.325	252	91668	9.2909	ng	95
108)	Indeno[1,2,3-cd]pyrene	15.698	276	96730	9.6411	ng	89
109)	Dibenzo[a,h]anthracene	15.719	278	80138	9.6692	ng	94
110)	Benzo[g,h,i]perylene	16.072	276	84720	9.9513	ng	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87271.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@10PPM
Data File: 7M87271.D
Acq On : 10/19/17 10:51
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 11:10
Qt Upd On: 10/16/17 15:29
Abundance
Time-->
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene-d4,I
Naphthalene-d8,I
Acenaphthene-d10,I
Phenanthrene-d10,I
Chrysene-d12,I
Perylene-d12,I
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Benzo[g,h,i]perylene,P

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87276.D Sam Mult : 1 Vial# : 9 Qt On : 10/19/17 14:16
Acq On : 10/19/17 12:48 Misc : A,BNA Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	50976	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	92669	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	353750	40.00	ng	0.00
50) Acenaphthene-d10	8.256	164	204711	40.00	ng	0.00
77) Phenanthrene-d10	9.715	188	363279	40.00	ng	0.00
91) Chrysene-d12	12.765	240	405369	40.00	ng	0.00
103) Perylene-d12	14.389	264	384315	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	58218	18.98	ng	0.00
Spiked Amount 100.000			Recovery = 18.98%			
16) Phenol-d5	5.495	99	73124	19.03	ng	0.00
Spiked Amount 100.000			Recovery = 19.03%			
32) Nitrobenzene-d5	6.269	128	13836	9.62	ng	0.00
Spiked Amount 50.000			Recovery = 19.24%			
55) 2-Fluorobiphenyl	7.669	172	64595	10.12	ng	0.00
Spiked Amount 50.000			Recovery = 20.24%			
80) 2,4,6-Tribromophenol	8.994	330	13959	19.11	ng	0.00
Spiked Amount 100.000			Recovery = 19.11%			
94) Terphenyl-d14	11.521	244	60859	9.42	ng	0.00
Spiked Amount 50.000			Recovery = 18.84%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.604	88	27755	18.8676	ng	99
9) Pyridine	3.096	79	66974	18.4452	ng	69
10) N-Nitrosodimethylamine	3.010	74	40053	19.2120	ng	70
12) Benzaldehyde	5.446	77	32923	22.0842	ng	70
13) Aniline	5.537	93	62285m	13.7611	ng	
14) Pentachloroethane	5.580	117	19676	18.9529	ng	84
15) bis(2-Chloroethyl)ether	5.596	93	65438	19.3835	ng	78
17) Phenol	5.505	94	86714	19.1402	ng	80
18) 2-Chlorophenol	5.633	128	61796	19.1847	ng	81
19) N-Decane	5.681	57	62292	20.6093	ng	92
20) 1,3-Dichlorobenzene	5.767	146	64775	19.8772	ng	98
22) 1,4-Dichlorobenzene	5.831	146	66658	19.9337	ng	97
23) 1,2-Dichlorobenzene	5.959	146	63570	20.0742	ng	98
24) Benzyl alcohol	5.927	108	40351	18.8605	ng	74
25) bis(2-chloroisopropyl)...	6.039	45	76587	19.2542	ng	96
26) 2-Methylphenol	6.018	108	58036	19.0152	ng	99
27) Acetophenone	6.146	105	94422	20.4570	ng	62
28) Hexachloroethane	6.232	117	25440	19.4220	ng	80
29) N-Nitroso-di-n-propyla...	6.141	70	44184	19.9038	ng	82
30) 3&4-Methylphenol	6.141	108	59511	19.9148	ng	100
33) Nitrobenzene	6.280	77	64110	20.1614	ng	82
34) Isophorone	6.467	82	117421	19.6703	ng	88
35) 2-Nitrophenol	6.531	139	29437	19.5000	ng	86
36) 2,4-Dimethylphenol	6.552	107	60343	19.4056	ng	92
37) Benzoic Acid	6.600	105	33128	11.9286	ng	45
38) bis(2-Chloroethoxy)met...	6.632	93	76382	20.4462	ng	97
39) 2,4-Dichlorophenol	6.713	162	47362	20.1477	ng	86
40) 1,2,4-Trichlorobenzene	6.782	180	52634	20.2733	ng	97
41) Naphthalene	6.846	128	187520	19.9132	ng	99
42) 4-Chloroaniline	6.878	127	47805	15.5171	ng	94
43) Hexachlorobutadiene	6.932	225	27092	20.0336	ng	98
44) Caprolactam	7.140	113	21001	17.9866	ng	66
45) 4-Chloro-3-methylphenol	7.236	107	50108	19.0966	ng	82
46) 2-Methylnaphthalene	7.380	142	125330	20.5458	ng	97
47) 1-Methylnaphthalene	7.460	142	115935	19.9368	ng	91
48) Methylnaphthalenes (To...	7.380	142	241218m	40.4964	ng	
49) 1,1'-Biphenyl	7.749	154	140239	19.7173	ng	96
51) 1,2,4,5-Tetrachloroben...	7.509	216	53206	20.3386	ng	98
52) Hexachlorocyclopentadiene	7.498	237	28572	20.6303	ng	97
53) 2,4,6-Trichlorophenol	7.594	196	32042	19.2136	ng	98
54) 2,4,5-Trichlorophenol	7.626	196	35246	20.7115	ng	98
56) 2-Chloronaphthalene	7.776	162	112561m	19.5350	ng	
57) 1,4-Dimethylnaphthalene	8.053	156	89299	21.0011	ng	86
58) Dimethylnaphthalenes (...	8.053	156	89299	21.0011	ng	86
59) Diphenyl Ether	7.840	170	84854	20.6389	ng	74
60) 2-Nitroaniline	7.850	65	38836	20.1310	ng	52
61) Coumarin	8.032	146	46655	20.7888	ng	76
62) Acenaphthylene	8.134	152	175890	20.5552	ng	99
63) Dimethylphthalate	7.995	163	127217	20.1849	ng	98
64) 2,6-Dinitrotoluene	8.053	165	29020	21.3155	ng	64
65) Acenaphthene	8.283	153	113085	20.3869	ng	98

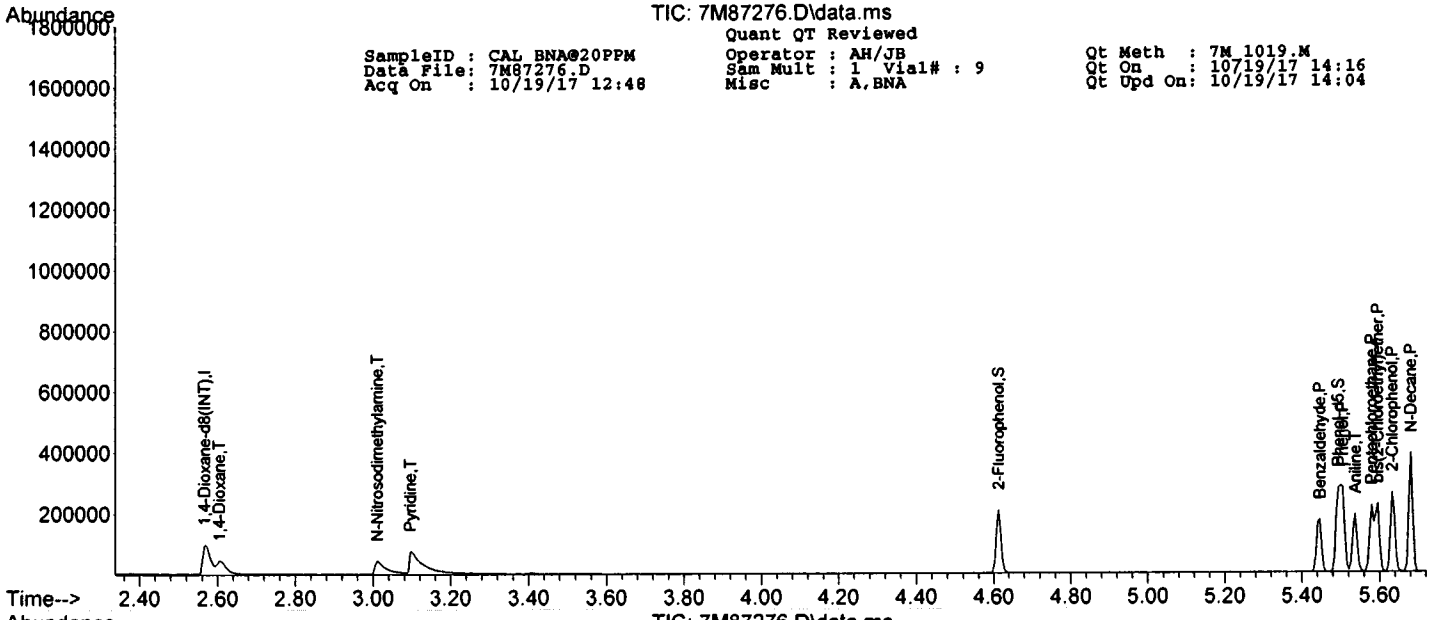
Quantitation Report (QT Reviewed)

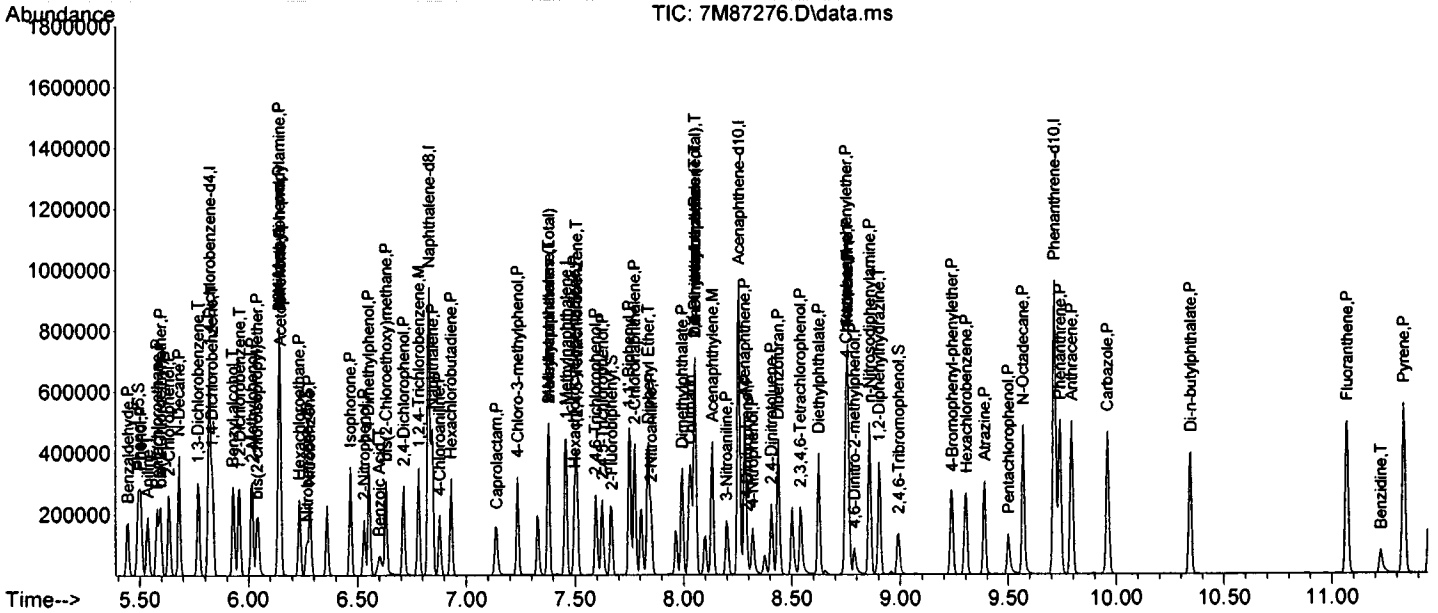
SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87276.D Sam Mult : 1 Vial# : 9 Qt On : 10/19/17 14:16
Acq On : 10/19/17 12:48 Misc : A,BNA Qt Upd On: 10/19/17 14:04

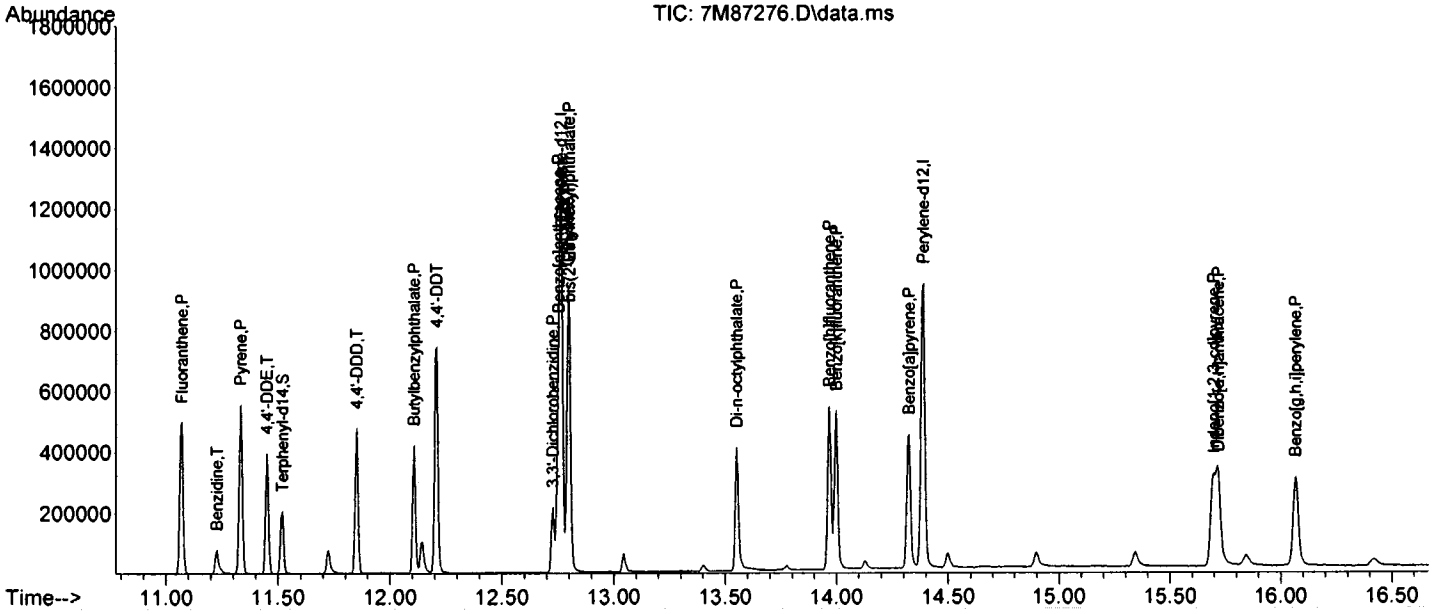
Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.198	138	27420	17.6531	ng	83
67)	2,4-Dinitrophenol	8.294	184	6812	10.5380	ng	57
68)	Dibenzofuran	8.438	168	161993	19.4308	ng	84
69)	2,4-Dinitrotoluene	8.406	165	37194	19.8851	ng	68
70)	4-Nitrophenol	8.321	65	22500	19.0880	ng	85
71)	2,3,4,6-Tetrachlorophenol	8.540	232	27749	18.7216	ng	82
72)	Fluorene	8.759	166	129791	20.2830	ng	97
73)	4-Chlorophenyl-phenyle...	8.753	204	59659	20.1665	ng	80
74)	Diethylphthalate	8.625	149	130535	19.9447	ng	98
75)	4-Nitroaniline	8.759	138	35186	19.7778	ng	78
76)	Atrazine	9.389	200	31281	19.3553	ng	97
78)	4,6-Dinitro-2-methylph...	8.791	198	13726	14.8182	ng	60
79)	n-Nitrosodiphenylamine	8.860	169	114733	20.4238	ng	95
81)	1,2-Diphenylhydrazine	8.903	77	137825	19.9592	ng	87
82)	4-Bromophenyl-phenylether	9.239	248	34092	19.7064	ng	83
83)	Hexachlorobenzene	9.304	284	36444	20.2890	ng	65
84)	N-Octadecane	9.571	57	79431	20.9870	ng	78
85)	Pentachlorophenol	9.501	266	15753	14.8640	ng	94
86)	Phenanthrene	9.742	178	197128	20.4092	ng	99
87)	Anthracene	9.795	178	199191	20.7360	ng	99
88)	Carbazole	9.961	167	189996	20.4197	ng	96
89)	Di-n-butylphthalate	10.345	149	215468	19.9644	ng	97
90)	Fluoranthene	11.072	202	217498	20.6672	ng	96
92)	Pyrene	11.334	202	228958	19.5789	ng	94
93)	Benzidine	11.227	184	38105	10.3241	ng	87
95)	4,4'-DDE	11.451	246	42439	18.5086	ng	97
96)	4,4'-DDD	11.852	235	84452	19.4446	ng	95
97)	Butylbenzylphthalate	12.108	149	100688	18.3037	ng	73
98)	4,4'-DDT	12.210	235	65978	19.4956	ng	99
99)	3,3'-Dichlorobenzidine	12.728	252	48343	15.8976	ng	97
100)	Benzo[a]anthracene	12.755	228	214450	19.6659	ng	100
101)	Chrysene	12.797	228	207412	21.0175	ng	97
102)	bis(2-Ethylhexyl)phtha...	12.803	149	141643	19.9879	ng	93
104)	Di-n-octylphthalate	13.551	149	220284	17.6196	ng	99
105)	Benzo[b]fluoranthene	13.967	252	208414	19.6768	ng	96
106)	Benzo[k]fluoranthene	13.999	252	211847m	20.3594	ng	
107)	Benzo[a]pyrene	14.325	252	202083	19.9881	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.698	276	205804	20.0180	ng	88
109)	Dibenzo[a,h]anthracene	15.720	278	169754	19.9882	ng	92
110)	Benzo[g,h,i]perylene	16.067	276	175447	20.1113	ng	82

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87276.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@20PPM
Data File: 7M87276.D
Acq On : 10/19/17 12:48
Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:16
Qt Upd On: 10/19/17 14:04
Abundance
Time-->


TIC: 7M87276.D\data.ms
Abundance
Time-->


TIC: 7M87276.D\data.ms
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87275.D Sam Mult : 1 Vial# : 8 Qt On : 10/19/17 14:07
Acq On : 10/19/17 12:25 Misc : A,BNA Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	43489	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	85499	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	347381	40.00	ng	0.00
50) Acenaphthene-d10	8.257	164	216607	40.00	ng	0.00
77) Phenanthrene-d10	9.715	188	407932	40.00	ng	0.00
91) Chrysene-d12	12.771	240	459088	40.00	ng	0.00
103) Perylene-d12	14.395	264	459411	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	228382	87.28	ng	0.00
Spiked Amount 100.000			Recovery = 87.28%			
16) Phenol-d5	5.495	99	291888	89.06	ng	0.00
Spiked Amount 100.000			Recovery = 89.06%			
32) Nitrobenzene-d5	6.269	128	56120	39.75	ng	0.00
Spiked Amount 50.000			Recovery = 79.50%			
55) 2-Fluorobiphenyl	7.669	172	256380	37.96	ng	0.00
Spiked Amount 50.000			Recovery = 75.92%			
80) 2,4,6-Tribromophenol	8.994	330	69996	85.33	ng	0.00
Spiked Amount 100.000			Recovery = 85.33%			
94) Terphenyl-d14	11.521	244	283776	38.79	ng	0.00
Spiked Amount 50.000			Recovery = 77.58%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	92574	73.7649	ng	99
9) Pyridine	3.069	79	260306	84.0326	ng	70
10) N-Nitrosodimethylamine	2.994	74	152944	85.9916	ng	69
12) Benzaldehyde	5.441	77	119248	93.7604	ng	79
13) Aniline	5.537	93	327317m	84.7669	ng	
14) Pentachloroethane	5.580	117	73722	83.2383	ng	87
15) bis(2-Chloroethyl)ether	5.596	93	234826	81.5333	ng	78
17) Phenol	5.511	94	340312	88.0481	ng	79
18) 2-Chlorophenol	5.639	128	241633	87.9299	ng	78
19) N-Decane	5.682	57	204180	79.1828	ng	91
20) 1,3-Dichlorobenzene	5.772	146	230116	82.7715	ng	97
22) 1,4-Dichlorobenzene	5.831	146	235454	76.3159	ng	97
23) 1,2-Dichlorobenzene	5.959	146	226320	77.4610	ng	98
24) Benzyl alcohol	5.933	108	161517	81.8257	ng	68
25) bis(2-chloroisopropyl)...	6.045	45	281633	76.7411	ng	98
26) 2-Methylphenol	6.018	108	223851	79.4945	ng	98
27) Acetophenone	6.146	105	334605	78.5732	ng	69
28) Hexachloroethane	6.232	117	92852	76.8319	ng	80
29) N-Nitroso-di-n-propyla...	6.146	70	159099	77.6803	ng	84
30) 3&4-Methylphenol	6.141	108	227892	82.6571	ng	99
33) Nitrobenzene	6.285	77	243830	78.0861	ng	77
34) Isophorone	6.472	82	465214	79.3612	ng	85
35) 2-Nitrophenol	6.531	139	125654	84.7631	ng	89
36) 2,4-Dimethylphenol	6.558	107	238665	78.1591	ng	91
37) Benzoic Acid	6.643	105	262224	96.1516	ng	43
38) bis(2-Chloroethoxy)met...	6.632	93	287580	78.3918	ng	96
39) 2,4-Dichlorophenol	6.713	162	191590	82.9961	ng	90
40) 1,2,4-Trichlorobenzene	6.782	180	196817	77.1987	ng	98
41) Naphthalene	6.846	128	681268	73.6720	ng	99
42) 4-Chloroaniline	6.878	127	246895m	81.6091	ng	
43) Hexachlorobutadiene	6.932	225	100813	75.9145	ng	96
44) Caprolactam	7.161	113	99478	86.7615	ng	70
45) 4-Chloro-3-methylphenol	7.241	107	217767	84.5146	ng	81
46) 2-Methylnaphthalene	7.380	142	471177	78.6580	ng	99
47) 1-Methylnaphthalene	7.460	142	452833	79.2992	ng	92
48) Methylnaphthalenes (To...	7.380	142	923398m	157.8650	ng	
49) 1,1'-Biphenyl	7.754	154	558287	79.9332	ng	95
51) 1,2,4,5-Tetrachloroben...	7.509	216	209317	75.6195	ng	98
52) Hexachlorocyclopentadiene	7.503	237	124423	84.9052	ng	98
53) 2,4,6-Trichlorophenol	7.599	196	139292	78.9378	ng	100
54) 2,4,5-Trichlorophenol	7.631	196	133998	74.4165	ng	98
56) 2-Chloronaphthalene	7.776	162	452945	74.2915	ng	92
57) 1,4-Dimethylnaphthalene	8.059	156	345212	76.7273	ng	84
58) Dimethylnaphthalenes (...	8.059	156	345212	76.7273	ng	84
59) Diphenyl Ether	7.840	170	327818	75.3556	ng	77
60) 2-Nitroaniline	7.856	65	164140	80.4105	ng	44
61) Coumarin	8.043	146	190793	80.3458	ng	75
62) Acenaphthylene	8.134	152	704815	77.8438	ng	99
63) Dimethylphthalate	8.000	163	527609	79.1156	ng	99
64) 2,6-Dinitrotoluene	8.053	165	118565	82.3046	ng	71
65) Acenaphthene	8.289	153	453073	77.1941	ng	97

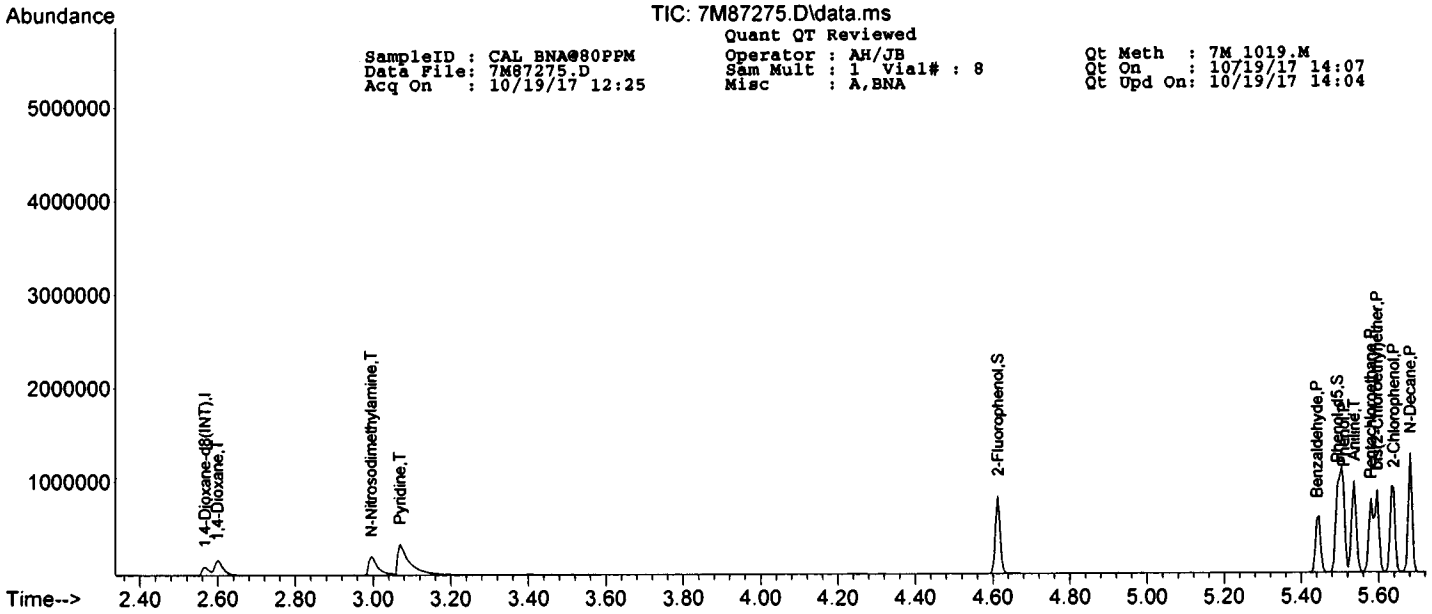
Quantitation Report (QT Reviewed)

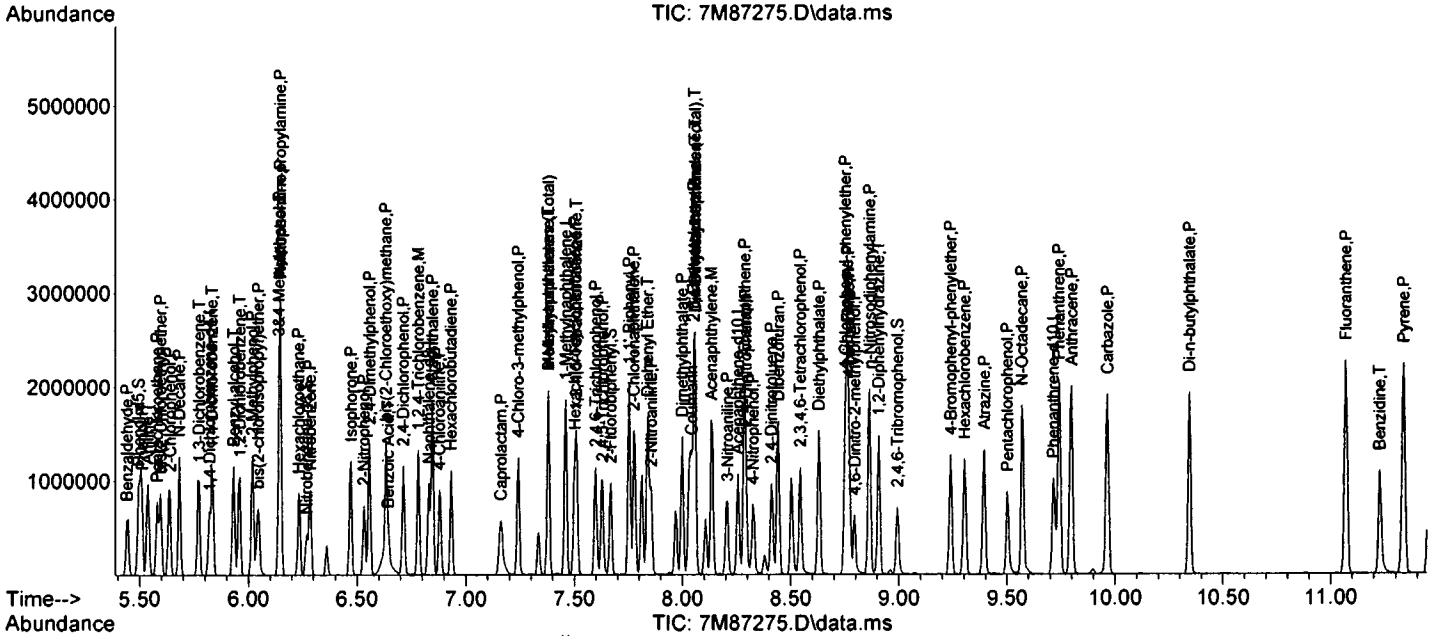
SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87275.D Sam Mult : 1 Vial# : 8 Qt On : 10/19/17 14:07
Acq On : 10/19/17 12:25 Misc : A,BNA Qt Upd On: 10/19/17 14:04

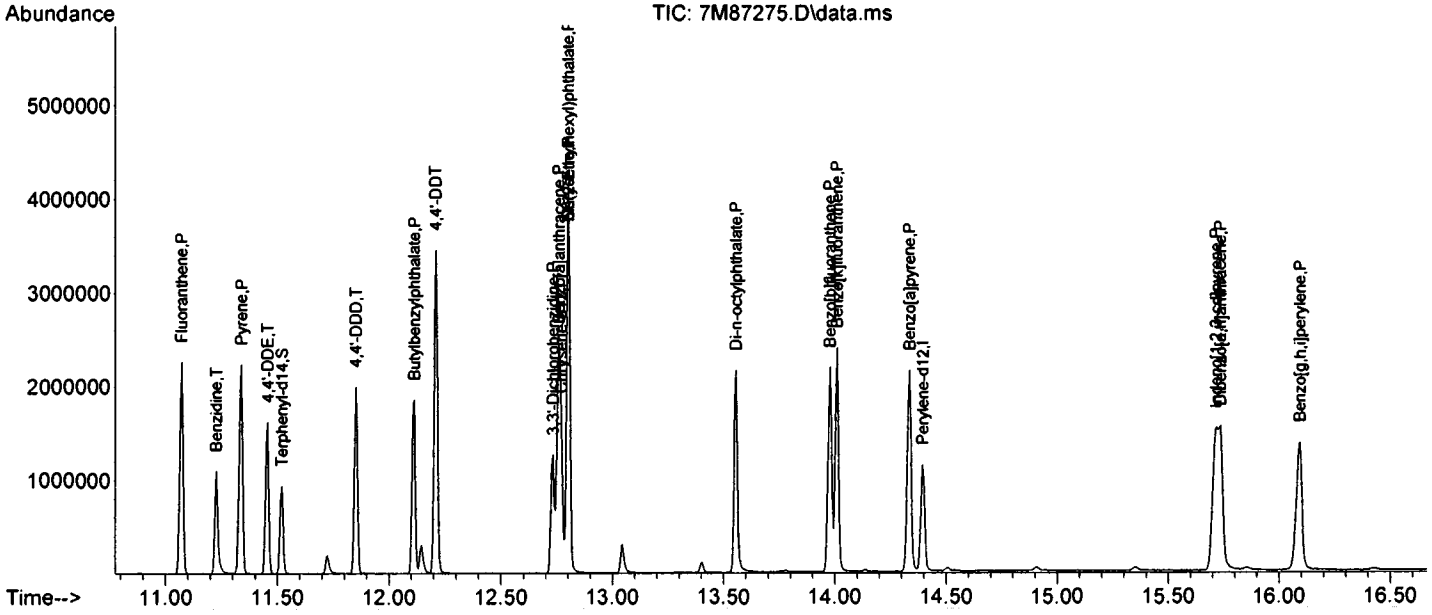
Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.208	138	137787	83.8360	ng	76
67)	2,4-Dinitrophenol	8.294	184	62774	91.7766	ng	58
68)	Dibenzofuran	8.443	168	657860	74.5755	ng	83
69)	2,4-Dinitrotoluene	8.411	165	174880	88.3618	ng	67
70)	4-Nitrophenol	8.326	65	115069	92.2582	ng	91
71)	2,3,4,6-Tetrachlorophenol	8.545	232	134213	85.5775	ng	83
72)	Fluorene	8.764	166	529001	78.1292	ng	99
73)	4-Chlorophenyl-phenyle...	8.753	204	248735	79.4620	ng	84
74)	Diethylphthalate	8.630	149	553430	79.9158	ng	98
75)	4-Nitroaniline	8.769	138	164053	87.1487	ng	74
76)	Atrazine	9.394	200	144616	84.5676	ng	96
78)	4,6-Dinitro-2-methylph...	8.796	198	95774	92.0773	ng	62
79)	n-Nitrosodiphenylamine	8.866	169	486057	77.0527	ng	98
81)	1,2-Diphenylhydrazine	8.908	77	558632	72.0434	ng	84
82)	4-Bromophenyl-phenylether	9.239	248	152614	78.5600	ng	82
83)	Hexachlorobenzene	9.304	284	156044	77.3633	ng	69
84)	N-Octadecane	9.571	57	318508	74.9433	ng	76
85)	Pentachlorophenol	9.501	266	102146	85.8311	ng	98
86)	Phenanthrene	9.742	178	830680	76.5885	ng	99
87)	Anthracene	9.800	178	851001	78.8928	ng	100
88)	Carbazole	9.966	167	835049	79.9226	ng	97
89)	Di-n-butylphthalate	10.345	149	1001219	82.6143	ng	98
90)	Fluoranthene	11.072	202	961914	81.3981	ng	96
92)	Pyrene	11.339	202	1001149	75.5938	ng	91
93)	Benzidine	11.227	184	443720	106.1529	ng	90
95)	4,4'-DDE	11.457	246	192061	73.9609	ng	95
96)	4,4'-DDD	11.852	235	387825	78.8461	ng	96
97)	Butylbenzylphthalate	12.114	149	491059	78.8222	ng	70
98)	4,4'-DDT	12.210	235	320845	83.7119	ng	98
99)	3,3'-Dichlorobenzidine	12.733	252	290880	84.4627	ng	95
100)	Benzo[a]anthracene	12.760	228	947535	76.7253	ng	100
101)	Chrysene	12.803	228	868645	77.7219	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.803	149	635911	79.2362	ng	93
104)	Di-n-octylphthalate	13.556	149	1181522	79.0573	ng	99
105)	Benzo[b]fluoranthene	13.978	252	979411m	77.3534	ng	
106)	Benzo[k]fluoranthene	14.010	252	950458	76.4121	ng	95
107)	Benzo[a]pyrene	14.336	252	958345	79.2956	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.714	276	1022262	83.1794	ng	88
109)	Dibenzo[a,h]anthracene	15.736	278	848743	83.6016	ng	93
110)	Benzo[g,h,i]perylene	16.094	276	869546	83.3820	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87275.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@80PPM
Data File: 7M87275.D
Acq On : 10/19/17 12:25
Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:07
Qt Upd On: 10/19/17 14:04
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Phenol-d5,S
Aniline,T
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 7M87275.D\data.ms
Time-->


Abundance
TIC: 7M87275.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87274.D Sam Mult : 1 Vial# : 7 Qt On : 10/19/17 14:06
Acq On : 10/19/17 12:02 Misc : A,BNA Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	45566	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	85420	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	353649	40.00	ng	0.00
50) Acenaphthene-d10	8.256	164	221886	40.00	ng	0.00
77) Phenanthrene-d10	9.720	188	417488	40.00	ng	0.00
91) Chrysene-d12	12.776	240	454475	40.00	ng	0.00
103) Perylene-d12	14.395	264	448390	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	360910	131.64	ng	0.00
Spiked Amount 100.000			Recovery = 131.64%			
16) Phenol-d5	5.500	99	457338	133.18	ng	0.00
Spiked Amount 100.000			Recovery = 133.18%			
32) Nitrobenzene-d5	6.269	128	87078	60.59	ng	0.00
Spiked Amount 50.000			Recovery = 121.18%			
55) 2-Fluorobiphenyl	7.669	172	396102	57.26	ng	0.00
Spiked Amount 50.000			Recovery = 114.52%			
80) 2,4,6-Tribromophenol	8.999	330	113521	135.22	ng	0.00
Spiked Amount 100.000			Recovery = 135.22%			
94) Terphenyl-d14	11.521	244	437304	60.38	ng	0.00
Spiked Amount 50.000			Recovery = 120.76%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	145700	110.8049	ng	99
9) Pyridine	3.064	79	411089	126.6595	ng	69
10) N-Nitrosodimethylamine	2.994	74	242883	130.3345	ng	72
12) Benzaldehyde	5.446	77	174698	131.0977	ng	73
13) Aniline	5.537	93	525483	129.8837	ng	7
14) Pentachloroethane	5.580	117	111751	120.4248	ng	85
15) bis(2-Chloroethyl)ether	5.596	93	355345	117.7545	ng	80
17) Phenol	5.511	94	521688	128.8227	ng	82
18) 2-Chlorophenol	5.639	128	372339	129.3175	ng	79
19) N-Decane	5.681	57	308644	114.2389	ng	93
20) 1,3-Dichlorobenzene	5.772	146	354508	121.7023	ng	98
22) 1,4-Dichlorobenzene	5.836	146	358536	116.3170	ng	97
23) 1,2-Dichlorobenzene	5.959	146	340938	116.7985	ng	97
24) Benzyl alcohol	5.933	108	253555	128.5716	ng	71
25) bis(2-chloroisopropyl)...	6.045	45	430148	117.3178	ng	99
26) 2-Methylphenol	6.018	108	342862	121.8705	ng	98
27) Acetophenone	6.152	105	490432	115.2716	ng	62
28) Hexachloroethane	6.237	117	142538	118.0545	ng	87
29) N-Nitroso-di-n-propyla...	6.152	70	232160	113.4573	ng	84
30) 3&4-Methylphenol	6.146	108	331199	120.2380	ng	100
33) Nitrobenzene	6.285	77	375196	118.0261	ng	80
34) Isophorone	6.472	82	714420	119.7133	ng	88
35) 2-Nitrophenol	6.536	139	199733	132.3470	ng	82
36) 2,4-Dimethylphenol	6.558	107	365913	117.7069	ng	93
37) Benzoic Acid	6.664	105	440103	158.5156	ng	42
38) bis(2-Chloroethoxy)met...	6.638	93	437303	117.0922	ng	96
39) 2,4-Dichlorophenol	6.718	162	295589	125.7787	ng	87
40) 1,2,4-Trichlorobenzene	6.782	180	301899	116.3169	ng	97
41) Naphthalene	6.846	128	1030595	109.4727	ng	99
42) 4-Chloroaniline	6.883	127	338973m	110.0589	ng	
43) Hexachlorobutadiene	6.937	225	155914	115.3259	ng	97
44) Caprolactam	7.177	113	154709	132.5406	ng	66
45) 4-Chloro-3-methylphenol	7.247	107	336829	128.4053	ng	77
46) 2-Methylnaphthalene	7.380	142	713926	117.0700	ng	99
47) 1-Methylnaphthalene	7.460	142	690619	118.7963	ng	92
48) Methylnaphthalenes (To...	7.380	142	1404821m	235.9128	ng	
49) 1,1'-Biphenyl	7.754	154	850436	119.6038	ng	95
51) 1,2,4,5-Tetrachloroben...	7.514	216	321363	113.3360	ng	98
52) Hexachlorocyclopentadiene	7.503	237	196885	131.1562	ng	99
53) 2,4,6-Trichlorophenol	7.599	196	234573	129.7715	ng	100
54) 2,4,5-Trichlorophenol	7.631	196	223721	121.2887	ng	99
56) 2-Chloronaphthalene	7.781	162	674726	108.0348	ng	92
57) 1,4-Dimethylnaphthalene	8.059	156	511917	111.0724	ng	88
58) Dimethylnaphthalenes (...	8.059	156	511917	111.0724	ng	88
59) Diphenyl Ether	7.840	170	502909	112.8535	ng	80
60) 2-Nitroaniline	7.856	65	255556	122.2158	ng	53
61) Coumarin	8.048	146	287470	118.1777	ng	75
62) Acenaphthylene	8.139	152	1077323	116.1548	ng	99
63) Dimethylphthalate	8.005	163	799594	117.0474	ng	98
64) 2,6-Dinitrotoluene	8.059	165	176062	119.3097	ng	69
65) Acenaphthene	8.289	153	686609	114.2004	ng	98

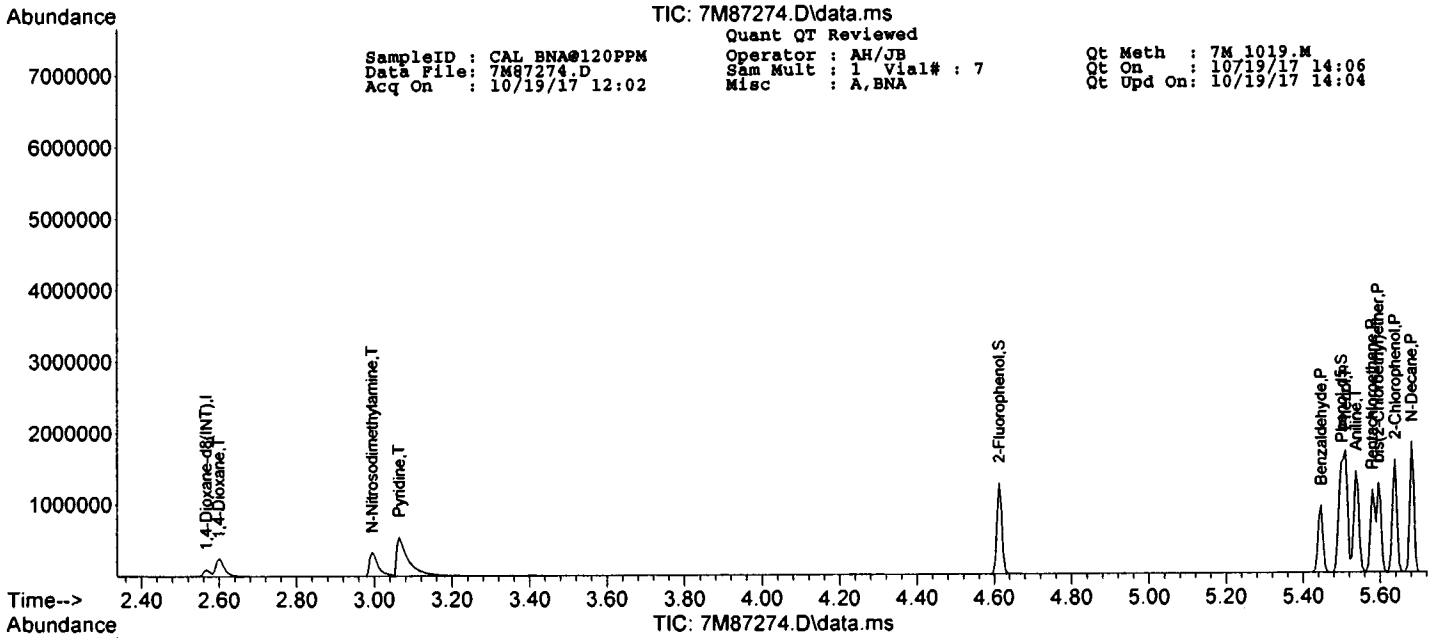
Quantitation Report (QT Reviewed)

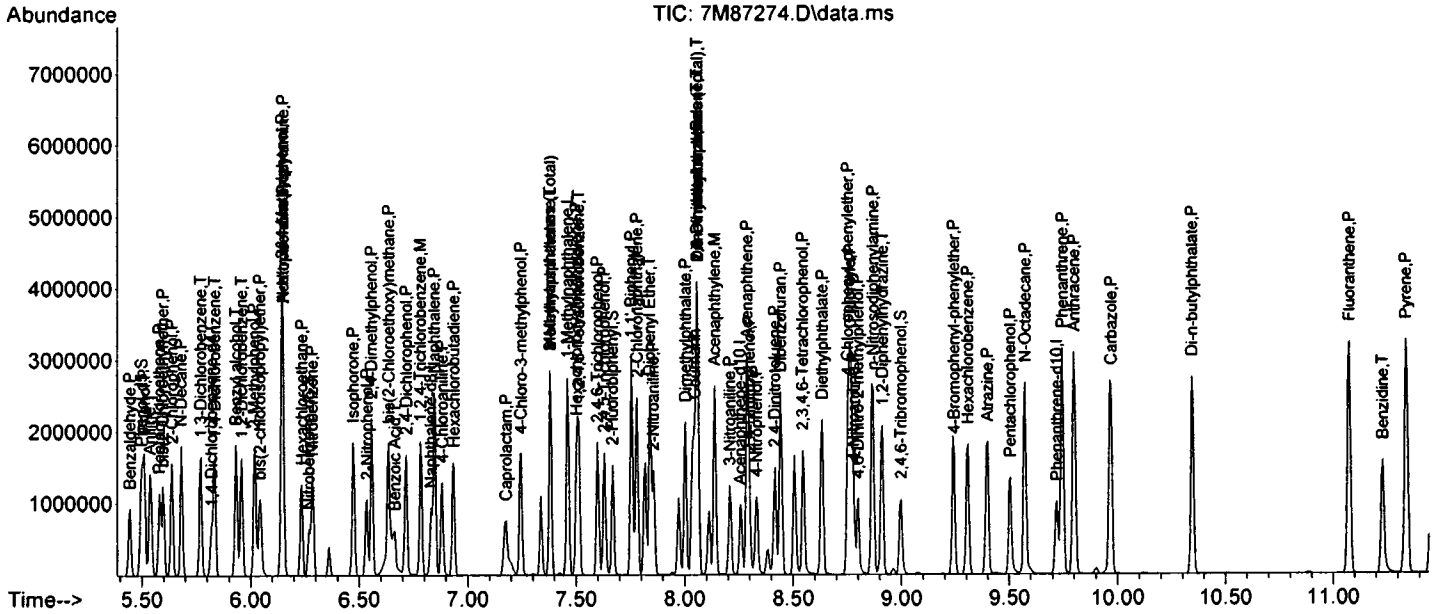
SampleID : CAL BNA@120PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87274.D Sam Mult : 1 Vial# : 7 Qt On : 10/19/17 14:06
Acq On : 10/19/17 12:02 Misc : A,BNA Qt Upd On: 10/19/17 14:04

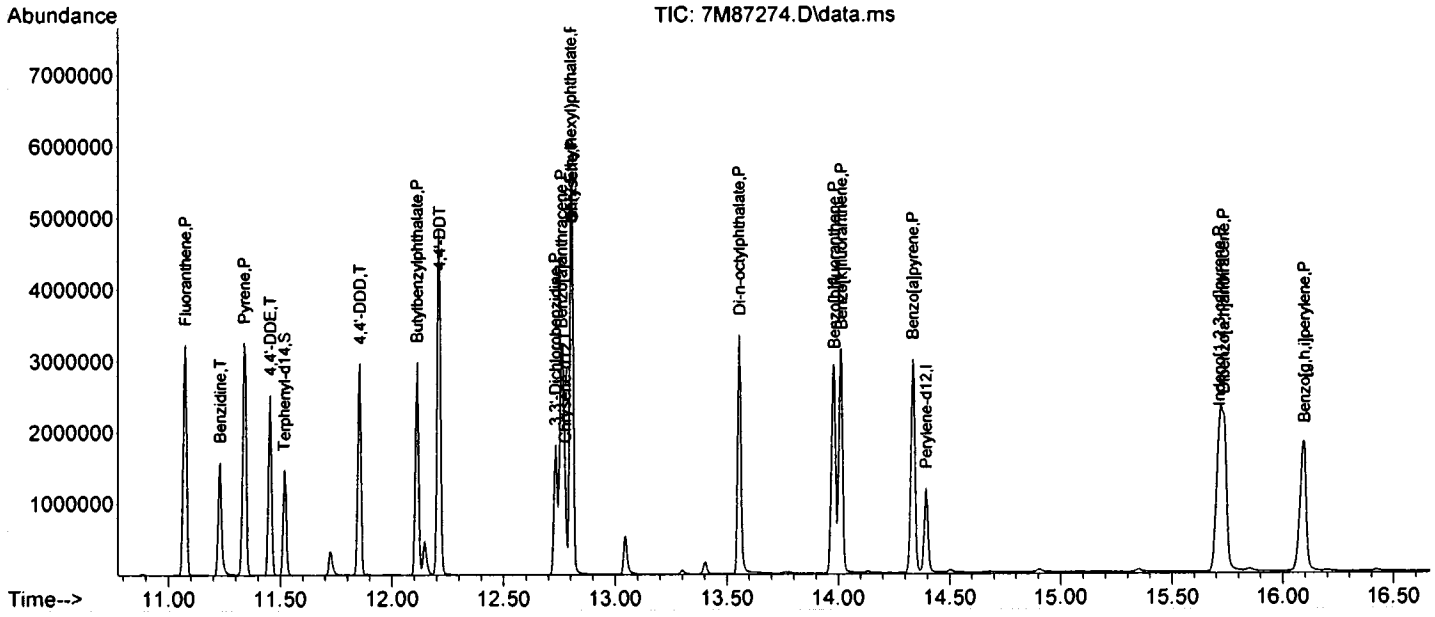
Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.208	138	203774	121.0357	ng	81
67) 2,4-Dinitrophenol	8.299	184	111967	159.8030	ng	41
68) Dibenzofuran	8.443	168	1002752	110.9683	ng	85
69) 2,4-Dinitrotoluene	8.417	165	272589	134.4545	ng	65
70) 4-Nitrophenol	8.331	65	176297	137.9857	ng	92
71) 2,3,4,6-Tetrachlorophenol	8.545	232	210029	130.7334	ng	84
72) Fluorene	8.764	166	808170	116.5205	ng	97
73) 4-Chlorophenyl-phenyle...	8.753	204	383869	119.7148	ng	85
74) Diethylphthalate	8.636	149	856455	120.7305	ng	97
75) 4-Nitroaniline	8.780	138	255048	132.2638	ng	77
76) Atrazine	9.400	200	225576	128.7724	ng	95
78) 4,6-Dinitro-2-methylph...	8.801	198	155302	145.8901	ng	64
79) n-Nitrosodiphenylamine	8.871	169	742562	115.0210	ng	98
81) 1,2-Diphenylhydrazine	8.914	77	845947	106.5996	ng	79
82) 4-Bromophenyl-phenylether	9.245	248	237716	119.5665	ng	79
83) Hexachlorobenzene	9.309	284	244250	118.3223	ng	64
84) N-Octadecane	9.576	57	474370	109.0621	ng	73
85) Pentachlorophenol	9.507	266	166943	137.0678	ng	98
86) Phenanthrene	9.747	178	1246614	112.3067	ng	100
87) Anthracene	9.800	178	1294290	117.2419	ng	100
88) Carbazole	9.971	167	1266120	118.4067	ng	97
89) Di-n-butylphthalate	10.345	149	1531864	123.5066	ng	98
90) Fluoranthene	11.077	202	1464359	121.0791	ng	93
92) Pyrene	11.339	202	1504055	114.7194	ng	93
93) Benzidine	11.232	184	674446	162.9881	ng	87
95) 4,4'-DDE	11.456	246	300671	116.9608	ng	94
96) 4,4'-DDD	11.857	235	587187	120.5888	ng	96
97) Butylbenzylphthalate	12.114	149	750515	121.6915	ng	71
98) 4,4'-DDT	12.215	235	478929	126.2260	ng	99
99) 3,3'-Dichlorobenzidine	12.733	252	422950	124.0584	ng	96
100) Benzo[a]anthracene	12.760	228	1420938	116.2263	ng	100
101) Chrysene	12.808	228	1249962	112.9754	ng	99
102) bis(2-Ethylhexyl)phtha...	12.803	149	922899	116.1628	ng	93
104) Di-n-octylphthalate	13.556	149	1805398	123.7708	ng	100
105) Benzo[b]fluoranthene	13.983	252	1417029m	114.6670	ng	
106) Benzo[k]fluoranthene	14.015	252	1424967	117.3761	ng	93
107) Benzo[a]pyrene	14.336	252	1413537	119.8339	ng	94
108) Indeno[1,2,3-cd]pyrene	15.714	276	1481843	123.5381	ng	89
109) Dibenzo[a,h]anthracene	15.736	278	1222933	123.4203	ng	92
110) Benzo[g,h,i]perylene	16.099	276	1248888	122.7012	ng	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87274.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@120PPM
Data File: 7M87274.D
Acq On : 10/19/17 12:02
Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:06
Qt Upd On: 10/19/17 14:04
Abundance
Time-->


TIC: 7M87274.D\data.ms
Abundance
Time-->


TIC: 7M87274.D\data.ms
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87273.D Sam Mult : 1 Vial# : 6 Qt On : 10/19/17 14:05
Acq On : 10/19/17 11:38 Misc : A,BNA Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	51053	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	91334	40.00	ng	0.00
31) Naphthalene-d8	6.841	136	369177	40.00	ng	0.00
50) Acenaphthene-d10	8.272	164	223992	40.00	ng	0.01
77) Phenanthrene-d10	9.726	188	417905	40.00	ng	0.00
91) Chrysene-d12	12.776	240	432828	40.00	ng	0.00
103) Perylene-d12	14.405	264	412194	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	488671	159.09	ng	0.00
Spiked Amount 100.000			Recovery = 159.09%			
16) Phenol-d5	5.500	99	598582	155.58	ng	0.00
Spiked Amount 100.000			Recovery = 155.58%			
32) Nitrobenzene-d5	6.274	128	118383	78.90	ng	0.00
Spiked Amount 50.000			Recovery = 157.80%			
55) 2-Fluorobiphenyl	7.679	172	522323	74.79	ng	0.00
Spiked Amount 50.000			Recovery = 149.58%			
80) 2,4,6-Tribromophenol	9.010	330	147306	175.28	ng	0.01
Spiked Amount 100.000			Recovery = 175.28%			
94) Terphenyl-d14	11.526	244	548709	79.55	ng	0.00
Spiked Amount 50.000			Recovery = 159.10%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	206646	140.2639	ng	98
9) Pyridine	3.058	79	563472	154.9509	ng	69
10) N-Nitrosodimethylamine	2.994	74	333379	159.6689	ng	71
12) Benzaldehyde	5.446	77	217379	145.5943	ng	71
13) Aniline	5.543	93	704896	155.5037	ng	14
14) Pentachloroethane	5.580	117	153462	147.5996	ng	86
15) bis(2-Chloroethyl)ether	5.601	93	467588	138.2963	ng	76
17) Phenol	5.516	94	685165	151.0067	ng	79
18) 2-Chlorophenol	5.639	128	494483	153.2815	ng	79
19) N-Decane	5.681	57	411627	135.9814	ng	90
20) 1,3-Dichlorobenzene	5.772	146	471784	144.5558	ng	98
22) 1,4-Dichlorobenzene	5.836	146	483563	146.7204	ng	97
23) 1,2-Dichlorobenzene	5.959	146	461389	147.8278	ng	96
24) Benzyl alcohol	5.933	108	330450	156.7132	ng	73
25) bis(2-chloroisopropyl)...	6.045	45	555681	141.7420	ng	99
26) 2-Methylphenol	6.023	108	448273	149.0215	ng	97
27) Acetophenone	6.152	105	618695	136.0026	ng	71
28) Hexachloroethane	6.237	117	193455	149.8508	ng	84
29) N-Nitroso-di-n-propyla...	6.152	70	294733	134.7103	ng	85
30) 3&4-Methylphenol	6.146	108	413435	140.3741	ng	93
33) Nitrobenzene	6.290	77	491182	148.0131	ng	74
34) Isophorone	6.477	82	934496	150.0044	ng	86
35) 2-Nitrophenol	6.536	139	264114	167.6461	ng	87
36) 2,4-Dimethylphenol	6.563	107	477770	147.2248	ng	93
37) Benzoic Acid	6.680	105	595456	205.4495	ng	45
38) bis(2-Chloroethoxy)met...	6.643	93	567127	145.4667	ng	95
39) 2,4-Dichlorophenol	6.723	162	386885	157.7024	ng	89
40) 1,2,4-Trichlorobenzene	6.793	180	396622	146.3847	ng	97
41) Naphthalene	6.857	128	1325309m	134.8568	ng	
42) 4-Chloroaniline	6.889	127	378373	117.6842	ng	94
43) Hexachlorobutadiene	6.942	225	206959	146.6439	ng	97
44) Caprolactam	7.193	113	213261	175.0180	ng	67
45) 4-Chloro-3-methylphenol	7.257	107	431276	157.4949	ng	78
46) 2-Methylnaphthalene	7.391	142	920019	144.5197	ng	99
47) 1-Methylnaphthalene	7.471	142	876819	144.4815	ng	90
48) Methylnaphthalenes (To...	7.391	142	1796066m	288.9286	ng	
49) 1,1'-Biphenyl	7.770	154	1087328	146.4879	ng	94
51) 1,2,4,5-Tetrachloroben...	7.525	216	411576	143.7870	ng	98
52) Hexachlorocyclopentadiene	7.514	237	261698	172.6927	ng	98
53) 2,4,6-Trichlorophenol	7.610	196	297785	163.1930	ng	98
54) 2,4,5-Trichlorophenol	7.642	196	301338	161.8322	ng	99
56) 2-Chloronaphthalene	7.792	162	858656	136.1924	ng	93
57) 1,4-Dimethylnaphthalene	8.075	156	639788	137.5118	ng	87
58) Dimethylnaphthalenes (...	8.075	156	639788	137.5118	ng	87
59) Diphenyl Ether	7.856	170	646007	143.6019	ng	75
60) 2-Nitroaniline	7.872	65	320210	151.6958	ng	44
61) Coumarin	8.064	146	356294	145.0939	ng	75
62) Acenaphthylene	8.155	152	1370221	146.3455	ng	99
63) Dimethylphthalate	8.021	163	1025604	148.7200	ng	98
64) 2,6-Dinitrotoluene	8.075	165	214011	143.6626	ng	67
65) Acenaphthene	8.304	153	876655	144.4390	ng	98

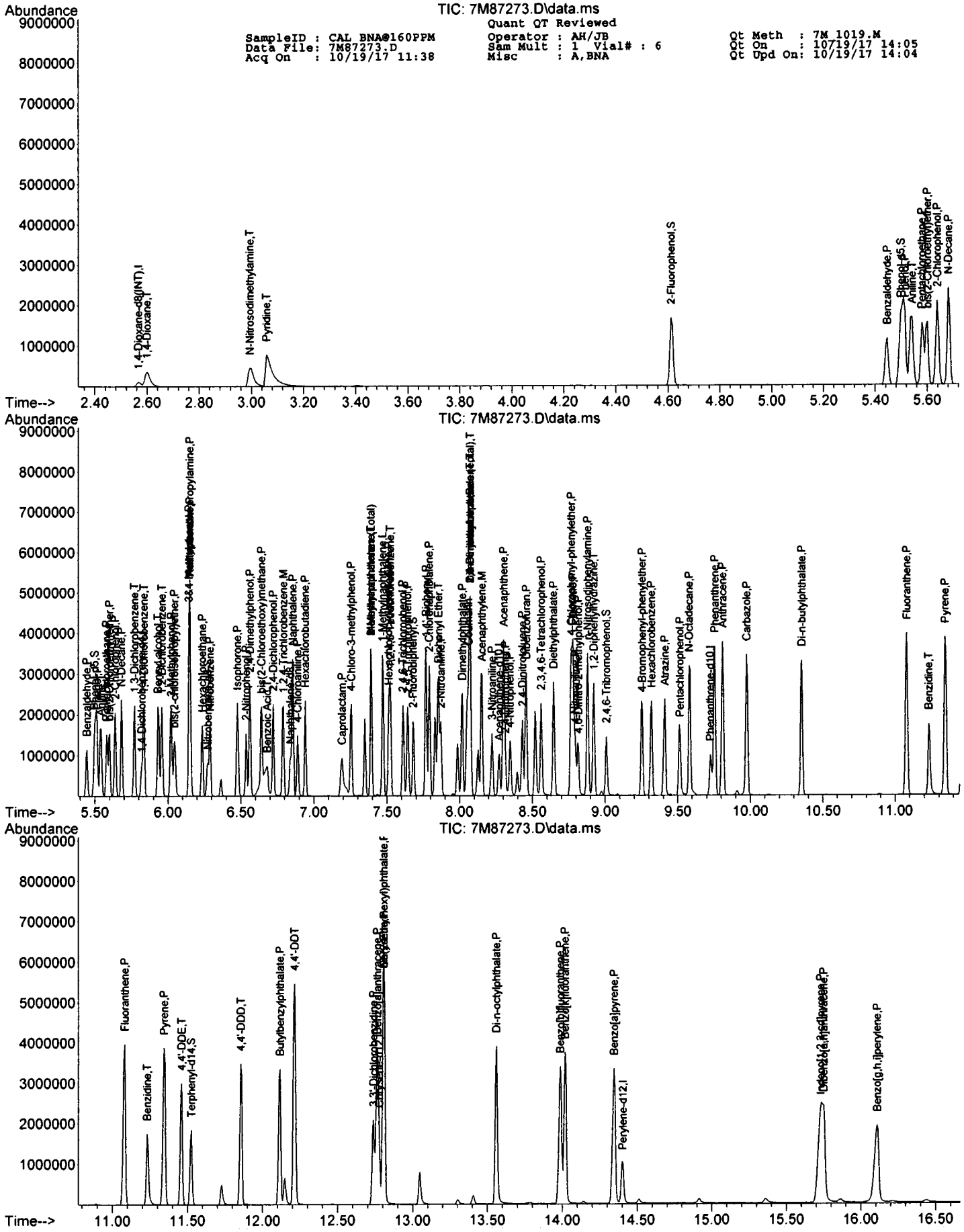
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87273.D Sam Mult : 1 Vial# : 6 Qt On : 10/19/17 14:05
Acq On : 10/19/17 11:38 Misc : A,BNA Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.224	138	248769	146.3722	ng	79
67)	2,4-Dinitrophenol	8.315	184	146839	207.6030	ng	35
68)	Dibenzofuran	8.459	168	1264960	138.6690	ng	85
69)	2,4-Dinitrotoluene	8.433	165	346610	169.3580	ng	61
70)	4-Nitrophenol	8.347	65	218687	169.5545	ng	88
71)	2,3,4,6-Tetrachlorophenol	8.561	232	270849	167.0060	ng	84
72)	Fluorene	8.780	166	1006896	143.8075	ng	98
73)	4-Chlorophenyl-phenyle...	8.769	204	477993	147.6672	ng	83
74)	Diethylphthalate	8.646	149	1080602	150.8953	ng	98
75)	4-Nitroaniline	8.796	138	321092	164.9476	ng	75
76)	Atrazine	9.410	200	289875	163.9224	ng	96
78)	4,6-Dinitro-2-methylph...	8.817	198	203203	190.6976	ng	66
79)	n-Nitrosodiphenylamine	8.881	169	936423	144.9049	ng	98
81)	1,2-Diphenylhydrazine	8.924	77	1173011	147.6661	ng	80
82)	4-Bromophenyl-phenylether	9.255	248	305194	153.3534	ng	79
83)	Hexachlorobenzene	9.320	284	312042	151.0120	ng	67
84)	N-Octadecane	9.581	57	589569	135.4121	ng	74
85)	Pentachlorophenol	9.517	266	218015	178.8217	ng	98
86)	Phenanthrene	9.758	178	1563825	140.7435	ng	99
87)	Anthracene	9.811	178	1596941	144.5128	ng	99
88)	Carbazole	9.977	167	1579349	147.5523	ng	98
89)	Di-n-butylphthalate	10.356	149	1916017	154.3248	ng	97
90)	Fluoranthene	11.082	202	1814078	149.8457	ng	93
92)	Pyrene	11.344	202	1839454	147.3183	ng	92
93)	Benzidine	11.232	184	741938	188.2656	ng	90
95)	4,4'-DDE	11.462	246	372337	152.0827	ng	95
96)	4,4'-DDD	11.857	235	726270	156.6114	ng	96
97)	Butylbenzylphthalate	12.119	149	927167	157.8532	ng	70
98)	4,4'-DDT	12.215	235	587069	162.4657	ng	99
99)	3,3'-Dichlorobenzidine	12.739	252	475485	146.4430	ng	96
100)	Benzo[a]anthracene	12.765	228	1716162	147.3948	ng	100
101)	Chrysene	12.808	228	1471583	139.6582	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.808	149	1117511	147.6928	ng	91
104)	Di-n-octylphthalate	13.561	149	2207691	164.6410	ng	100
105)	Benzo[b]fluoranthene	13.989	252	1734624m	152.6931	ng	
106)	Benzo[k]fluoranthene	14.021	252	1625609	145.6616	ng	95
107)	Benzo[a]pyrene	14.347	252	1651450	152.2973	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.730	276	1670354	151.4822	ng	88
109)	Dibenzo[a,h]anthracene	15.752	278	1393428	152.9758	ng	91
110)	Benzo[g,h,i]perylene	16.110	276	1398093	149.4223	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87273.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@160PPM
Data File: 7M87273.D
Acq On : 10/19/17 11:38
Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:05
Qt Upd On: 10/19/17 14:04
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM
Data File: 7M87272.D
Acq On : 10/19/17 11:15
Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:04
Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.562	96	42028	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	75799	40.00	ng	0.00
31) Naphthalene-d8	6.835	136	307691	40.00	ng	0.00
50) Acenaphthene-d10	8.267	164	194093	40.00	ng	0.00
77) Phenanthrene-d10	9.726	188	366659	40.00	ng	0.00
91) Chrysene-d12	12.781	240	387188	40.00	ng	0.01
103) Perylene-d12	14.395	264	373478	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	536023	211.97	ng	0.00
Spiked Amount 100.000			Recovery = 211.97%			
16) Phenol-d5	5.500	99	664087	209.67	ng	0.00
Spiked Amount 100.000			Recovery = 209.67%			
32) Nitrobenzene-d5	6.274	128	128974	103.14	ng	0.00
Spiked Amount 50.000			Recovery = 206.28%			
55) 2-Fluorobiphenyl	7.674	172	581052	96.02	ng	0.00
Spiked Amount 50.000			Recovery = 192.04%			
80) 2,4,6-Tribromophenol	9.004	330	168703	228.80	ng	0.00
Spiked Amount 100.000			Recovery = 228.80%			
94) Terphenyl-d14	11.526	244	658508	106.72	ng	0.00
Spiked Amount 50.000			Recovery = 213.44%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	227103	187.2511	ng	99
9) Pyridine	3.053	79	610454	203.9187	ng	69
10) N-Nitrosodimethylamine	2.994	74	369885	215.1945	ng	71
12) Benzaldehyde	5.446	77	227818	185.3520	ng	72
13) Aniline	5.543	93	760824	203.8837	ng	13
14) Pentachloroethane	5.580	117	165877	193.7996	ng	87
15) bis(2-Chloroethyl)ether	5.601	93	511863	183.9007	ng	77
17) Phenol	5.516	94	753243	201.6595	ng	81
18) 2-Chlorophenol	5.639	128	540444	203.5034	ng	80
19) N-Decane	5.681	57	432812	173.6831	ng	90
20) 1,3-Dichlorobenzene	5.772	146	511067	190.2185	ng	99
22) 1,4-Dichlorobenzene	5.836	146	516159	188.7078	ng	97
23) 1,2-Dichlorobenzene	5.959	146	491854	189.8865	ng	97
24) Benzyl alcohol	5.933	108	358764	205.0113	ng	74
25) bis(2-chloroisopropyl)...	6.045	45	608515	187.0309	ng	99
26) 2-Methylphenol	6.023	108	487920	195.4448	ng	99
27) Acetophenone	6.152	105	656790	173.9667	ng	73
28) Hexachloroethane	6.237	117	207757	193.9116	ng	84
29) N-Nitroso-di-n-propyla...	6.152	70	321683	177.1614	ng	83
30) 3&4-Methylphenol	6.146	108	437329	178.9193	ng	95
33) Nitrobenzene	6.290	77	537928	194.4920	ng	76
34) Isophorone	6.477	82	1036856	199.6940	ng	87
35) 2-Nitrophenol	6.536	139	286068	217.8669	ng	87
36) 2,4-Dimethylphenol	6.563	107	525153	194.1635	ng	95
37) Benzoic Acid	6.686	105	647233	267.9390	ng	43
38) bis(2-Chloroethoxy)met...	6.638	93	620351	190.9152	ng	97
39) 2,4-Dichlorophenol	6.723	162	420804	205.8051	ng	88
40) 1,2,4-Trichlorobenzene	6.787	180	432702	191.6142	ng	97
41) Naphthalene	6.851	128	1450855m	177.1331	ng	
42) 4-Chloroaniline	6.883	127	382969m	142.9162	ng	
43) Hexachlorobutadiene	6.937	225	223559	190.0604	ng	96
44) Caprolactam	7.193	113	245056	241.2995	ng	65
45) 4-Chloro-3-methylphenol	7.252	107	484270	212.1870	ng	82
46) 2-Methylnaphthalene	7.386	142	1002801	189.0014	ng	97
47) 1-Methylnaphthalene	7.466	142	963649	190.5202	ng	92
48) Methylnaphthalenes (To...	7.386	142	1965595m	379.3867	ng	
49) 1,1'-Biphenyl	7.760	154	1209279	195.4733	ng	94
51) 1,2,4,5-Tetrachloroben...	7.519	216	451327	181.9631	ng	99
52) Hexachlorocyclopentadiene	7.508	237	282709	215.2960	ng	99
53) 2,4,6-Trichlorophenol	7.605	196	328942	208.0370	ng	97
54) 2,4,5-Trichlorophenol	7.637	196	336804	208.7425	ng	97
56) 2-Chloronaphthalene	7.786	162	953190	174.4760	ng	93
57) 1,4-Dimethylnaphthalene	8.069	156	695603	172.5393	ng	88
58) Dimethylnaphthalenes (...	8.069	156	695603	172.5393	ng	88
59) Diphenyl Ether	7.845	170	718160	184.2327	ng	80
60) 2-Nitroaniline	7.866	65	363798	198.8939	ng	47
61) Coumarin	8.059	146	394349	185.3292	ng	72
62) Acenaphthylene	8.144	152	1540638	189.8943	ng	99
63) Dimethylphthalate	8.016	163	1153229	192.9869	ng	99
64) 2,6-Dinitrotoluene	8.069	165	236605	183.2965	ng	69
65) Acenaphthene	8.299	153	979110	186.1700	ng	99

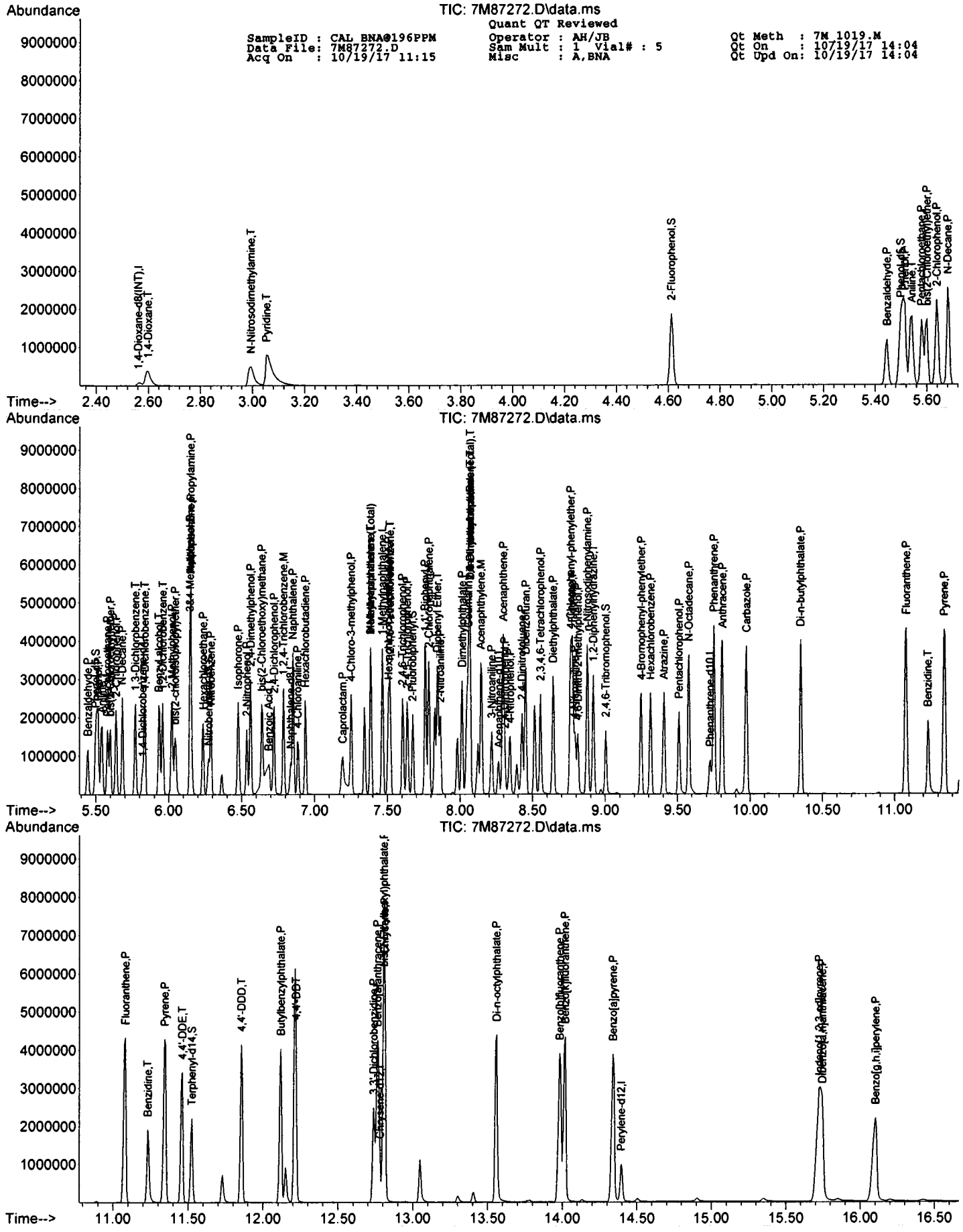
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87272.D Sam Mult : 1 Vial# : 5 Qt On : 10/19/17 14:04
Acq On : 10/19/17 11:15 Misc : A,BNA Qt Upd On: 10/19/17 14:04

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.219	138	277241	188.2532	ng	80
67)	2,4-Dinitrophenol	8.310	184	169016	275.7672	ng	36
68)	Dibenzofuran	8.454	168	1431302	181.0742	ng	85
69)	2,4-Dinitrotoluene	8.427	165	397421	224.0980	ng	65
70)	4-Nitrophenol	8.347	65	259654	232.3294	ng	82
71)	2,3,4,6-Tetrachlorophenol	8.556	232	307562	218.8568	ng	85
72)	Fluorene	8.775	166	1143523	188.4797	ng	98
73)	4-Chlorophenyl-phenyle...	8.764	204	542515	193.4179	ng	82
74)	Diethylphthalate	8.641	149	1247863	201.0941	ng	98
75)	4-Nitroaniline	8.791	138	377414	223.7470	ng	76
76)	Atrazine	9.405	200	336941	219.8892	ng	97
78)	4,6-Dinitro-2-methylph...	8.812	198	237484	254.0181	ng	60
79)	n-Nitrosodiphenylamine	8.876	169	1063848	187.6315	ng	99
81)	1,2-Diphenylhydrazine	8.919	77	1220698	175.1468	ng	81
82)	4-Bromophenyl-phenylether	9.250	248	349188	199.9825	ng	81
83)	Hexachlorobenzene	9.314	284	355897	196.3080	ng	66
84)	N-Octadecane	9.581	57	653308	171.0236	ng	68
85)	Pentachlorophenol	9.512	266	250728	234.3969	ng	98
86)	Phenanthrene	9.752	178	1804577	185.1104	ng	99
87)	Anthracene	9.811	178	1857931	191.6295	ng	99
88)	Carbazole	9.977	167	1821681	193.9794	ng	98
89)	Di-n-butylphthalate	10.351	149	2212103	203.0752	ng	98
90)	Fluoranthene	11.082	202	2108073	198.4674	ng	91
92)	Pyrene	11.344	202	2164456	193.7805	ng	91
93)	Benzidine	11.232	184	805080	228.3684	ng	90
95)	4,4'-DDE	11.462	246	440516	201.1401	ng	95
96)	4,4'-DDD	11.857	235	848743	204.5949	ng	95
97)	Butylbenzylphthalate	12.119	149	1100723	209.4917	ng	72
98)	4,4'-DDT	12.220	235	682135	211.0262	ng	99
99)	3,3'-Dichlorobenzidine	12.739	252	540911	186.2306	ng	97
100)	Benzo[a]anthracene	12.765	228	2048438	196.6710	ng	99
101)	Chrysene	12.813	228	1741024	184.7055	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.808	149	1308113	193.2620	ng	93
104)	Di-n-octylphthalate	13.561	149	2614274	215.1728	ng	100
105)	Benzo[b]fluoranthene	13.983	252	2069924	201.0968	ng	95
106)	Benzo[k]fluoranthene	14.021	252	1962910m	194.1181	ng	
107)	Benzo[a]pyrene	14.341	252	1998042	203.3612	ng	94
108)	Indeno[1,2,3-cd]pyrene	15.725	276	1990652	199.2439	ng	87
109)	Dibenzo[a,h]anthracene	15.746	278	1663343	201.5379	ng	90
110)	Benzo[g,h,i]perylene	16.104	276	1655304	195.2513	ng	79

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87272.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@196PPM
Data File: 7M87272.D
Acq On : 10/19/17 11:15
Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:04
Qt Upd On: 10/19/17 14:04
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Phenol-d6,S
Aniline,P
Bis(2-Chloroethyl)ether,P
2-Chlorophenol,P
N-Decane,P
Time-->

Abundance
TIC: 7M87272.D\data.ms
Benzaldehyde,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Dimethylphthalate,P
Acenaphthylene,M
Acenaphthene,P
Diethylphthalate,P
2,3,4,6-Tetrachlorophenol,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->

Abundance
TIC: 7M87272.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87277.D Sam Mult : 1 Vial# : 10 Qt On : 10/19/17 14:22
Acq On : 10/19/17 13:11 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	46605	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.820	152	87656	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	355993	40.00	ng	0.00
50) Acenaphthene-d10	8.262	164	215585	40.00	ng	0.00
77) Phenanthrene-d10	9.720	188	390883	40.00	ng	0.00
91) Chrysene-d12	12.765	240	429139	40.00	ng	0.00
103) Perylene-d12	14.395	264	402635	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.620	88	962m	0.7153	ng	
9) Pyridine	0.000		0	N.D. d		
10) N-Nitrosodimethylamine	0.000		0	N.D.		
12) Benzaldehyde	0.000		0	N.D. d		
13) Aniline	5.537	93	1712m	0.4137	ng	
14) Pentachloroethane	0.000		0	N.D. d		
15) bis(2-Chloroethyl)ether	5.596	93	2050	0.6896	ng	80
17) Phenol	0.000		0	N.D. d		
18) 2-Chlorophenol	0.000		0	N.D. d		
19) N-Decane	0.000		0	N.D. d		
20) 1,3-Dichlorobenzene	0.000		0	N.D. d		
22) 1,4-Dichlorobenzene	0.000		0	N.D. d		
23) 1,2-Dichlorobenzene	0.000		0	N.D. d		
24) Benzyl alcohol	0.000		0	N.D. d		
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d		
26) 2-Methylphenol	6.018	108	1480	0.5126	ng	84
27) Acetophenone	0.000		0	N.D. d		
28) Hexachloroethane	0.000		0	N.D. d		
29) N-Nitroso-di-n-propyla...	6.141	70	1270	0.6048	ng	84
30) 3&4-Methylphenol	6.135	108	1473	0.5211	ng	96
33) Nitrobenzene	0.000		0	N.D. d		
34) Isophorone	0.000		0	N.D. d		
35) 2-Nitrophenol	0.000		0	N.D. d		
36) 2,4-Dimethylphenol	6.558	107	1430	0.4570	ng	90
37) Benzoic Acid	0.000		0	N.D. d		
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d		
39) 2,4-Dichlorophenol	6.712	162	952	0.4024	ng	79
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d		
41) Naphthalene	6.846	128	6351	0.6999	ng	94
42) 4-Chloroaniline	6.883	127	1341	0.4325	ng	80
43) Hexachlorobutadiene	0.000		0	N.D. d		
44) Caprolactam	0.000		0	N.D.		
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d		
46) 2-Methylnaphthalene	0.000		0	N.D. d		
47) 1-Methylnaphthalene	0.000		0	N.D. d		
48) Methylnaphthalenes (To...	0.000		0	N.D. d		
49) 1,1'-Biphenyl	0.000		0	N.D. d		
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d		
52) Hexachlorocyclopentadiene	0.000		0	N.D. d		
53) 2,4,6-Trichlorophenol	0.000		0	N.D. d		
54) 2,4,5-Trichlorophenol	0.000		0	N.D. d		
56) 2-Chloronaphthalene	0.000		0	N.D. d		
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d		
58) Dimethylnaphthalenes (...	0.000		0	N.D. d		
59) Diphenyl Ether	0.000		0	N.D. d		
60) 2-Nitroaniline	0.000		0	N.D. d		
61) Coumarin	0.000		0	N.D. d		
62) Acenaphthylene	0.000		0	N.D. d		
63) Dimethylphthalate	0.000		0	N.D. d		
64) 2,6-Dinitrotoluene	0.000		0	N.D. d		
65) Acenaphthene	0.000		0	N.D. d		

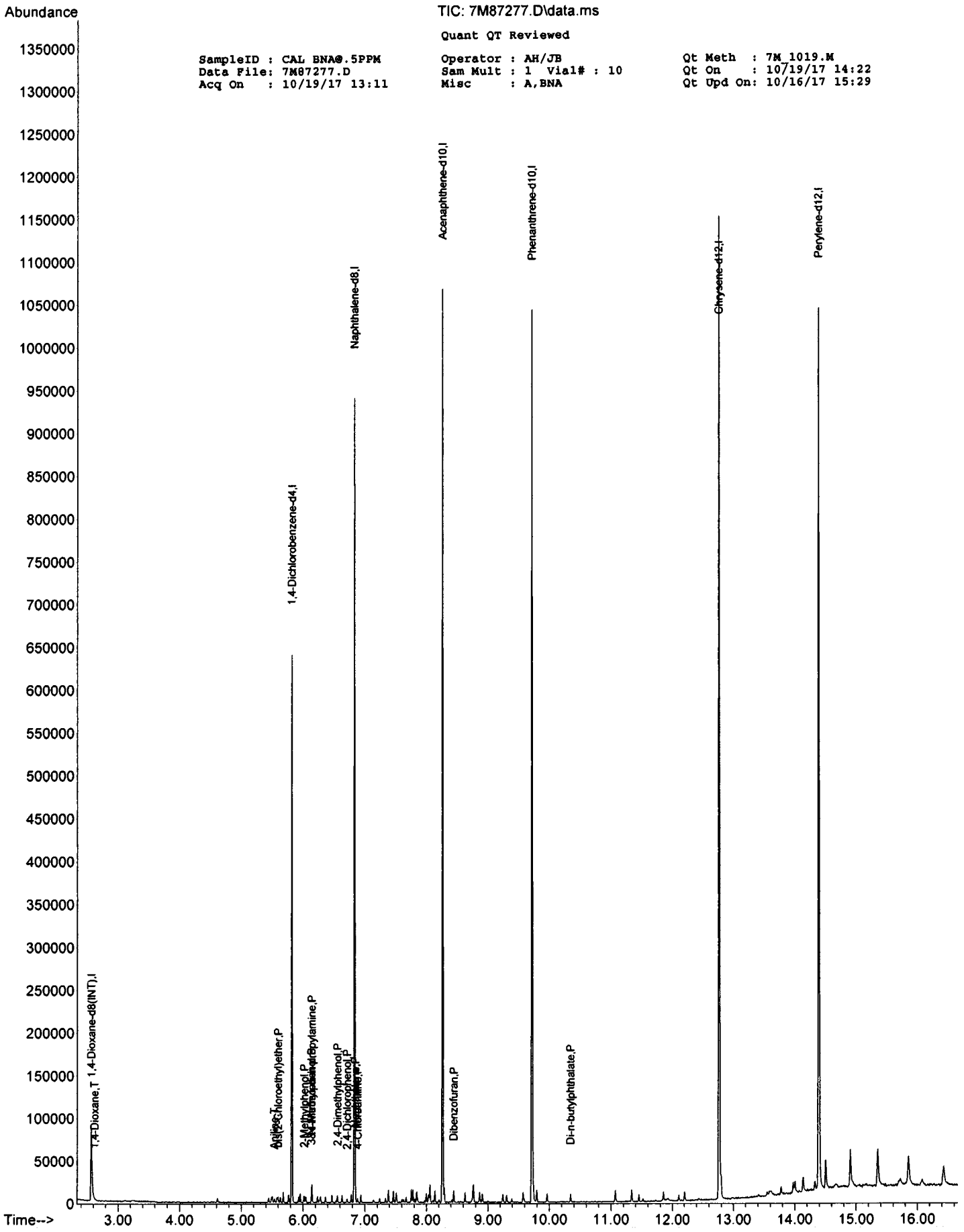
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87277.D Sam Mult : 1 Vial# : 10 Qt On : 10/19/17 14:22
Acq On : 10/19/17 13:11 Misc : A,BNA Qt Upd On: 10/16/17 15:29

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	0.000		0	N.D. d		
67)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.443	168	5790	0.6833	ng	86
69)	2,4-Dinitrotoluene	0.000		0	N.D. d		
70)	4-Nitrophenol	0.000		0	N.D. d		
71)	2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
72)	Fluorene	0.000		0	N.D. d		
73)	4-Chlorophenyl-phenyle...	0.000		0	N.D. d		
74)	Diethylphthalate	0.000		0	N.D. d		
75)	4-Nitroaniline	0.000		0	N.D. d		
76)	Atrazine	0.000		0	N.D. d		
78)	4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79)	n-Nitrosodiphenylamine	0.000		0	N.D. d		
81)	1,2-Diphenylhydrazine	0.000		0	N.D. d		
82)	4-Bromophenyl-phenylether	0.000		0	N.D. d		
83)	Hexachlorobenzene	0.000		0	N.D. d		
84)	N-Octadecane	0.000		0	N.D. d		
85)	Pentachlorophenol	0.000		0	N.D.		
86)	Phenanthrene	0.000		0	N.D. d		
87)	Anthracene	0.000		0	N.D. d		
88)	Carbazole	0.000		0	N.D. d		
89)	Di-n-butylphthalate	10.345	149	4714	0.4059	ng	95
90)	Fluoranthene	0.000		0	N.D. d		
92)	Pyrene	0.000		0	N.D. d		
93)	Benzidine	0.000		0	N.D.		
95)	4,4'-DDE	0.000		0	N.D. d		
96)	4,4'-DDD	0.000		0	N.D. d		
97)	Butylbenzylphthalate	0.000		0	N.D. d		
98)	4,4'-DDT	0.000		0	N.D. d		
99)	3,3'-Dichlorobenzidine	0.000		0	N.D. d		
100)	Benzo[a]anthracene	0.000		0	N.D. d		
101)	Chrysene	0.000		0	N.D. d		
102)	bis(2-Ethylhexyl)phtha...	0.000		0	N.D. d		
104)	Di-n-octylphthalate	0.000		0	N.D. d		
105)	Benzo[b]fluoranthene	0.000		0	N.D. d		
106)	Benzo[k]fluoranthene	0.000		0	N.D. d		
107)	Benzo[a]pyrene	0.000		0	N.D. d		
108)	Indeno[1,2,3-cd]pyrene	0.000		0	N.D. d		
109)	Dibenzo[a,h]anthracene	0.000		0	N.D. d		
110)	Benzo[g,h,i]perylene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87277.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@.5PPM
Data File: 7M87277.D
Acq On : 10/19/17 13:11
Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 10/19/17 14:22
Qt Upd On: 10/16/17 15:29
1,4-Dioxane,T
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Naphthalene-d8,I
Acenaphthene-d10,I
Phenanthrene-d10,I
Chrysene-d12,I
Perylene-d12,I
Dibenzofuran,P
Di-n-butylphthalate,P
Time-->

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M101329.D	CAL BNA@50PPM	10/20/17 12:43	2	5M101322.D	CAL BNA@2PPM	10/20/17 09:48
3	5M101321.D	CAL BNA@10PPM	10/20/17 09:25	4	5M101327.D	CAL BNA@20PPM	10/20/17 11:57
5	5M101326.D	CAL BNA@80PPM	10/20/17 11:34	6	5M101325.D	CAL BNA@120PPM	10/20/17 11:12
7	5M101324.D	CAL BNA@160PPM	10/20/17 10:49	8	5M101323.D	CAL BNA@196PPM	10/20/17 10:26
9	5M101328.D	CAL BNA@.5PPM	10/20/17 12:20				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
1,4-Dioxane	1	0	Qua	1.0703	1.4764	1.1658	1.1166	1.0743	1.0952	1.0454	1.1376	1.7041	1.21	2.47	0.997	0.998	19		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pyridine	1	0	Avg	3.2004	2.4855	2.9554	3.0128	3.1334	3.2806	3.0838	3.5396	-----	3.09	2.90	0.992	0.995	9.8		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitrosodimethylamin	1	0	Avg	1.7360	1.2257	1.6013	1.7445	1.7261	1.7627	1.6846	1.9932	-----	1.68	2.82	0.988	0.993	13		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorophenol	1	0	Avg	2.8276	2.6513	2.5609	2.5494	2.5929	2.8890	2.5293	3.1296	-----	2.72	4.50	0.991	0.993	7.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzaldehyde	1	0	Avg	1.4109	1.3034	1.3626	1.4753	1.2219	0.8951	-----	-----	-----	1.28	5.33	0.930	0.999	16	0.01	50.00	2.00	10.00	20.00	80.00	120.0			
Aniline	1	0	Qua	4.3819	2.6912	2.6715	3.4686	4.1173	4.2022	4.0144	4.9566	2.8854	3.71	5.43	0.983	0.990	22		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Pentachloroethane	1	0	Avg	0.9264	0.9445	0.8310	0.8928	0.8778	0.8709	0.8432	1.0434	-----	0.904	5.47	0.980	0.989	7.5	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethyl)ether	1	0	Avg	2.9319	2.9993	2.8040	2.7934	2.7404	2.7378	2.5878	3.2332	3.2903	2.90	5.49	0.981	0.988	8.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Phenol-d5	1	0	Avg	3.6808	3.1558	3.1686	3.4982	3.4230	3.4028	3.2351	3.9894	-----	3.44	5.40	0.981	0.988	8.2		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Phenol	1	0	Avg	4.2670	3.8256	3.6744	4.0474	3.9455	3.8685	3.6762	4.4745	-----	3.97	5.41	0.983	0.989	7.1	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Chlorophenol	1	0	Avg	2.9167	2.8406	2.7425	2.9947	2.9343	2.9618	2.8336	3.5505	-----	2.97	5.53	0.989	0.994	8.3	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Decane	1	0	Avg	2.8841	3.4502	2.8929	3.0670	2.8547	2.7546	2.6017	3.0946	-----	2.95	5.59	0.987	0.991	8.7	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,3-Dichlorobenzene	1	0	Avg	2.8957	3.4612	2.9208	3.0630	2.9842	2.9537	2.8157	3.4474	-----	3.07	5.67	0.983	0.990	8.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dichlorobenzene	1	0	Avg	1.4669	1.7077	1.4980	1.5136	1.4420	1.4577	1.3930	1.4774	-----	1.49	5.73	0.999	0.999	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Dichlorobenzene	1	0	Avg	1.3989	1.6884	1.4245	1.4599	1.4015	1.3509	1.3559	1.4300	-----	1.44	5.86	0.998	0.999	7.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzyl alcohol	1	0	Avg	0.9293	0.8648	0.8720	0.9436	0.9341	0.9324	0.9136	0.9612	-----	0.919	5.83	1.00	1.00	3.7		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-chloroisopropyl)e	1	0	Avg	1.9483	2.2680	2.0180	2.0398	1.9451	1.8575	1.8310	1.8557	-----	1.97	5.95	1.00	1.00	7.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylphenol	1	0	Avg	1.2954	1.3454	1.2779	1.3251	1.3083	1.2729	1.2391	1.3406	1.4481	1.32	5.93	0.998	0.998	4.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Acetophenone	1	0	Avg	2.0211	2.1922	2.0728	2.1326	1.9813	1.8914	1.8021	1.8813	-----	2.00	6.04	0.998	0.999	6.7	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachloroethane	1	0	Avg	0.5555	0.6124	0.5234	0.5569	0.5563	0.5474	0.5850	0.5755	-----	0.564	6.14	0.999	0.999	4.7	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Nitroso-di-n-propyla	1	0	Avg	1.0054	1.0613	1.0226	1.0713	1.0114	0.9335	0.8871	0.9292	1.1803	1.01	6.05	0.997	0.998	8.8	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
3&4-Methylphenol	1	0	Avg	1.3533	1.3962	1.3723	1.4220	1.3199	1.2522	1.1956	1.2545	1.5220	1.34	6.05	0.998	0.998	7.5		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Nitrobenzene-d5	1	0	Avg	0.1556	0.1343	0.1425	0.1515	0.1448	0.1658	0.1583	0.1622	-----	0.152	6.17	0.998	0.999	7.1		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
Nitrobenzene	1	0	Avg	0.3485	0.3397	0.3440	0.3651	0.3169	0.3617	0.3400	0.3491	-----	0.346	6.18	0.998	0.998	4.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Isophorone	1	0	Avg	0.6474	0.6507	0.6474	0.6654	0.5940	0.6589	0.6386	0.6587	-----	0.645	6.37	0.998	0.999	3.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitrophenol	1	0	Avg	0.1781	0.1388	0.1588	0.1751	0.1706	0.1910	0.1845	0.1905	-----	0.173	6.43	0.998	0.999	10	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dimethylphenol	1	0	Avg	0.3486	0.3469	0.3371	0.3476	0.3108	0.3568	0.3377	0.3459	0.4019	0.348	6.47	0.998	0.998	6.9	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Benzoic Acid	1	0	Qua	0.2575	-----	0.0471	0.1831	0.3231	0.4108	0.4006	0.4145	-----	0.291	6.56	0.994	0.996	48		50.00		10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Chloroethoxy)me	1	0	Avg	0.4030	0.4534	0.4116	0.4174	0.3627	0.4070	0.3842	0.3962	-----	0.404	6.54	0.998	0.998	6.5	0.30	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dichlorophenol	1	0	Avg	0.2861	0.2611	0.2761	0.2916	0.2803	0.2971	0.2815	0.2864	0.2669	0.281	6.62	0.999	0.999	4.1	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
1,2,4-Trichlorobenzen	1	0	Avg	0.3108	0.3617	0.3206	0.3188	0.3079	0.3192	0.2944	0.3048	-----	0.317	6.69	0.998	0.999	6.3		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Naphthalene	1	0	Qua	1.0004	1.2306	1.0691	1.0436	0.9728	1.0349	0.9484	0.9967	1.4207	1.08	6.74	0.998	0.998	14	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
4-Chloroaniline	1	0	Qua	0.3909	0.2986	0.2717	0.3394	0.3667	0.3428	0.2810	0.2723	0.3178	0.320	6.78	0.973	0.996	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Hexachlorobutadiene	1	0	Avg	0.1815	0.2162	0.1834	0.1867	0.1756	0.1887	0.1791	0.1783	-----	0.186	6.84	0.999	0.999	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Caprolactam	1	0	Avg	0.1258	0.0781	0.1116	0.1255	0.1289	0.1243	0.1059	0.1039	-----	0.113	7.06	0.985	0.997	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chloro-3-methylphe	1	0	Avg	0.3054	0.2736	0.2942	0.3067	0.2990	0.3174	0.2967	0.3180	-----	0.301	7.15	0.998	0.998	4.7	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Methylnaphthalene	1	0	Avg	0.6961	0.7620	0.7218	0.7172	0.6775	0.6974	0.6556	0.6697	-----	0.700	7.28	0.999	0.999	4.8	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1-Methylnaphthalene	1	0	Avg	0.6662	0.7549	0.7008	0.6925	0.6483	0.6826	0.6320	0.6504	-----	0.679	7.36	0.999	0.999	5.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Methylnaphthalenes (	1	0	Avg	0.6832	0.7585	0.7076	0.7043	0.6649	0.6865	0.6401	0.6555	-----	0.688	7.28	0.999	1.00	5.4		100.0	4.00	20.00	40.00	160.0	240.0	320.0	392.0	
1,1'-Biphenyl	1	0	Avg	0.8322	0.9538	0.8619	0.8569	0.8148	0.8447	0.7142	0.8101	-----	0.836	7.65	0.991	0.991	8.0	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2,4,5-Tetrachloroben	1	0	Avg	0.5547	0.6815	0.5789	0.5634	0.5333	0.5564	0.5662	0.5327	-----	0.571	7.41	0.998	0.998	8.3	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note: Avg Rsd: 8.81

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

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Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M101329.D	CAL BNA@50PPM	10/20/17 12:43	2	5M101322.D	CAL BNA@2PPM	10/20/17 09:48
3	5M101321.D	CAL BNA@10PPM	10/20/17 09:25	4	5M101327.D	CAL BNA@20PPM	10/20/17 11:57
5	5M101326.D	CAL BNA@80PPM	10/20/17 11:34	6	5M101325.D	CAL BNA@120PPM	10/20/17 11:12
7	5M101324.D	CAL BNA@160PPM	10/20/17 10:49	8	5M101323.D	CAL BNA@196PPM	10/20/17 10:26
9	5M101328.D	CAL BNA@.5PPM	10/20/17 12:20				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
Hexachlorocyclopenta	1	0	Avg	0.3061	0.2261	0.2638	0.2829	0.3033	0.3233	0.3385	0.3095	-----	0.294	7.41	0.998	0.998	12	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Trichlorophenol	1	0	Avg	0.3404	0.2869	0.3192	0.3423	0.3254	0.3516	0.3562	0.3452	-----	0.333	7.50	0.999	0.999	6.8	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,5-Trichlorophenol	1	0	Avg	0.3674	0.3125	0.3561	0.3799	0.3586	0.3692	0.3848	0.3772	-----	0.363	7.53	0.999	1.00	6.3	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Fluorobiphenyl	1	0	Avg	1.2337	1.4914	1.3272	1.2454	1.1688	1.2335	1.2059	1.1886	-----	1.26	7.57	1.00	1.00	8.3		25.00	1.00	5.00	10.00	40.00	60.00	80.00	98.00	
2-Chloronaphthalene	1	0	Avg	1.0455	1.2036	1.0942	1.0455	1.0067	1.0246	0.9601	1.0065	-----	1.05	7.67	0.999	0.999	7.0	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,4-Dimethylnaphthale	1	0	Avg	0.8366	0.9784	0.8770	0.8441	0.7783	0.7813	0.7382	0.7277	-----	0.820	7.95	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylnaphthalenes	1	0	Avg	0.8366	0.9784	0.8770	0.8441	0.7783	0.7813	0.7382	0.7277	-----	0.820	7.95	0.998	1.00	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diphenyl Ether	1	0	Avg	0.7914	0.9490	0.8573	0.8002	0.7394	0.7756	0.7047	0.7161	-----	0.792	7.73	0.997	0.998	10		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2-Nitroaniline	1	0	Avg	0.3828	0.3305	0.3722	0.3762	0.3703	0.3884	0.3552	0.3642	-----	0.368	7.74	0.999	0.999	4.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Coumarin	1	0	Avg	0.4285	0.4442	0.4440	0.4289	0.4116	0.4238	0.3881	0.3908	-----	0.420	7.93	0.998	0.999	5.1		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthylene	1	0	Avg	1.6345	1.7387	1.6852	1.6324	1.5378	1.5707	1.4773	1.5077	-----	1.60	8.03	0.999	0.999	5.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dimethylphthalate	1	0	Avg	1.2615	1.4090	1.3143	1.2531	1.1724	1.2254	1.1468	1.1793	-----	1.25	7.90	0.999	0.999	6.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,6-Dinitrotoluene	1	0	Avg	0.2804	0.2570	0.2831	0.2831	0.2677	0.2701	0.2510	0.2496	-----	0.268	7.95	0.998	0.999	5.2	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Acenaphthene	1	0	Avg	1.0621	1.2760	1.1383	1.1076	1.0341	1.0510	0.9900	0.9925	-----	1.08	8.18	0.999	1.00	8.7	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3-Nitroaniline	1	0	Avg	0.3077	0.2487	0.2794	0.2775	0.2863	0.2885	0.2486	0.2595	-----	0.275	8.10	0.992	0.996	7.6	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4-Dinitrophenol	1	0	Qua	0.1296	-----	0.0561	0.1021	0.1673	0.1832	0.1818	0.1914	-----	0.145	8.19	0.997	0.998	35	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzofuran	1	0	Qua	1.5442	1.9099	1.6291	1.5549	1.4559	1.4937	1.4161	1.4317	2.1102	1.62	8.33	0.999	1.00	15	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
2,4-Dinitrotoluene	1	0	Avg	0.3884	0.3116	0.3629	0.3953	0.3861	0.4027	0.3827	0.4051	-----	0.379	8.30	0.999	0.999	8.0	0.20	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitrophenol	1	0	Qua	0.2282	0.1314	0.2145	0.2241	0.2256	0.2387	0.2378	0.2519	-----	0.219	8.23	0.998	0.999	17	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,3,4,6-Tetrachlorophe	1	0	Avg	0.3402	0.2290	0.3087	0.3397	0.3231	0.3438	0.3173	0.3327	-----	0.317	8.44	0.998	0.998	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Fluorene	1	0	Avg	1.2045	1.4725	1.3276	1.2735	1.1828	1.2186	1.1487	1.0869	-----	1.24	8.65	0.996	0.999	9.6	0.90	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Chlorophenyl-phenyl	1	0	Avg	0.6216	0.7174	0.6717	0.6339	0.5851	0.6093	0.5729	0.5542	-----	0.621	8.65	0.997	0.999	8.7	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Diethylphthalate	1	0	Avg	1.2334	1.2943	1.2688	1.2307	1.1935	1.2504	1.1728	1.1935	-----	1.23	8.53	0.999	0.999	3.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Nitroaniline	1	0	Avg	0.3515	0.2812	0.3432	0.3522	0.3587	0.3700	0.3455	0.3297	-----	0.342	8.66	0.996	0.999	7.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Atrazine	1	0	Avg	0.3620	0.3380	0.3386	0.3609	0.3598	0.3656	0.3494	0.3219	-----	0.350	9.28	0.994	0.999	4.4	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,6-Dinitro-2-methylph	1	0	Qua	0.1159	-----	0.0693	0.0985	0.1423	0.1385	0.1390	0.1448	-----	0.121	8.69	0.998	0.999	23	0.01	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
n-Nitrosodiphenylamin	1	0	Avg	0.5993	0.5780	0.6092	0.6008	0.6330	0.5785	0.5603	0.5791	-----	0.592	8.75	0.998	0.999	3.9	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
2,4,6-Tribromophenol	1	0	Qua	0.0992	0.0569	0.0846	0.0960	0.1060	0.0968	0.0948	0.0989	-----	0.0917	8.88	0.998	0.998	17		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
1,2-Diphenylhydrazine	1	0	Avg	0.6764	0.6053	0.6619	0.6789	0.7084	0.6888	0.6752	0.7095	-----	0.676	8.80	0.999	1.00	4.9		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4-Bromophenyl-phenyl	1	0	Avg	0.2006	0.1818	0.1988	0.2025	0.2136	0.1989	0.1930	0.2002	-----	0.199	9.13	0.998	0.999	4.5	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Hexachlorobenzene	1	0	Avg	0.2113	0.2266	0.2159	0.2153	0.2212	0.1975	0.1950	0.2046	-----	0.211	9.20	0.997	0.997	5.3	0.10	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
N-Octadecane	1	0	Avg	0.4415	0.4176	0.4250	0.4385	0.4156	0.3906	0.3698	0.3687	-----	0.408	9.47	0.996	0.999	7.0	0.05	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pentachlorophenol	1	0	Qua	0.1229	-----	0.0730	0.1022	0.1403	0.1376	0.1362	0.1425	-----	0.122	9.39	0.999	0.999	21	0.05	50.00		10.00	20.00	80.00	120.0	160.0	196.0	
Phenanthrene	1	0	Avg	1.0601	1.2398	1.0896	1.0965	1.0233	1.0318	0.9842	1.0070	-----	1.07	9.62	0.999	1.00	7.5	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Anthracene	1	0	Avg	1.0956	1.1291	1.0915	1.1148	1.0638	1.0673	1.0275	1.0458	-----	1.08	9.68	1.00	1.00	3.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Carbazole	1	0	Avg	0.9935	1.0506	1.0212	1.0231	0.9880	0.9691	0.9167	0.9680	-----	0.991	9.85	0.998	0.998	4.2	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-butylphthalate	1	0	Avg	1.1827	0.9563	1.0850	1.1703	1.1919	1.1329	1.1012	1.1504	1.0838	1.12	10.24	0.999	0.999	6.5	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	0.50
Fluoranthene	1	0	Avg	1.2116	1.3055	1.2213	1.2160	1.2023	1.1398	1.1217	1.1733	-----	1.20	10.95	0.999	0.999	4.7	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Pyrene	1	0	Avg	1.0834	1.1236	1.0630	1.0740	1.0505	1.0749	1.0074	1.0720	-----	1.07	11.21	0.998	0.998	3.0	0.60	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzidine	1	0	Qua	0.5311	0.1393	0.2438	0.4079	0.5047	0.4244	-----	-----	-----	0.375	11.10	0.978	0.996	41		50.00	2.00	10.00	20.00	80.00	120.0			
Terphenyl-d14	1	0	Avg	0.6166	0.6491	0.6261	0.6478	0.6275	0.6535	0.6336	0.6881	-----	0.643	11.40	0.997	0.998	3.5		25.00	1.00	5.00	10.00	40.00	60.00	80.00	96.00	

Avg Rsd: 8.81

Flags

a - failed the min rf criteria

c - failed the minimum correlation coeff criteria(if applicable)

Note:

Corr 1 = Correlation Coefficient for linear Eq.

Corr 2 = Correlation Coefficient for quad Eq.

Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

7111018 0200

Method: EPA 8270D

Form 6
Initial Calibration

Instrument: GCMS_5

Level #:	Data File:	Cal Identifier:	Analysis Date/Time	Level #:	Data File:	Cal Identifier:	Analysis Date/Time
1	5M101329.D	CAL BNA@50PPM	10/20/17 12:43	2	5M101322.D	CAL BNA@2PPM	10/20/17 09:48
3	5M101321.D	CAL BNA@10PPM	10/20/17 09:25	4	5M101327.D	CAL BNA@20PPM	10/20/17 11:57
5	5M101326.D	CAL BNA@80PPM	10/20/17 11:34	6	5M101325.D	CAL BNA@120PPM	10/20/17 11:12
7	5M101324.D	CAL BNA@160PPM	10/20/17 10:49	8	5M101323.D	CAL BNA@196PPM	10/20/17 10:26
9	5M101328.D	CAL BNA@.5PPM	10/20/17 12:20				

Compound	Col	Mr	Fit:	RF1	RF2	RF3	RF4	RF5	RF6	RF7	RF8	RF9	AvgRf	RT	Corr1	Corr2	%Rsd		Calibration Level Concentrations Lvl1	Lvl2	Lvl3	Lvl4	Lvl5	Lvl6	Lvl7	Lvl8	Lvl9
4,4'-DDE	1	0	Avg	0.2271	0.2220	0.2222	0.2227	0.2236	0.2301	0.2199	0.2327	-----	0.225	11.34	0.999	0.999	2.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDD	1	0	Avg	0.4406	0.3783	0.4139	0.4277	0.4387	0.4307	0.4127	0.4387	-----	0.423	11.73	0.999	0.999	5.0		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Butylbenzylphthalate	1	0	Qua	0.4666	0.3071	0.4001	0.4443	0.4686	0.4678	0.4510	0.4788	-----	0.436	11.99	0.999	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
4,4'-DDT	1	0	Avg	0.3636	0.2574	0.3367	0.3549	0.3713	0.3798	0.3665	0.3822	-----	0.352	12.09	1.00	1.00	12		50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
3,3'-Dichlorobenzidine	1	0	Qua	0.3321	0.2106	0.2395	0.2542	0.3249	0.2997	0.2653	0.2705	-----	0.275	12.61	0.989	0.996	15	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]anthracene	1	0	Avg	1.0385	1.1646	1.0327	1.0720	1.0333	1.0322	0.9912	1.0337	-----	1.05	12.63	0.999	0.999	4.9	0.80	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Chrysene	1	0	Avg	1.0176	1.1820	1.0491	1.0390	0.9941	0.9905	0.9413	0.9715	-----	1.02	12.67	0.999	1.00	7.1	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
bis(2-Ethylhexyl)phthal	1	0	Qua	0.6663	0.4314	0.5804	0.6398	0.6494	0.6683	0.6292	0.6344	-----	0.612	12.69	0.999	0.999	13	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Di-n-octylphthalate	1	0	Qua	1.2357	0.8471	0.9943	1.0834	1.1970	1.2081	1.0803	1.2041	-----	1.11	13.44	0.994	0.994	12	0.01	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[b]fluoranthene	1	0	Avg	1.0685	1.3029	1.0437	1.0701	1.0753	1.0432	0.9610	1.1448	-----	1.09	13.84	0.995	0.995	9.2	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[k]fluoranthene	1	0	Avg	1.0874	1.2496	1.1357	1.0518	1.0042	1.0588	0.9165	0.9676	-----	1.06	13.87	0.994	0.995	9.8	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[a]pyrene	1	0	Avg	1.0636	1.0647	1.0248	1.0518	1.0100	1.0198	0.9707	1.0283	-----	1.03	14.19	0.999	0.999	3.0	0.70	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Indeno[1,2,3-cd]pyren	1	0	Avg	1.0819	1.1970	1.1075	1.0823	1.0467	1.0410	0.9186	1.0649	-----	1.07	15.51	0.996	0.996	7.3	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Dibenzo[a,h]anthracen	1	0	Avg	0.9376	1.0148	0.9546	0.9378	0.9075	0.9011	0.7734	0.9001	-----	0.916	15.53	0.989	0.989	7.5	0.40	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	
Benzo[g,h,i]perylene	1	0	Avg	0.9011	1.0146	0.9422	0.8301	0.8682	0.8774	0.7724	0.8855	-----	0.886	15.86	0.992	0.992	8.1	0.50	50.00	2.00	10.00	20.00	80.00	120.0	160.0	196.0	

Flags	*Note:* Avg Rsd: 8.81
a - failed the min rf criteria	*Corr 1 = Correlation Coefficient for linear Eq.*
c - failed the minimum correlation coeff criteria(if applicable)	*Corr 2 = Correlation Coefficient for quad Eq.*
	Fit = Indicates whether Avg RF, Linear, or Quadratic Curve was used for compound.

Quantitation Report (QT Reviewed)

Data File: 5M101329.D
Acq On : 10/20/17 12:43
SampleID : CAL BNA@50PPM
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:25
Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	38907	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	78662	40.00	ng	0.00
31) Naphthalene-d8	6.729	136	327254	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	207026	40.00	ng	0.00
77) Phenanthrene-d10	9.597	188	376951	40.00	ng	0.00
91) Chrysene-d12	12.643	240	445075	40.00	ng	0.00
103) Perylene-d12	14.245	264	401167	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.501	112	137519	55.74	ng	0.00
Spiked Amount 100.000			Recovery = 55.74%			
16) Phenol-d5	5.398	99	179014	57.26	ng	0.00
Spiked Amount 100.000			Recovery = 57.26%			
32) Nitrobenzene-d5	6.168	128	31841	26.04	ng	0.00
Spiked Amount 50.000			Recovery = 52.08%			
55) 2-Fluorobiphenyl	7.567	172	159632	24.95	ng	0.00
Spiked Amount 50.000			Recovery = 49.90%			
80) 2,4,6-Tribromophenol	8.882	330	46742	53.53	ng	0.00
Spiked Amount 100.000			Recovery = 53.53%			
94) Terphenyl-d14	11.398	244	171520	24.33	ng	0.00
Spiked Amount 50.000			Recovery = 48.66%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.466	88	52056	52.1495	ng	95
9) Pyridine	2.904	79	155649	53.6784	ng	75
10) N-Nitrosodimethylamine	2.823	74	84428	53.3327	ng	75
12) Benzaldehyde	5.329	77	68618	54.3124	ng	83
13) Aniline	5.430	93	213108	60.3135	ng	46
14) Pentachloroethane	5.473	117	45058	55.7857	ng	78
15) bis(2-Chloroethyl)ether	5.489	93	142591	53.3546	ng	81
17) Phenol	5.414	94	207521	58.3576	ng	82
18) 2-Chlorophenol	5.532	128	141854	52.2927	ng	82
19) N-Decane	5.591	57	140265	51.5060	ng	86
20) 1,3-Dichlorobenzene	5.666	146	140830	49.8427	ng	97
22) 1,4-Dichlorobenzene	5.730	146	144244	49.2683	ng	98
23) 1,2-Dichlorobenzene	5.858	146	137555	49.4687	ng	98
24) Benzyl alcohol	5.831	108	91376	52.2695	ng	74
25) bis(2-chloroisopropyl)...	5.949	45	191577	49.8889	ng	95
26) 2-Methylphenol	5.927	108	127379	49.7342	ng	97
27) Acetophenone	6.045	105	198732	52.1425	ng	72
28) Hexachloroethane	6.136	117	54623	50.3962	ng	89
29) N-Nitroso-di-n-propyla...	6.050	70	98866	51.7920	ng	70
30) 3&4-Methylphenol	6.050	108	133072	51.0672	ng	99
33) Nitrobenzene	6.184	77	142560	50.7008	ng	80
34) Isophorone	6.371	82	264857	51.6725	ng	89
35) 2-Nitrophenol	6.435	139	72854	51.8245	ng	86
36) 2,4-Dimethylphenol	6.467	107	142631	51.4892	ng	94
37) Benzoic Acid	6.558	105	105350	46.4220	ng	88
38) bis(2-Chloroethoxy)met...	6.536	93	164885	50.6816	ng	97
39) 2,4-Dichlorophenol	6.622	162	117034	51.2422	ng	86
40) 1,2,4-Trichlorobenzene	6.686	180	127166	49.0590	ng	97
41) Naphthalene	6.745	128	409268	52.0743	ng	99
42) 4-Chloroaniline	6.782	127	159916m	67.1649	ng	
43) Hexachlorobutadiene	6.841	225	74272	49.2084	ng	97
44) Caprolactam	7.060	113	51462	58.2899	ng	70
45) 4-Chloro-3-methylphenol	7.151	107	124953	51.9379	ng	76
46) 2-Methylnaphthalene	7.279	142	284766	49.8814	ng	100
47) 1-Methylnaphthalene	7.359	142	272556	49.6186	ng	92
48) Methylnaphthalenes (To...	7.279	142	558983m	99.5665	ng	
49) 1,1'-Biphenyl	7.648	154	340447	48.8995	ng	96
51) 1,2,4,5-Tetrachloroben...	7.412	216	143565	49.8549	ng	99
52) Hexachlorocyclopentadiene	7.407	237	79219	51.9817	ng	99
53) 2,4,6-Trichlorophenol	7.498	196	88101	51.5290	ng	97
54) 2,4,5-Trichlorophenol	7.530	196	95089	54.1479	ng	97
56) 2-Chloronaphthalene	7.669	162	270566	49.8949	ng	93
57) 1,4-Dimethylnaphthalene	7.952	156	216502	51.4460	ng	89
58) Dimethylnaphthalenes (...	7.952	156	216502	51.4460	ng	89
59) Diphenyl Ether	7.733	170	204821	50.5207	ng	80
60) 2-Nitroaniline	7.744	65	99065	53.1704	ng	69
61) Coumarin	7.931	146	110896	52.0341	ng	76
62) Acenaphthylene	8.027	152	422980	51.2091	ng	99
63) Dimethylphthalate	7.899	163	326454	51.9188	ng	99
64) 2,6-Dinitrotoluene	7.952	165	72564	53.2621	ng	62
65) Acenaphthene	8.182	153	274865	49.1778	ng	98

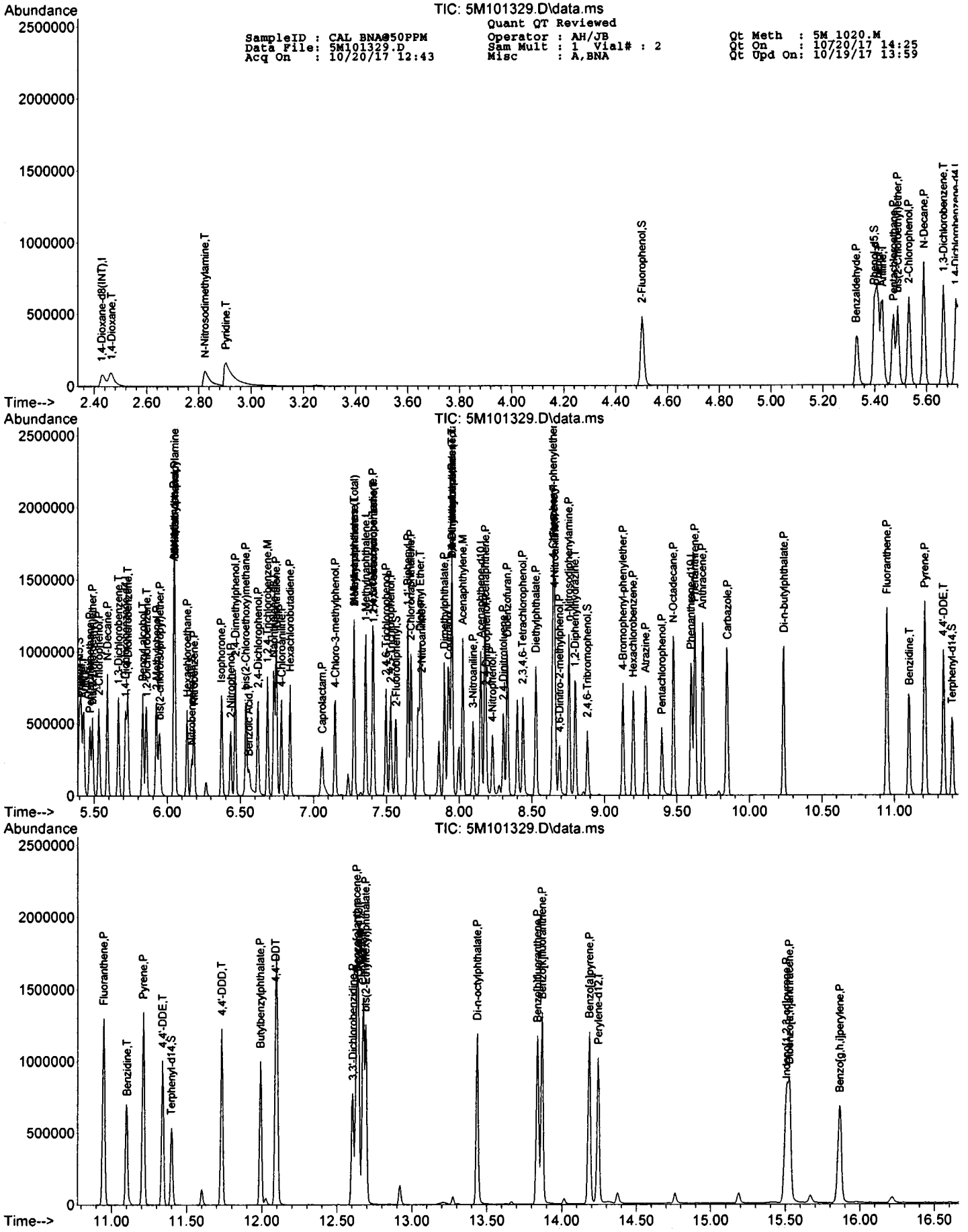
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101329.D Sam Mult : 1 Vial# : 2 Qt On : 10/20/17 14:25
Acq On : 10/20/17 12:43 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.096	138	79642	60.1601	ng	78
67)	2,4-Dinitrophenol	8.187	184	33550	43.1669	ng	50
68)	Dibenzofuran	8.331	168	399615	47.8449	ng	86
69)	2,4-Dinitrotoluene	8.305	165	100519	51.4328	ng	64
70)	4-Nitrophenol	8.230	65	59068m	49.7355	ng	
71)	2,3,4,6-Tetrachlorophenol	8.438	232	88047	53.2024	ng	81
72)	Fluorene	8.652	166	311718	48.3224	ng	99
73)	4-Chlorophenyl-phenyle...	8.646	204	160869	50.0228	ng	79
74)	Diethylphthalate	8.529	149	319186	50.8269	ng	96
75)	4-Nitroaniline	8.657	138	90964	51.0593	ng	74
76)	Atrazine	9.282	200	93682	51.7228	ng	97
78)	4,6-Dinitro-2-methylph...	8.689	198	54653	45.2793	ng	66
79)	n-Nitrosodiphenylamine	8.753	169	282416	49.9852	ng	98
81)	1,2-Diphenylhydrazine	8.796	77	318739	48.1144	ng	86
82)	4-Bromophenyl-phenylether	9.127	248	94538	49.3031	ng	82
83)	Hexachlorobenzene	9.197	284	99572	49.2802	ng	68
84)	N-Octadecane	9.475	57	208043	54.5693	ng	84
85)	Pentachlorophenol	9.394	266	57947	50.9477	ng	96
86)	Phenanthrene	9.624	178	499528	49.8015	ng	99
87)	Anthracene	9.678	178	516261	51.1761	ng	100
88)	Carbazole	9.849	167	468142	50.3378	ng	97
89)	Di-n-butylphthalate	10.239	149	557301	54.7431	ng	96
90)	Fluoranthene	10.949	202	570898	51.5652	ng	91
92)	Pyrene	11.211	202	602757	51.6610	ng	89
93)	Benzidine	11.104	184	295507	54.5204	ng	85
95)	4,4'-DDE	11.339	246	126394	51.7328	ng	96
96)	4,4'-DDD	11.734	235	245175	53.4563	ng	97
97)	Butylbenzylphthalate	11.991	149	259614	53.7376	ng	74
98)	4,4'-DDT	12.092	235	202299	51.1532	ng	99
99)	3,3'-Dichlorobenzidine	12.605	252	184797	63.7569	ng	95
100)	Benzo[a]anthracene	12.632	228	577797	49.7199	ng	100
101)	Chrysene	12.675	228	566155	50.0353	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.691	149	370707	55.6322	ng	95
104)	Di-n-octylphthalate	13.438	149	619671	58.0082	ng	100
105)	Benzo[b]fluoranthene	13.839	252	535845	49.5337	ng	95
106)	Benzo[k]fluoranthene	13.871	252	545313m	51.0097	ng	
107)	Benzo[a]pyrene	14.186	252	533387	52.3901	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.506	276	542546	50.1869	ng	81
109)	Dibenzo[a,h]anthracene	15.527	278	470191	50.7664	ng	88
110)	Benzo[g,h,i]perylene	15.864	276	451900	47.7811	ng	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M101329.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 5M101329.D
Acq On : 10/20/17 12:43
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:25
Qt Upd On: 10/19/17 13:59
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@2PPM
Data File: 5M101322.D
Acq On : 10/20/17 09:48
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:26
Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.434	96	36548	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	72363	40.00	ng	0.00
31) Naphthalene-d8	6.729	136	299029	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	184095	40.00	ng	0.00
77) Phenanthrene-d10	9.598	188	384490	40.00	ng	0.00
91) Chrysene-d12	12.637	240	466759	40.00	ng	0.00
103) Perylene-d12	14.245	264	393641	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.506	112	4845m	2.09	ng	0.00
Spiked Amount 100.000			Recovery =	2.09%		
16) Phenol-d5	5.399	99	5767	1.96	ng	0.00
Spiked Amount 100.000			Recovery =	1.96%		
32) Nitrobenzene-d5	6.168	128	1004	0.90	ng	0.00
Spiked Amount 50.000			Recovery =	1.80%		
55) 2-Fluorobiphenyl	7.562	172	6864	1.21	ng	0.00
Spiked Amount 50.000			Recovery =	2.42%		
80) 2,4,6-Tribromophenol	8.882	330	1095	1.23	ng	0.00
Spiked Amount 100.000			Recovery =	1.23%		
94) Terphenyl-d14	11.398	244	7575	1.02	ng	0.00
Spiked Amount 50.000			Recovery =	2.04%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.471	88	2698	2.9537	ng	94
9) Pyridine	3.069	79	4542m	1.6675	ng	
10) N-Nitrosodimethylamine	2.920	74	2240m	1.5063	ng	
12) Benzaldehyde	5.334	77	2382	2.0071	ng	81
13) Aniline	5.431	93	4918	1.5822	ng	44
14) Pentachloroethane	5.473	117	1726	2.2749	ng	81
15) bis(2-Chloroethyl)ether	5.489	93	5481	2.1833	ng	83
17) Phenol	5.409	94	6991	2.0929	ng	89
18) 2-Chlorophenol	5.532	128	5191	2.0371	ng	85
19) N-Decane	5.591	57	6305	2.4647	ng	90
20) 1,3-Dichlorobenzene	5.666	146	6325	2.3830	ng	99
22) 1,4-Dichlorobenzene	5.730	146	6179	2.2942	ng	98
23) 1,2-Dichlorobenzene	5.858	146	6109	2.3882	ng	97
24) Benzyl alcohol	5.831	108	3129	1.9457	ng	86
25) bis(2-chloroisopropyl)...	5.944	45	8206	2.3230	ng	100
26) 2-Methylphenol	5.922	108	4868	2.0661	ng	100
27) Acetophenone	6.045	105	7932	2.2623	ng	76
28) Hexachloroethane	6.136	117	2216	2.2225	ng	88
29) N-Nitroso-di-n-propyla...	6.045	70	3840	2.1867	ng	76
30) 3&4-Methylphenol	6.050	108	5052	2.1075	ng	100
33) Nitrobenzene	6.184	77	5080	1.9772	ng	79
34) Isophorone	6.371	82	9729	2.0772	ng	86
35) 2-Nitrophenol	6.435	139	2076	1.6161	ng	91
36) 2,4-Dimethylphenol	6.462	107	5188	2.0496	ng	99
37) Benzoic Acid	0.000		0	N.D.		
38) bis(2-Chloroethoxy)met...	6.536	93	6780	2.2807	ng	98
39) 2,4-Dichlorophenol	6.622	162	3904	1.8707	ng	87
40) 1,2,4-Trichlorobenzene	6.686	180	5409	2.2837	ng	94
41) Naphthalene	6.745	128	18400	2.5674	ng	99
42) 4-Chloroaniline	6.782	127	4465m	2.0523	ng	
43) Hexachlorobutadiene	6.841	225	3233	2.3442	ng	93
44) Caprolactam	7.028	113	1168	1.4478	ng	67
45) 4-Chloro-3-methylphenol	7.146	107	4092	1.8614	ng	78
46) 2-Methylnaphthalene	7.279	142	11393	2.1840	ng	100
47) 1-Methylnaphthalene	7.359	142	11287	2.2487	ng	92
48) Methylnaphthalenes (To...	7.279	142	22683m	4.4217	ng	
49) 1,1'-Biphenyl	7.648	154	14262	2.2419	ng	96
51) 1,2,4,5-Tetrachloroben...	7.413	216	6273	2.4497	ng	97
52) Hexachlorocyclopentadiene	7.407	237	2082	1.5363	ng	98
53) 2,4,6-Trichlorophenol	7.498	196	2641	1.7371	ng	95
54) 2,4,5-Trichlorophenol	7.525	196	2877	1.8424	ng	96
56) 2-Chloronaphthalene	7.669	162	11079	2.2976	ng	89
57) 1,4-Dimethylnaphthalene	7.952	156	9006	2.4066	ng	86
58) Dimethylnaphthalenes (...	7.952	156	9006	2.4066	ng	86
59) Diphenyl Ether	7.733	170	8736	2.4232	ng	77
60) 2-Nitroaniline	7.744	65	3043	1.8367	ng	80
61) Coumarin	7.925	146	4089	2.1576	ng	74
62) Acenaphthylene	8.022	152	16005	2.1790	ng	98
63) Dimethylphthalate	7.893	163	12970	2.3197	ng	98
64) 2,6-Dinitrotoluene	7.947	165	2366	1.9530	ng	68
65) Acenaphthene	8.177	153	11746	2.3633	ng	95

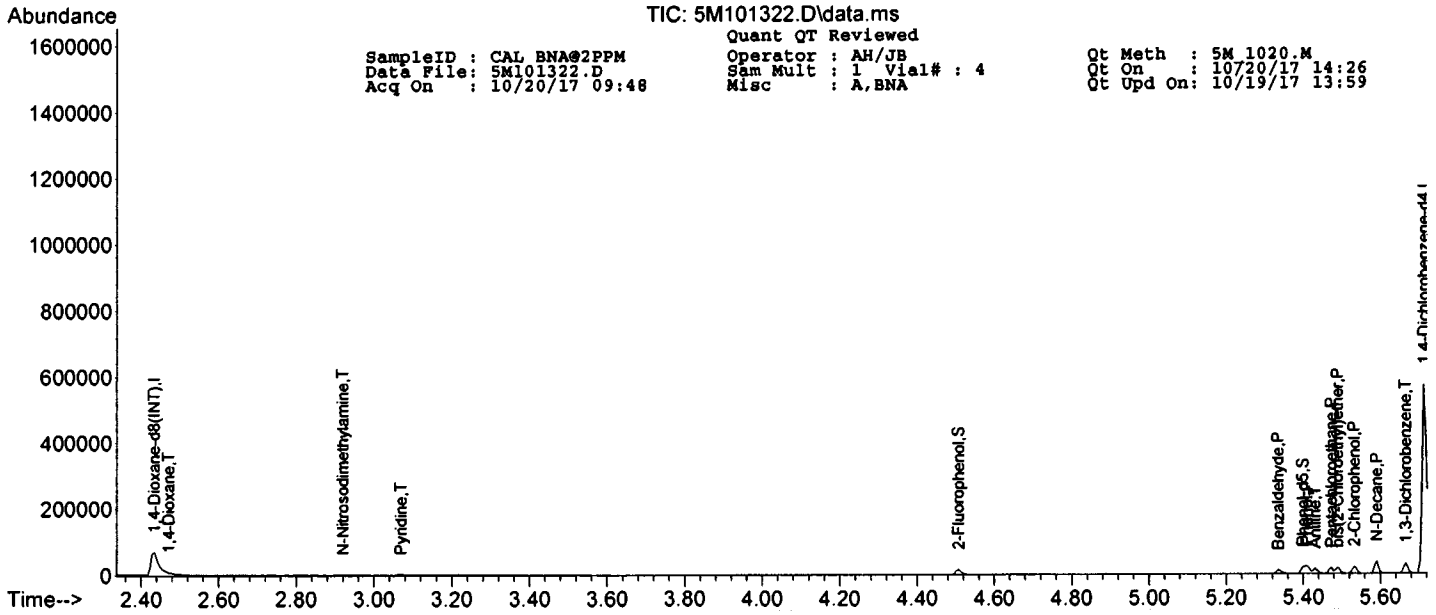
Quantitation Report (QT Reviewed)

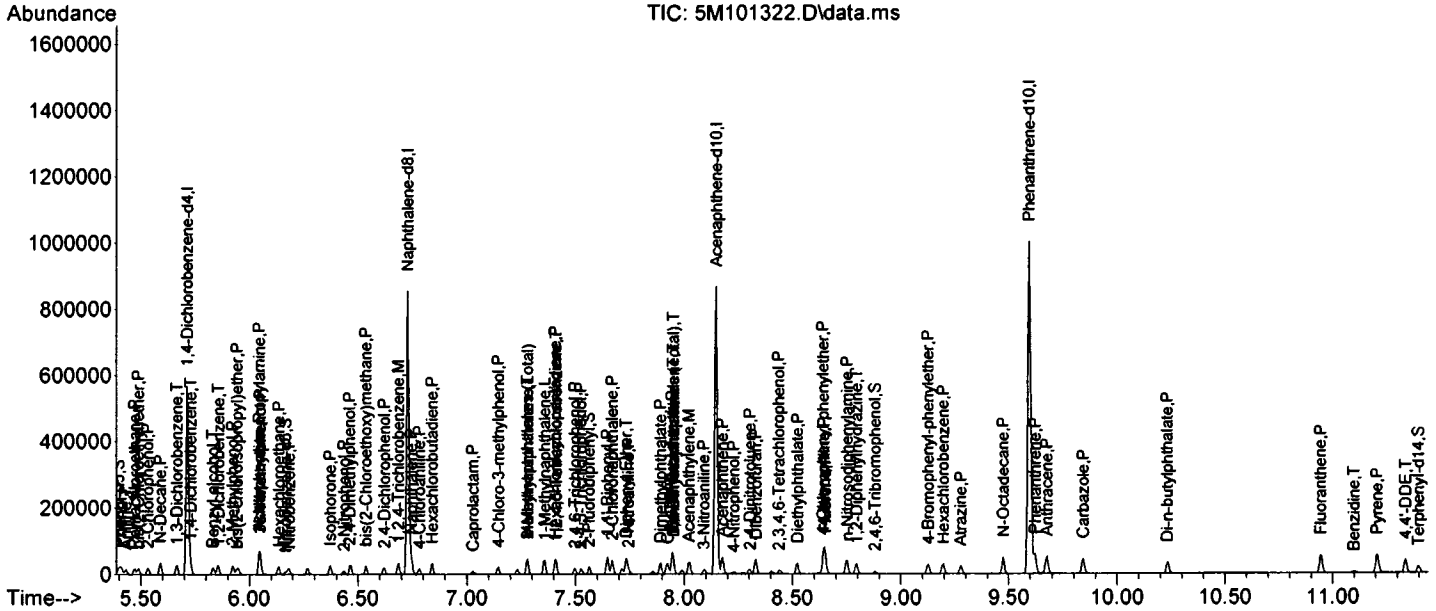
SampleID : CAL BNA@2PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101322.D Sam Mult : 1 Vial# : 4 Qt On : 10/20/17 14:26
Acq On : 10/20/17 09:48 Misc : A,BNA Qt Upd On: 10/19/17 13:59

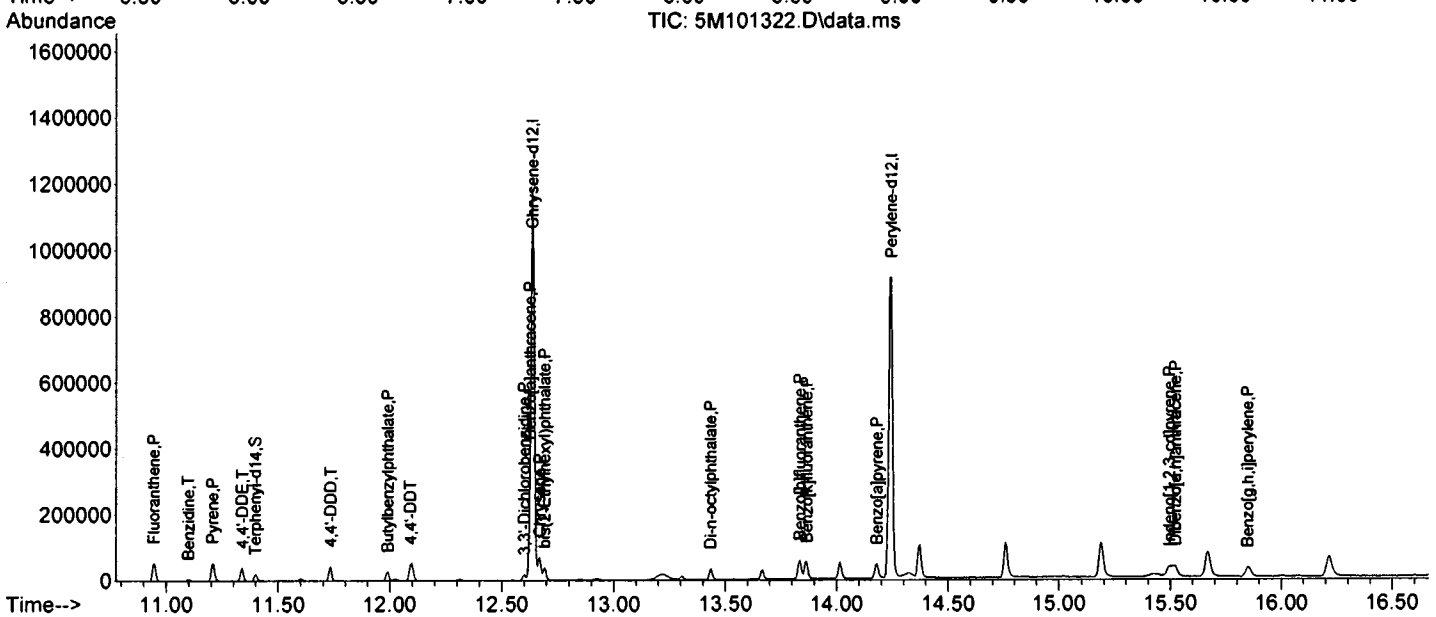
Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.091	138	2290	1.9453	ng	81
67) 2,4-Dinitrophenol	0.000		0	N.D.		
68) Dibenzofuran	8.331	168	17581	2.3671	ng	86
69) 2,4-Dinitrotoluene	8.305	165	2869	1.6508	ng	53
70) 4-Nitrophenol	8.230	65	1210	1.1792	ng	88
71) 2,3,4,6-Tetrachlorophenol	8.438	232	2108	1.4324	ng	79
72) Fluorene	8.652	166	13554	2.3629	ng	97
73) 4-Chlorophenyl-phenyle...	8.641	204	6604	2.3093	ng	88
74) Diethylphthalate	8.524	149	11914	2.1335	ng	93
75) 4-Nitroaniline	8.647	138	2589	1.6343	ng	76
76) Atrazine	9.277	200	3112	1.9322	ng	91
78) 4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79) n-Nitrosodiphenylamine	8.754	169	11112	1.9282	ng	97
81) 1,2-Diphenylhydrazine	8.796	77	11637	1.7222	ng	83
82) 4-Bromophenyl-phenylether	9.127	248	3495	1.7870	ng	81
83) Hexachlorobenzene	9.197	284	4358	2.1146	ng	63
84) N-Octadecane	9.475	57	8029	2.0647	ng	82
85) Pentachlorophenol	0.000		0	N.D. d		
86) Phenanthrene	9.624	178	23835	2.3297	ng	99
87) Anthracene	9.678	178	21707	2.1096	ng	99
88) Carbazole	9.843	167	20198	2.1292	ng	96
89) Di-n-butylphthalate	10.233	149	18386	1.7706	ng	97
90) Fluoranthene	10.944	202	25098	2.2225	ng	93
92) Pyrene	11.206	202	26223	2.1431	ng	87
93) Benzidine	11.099	184	3252	0.5477	ng	96
95) 4,4'-DDE	11.339	246	5182	2.0224	ng	96
96) 4,4'-DDD	11.734	235	8829	1.8356	ng	98
97) Butylbenzylphthalate	11.991	149	7168	1.4937	ng	70
98) 4,4'-DDT	12.092	235	6008	1.4486	ng	99
99) 3,3'-Dichlorobenzidine	12.600	252	4915	1.6192	ng	94
100) Benzo[a]anthracene	12.627	228	27180	2.2302	ng	97
101) Chrysene	12.669	228	27586	2.3247	ng	99
102) bis(2-Ethylhexyl)phtha...	12.691	149	10070	1.4410	ng	93
104) Di-n-octylphthalate	13.433	149	16673	1.5906	ng	100
105) Benzo[b]fluoranthene	13.834	252	25644m	2.4159	ng	
106) Benzo[k]fluoranthene	13.866	252	24595	2.3447	ng	90
107) Benzo[a]pyrene	14.181	252	20957	2.0978	ng	92
108) Indeno[1,2,3-cd]pyrene	15.495	276	23561	2.2211	ng	83
109) Dibenzo[a,h]anthracene	15.522	278	19974	2.1978	ng	88
110) Benzo[g,h,i]perylene	15.848	276	19971	2.1520	ng	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 5M101322.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@2PPM
Data File: 5M101322.D
Acq On : 10/20/17 09:48
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:26
Qt Upd On: 10/19/17 13:59
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene,T
Time-->


Abundance
TIC: 5M101322.D\data.ms
1,3-Dichlorobenzene,T
1,4-Dichlorobenzene-d4,I
N-Decane,P
Isophorone,P
bis(2-Chloroethoxy)methane,P
2,4-Dichlorophenol,P
1,2,4-Trichlorobenzene,M
Naphthalene-d8,I
Hexachlorobutadiene,P
Caprolactam,P
4-Chloro-3-methylphenol,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
Acenaphthene-d10,I
Phenanthrene-d10,I
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
N-Octadecane,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
Time-->


Abundance
TIC: 5M101322.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Chrysene-d12,I
Di-n-octylphthalate,P
Perylene-d12,I
Benzo(a)pyrene,P
Benzo(g,h,i)perylene,P
Time-->

SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101321.D Sam Mult : 1 Vial# : 3 Qt On : 10/20/17 14:25
Acq On : 10/20/17 09:25 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	34776	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	70328	40.00	ng	0.00
31) Naphthalene-d8	6.734	136	288262	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	178968	40.00	ng	0.00
77) Phenanthrene-d10	9.603	188	340868	40.00	ng	0.00
91) Chrysene-d12	12.643	240	416531	40.00	ng	0.00
103) Perylene-d12	14.245	264	389436	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.506	112	22265	10.10	ng	0.00
Spiked Amount 100.000			Recovery = 10.10%			
16) Phenol-d5	5.399	99	27548	9.86	ng	0.00
Spiked Amount 100.000			Recovery = 9.86%			
32) Nitrobenzene-d5	6.168	128	5138	4.77	ng	0.00
Spiked Amount 50.000			Recovery = 9.54%			
55) 2-Fluorobiphenyl	7.567	172	29691	5.37	ng	0.00
Spiked Amount 50.000			Recovery = 10.74%			
80) 2,4,6-Tribromophenol	8.887	330	7211	9.13	ng	0.00
Spiked Amount 100.000			Recovery = 9.13%			
94) Terphenyl-d14	11.403	244	32600	4.94	ng	0.00
Spiked Amount 50.000			Recovery = 9.88%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.471	88	10136	11.6080	ng	97
9) Pyridine	2.962	79	25695	9.9140	ng	73
10) N-Nitrosodimethylamine	2.856	74	13922	9.8391	ng	71
12) Benzaldehyde	5.334	77	11847	10.4910	ng	77
13) Aniline	5.431	93	23226	7.7971	ng	45
14) Pentachloroethane	5.473	117	7225	10.0078	ng	79
15) bis(2-Chloroethyl)ether	5.489	93	24378	10.2053	ng	82
17) Phenol	5.409	94	31946	10.0508	ng	84
18) 2-Chlorophenol	5.532	128	23844	9.8339	ng	80
19) N-Decane	5.591	57	25151	10.3326	ng	90
20) 1,3-Dichlorobenzene	5.666	146	25394	10.0551	ng	95
22) 1,4-Dichlorobenzene	5.730	146	26339	10.0625	ng	99
23) 1,2-Dichlorobenzene	5.858	146	25047	10.0750	ng	97
24) Benzyl alcohol	5.831	108	15333	9.8102	ng	77
25) bis(2-chloroisopropyl)...	5.949	45	35481	10.3346	ng	96
26) 2-Methylphenol	5.927	108	22469	9.8125	ng	98
27) Acetophenone	6.045	105	36445	10.6954	ng	73
28) Hexachloroethane	6.136	117	9204	9.4981	ng	90
29) N-Nitroso-di-n-propyla...	6.050	70	17981	10.5358	ng	71
30) 3&4-Methylphenol	6.050	108	24129	10.3569	ng	100
33) Nitrobenzene	6.184	77	24792	10.0098	ng	77
34) Isophorone	6.371	82	46661	10.3347	ng	90
35) 2-Nitrophenol	6.435	139	11450	9.2467	ng	88
36) 2,4-Dimethylphenol	6.467	107	24297	9.9575	ng	94
37) Benzoic Acid	6.520	105	3398	2.0365	ng	81
38) bis(2-Chloroethoxy)met...	6.536	93	29664	10.3513	ng	99
39) 2,4-Dichlorophenol	6.622	162	19901	9.8921	ng	86
40) 1,2,4-Trichlorobenzene	6.686	180	23105	10.1193	ng	97
41) Naphthalene	6.745	128	77048	11.1484	ng	98
42) 4-Chloroaniline	6.782	127	19585	9.3384	ng	91
43) Hexachlorobutadiene	6.841	225	13218	9.9421	ng	95
44) Caprolactam	7.033	113	8046	10.3463	ng	68
45) 4-Chloro-3-methylphenol	7.145	107	21207	10.0072	ng	80
46) 2-Methylnaphthalene	7.279	142	52017	10.3441	ng	99
47) 1-Methylnaphthalene	7.359	142	50510	10.4391	ng	96
48) Methylnaphthalenes (To...	7.279	142	101998m	20.6255	ng	
49) 1,1'-Biphenyl	7.648	154	62117	10.1289	ng	96
51) 1,2,4,5-Tetrachloroben...	7.413	216	25905	10.4062	ng	96
52) Hexachlorocyclopentadiene	7.407	237	11805	8.9606	ng	98
53) 2,4,6-Trichlorophenol	7.498	196	14283	9.6636	ng	99
54) 2,4,5-Trichlorophenol	7.530	196	15936	10.4974	ng	97
56) 2-Chloronaphthalene	7.669	162	48959	10.4440	ng	93
57) 1,4-Dimethylnaphthalene	7.952	156	39239	10.7859	ng	86
58) Dimethylnaphthalenes (...	7.952	156	39239	10.7859	ng	86
59) Diphenyl Ether	7.738	170	38360	10.9452	ng	75
60) 2-Nitroaniline	7.744	65	16656	10.3412	ng	75
61) Coumarin	7.931	146	19867	10.7834	ng	77
62) Acenaphthylene	8.027	152	75403	10.5600	ng	99
63) Dimethylphthalate	7.893	163	58805	10.8185	ng	99
64) 2,6-Dinitrotoluene	7.947	165	12667	10.7552	ng	66
65) Acenaphthene	8.182	153	50932	10.5412	ng	93

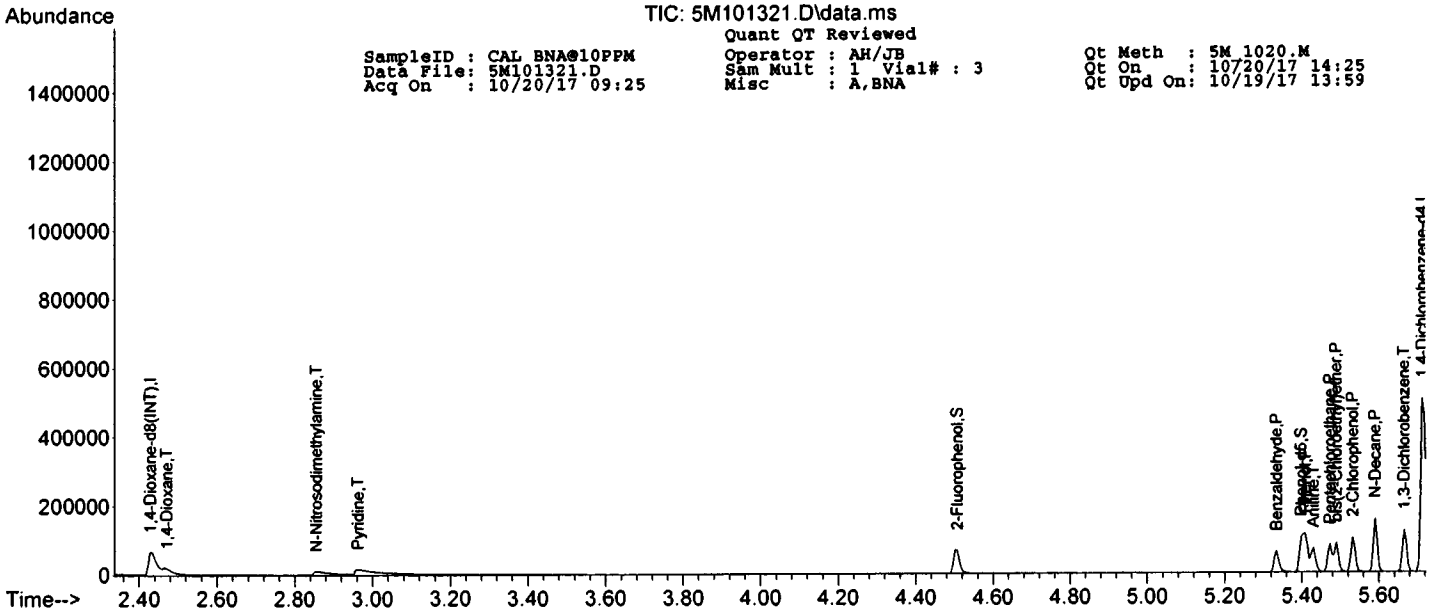
Quantitation Report (QT Reviewed)

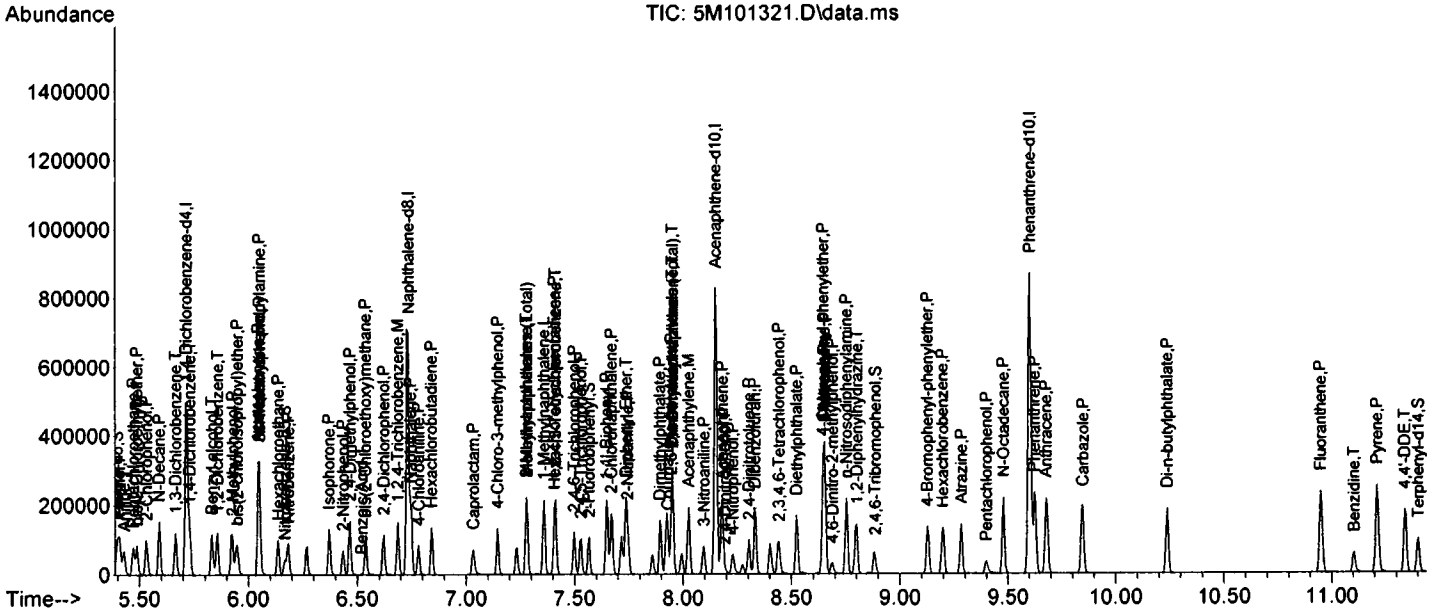
SampleID : CAL BNA@10PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101321.D Sam Mult : 1 Vial# : 3 Qt On : 10/20/17 14:25
Acq On : 10/20/17 09:25 Misc : A,BNA Qt Upd On: 10/19/17 13:59

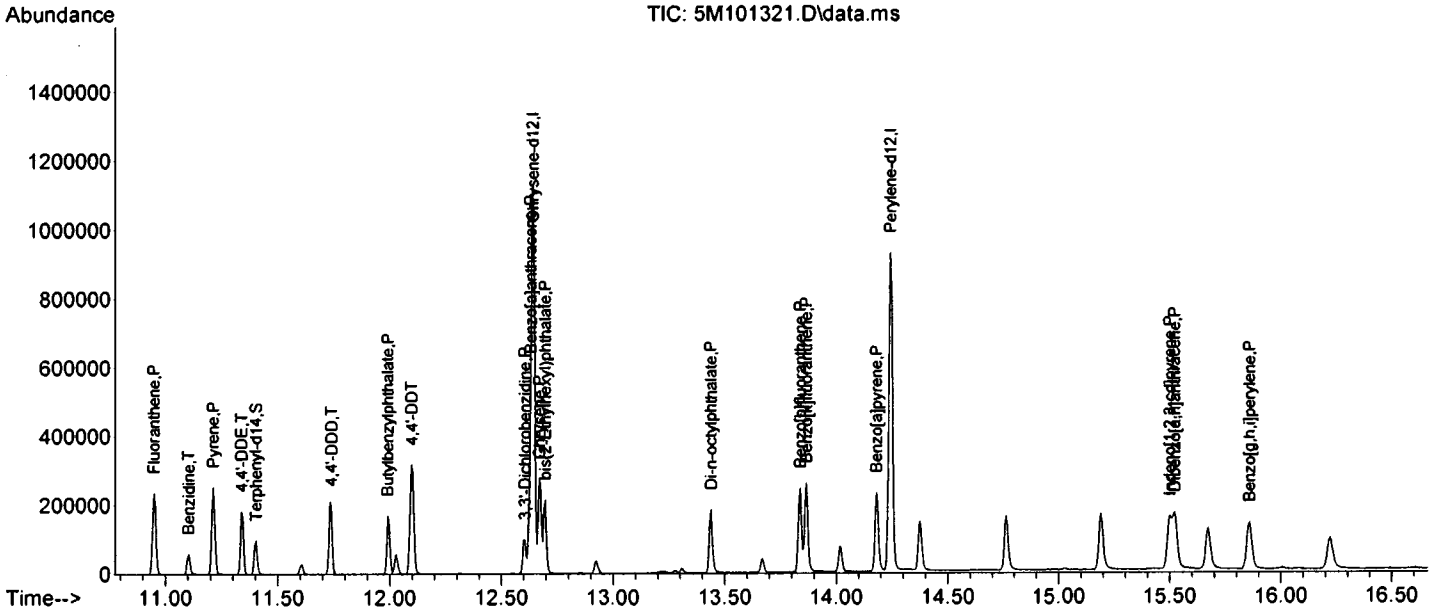
Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.096	138	12505	10.9270	ng	69
67)	2,4-Dinitrophenol	8.193	184	2511	4.1054	ng	39
68)	Dibenzofuran	8.331	168	72890	10.0951	ng	86
69)	2,4-Dinitrotoluene	8.305	165	16239	9.6117	ng	61
70)	4-Nitrophenol	8.230	65	9597	9.5726	ng	89
71)	2,3,4,6-Tetrachlorophenol	8.444	232	13816	9.6571	ng	82
72)	Fluorene	8.652	166	59402	10.6522	ng	98
73)	4-Chlorophenyl-phenyle...	8.647	204	30056	10.8113	ng	80
74)	Diethylphthalate	8.524	149	56771	10.4574	ng	98
75)	4-Nitroaniline	8.652	138	15356	9.9709	ng	70
76)	Atrazine	9.282	200	15151	9.6765	ng	92
78)	4,6-Dinitro-2-methylph...	8.689	198	5913	5.7434	ng	66
79)	n-Nitrosodiphenylamine	8.753	169	51921	10.1623	ng	98
81)	1,2-Diphenylhydrazine	8.802	77	56409	9.4165	ng	80
82)	4-Bromophenyl-phenylether	9.127	248	16944	9.7720	ng	83
83)	Hexachlorobenzene	9.197	284	18402	10.0716	ng	68
84)	N-Octadecane	9.480	57	36224	10.5073	ng	80
85)	Pentachlorophenol	9.400	266	6228	6.5046	ng	97
86)	Phenanthrene	9.624	178	92856	10.2374	ng	99
87)	Anthracene	9.678	178	93018	10.1968	ng	99
88)	Carbazole	9.849	167	87030	10.3487	ng	97
89)	Di-n-butylphthalate	10.239	149	92467	10.0444	ng	98
90)	Fluoranthene	10.949	202	104081	10.3961	ng	91
92)	Pyrene	11.211	202	110701	10.1381	ng	88
93)	Benzidine	11.104	184	25389	4.8078	ng	84
95)	4,4'-DDE	11.339	246	23139	10.1198	ng	94
96)	4,4'-DDD	11.740	235	43106	10.0426	ng	97
97)	Butylbenzylphthalate	11.991	149	41673	9.6470	ng	76
98)	4,4'-DDT	12.098	235	35063	9.4736	ng	97
99)	3,3'-Dichlorobenzidine	12.605	252	24947	9.2080	ng	96
100)	Benzo[a]anthracene	12.632	228	107540	9.8881	ng	99
101)	Chrysene	12.669	228	109254	10.3173	ng	100
102)	bis(2-Ethylhexyl)phtha...	12.696	149	60439	9.6917	ng	93
104)	Di-n-octylphthalate	13.439	149	96813	9.3358	ng	98
105)	Benzo[b]fluoranthene	13.839	252	101620m	9.6768	ng	
106)	Benzo[k]fluoranthene	13.866	252	110571m	10.6546	ng	
107)	Benzo[a]pyrene	14.181	252	99776	10.0954	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.501	276	107832	10.2752	ng	80
109)	Dibenzo[a,h]anthracene	15.522	278	92942	10.3372	ng	90
110)	Benzo[g,h,i]perylene	15.859	276	91735	9.9917	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M101321.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@10PPM
Data File: 5M101321.D
Acq On : 10/20/17 09:25
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:25
Qt Upd On: 10/19/17 13:59
Abundance
Time-->


TIC: 5M101321.D\data.ms
Abundance
Time-->


TIC: 5M101321.D\data.ms
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM
Data File: 5M101327.D
Acq On : 10/20/17 11:57
Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:24
Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	36316	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	76446	40.00	ng	0.00
31) Naphthalene-d8	6.729	136	320786	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	206107	40.00	ng	0.00
77) Phenanthrene-d10	9.598	188	381862	40.00	ng	0.00
91) Chrysene-d12	12.643	240	463803	40.00	ng	0.00
103) Perylene-d12	14.245	264	469140	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.501	112	46293	20.10	ng	0.00
Spiked Amount 100.000			Recovery = 20.10%			
16) Phenol-d5	5.399	99	63521	21.77	ng	0.00
Spiked Amount 100.000			Recovery = 21.77%			
32) Nitrobenzene-d5	6.168	128	12153	10.14	ng	0.00
Spiked Amount 50.000			Recovery = 20.28%			
55) 2-Fluorobiphenyl	7.562	172	64174	10.07	ng	0.00
Spiked Amount 50.000			Recovery = 20.14%			
80) 2,4,6-Tribromophenol	8.882	330	18347	20.74	ng	0.00
Spiked Amount 100.000			Recovery = 20.74%			
94) Terphenyl-d14	11.398	244	75122	10.22	ng	0.00
Spiked Amount 50.000			Recovery = 20.44%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.466	88	20276	22.1110	ng	94
9) Pyridine	2.925	79	54707	20.2128	ng	75
10) N-Nitrosodimethylamine	2.840	74	31677	21.4378	ng	72
12) Benzaldehyde	5.329	77	26789	22.7168	ng	78
13) Aniline	5.425	93	62983	19.9684	ng	46
14) Pentachloroethane	5.473	117	16213	21.5052	ng	77
15) bis(2-Chloroethyl)ether	5.489	93	50723	20.3336	ng	83
17) Phenol	5.409	94	73494	22.1420	ng	82
18) 2-Chlorophenol	5.532	128	54378	21.4759	ng	80
19) N-Decane	5.591	57	55691	21.9090	ng	86
20) 1,3-Dichlorobenzene	5.666	146	55619	21.0892	ng	95
22) 1,4-Dichlorobenzene	5.730	146	57856	20.3343	ng	97
23) 1,2-Dichlorobenzene	5.853	146	55804	20.6505	ng	95
24) Benzyl alcohol	5.831	108	36070	21.2311	ng	74
25) bis(2-chloroisopropyl)...	5.944	45	77969	20.8926	ng	97
26) 2-Methylphenol	5.922	108	50651	20.3496	ng	99
27) Acetophenone	6.045	105	81517	22.0081	ng	74
28) Hexachloroethane	6.136	117	21290	20.2119	ng	90
29) N-Nitroso-di-n-propyla...	6.045	70	40950	22.0739	ng	74
30) 3&4-Methylphenol	6.050	108	54355	21.4637	ng	97
33) Nitrobenzene	6.179	77	58559	21.2462	ng	85
34) Isophorone	6.371	82	106739	21.2442	ng	88
35) 2-Nitrophenol	6.435	139	28089	20.3839	ng	84
36) 2,4-Dimethylphenol	6.467	107	55754	20.5328	ng	93
37) Benzoic Acid	6.536	105	29378	14.9594	ng	86
38) bis(2-Chloroethoxy)met...	6.536	93	66956	20.9956	ng	97
39) 2,4-Dichlorophenol	6.617	162	46779	20.8947	ng	87
40) 1,2,4-Trichlorobenzene	6.686	180	51141	20.1274	ng	97
41) Naphthalene	6.745	128	167395m	21.7558	ng	
42) 4-Chloroaniline	6.782	127	54441m	23.3263	ng	
43) Hexachlorobutadiene	6.841	225	29950	20.2432	ng	98
44) Caprolactam	7.039	113	20133	23.2640	ng	70
45) 4-Chloro-3-methylphenol	7.146	107	49201	20.8632	ng	81
46) 2-Methylnaphthalene	7.279	142	115042	20.5578	ng	99
47) 1-Methylnaphthalene	7.359	142	111082	20.6301	ng	92
48) Methylnaphthalenes (To...	7.279	142	225929m	41.0541	ng	
49) 1,1'-Biphenyl	7.648	154	137455	20.1412	ng	95
51) 1,2,4,5-Tetrachloroben...	7.413	216	58067	20.2545	ng	98
52) Hexachlorocyclopentadiene	7.407	237	29156	19.2168	ng	99
53) 2,4,6-Trichlorophenol	7.498	196	35279	20.7262	ng	97
54) 2,4,5-Trichlorophenol	7.525	196	39157	22.3972	ng	99
56) 2-Chloronaphthalene	7.669	162	107747	19.9581	ng	91
57) 1,4-Dimethylnaphthalene	7.952	156	86993	20.7638	ng	85
58) Dimethylnaphthalenes (...	7.952	156	86993	20.7638	ng	85
59) Diphenyl Ether	7.733	170	82466	20.4316	ng	78
60) 2-Nitroaniline	7.744	65	38771	20.9021	ng	61
61) Coumarin	7.925	146	44208	20.8355	ng	75
62) Acenaphthylene	8.027	152	168230	20.4580	ng	99
63) Dimethylphthalate	7.893	163	129138	20.6295	ng	99
64) 2,6-Dinitrotoluene	7.947	165	29180	21.5137	ng	63
65) Acenaphthene	8.177	153	114144	20.5133	ng	95

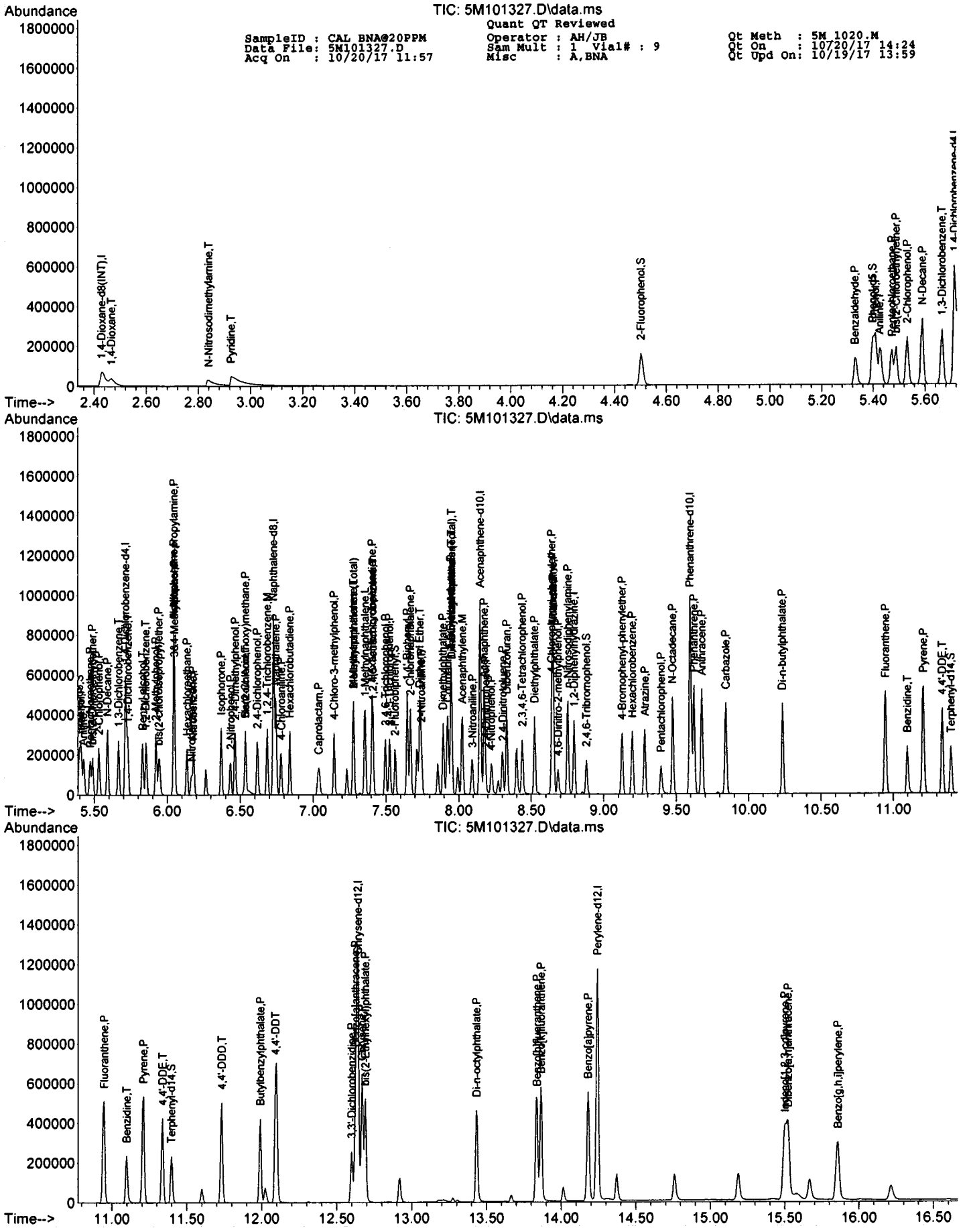
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@20PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101327.D Sam Mult : 1 Vial# : 9 Qt On : 10/20/17 14:24
Acq On : 10/20/17 11:57 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.096	138	28602	21.7018	ng	72
67)	2,4-Dinitrophenol	8.187	184	10530	14.5652	ng	44
68)	Dibenzofuran	8.331	168	160246	19.2714	ng	86
69)	2,4-Dinitrotoluene	8.305	165	40742	20.9395	ng	57
70)	4-Nitrophenol	8.225	65	23097	19.8818	ng	97
71)	2,3,4,6-Tetrachlorophenol	8.438	232	35013	21.2509	ng	81
72)	Fluorene	8.652	166	131245	20.4363	ng	100
73)	4-Chlorophenyl-phenyle...	8.641	204	65335	20.4068	ng	86
74)	Diethylphthalate	8.524	149	126837	20.2875	ng	97
75)	4-Nitroaniline	8.652	138	36296	20.4643	ng	73
76)	Atrazine	9.282	200	37196	20.6278	ng	96
78)	4,6-Dinitro-2-methylph...	8.684	198	18821	16.0662	ng	63
79)	n-Nitrosodiphenylamine	8.754	169	114719	20.0431	ng	99
81)	1,2-Diphenylhydrazine	8.796	77	129640	19.3178	ng	82
82)	4-Bromophenyl-phenylether	9.127	248	38681	19.9133	ng	82
83)	Hexachlorobenzene	9.197	284	41107	20.0830	ng	65
84)	N-Octadecane	9.475	57	83734	21.6808	ng	84
85)	Pentachlorophenol	9.395	266	19517	17.8572	ng	94
86)	Phenanthrene	9.624	178	209370	20.6051	ng	99
87)	Anthracene	9.678	178	212854	20.8285	ng	99
88)	Carbazole	9.843	167	195351	20.7353	ng	97
89)	Di-n-butylphthalate	10.233	149	223455	21.6675	ng	97
90)	Fluoranthene	10.949	202	232177	20.7012	ng	90
92)	Pyrene	11.211	202	249071	20.4853	ng	86
93)	Benzidine	11.099	184	94611	16.2371	ng	88
95)	4,4'-DDE	11.339	246	51663	20.2917	ng	96
96)	4,4'-DDD	11.735	235	99194	20.7543	ng	96
97)	Butylbenzylphthalate	11.991	149	103039	21.1638	ng	70
98)	4,4'-DDT	12.092	235	82318	19.9744	ng	99
99)	3,3'-Dichlorobenzidine	12.600	252	58951	19.5367	ng	96
100)	Benzo[a]anthracene	12.627	228	248606	20.5289	ng	100
101)	Chrysene	12.669	228	240948	20.4345	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.691	149	148388	21.3695	ng	95
104)	Di-n-octylphthalate	13.433	149	254137	20.3432	ng	99
105)	Benzo[b]fluoranthene	13.839	252	251031	19.8432	ng	93
106)	Benzo[k]fluoranthene	13.866	252	246722	19.7350	ng	93
107)	Benzo[a]pyrene	14.181	252	246721	20.7222	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.501	276	253880	20.0819	ng	82
109)	Dibenzo[a,h]anthracene	15.522	278	219992	20.3110	ng	89
110)	Benzo[g,h,i]perylene	15.859	276	194732	17.6065	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M101327.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@20PPM
Data File: 5M101327.D
Acq On : 10/20/17 11:57
Operator : AH/JB
Sam Mult : 1 Vial# : 9
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:24
Qt Upd On: 10/19/17 13:59
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101326.D Sam Mult : 1 Vial# : 8 Qt On : 10/20/17 14:24
Acq On : 10/20/17 11:34 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	35532	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	74916	40.00	ng	0.00
31) Naphthalene-d8	6.734	136	344094	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	222542	40.00	ng	0.00
77) Phenanthrene-d10	9.603	188	372915	40.00	ng	0.00
91) Chrysene-d12	12.648	240	448310	40.00	ng	0.00
103) Perylene-d12	14.245	264	425587	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.501	112	184264	81.79	ng	0.00
Spiked Amount 100.000			Recovery = 81.79%			
16) Phenol-d5	5.404	99	243258	85.19	ng	0.00
Spiked Amount 100.000			Recovery = 85.19%			
32) Nitrobenzene-d5	6.168	128	49827	38.75	ng	0.00
Spiked Amount 50.000			Recovery = 77.50%			
55) 2-Fluorobiphenyl	7.567	172	260122	37.82	ng	0.00
Spiked Amount 50.000			Recovery = 75.64%			
80) 2,4,6-Tribromophenol	8.887	330	79119	91.58	ng	0.00
Spiked Amount 100.000			Recovery = 91.58%			
94) Terphenyl-d14	11.403	244	281341	39.62	ng	0.00
Spiked Amount 50.000			Recovery = 79.24%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.460	88	76350	82.4387	ng	92
9) Pyridine	2.893	79	222676	84.0882	ng	74
10) N-Nitrosodimethylamine	2.824	74	122667	84.8483	ng	77
12) Benzaldehyde	5.334	77	86834	75.2591	ng	75
13) Aniline	5.431	93	292597	88.0363	ng	47
14) Pentachloroethane	5.473	117	62385	84.5744	ng	78
15) bis(2-Chloroethyl)ether	5.489	93	194750	79.7931	ng	83
17) Phenol	5.414	94	280385	86.3373	ng	84
18) 2-Chlorophenol	5.537	128	208525	84.1716	ng	78
19) N-Decane	5.591	57	202869	81.5703	ng	87
20) 1,3-Dichlorobenzene	5.666	146	212074	82.1868	ng	97
22) 1,4-Dichlorobenzene	5.730	146	216062	77.4887	ng	98
23) 1,2-Dichlorobenzene	5.858	146	209989	79.2941	ng	97
24) Benzyl alcohol	5.831	108	139968	84.0688	ng	76
25) bis(2-chloroisopropyl)...	5.949	45	291448	79.6914	ng	96
26) 2-Methylphenol	5.927	108	196035	80.3676	ng	98
27) Acetophenone	6.050	105	296862	81.7842	ng	72
28) Hexachloroethane	6.136	117	83351	80.7464	ng	90
29) N-Nitroso-di-n-propyla...	6.050	70	151547	83.3592	ng	70
30) 3&4-Methylphenol	6.056	108	197763	79.6876	ng	99
33) Nitrobenzene	6.184	77	218105	73.7719	ng	80
34) Isophorone	6.376	82	408784	75.8490	ng	86
35) 2-Nitrophenol	6.435	139	117427	79.4433	ng	87
36) 2,4-Dimethylphenol	6.467	107	213916	73.4435	ng	96
37) Benzoic Acid	6.579	105	222371	82.2259	ng	88
38) bis(2-Chloroethoxy)met...	6.542	93	249645	72.9794	ng	96
39) 2,4-Dichlorophenol	6.622	162	192906	80.3284	ng	88
40) 1,2,4-Trichlorobenzene	6.686	180	211958	77.7689	ng	97
41) Naphthalene	6.750	128	669528m	80.9229	ng	
42) 4-Chloroaniline	6.782	127	252381m	100.8127	ng	
43) Hexachlorobutadiene	6.841	225	120861	76.1566	ng	96
44) Caprolactam	7.071	113	88718	95.5711	ng	71
45) 4-Chloro-3-methylphenol	7.151	107	205812	81.3610	ng	80
46) 2-Methylnaphthalene	7.279	142	466265	77.6768	ng	98
47) 1-Methylnaphthalene	7.359	142	446213	77.2572	ng	92
48) Methylnaphthalenes (To...	7.279	142	915243m	155.0454	ng	
49) 1,1'-Biphenyl	7.648	154	560742	76.5996	ng	96
51) 1,2,4,5-Tetrachloroben...	7.412	216	237377	76.6851	ng	98
52) Hexachlorocyclopentadiene	7.407	237	134995	82.4047	ng	99
53) 2,4,6-Trichlorophenol	7.498	196	144840	78.8084	ng	98
54) 2,4,5-Trichlorophenol	7.530	196	159634	84.5648	ng	99
56) 2-Chloronaphthalene	7.674	162	448071	76.8675	ng	90
57) 1,4-Dimethylnaphthalene	7.957	156	346447	76.5843	ng	86
58) Dimethylnaphthalenes (...	7.957	156	346447	76.5843	ng	86
59) Diphenyl Ether	7.738	170	329128	75.5219	ng	77
60) 2-Nitroaniline	7.749	65	164851	82.3103	ng	56
61) Coumarin	7.936	146	183228	79.9791	ng	77
62) Acenaphthylene	8.032	152	684487	77.0913	ng	100
63) Dimethylphthalate	7.904	163	521845	77.2071	ng	99
64) 2,6-Dinitrotoluene	7.952	165	119191	81.3867	ng	66
65) Acenaphthene	8.182	153	460295	76.6124	ng	95

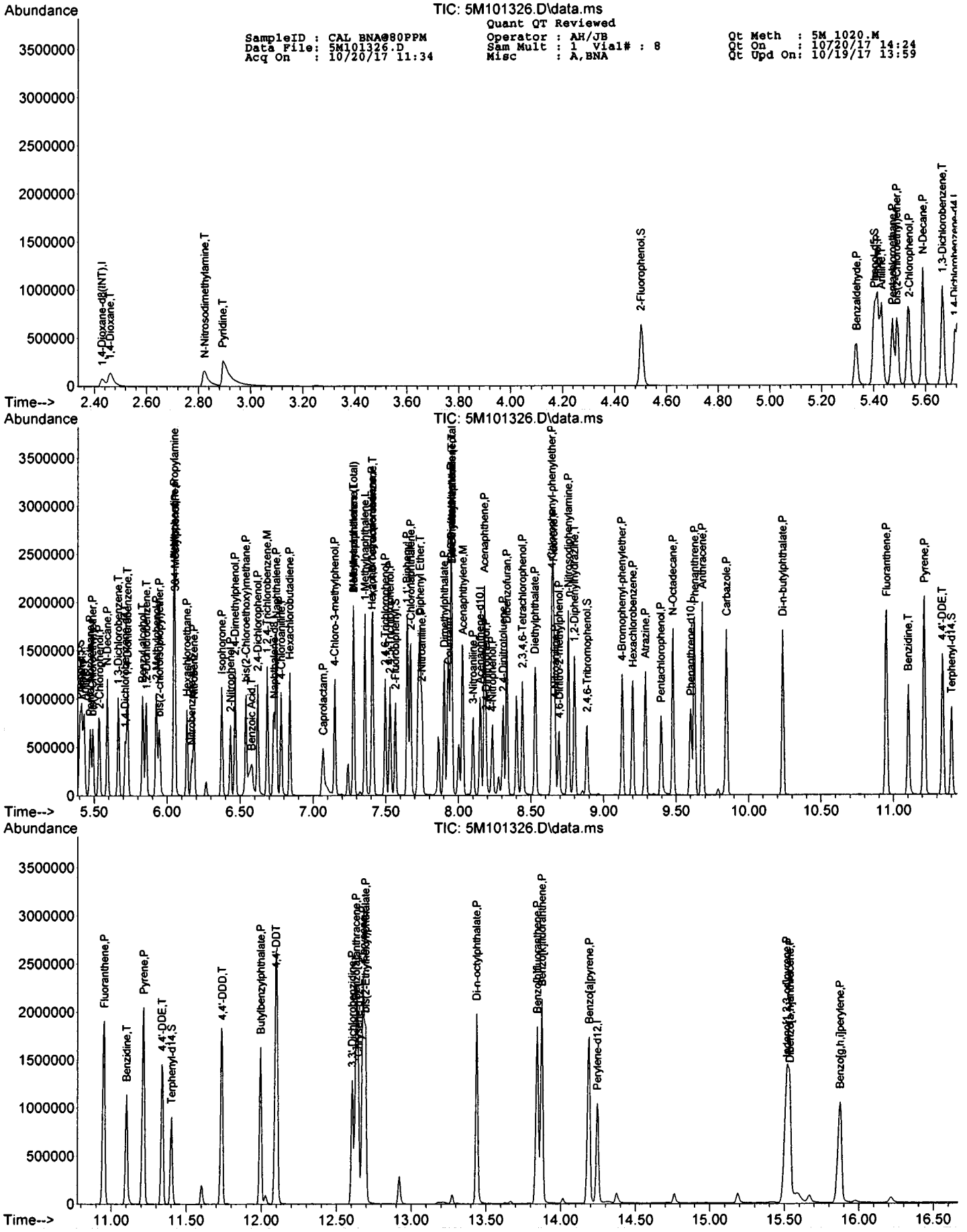
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@80PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101326.D Sam Mult : 1 Vial# : 8 Qt On : 10/20/17 14:24
Acq On : 10/20/17 11:34 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.102	138	127461	89.5688	ng	74
67)	2,4-Dinitrophenol	8.192	184	74475	81.8679	ng	35
68)	Dibenzofuran	8.337	168	648020	72.1764	ng	85
69)	2,4-Dinitrotoluene	8.310	165	171877	81.8131	ng	62
70)	4-Nitrophenol	8.235	65	100423	77.4076	ng	86
71)	2,3,4,6-Tetrachlorophenol	8.444	232	143845	80.8582	ng	83
72)	Fluorene	8.657	166	526476	75.9239	ng	98
73)	4-Chlorophenyl-phenyle...	8.647	204	260422	75.3332	ng	83
74)	Diethylphthalate	8.529	149	531207	78.6912	ng	97
75)	4-Nitroaniline	8.668	138	159657	83.3693	ng	73
76)	Atrazine	9.288	200	160171	82.2664	ng	97
78)	4,6-Dinitro-2-methylph...	8.695	198	106140	84.1853	ng	73
79)	n-Nitrosodiphenylamine	8.759	169	472120	84.4655	ng	99
81)	1,2-Diphenylhydrazine	8.801	77	528375	80.6227	ng	81
82)	4-Bromophenyl-phenylether	9.127	248	159352	84.0041	ng	86
83)	Hexachlorobenzene	9.202	284	165025	82.5581	ng	64
84)	N-Octadecane	9.480	57	310005	82.1938	ng	80
85)	Pentachlorophenol	9.394	266	104701	87.9860	ng	98
86)	Phenanthrene	9.630	178	763210	76.9133	ng	100
87)	Anthracene	9.683	178	793465	79.5061	ng	99
88)	Carbazole	9.849	167	736935	80.0978	ng	98
89)	Di-n-butylphthalate	10.239	149	889019	88.2725	ng	96
90)	Fluoranthene	10.954	202	896721	81.8711	ng	89
92)	Pyrene	11.216	202	941899	80.1456	ng	87
93)	Benzidine	11.104	184	452584	85.0426	ng	87
95)	4,4'-DDE	11.339	246	200558	81.4956	ng	95
96)	4,4'-DDD	11.740	235	393423	85.1604	ng	96
97)	Butylbenzylphthalate	11.996	149	420185	83.7999	ng	70
98)	4,4'-DDT	12.098	235	332998	83.5942	ng	99
99)	3,3'-Dichlorobenzidine	12.605	252	291313	99.7009	ng	96
100)	Benzo[a]anthracene	12.632	228	926518	79.1524	ng	100
101)	Chrysene	12.680	228	891361	78.2077	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.696	149	582264	86.7501	ng	94
104)	Di-n-octylphthalate	13.439	149	1018920	89.9094	ng	100
105)	Benzo[b]fluoranthene	13.845	252	915338m	79.7591	ng	
106)	Benzo[k]fluoranthene	13.877	252	854800	75.3716	ng	92
107)	Benzo[a]pyrene	14.192	252	859763	79.6017	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.517	276	890996	77.6902	ng	84
109)	Dibenzo[a,h]anthracene	15.538	278	772480	78.6187	ng	87
110)	Benzo[g,h,i]perylene	15.875	276	739041	73.6579	ng	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M101326.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@80PPM
Data File: 5M101326.D
Acq On : 10/20/17 11:34
Operator : AH/JB
Sam Mult : 1 Vial# : 8
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:24
Qt Upd On: 10/19/17 13:59
Abundance
Time-->
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene,T
Caprolactam,P
4-Chloro-3-methylphenol,P
Hexachlorobutadiene,P
Acenaphthene,P
Diethylphthalate,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
4,4'-DDE,T
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,P
Benzo[g,h,i]perylene,P

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101325.D Sam Mult : 1 Vial# : 7 Qt On : 10/20/17 14:24
Acq On : 10/20/17 11:12 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	36545	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	77243	40.00	ng	0.00
31) Naphthalene-d8	6.734	136	307881	40.00	ng	0.00
50) Acenaphthene-d10	8.155	164	201651	40.00	ng	0.00
77) Phenanthrene-d10	9.603	188	380998	40.00	ng	0.00
91) Chrysene-d12	12.648	240	434740	40.00	ng	0.00
103) Perylene-d12	14.251	264	400127	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.501	112	316744	136.69	ng	0.00
Spiked Amount 100.000			Recovery = 136.69%			
16) Phenol-d5	5.404	99	373068	127.03	ng	0.00
Spiked Amount 100.000			Recovery = 127.03%			
32) Nitrobenzene-d5	6.173	128	76568	66.55	ng	0.00
Spiked Amount 50.000			Recovery = 133.10%			
55) 2-Fluorobiphenyl	7.567	172	373109	59.87	ng	0.00
Spiked Amount 50.000			Recovery = 119.74%			
80) 2,4,6-Tribromophenol	8.887	330	110731	125.46	ng	0.00
Spiked Amount 100.000			Recovery = 125.46%			
94) Terphenyl-d14	11.403	244	426203	61.89	ng	0.00
Spiked Amount 50.000			Recovery = 123.78%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.460	88	120074	123.4353	ng	93
9) Pyridine	2.888	79	359671	132.0561	ng	73
10) N-Nitrosodimethylamine	2.824	74	193263	129.9738	ng	76
12) Benzaldehyde	5.334	77	98139	82.6994	ng	78
13) Aniline	5.431	93	460710	129.1924	ng	48
14) Pentachloroethane	5.473	117	95485	125.8594	ng	77
15) bis(2-Chloroethyl)ether	5.495	93	300162	119.5736	ng	81
17) Phenol	5.420	94	424126	126.9785	ng	91
18) 2-Chlorophenol	5.537	128	324721	127.4411	ng	80
19) N-Decane	5.591	57	302002	118.0641	ng	86
20) 1,3-Dichlorobenzene	5.666	146	323839	122.0212	ng	98
22) 1,4-Dichlorobenzene	5.730	146	337803	117.5003	ng	97
23) 1,2-Dichlorobenzene	5.858	146	313047	114.6488	ng	97
24) Benzyl alcohol	5.837	108	216063	125.8642	ng	73
25) bis(2-chloroisopropyl)...	5.949	45	430454	114.1544	ng	98
26) 2-Methylphenol	5.927	108	294975	117.2866	ng	97
27) Acetophenone	6.050	105	438309	117.1145	ng	69
28) Hexachloroethane	6.136	117	126852	119.1860	ng	88
29) N-Nitroso-di-n-propyla...	6.056	70	216327	115.4071	ng	67
30) 3&4-Methylphenol	6.056	108	290183	113.4052	ng	96
33) Nitrobenzene	6.184	77	334135	126.3111	ng	82
34) Isophorone	6.376	82	608672	126.2215	ng	89
35) 2-Nitrophenol	6.435	139	176432	133.4016	ng	89
36) 2,4-Dimethylphenol	6.472	107	329600	126.4711	ng	93
37) Benzoic Acid	6.600	105	379492	134.0181	ng	89
38) bis(2-Chloroethoxy)met...	6.542	93	375979	122.8386	ng	98
39) 2,4-Dichlorophenol	6.622	162	274488	127.7441	ng	89
40) 1,2,4-Trichlorobenzene	6.686	180	294883	120.9205	ng	98
41) Naphthalene	6.750	128	955963	128.8766	ng	99
42) 4-Chloroaniline	6.782	127	316641m	141.3579	ng	
43) Hexachlorobutadiene	6.841	225	174351	122.7836	ng	96
44) Caprolactam	7.081	113	114856	138.2810	ng	71
45) 4-Chloro-3-methylphenol	7.156	107	293234	129.5549	ng	78
46) 2-Methylnaphthalene	7.279	142	644160	119.9351	ng	99
47) 1-Methylnaphthalene	7.359	142	630554	122.0150	ng	92
48) Methylnaphthalenes (To...	7.359	142	1268294m	240.1246	ng	
49) 1,1'-Biphenyl	7.653	154	780201	119.1143	ng	95
51) 1,2,4,5-Tetrachloroben...	7.418	216	336595	120.0029	ng	97
52) Hexachlorocyclopentadiene	7.407	237	195589	131.7620	ng	100
53) 2,4,6-Trichlorophenol	7.498	196	212705	127.7243	ng	96
54) 2,4,5-Trichlorophenol	7.535	196	223397	130.6031	ng	98
56) 2-Chloronaphthalene	7.674	162	619840	117.3511	ng	92
57) 1,4-Dimethylnaphthalene	7.957	156	472650	115.3066	ng	91
58) Dimethylnaphthalenes (...	7.957	156	472650	115.3066	ng	91
59) Diphenyl Ether	7.738	170	469220	118.8218	ng	77
60) 2-Nitroaniline	7.754	65	235016	129.5006	ng	49
61) Coumarin	7.941	146	256401	123.5140	ng	77
62) Acenaphthylene	8.032	152	950205	118.1052	ng	99
63) Dimethylphthalate	7.909	163	741363	121.0481	ng	99
64) 2,6-Dinitrotoluene	7.957	165	163415	123.1441	ng	63
65) Acenaphthene	8.182	153	635853	116.7968	ng	94

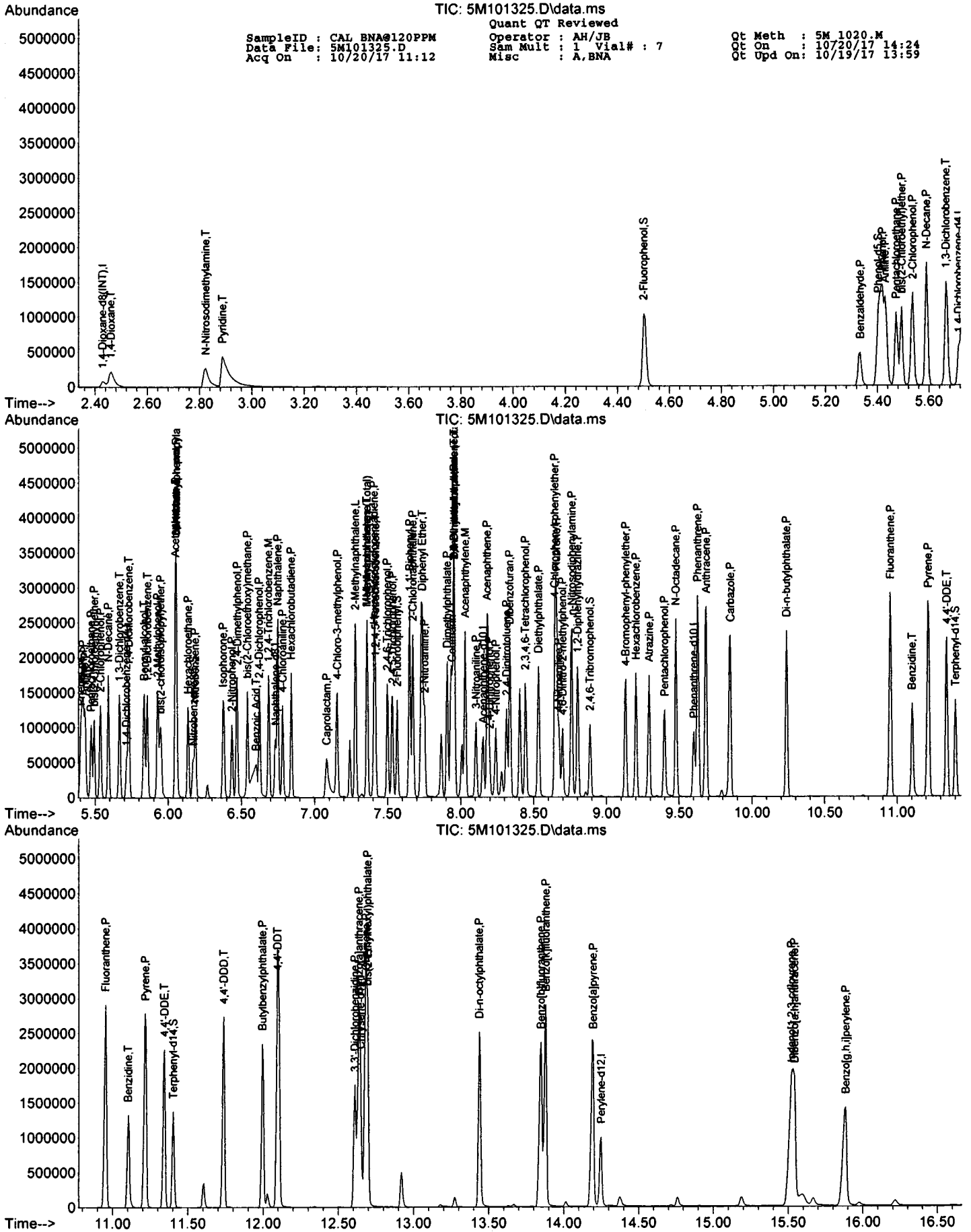
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@120PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101325.D Sam Mult : 1 Vial# : 7 Qt On : 10/20/17 14:24
Acq On : 10/20/17 11:12 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.107	138	174551	135.3672	ng	76
67)	2,4-Dinitrophenol	8.198	184	110865	123.6151	ng	32
68)	Dibenzofuran	8.337	168	903655	111.0762	ng	88
69)	2,4-Dinitrotoluene	8.315	165	243622	127.9774	ng	60
70)	4-Nitrophenol	8.241	65	144424	119.9215	ng	88
71)	2,3,4,6-Tetrachlorophenol	8.444	232	208000	129.0341	ng	82
72)	Fluorene	8.657	166	737226	117.3308	ng	100
73)	4-Chlorophenyl-phenyle...	8.647	204	368618	117.6784	ng	84
74)	Diethylphthalate	8.534	149	756449	123.6670	ng	97
75)	4-Nitroaniline	8.673	138	223871	129.0112	ng	77
76)	Atrazine	9.293	200	221185	125.3735	ng	97
78)	4,6-Dinitro-2-methylph...	8.700	198	158398	117.6212	ng	71
79)	n-Nitrosodiphenylamine	8.764	169	661320	115.8046	ng	99
81)	1,2-Diphenylhydrazine	8.801	77	787355	117.5907	ng	82
82)	4-Bromophenyl-phenylether	9.133	248	227440	117.3537	ng	79
83)	Hexachlorobenzene	9.202	284	225772	110.5522	ng	69
84)	N-Octadecane	9.480	57	446480	115.8670	ng	77
85)	Pentachlorophenol	9.400	266	157273	123.0263	ng	97
86)	Phenanthrene	9.630	178	1179351	116.3289	ng	99
87)	Anthracene	9.688	178	1219969	119.6489	ng	100
88)	Carbazole	9.854	167	1107752	117.8477	ng	97
89)	Di-n-butylphthalate	10.239	149	1294929	125.8484	ng	98
90)	Fluoranthene	10.954	202	1302819	116.4245	ng	92
92)	Pyrene	11.216	202	1402022	123.0209	ng	89
93)	Benzidine	11.104	184	553506	109.5254	ng	88
95)	4,4'-DDE	11.344	246	300116	125.7570	ng	95
96)	4,4'-DDD	11.740	235	561769	125.3962	ng	96
97)	Butylbenzylphthalate	11.996	149	610130	121.0552	ng	75
98)	4,4'-DDT	12.098	235	495405	128.2459	ng	99
99)	3,3'-Dichlorobenzidine	12.611	252	390944	137.8584	ng	96
100)	Benzo[a]anthracene	12.637	228	1346322	118.6063	ng	99
101)	Chrysene	12.685	228	1291842	116.8838	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.696	149	871675	133.9225	ng	93
104)	Di-n-octylphthalate	13.439	149	1450177	136.1058	ng	100
105)	Benzo[b]fluoranthene	13.850	252	1252331	116.0669	ng	93
106)	Benzo[k]fluoranthene	13.882	252	1270985m	119.1995	ng	
107)	Benzo[a]pyrene	14.197	252	1224213	120.5567	ng	90
108)	Indeno[1,2,3-cd]pyrene	15.522	276	1249596	115.8913	ng	84
109)	Dibenzo[a,h]anthracene	15.543	278	1081688	117.0931	ng	88
110)	Benzo[g,h,i]perylene	15.885	276	1053224	111.6508	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 5M101325.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@120PPM
Data File: 5M101325.D
Acq On : 10/20/17 11:12
Operator : AH/JB
Sam Mult : 1 Vial# : 7
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:24
Qt Upd On: 10/19/17 13:59
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene,T
Time-->
Abundance
TIC: 5M101325.D\data.ms
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
2-Nitrophenol,P
Benzoic Acid,T
Naphthalene,P
Hexachlorobutadiene,P
2-Methylnaphthalene,L
Diphenyl Ether,T
2-Nitroaniline,P
Acenaphthylene,M
Acenaphthene,P
Diethylphthalate,P
2,3,4,6-Tetrachlorophenol,P
2,4,6-Tribromophenol,S
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
4,4'-DDE,T
Time-->
Abundance
TIC: 5M101325.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
4,4'-DDE,T
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101324.D Sam Mult : 1 Vial# : 6 Qt On : 10/20/17 14:23
Acq On : 10/20/17 10:49 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	36817	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.719	152	75426	40.00	ng	0.00
31) Naphthalene-d8	6.734	136	336425	40.00	ng	0.00
50) Acenaphthene-d10	8.155	164	199804	40.00	ng	0.00
77) Phenanthrene-d10	9.603	188	362989	40.00	ng	0.00
91) Chrysene-d12	12.653	240	423719	40.00	ng	0.01
103) Perylene-d12	14.251	264	419436	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.506	112	372490	159.56	ng	0.00
Spiked Amount 100.000			Recovery = 159.56%			
16) Phenol-d5	5.409	99	476432	161.03	ng	0.01
Spiked Amount 100.000			Recovery = 161.03%			
32) Nitrobenzene-d5	6.173	128	106547	84.75	ng	0.00
Spiked Amount 50.000			Recovery = 169.50%			
55) 2-Fluorobiphenyl	7.568	172	481923	78.04	ng	0.00
Spiked Amount 50.000			Recovery = 156.08%			
80) 2,4,6-Tribromophenol	8.892	330	137703	163.75	ng	0.01
Spiked Amount 100.000			Recovery = 163.75%			
94) Terphenyl-d14	11.403	244	536991	80.00	ng	0.00
Spiked Amount 50.000			Recovery = 160.00%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.460	88	153963	154.6553	ng	94
9) Pyridine	2.888	79	454151	165.5133	ng	73
10) N-Nitrosodimethylamine	2.824	74	248097	165.6183	ng	76
12) Benzaldehyde	5.334	77	91411	76.4608	ng	75
13) Aniline	5.436	93	591202	159.6631	ng	48
14) Pentachloroethane	5.473	117	124186	162.4810	ng	79
15) bis(2-Chloroethyl)ether	5.495	93	381106	150.6971	ng	83
17) Phenol	5.420	94	541386	160.8874	ng	91
18) 2-Chlorophenol	5.537	128	417303	162.5661	ng	82
19) N-Decane	5.591	57	383154	148.6829	ng	86
20) 1,3-Dichlorobenzene	5.671	146	414673	155.0927	ng	97
22) 1,4-Dichlorobenzene	5.730	146	420302	149.7183	ng	98
23) 1,2-Dichlorobenzene	5.858	146	409097	153.4349	ng	98
24) Benzyl alcohol	5.837	108	275658	164.4487	ng	76
25) bis(2-chloroisopropyl)...	5.949	45	552429	150.0308	ng	99
26) 2-Methylphenol	5.933	108	373870	152.2375	ng	98
27) Acetophenone	6.056	105	543709	148.7766	ng	71
28) Hexachloroethane	6.136	117	176523	169.8506	ng	87
29) N-Nitroso-di-n-propyla...	6.061	70	267660	146.2323	ng	66
30) 3&4-Methylphenol	6.061	108	360719	144.3670	ng	99
33) Nitrobenzene	6.189	77	457559	158.2929	ng	78
34) Isophorone	6.382	82	859485	163.1109	ng	86
35) 2-Nitrophenol	6.440	139	248310	171.8195	ng	82
36) 2,4-Dimethylphenol	6.472	107	454484	159.5943	ng	96
37) Benzoic Acid	6.617	105	539172	161.6891	ng	86
38) bis(2-Chloroethoxy)met...	6.547	93	517012	154.5848	ng	96
39) 2,4-Dichlorophenol	6.627	162	378852	161.3548	ng	87
40) 1,2,4-Trichlorobenzene	6.691	180	396270	148.7086	ng	97
41) Naphthalene	6.750	128	1276264	157.2742	ng	99
42) 4-Chloroaniline	6.782	127	378229m	154.5263	ng	
43) Hexachlorobutadiene	6.841	225	241127	155.4019	ng	96
44) Caprolactam	7.092	113	142539	157.0497	ng	69
45) 4-Chloro-3-methylphenol	7.156	107	399355	161.4705	ng	81
46) 2-Methylnaphthalene	7.284	142	882261	150.3295	ng	99
47) 1-Methylnaphthalene	7.359	142	850605	150.6307	ng	93
48) Methylnaphthalenes (To...	7.284	142	1722895m	298.5177	ng	
49) 1,1'-Biphenyl	7.653	154	961203	134.2972	ng	95
51) 1,2,4,5-Tetrachloroben...	7.418	216	452561	162.8386	ng	98
52) Hexachlorocyclopentadiene	7.407	237	270562	183.9538	ng	100
53) 2,4,6-Trichlorophenol	7.503	196	284740	172.5601	ng	97
54) 2,4,5-Trichlorophenol	7.535	196	307539	181.4565	ng	100
56) 2-Chloronaphthalene	7.674	162	767362	146.6236	ng	93
57) 1,4-Dimethylnaphthalene	7.958	156	590001	145.2658	ng	90
58) Dimethylnaphthalenes (...	7.958	156	590001	145.2658	ng	90
59) Diphenyl Ether	7.738	170	563247	143.9510	ng	77
60) 2-Nitroaniline	7.755	65	283887	157.8760	ng	57
61) Coumarin	7.947	146	310202	150.8125	ng	76
62) Acenaphthylene	8.032	152	1180682	148.1088	ng	99
63) Dimethylphthalate	7.915	163	916561	151.0375	ng	99
64) 2,6-Dinitrotoluene	7.963	165	200641	152.5940	ng	59
65) Acenaphthene	8.187	153	791225	146.6799	ng	96

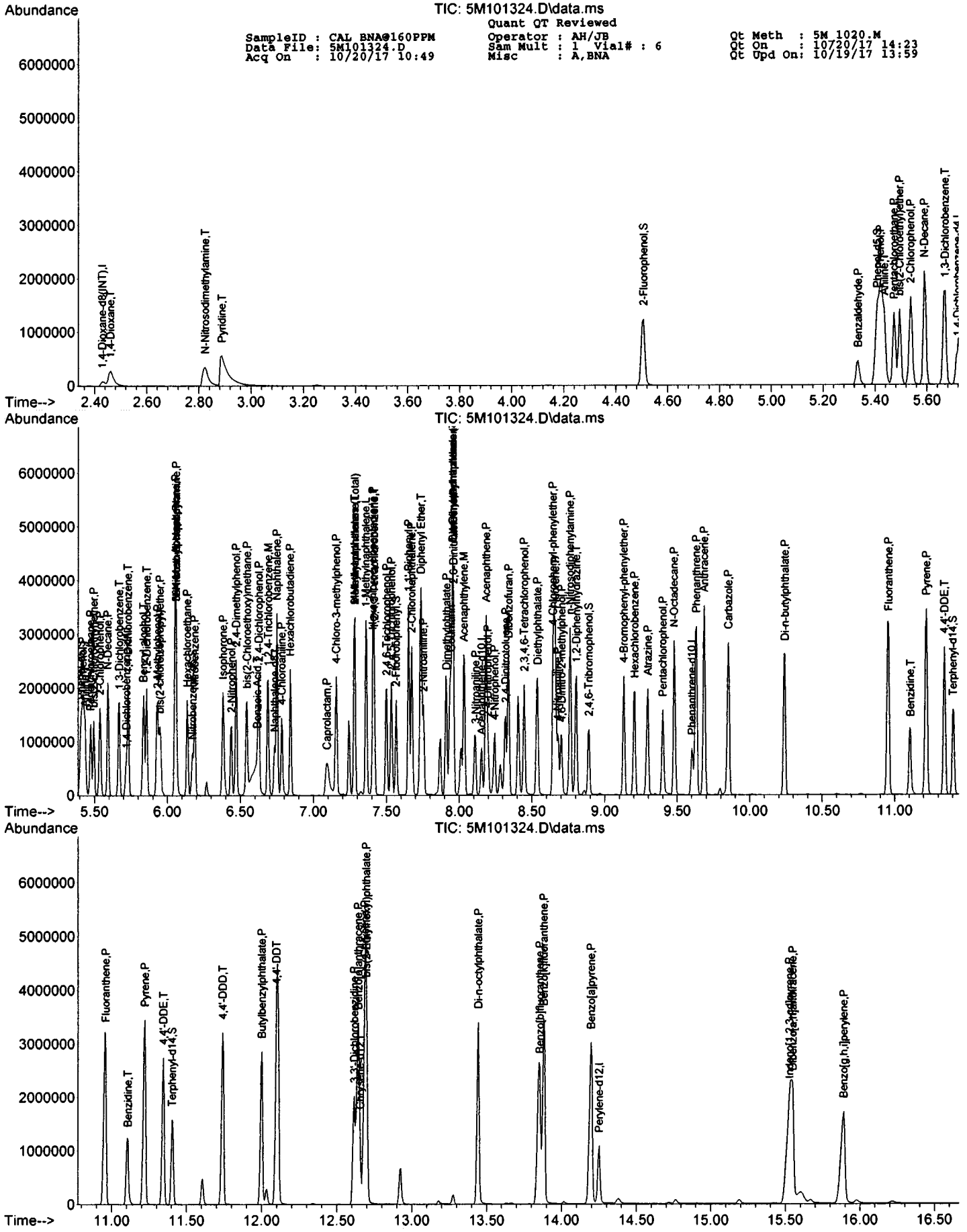
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@160PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101324.D Sam Mult : 1 Vial# : 6 Qt On : 10/20/17 14:23
Acq On : 10/20/17 10:49 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.112	138	198701	155.5204	ng	73
67)	2,4-Dinitrophenol	8.198	184	145347	154.3630	ng	39
68)	Dibenzofuran	8.342	168	1131806	140.4062	ng	87
69)	2,4-Dinitrotoluene	8.321	165	305926	162.1919	ng	57
70)	4-Nitrophenol	8.246	65	190051	156.0926	ng	88
71)	2,3,4,6-Tetrachlorophenol	8.449	232	253616	158.7866	ng	83
72)	Fluorene	8.663	166	918098	147.4676	ng	100
73)	4-Chlorophenyl-phenyle...	8.647	204	457876	147.5246	ng	84
74)	Diethylphthalate	8.540	149	937320	154.6529	ng	96
75)	4-Nitroaniline	8.679	138	276164	160.6175	ng	76
76)	Atrazine	9.298	200	279263	159.7569	ng	95
78)	4,6-Dinitro-2-methylph...	8.705	198	201900	150.8447	ng	72
79)	n-Nitrosodiphenylamine	8.764	169	813661	149.5502	ng	99
81)	1,2-Diphenylhydrazine	8.807	77	980451	153.6942	ng	76
82)	4-Bromophenyl-phenylether	9.133	248	280341	151.8259	ng	84
83)	Hexachlorobenzene	9.208	284	283220	145.5628	ng	64
84)	N-Octadecane	9.480	57	537052	146.2861	ng	76
85)	Pentachlorophenol	9.400	266	197761	155.3541	ng	96
86)	Phenanthrene	9.635	178	1429114	147.9588	ng	99
87)	Anthracene	9.688	178	1491995	153.5877	ng	99
88)	Carbazole	9.854	167	1331036	148.6269	ng	98
89)	Di-n-butylphthalate	10.244	149	1599024	163.1120	ng	97
90)	Fluoranthene	10.960	202	1628687	152.7662	ng	90
92)	Pyrene	11.222	202	1707526	153.7245	ng	87
93)	Benzidine	11.109	184	558316	113.7685	ng	85
95)	4,4'-DDE	11.345	246	372828	160.2888	ng	95
96)	4,4'-DDD	11.740	235	699558	160.2146	ng	96
97)	Butylbenzylphthalate	12.002	149	764398	151.2803	ng	68
98)	4,4'-DDT	12.098	235	621205	164.9946	ng	98
99)	3,3'-Dichlorobenzidine	12.616	252	449688	162.6082	ng	96
100)	Benzo[a]anthracene	12.643	228	1680051	151.8563	ng	99
101)	Chrysene	12.685	228	1595529	148.1157	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.696	149	1066451	168.1093	ng	94
104)	Di-n-octylphthalate	13.444	149	1812562	162.2858	ng	100
105)	Benzo[b]fluoranthene	13.855	252	1612344m	142.5539	ng	
106)	Benzo[k]fluoranthene	13.882	252	1537773	137.5809	ng	95
107)	Benzo[a]pyrene	14.197	252	1628608	152.9970	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.527	276	1541240	136.3590	ng	84
109)	Dibenzo[a,h]anthracene	15.549	278	1297706	134.0101	ng	89
110)	Benzo[g,h,i]perylene	15.891	276	1296026	131.0651	ng	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 5M101324.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@160PPM
Data File: 5M101324.D
Acq On : 10/20/17 10:49
Operator : AH/JB
Sam Mult : 1 Vial# : 6
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:23
Qt Upd On: 10/19/17 13:59
Abundance
Time-->

SampleID : CAL BNA@196PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101323.D Sam Mult : 1 Vial# : 5 Qt On : 10/20/17 14:23
Acq On : 10/20/17 10:26 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	32780	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.719	152	78163	40.00	ng	0.00
31) Naphthalene-d8	6.739	136	332760	40.00	ng	0.01
50) Acenaphthene-d10	8.160	164	217665	40.00	ng	0.01
77) Phenanthrene-d10	9.608	188	356516	40.00	ng	0.01
91) Chrysene-d12	12.659	240	412279	40.00	ng	0.02
103) Perylene-d12	14.256	264	375753	40.00	ng	0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.506	112	502688	241.85	ng	0.00
Spiked Amount 100.000			Recovery = 241.85%			
16) Phenol-d5	5.414	99	640790	243.25	ng	0.02
Spiked Amount 100.000			Recovery = 243.25%			
32) Nitrobenzene-d5	6.178	128	132288	106.38	ng	0.01
Spiked Amount 50.000			Recovery = 212.76%			
55) 2-Fluorobiphenyl	7.573	172	633878	94.23	ng	0.00
Spiked Amount 50.000			Recovery = 188.46%			
80) 2,4,6-Tribromophenol	8.898	330	172769	209.18	ng	0.02
Spiked Amount 100.000			Recovery = 209.18%			
94) Terphenyl-d14	11.414	244	680869	104.25	ng	0.02
Spiked Amount 50.000			Recovery = 208.50%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.460	88	182723	201.4442	ng	94
9) Pyridine	2.882	79	568542	232.7205	ng	73
10) N-Nitrosodimethylamine	2.823	74	320153	240.0401	ng	74
12) Benzaldehyde	5.334	77	92207	86.6251	ng	79
13) Aniline	5.436	93	796153	226.6620	ng	47
14) Pentachloroethane	5.479	117	167600	246.2881	ng	79
15) bis(2-Chloroethyl)ether	5.500	93	519325	230.6416	ng	81
17) Phenol	5.425	94	718714	239.8891	ng	96
18) 2-Chlorophenol	5.543	128	570298	249.5283	ng	80
19) N-Decane	5.596	57	497076	216.6455	ng	83
20) 1,3-Dichlorobenzene	5.671	146	553739	232.6110	ng	99
22) 1,4-Dichlorobenzene	5.735	146	565842	194.5040	ng	96
23) 1,2-Dichlorobenzene	5.858	146	547717	198.2321	ng	97
24) Benzyl alcohol	5.842	108	368144	211.9324	ng	74
25) bis(2-chloroisopropyl)...	5.954	45	710745	186.2678	ng	98
26) 2-Methylphenol	5.933	108	513460	201.7565	ng	97
27) Acetophenone	6.056	105	720536	190.2584	ng	67
28) Hexachloroethane	6.141	117	220428	204.6692	ng	90
29) N-Nitroso-di-n-propyla...	6.061	70	355915	187.6402	ng	64
30) 3&4-Methylphenol	6.066	108	480500	185.5719	ng	98
33) Nitrobenzene	6.194	77	569331	199.1298	ng	76
34) Isophorone	6.387	82	1074027	206.0711	ng	85
35) 2-Nitrophenol	6.440	139	310701	217.3592	ng	87
36) 2,4-Dimethylphenol	6.478	107	564046	200.2490	ng	95
37) Benzoic Acid	6.632	105	675863	190.5704	ng	86
38) bis(2-Chloroethoxy)met...	6.547	93	646059	195.2969	ng	98
39) 2,4-Dichlorophenol	6.632	162	467117	201.1384	ng	88
40) 1,2,4-Trichlorobenzene	6.691	180	497010	188.5676	ng	97
41) Naphthalene	6.755	128	1625161	202.0997	ng	99
42) 4-Chloroaniline	6.787	127	444116m	183.4429	ng	
43) Hexachlorobutadiene	6.846	225	290813	189.4879	ng	96
44) Caprolactam	7.113	113	169423	188.7265	ng	71
45) 4-Chloro-3-methylphenol	7.161	107	518659	212.0183	ng	81
46) 2-Methylnaphthalene	7.284	142	1091965	188.1105	ng	98
47) 1-Methylnaphthalene	7.364	142	1060513	189.8710	ng	93
48) Methylnaphthalenes (To...	7.284	142	2137810m	374.4877	ng	
49) 1,1'-Biphenyl	7.658	154	1320974	186.5965	ng	95
51) 1,2,4,5-Tetrachloroben...	7.423	216	568155	187.6561	ng	97
52) Hexachlorocyclopentadiene	7.412	237	330142	206.0432	ng	99
53) 2,4,6-Trichlorophenol	7.509	196	368273	204.8695	ng	99
54) 2,4,5-Trichlorophenol	7.541	196	402333	217.9082	ng	99
56) 2-Chloronaphthalene	7.680	162	1073560	188.2979	ng	93
57) 1,4-Dimethylnaphthalene	7.963	156	776132	175.4130	ng	91
58) Dimethylnaphthalenes (...	7.963	156	776132	175.4130	ng	91
59) Diphenyl Ether	7.744	170	763769	179.1816	ng	77
60) 2-Nitroaniline	7.760	65	388530	198.3402	ng	58
61) Coumarin	7.957	146	416886	186.0482	ng	76
62) Acenaphthylene	8.043	152	1608084	185.1707	ng	99
63) Dimethylphthalate	7.920	163	1257891	190.2751	ng	98
64) 2,6-Dinitrotoluene	7.968	165	266266	185.8870	ng	67
65) Acenaphthene	8.192	153	1058638	180.1497	ng	94

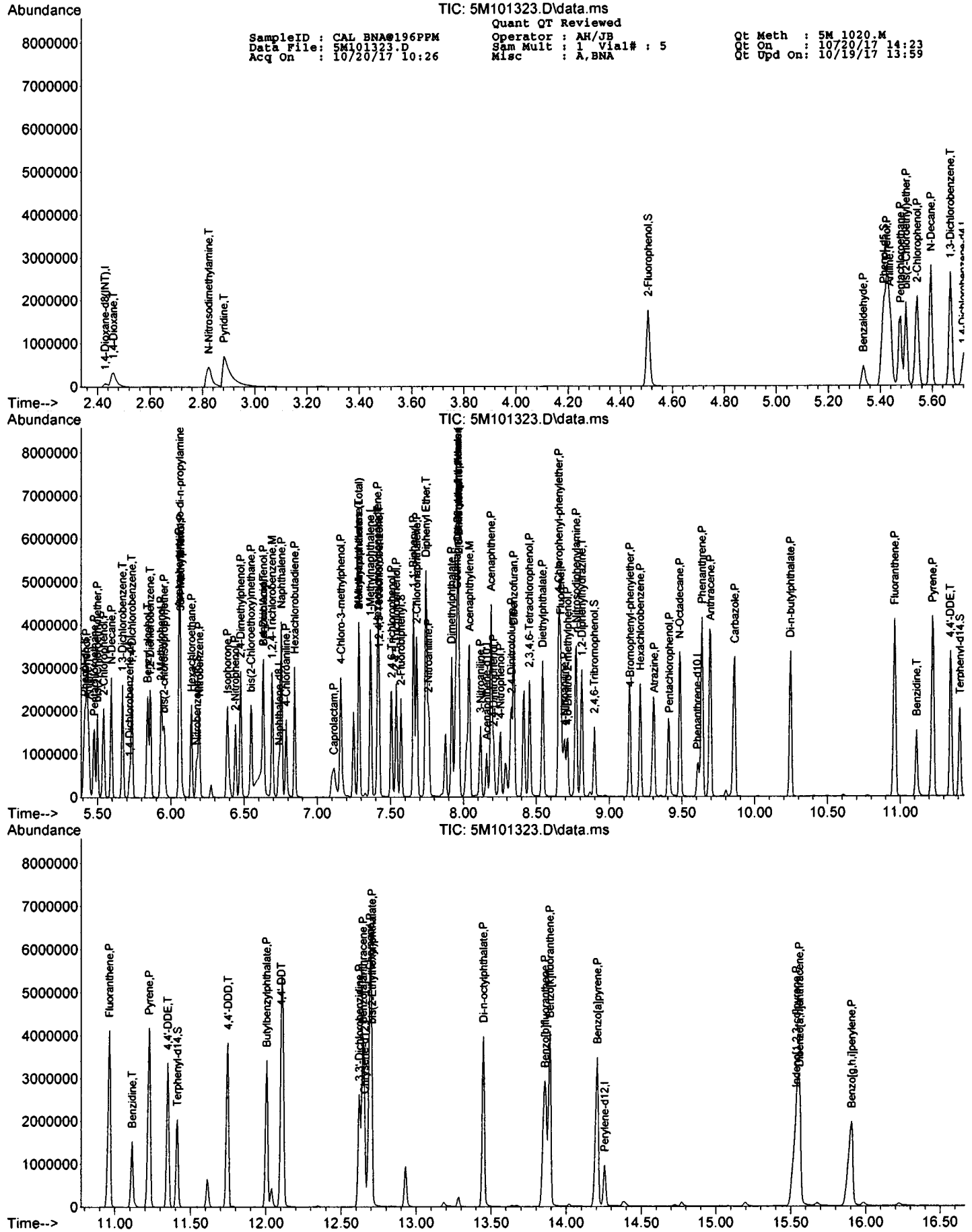
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@196PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101323.D Sam Mult : 1 Vial# : 5 Qt On : 10/20/17 14:23
Acq On : 10/20/17 10:26 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.118	138	276812	198.8785	ng	75
67)	2,4-Dinitrophenol	8.208	184	204228	187.6675	ng	32
68)	Dibenzofuran	8.347	168	1527004	173.8882	ng	87
69)	2,4-Dinitrotoluene	8.331	165	432079	210.2769	ng	56
70)	4-Nitrophenol	8.257	65	268696	198.0045	ng	86
71)	2,3,4,6-Tetrachlorophenol	8.454	232	354877	203.9533	ng	83
72)	Fluorene	8.668	166	1159290	170.9288	ng	100
73)	4-Chlorophenyl-phenyle...	8.657	204	591183	174.8453	ng	81
74)	Diethylphthalate	8.545	149	1272995	192.8024	ng	96
75)	4-Nitroaniline	8.695	138	351691	187.7598	ng	75
76)	Atrazine	9.309	200	343374	180.3139	ng	95
78)	4,6-Dinitro-2-methylph...	8.716	198	253025	184.6828	ng	73
79)	n-Nitrosodiphenylamine	8.775	169	1011731	189.3316	ng	99
81)	1,2-Diphenylhydrazine	8.812	77	1239512	197.8321	ng	79
82)	4-Bromophenyl-phenylether	9.143	248	349890	192.9324	ng	78
83)	Hexachlorobenzene	9.213	284	357552	187.1028	ng	68
84)	N-Octadecane	9.485	57	644229	178.6659	ng	75
85)	Pentachlorophenol	9.410	266	248986	190.2643	ng	96
86)	Phenanthrene	9.640	178	1759251	185.4454	ng	100
87)	Anthracene	9.699	178	1826982	191.4864	ng	99
88)	Carbazole	9.865	167	1691135	192.2651	ng	98
89)	Di-n-butylphthalate	10.249	149	2009705	208.7265	ng	98
90)	Fluoranthene	10.965	202	2049666	195.7434	ng	92
92)	Pyrene	11.227	202	2165807	200.3928	ng	89
93)	Benzidine	11.115	184	628580	133.9947	ng	86
95)	4,4'-DDE	11.350	246	470116	207.7239	ng	94
96)	4,4'-DDD	11.750	235	886421	208.6436	ng	96
97)	Butylbenzylphthalate	12.007	149	967319	189.9856	ng	73
98)	4,4'-DDT	12.103	235	772157	210.7789	ng	98
99)	3,3'-Dichlorobenzidine	12.621	252	546501	202.9174	ng	97
100)	Benzo[a]anthracene	12.648	228	2088410	194.0050	ng	99
101)	Chrysene	12.696	228	1962605	187.2475	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.707	149	1281709	207.6476	ng	91
104)	Di-n-octylphthalate	13.449	149	2217107	221.5836	ng	100
105)	Benzo[b]fluoranthene	13.861	252	2107860	208.0302	ng	94
106)	Benzo[k]fluoranthene	13.893	252	1781568m	177.9228	ng	
107)	Benzo[a]pyrene	14.208	252	1893303	198.5408	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.538	276	1960738	193.6405	ng	86
109)	Dibenzo[a,h]anthracene	15.559	278	1657272	191.0374	ng	89
110)	Benzo[g,h,i]perylene	15.907	276	1630392	184.0469	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 5M101323.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@196PPM
Data File: 5M101323.D
Acq On : 10/20/17 10:26
Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:23
Qt Upd On: 10/19/17 13:59
1,4-Dioxane-d8(INT),I
1,4-Dioxane,I
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene,T
Time-->
Abundance
TIC: 5M101323.D\data.ms
Caprolactam,P
4-Chloro-3-methylphenol,P
Diphenyl Ether,T
Acenaphthylene,M
Acenaphthene,P
Diethylphthalate,P
Hexachlorobutadiene,P
Naphthalene,P
Isophorone,P
2-Nitrophenol,P
2,4-Dimethylphenol,P
bis(2-Chloroethoxy)methane,P
2,4-Trichlorobenzene,M
4-Chloroaniline,P
Hexachlorocyclopentadiene,P
2-Nitroaniline,P
Dimethylphthalate,P
2,3,4,6-Tetrachlorophenol,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
2,4,6-Tribromophenol,S
Time-->
Abundance
TIC: 5M101323.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[b]fluoranthene,P
Benzo[k]fluoranthene,P
Benzo[a]pyrene,P
Perylene-d12,I
Indeno[1,2,3-cd]pyrene,P
Dibenz[a,h]anthracene,P
Benzo[g,h,i]perylene,P
Time-->

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101328.D Sam Mult : 1 Vial# : 10 Qt On : 10/20/17 14:24
Acq On : 10/20/17 12:20 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.433	96	35960	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	72588	40.00	ng	0.00
31) Naphthalene-d8	6.729	136	298763	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	188904	40.00	ng	0.00
77) Phenanthrene-d10	9.597	188	376428	40.00	ng	0.00
91) Chrysene-d12	12.637	240	422689	40.00	ng	0.00
103) Perylene-d12	14.240	264	397888	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	0.000	128	0	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
55) 2-Fluorobiphenyl	0.000	172	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	0.000	244	0d	0.00	ng	
Spiked Amount 50.000			Recovery =	0.00%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.476	88	766m	0.8533	ng	
9) Pyridine	0.000		0	N.D.		
10) N-Nitrosodimethylamine	0.000		0	N.D.		
12) Benzaldehyde	0.000		0	N.D. d		
13) Aniline	5.430	93	1297	0.4247	ng	42
14) Pentachloroethane	0.000		0	N.D. d		
15) bis(2-Chloroethyl)ether	5.489	93	1479	0.5988	ng	87
17) Phenol	0.000		0	N.D. d		
18) 2-Chlorophenol	0.000		0	N.D. d		
19) N-Decane	0.000		0	N.D. d		
20) 1,3-Dichlorobenzene	0.000		0	N.D. d		
22) 1,4-Dichlorobenzene	0.000		0	N.D. d		
23) 1,2-Dichlorobenzene	0.000		0	N.D. d		
24) Benzyl alcohol	0.000		0	N.D. d		
25) bis(2-chloroisopropyl)...	0.000		0	N.D. d		
26) 2-Methylphenol	5.927	108	1314	0.5560	ng	96
27) Acetophenone	0.000		0	N.D. d		
28) Hexachloroethane	0.000		0	N.D. d		
29) N-Nitroso-di-n-propyla...	6.045	70	1071	0.6080	ng	77
30) 3&4-Methylphenol	6.050	108	1381	0.5743	ng	97
33) Nitrobenzene	0.000		0	N.D. d		
34) Isophorone	0.000		0	N.D. d		
35) 2-Nitrophenol	0.000		0	N.D. d		
36) 2,4-Dimethylphenol	6.467	107	1501	0.5935	ng	89
37) Benzoic Acid	0.000		0	N.D. d		
38) bis(2-Chloroethoxy)met...	0.000		0	N.D. d		
39) 2,4-Dichlorophenol	6.622	162	997	0.4782	ng	88
40) 1,2,4-Trichlorobenzene	0.000		0	N.D. d		
41) Naphthalene	6.745	128	5306	0.7411	ng	98
42) 4-Chloroaniline	6.782	127	1187	0.5461	ng	87
43) Hexachlorobutadiene	0.000		0	N.D. d		
44) Caprolactam	0.000		0	N.D.		
45) 4-Chloro-3-methylphenol	0.000		0	N.D. d		
46) 2-Methylnaphthalene	0.000		0	N.D. d		
47) 1-Methylnaphthalene	0.000		0	N.D. d		
48) Methylnaphthalenes (To...	0.000		0	N.D. d		
49) 1,1'-Biphenyl	0.000		0	N.D. d		
51) 1,2,4,5-Tetrachloroben...	0.000		0	N.D. d		
52) Hexachlorocyclopentadiene	0.000		0	N.D.		
53) 2,4,6-Trichlorophenol	0.000		0	N.D. d		
54) 2,4,5-Trichlorophenol	0.000		0	N.D. d		
56) 2-Chloronaphthalene	0.000		0	N.D. d		
57) 1,4-Dimethylnaphthalene	0.000		0	N.D. d		
58) Dimethylnaphthalenes (...	0.000		0	N.D. d		
59) Diphenyl Ether	0.000		0	N.D. d		
60) 2-Nitroaniline	0.000		0	N.D. d		
61) Coumarin	0.000		0	N.D. d		
62) Acenaphthylene	0.000		0	N.D. d		
63) Dimethylphthalate	0.000		0	N.D. d		
64) 2,6-Dinitrotoluene	0.000		0	N.D. d		
65) Acenaphthene	0.000		0	N.D. d		

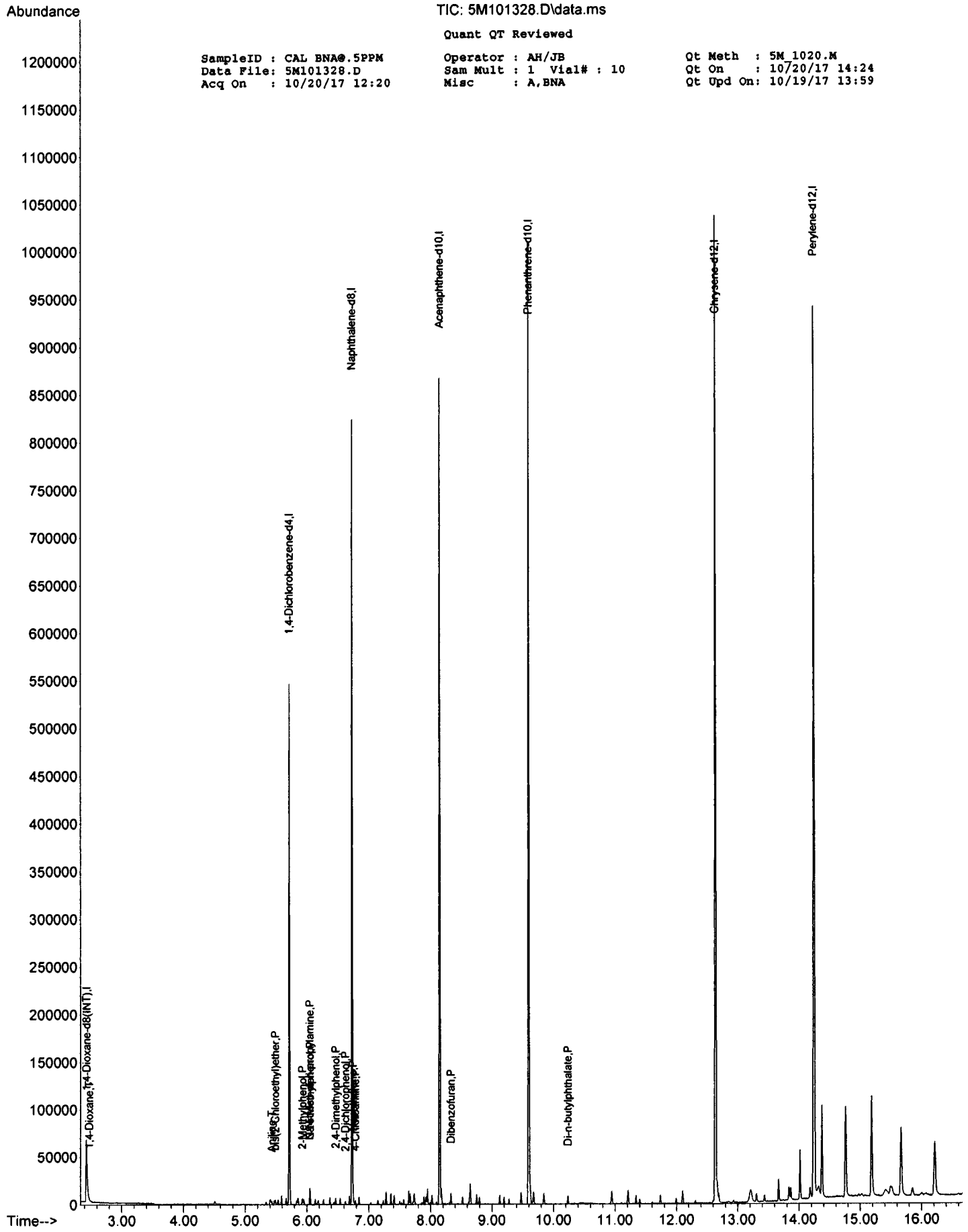
Quantitation Report (QT Reviewed)

SampleID : CAL BNA@.5PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101328.D Sam Mult : 1 Vial# : 10 Qt On : 10/20/17 14:24
Acq On : 10/20/17 12:20 Misc : A,BNA Qt Upd On: 10/19/17 13:59

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	0.000		0	N.D.		
67)	2,4-Dinitrophenol	0.000		0	N.D.		
68)	Dibenzofuran	8.331	168	4983	0.6538	ng	84
69)	2,4-Dinitrotoluene	0.000		0	N.D. d		
70)	4-Nitrophenol	0.000		0	N.D. d		
71)	2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
72)	Fluorene	0.000		0	N.D. d		
73)	4-Chlorophenyl-phenyle...	0.000		0	N.D. d		
74)	Diethylphthalate	0.000		0	N.D. d		
75)	4-Nitroaniline	0.000		0	N.D. d		
76)	Atrazine	0.000		0	N.D. d		
78)	4,6-Dinitro-2-methylph...	0.000		0	N.D.		
79)	n-Nitrosodiphenylamine	0.000		0	N.D. d		
81)	1,2-Diphenylhydrazine	0.000		0	N.D. d		
82)	4-Bromophenyl-phenylether	0.000		0	N.D. d		
83)	Hexachlorobenzene	0.000		0	N.D. d		
84)	N-Octadecane	0.000		0	N.D. d		
85)	Pentachlorophenol	0.000		0	N.D.		
86)	Phenanthrene	0.000		0	N.D. d		
87)	Anthracene	0.000		0	N.D. d		
88)	Carbazole	0.000		0	N.D. d		
89)	Di-n-butylphthalate	10.233	149	5100	0.5017	ng	96
90)	Fluoranthene	0.000		0	N.D. d		
92)	Pyrene	0.000		0	N.D. d		
93)	Benzidine	0.000		0	N.D. d		
95)	4,4'-DDE	0.000		0	N.D. d		
96)	4,4'-DDD	0.000		0	N.D. d		
97)	Butylbenzylphthalate	0.000		0	N.D. d		
98)	4,4'-DDT	0.000		0	N.D. d		
99)	3,3'-Dichlorobenzidine	0.000		0	N.D. d		
100)	Benzo[a]anthracene	0.000		0	N.D. d		
101)	Chrysene	0.000		0	N.D. d		
102)	bis(2-Ethylhexyl)phtha...	0.000		0	N.D. d		
104)	Di-n-octylphthalate	0.000		0	N.D. d		
105)	Benzo[b]fluoranthene	0.000		0	N.D. d		
106)	Benzo[k]fluoranthene	0.000		0	N.D. d		
107)	Benzo[a]pyrene	0.000		0	N.D. d		
108)	Indeno[1,2,3-cd]pyrene	0.000		0	N.D. d		
109)	Dibenzo[a,h]anthracene	0.000		0	N.D. d		
110)	Benzo[g,h,i]perylene	0.000		0	N.D. d		

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 5M101328.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@.5PPM
Data File: 5M101328.D
Acq On : 10/20/17 12:20
Operator : AH/JB
Sam Mult : 1 Vial# : 10
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 10/20/17 14:24
Qt Upd On: 10/19/17 13:59
1,4-Dioxane-d8(INT),I
1,4-Dioxane,I
1,4-Dichlorobenzene-d4,I
2-Methylphenol,P
2,4-Dimethylphenol,P
2,4-Dichlorophenol,P
Naphthalene-d8,I
Acenaphthene-d10,I
Dibenzofuran,P
Phenanthrene-d10,I
Di-n-butylphthalate,P
Chrysene-d12,I
Perylene-d12,I
Time-->

TxtDfile: 10M65436.D ICV FORM Date/Time: 10/11/17 16:35 7111018 0228

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1.4-Dioxane	1	0		43.7172	50	87		70	130
Pyridine	1	0		47.38	50	95		50	150
N-Nitrosodimethylamine	1	0		52.217	50	104		70	130
Benzaldehyde	1	0		90.5111	50	181	*	50	150
Aniline	1	0		52.7146	50	105		50	150
Pentachloroethane	1	0		49.3917	50	99		70	130
bis(2-Chloroethyl)ether	1	0		50.4559	50	101		70	130
Phenol	1	0		49.8264	50	100		70	130
2-Chlorophenol	1	0		49.2724	50	99		70	130
1.3-Dichlorobenzene	1	0		49.5028	50	99		70	130
1.4-Dichlorobenzene	1	0		50.3597	50	101		70	130
1.2-Dichlorobenzene	1	0		49.3381	50	99		70	130
Benzyl alcohol	1	0		48.6667	50	97		70	130
bis(2-chloroisopropyl)ether	1	0		47.5735	50	95		70	130
2-Methylphenol	1	0		47.3835	50	95		70	130
Acetophenone	1	0		45.6012	50	91		70	130
Hexachloroethane	1	0		51.4943	50	103		70	130
N-Nitroso-di-n-propylamine	1	0		49.1893	50	98		70	130
3&4-Methylphenol	1	0		48.2674	50	97		70	130
Nitrobenzene	1	0		50.1715	50	100		70	130
Isophorone	1	0		49.3005	50	99		70	130
2-Nitrophenol	1	0		50.3195	50	101		70	130
2.4-Dimethylphenol	1	0		47.2167	50	94		70	130
Benzoic Acid	1	0		25.6383	50	51	*	70	130
bis(2-Chloroethoxy)methane	1	0		48.5752	50	97		70	130
2.4-Dichlorophenol	1	0		49.6267	50	99		70	130
1.2.4-Trichlorobenzene	1	0		48.973	50	98		70	130
Naphthalene	1	0		51.2557	50	103		70	130
4-Chloroaniline	1	0		56.0598	50	112		50	150
Hexachlorobutadiene	1	0		46.6375	50	93		70	130
Caprolactam	1	0		45.3395	50	91		70	130
4-Chloro-3-methylphenol	1	0		48.7635	50	98		70	130
2-Methylnaphthalene	1	0		47.828	50	96		70	130
1-Methylnaphthalene	1	0		49.996	50	100		70	130
1.1'-Biphenyl	1	0		46.6503	50	93		70	130
1.2.4.5-Tetrachlorobenzene	1	0		46.7669	50	94		70	130
Hexachlorocyclopentadiene	1	0		50.0254	50	100		70	130
2.4.6-Trichlorophenol	1	0		50.3901	50	101		70	130
2.4.5-Trichlorophenol	1	0		51.1827	50	102		70	130
2-Chloronaphthalene	1	0		52.7628	50	106		70	130
1.4-Dimethylnaphthalene	1	0		50.8776	50	102		70	130
Diphenyl Ether	1	0		46.4744	50	93		70	130
2-Nitroaniline	1	0		49.3285	50	99		70	130
Acenaphthylene	1	0		53.2226	50	106		70	130
Dimethylphthalate	1	0		49.205	50	98		70	130
2.6-Dinitrotoluene	1	0		48.6876	50	97		70	130
Acenaphthene	1	0		50.3449	50	101		70	130
3-Nitroaniline	1	0		50.8136	50	102		70	130
2.4-Dinitrophenol	1	0		41.7854	50	84		70	130
Dibenzofuran	1	0		47.6837	50	95		70	130
2.4-Dinitrotoluene	1	0		49.363	50	99		70	130
4-Nitrophenol	1	0		49.0783	50	98		70	130
2.3.4.6-Tetrachlorophenol	1	0		47.5748	50	95		70	130
Fluorene	1	0		50.4402	50	101		70	130
4-Chlorophenyl-phenylether	1	0		49.2752	50	99		70	130
Diethylphthalate	1	0		51.0159	50	102		70	130
4-Nitroaniline	1	0		49.857	50	100		70	130
Atrazine	1	0		53.1077	50	106		70	130
4.6-Dinitro-2-methylphenol	1	0		47.0947	50	94		70	130
n-Nitrosodiphenylamine	1	0		41.7962	50	84		70	130
1.2-Diphenylhydrazine	1	0		53.4565	50	107		70	130
4-Bromophenyl-phenylether	1	0		49.1592	50	98		70	130
Hexachlorobenzene	1	0		50.4791	50	101		70	130
Pentachlorophenol	1	0		52.7244	50	105		70	130
Phenanthrene	1	0		49.0523	50	98		70	130
Anthracene	1	0		48.6537	50	97		70	130
Carbazole	1	0		49.5291	50	99		70	130
Di-n-butylphthalate	1	0		51.3394	50	103		70	130
Fluoranthene	1	0		49.9233	50	100		70	130
Pyrene	1	0		50.4718	50	101		70	130
Benzidine	1	0		42.9597	50	86		50	150
Butylbenzylphthalate	1	0		48.3441	50	97		70	130
3.3'-Dichlorobenzidine	1	0		59.338	50	119		50	150
Benzo[a]anthracene	1	0		49.9	50	100		70	130
Chrysene	1	0		50.706	50	101		70	130
bis(2-Ethylhexyl)phthalate	1	0		52.4518	50	105		70	130
Di-n-octylphthalate	1	0		51.3731	50	103		70	130
Benzo[b]fluoranthene	1	0		50.4876	50	101		70	130
Benzo[k]fluoranthene	1	0		50.4418	50	101		70	130
Benzo[a]pyrene	1	0		51.6674	50	103		70	130
Indeno[1.2.3-cd]pyrene	1	0		51.6293	50	103		70	130
Dibenzo[a.h]anthracene	1	0		50.2399	50	100		70	130
Benzo[g.h.i]perylene	1	0		47.8893	50	96		70	130

TxtDfile: 5M101330.D ICV FORM Date/Time: 10/20/17 13:06 7111018 0229

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1.4-Dioxane	1	0		43.0051	50	86		70	130
Pyridine	1	0		46.529	50	93		50	150
N-Nitrosodimethylamine	1	0		55.2446	50	110		70	130
Benzaldehyde	1	0		93.4996	50	187	*	50	150
Aniline	1	0		57.5367	50	115		50	150
Pentachloroethane	1	0		48.0903	50	96		70	130
bis(2-Chloroethyl)ether	1	0		48.072	50	96		70	130
Phenol	1	0		49.453	50	99		70	130
2-Chlorophenol	1	0		49.1908	50	98		70	130
1.3-Dichlorobenzene	1	0		50.265	50	101		70	130
1.4-Dichlorobenzene	1	0		49.8073	50	100		70	130
1.2-Dichlorobenzene	1	0		50.3806	50	101		70	130
Benzyl alcohol	1	0		51.4947	50	103		70	130
bis(2-chloroisopropyl)ether	1	0		49.6842	50	99		70	130
2-Methylphenol	1	0		49.1766	50	98		70	130
Acetophenone	1	0		47.8798	50	96		70	130
Hexachloroethane	1	0		50.3214	50	101		70	130
N-Nitroso-di-n-propylamine	1	0		51.4425	50	103		70	130
3&4-Methylphenol	1	0		50.3343	50	101		70	130
Nitrobenzene	1	0		52.5611	50	105		70	130
Isophorone	1	0		53.0035	50	106		70	130
2-Nitrophenol	1	0		53.6969	50	107		70	130
2.4-Dimethylphenol	1	0		48.3147	50	97		70	130
Benzoic Acid	1	0		22.6781	50	45	*	70	130
bis(2-Chloroethoxy)methane	1	0		50.6532	50	101		70	130
2.4-Dichlorophenol	1	0		51.7025	50	103		70	130
1.2.4-Trichlorobenzene	1	0		51.1631	50	102		70	130
Naphthalene	1	0		51.369	50	103		70	130
4-Chloroaniline	1	0		58.3131	50	117		50	150
Hexachlorobutadiene	1	0		49.5117	50	99		70	130
Caprolactam	1	0		52.6849	50	105		70	130
4-Chloro-3-methylphenol	1	0		51.6178	50	103		70	130
2-Methylnaphthalene	1	0		48.7198	50	97		70	130
1-Methylnaphthalene	1	0		53.3711	50	107		70	130
1.1'-Biphenyl	1	0		54.2426	50	108		70	130
1.2.4.5-Tetrachlorobenzene	1	0		45.1917	50	90		70	130
Hexachlorocyclopentadiene	1	0		50.25	50	100		70	130
2.4.6-Trichlorophenol	1	0		51.9571	50	104		70	130
2.4.5-Trichlorophenol	1	0		52.9385	50	106		70	130
2-Chloronaphthalene	1	0		50.8633	50	102		70	130
1.4-Dimethylnaphthalene	1	0		52.2619	50	105		70	130
Diphenyl Ether	1	0		48.0807	50	96		70	130
2-Nitroaniline	1	0		52.7132	50	105		70	130
Acenaphthylene	1	0		53.1092	50	106		70	130
Dimethylphthalate	1	0		51.4895	50	103		70	130
2.6-Dinitrotoluene	1	0		51.9303	50	104		70	130
Acenaphthene	1	0		51.1823	50	102		70	130
3-Nitroaniline	1	0		57.1057	50	114		70	130
2.4-Dinitrophenol	1	0		42.8039	50	86		70	130
Dibenzofuran	1	0		50.6547	50	101		70	130
2.4-Dinitrotoluene	1	0		50.1367	50	100		70	130
4-Nitrophenol	1	0		51.4355	50	103		70	130
2.3.4.6-Tetrachlorophenol	1	0		48.4674	50	97		70	130
Fluorene	1	0		50.6165	50	101		70	130
4-Chlorophenyl-phenylether	1	0		49.904	50	100		70	130
Diethylphthalate	1	0		50.7479	50	101		70	130
4-Nitroaniline	1	0		52.2609	50	105		70	130
Atrazine	1	0		57.1666	50	114		70	130
4.6-Dinitro-2-methylphenol	1	0		44.4154	50	89		70	130
n-Nitrosodiphenylamine	1	0		42.3715	50	85		70	130
1.2-Diphenylhydrazine	1	0		48.531	50	97		70	130
4-Bromophenyl-phenylether	1	0		51.0053	50	102		70	130
Hexachlorobenzene	1	0		50.5191	50	101		70	130
Pentachlorophenol	1	0		49.3806	50	99		70	130
Phenanthrene	1	0		48.9469	50	98		70	130
Anthracene	1	0		50.3363	50	101		70	130
Carbazole	1	0		51.079	50	102		70	130
Di-n-butylphthalate	1	0		48.0013	50	96		70	130
Fluoranthene	1	0		44.684	50	89		70	130
Pyrene	1	0		50.3121	50	101		70	130
Benzidine	1	0		35.8181	50	72		50	150
Butylbenzylphthalate	1	0		51.1944	50	102		70	130
3.3'-Dichlorobenzidine	1	0		57.3235	50	115		50	150
Benzo[a]anthracene	1	0		49.9868	50	100		70	130
Chrysene	1	0		51.383	50	103		70	130
bis(2-Ethylhexyl)phthalate	1	0		51.5532	50	103		70	130
Di-n-octylphthalate	1	0		55.9078	50	112		70	130
Benzo[b]fluoranthene	1	0		52.7984	50	106		70	130
Benzo[k]fluoranthene	1	0		54.3197	50	109		70	130
Benzo[a]pyrene	1	0		53.8802	50	108		70	130
Indeno[1.2.3-cd]pyrene	1	0		53.2589	50	107		70	130
Dibenzo[a.h]anthracene	1	0		52.8958	50	106		70	130
Benzo[g.h.i]perylene	1	0		50.1706	50	100		70	130

TxtDfile: 7M87279.D ICV FORM Date/Time: 10/19/17 13:58 **7111018 0230**

Compound	bytCol Num:	bytMr Num:	Type	sngConc:	Exp Conc	Rec	Flag	sngLoLim:	sngHiLim:
1.4-Dioxane	1	0		44.4011	50	89		70	130
Pyridine	1	0		47.3736	50	95		50	150
N-Nitrosodimethylamine	1	0		51.7775	50	104		70	130
Benzaldehyde	1	0		91.0654	50	182	*	50	150
Aniline	1	0		57.3656	50	115		50	150
Pentachloroethane	1	0		52.4563	50	105		70	130
bis(2-Chloroethyl)ether	1	0		50.0679	50	100		70	130
Phenol	1	0		52.502	50	105		70	130
2-Chlorophenol	1	0		52.5996	50	105		70	130
1.3-Dichlorobenzene	1	0		52.5426	50	105		70	130
1.4-Dichlorobenzene	1	0		51.6819	50	103		70	130
1.2-Dichlorobenzene	1	0		50.1196	50	100		70	130
Benzyl alcohol	1	0		50.3082	50	101		70	130
bis(2-chloroisopropyl)ether	1	0		49.579	50	99		70	130
2-Methylphenol	1	0		50.2038	50	100		70	130
Acetophenone	1	0		48.2599	50	97		70	130
Hexachloroethane	1	0		50.0922	50	100		70	130
N-Nitroso-di-n-propylamine	1	0		53.0977	50	106		70	130
3&4-Methylphenol	1	0		53.155	50	106		70	130
Nitrobenzene	1	0		51.3437	50	103		70	130
Isophorone	1	0		52.519	50	105		70	130
2-Nitrophenol	1	0		49.4382	50	99		70	130
2.4-Dimethylphenol	1	0		49.6794	50	99		70	130
Benzoic Acid	1	0		22.6396	50	45	*	70	130
bis(2-Chloroethoxy)methane	1	0		50.2393	50	100		70	130
2.4-Dichlorophenol	1	0		52.625	50	105		70	130
1.2.4-Trichlorobenzene	1	0		50.1363	50	100		70	130
Naphthalene	1	0		54.1132	50	108		70	130
4-Chloroaniline	1	0		61.9251	50	124		50	150
Hexachlorobutadiene	1	0		48.7148	50	97		70	130
Caprolactam	1	0		48.4595	50	97		70	130
4-Chloro-3-methylphenol	1	0		50.9185	50	102		70	130
2-Methylnaphthalene	1	0		48.5628	50	97		70	130
1-Methylnaphthalene	1	0		49.7393	50	99		70	130
1.1'-Biphenyl	1	0		48.8188	50	98		70	130
1.2.4.5-Tetrachlorobenzene	1	0		48.1464	50	96		70	130
Hexachlorocyclopentadiene	1	0		50.1792	50	100		70	130
2.4.6-Trichlorophenol	1	0		50.0302	50	100		70	130
2.4.5-Trichlorophenol	1	0		57.1314	50	114		70	130
2-Chloronaphthalene	1	0		52.6385	50	105		70	130
1.4-Dimethylnaphthalene	1	0		52.3704	50	105		70	130
Diphenyl Ether	1	0		48.1386	50	96		70	130
2-Nitroaniline	1	0		52.7303	50	105		70	130
Acenaphthylene	1	0		54.2887	50	109		70	130
Dimethylphthalate	1	0		51.4887	50	103		70	130
2.6-Dinitrotoluene	1	0		51.9505	50	104		70	130
Acenaphthene	1	0		51.2993	50	103		70	130
3-Nitroaniline	1	0		56.6324	50	113		70	130
2.4-Dinitrophenol	1	0		42.939	50	86		70	130
Dibenzofuran	1	0		52.5557	50	105		70	130
2.4-Dinitrotoluene	1	0		50.1222	50	100		70	130
4-Nitrophenol	1	0		48.5782	50	97		70	130
2.3.4.6-Tetrachlorophenol	1	0		47.8989	50	96		70	130
Fluorene	1	0		52.9135	50	106		70	130
4-Chlorophenyl-phenylether	1	0		52.442	50	105		70	130
Diethylphthalate	1	0		53.6157	50	107		70	130
4-Nitroaniline	1	0		52.0252	50	104		70	130
Atrazine	1	0		56.3692	50	113		70	130
4.6-Dinitro-2-methylphenol	1	0		48.4866	50	97		70	130
n-Nitrosodiphenylamine	1	0		44.5361	50	89		70	130
1.2-Diphenylhydrazine	1	0		51.6219	50	103		70	130
4-Bromophenyl-phenylether	1	0		49.8707	50	100		70	130
Hexachlorobenzene	1	0		50.8145	50	102		70	130
Pentachlorophenol	1	0		51.3011	50	103		70	130
Phenanthrene	1	0		49.9099	50	100		70	130
Anthracene	1	0		50.7377	50	101		70	130
Carbazole	1	0		52.6392	50	105		70	130
Di-n-butylphthalate	1	0		55.965	50	112		70	130
Fluoranthene	1	0		51.7505	50	104		70	130
Pyrene	1	0		49.9719	50	100		70	130
Benzidine	1	0		36.1465	50	72		50	150
Butylbenzylphthalate	1	0		51.7739	50	104		70	130
3.3'-Dichlorobenzidine	1	0		57.6235	50	115		50	150
Benzo[a]anthracene	1	0		50.2956	50	101		70	130
Chrysene	1	0		51.8539	50	104		70	130
bis(2-Ethylhexyl)phthalate	1	0		56.3464	50	113		70	130
Di-n-octylphthalate	1	0		53.8004	50	108		70	130
Benzo[b]fluoranthene	1	0		53.2143	50	106		70	130
Benzo[k]fluoranthene	1	0		54.5615	50	109		70	130
Benzo[a]pyrene	1	0		54.1354	50	108		70	130
Indeno[1.2.3-cd]pyrene	1	0		54.2592	50	109		70	130
Dibenzo[a.h]anthracene	1	0		53.1869	50	106		70	130
Benzo[g.h.i]perylene	1	0		49.9036	50	100		70	130

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M101508.D **Instrument:** GCMS 5

Cont Calibration Date/Time 11/14/2017 9:01:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.43	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.46	54.13	50	**		1.210	1.133	8.25	
Pyridine	1	0		2.90	50.67	50	**		3.086	3.128	1.34	
N-Nitrosodimethylamine	1	0		2.82	55.13	50	**		1.684	1.857	10.26	
2-Fluorophenol	1	0	S	4.51	51.63	50	**		2.716	2.805	3.27	
Benzaldehyde	1	0		5.33	28.66	50	20	0.01	1.278	0.733	42.68	C1
Aniline	1	0		5.43	59.37	50	**		3.710	4.449	18.75	
Pentachloroethane	1	0		5.47	51.52	50	**	0.05	0.904	0.931	3.04	
bis(2-Chloroethyl)ether	1	0		5.49	51.72	50	20	0.7	2.902	3.002	3.43	
Phenol-d5	1	0	S	5.41	53.93	50	**		3.444	3.715	7.86	
Phenol	1	0		5.42	54.70	50	20	0.8	3.972	4.346	9.40	
2-Chlorophenol	1	0		5.53	53.64	50	20	0.8	2.972	3.188	7.27	
N-Decane	1	0		5.59	52.86	50	**	0.05	2.950	3.119	5.72	
1,3-Dichlorobenzene	1	0		5.67	52.92	50	**		3.068	3.247	5.85	
1,4-Dichlorobenzene-d4	1	0	I	5.71	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.73	49.50	50	20		1.495	1.480	1.01	
1,2-Dichlorobenzene	1	0		5.85	49.66	50	**		1.439	1.429	0.68	
Benzyl alcohol	1	0		5.83	51.93	50	**		0.919	0.954	3.87	
bis(2-chloroisopropyl)ether	1	0		5.94	50.35	50	20	0.01	1.970	1.984	0.71	
2-Methylphenol	1	0		5.93	51.49	50	20	0.7	1.317	1.356	2.98	
Acetophenone	1	0		6.04	52.53	50	20	0.01	1.997	2.098	5.05	
Hexachloroethane	1	0		6.14	49.64	50	20	0.3	0.564	0.560	0.73	
N-Nitroso-di-n-propylamine	1	0		6.04	51.32	50	20	0.5	1.011	1.038	2.64	
3&4-Methylphenol	1	0		6.06	53.15	50	20		1.343	1.428	6.31	
Naphthalene-d8	1	0	I	6.73	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.17	24.87	25	**		0.152	0.151	0.54	
Nitrobenzene	1	0		6.18	50.05	50	20	0.2	0.346	0.346	0.09	
Isophorone	1	0		6.37	51.39	50	20	0.4	0.645	0.663	2.77	
2-Nitrophenol	1	0		6.43	53.12	50	20	0.1	0.173	0.184	6.24	
2,4-Dimethylphenol	1	0		6.47	50.24	50	20	0.2	0.348	0.350	0.49	
Benzoic Acid	1	0		6.56	48.30	50	**		0.291	0.307	3.40	
bis(2-Chloroethoxy)methane	1	0		6.54	49.37	50	20	0.3	0.404	0.399	1.27	
2,4-Dichlorophenol	1	0		6.62	51.38	50	20	0.2	0.281	0.289	2.76	
1,2,4-Trichlorobenzene	1	0		6.69	49.63	50	**		0.317	0.315	0.74	
Naphthalene	1	0		6.74	50.31	50	20	0.7	1.080	1.005	0.62	
4-Chloroaniline	1	0		6.78	52.38	50	20	0.01	0.320	0.401	4.76	
Hexachlorobutadiene	1	0		6.84	47.66	50	20	0.01	0.186	0.178	4.68	
Caprolactam	1	0		7.06	58.03	50	20	0.01	0.113	0.131	16.05	
4-Chloro-3-methylphenol	1	0		7.15	51.13	50	20	0.2	0.301	0.308	2.26	
2-Methylnaphthalene	1	0		7.28	50.17	50	**	0.4	0.700	0.702	0.34	
1-Methylnaphthalene	1	0		7.35	50.00	50	**	0.4	0.679	0.678	0.01	
Methylnaphthalenes	1	0		7.28	100.45	100	**			0.691	0.45	
1,1'-Biphenyl	1	0		7.65	49.57	50	20	0.01	0.836	0.829	0.86	
Acenaphthene-d10	1	0	I	8.15	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.41	47.58	50	20	0.01	0.571	0.543	4.84	
Hexachlorocyclopentadiene	1	0		7.40	46.59	50	20	0.05	0.294	0.274	6.81	
2,4,6-Trichlorophenol	1	0		7.50	49.60	50	20	0.2	0.333	0.331	0.79	
2,4,5-Trichlorophenol	1	0		7.54	50.11	50	20	0.2	0.363	0.364	0.22	
2-Fluorobiphenyl	1	0	S	7.56	24.26	25	**		1.262	1.224	2.96	
2-Chloronaphthalene	1	0		7.67	48.52	50	20	0.8	1.048	1.017	2.96	
1,4-Dimethylnaphthalene	1	0		7.95	49.43	50	**		0.820	0.811	1.15	
Dimethylnaphthalenes	1	0		7.95	49.43	50	20			0.811	1.15	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M101508.D **Instrument:** GCMS 5

Cont Calibration Date/Time 11/14/2017 9:01:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.73	48.89	50	**		0.792	0.774	2.22	
2-Nitroaniline	1	0		7.75	52.10	50	20	0.01	0.368	0.383	4.20	
Coumarin	1	0		7.93	51.95		**		0.420			
Acenaphthylene	1	0		8.03	49.89	50	20	0.9	1.598	1.594	0.23	
Dimethylphthalate	1	0		7.90	50.49	50	20	0.01	1.245	1.257	0.98	
2,6-Dinitrotoluene	1	0		7.95	52.25	50	20	0.2	0.268	0.280	4.50	
Acenaphthene	1	0		8.18	50.00	50	20	0.9	1.082	1.081	0.00	
3-Nitroaniline	1	0		8.10	58.07	50	20	0.01	0.275	0.319	16.15	
2,4-Dinitrophenol	1	0		8.19	39.95	50	20	0.01	0.145	0.121	20.11	
Dibenzofuran	1	0		8.33	50.74	50	20	0.8	1.616	1.528	1.48	
2,4-Dinitrotoluene	1	0		8.30	51.45	50	20	0.2	0.379	0.390	2.91	
4-Nitrophenol	1	0		8.24	50.67	50	20	0.01	0.219	0.225	1.35	
2,3,4,6-Tetrachlorophenol	1	0		8.44	53.68	50	20	0.01	0.317	0.340	7.35	
Fluorene	1	0		8.65	49.92	50	20	0.9	1.239	1.237	0.16	
4-Chlorophenyl-phenylether	1	0		8.64	48.83	50	20	0.4	0.621	0.606	2.35	
Diethylphthalate	1	0		8.52	50.34	50	20	0.01	1.230	1.238	0.69	
4-Nitroaniline	1	0		8.66	54.72	50	20	0.01	0.342	0.374	9.44	
Atrazine	1	0		9.28	52.43	50	20	0.01	0.350	0.367	4.86	
Phenanthrene-d10	1	0	I	9.60	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.69	44.65	50	20	0.01	0.121	0.115	10.70	
n-Nitrosodiphenylamine	1	0		8.75	48.88	50	20	0.01	0.592	0.579	2.24	
2,4,6-Tribromophenol	1	0	S	8.88	47.63	50	**		0.092	0.095	4.74	
1,2-Diphenylhydrazine	1	0		8.80	49.17	50	**		0.676	0.664	1.66	
4-Bromophenyl-phenylether	1	0		9.13	49.12	50	20	0.1	0.199	0.195	1.76	
Hexachlorobenzene	1	0		9.20	48.65	50	20	0.1	0.211	0.205	2.71	
N-Octadecane	1	0		9.47	49.98	50	**	0.05	0.408	0.408	0.04	
Pentachlorophenol	1	0		9.39	43.96	50	20	0.05	0.122	0.114	12.08	
Phenanthrene	1	0		9.62	49.88	50	20	0.7	1.067	1.064	0.24	
Anthracene	1	0		9.68	50.14	50	20	0.7	1.079	1.082	0.28	
Carbazole	1	0		9.84	51.88	50	20	0.01	0.991	1.029	3.76	
Di-n-butylphthalate	1	0		10.23	53.15	50	20	0.01	1.117	1.188	6.31	
Fluoranthene	1	0		10.95	52.29	50	20	0.6	1.199	1.254	4.58	
Chrysene-d12	1	0	I	12.64	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.21	49.35	50	20	0.6	1.069	1.055	1.30	
Benzidine	1	0		11.10	36.29	50	**		0.375	0.385	27.43	
Terphenyl-d14	1	0	S	11.40	24.29	25	**		0.643	0.624	2.86	
4,4'-DDE	1	0		11.34	47.95		**		0.225			
4,4'-DDD	1	0		11.73	50.90		**		0.423			
Butylbenzylphthalate	1	0		11.99	51.86	50	20	0.01	0.436	0.472	3.72	
4,4'-DDT	1	0		12.09	52.54		**		0.352			
3,3'-Dichlorobenzidine	1	0		12.60	56.06	50	20	0.01	0.275	0.358	12.12	
Benzo[a]anthracene	1	0		12.63	49.80	50	20	0.8	1.050	1.046	0.40	
Chrysene	1	0		12.67	49.67	50	20	0.7	1.023	1.016	0.66	
bis(2-Ethylhexyl)phthalate	1	0		12.69	48.40	50	20	0.01	0.612	0.644	3.19	
Perylene-d12	1	0	I	14.25	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.43	50.23	50	20	0.01	1.106	1.173	0.46	
Benzo[b]fluoranthene	1	0		13.84	49.84	50	20	0.7	1.089	1.085	0.32	
Benzo[k]fluoranthene	1	0		13.87	48.03	50	20	0.7	1.059	1.017	3.95	
Benzo[a]pyrene	1	0		14.19	51.56	50	20	0.7	1.029	1.061	3.11	
Indeno[1,2,3-cd]pyrene	1	0		15.51	54.60	50	20	0.5	1.068	1.166	9.21	
Dibenzo[a,h]anthracene	1	0		15.53	54.67	50	20	0.4	0.916	1.002	9.35	
Benzo[g,h,i]perylene	1	0		15.86	54.32	50	20	0.5	0.886	0.963	8.65	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 5M101508.D **Instrument:** GCMS 5

Cont Calibration Date/Time 11/14/2017 9:01:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.688	0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.820	0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
Data File: 5M101508.D
Acq On : 11/14/17 09:01

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 5M_1020.M
Qt On : 11/14/17 09:27
Qt Upd On: 10/20/17 15:15

Data Path : G:\GcMsData\2017\GCMS_5\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.428	96	31105	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	69520	40.00	ng	0.00
31) Naphthalene-d8	6.729	136	292823	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	190142	40.00	ng	0.00
77) Phenanthrene-d10	9.597	188	361044	40.00	ng	0.00
91) Chrysene-d12	12.643	240	450922	40.00	ng	0.00
103) Perylene-d12	14.245	264	427480	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.506	112	109065	51.63	ng	0.00
Spiked Amount 100.000			Recovery = 51.63%			
16) Phenol-d5	5.409	99	144444	53.93	ng	0.01
Spiked Amount 100.000			Recovery = 53.93%			
32) Nitrobenzene-d5	6.168	128	27653	24.87	ng	0.00
Spiked Amount 50.000			Recovery = 49.74%			
55) 2-Fluorobiphenyl	7.562	172	145514	24.26	ng	0.00
Spiked Amount 50.000			Recovery = 48.52%			
80) 2,4,6-Tribromophenol	8.882	330	42782	47.63	ng	0.00
Spiked Amount 100.000			Recovery = 47.63%			
94) Terphenyl-d14	11.398	244	175986	24.28	ng	0.00
Spiked Amount 50.000			Recovery = 48.56%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.460	88	44064	54.1258	ng	94
9) Pyridine	2.904	79	121610	50.6683	ng	74
10) N-Nitrosodimethylamine	2.824	74	72204	55.1278	ng	74
12) Benzaldehyde	5.329	77	28487	28.6592	ng	79
13) Aniline	5.425	93	173002	59.3735	ng	45
14) Pentachloroethane	5.468	117	36208	51.5182	ng	79
15) bis(2-Chloroethyl)ether	5.489	93	116710	51.7171	ng	83
17) Phenol	5.420	94	168979	54.7024	ng	95
18) 2-Chlorophenol	5.532	128	123955	53.6367	ng	84
19) N-Decane	5.585	57	121256	52.8578	ng	89
20) 1,3-Dichlorobenzene	5.666	146	126255	52.9244	ng	97
22) 1,4-Dichlorobenzene	5.730	146	128574	49.4972	ng	97
23) 1,2-Dichlorobenzene	5.853	146	124180	49.6595	ng	98
24) Benzyl alcohol	5.831	108	82942	51.9338	ng	74
25) bis(2-chloroisopropyl)...	5.943	45	172447	50.3543	ng	97
26) 2-Methylphenol	5.927	108	117862	51.4906	ng	96
27) Acetophenone	6.045	105	182300	52.5270	ng	64
28) Hexachloroethane	6.136	117	48663	49.6355	ng	91
29) N-Nitroso-di-n-propyla...	6.045	70	90212	51.3205	ng	73
30) 3&4-Methylphenol	6.056	108	124085	53.1548	ng	99
33) Nitrobenzene	6.178	77	126638	50.0465	ng	81
34) Isophorone	6.371	82	242706	51.3864	ng	89
35) 2-Nitrophenol	6.435	139	67456	53.1222	ng	84
36) 2,4-Dimethylphenol	6.467	107	128065	50.2425	ng	95
37) Benzoic Acid	6.558	105	112516	48.3003	ng	88
38) bis(2-Chloroethoxy)met...	6.536	93	146175	49.3660	ng	98
39) 2,4-Dichlorophenol	6.622	162	105626	51.3783	ng	89
40) 1,2,4-Trichlorobenzene	6.686	180	115288	49.6281	ng	97
41) Naphthalene	6.745	128	367694	50.3095	ng	100
42) 4-Chloroaniline	6.782	127	146892m	52.3816	ng	
43) Hexachlorobutadiene	6.841	225	64977	47.6603	ng	97
44) Caprolactam	7.060	113	48010	58.0253	ng	71
45) 4-Chloro-3-methylphenol	7.151	107	112831	51.1298	ng	86
46) 2-Methylnaphthalene	7.279	142	256971	50.1695	ng	97
47) 1-Methylnaphthalene	7.354	142	248345	49.9969	ng	93
48) Methylnaphthalenes (To...	7.279	142	505654m	100.4513	ng	
49) 1,1'-Biphenyl	7.648	154	303403	49.5681	ng	95
51) 1,2,4,5-Tetrachloroben...	7.412	216	129131	47.5810	ng	96
52) Hexachlorocyclopentadiene	7.402	237	65166	46.5940	ng	100
53) 2,4,6-Trichlorophenol	7.498	196	78622	49.6030	ng	99
54) 2,4,5-Trichlorophenol	7.535	196	86532	50.1114	ng	99
56) 2-Chloronaphthalene	7.669	162	241799	48.5200	ng	92
57) 1,4-Dimethylnaphthalene	7.952	156	192716	49.4273	ng	87
58) Dimethylnaphthalenes (...	7.952	156	192716	49.4273	ng	87
59) Diphenyl Ether	7.733	170	184001	48.8886	ng	78
60) 2-Nitroaniline	7.749	65	91023	52.1001	ng	51
61) Coumarin	7.931	146	103726	51.9498	ng	78
62) Acenaphthylene	8.027	152	378964	49.8863	ng	99
63) Dimethylphthalate	7.899	163	298862	50.4881	ng	99
64) 2,6-Dinitrotoluene	7.952	165	66514	52.2514	ng	60
65) Acenaphthene	8.176	153	257039	49.9981	ng	96

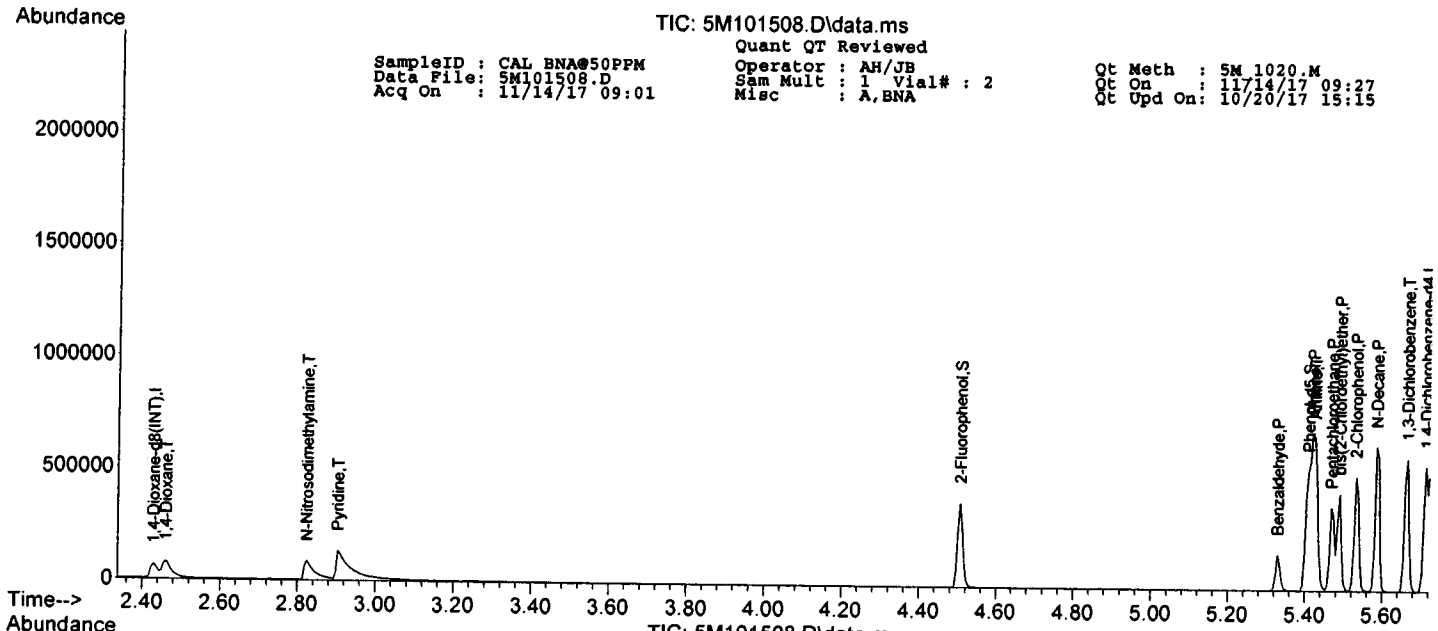
Quantitation Report (QT Reviewed)

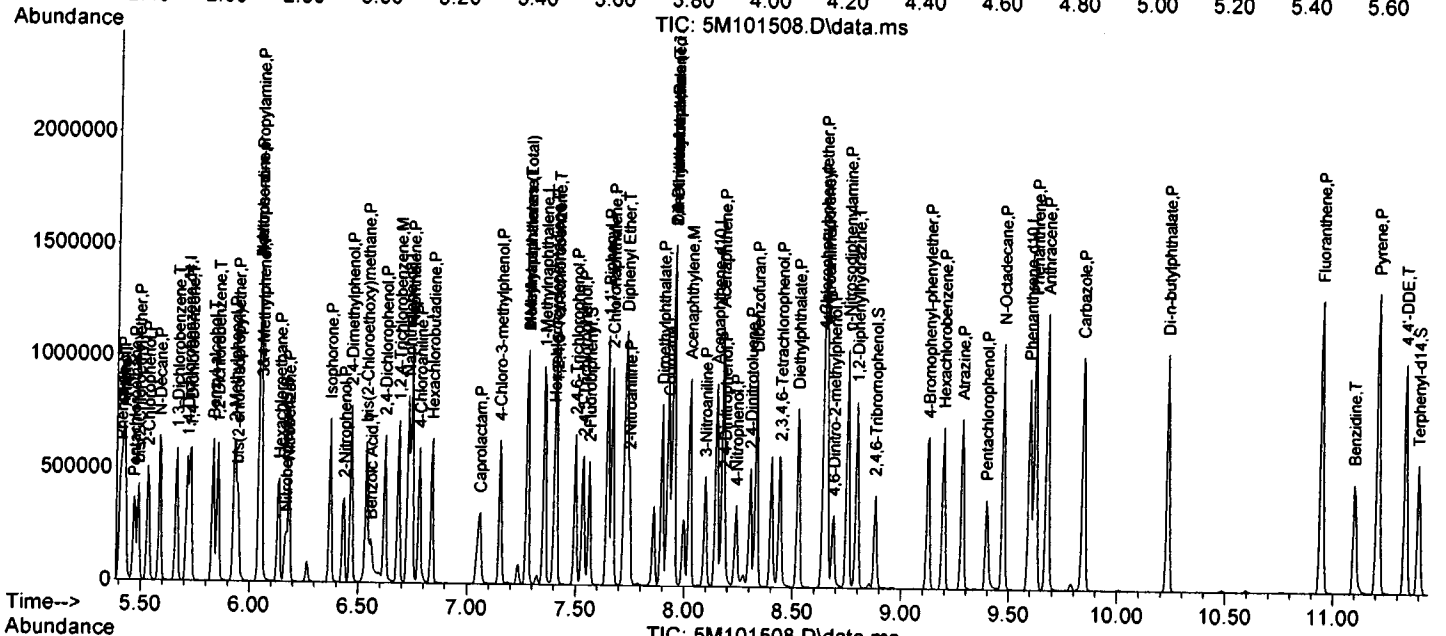
SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101508.D Sam Mult : 1 Vial# : 2 Qt On : 11/14/17 09:27
Acq On : 11/14/17 09:01 Misc : A,BNA Qt Upd On: 10/20/17 15:15

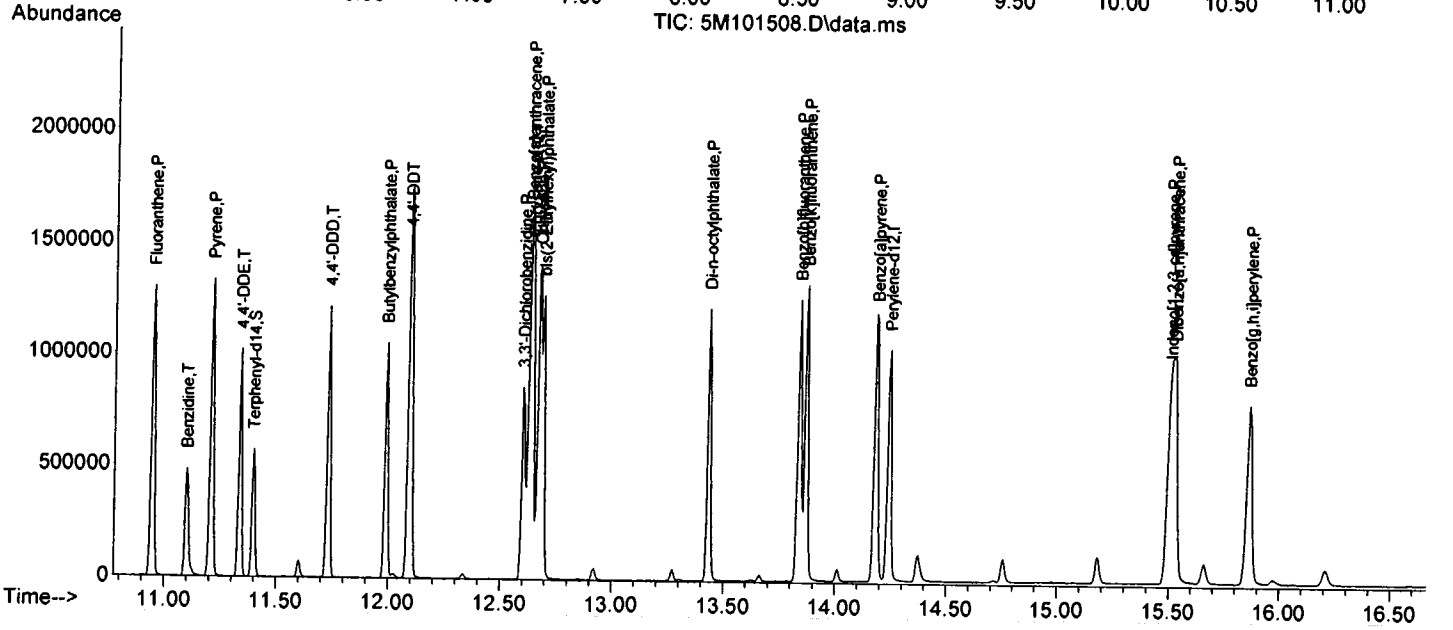
Data Path : G:\GcMsData\2017\GCMS_5\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.096	138	75800	58.0739	ng	79
67) 2,4-Dinitrophenol	8.187	184	28801	39.9453	ng	48
68) Dibenzofuran	8.331	168	363140	50.7385	ng	85
69) 2,4-Dinitrotoluene	8.305	165	92796	51.4535	ng	62
70) 4-Nitrophenol	8.241	65	53528	50.6742	ng	88
71) 2,3,4,6-Tetrachlorophenol	8.444	232	80847	53.6759	ng	79
72) Fluorene	8.652	166	294122	49.9212	ng	100
73) 4-Chlorophenyl-phenyle...	8.641	204	144091	48.8270	ng	83
74) Diethylphthalate	8.524	149	294282	50.3435	ng	97
75) 4-Nitroaniline	8.657	138	88841	54.7223	ng	75
76) Atrazine	9.282	200	87119	52.4284	ng	98
78) 4,6-Dinitro-2-methylph...	8.689	198	51845	44.6487	ng	70
79) n-Nitrosodiphenylamine	8.753	169	261324	48.8782	ng	98
81) 1,2-Diphenylhydrazine	8.796	77	299829	49.1681	ng	84
82) 4-Bromophenyl-phenylether	9.127	248	88110	49.1194	ng	82
83) Hexachlorobenzene	9.197	284	92634	48.6458	ng	65
84) N-Octadecane	9.475	57	184261	49.9776	ng	81
85) Pentachlorophenol	9.394	266	51420	43.9609	ng	95
86) Phenanthrene	9.624	178	480213	49.8817	ng	99
87) Anthracene	9.678	178	488527	50.1392	ng	100
88) Carbazole	9.843	167	464233	51.8822	ng	98
89) Di-n-butylphthalate	10.233	149	536022	53.1545	ng	97
90) Fluoranthene	10.949	202	565874	52.2895	ng	91
92) Pyrene	11.211	202	594538	49.3517	ng	89
93) Benzidine	11.099	184	217150	36.2873	ng	89
95) 4,4'-DDE	11.339	246	121675	47.9524	ng	95
96) 4,4'-DDD	11.734	235	242572	50.9036	ng	97
97) Butylbenzylphthalate	11.991	149	266188	51.8597	ng	72
98) 4,4'-DDT	12.092	235	208236	52.5384	ng	98
99) 3,3'-Dichlorobenzidine	12.600	252	201893	56.0621	ng	97
100) Benzo[a]anthracene	12.632	228	589391	49.8018	ng	99
101) Chrysene	12.675	228	572911	49.6703	ng	98
102) bis(2-Ethylhexyl)phtha...	12.691	149	363213	48.4047	ng	93
104) Di-n-octylphthalate	13.433	149	626802	50.2316	ng	100
105) Benzo[b]fluoranthene	13.839	252	579929	49.8418	ng	93
106) Benzo[k]fluoranthene	13.871	252	543542m	48.0274	ng	
107) Benzo[a]pyrene	14.186	252	567113	51.5574	ng	91
108) Indeno[1,2,3-cd]pyrene	15.506	276	622956	54.6035	ng	83
109) Dibenzo[a,h]anthracene	15.527	278	535164	54.6741	ng	88
110) Benzo[g,h,i]perylene	15.864	276	514664	54.3244	ng	76

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 5M101508.D\data.ms
SampleID : CAL BNA@50PPM
Data File: 5M101508.D
Acq On : 11/14/17 09:01
Quant QT Reviewed
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 11/14/17 09:27
Qt Upd On: 10/20/17 15:15
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene,T
Time-->


Abundance
TIC: 5M101508.D\data.ms
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
2-Nitrophenol,P
2,4-Dichlorophenol,P
Benzoic Acid,P
Hexachlorobutadiene,P
Dimethylphthalate,P
Acenaphthylene,M
3-Nitroaniline,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
Diphenyl Ether,T
Fluorene,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
4,4'-DDE,T
Time-->


Abundance
TIC: 5M101508.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
3,3'-Dichlorobenzidine,P
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M87624.D **Instrument:** GCMS 7

Cont Calibration Date/Time 11/14/2017 9:03:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.56	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.60	52.03	50	**		1.171	1.080	4.05	
Pyridine	1	0		3.07	50.45	50	**		2.828	2.854	0.90	
N-Nitrosodimethylamine	1	0		2.99	49.00	50	**		1.682	1.648	2.01	
2-Fluorophenol	1	0	S	4.61	51.36	50	**		2.421	2.487	2.73	
Benzaldehyde	1	0		5.44	24.45	50	20	0.01	1.288	0.694	51.10	C1
Aniline	1	0		5.54	52.13	50	**		3.131	3.763	4.26	
Pentachloroethane	1	0		5.57	50.95	50	**	0.05	0.808	0.823	1.89	
bis(2-Chloroethyl)ether	1	0		5.59	48.91	50	20	0.7	2.706	2.647	2.19	
Phenol-d5	1	0	S	5.50	51.79	50	**		3.098	3.209	3.57	
Phenol	1	0		5.51	51.72	50	20	0.8	3.618	3.743	3.44	
2-Chlorophenol	1	0		5.63	52.15	50	20	0.8	2.558	2.669	4.31	
N-Decane	1	0		5.68	51.94	50	**	0.05	2.360	2.452	3.87	
1,3-Dichlorobenzene	1	0		5.77	50.36	50	**		2.603	2.621	0.71	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	49.60	50	20		1.428	1.416	0.80	
1,2-Dichlorobenzene	1	0		5.95	49.38	50	**		1.373	1.356	1.24	
Benzyl alcohol	1	0		5.93	51.52	50	**		0.919	0.947	3.04	
bis(2-chloroisopropyl)ether	1	0		6.04	51.70	50	20	0.01	1.706	1.764	3.40	
2-Methylphenol	1	0		6.02	51.38	50	20	0.7	1.288	1.324	2.75	
Acetophenone	1	0		6.15	51.58	50	20	0.01	1.984	2.047	3.17	
Hexachloroethane	1	0		6.23	50.17	50	20	0.3	0.557	0.559	0.34	
N-Nitroso-di-n-propylamine	1	0		6.14	53.53	50	20	0.5	0.962	0.986	7.05	
3&4-Methylphenol	1	0		6.14	53.31	50	20		1.275	1.359	6.62	
Naphthalene-d8	1	0	I	6.82	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	25.49	25	**		0.161	0.164	1.96	
Nitrobenzene	1	0		6.28	50.63	50	20	0.2	0.357	0.362	1.27	
Isophorone	1	0		6.47	51.71	50	20	0.4	0.667	0.689	3.43	
2-Nitrophenol	1	0		6.53	54.09	50	20	0.1	0.171	0.192	8.17	
2,4-Dimethylphenol	1	0		6.56	52.15	50	20	0.2	0.337	0.352	4.31	
Benzoic Acid	1	0		6.63	33.90	50	**		0.311	0.229	32.21	
bis(2-Chloroethoxy)methane	1	0		6.63	50.15	50	20	0.3	0.421	0.422	0.29	
2,4-Dichlorophenol	1	0		6.71	53.63	50	20	0.2	0.258	0.277	7.26	
1,2,4-Trichlorobenzene	1	0		6.78	49.73	50	**		0.293	0.291	0.54	
Naphthalene	1	0		6.85	46.88	50	20	0.7	1.069	1.002	6.24	
4-Chloroaniline	1	0		6.88	54.06	50	20	0.01	0.290	0.386	8.11	
Hexachlorobutadiene	1	0		6.93	50.00	50	20	0.01	0.150	0.150	0.00	
Caprolactam	1	0		7.16	52.33	50	20	0.01	0.133	0.138	4.66	
4-Chloro-3-methylphenol	1	0		7.24	52.56	50	20	0.2	0.298	0.314	5.12	
2-Methylnaphthalene	1	0		7.38	49.90	50	**	0.4	0.692	0.691	0.20	
1-Methylnaphthalene	1	0		7.46	49.78	50	**	0.4	0.662	0.660	0.43	
Methylnaphthalenes	1	0		7.38	99.66	100	**			0.675	0.34	
1,1'-Biphenyl	1	0		7.75	49.74	50	20	0.01	0.813	0.809	0.52	
Acenaphthene-d10	1	0	I	8.26	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	49.64	50	20	0.01	0.504	0.500	0.72	
Hexachlorocyclopentadiene	1	0		7.50	51.16	50	20	0.05	0.283	0.289	2.33	
2,4,6-Trichlorophenol	1	0		7.60	49.23	50	20	0.2	0.315	0.324	1.54	
2,4,5-Trichlorophenol	1	0		7.63	54.79	50	20	0.2	0.323	0.354	9.57	
2-Fluorobiphenyl	1	0	S	7.66	24.74	25	**		1.244	1.231	1.03	
2-Chloronaphthalene	1	0		7.78	48.63	50	20	0.8	1.066	1.037	2.74	
1,4-Dimethylnaphthalene	1	0		8.05	50.89	50	**		0.826	0.841	1.78	
Dimethylnaphthalenes	1	0		8.05	50.89	50	20			0.841	1.78	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M87624.D **Instrument:** GCMS 7

Cont Calibration Date/Time 11/14/2017 9:03:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	50.41	50	**		0.793	0.800	0.81	
2-Nitroaniline	1	0		7.85	53.41	50	20	0.01	0.372	0.398	6.82	
Coumarin	1	0		8.04	49.73		**		0.442			
Acenaphthylene	1	0		8.13	49.81	50	20	0.9	1.657	1.651	0.38	
Dimethylphthalate	1	0		7.99	49.52	50	20	0.01	1.229	1.217	0.96	
2,6-Dinitrotoluene	1	0		8.05	53.27	50	20	0.2	0.267	0.285	6.54	
Acenaphthene	1	0		8.28	48.73	50	20	0.9	1.085	1.057	2.53	
3-Nitroaniline	1	0		8.20	54.11	50	20	0.01	0.281	0.334	8.22	
2,4-Dinitrophenol	1	0		8.29	56.90	50	20	0.01	0.124	0.155	13.81	
Dibenzofuran	1	0		8.44	51.20	50	20	0.8	1.634	1.540	2.40	
2,4-Dinitrotoluene	1	0		8.41	51.37	50	20	0.2	0.375	0.400	2.74	
4-Nitrophenol	1	0		8.33	49.83	50	20	0.01	0.230	0.248	0.34	
2,3,4,6-Tetrachlorophenol	1	0		8.55	47.58	50	20	0.01	0.285	0.283	4.84	
Fluorene	1	0		8.76	49.90	50	20	0.9	1.249	1.246	0.21	
4-Chlorophenyl-phenylether	1	0		8.75	50.29	50	20	0.4	0.580	0.583	0.58	
Diethylphthalate	1	0		8.63	49.44	50	20	0.01	1.275	1.261	1.13	
4-Nitroaniline	1	0		8.77	49.94	50	20	0.01	0.350	0.361	0.11	
Atrazine	1	0		9.39	50.71	50	20	0.01	0.315	0.319	1.43	
Phenanthrene-d10	1	0	I	9.71	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	57.12	50	20	0.01	0.103	0.125	14.24	
n-Nitrosodiphenylamine	1	0		8.86	51.62	50	20	0.01	0.602	0.621	3.25	
2,4,6-Tribromophenol	1	0	S	8.99	53.47	50	**		0.079	0.089	6.94	
1,2-Diphenylhydrazine	1	0		8.90	50.42	50	**		0.723	0.729	0.85	
4-Bromophenyl-phenylether	1	0		9.24	51.49	50	20	0.1	0.189	0.194	2.98	
Hexachlorobenzene	1	0		9.30	50.01	50	20	0.1	0.199	0.199	0.02	
N-Octadecane	1	0		9.57	55.19	50	**	0.05	0.398	0.440	10.38	
Pentachlorophenol	1	0		9.50	43.42	50	20	0.05	0.114	0.102	13.16	
Phenanthrene	1	0		9.74	49.40	50	20	0.7	1.052	1.040	1.20	
Anthracene	1	0		9.80	50.35	50	20	0.7	1.055	1.062	0.70	
Carbazole	1	0		9.97	50.80	50	20	0.01	1.010	1.026	1.60	
Di-n-butylphthalate	1	0		10.34	54.58	50	20	0.01	1.147	1.252	9.17	
Fluoranthene	1	0		11.07	50.17	50	20	0.6	1.167	1.171	0.34	
Chrysene-d12	1	0	I	12.77	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.33	53.72	50	20	0.6	1.114	1.196	7.44	
Benzidine	1	0		11.23	40.56	50	**		0.322	0.384	18.89	
Terphenyl-d14	1	0	S	11.52	26.58	25	**		0.619	0.658	6.33	
4,4'-DDE	1	0		11.45	52.70		**		0.214			
4,4'-DDD	1	0		11.85	54.49		**		0.412			
Butylbenzylphthalate	1	0		12.10	55.17	50	20	0.01	0.502	0.568	10.35	
4,4'-DDT	1	0		12.21	59.39		**		0.325			
3,3'-Dichlorobenzidine	1	0		12.73	63.13	50	20	0.01	0.258	0.389	26.25	C1
Benzo[a]anthracene	1	0		12.75	50.67	50	20	0.8	1.049	1.063	1.33	
Chrysene	1	0		12.80	49.78	50	20	0.7	0.975	0.970	0.45	
bis(2-Ethylhexyl)phthalate	1	0		12.80	58.15	50	20	0.01	0.648	0.754	16.30	
Perylene-d12	1	0	I	14.39	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.55	58.69	50	20	0.01	1.172	1.457	17.37	
Benzo[b]fluoranthene	1	0		13.97	50.90	50	20	0.7	1.051	1.070	1.79	
Benzo[k]fluoranthene	1	0		14.00	49.42	50	20	0.7	1.060	1.047	1.16	
Benzo[a]pyrene	1	0		14.33	52.24	50	20	0.7	1.023	1.069	4.48	
Indeno[1,2,3-cd]pyrene	1	0		15.70	51.61	50	20	0.5	1.064	1.098	3.21	
Dibenzo[a,h]anthracene	1	0		15.73	52.60	50	20	0.4	0.880	0.926	5.20	
Benzo[g,h,i]perylene	1	0		16.08	49.74	50	20	0.5	0.908	0.903	0.51	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M87624.D **Instrument:** GCMS 7

Cont Calibration Date/Time 11/14/2017 9:03:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.677	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.826	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87624.D Sam Mult : 1 Vial# : 2 Qt On : 11/14/17 09:19
Acq On : 11/14/17 09:03 Misc : A,BNA Qt Upd On: 11/13/17 12:55

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.562	96	56796	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	106395	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	432005	40.00	ng	0.00
50) Acenaphthene-d10	8.257	164	261982	40.00	ng	0.00
77) Phenanthrene-d10	9.715	188	469374	40.00	ng	0.00
91) Chrysene-d12	12.765	240	478725	40.00	ng	0.00
103) Perylene-d12	14.389	264	444662	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	176590	51.36	ng	0.00
Spiked Amount 100.000			Recovery = 51.36%			
16) Phenol-d5	5.500	99	227840	51.79	ng	0.00
Spiked Amount 100.000			Recovery = 51.79%			
32) Nitrobenzene-d5	6.269	128	44365	25.49	ng	0.00
Spiked Amount 50.000			Recovery = 50.98%			
55) 2-Fluorobiphenyl	7.664	172	201565	24.74	ng	-0.01
Spiked Amount 50.000			Recovery = 49.48%			
80) 2,4,6-Tribromophenol	8.994	330	52372	53.47	ng	0.00
Spiked Amount 100.000			Recovery = 53.47%			
94) Terphenyl-d14	11.515	244	196770	26.58	ng	0.00
Spiked Amount 50.000			Recovery = 53.16%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	76685	52.0270	ng	99
9) Pyridine	3.075	79	202606	50.4494	ng	68
10) N-Nitrosodimethylamine	2.994	74	117006	48.9960	ng	72
12) Benzaldehyde	5.441	77	49265	24.4478	ng	76
13) Aniline	5.537	93	267154	52.1307	ng	13
14) Pentachloroethane	5.575	117	58419	50.9462	ng	87
15) bis(2-Chloroethyl)ether	5.591	93	187929	48.9054	ng	81
17) Phenol	5.511	94	265717	51.7212	ng	81
18) 2-Chlorophenol	5.634	128	189452	52.1548	ng	82
19) N-Decane	5.676	57	174060	51.9366	ng	94
20) 1,3-Dichlorobenzene	5.767	146	186102	50.3568	ng	99
22) 1,4-Dichlorobenzene	5.831	146	188372	49.6024	ng	98
23) 1,2-Dichlorobenzene	5.954	146	180358	49.3779	ng	98
24) Benzyl alcohol	5.927	108	126004	51.5213	ng	76
25) bis(2-chloroisopropyl)...	6.040	45	234591	51.7020	ng	98
26) 2-Methylphenol	6.018	108	176056	51.3768	ng	97
27) Acetophenone	6.146	105	272196	51.5845	ng	70
28) Hexachloroethane	6.232	117	74349	50.1707	ng	85
29) N-Nitroso-di-n-propyla...	6.141	70	131131	53.5272	ng	82
30) 3&4-Methylphenol	6.141	108	180725	53.3084	ng	98
33) Nitrobenzene	6.280	77	195360	50.6336	ng	82
34) Isophorone	6.467	82	372266	51.7126	ng	88
35) 2-Nitrophenol	6.531	139	103796	54.0866	ng	84
36) 2,4-Dimethylphenol	6.558	107	190081	52.1525	ng	94
37) Benzoic Acid	6.633	105	123851	33.8958	ng	50
38) bis(2-Chloroethoxy)met...	6.633	93	227986	50.1454	ng	95
39) 2,4-Dichlorophenol	6.713	162	149682	53.6295	ng	90
40) 1,2,4-Trichlorobenzene	6.782	180	157253	49.7277	ng	97
41) Naphthalene	6.846	128	541056	46.8800	ng	99
42) 4-Chloroaniline	6.878	127	208479m	54.0566	ng	
43) Hexachlorobutadiene	6.932	225	80857	49.9984	ng	98
44) Caprolactam	7.156	113	74497	52.3294	ng	68
45) 4-Chloro-3-methylphenol	7.242	107	169321	52.5610	ng	83
46) 2-Methylnaphthalene	7.380	142	372879	49.9014	ng	99
47) 1-Methylnaphthalene	7.461	142	356146	49.7834	ng	92
48) Methylnaphthalenes (To...	7.380	142	728614m	99.6552	ng	
49) 1,1'-Biphenyl	7.749	154	436709	49.7396	ng	97
51) 1,2,4,5-Tetrachloroben...	7.509	216	163824	49.6416	ng	98
52) Hexachlorocyclopentadiene	7.498	237	94697	51.1646	ng	99
53) 2,4,6-Trichlorophenol	7.599	196	105954	49.2296	ng	100
54) 2,4,5-Trichlorophenol	7.632	196	115959	54.7865	ng	99
56) 2-Chloronaphthalene	7.776	162	339439	48.6305	ng	92
57) 1,4-Dimethylnaphthalene	8.054	156	275429	50.8894	ng	86
58) Dimethylnaphthalenes (...	8.054	156	275429	50.8894	ng	86
59) Diphenyl Ether	7.835	170	261917	50.4058	ng	79
60) 2-Nitroaniline	7.851	65	130262	53.4084	ng	57
61) Coumarin	8.038	146	144060	49.7286	ng	77
62) Acenaphthylene	8.134	152	540523	49.8110	ng	99
63) Dimethylphthalate	7.995	163	398525	49.5193	ng	99
64) 2,6-Dinitrotoluene	8.054	165	93191	53.2723	ng	63
65) Acenaphthene	8.283	153	346211	48.7329	ng	98

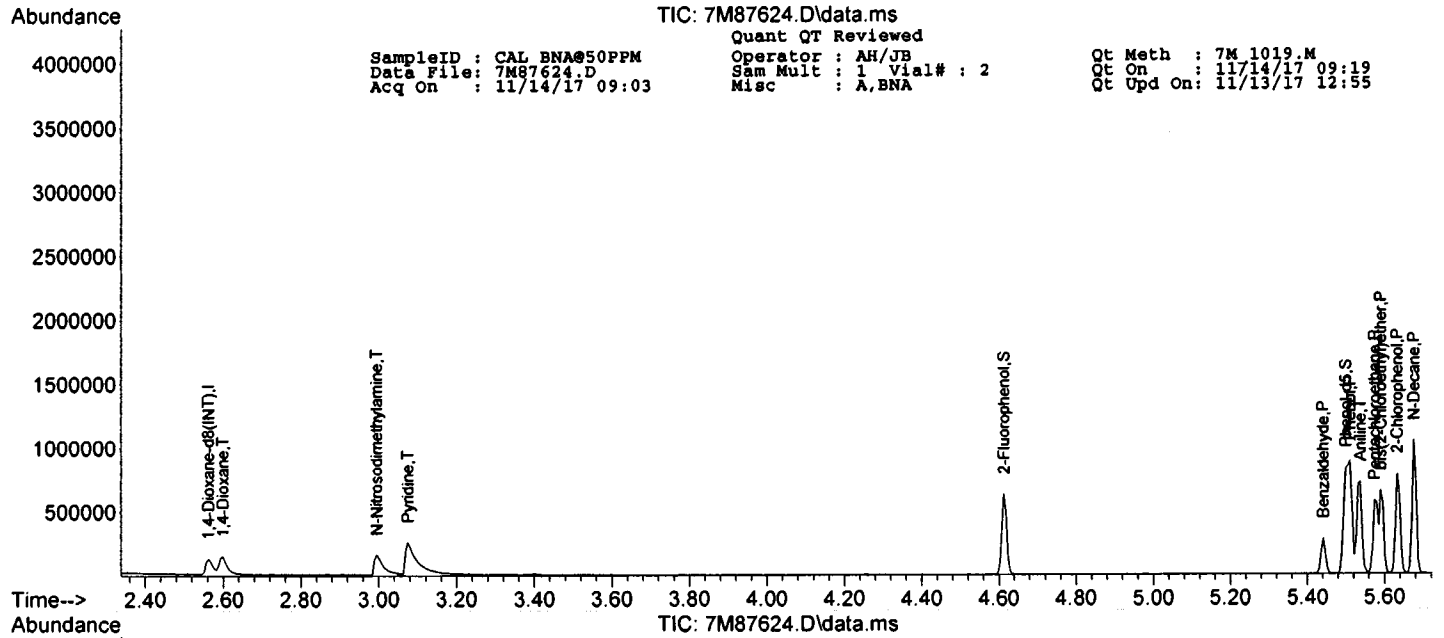
Quantitation Report (QT Reviewed)

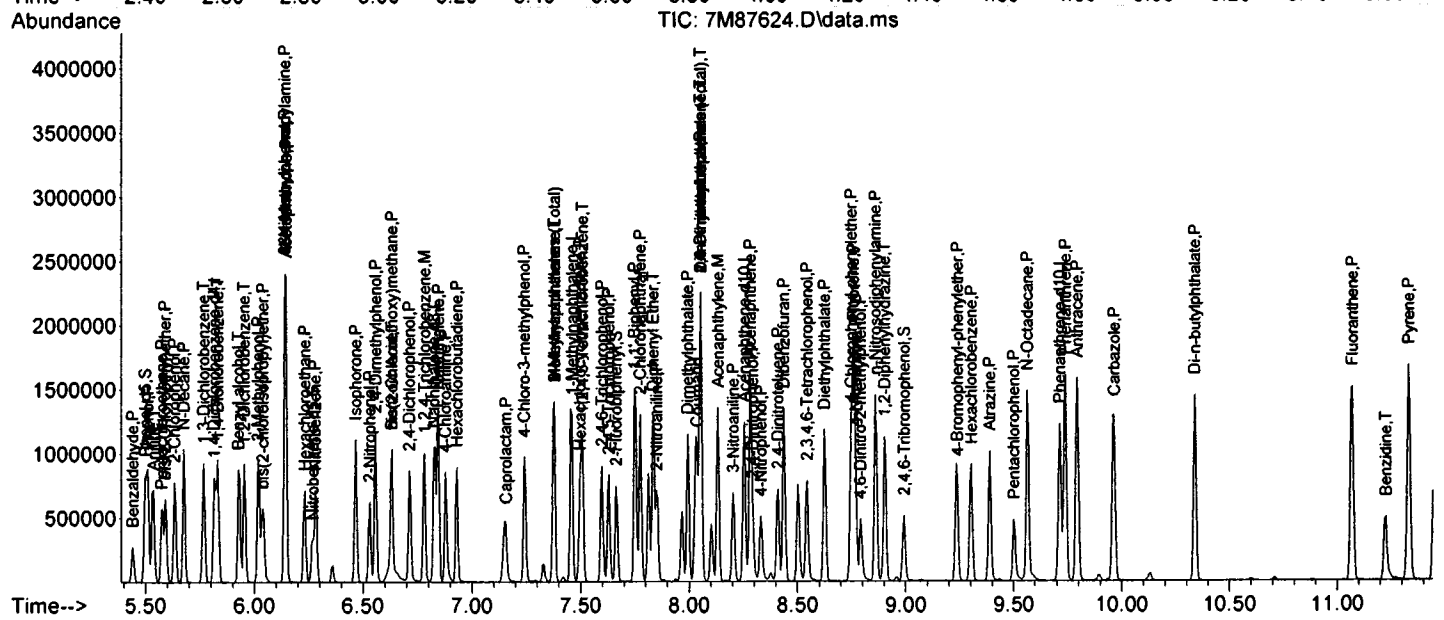
SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87624.D Sam Mult : 1 Vial# : 2 Qt On : 11/14/17 09:19
Acq On : 11/14/17 09:03 Misc : A,BNA Qt Upd On: 11/13/17 12:55

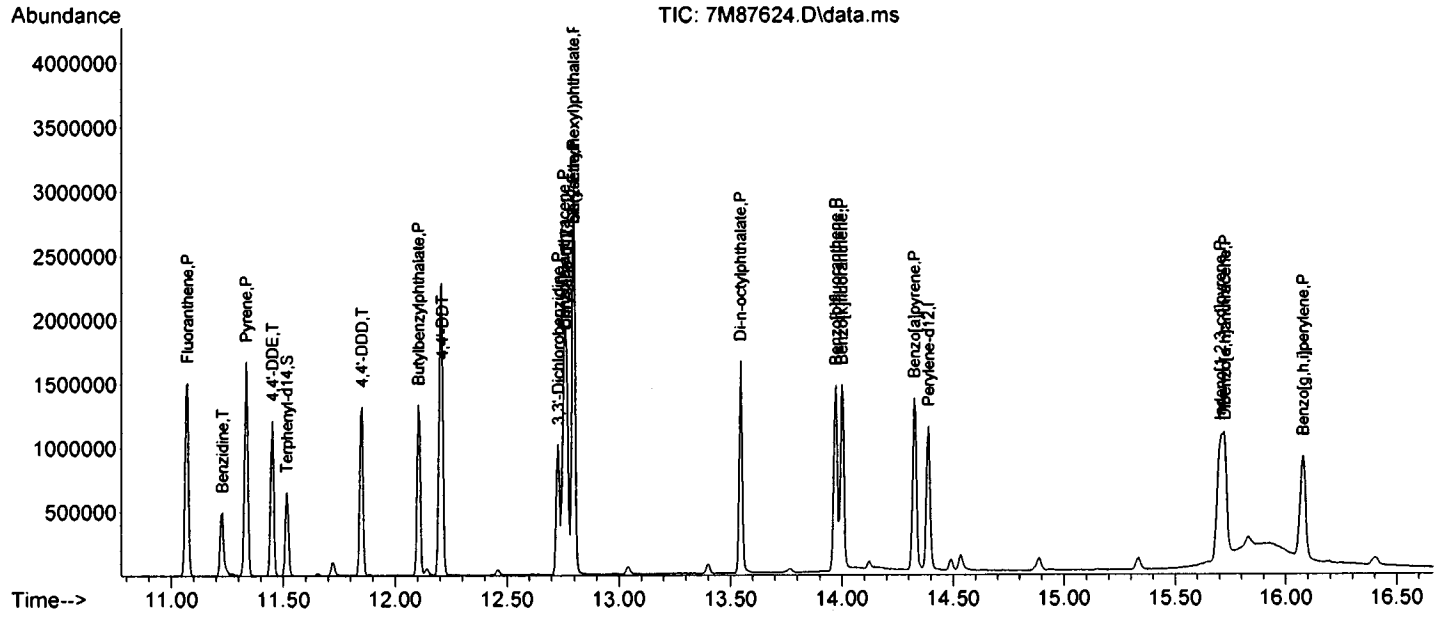
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.203	138	109298	54.1099	ng	78
67)	2,4-Dinitrophenol	8.294	184	50652	56.9028	ng	45
68)	Dibenzofuran	8.438	168	504373	51.2016	ng	84
69)	2,4-Dinitrotoluene	8.411	165	130848	51.3684	ng	61
70)	4-Nitrophenol	8.331	65	81175	49.8319	ng	94
71)	2,3,4,6-Tetrachlorophenol	8.545	232	92699	47.5781	ng	86
72)	Fluorene	8.759	166	408078	49.8958	ng	98
73)	4-Chlorophenyl-phenyle...	8.748	204	191080	50.2904	ng	83
74)	Diethylphthalate	8.625	149	412913	49.4366	ng	98
75)	4-Nitroaniline	8.769	138	118326	49.9444	ng	73
76)	Atrazine	9.389	200	104577	50.7128	ng	94
78)	4,6-Dinitro-2-methylph...	8.791	198	73131	57.1179	ng	60
79)	n-Nitrosodiphenylamine	8.860	169	364536	51.6229	ng	98
81)	1,2-Diphenylhydrazine	8.903	77	427709	50.4236	ng	87
82)	4-Bromophenyl-phenylether	9.240	248	113923	51.4876	ng	79
83)	Hexachlorobenzene	9.304	284	116651	50.0084	ng	65
84)	N-Octadecane	9.565	57	257970	55.1882	ng	79
85)	Pentachlorophenol	9.501	266	59695	43.4200	ng	98
86)	Phenanthrene	9.742	178	609997	49.4008	ng	98
87)	Anthracene	9.795	178	623164	50.3493	ng	100
88)	Carbazole	9.966	167	601794	50.7978	ng	97
89)	Di-n-butylphthalate	10.340	149	734772	54.5848	ng	97
90)	Fluoranthene	11.072	202	687058	50.1679	ng	92
92)	Pyrene	11.334	202	715975	53.7187	ng	93
93)	Benzidine	11.227	184	229920	40.5550	ng	90
95)	4,4'-DDE	11.451	246	134936	52.7017	ng	93
96)	4,4'-DDD	11.852	235	268464	54.4948	ng	96
97)	Butylbenzylphthalate	12.103	149	340189	55.1745	ng	77
98)	4,4'-DDT	12.210	235	231237	59.3888	ng	99
99)	3,3'-Dichlorobenzidine	12.728	252	232778	63.1262	ng	97
100)	Benzo[a]anthracene	12.755	228	636017	50.6656	ng	100
101)	Chrysene	12.797	228	580698	49.7762	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.797	149	451026	58.1493	ng	94
104)	Di-n-octylphthalate	13.545	149	810058	58.6865	ng	100
105)	Benzo[b]fluoranthene	13.973	252	594515	50.8960	ng	95
106)	Benzo[k]fluoranthene	13.999	252	582207	49.4178	ng	96
107)	Benzo[a]pyrene	14.325	252	594238	52.2407	ng	96
108)	Indeno[1,2,3-cd]pyrene	15.704	276	610537	51.6067	ng	89
109)	Dibenzo[a,h]anthracene	15.725	278	514721	52.6003	ng	91
110)	Benzo[g,h,i]perylene	16.078	276	501882	49.7448	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87624.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 7M87624.D
Acq On : 11/14/17 09:03
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/14/17 09:19
Qt Upd On: 11/13/17 12:55
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
Aniline,P
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 7M87624.D\data.ms
Time-->


Abundance
TIC: 7M87624.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M87651.D **Instrument:** GCMS 7

Cont Calibration Date/Time 11/15/2017 9:29:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.56	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.60	51.27	50	**		1.171	1.064	2.55	
Pyridine	1	0		3.07	46.45	50	**		2.828	2.628	7.09	
N-Nitrosodimethylamine	1	0		2.99	47.03	50	**		1.682	1.582	5.95	
2-Fluorophenol	1	0	S	4.61	47.27	50	**		2.421	2.289	5.46	
Benzaldehyde	1	0		5.44	22.48	50	20	0.01	1.288	0.640	55.05	C1
Aniline	1	0		5.53	47.29	50	**		3.131	3.412	5.42	
Pentachloroethane	1	0		5.57	47.68	50	**	0.05	0.808	0.770	4.63	
bis(2-Chloroethyl)ether	1	0		5.59	43.96	50	20	0.7	2.706	2.380	12.08	
Phenol-d5	1	0	S	5.49	46.89	50	**		3.098	2.906	6.22	
Phenol	1	0		5.51	46.74	50	20	0.8	3.618	3.382	6.52	
2-Chlorophenol	1	0		5.63	47.53	50	20	0.8	2.558	2.432	4.93	
N-Decane	1	0		5.68	48.77	50	**	0.05	2.360	2.302	2.46	
1,3-Dichlorobenzene	1	0		5.77	46.56	50	**		2.603	2.424	6.87	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	49.22	50	20		1.428	1.406	1.56	
1,2-Dichlorobenzene	1	0		5.95	48.36	50	**		1.373	1.328	3.28	
Benzyl alcohol	1	0		5.93	49.35	50	**		0.919	0.907	1.31	
bis(2-chloroisopropyl)ether	1	0		6.04	48.77	50	20	0.01	1.706	1.664	2.45	
2-Methylphenol	1	0		6.02	49.08	50	20	0.7	1.288	1.265	1.85	
Acetophenone	1	0		6.14	49.29	50	20	0.01	1.984	1.956	1.42	
Hexachloroethane	1	0		6.23	49.67	50	20	0.3	0.557	0.553	0.66	
N-Nitroso-di-n-propylamine	1	0		6.14	49.27	50	20	0.5	0.962	0.910	1.47	
3&4-Methylphenol	1	0		6.14	50.82	50	20		1.275	1.296	1.64	
Naphthalene-d8	1	0	I	6.82	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.26	25.57	25	**		0.161	0.165	2.29	
Nitrobenzene	1	0		6.28	50.54	50	20	0.2	0.357	0.361	1.09	
Isophorone	1	0		6.47	50.63	50	20	0.4	0.667	0.675	1.27	
2-Nitrophenol	1	0		6.53	52.94	50	20	0.1	0.171	0.188	5.89	
2,4-Dimethylphenol	1	0		6.55	51.08	50	20	0.2	0.337	0.345	2.15	
Benzoic Acid	1	0		6.62	29.64	50	**		0.311	0.199	40.72	
bis(2-Chloroethoxy)methane	1	0		6.63	49.62	50	20	0.3	0.421	0.418	0.76	
2,4-Dichlorophenol	1	0		6.71	52.24	50	20	0.2	0.258	0.270	4.49	
1,2,4-Trichlorobenzene	1	0		6.78	49.65	50	**		0.293	0.291	0.70	
Naphthalene	1	0		6.84	51.71	50	20	0.7	1.069	1.007	3.43	
4-Chloroaniline	1	0		6.88	53.72	50	20	0.01	0.290	0.384	7.43	
Hexachlorobutadiene	1	0		6.93	50.23	50	20	0.01	0.150	0.150	0.46	
Caprolactam	1	0		7.15	49.83	50	20	0.01	0.133	0.131	0.34	
4-Chloro-3-methylphenol	1	0		7.24	51.39	50	20	0.2	0.298	0.307	2.78	
2-Methylnaphthalene	1	0		7.37	49.07	50	**	0.4	0.692	0.679	1.87	
1-Methylnaphthalene	1	0		7.46	48.80	50	**	0.4	0.662	0.646	2.41	
Methylnaphthalenes	1	0		7.37	98.06	100	**			0.664	1.94	
1,1'-Biphenyl	1	0		7.75	48.66	50	20	0.01	0.813	0.791	2.68	
Acenaphthene-d10	1	0	I	8.25	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	50.27	50	20	0.01	0.504	0.507	0.54	
Hexachlorocyclopentadiene	1	0		7.50	51.23	50	20	0.05	0.283	0.290	2.47	
2,4,6-Trichlorophenol	1	0		7.59	52.79	50	20	0.2	0.315	0.347	5.58	
2,4,5-Trichlorophenol	1	0		7.63	54.84	50	20	0.2	0.323	0.354	9.68	
2-Fluorobiphenyl	1	0	S	7.66	24.99	25	**		1.244	1.243	0.04	
2-Chloronaphthalene	1	0		7.77	49.28	50	20	0.8	1.066	1.050	1.44	
1,4-Dimethylnaphthalene	1	0		8.05	50.90	50	**		0.826	0.841	1.80	
Dimethylnaphthalenes	1	0		8.05	50.90	50	20			0.841	1.80	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M87651.D **Instrument:** GCMS 7

Cont Calibration Date/Time 11/15/2017 9:29:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	49.61	50	**		0.793	0.787	0.79	
2-Nitroaniline	1	0		7.85	52.49	50	20	0.01	0.372	0.391	4.97	
Coumarin	1	0		8.03	49.93		**		0.442			
Acenaphthylene	1	0		8.13	50.46	50	20	0.9	1.657	1.672	0.93	
Dimethylphthalate	1	0		7.99	49.37	50	20	0.01	1.229	1.213	1.26	
2,6-Dinitrotoluene	1	0		8.05	52.94	50	20	0.2	0.267	0.283	5.89	
Acenaphthene	1	0		8.28	48.96	50	20	0.9	1.085	1.062	2.09	
3-Nitroaniline	1	0		8.20	55.18	50	20	0.01	0.281	0.340	10.35	
2,4-Dinitrophenol	1	0		8.29	49.73	50	20	0.01	0.124	0.133	0.53	
Dibenzofuran	1	0		8.44	51.72	50	20	0.8	1.634	1.556	3.44	
2,4-Dinitrotoluene	1	0		8.41	51.13	50	20	0.2	0.375	0.398	2.27	
4-Nitrophenol	1	0		8.33	49.50	50	20	0.01	0.230	0.246	0.99	
2,3,4,6-Tetrachlorophenol	1	0		8.54	48.72	50	20	0.01	0.285	0.290	2.56	
Fluorene	1	0		8.76	50.02	50	20	0.9	1.249	1.249	0.04	
4-Chlorophenyl-phenylether	1	0		8.75	49.89	50	20	0.4	0.580	0.579	0.21	
Diethylphthalate	1	0		8.63	49.30	50	20	0.01	1.275	1.257	1.40	
4-Nitroaniline	1	0		8.76	51.15	50	20	0.01	0.350	0.370	2.29	
Atrazine	1	0		9.39	50.61	50	20	0.01	0.315	0.319	1.23	
Phenanthrene-d10	1	0	I	9.71	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.79	53.66	50	20	0.01	0.103	0.117	7.32	
n-Nitrosodiphenylamine	1	0		8.86	51.20	50	20	0.01	0.602	0.616	2.40	
2,4,6-Tribromophenol	1	0	S	8.99	51.62	50	**		0.079	0.086	3.24	
1,2-Diphenylhydrazine	1	0		8.90	49.42	50	**		0.723	0.714	1.17	
4-Bromophenyl-phenylether	1	0		9.23	50.16	50	20	0.1	0.189	0.189	0.32	
Hexachlorobenzene	1	0		9.30	49.31	50	20	0.1	0.199	0.196	1.38	
N-Octadecane	1	0		9.57	53.47	50	**	0.05	0.398	0.426	6.94	
Pentachlorophenol	1	0		9.50	45.91	50	20	0.05	0.114	0.108	8.17	
Phenanthrene	1	0		9.74	48.80	50	20	0.7	1.052	1.027	2.41	
Anthracene	1	0		9.79	50.46	50	20	0.7	1.055	1.064	0.92	
Carbazole	1	0		9.96	50.04	50	20	0.01	1.010	1.010	0.08	
Di-n-butylphthalate	1	0		10.34	54.19	50	20	0.01	1.147	1.243	8.39	
Fluoranthene	1	0		11.07	49.87	50	20	0.6	1.167	1.164	0.26	
Chrysene-d12	1	0	I	12.77	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.33	52.44	50	20	0.6	1.114	1.168	4.88	
Benzidine	1	0		11.22	44.71	50	**		0.322	0.422	10.58	
Terphenyl-d14	1	0	S	11.52	26.25	25	**		0.619	0.649	4.99	
4,4'-DDE	1	0		11.45	51.60		**		0.214			
4,4'-DDD	1	0		11.85	53.18		**		0.412			
Butylbenzylphthalate	1	0		12.10	53.72	50	20	0.01	0.502	0.553	7.44	
4,4'-DDT	1	0		12.20	58.69		**		0.325			
3,3'-Dichlorobenzidine	1	0		12.73	58.66	50	20	0.01	0.258	0.363	17.32	
Benzo[a]anthracene	1	0		12.75	50.81	50	20	0.8	1.049	1.066	1.62	
Chrysene	1	0		12.80	50.96	50	20	0.7	0.975	0.993	1.92	
bis(2-Ethylhexyl)phthalate	1	0		12.80	56.66	50	20	0.01	0.648	0.734	13.32	
Perylene-d12	1	0	I	14.39	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.55	55.60	50	20	0.01	1.172	1.376	11.20	
Benzo[b]fluoranthene	1	0		13.97	51.76	50	20	0.7	1.051	1.088	3.52	
Benzo[k]fluoranthene	1	0		14.00	52.18	50	20	0.7	1.060	1.106	4.36	
Benzo[a]pyrene	1	0		14.33	52.61	50	20	0.7	1.023	1.077	5.22	
Indeno[1,2,3-cd]pyrene	1	0		15.70	52.70	50	20	0.5	1.064	1.122	5.40	
Dibenzo[a,h]anthracene	1	0		15.73	54.16	50	20	0.4	0.880	0.954	8.33	
Benzo[g,h,i]perylene	1	0		16.08	51.38	50	20	0.5	0.908	0.933	2.77	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 7M87651.D **Instrument:** GCMS 7

Cont Calibration Date/Time 11/15/2017 9:29:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.677	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.826	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87651.D Sam Mult : 1 Vial# : 2 Qt On : 11/15/17 09:49
Acq On : 11/15/17 09:29 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.562	96	59711	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	104269	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	405274	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	240221	40.00	ng	-0.01
77) Phenanthrene-d10	9.709	188	436161	40.00	ng	-0.01
91) Chrysene-d12	12.765	240	453883	40.00	ng	0.00
103) Perylene-d12	14.395	264	424969	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	170850	47.27	ng	0.00
Spiked Amount 100.000			Recovery = 47.27%			
16) Phenol-d5	5.494	99	216878	46.89	ng	0.00
Spiked Amount 100.000			Recovery = 46.89%			
32) Nitrobenzene-d5	6.264	128	41753	25.57	ng	0.00
Spiked Amount 50.000			Recovery = 51.14%			
55) 2-Fluorobiphenyl	7.663	172	186657	24.99	ng	-0.01
Spiked Amount 50.000			Recovery = 49.98%			
80) 2,4,6-Tribromophenol	8.988	330	46913	51.62	ng	-0.01
Spiked Amount 100.000			Recovery = 51.62%			
94) Terphenyl-d14	11.515	244	184218	26.25	ng	0.00
Spiked Amount 50.000			Recovery = 52.50%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	79438	51.2738	ng	98
9) Pyridine	3.074	79	196138	46.4546	ng	69
10) N-Nitrosodimethylamine	2.994	74	118068	47.0271	ng	71
12) Benzaldehyde	5.441	77	47751	22.4772	ng	77
13) Aniline	5.532	93	254700	47.2914	ng	13
14) Pentachloroethane	5.575	117	57484	47.6835	ng	87
15) bis(2-Chloroethyl)ether	5.591	93	177603	43.9620	ng	78
17) Phenol	5.505	94	252439	46.7379	ng	82
18) 2-Chlorophenol	5.633	128	181530	47.5343	ng	79
19) N-Decane	5.676	57	171842	48.7717	ng	93
20) 1,3-Dichlorobenzene	5.767	146	180915	46.5634	ng	98
22) 1,4-Dichlorobenzene	5.831	146	183188	49.2208	ng	97
23) 1,2-Dichlorobenzene	5.954	146	173103	48.3579	ng	97
24) Benzyl alcohol	5.927	108	118273	49.3462	ng	71
25) bis(2-chloroisopropyl)...	6.039	45	216879	48.7730	ng	96
26) 2-Methylphenol	6.018	108	164814	49.0768	ng	98
27) Acetophenone	6.141	105	254896	49.2909	ng	75
28) Hexachloroethane	6.232	117	72139	49.6719	ng	84
29) N-Nitroso-di-n-propyla...	6.141	70	118583	49.2668	ng	81
30) 3&4-Methylphenol	6.141	108	168852	50.8217	ng	100
33) Nitrobenzene	6.280	77	182944	50.5431	ng	81
34) Isophorone	6.467	82	341945	50.6336	ng	85
35) 2-Nitrophenol	6.531	139	95273	52.9440	ng	83
36) 2,4-Dimethylphenol	6.552	107	174641	51.0767	ng	92
37) Benzoic Acid	6.622	105	100875	29.6424	ng	47
38) bis(2-Chloroethoxy)met...	6.627	93	211629	49.6179	ng	96
39) 2,4-Dichlorophenol	6.713	162	136791	52.2434	ng	89
40) 1,2,4-Trichlorobenzene	6.777	180	147288	49.6486	ng	99
41) Naphthalene	6.841	128	510077	51.7138	ng	99
42) 4-Chloroaniline	6.878	127	194492m	53.7167	ng	
43) Hexachlorobutadiene	6.926	225	76202	50.2279	ng	96
44) Caprolactam	7.151	113	66310	49.8300	ng	68
45) 4-Chloro-3-methylphenol	7.236	107	155305	51.3900	ng	84
46) 2-Methylnaphthalene	7.375	142	343956	49.0668	ng	99
47) 1-Methylnaphthalene	7.455	142	327481	48.7958	ng	91
48) Methylnaphthalenes (To...	7.375	142	672557m	98.0554	ng	
49) 1,1'-Biphenyl	7.749	154	400787	48.6590	ng	96
51) 1,2,4,5-Tetrachloroben...	7.508	216	152124	50.2721	ng	97
52) Hexachlorocyclopentadiene	7.498	237	86949	51.2340	ng	99
53) 2,4,6-Trichlorophenol	7.594	196	104304	52.7916	ng	99
54) 2,4,5-Trichlorophenol	7.626	196	106435	54.8421	ng	99
56) 2-Chloronaphthalene	7.770	162	315405	49.2806	ng	93
57) 1,4-Dimethylnaphthalene	8.053	156	252594	50.8981	ng	83
58) Dimethylnaphthalenes (...	8.053	156	252594	50.8981	ng	83
59) Diphenyl Ether	7.834	170	236356	49.6071	ng	77
60) 2-Nitroaniline	7.850	65	117379	52.4859	ng	51
61) Coumarin	8.032	146	132641	49.9345	ng	76
62) Acenaphthylene	8.128	152	502113	50.4630	ng	99
63) Dimethylphthalate	7.989	163	364321	49.3700	ng	98
64) 2,6-Dinitrotoluene	8.048	165	84925	52.9448	ng	68
65) Acenaphthene	8.283	153	318907	48.9560	ng	98

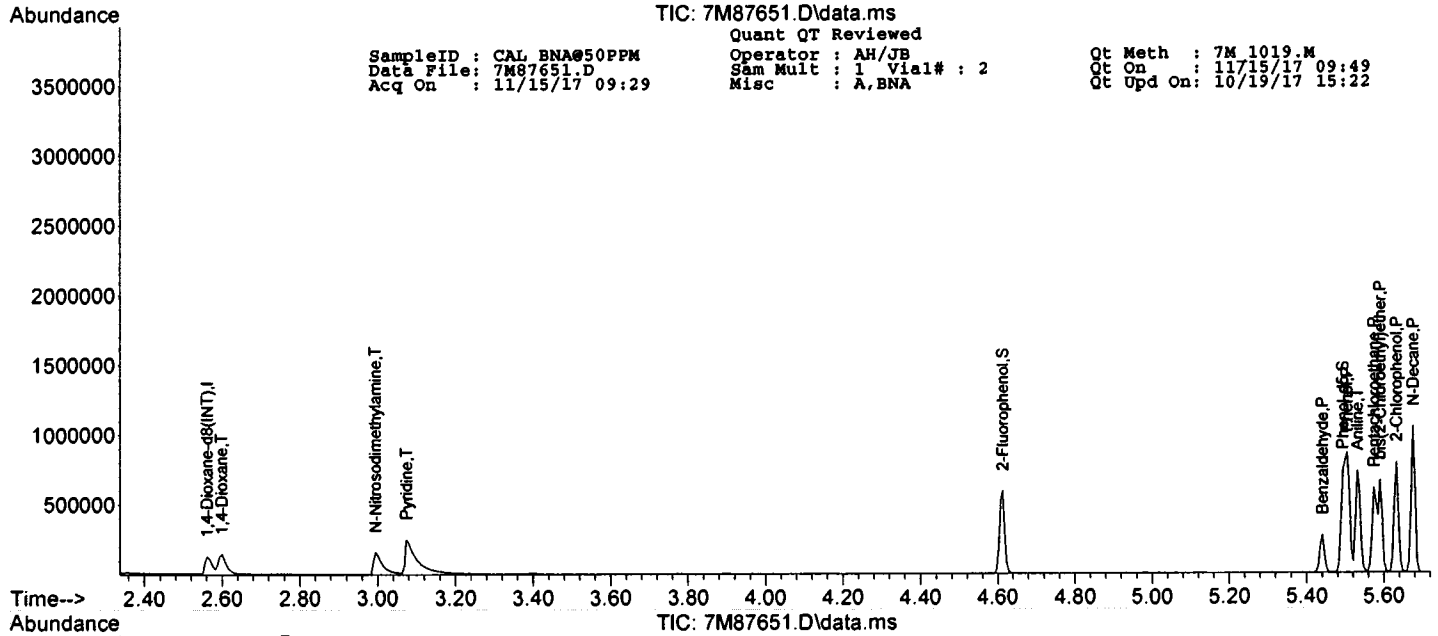
Quantitation Report (QT Reviewed)

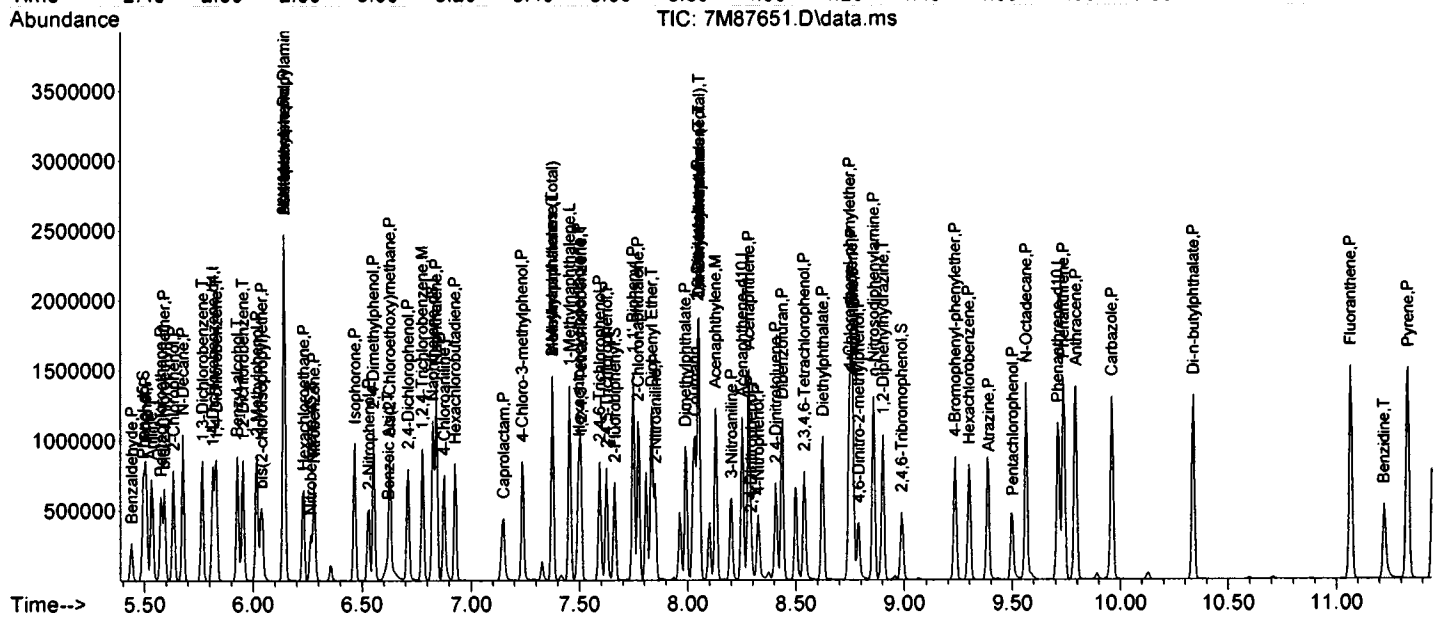
SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87651.D Sam Mult : 1 Vial# : 2 Qt On : 11/15/17 09:49
Acq On : 11/15/17 09:29 Misc : A,BNA Qt Upd On: 10/19/17 15:22

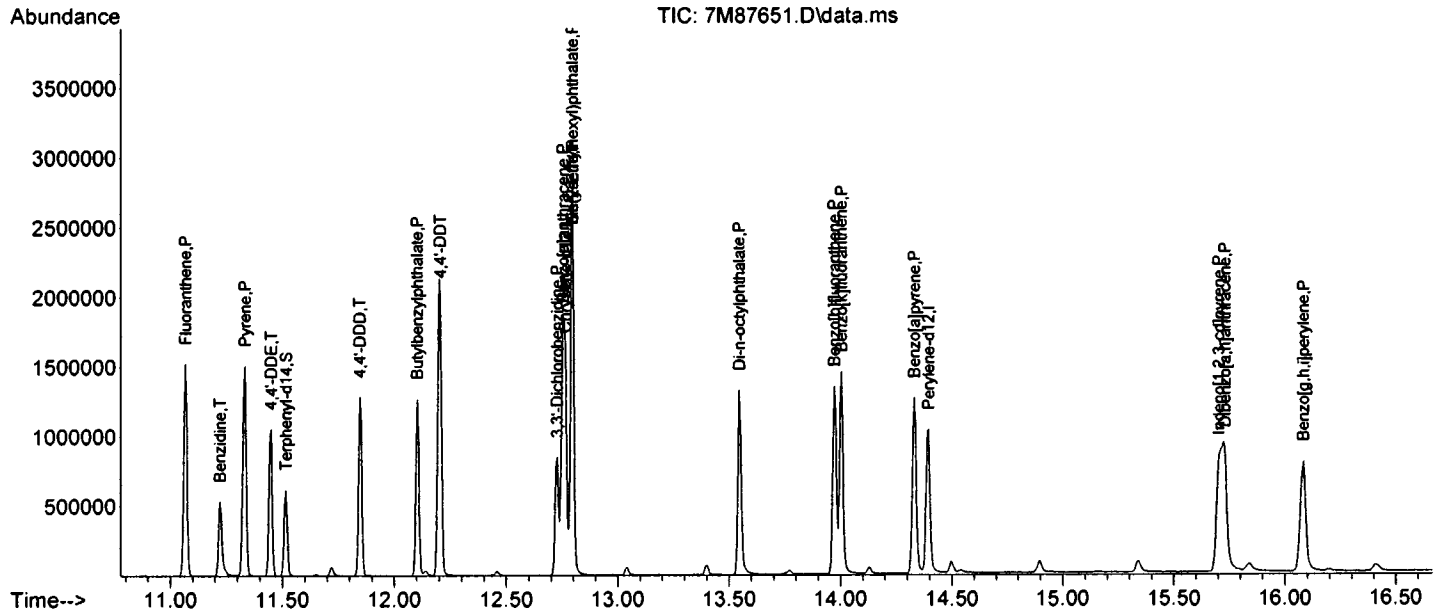
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66) 3-Nitroaniline	8.203	138	102141	55.1770	ng	75
67) 2,4-Dinitrophenol	8.294	184	39937	49.7331	ng	34
68) Dibenzofuran	8.438	168	467126	51.7199	ng	82
69) 2,4-Dinitrotoluene	8.406	165	119418	51.1328	ng	65
70) 4-Nitrophenol	8.326	65	73930	49.5033	ng	92
71) 2,3,4,6-Tetrachlorophenol	8.540	232	87086	48.7189	ng	85
72) Fluorene	8.759	166	375106	50.0191	ng	96
73) 4-Chlorophenyl-phenyle...	8.748	204	173824	49.8930	ng	83
74) Diethylphthalate	8.625	149	377578	49.3012	ng	96
75) 4-Nitroaniline	8.764	138	111173	51.1460	ng	73
76) Atrazine	9.389	200	95702	50.6131	ng	93
78) 4,6-Dinitro-2-methylph...	8.791	198	63520	53.6609	ng	68
79) n-Nitrosodiphenylamine	8.860	169	335966	51.2000	ng	96
81) 1,2-Diphenylhydrazine	8.903	77	389495	49.4150	ng	83
82) 4-Bromophenyl-phenylether	9.234	248	103128	50.1580	ng	84
83) Hexachlorobenzene	9.298	284	106880	49.3086	ng	70
84) N-Octadecane	9.565	57	232262	53.4722	ng	77
85) Pentachlorophenol	9.501	266	58835	45.9135	ng	98
86) Phenanthrene	9.736	178	559903	48.7968	ng	99
87) Anthracene	9.795	178	580317	50.4578	ng	99
88) Carbazole	9.961	167	550882	50.0413	ng	97
89) Di-n-butylphthalate	10.340	149	677897	54.1945	ng	97
90) Fluoranthene	11.066	202	634666	49.8713	ng	97
92) Pyrene	11.334	202	662654	52.4393	ng	92
93) Benzidine	11.221	184	239703	44.7084	ng	92
95) 4,4'-DDE	11.451	246	125250	51.5961	ng	94
96) 4,4'-DDD	11.846	235	248385	53.1785	ng	96
97) Butylbenzylphthalate	12.103	149	313683	53.7206	ng	74
98) 4,4'-DDT	12.204	235	216648	58.6873	ng	99
99) 3,3'-Dichlorobenzidine	12.728	252	205690	58.6615	ng	97
100) Benzo[a]anthracene	12.755	228	604734	50.8102	ng	100
101) Chrysene	12.797	228	563645	50.9588	ng	98
102) bis(2-Ethylhexyl)phtha...	12.797	149	416677	56.6611	ng	94
104) Di-n-octylphthalate	13.545	149	731168	55.6023	ng	100
105) Benzo[b]fluoranthene	13.973	252	577831	51.7601	ng	97
106) Benzo[k]fluoranthene	14.005	252	587514m	52.1791	ng	
107) Benzo[a]pyrene	14.331	252	571946	52.6109	ng	95
108) Indeno[1,2,3-cd]pyrene	15.703	276	595858	52.6999	ng	90
109) Dibenzo[a,h]anthracene	15.730	278	506552	54.1643	ng	91
110) Benzo[g,h,i]perylene	16.083	276	495452	51.3831	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87651.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 7M87651.D
Acq On : 11/15/17 09:29
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 09:49
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 7M87651.D\data.ms
Benzaldehyde,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
2-Nitrophenol,P
2,4-Dichlorophenol,P
1,2,4-Trichlorobenzene,M
Hexachlorobutadiene,P
Acenaphthylene,M
3-Nitroaniline,P
2,4-Dinitrotoluene,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
4,6-Dinitro-2-methylphenol,P
2,4,6-Tribromophenol,S
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 7M87651.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M66039.D **Instrument:** GCMS 10

Cont Calibration Date/Time 11/15/2017 11:11:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.58	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.61	49.59	50	**		1.208	0.998	0.82	
Pyridine	1	0		3.09	49.58	50	**		2.562	2.541	0.83	
N-Nitrosodimethylamine	1	0		3.02	49.78	50	**		1.443	1.437	0.44	
2-Fluorophenol	1	0	S	4.62	48.64	50	**		2.611	2.540	2.73	
Benzaldehyde	1	0		5.45	32.84	50	20	0.01	1.204	0.791	34.32	C1
Aniline	1	0		5.54	45.87	50	**		3.501	3.711	8.26	
Pentachloroethane	1	0		5.58	50.61	50	**	0.05	0.942	0.953	1.22	
bis(2-Chloroethyl)ether	1	0		5.60	46.60	50	20	0.7	2.748	2.561	6.81	
Phenol-d5	1	0	S	5.50	49.27	50	**		3.212	3.165	1.46	
Phenol	1	0		5.52	50.69	50	20	0.8	3.681	3.732	1.39	
2-Chlorophenol	1	0		5.64	50.42	50	20	0.8	3.079	3.105	0.84	
N-Decane	1	0		5.68	37.73	50	**	0.05	3.092	2.333	24.53	
1,3-Dichlorobenzene	1	0		5.77	47.93	50	**		3.371	3.232	4.13	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	47.82	50	20		1.505	1.440	4.36	
1,2-Dichlorobenzene	1	0		5.96	48.33	50	**		1.424	1.376	3.34	
Benzyl alcohol	1	0		5.94	48.96	50	**		0.834	0.817	2.08	
bis(2-chloroisopropyl)ether	1	0		6.04	35.97	50	20	0.01	1.983	1.426	28.06	C1
2-Methylphenol	1	0		6.03	48.31	50	20	0.7	1.172	1.132	3.38	
Acetophenone	1	0		6.15	53.17	50	20	0.01	1.761	1.873	6.34	
Hexachloroethane	1	0		6.24	51.01	50	20	0.3	0.537	0.548	2.01	
N-Nitroso-di-n-propylamine	1	0		6.15	52.98	50	20	0.5	0.808	0.857	5.96	
3&4-Methylphenol	1	0		6.15	52.28	50	20		1.197	1.252	4.56	
Naphthalene-d8	1	0	I	6.83	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	24.03	25	**		0.156	0.150	3.87	
Nitrobenzene	1	0		6.29	50.37	50	20	0.2	0.306	0.308	0.75	
Isophorone	1	0		6.47	51.15	50	20	0.4	0.569	0.582	2.30	
2-Nitrophenol	1	0		6.54	50.53	50	20	0.1	0.182	0.184	1.06	
2,4-Dimethylphenol	1	0		6.56	50.78	50	20	0.2	0.320	0.325	1.57	
Benzoic Acid	1	0		6.64	20.61	50	**		0.272	0.119	58.78	
bis(2-Chloroethoxy)methane	1	0		6.63	48.29	50	20	0.3	0.368	0.355	3.43	
2,4-Dichlorophenol	1	0		6.72	48.43	50	20	0.2	0.291	0.282	3.14	
1,2,4-Trichlorobenzene	1	0		6.78	47.04	50	**		0.320	0.301	5.92	
Naphthalene	1	0		6.85	50.80	50	20	0.7	1.075	1.039	1.59	
4-Chloroaniline	1	0		6.88	53.18	50	20	0.01	0.317	0.397	6.35	
Hexachlorobutadiene	1	0		6.93	48.95	50	20	0.01	0.176	0.172	2.11	
Caprolactam	1	0		7.16	52.87	50	20	0.01	0.117	0.119	5.73	
4-Chloro-3-methylphenol	1	0		7.25	53.19	50	20	0.2	0.267	0.284	6.37	
2-Methylnaphthalene	1	0		7.38	49.95	50	**	0.4	0.709	0.708	0.11	
1-Methylnaphthalene	1	0		7.46	49.67	50	**	0.4	0.681	0.676	0.65	
Methylnaphthalenes	1	0		7.38	99.08	100	**			0.687	0.92	
1,1'-Biphenyl	1	0		7.75	49.55	50	20	0.01	0.824	0.817	0.91	
Acenaphthene-d10	1	0	I	8.26	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	49.93	50	20	0.01	0.568	0.567	0.14	
Hexachlorocyclopentadiene	1	0		7.50	40.77	50	20	0.05	0.329	0.268	18.46	
2,4,6-Trichlorophenol	1	0		7.60	51.19	50	20	0.2	0.347	0.356	2.38	
2,4,5-Trichlorophenol	1	0		7.63	49.32	50	20	0.2	0.373	0.368	1.36	
2-Fluorobiphenyl	1	0	S	7.67	25.46	25	**		1.252	1.275	1.82	
2-Chloronaphthalene	1	0		7.78	49.33	50	20	0.8	1.055	1.041	1.34	
1,4-Dimethylnaphthalene	1	0		8.06	51.51	50	**		0.858	0.884	3.03	
Dimethylnaphthalenes	1	0		8.06	51.51	50	20			0.884	3.03	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M66039.D **Instrument:** GCMS 10

Cont Calibration Date/Time 11/15/2017 11:11:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.83	50.17	50	**		0.823	0.826	0.33	
2-Nitroaniline	1	0		7.86	52.81	50	20	0.01	0.349	0.369	5.63	
Coumarin	1	0		8.04	50.02		**		0.435			
Acenaphthylene	1	0		8.13	49.15	50	20	0.9	1.711	1.682	1.70	
Dimethylphthalate	1	0		8.00	50.87	50	20	0.01	1.209	1.230	1.73	
2,6-Dinitrotoluene	1	0		8.06	51.80	50	20	0.2	0.276	0.301	3.59	
Acenaphthene	1	0		8.29	50.56	50	20	0.9	1.117	1.129	1.12	
3-Nitroaniline	1	0		8.21	51.35	50	20	0.01	0.278	0.327	2.70	
2,4-Dinitrophenol	1	0		8.30	40.43	50	20	0.01	0.123	0.106	19.14	
Dibenzofuran	1	0		8.44	48.49	50	20	0.8	1.621	1.572	3.02	
2,4-Dinitrotoluene	1	0		8.42	53.25	50	20	0.2	0.360	0.392	6.51	
4-Nitrophenol	1	0		8.34	49.09	50	20	0.01	0.215	0.226	1.82	
2,3,4,6-Tetrachlorophenol	1	0		8.55	52.68	50	20	0.01	0.323	0.340	5.35	
Fluorene	1	0		8.77	51.55	50	20	0.9	1.283	1.323	3.11	
4-Chlorophenyl-phenylether	1	0		8.75	51.70	50	20	0.4	0.599	0.620	3.40	
Diethylphthalate	1	0		8.63	52.28	50	20	0.01	1.242	1.299	4.56	
4-Nitroaniline	1	0		8.77	51.48	50	20	0.01	0.358	0.370	2.96	
Atrazine	1	0		9.39	52.78	50	20	0.01	0.327	0.345	5.55	
Phenanthrene-d10	1	0	I	9.72	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.80	47.20	50	20	0.01	0.108	0.108	5.60	
n-Nitrosodiphenylamine	1	0		8.86	50.91	50	20	0.01	0.630	0.642	1.81	
2,4,6-Tribromophenol	1	0	S	9.00	55.82	50	**		0.109	0.124	11.65	
1,2-Diphenylhydrazine	1	0		8.90	52.31	50	**		0.650	0.680	4.61	
4-Bromophenyl-phenylether	1	0		9.24	53.14	50	20	0.1	0.208	0.221	6.28	
Hexachlorobenzene	1	0		9.31	55.10	50	20	0.1	0.220	0.243	10.19	
N-Octadecane	1	0		9.57	40.48	50	**	0.05	0.441	0.357	19.05	
Pentachlorophenol	1	0		9.51	42.09	50	20	0.05	0.132	0.111	15.83	
Phenanthrene	1	0		9.74	48.80	50	20	0.7	1.118	1.092	2.39	
Anthracene	1	0		9.80	49.84	50	20	0.7	1.134	1.131	0.32	
Carbazole	1	0		9.97	50.36	50	20	0.01	1.042	1.049	0.72	
Di-n-butylphthalate	1	0		10.34	53.02	50	20	0.01	1.197	1.273	6.04	
Fluoranthene	1	0		11.07	51.90	50	20	0.6	1.176	1.221	3.79	
Chrysene-d12	1	0	I	12.76	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.33	46.49	50	20	0.6	1.118	1.039	7.02	
Benzidine	1	0		11.23	32.83	50	**		0.438	0.397	34.34	
Terphenyl-d14	1	0	S	11.51	24.76	25	**		0.612	0.606	0.94	
4,4'-DDE	1	0		11.45	49.34		**		0.223			
4,4'-DDD	1	0		11.85	49.90		**		0.424			
Butylbenzylphthalate	1	0		12.10	48.36	50	20	0.01	0.489	0.481	3.28	
4,4'-DDT	1	0		12.20	52.37		**		0.359			
3,3'-Dichlorobenzidine	1	0		12.72	56.48	50	20	0.01	0.271	0.353	12.96	
Benzo[a]anthracene	1	0		12.75	48.89	50	20	0.8	1.027	1.004	2.22	
Chrysene	1	0		12.79	49.51	50	20	0.7	0.975	0.965	0.97	
bis(2-Ethylhexyl)phthalate	1	0		12.78	51.58	50	20	0.01	0.683	0.704	3.15	
Perylene-d12	1	0	I	14.38	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.53	48.02	50	20	0.01	1.245	1.232	3.96	
Benzo[b]fluoranthene	1	0		13.96	49.11	50	20	0.7	1.092	1.073	1.78	
Benzo[k]fluoranthene	1	0		13.99	51.35	50	20	0.7	1.088	1.117	2.70	
Benzo[a]pyrene	1	0		14.32	49.51	50	20	0.7	1.043	1.033	0.98	
Indeno[1,2,3-cd]pyrene	1	0		15.69	51.04	50	20	0.5	1.142	1.165	2.08	
Dibenzo[a,h]anthracene	1	0		15.71	50.17	50	20	0.4	0.966	0.969	0.33	
Benzo[g,h,i]perylene	1	0		16.07	51.09	50	20	0.5	0.975	0.996	2.18	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M66039.D **Instrument:** GCMS 10

Cont Calibration Date/Time 11/15/2017 11:11:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.694	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.858	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
Data File: 10M66039.D
Acq On : 11/15/17 11:11

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M_1011.M
Qt On : 11/15/17 11:28
Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	45100	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	102757	40.00	ng	-0.01
31) Naphthalene-d8	6.829	136	410276	40.00	ng	-0.01
50) Acenaphthene-d10	8.257	164	245443	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	428658	40.00	ng	0.00
91) Chrysene-d12	12.761	240	523383	40.00	ng	0.00
103) Perylene-d12	14.376	264	497060	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.620	112	143187	48.64	ng	-0.01
Spiked Amount 100.000			Recovery = 48.64%			
16) Phenol-d5	5.503	99	178443	49.27	ng	0.00
Spiked Amount 100.000			Recovery = 49.27%			
32) Nitrobenzene-d5	6.273	128	38372	24.03	ng	0.00
Spiked Amount 50.000			Recovery = 48.06%			
55) 2-Fluorobiphenyl	7.669	172	195516	25.46	ng	0.00
Spiked Amount 50.000			Recovery = 50.92%			
80) 2,4,6-Tribromophenol	8.996	330	66257	55.82	ng	0.00
Spiked Amount 100.000			Recovery = 55.82%			
94) Terphenyl-d14	11.515	244	198158	24.76	ng	0.00
Spiked Amount 50.000			Recovery = 49.52%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.615	88	56284	49.5920	ng	61
9) Pyridine	3.091	79	143238	49.5839	ng	74
10) N-Nitrosodimethylamine	3.016	74	81010	49.7804	ng	84
12) Benzaldehyde	5.449	77	44584	32.8376	ng	71
13) Aniline	5.540	93	209183	45.8709	ng	72
14) Pentachloroethane	5.583	117	53735	50.6081	ng	76
15) bis(2-Chloroethyl)ether	5.599	93	144359	46.5950	ng	77
17) Phenol	5.519	94	210409	50.6927	ng	83
18) 2-Chlorophenol	5.642	128	175036	50.4217	ng	73
19) N-Decane	5.679	57	131536	37.7331	ng	81
20) 1,3-Dichlorobenzene	5.770	146	182208	47.9328	ng	97
22) 1,4-Dichlorobenzene	5.834	146	184935	47.8213	ng	99
23) 1,2-Dichlorobenzene	5.957	146	176754	48.3298	ng	98
24) Benzyl alcohol	5.936	108	104938	48.9609	ng	70
25) bis(2-chloroisopropyl)...	6.043	45	183220	35.9709	ng	80
26) 2-Methylphenol	6.027	108	145398	48.3123	ng	96
27) Acetophenone	6.150	105	240611	53.1722	ng	74
28) Hexachloroethane	6.236	117	70423	51.0071	ng	88
29) N-Nitroso-di-n-propyla...	6.150	70	110026	52.9794	ng	79
30) 3&4-Methylphenol	6.150	108	160816	52.2803	ng	100
33) Nitrobenzene	6.289	77	158107	50.3740	ng	71
34) Isophorone	6.471	82	298534	51.1491	ng	82
35) 2-Nitrophenol	6.535	139	94565	50.5275	ng	84
36) 2,4-Dimethylphenol	6.562	107	166469	50.7846	ng	91
37) Benzoic Acid	6.637	105	61126	20.6088	ng	81
38) bis(2-Chloroethoxy)met...	6.631	93	182169	48.2857	ng	96
39) 2,4-Dichlorophenol	6.717	162	144530	48.4315	ng	85
40) 1,2,4-Trichlorobenzene	6.781	180	154400	47.0400	ng	99
41) Naphthalene	6.845	128	533094	50.7960	ng	100
42) 4-Chloroaniline	6.883	127	203544	53.1763	ng	96
43) Hexachlorobutadiene	6.931	225	88389	48.9453	ng	98
44) Caprolactam	7.161	113	60907	52.8661	ng	59
45) 4-Chloro-3-methylphenol	7.247	107	145606	53.1871	ng	73
46) 2-Methylnaphthalene	7.380	142	363183	49.9475	ng	100
47) 1-Methylnaphthalene	7.460	142	346912	49.6732	ng	94
48) Methylnaphthalenes (To...	7.380	142	704986m	99.0796	ng	
49) 1,1'-Biphenyl	7.755	154	418930	49.5470	ng	93
51) 1,2,4,5-Tetrachloroben...	7.509	216	174031	49.9291	ng	97
52) Hexachlorocyclopentadiene	7.498	237	82256	40.7689	ng	98
53) 2,4,6-Trichlorophenol	7.600	196	109107	51.1879	ng	97
54) 2,4,5-Trichlorophenol	7.632	196	112981	49.3193	ng	99
56) 2-Chloronaphthalene	7.776	162	319309	49.3289	ng	92
57) 1,4-Dimethylnaphthalene	8.059	156	271297	51.5134	ng	86
58) Dimethylnaphthalenes (...	8.059	156	271297	51.5134	ng	86
59) Diphenyl Ether	7.835	170	253353	50.1659	ng	79
60) 2-Nitroaniline	7.856	65	113125	52.8144	ng	48
61) Coumarin	8.043	146	133607	50.0151	ng	75
62) Acenaphthylene	8.134	152	515906	49.1516	ng	98
63) Dimethylphthalate	7.995	163	377446	50.8671	ng	98
64) 2,6-Dinitrotoluene	8.059	165	92470	51.7970	ng	59
65) Acenaphthene	8.290	153	346513	50.5587	ng	97

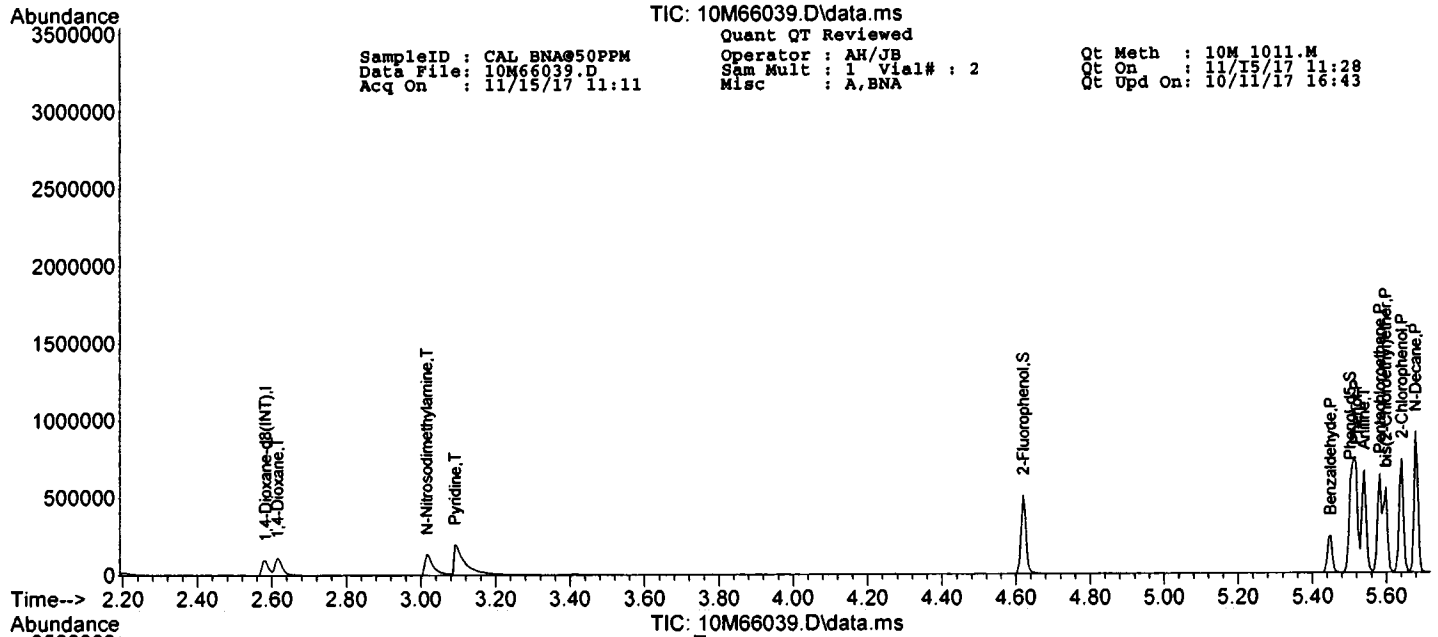
Quantitation Report (QT Reviewed)

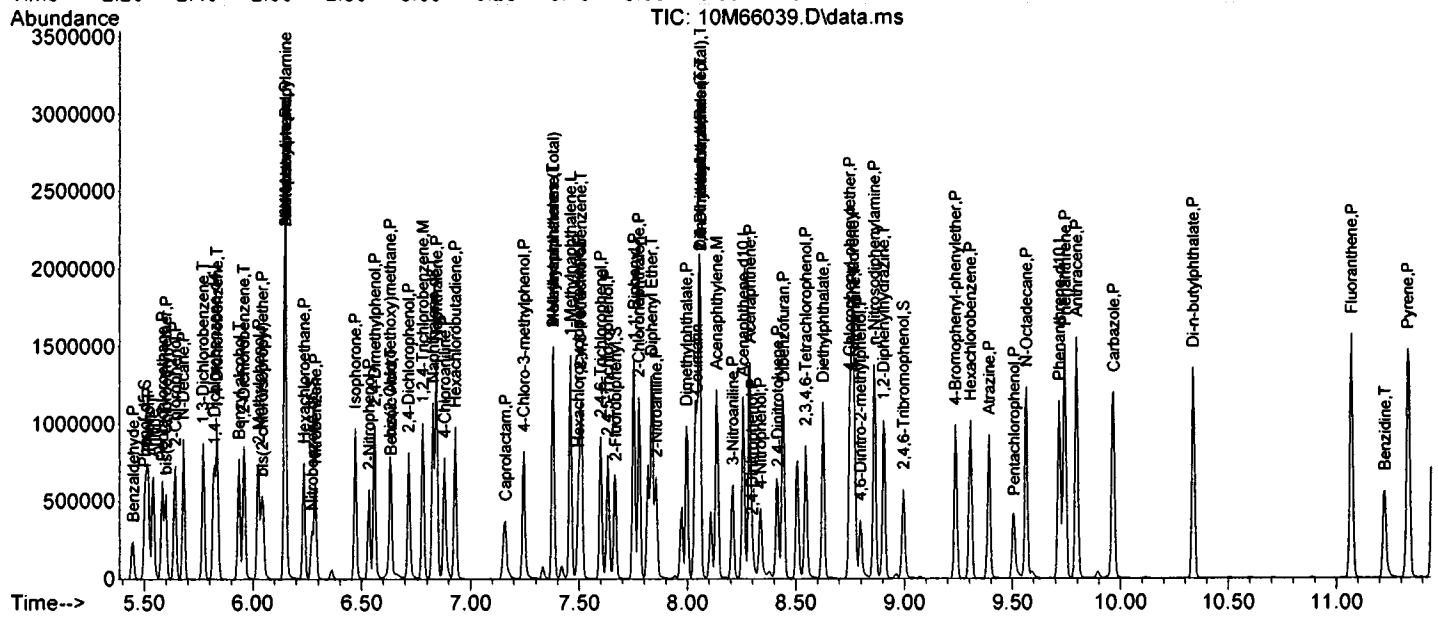
SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66039.D Sam Mult : 1 Vial# : 2 Qt On : 11/15/17 11:28
Acq On : 11/15/17 11:11 Misc : A,BNA Qt Upd On: 10/11/17 16:43

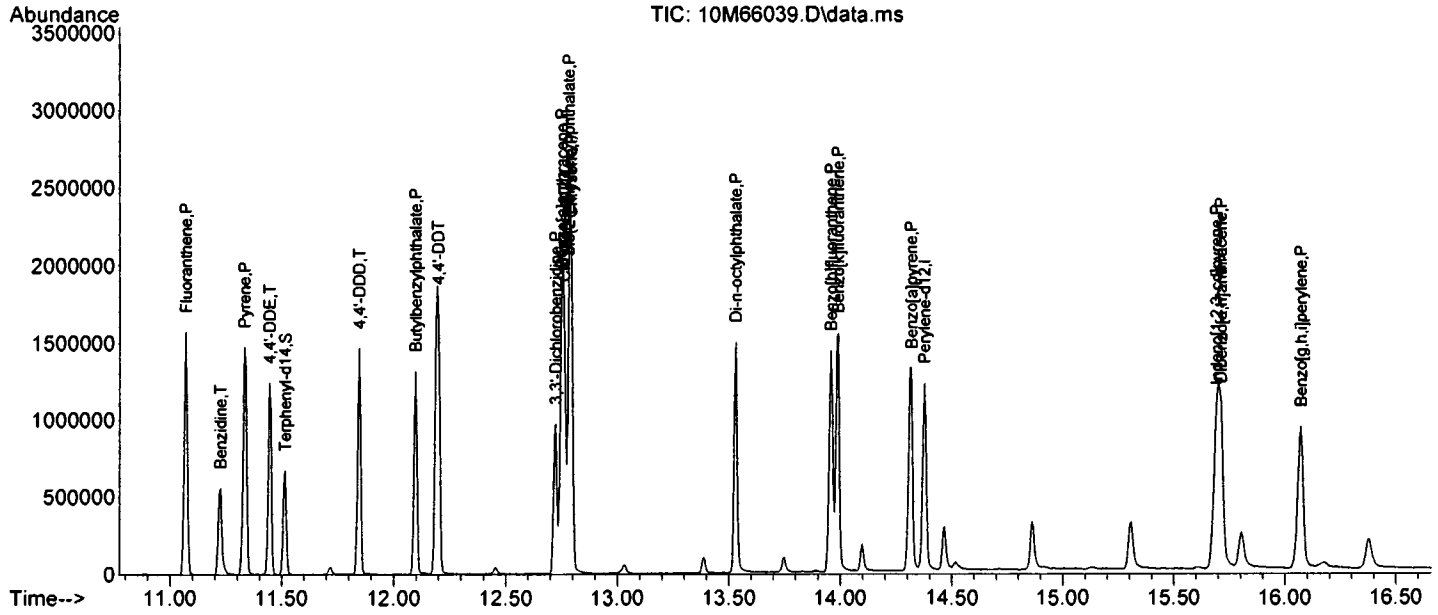
Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.209	138	100445	51.3497	ng	66
67)	2,4-Dinitrophenol	8.300	184	32386	40.4298	ng	41
68)	Dibenzofuran	8.445	168	482258	48.4918	ng	84
69)	2,4-Dinitrotoluene	8.418	165	120407	53.2546	ng	57
70)	4-Nitrophenol	8.338	65	69324	49.0915	ng	78
71)	2,3,4,6-Tetrachlorophenol	8.546	232	104265	52.6756	ng	81
72)	Fluorene	8.766	166	405816	51.5547	ng	99
73)	4-Chlorophenyl-phenyle...	8.749	204	190069	51.6998	ng	86
74)	Diethylphthalate	8.626	149	398480	52.2781	ng	98
75)	4-Nitroaniline	8.771	138	113545	51.4784	ng	78
76)	Atrazine	9.391	200	105770	52.7754	ng	95
78)	4,6-Dinitro-2-methylph...	8.798	198	57653	47.1993	ng	55
79)	n-Nitrosodiphenylamine	8.862	169	343785	50.9060	ng	100
81)	1,2-Diphenylhydrazine	8.905	77	364563	52.3068	ng	85
82)	4-Bromophenyl-phenylether	9.236	248	118502	53.1410	ng	85
83)	Hexachlorobenzene	9.306	284	130086	55.0973	ng	63
84)	N-Octadecane	9.568	57	191465	40.4762	ng	77
85)	Pentachlorophenol	9.509	266	59492	42.0851	ng	99
86)	Phenanthrene	9.744	178	584861	48.8044	ng	99
87)	Anthracene	9.798	178	605812	49.8403	ng	99
88)	Carbazole	9.969	167	562291	50.3595	ng	97
89)	Di-n-butylphthalate	10.338	149	682206	53.0222	ng	98
90)	Fluoranthene	11.071	202	654254	51.8974	ng	89
92)	Pyrene	11.333	202	679839	46.4888	ng	88
93)	Benzidine	11.226	184	259458	32.8294	ng	85
95)	4,4'-DDE	11.445	246	144267	49.3383	ng	91
96)	4,4'-DDD	11.846	235	276620	49.9014	ng	96
97)	Butylbenzylphthalate	12.098	149	314538	48.3576	ng	70
98)	4,4'-DDT	12.199	235	245787	52.3743	ng	99
99)	3,3'-Dichlorobenzidine	12.724	252	231020	56.4791	ng	96
100)	Benzo[a]anthracene	12.750	228	656708	48.8908	ng	99
101)	Chrysene	12.793	228	631555	49.5135	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.782	149	460877	51.5768	ng	95
104)	Di-n-octylphthalate	13.531	149	765674	48.0185	ng	100
105)	Benzo[b]fluoranthene	13.959	252	666606	49.1078	ng	93
106)	Benzo[k]fluoranthene	13.991	252	694264	51.3500	ng	91
107)	Benzo[a]pyrene	14.317	252	641712	49.5081	ng	91
108)	Indeno[1,2,3-cd]pyrene	15.692	276	724085	51.0411	ng	80
109)	Dibenzo[a,h]anthracene	15.713	278	602056	50.1671	ng	88
110)	Benzo[g,h,i]perylene	16.072	276	619036	51.0888	ng	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 10M66039.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 10M66039.D
Acq On : 11/15/17 11:11
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 11/15/17 11:28
Qt Upd On: 10/11/17 16:43
Abundance
Time-->


TIC: 10M66039.D\data.ms
Abundance
Time-->


TIC: 10M66039.D\data.ms
Abundance
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M66068.D **Instrument:** GCMS 10

Cont Calibration Date/Time 11/16/2017 9:32:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
1,4-Dioxane-d8(INT)	1	0	I	2.58	40.00	40	**			0.000	0.00	
1,4-Dioxane	1	0		2.62	51.12	50	**		1.208	1.030	2.23	
Pyridine	1	0		3.10	47.02	50	**		2.562	2.410	5.95	
N-Nitrosodimethylamine	1	0		3.02	50.55	50	**		1.443	1.459	1.10	
2-Fluorophenol	1	0	S	4.63	47.98	50	**		2.611	2.506	4.03	
Benzaldehyde	1	0		5.45	32.21	50	20	0.01	1.204	0.776	35.57	C1
Aniline	1	0		5.54	44.80	50	**		3.501	3.623	10.41	
Pentachloroethane	1	0		5.58	49.65	50	**	0.05	0.942	0.935	0.69	
bis(2-Chloroethyl)ether	1	0		5.60	45.73	50	20	0.7	2.748	2.513	8.54	
Phenol-d5	1	0	S	5.51	48.94	50	**		3.212	3.144	2.13	
Phenol	1	0		5.52	48.08	50	20	0.8	3.681	3.540	3.83	
2-Chlorophenol	1	0		5.64	49.38	50	20	0.8	3.079	3.041	1.24	
N-Decane	1	0		5.68	37.61	50	**	0.05	3.092	2.326	24.77	
1,3-Dichlorobenzene	1	0		5.77	47.55	50	**		3.371	3.206	4.91	
1,4-Dichlorobenzene-d4	1	0	I	5.82	40.00	40	**			0.000	0.00	
1,4-Dichlorobenzene	1	0		5.83	47.88	50	20		1.505	1.442	4.24	
1,2-Dichlorobenzene	1	0		5.96	47.78	50	**		1.424	1.360	4.44	
Benzyl alcohol	1	0		5.94	47.47	50	**		0.834	0.792	5.07	
bis(2-chloroisopropyl)ether	1	0		6.04	34.56	50	20	0.01	1.983	1.371	30.87	C1
2-Methylphenol	1	0		6.03	48.63	50	20	0.7	1.172	1.139	2.74	
Acetophenone	1	0		6.15	50.04	50	20	0.01	1.761	1.763	0.07	
Hexachloroethane	1	0		6.24	49.23	50	20	0.3	0.537	0.529	1.55	
N-Nitroso-di-n-propylamine	1	0		6.15	51.07	50	20	0.5	0.808	0.826	2.15	
3&4-Methylphenol	1	0		6.15	50.26	50	20		1.197	1.204	0.53	
Naphthalene-d8	1	0	I	6.83	40.00	40	**			0.000	0.00	
Nitrobenzene-d5	1	0	S	6.27	24.87	25	**		0.156	0.155	0.51	
Nitrobenzene	1	0		6.29	50.94	50	20	0.2	0.306	0.312	1.88	
Isophorone	1	0		6.47	49.88	50	20	0.4	0.569	0.568	0.25	
2-Nitrophenol	1	0		6.54	51.12	50	20	0.1	0.182	0.187	2.23	
2,4-Dimethylphenol	1	0		6.56	50.52	50	20	0.2	0.320	0.323	1.04	
Benzoic Acid	1	0		6.64	27.64	50	**		0.272	0.162	44.73	
bis(2-Chloroethoxy)methane	1	0		6.63	47.87	50	20	0.3	0.368	0.352	4.25	
2,4-Dichlorophenol	1	0		6.72	49.68	50	20	0.2	0.291	0.289	0.64	
1,2,4-Trichlorobenzene	1	0		6.78	47.82	50	**		0.320	0.306	4.35	
Naphthalene	1	0		6.85	49.31	50	20	0.7	1.075	1.009	1.38	
4-Chloroaniline	1	0		6.88	52.49	50	20	0.01	0.317	0.392	4.97	
Hexachlorobutadiene	1	0		6.93	51.28	50	20	0.01	0.176	0.181	2.56	
Caprolactam	1	0		7.16	51.21	50	20	0.01	0.117	0.115	2.42	
4-Chloro-3-methylphenol	1	0		7.25	52.08	50	20	0.2	0.267	0.278	4.16	
2-Methylnaphthalene	1	0		7.38	49.13	50	**	0.4	0.709	0.697	1.75	
1-Methylnaphthalene	1	0		7.46	49.07	50	**	0.4	0.681	0.668	1.85	
Methylnaphthalenes	1	0		7.38	97.92	100	**			0.679	2.08	
1,1'-Biphenyl	1	0		7.75	50.33	50	20	0.01	0.824	0.830	0.65	
Acenaphthene-d10	1	0	I	8.26	40.00	40	**			0.000	0.00	
1,2,4,5-Tetrachlorobenzene	1	0		7.51	49.44	50	20	0.01	0.568	0.562	1.11	
Hexachlorocyclopentadiene	1	0		7.50	41.56	50	20	0.05	0.329	0.273	16.87	
2,4,6-Trichlorophenol	1	0		7.60	49.80	50	20	0.2	0.347	0.346	0.40	
2,4,5-Trichlorophenol	1	0		7.63	48.67	50	20	0.2	0.373	0.363	2.66	
2-Fluorobiphenyl	1	0	S	7.66	25.13	25	**		1.252	1.258	0.53	
2-Chloronaphthalene	1	0		7.78	49.58	50	20	0.8	1.055	1.046	0.83	
1,4-Dimethylnaphthalene	1	0		8.05	50.26	50	**		0.858	0.863	0.53	
Dimethylnaphthalenes	1	0		8.05	50.26	50	20			0.863	0.53	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M66068.D **Instrument:** GCMS 10

Cont Calibration Date/Time 11/16/2017 9:32:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Diphenyl Ether	1	0		7.84	49.54	50	**		0.823	0.816	0.92	
2-Nitroaniline	1	0		7.86	51.02	50	20	0.01	0.349	0.356	2.05	
Coumarin	1	0		8.04	48.92		**		0.435			
Acenaphthylene	1	0		8.13	48.67	50	20	0.9	1.711	1.665	2.66	
Dimethylphthalate	1	0		8.00	51.02	50	20	0.01	1.209	1.234	2.04	
2,6-Dinitrotoluene	1	0		8.05	50.04	50	20	0.2	0.276	0.291	0.08	
Acenaphthene	1	0		8.28	48.83	50	20	0.9	1.117	1.091	2.33	
3-Nitroaniline	1	0		8.21	51.42	50	20	0.01	0.278	0.328	2.85	
2,4-Dinitrophenol	1	0		8.30	49.17	50	20	0.01	0.123	0.131	1.66	
Dibenzofuran	1	0		8.44	48.62	50	20	0.8	1.621	1.576	2.76	
2,4-Dinitrotoluene	1	0		8.41	51.97	50	20	0.2	0.360	0.383	3.93	
4-Nitrophenol	1	0		8.34	43.04	50	20	0.01	0.215	0.198	13.91	
2,3,4,6-Tetrachlorophenol	1	0		8.55	50.15	50	20	0.01	0.323	0.324	0.29	
Fluorene	1	0		8.77	49.90	50	20	0.9	1.283	1.280	0.21	
4-Chlorophenyl-phenylether	1	0		8.75	49.89	50	20	0.4	0.599	0.598	0.21	
Diethylphthalate	1	0		8.63	49.26	50	20	0.01	1.242	1.224	1.49	
4-Nitroaniline	1	0		8.77	49.87	50	20	0.01	0.358	0.358	0.26	
Atrazine	1	0		9.39	52.15	50	20	0.01	0.327	0.341	4.30	
Phenanthrene-d10	1	0	I	9.72	40.00	40	**			0.000	0.00	
4,6-Dinitro-2-methylphenol	1	0		8.80	48.75	50	20	0.01	0.108	0.111	2.51	
n-Nitrosodiphenylamine	1	0		8.86	49.03	50	20	0.01	0.630	0.618	1.94	
2,4,6-Tribromophenol	1	0	S	9.00	54.33	50	**		0.109	0.120	8.66	
1,2-Diphenylhydrazine	1	0		8.90	48.56	50	**		0.650	0.632	2.89	
4-Bromophenyl-phenylether	1	0		9.24	51.66	50	20	0.1	0.208	0.215	3.32	
Hexachlorobenzene	1	0		9.31	52.72	50	20	0.1	0.220	0.232	5.44	
N-Octadecane	1	0		9.56	39.67	50	**	0.05	0.441	0.350	20.66	
Pentachlorophenol	1	0		9.51	42.32	50	20	0.05	0.132	0.112	15.36	
Phenanthrene	1	0		9.74	47.83	50	20	0.7	1.118	1.070	4.35	
Anthracene	1	0		9.80	48.17	50	20	0.7	1.134	1.093	3.66	
Carbazole	1	0		9.97	49.00	50	20	0.01	1.042	1.021	2.00	
Di-n-butylphthalate	1	0		10.34	50.90	50	20	0.01	1.197	1.221	1.79	
Fluoranthene	1	0		11.07	50.40	50	20	0.6	1.176	1.186	0.81	
Chrysene-d12	1	0	I	12.76	40.00	40	**			0.000	0.00	
Pyrene	1	0		11.33	47.37	50	20	0.6	1.118	1.059	5.26	
Benzidine	1	0		11.23	33.85	50	**		0.438	0.408	32.29	
Terphenyl-d14	1	0	S	11.51	25.57	25	**		0.612	0.625	2.27	
4,4'-DDE	1	0		11.45	50.67		**		0.223			
4,4'-DDD	1	0		11.85	51.45		**		0.424			
Butylbenzylphthalate	1	0		12.10	48.45	50	20	0.01	0.489	0.482	3.09	
4,4'-DDT	1	0		12.20	53.22		**		0.359			
3,3'-Dichlorobenzidine	1	0		12.72	58.36	50	20	0.01	0.271	0.364	16.72	
Benzo[a]anthracene	1	0		12.75	49.44	50	20	0.8	1.027	1.015	1.12	
Chrysene	1	0		12.79	48.76	50	20	0.7	0.975	0.951	2.49	
bis(2-Ethylhexyl)phthalate	1	0		12.78	49.38	50	20	0.01	0.683	0.674	1.25	
Perylene-d12	1	0	I	14.38	40.00	40	**			0.000	0.00	
Di-n-octylphthalate	1	0		13.53	46.51	50	20	0.01	1.245	1.193	6.99	
Benzo[b]fluoranthene	1	0		13.96	48.65	50	20	0.7	1.092	1.063	2.70	
Benzo[k]fluoranthene	1	0		13.99	47.17	50	20	0.7	1.088	1.026	5.66	
Benzo[a]pyrene	1	0		14.32	50.21	50	20	0.7	1.043	1.047	0.42	
Indeno[1,2,3-cd]pyrene	1	0		15.69	50.39	50	20	0.5	1.142	1.151	0.78	
Dibenzo[a,h]anthracene	1	0		15.71	50.32	50	20	0.4	0.966	0.972	0.65	
Benzo[g,h,i]perylene	1	0		16.07	49.02	50	20	0.5	0.975	0.956	1.97	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Form7

Continuing Calibration

Calibration Name: CAL BNA@50PPM **Data File:** 10M66068.D **Instrument:** GCMS 10

Cont Calibration Date/Time 11/16/2017 9:32:00 Method: EPA 8270D

TxtCompd:	Col#	Multi Num	Type	RT	Conc	Conc Exp	Lo Lim	MIN RF	Initial RF	RF	%Diff	Flag
Toluene Diisocyanate	1	100		0.00	0.00	50	**			0.000	100.00	
2,2'-oxybis-(1-Chloropropane)	1	100		0.00	0.00	50	**			0.000	100.00	
2,4 Diaminotoluene	1	100		0.00	0.00	50	**			0.000	100.00	
Methylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.694	0.000	100.00	
Methoxychlor	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor epoxide	1	100		0.00	0.00	10	**			0.000	100.00	
Heptachlor	1	100		0.00	0.00	10	**			0.000	100.00	
Endrin	1	100		0.00	0.00	50	**			0.000	100.00	
1,4-Dioxane-d8	1	100		0.00	0.00	40	**			0.000	100.00	
Dimethylnaphthalenes (Total)	1	100		0.00	0.00	50	**		0.858	0.000	100.00	
Diaminotoluene Dihydrochloride	1	100		0.00	0.00	50	**			0.000	100.00	
4-Methylphenol	1	100		0.00	0.00	50	**	0.6		0.000	100.00	
1,4-Dioxane-d8-Surro	1	100		0.00	0.00	40	**			0.000	100.00	
gamma-BHC	1	100		0.00	0.00	10	**			0.000	100.00	

S-Surrogate Compound I-Internal Standard Compound

N/O or N/Q - Not applicable for this run C1-Compound %Diff exceeds limits ** - No limit specified in method

Note: 8260/8270 limits are compared against the %DIFF/R.F. 625 limits are compared against the %DIFF.

624 limits are compared against the concentration found. 524.2 limits are compared against the %DIFF

Quantitation Report (QT Reviewed)

SampleID : CAL BNA@50PPM
Data File: 10M66068.D
Acq On : 11/16/17 09:32

Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA

Qt Meth : 10M_1011.M
Qt On : 11/16/17 09:53
Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.583	96	43249	40.00	ng	-0.02
21) 1,4-Dichlorobenzene-d4	5.824	152	99891	40.00	ng	-0.01
31) Naphthalene-d8	6.830	136	383208	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	230016	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	408639	40.00	ng	0.00
91) Chrysene-d12	12.761	240	477463	40.00	ng	0.00
103) Perylene-d12	14.376	264	449006	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.626	112	135464	47.98	ng	0.00
Spiked Amount 100.000			Recovery = 47.98%			
16) Phenol-d5	5.508	99	169956	48.94	ng	0.00
Spiked Amount 100.000			Recovery = 48.94%			
32) Nitrobenzene-d5	6.273	128	37091	24.87	ng	0.00
Spiked Amount 50.000			Recovery = 49.74%			
55) 2-Fluorobiphenyl	7.664	172	180907	25.13	ng	-0.01
Spiked Amount 50.000			Recovery = 50.26%			
80) 2,4,6-Tribromophenol	8.996	330	61416	54.33	ng	0.00
Spiked Amount 100.000			Recovery = 54.33%			
94) Terphenyl-d14	11.515	244	186638	25.57	ng	0.00
Spiked Amount 50.000			Recovery = 51.14%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.620	88	55669	51.1168	ng	60
9) Pyridine	3.096	79	130268	47.0241	ng	71
10) N-Nitrosodimethylamine	3.021	74	78889	50.5518	ng	83
12) Benzaldehyde	5.450	77	41943	32.2146	ng	70
13) Aniline	5.541	93	195867	44.7967	ng	70
14) Pentachloroethane	5.583	117	50559	49.6549	ng	76
15) bis(2-Chloroethyl)ether	5.599	93	135857	45.7276	ng	77
17) Phenol	5.519	94	191387	48.0833	ng	84
18) 2-Chlorophenol	5.642	128	164379	49.3784	ng	74
19) N-Decane	5.680	57	125741	37.6145	ng	78
20) 1,3-Dichlorobenzene	5.771	146	173323	47.5469	ng	97
22) 1,4-Dichlorobenzene	5.835	146	180005	47.8820	ng	96
23) 1,2-Dichlorobenzene	5.958	146	169877	47.7821	ng	97
24) Benzyl alcohol	5.936	108	98895	47.4653	ng	69
25) bis(2-chloroisopropyl)...	6.043	45	171147	34.5647	ng	83
26) 2-Methylphenol	6.027	108	142273	48.6302	ng	99
27) Acetophenone	6.150	105	220105	50.0362	ng	73
28) Hexachloroethane	6.236	117	66067	49.2250	ng	90
29) N-Nitroso-di-n-propyla...	6.150	70	103112	51.0747	ng	75
30) 3&4-Methylphenol	6.150	108	150301	50.2639	ng	98
33) Nitrobenzene	6.289	77	149339	50.9413	ng	71
34) Isophorone	6.471	82	271900	49.8764	ng	82
35) 2-Nitrophenol	6.535	139	89354	51.1156	ng	83
36) 2,4-Dimethylphenol	6.562	107	154682	50.5219	ng	85
37) Benzoic Acid	6.637	105	77395	27.6368	ng	84
38) bis(2-Chloroethoxy)met...	6.632	93	168702	47.8747	ng	96
39) 2,4-Dichlorophenol	6.717	162	138471	49.6787	ng	86
40) 1,2,4-Trichlorobenzene	6.781	180	146617	47.8240	ng	98
41) Naphthalene	6.846	128	483524m	49.3108	ng	
42) 4-Chloroaniline	6.883	127	187907	52.4851	ng	96
43) Hexachlorobutadiene	6.931	225	86493	51.2785	ng	98
44) Caprolactam	7.161	113	55003	51.2107	ng	58
45) 4-Chloro-3-methylphenol	7.247	107	133173	52.0817	ng	69
46) 2-Methylnaphthalene	7.380	142	333652	49.1273	ng	100
47) 1-Methylnaphthalene	7.461	142	320116	49.0740	ng	92
48) Methylnaphthalenes (To...	7.380	142	650762m	97.9192	ng	
49) 1,1'-Biphenyl	7.755	154	397437	50.3252	ng	92
51) 1,2,4,5-Tetrachloroben...	7.509	216	161511	49.4449	ng	97
52) Hexachlorocyclopentadiene	7.498	237	78588	41.5633	ng	96
53) 2,4,6-Trichlorophenol	7.600	196	99472	49.7976	ng	99
54) 2,4,5-Trichlorophenol	7.632	196	104481	48.6678	ng	100
56) 2-Chloronaphthalene	7.776	162	300791	49.5847	ng	93
57) 1,4-Dimethylnaphthalene	8.054	156	248071	50.2625	ng	89
58) Dimethylnaphthalenes (...	8.054	156	248071	50.2625	ng	89
59) Diphenyl Ether	7.835	170	234473	49.5413	ng	77
60) 2-Nitroaniline	7.856	65	102419	51.0231	ng	40
61) Coumarin	8.044	146	122477	48.9237	ng	78
62) Acenaphthylene	8.135	152	478739	48.6697	ng	100
63) Dimethylphthalate	7.996	163	354803	51.0225	ng	98
64) 2,6-Dinitrotoluene	8.054	165	83765	50.0420	ng	70
65) Acenaphthene	8.284	153	313648	48.8328	ng	96

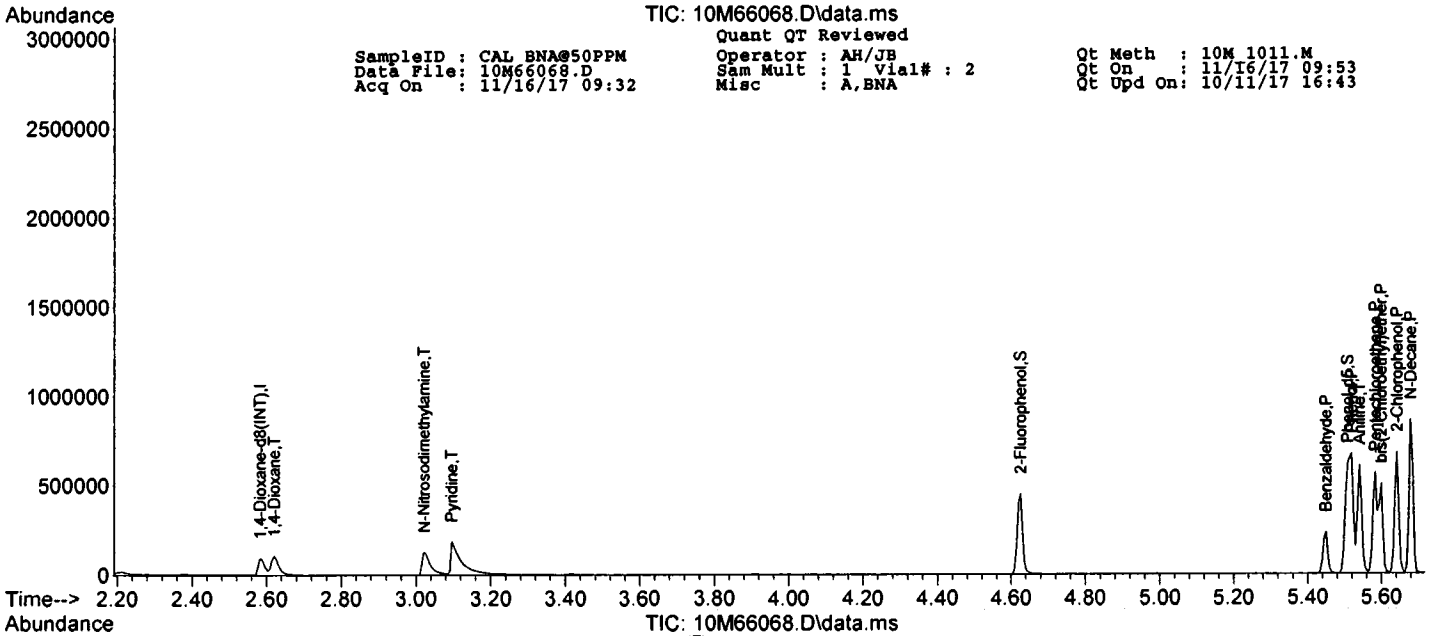
Quantitation Report (QT Reviewed)

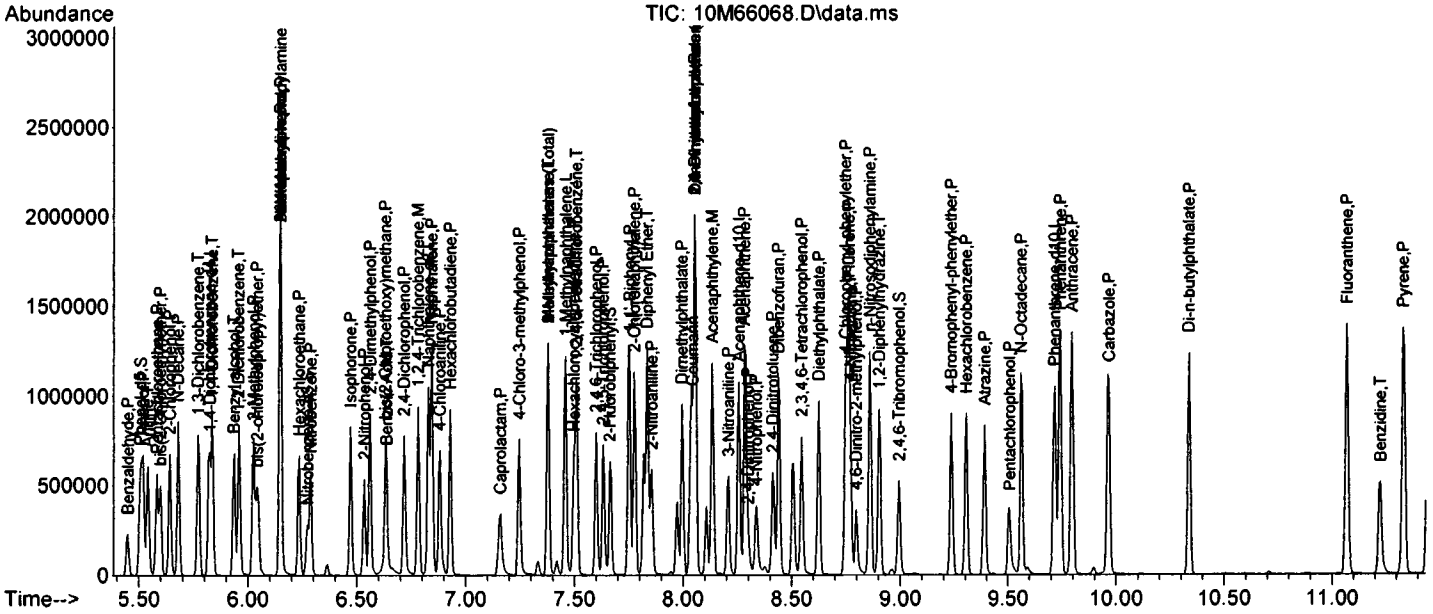
SampleID : CAL BNA@50PPM Operator : AH/JB Qt Meth : 10M_1011.M
Data File: 10M66068.D Sam Mult : 1 Vial# : 2 Qt On : 11/16/17 09:53
Acq On : 11/16/17 09:32 Misc : A,BNA Qt Upd On: 10/11/17 16:43

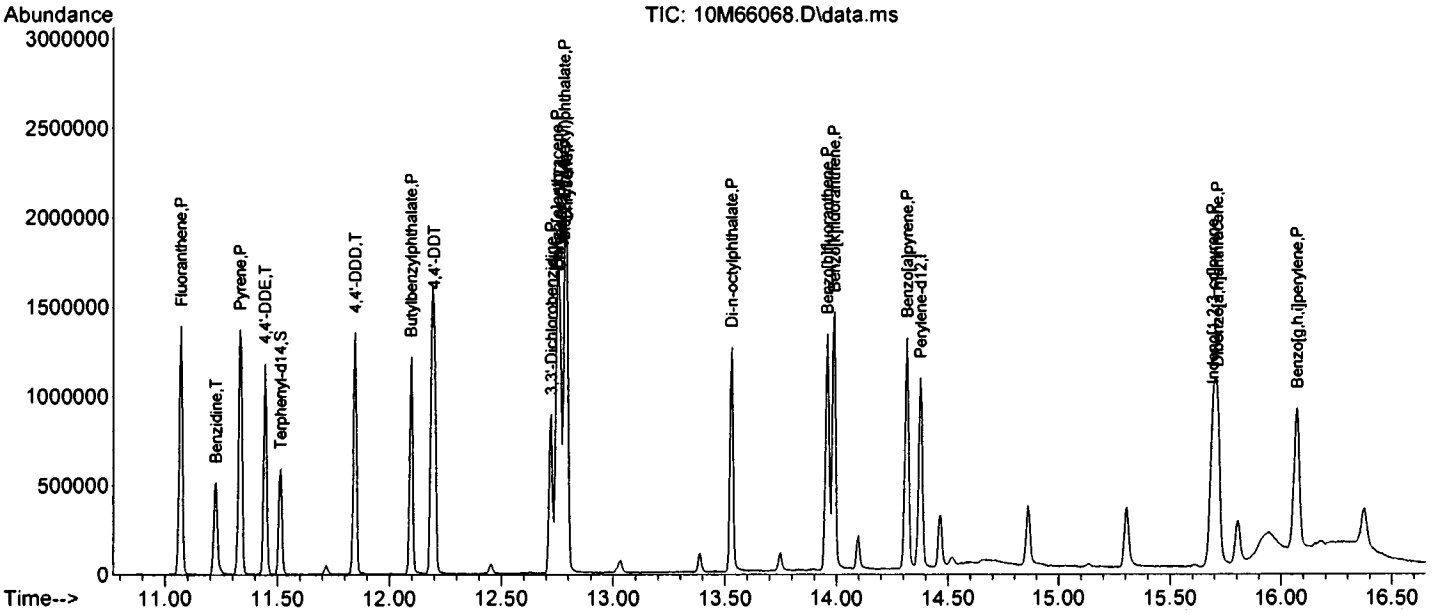
Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.210	138	94256	51.4231	ng	69
67)	2,4-Dinitrophenol	8.300	184	37769	49.1713	ng	36
68)	Dibenzofuran	8.439	168	453132	48.6190	ng	86
69)	2,4-Dinitrotoluene	8.413	165	110053	51.9651	ng	65
70)	4-Nitrophenol	8.338	65	57029	43.0447	ng	82
71)	2,3,4,6-Tetrachlorophenol	8.546	232	93018	50.1453	ng	82
72)	Fluorene	8.766	166	368067	49.8952	ng	100
73)	4-Chlorophenyl-phenyle...	8.750	204	171899	49.8934	ng	84
74)	Diethylphthalate	8.627	149	351843	49.2555	ng	96
75)	4-Nitroaniline	8.771	138	103017	49.8705	ng	74
76)	Atrazine	9.392	200	97949	52.1509	ng	95
78)	4,6-Dinitro-2-methylph...	8.798	198	56915	48.7465	ng	65
79)	n-Nitrosodiphenylamine	8.862	169	315649	49.0295	ng	98
81)	1,2-Diphenylhydrazine	8.905	77	322621	48.5567	ng	83
82)	4-Bromophenyl-phenylether	9.236	248	109814	51.6575	ng	82
83)	Hexachlorobenzene	9.306	284	118665	52.7222	ng	63
84)	N-Octadecane	9.563	57	178880	39.6682	ng	75
85)	Pentachlorophenol	9.509	266	57050	42.3195	ng	98
86)	Phenanthrene	9.745	178	546384	47.8273	ng	99
87)	Anthracene	9.798	178	558159	48.1694	ng	100
88)	Carbazole	9.969	167	521546	48.9986	ng	97
89)	Di-n-butylphthalate	10.338	149	623923	50.8963	ng	97
90)	Fluoranthene	11.071	202	605751	50.4040	ng	89
92)	Pyrene	11.333	202	631969	47.3716	ng	87
93)	Benzidine	11.226	184	243593	33.8526	ng	82
95)	4,4'-DDE	11.445	246	135169	50.6727	ng	90
96)	4,4'-DDD	11.847	235	260193	51.4523	ng	97
97)	Butylbenzylphthalate	12.098	149	287525	48.4546	ng	70
98)	4,4'-DDT	12.200	235	227859	53.2237	ng	98
99)	3,3'-Dichlorobenzidine	12.724	252	217318	58.3596	ng	96
100)	Benzo[a]anthracene	12.751	228	605814	49.4395	ng	100
101)	Chrysene	12.793	228	567328	48.7558	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.783	149	402504	49.3764	ng	94
104)	Di-n-octylphthalate	13.531	149	669322	46.5050	ng	99
105)	Benzo[b]fluoranthene	13.959	252	596565	48.6515	ng	94
106)	Benzo[k]fluoranthene	13.991	252	576113m	47.1715	ng	
107)	Benzo[a]pyrene	14.318	252	587884	50.2093	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.692	276	645744	50.3904	ng	79
109)	Dibenzo[a,h]anthracene	15.714	278	545552	50.3240	ng	89
110)	Benzo[g,h,i]perylene	16.072	276	536499	49.0157	ng	75

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 10M66068.D\data.ms
Quant QT Reviewed
SampleID : CAL BNA@50PPM
Data File: 10M66068.D
Acq On : 11/16/17 09:32
Operator : AH/JB
Sam Mult : 1 Vial# : 2
Misc : A,BNA
Qt Meth : 10M_1011.M
Qt On : 11/16/17 09:53
Qt Upd On: 10/11/17 16:43
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
Time-->


Abundance
TIC: 10M66068.D\data.ms
Benzaldehyde,P
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
2-Nitrophenol,P
2,4-Dichlorophenol,P
Hexachloroethane,P
Diphenyl Ether,T
Acenaphthylene,M
3-Nitroaniline,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
4,6-Dinitro-2-methylphenol,P
1,2-Diphenylhydrazine,I
2,4,6-Tribromophenol,S
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 10M66068.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
4,4'-DDE,T
Terphenyl-d14,S
4,4'-DDD,T
Butylbenzylphthalate,P
4,4'-DDT
3,3'-Dichlorobenzidine,P
Di-n-octylphthalate,P
Benzo(b)fluoranthene,P
Benzo(k)fluoranthene,P
Benzo(a)pyrene,P
Perylene-d12,I
Indeno(1,2,3-cd)pyrene,P
Dibenz(a,h)anthracene,P
Benzo(g,h,i)perylene,P
Time-->

GC/MS Base Neutral/Acid Extractable Data
Raw QC Data

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10
Data File: 10M65424.D
Analysis Date: 10/11/17 11:02
Method: EPA 8270D

Tune Scan/Time Range: Scan 1462

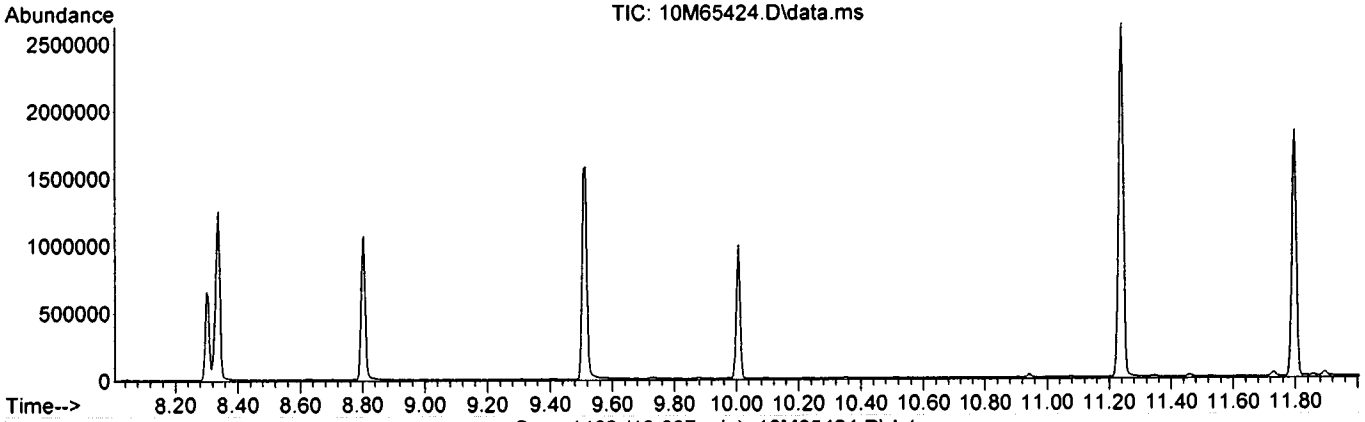
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	34.6	42912	PASS
68	69	0.00	2	1.4	631	PASS
69	198	0.00	100	35.2	43728	PASS
70	69	0.00	2	0.9	411	PASS
127	198	40	60	48.5	60160	PASS
197	198	0.00	1	0.6	725	PASS
198	198	100	100	100.0	124112	PASS
199	198	5	9	6.8	8409	PASS
275	198	10	30	25.0	31000	PASS
365	198	1	100	2.7	3295	PASS
441	443	0.01	100	66.6	10632	PASS
442	198	40	100	63.5	78752	PASS
443	442	17	23	20.3	15957	PASS

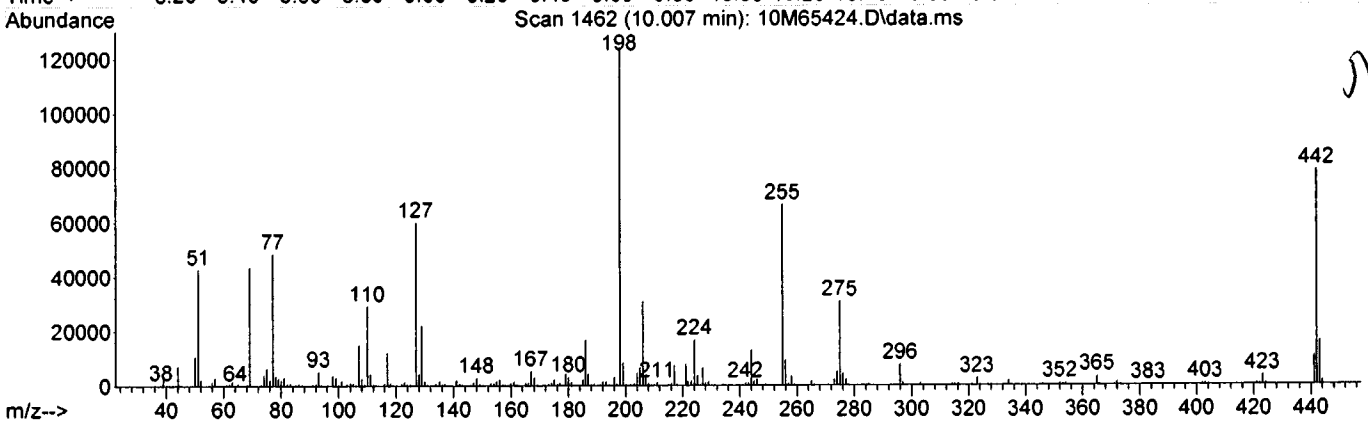
Data File	Sample Number	Analysis Date:
10M65425.D	CAL BNA@10PPM	10/11/17 12:08
10M65426.D	CAL BNA@2PPM	10/11/17 12:48
10M65427.D	CAL BNA@196PP	10/11/17 13:10
10M65428.D	CAL BNA@160PP	10/11/17 13:33
10M65429.D	CAL BNA@120PP	10/11/17 13:55
10M65430.D	CAL BNA@80PPM	10/11/17 14:17
10M65431.D	CAL BNA@50PPM	10/11/17 14:39
10M65432.D	CAL BNA@20PPM	10/11/17 15:01
10M65433.D	CAL BNA@.5PPM	10/11/17 15:24
10M65434.D	CAL BNA@10PPM	10/11/17 15:51
10M65435.D	CAL BNA@50PPM	10/11/17 16:13
10M65436.D	ICV BNA@50PPM	10/11/17 16:35

Data Path : G:\GcMsData\2017\GCMS_10\Data\10-11-17\
Data File : 10M65424.D
Acq On : 11 Oct 2017 11:02
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_10\METHODQT\10M_0911.M
Title : @GCMS_10,mg,625,8270
Last Update : Mon Sep 11 13:11:29 2017





Spectrum Information: Scan 1462

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	34.6	42912	PASS
68	69	0.00	2	1.4	631	PASS
69	198	0.00	100	35.2	43728	PASS
70	69	0.00	2	0.9	411	PASS
127	198	40	60	48.5	60160	PASS
197	198	0.00	1	0.6	725	PASS
198	198	100	100	100.0	124112	PASS
199	198	5	9	6.8	8409	PASS
275	198	10	30	25.0	31000	PASS
365	198	1	100	2.7	3295	PASS
441	443	0.01	100	66.6	10632	PASS
442	198	40	100	63.5	78752	PASS
443	442	17	23	20.3	15957	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7
Data File: 7M87268.D
Analysis Date: 10/19/17 09:03
Method: EPA 8270D

Tune Scan/Time Range: Average of 10.003 to 10.009 min

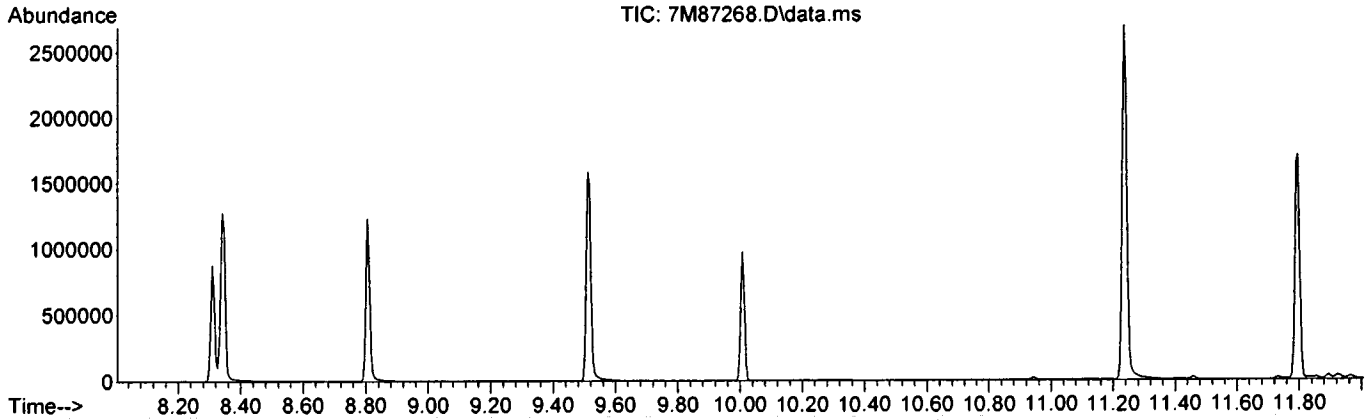
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	44.7	41608	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.0	45560	PASS
70	69	0.00	2	0.6	275	PASS
127	198	40	60	58.3	54188	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93004	PASS
199	198	5	9	6.8	6361	PASS
275	198	10	30	21.3	19815	PASS
365	198	1	100	2.4	2198	PASS
441	443	0.01	100	73.9	6922	PASS
442	198	40	100	50.0	46472	PASS
443	442	17	23	20.2	9368	PASS

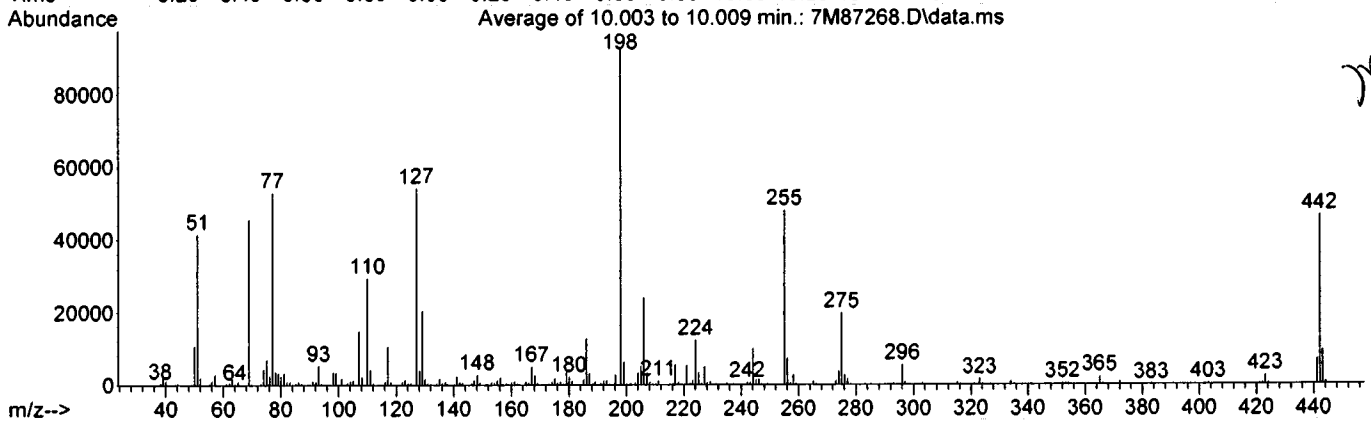
Data File	Sample Number	Analysis Date:
7M87269.D	CAL BNA@10PPM	10/19/17 09:26
7M87270.D	CAL BNA@2PPM	10/19/17 10:27
7M87271.D	CAL BNA@10PPM	10/19/17 10:51
7M87272.D	CAL BNA@196PP	10/19/17 11:15
7M87273.D	CAL BNA@160PP	10/19/17 11:38
7M87274.D	CAL BNA@120PP	10/19/17 12:02
7M87275.D	CAL BNA@80PPM	10/19/17 12:25
7M87276.D	CAL BNA@20PPM	10/19/17 12:48
7M87277.D	CAL BNA@.5PPM	10/19/17 13:11
7M87278.D	CAL BNA@50PPM	10/19/17 13:35
7M87279.D	ICV BNA@50PPM	10/19/17 13:58

Data Path : G:\GcMsData\2017\GCMS_7\Data\10-19-17\
Data File : 7M87268.D
Acq On : 19 Oct 2017 9:03
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_7\METHODQT\7M_1016.M
Title : @GCMS_7,mg,625,8270
Last Update : Mon Oct 16 15:11:03 2017





Spectrum Information: Average of 10.003 to 10.009 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	44.7	41608	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	49.0	45560	PASS
70	69	0.00	2	0.6	275	PASS
127	198	40	60	58.3	54188	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	93004	PASS
199	198	5	9	6.8	6361	PASS
275	198	10	30	21.3	19815	PASS
365	198	1	100	2.4	2198	PASS
441	443	0.01	100	73.9	6922	PASS
442	198	40	100	50.0	46472	PASS
443	442	17	23	20.2	9368	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5
Data File: 5M101319.D
Analysis Date: 10/20/17 08:27
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.907 to 9.907 min

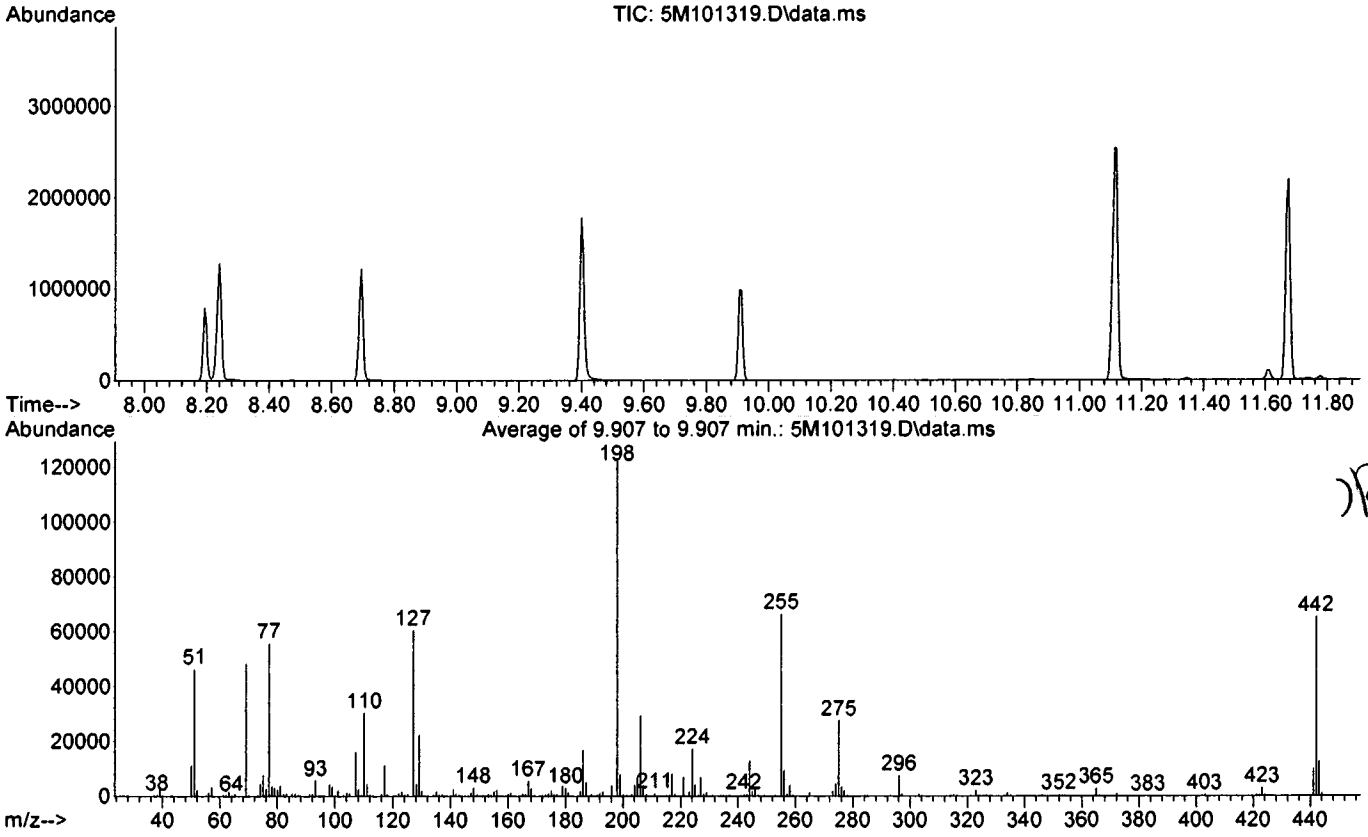
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	37.7	46456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	48400	PASS
70	69	0.00	2	0.6	282	PASS
127	198	40	60	49.1	60544	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	123224	PASS
199	198	5	9	6.5	8056	PASS
275	198	10	30	22.4	27568	PASS
365	198	1	100	2.3	2868	PASS
441	443	0.01	100	78.9	10002	PASS
442	198	40	100	52.9	65168	PASS
443	442	17	23	19.5	12677	PASS

Data File	Sample Number	Analysis Date:
5M101320.D	CAL BNA@50PPM	10/20/17 08:56
5M101321.D	CAL BNA@10PPM	10/20/17 09:25
5M101322.D	CAL BNA@2PPM	10/20/17 09:48
5M101323.D	CAL BNA@196PP	10/20/17 10:26
5M101324.D	CAL BNA@160PP	10/20/17 10:49
5M101325.D	CAL BNA@120PP	10/20/17 11:12
5M101326.D	CAL BNA@80PPM	10/20/17 11:34
5M101327.D	CAL BNA@20PPM	10/20/17 11:57
5M101328.D	CAL BNA@.5PPM	10/20/17 12:20
5M101329.D	CAL BNA@50PPM	10/20/17 12:43
5M101330.D	ICV BNA@50PPM	10/20/17 13:06

Data Path : G:\GcMsData\2017\GCMS_5\Data\10-20-17\
Data File : 5M101319.D
Acq On : 20 Oct 2017 8:27
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_5\METHODQT\5M_1019.M
Title : @GCMS_5,mg,625,8270
Last Update : Thu Oct 19 13:43:08 2017



Spectrum Information: Average of 9.907 to 9.907 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	37.7	46456	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.3	48400	PASS
70	69	0.00	2	0.6	282	PASS
127	198	40	60	49.1	60544	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	123224	PASS
199	198	5	9	6.5	8056	PASS
275	198	10	30	22.4	27568	PASS
365	198	1	100	2.3	2868	PASS
441	443	0.01	100	78.9	10002	PASS
442	198	40	100	52.9	65168	PASS
443	442	17	23	19.5	12677	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 7
Data File: 7M87623.D
Analysis Date: 11/14/17 08:38
Method: EPA 8270D

Tune Scan/Time Range: Scan 1434

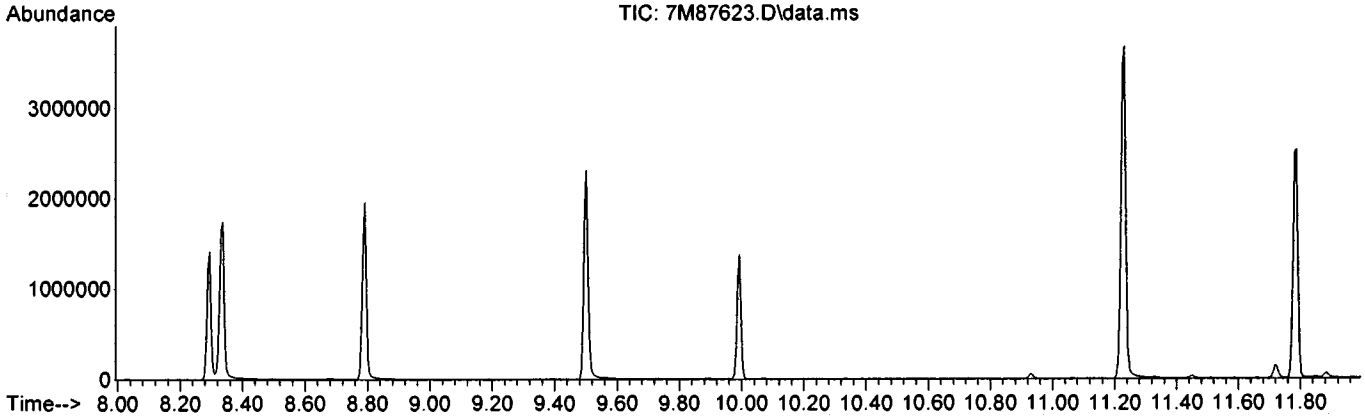
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	35.7	57184	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.4	67792	PASS
70	69	0.00	2	0.8	571	PASS
127	198	40	60	53.6	85744	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	160000	PASS
199	198	5	9	6.9	11004	PASS
275	198	10	30	26.0	41544	PASS
365	198	1	100	2.7	4302	PASS
441	443	0.01	100	77.6	16488	PASS
442	198	40	100	69.9	111872	PASS
443	442	17	23	19.0	21248	PASS

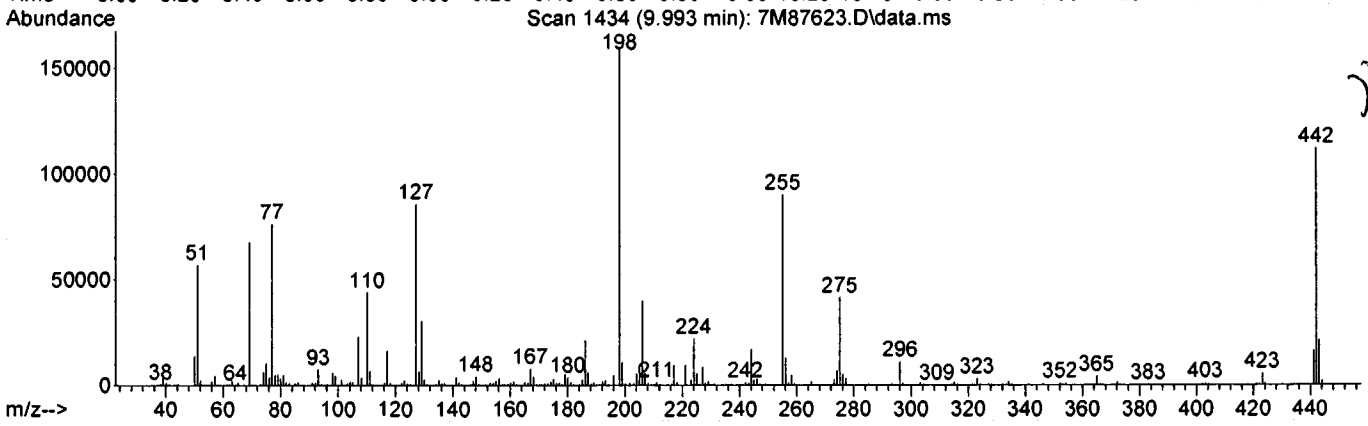
Data File	Sample Number	Analysis Date:
7M87624.D	CAL BNA@50PPM	11/14/17 09:03
7M87625.D	WMB63390	11/14/17 09:33
7M87626.D	AD00971-001(T)	11/14/17 09:56
7M87627.D	AD00920-009(T)	11/14/17 10:20
7M87628.D	AD01015-001(T)	11/14/17 10:43
7M87629.D	AD00920-009(10X)	11/14/17 11:06
7M87630.D	WMB63390	11/14/17 11:30
7M87631.D	AD01071-001	11/14/17 11:53
7M87632.D	AD01071-002	11/14/17 12:17
7M87633.D	AD01071-003	11/14/17 12:40
7M87634.D	AD01071-004	11/14/17 13:04
7M87635.D	AD01071-005	11/14/17 13:27
7M87636.D	AD01071-006	11/14/17 13:50
7M87637.D	WMB63394	11/14/17 14:14
7M87638.D	AD00920-009(T)(R)	11/14/17 15:45
7M87639.D	WMB63402	11/14/17 16:09
7M87640.D	SMB63407(MS)	11/14/17 16:33
7M87641.D	SMB63407	11/14/17 16:57
7M87642.D	AD01063-001	11/14/17 17:21
7M87643.D	AD01063-002(10X)	11/14/17 17:44
7M87644.D	AD01063-003	11/14/17 18:08
7M87645.D	AD01063-004	11/14/17 18:31
7M87646.D	AD01063-006	11/14/17 18:55
7M87647.D	AD01063-008	11/14/17 19:19
7M87648.D	AD01063-011	11/14/17 19:42
7M87649.D	AD01063-013	11/14/17 20:05

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-14-17\
Data File : 7M87623.D
Acq On : 14 Nov 2017 8:38
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_7\METHODQT\7M_1019.M
Title : @GCMS_7,mg,625,8270
Last Update : Thu Oct 19 15:21:36 2017





Spectrum Information: Scan 1434

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	35.7	57184	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.4	67792	PASS
70	69	0.00	2	0.8	571	PASS
127	198	40	60	53.6	85744	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	160000	PASS
199	198	5	9	6.9	11004	PASS
275	198	10	30	26.0	41544	PASS
365	198	1	100	2.7	4302	PASS
441	443	0.01	100	77.6	16488	PASS
442	198	40	100	69.9	111872	PASS
443	442	17	23	19.0	21248	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 5
Data File: 5M101507.D
Analysis Date: 11/14/17 08:38
Method: EPA 8270D

Tune Scan/Time Range: Scan 1416

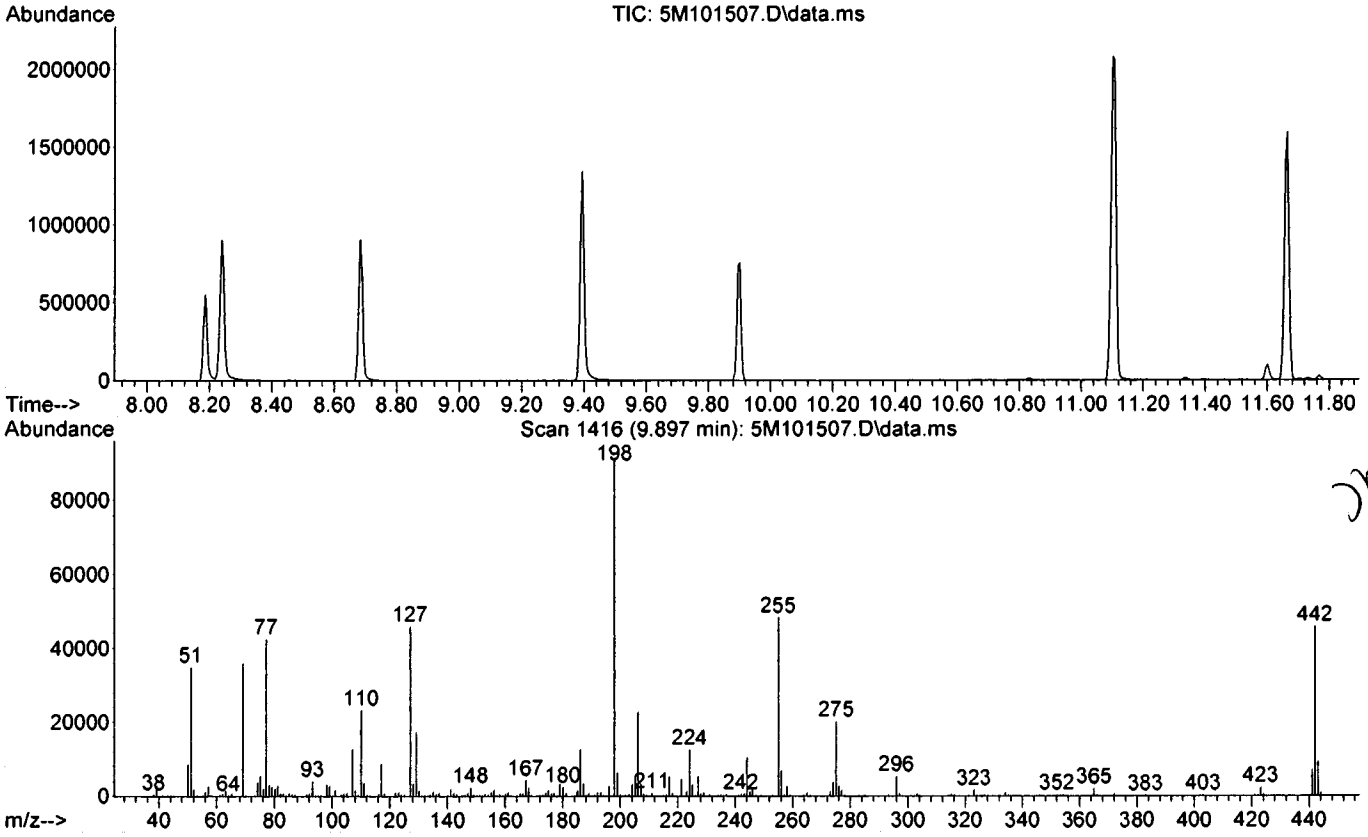
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	38.2	34928	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.4	36024	PASS
70	69	0.00	2	0.8	274	PASS
127	198	40	60	50.2	45952	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91496	PASS
199	198	5	9	7.1	6473	PASS
275	198	10	30	22.0	20168	PASS
365	198	1	100	2.3	2065	PASS
441	443	0.01	100	75.9	7035	PASS
442	198	40	100	50.1	45816	PASS
443	442	17	23	20.2	9263	PASS

Data File	Sample Number	Analysis Date:
5M101508.D	CAL BNA@50PPM	11/14/17 09:01
5M101509.D	EF-1 V-266631(11/	11/14/17 09:37
5M101510.D	EF-1 V-266631(11/	11/14/17 10:00
5M101511.D	AD01055-009	11/14/17 10:23
5M101512.D	AD01028-013(R)	11/14/17 10:46
5M101513.D	AD01050-005(R)	11/14/17 11:09
5M101514.D	AD01066-001	11/14/17 11:47
5M101515.D	WMB63387(MS)	11/14/17 12:10
5M101516.D	WMB63394(MS)	11/14/17 12:33
5M101517.D	WMB63394	11/14/17 12:57
5M101518.D	AD01067-001	11/14/17 13:20
5M101519.D	AD01067-002	11/14/17 13:43
5M101520.D	AD01063-014(10X)	11/14/17 15:39
5M101521.D	WMB63402(MS)	11/14/17 16:03
5M101522.D	WMB63402	11/14/17 16:27
5M101523.D	AD01063-017(10X)	11/14/17 16:52
5M101524.D	AD01063-018(10X)	11/14/17 17:15
5M101525.D	AD01063-015	11/14/17 17:38
5M101526.D	AD01063-016	11/14/17 18:02
5M101527.D	AD01063-019	11/14/17 18:25
5M101528.D	AD01063-020	11/14/17 18:49
5M101529.D	AD01063-021	11/14/17 19:12
5M101530.D	AD01063-022	11/14/17 19:36
5M101531.D	AD01063-023	11/14/17 19:59
5M101532.D	AD01063-024	11/14/17 20:23

Data Path : G:\GcMsData\2017\GCMS_5\Data\11-14-17\
Data File : 5M101507.D
Acq On : 14 Nov 2017 8:38
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_5\METHODQT\5M_1020.M
Title : @GCMS_5,mg,625,8270
Last Update : Fri Oct 20 14:48:39 2017



Spectrum Information: Scan 1416

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	38.2	34928	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	39.4	36024	PASS
70	69	0.00	2	0.8	274	PASS
127	198	40	60	50.2	45952	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	91496	PASS
199	198	5	9	7.1	6473	PASS
275	198	10	30	22.0	20168	PASS
365	198	1	100	2.3	2065	PASS
441	443	0.01	100	75.9	7035	PASS
442	198	40	100	50.1	45816	PASS
443	442	17	23	20.2	9263	PASS

Form 5

Tune Name: CAL DFTPP **Data File:** 7M87650.D
Instrument: GCMS 7 **Analysis Date:** 11/15/17 09:04
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.987 to 9.993 min

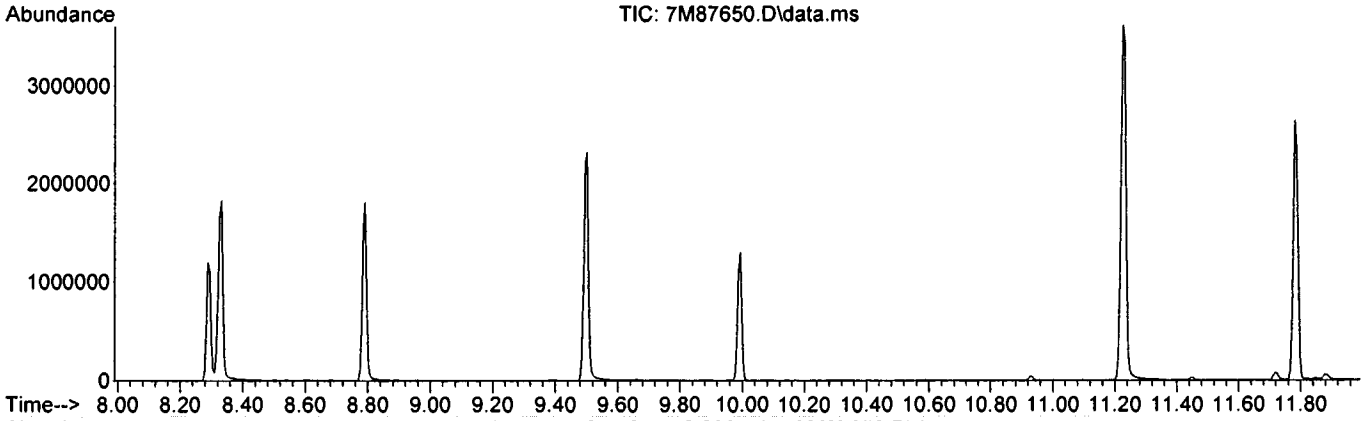
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	39.5	54340	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.8	63036	PASS
70	69	0.00	2	0.6	352	PASS
127	198	40	60	56.0	77120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	137712	PASS
199	198	5	9	6.7	9201	PASS
275	198	10	30	23.3	32148	PASS
365	198	1	100	2.5	3392	PASS
441	443	0.01	100	74.1	12178	PASS
442	198	40	100	59.7	82224	PASS
443	442	17	23	20.0	16442	PASS

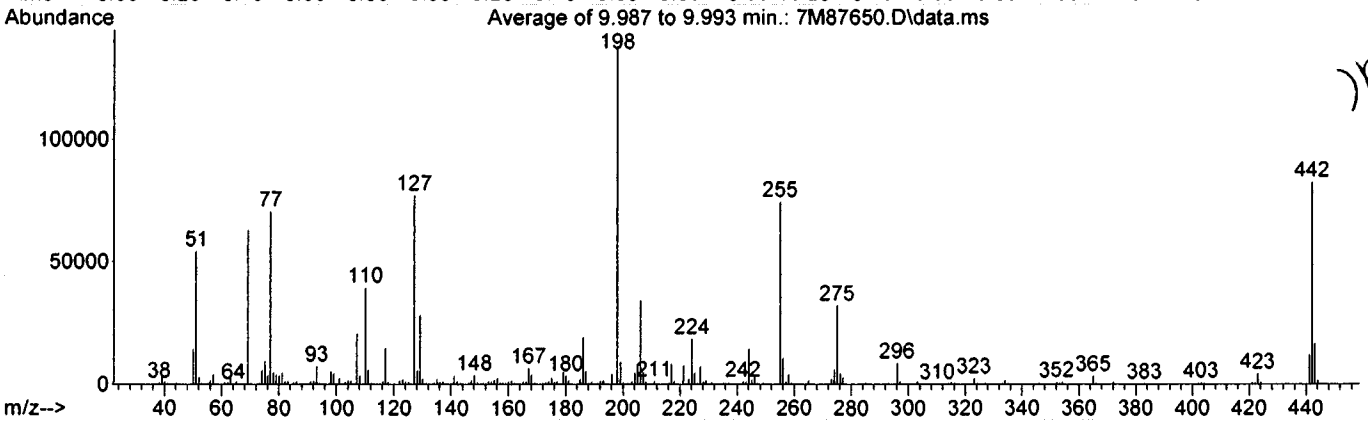
Data File	Sample Number	Analysis Date:
7M87651.D	CAL BNA@50PPM	11/15/17 09:29
7M87652.D	AD01097-006	11/15/17 10:36
7M87653.D	AD01097-007(MS:	11/15/17 11:00
7M87654.D	AD01097-008(MSD	11/15/17 11:23
7M87655.D	AD01097-001	11/15/17 11:46
7M87656.D	AD01097-002	11/15/17 12:09
7M87657.D	AD01097-003	11/15/17 12:33
7M87658.D	AD01097-004	11/15/17 12:56
7M87659.D	AD01097-005	11/15/17 13:20
7M87660.D	AD01063-010(50X)	11/15/17 13:43
7M87661.D	WMB63410(MS)	11/15/17 14:06
7M87662.D	WMB63410	11/15/17 14:31
7M87663.D	AD01096-017	11/15/17 14:55
7M87664.D	AD01080-017	11/15/17 15:18
7M87665.D	WMB63412(MS)	11/15/17 15:42
7M87666.D	WMB63412	11/15/17 16:05
7M87667.D	WMB63410	11/15/17 16:28
7M87668.D	AD01106-001	11/15/17 16:52
7M87669.D	AD01106-002	11/15/17 17:15
7M87670.D	AD01106-002(MS)	11/15/17 17:39
7M87671.D	AD01106-002(MSD	11/15/17 18:02
7M87672.D	AD01082-013	11/15/17 18:26
7M87673.D	AD01082-022(MS:	11/15/17 18:49
7M87674.D	AD01082-024(MSD	11/15/17 19:12
7M87675.D	AD01082-020	11/15/17 19:36
7M87676.D	AD01082-021	11/15/17 19:59
7M87677.D	AD01082-026	11/15/17 20:23
7M87678.D	AD01082-027	11/15/17 20:46
7M87679.D	AD01083-001	11/15/17 21:09
7M87680.D	AD01083-002	11/15/17 21:33
7M87681.D	AD01083-003	11/15/17 21:56

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Data File : 7M87650.D
Acq On : 15 Nov 2017 9:04
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_7\METHODQT\7M_1019.M
Title : @GCMS_7,mg,625,8270
Last Update : Thu Oct 19 15:21:36 2017





Spectrum Information: Average of 9.987 to 9.993 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	39.5	54340	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	45.8	63036	PASS
70	69	0.00	2	0.6	352	PASS
127	198	40	60	56.0	77120	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	137712	PASS
199	198	5	9	6.7	9201	PASS
275	198	10	30	23.3	32148	PASS
365	198	1	100	2.5	3392	PASS
441	443	0.01	100	74.1	12178	PASS
442	198	40	100	59.7	82224	PASS
443	442	17	23	20.0	16442	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10
Data File: 10M66038.D
Analysis Date: 11/15/17 10:42
Method: EPA 8270D

Tune Scan/Time Range: Scan 1459

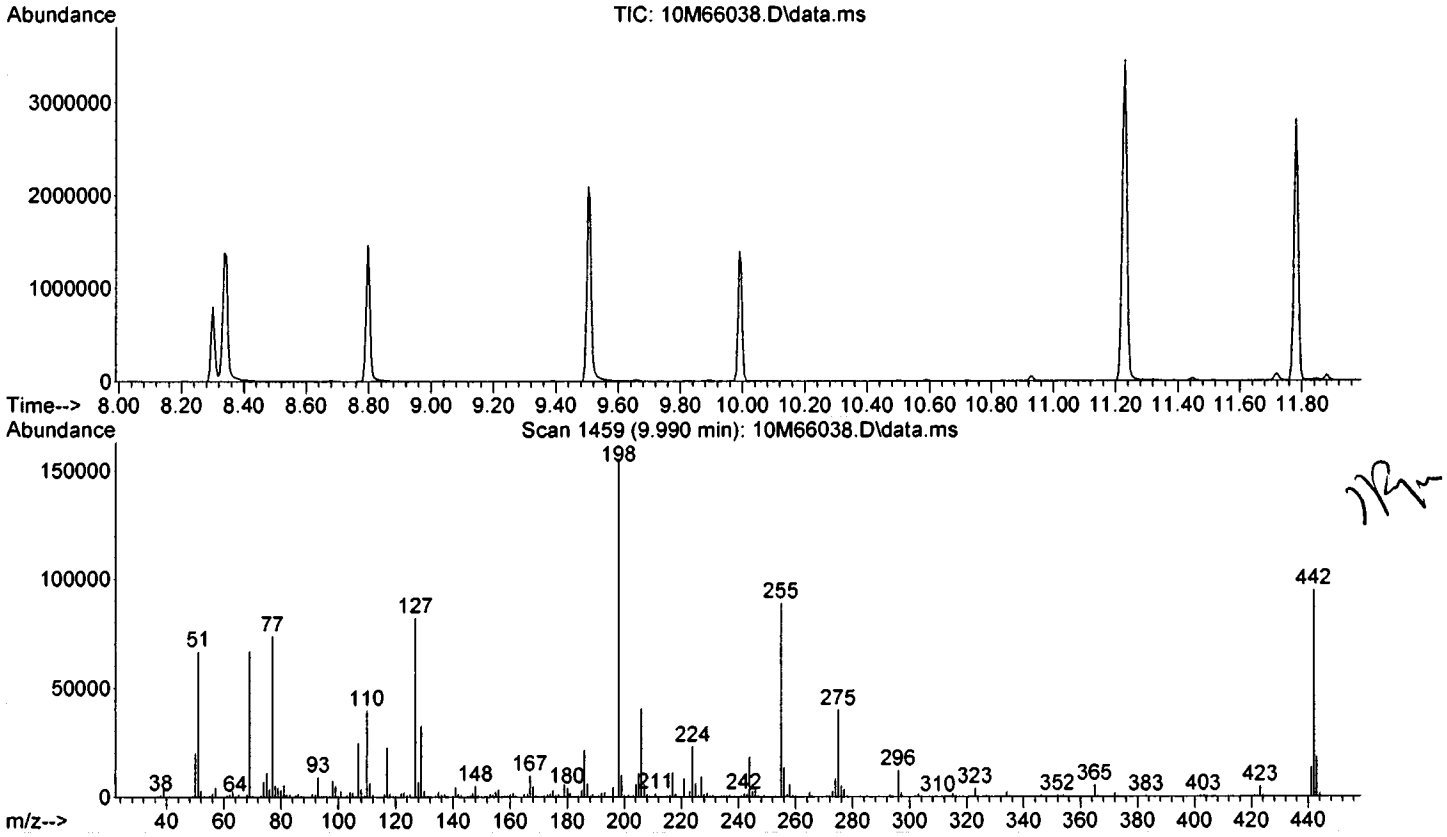
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	42.9	66792	PASS
68	69	0.00	2	1.9	1263	PASS
69	198	0.00	100	43.1	66952	PASS
70	69	0.00	2	0.6	415	PASS
127	198	40	60	52.9	82320	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	155520	PASS
199	198	5	9	6.5	10053	PASS
275	198	10	30	25.7	39928	PASS
365	198	1	100	3.6	5549	PASS
441	443	0.01	100	73.9	13468	PASS
442	198	40	100	61.1	94968	PASS
443	442	17	23	19.2	18216	PASS

Data File	Sample Number	Analysis Date:
10M66039.D	CAL BNA@50PPM	11/15/17 11:11
10M66040.D	AD01055-002	11/15/17 11:35
10M66041.D	AD01055-004	11/15/17 11:57
10M66042.D	AD01055-006	11/15/17 12:19
10M66043.D	AD01055-008	11/15/17 12:41
10M66044.D	AD01055-001	11/15/17 13:03
10M66045.D	SMB63406(MS)	11/15/17 13:25
10M66046.D	OMB63405(MS)	11/15/17 13:48
10M66047.D	AD01111-001(3X)(	11/15/17 14:10
10M66048.D	AD01111-006(3X)(	11/15/17 14:32
10M66049.D	AD01111-010(3X)(	11/15/17 14:54
10M66050.D	SMB63406	11/15/17 15:17
10M66051.D	OMB63405	11/15/17 15:39
10M66052.D	WMB63410	11/15/17 16:01
10M66053.D	WMB63412	11/15/17 16:23
10M66054.D	AD01055-003	11/15/17 16:46
10M66055.D	AD01055-005	11/15/17 17:08
10M66056.D	AD01055-007	11/15/17 17:30
10M66057.D	AD01145-002(MS)	11/15/17 17:52
10M66058.D	AD01145-002(MSD	11/15/17 18:15
10M66059.D	AD01145-002	11/15/17 18:37
10M66060.D	AD01080-002(R)	11/15/17 18:59
10M66061.D	AD01097-009	11/15/17 19:21
10M66062.D	AD01097-010	11/15/17 19:44
10M66063.D	AD01097-011	11/15/17 20:06
10M66064.D	AD01097-012	11/15/17 20:28
10M66065.D	AD01097-013	11/15/17 20:50
10M66066.D	AD01096-015(5X)(	11/15/17 21:12

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Data File : 10M66038.D
Acq On : 15 Nov 2017 10:42
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_10\METHODQT\10M_1011.M
Title : @GCMS_10,mg,625,8270
Last Update : Wed Oct 11 16:38:16 2017



Spectrum Information: Scan 1459

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.9	66792	PASS
68	69	0.00	2	1.9	1263	PASS
69	198	0.00	100	43.1	66952	PASS
70	69	0.00	2	0.6	415	PASS
127	198	40	60	52.9	82320	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	155520	PASS
199	198	5	9	6.5	10053	PASS
275	198	10	30	25.7	39928	PASS
365	198	1	100	3.6	5549	PASS
441	443	0.01	100	73.9	13468	PASS
442	198	40	100	61.1	94968	PASS
443	442	17	23	19.2	18216	PASS

Form 5

Tune Name: CAL DFTPP
Instrument: GCMS 10
Data File: 10M66067.D
Analysis Date: 11/16/17 09:10
Method: EPA 8270D

Tune Scan/Time Range: Average of 9.985 to 9.990 min

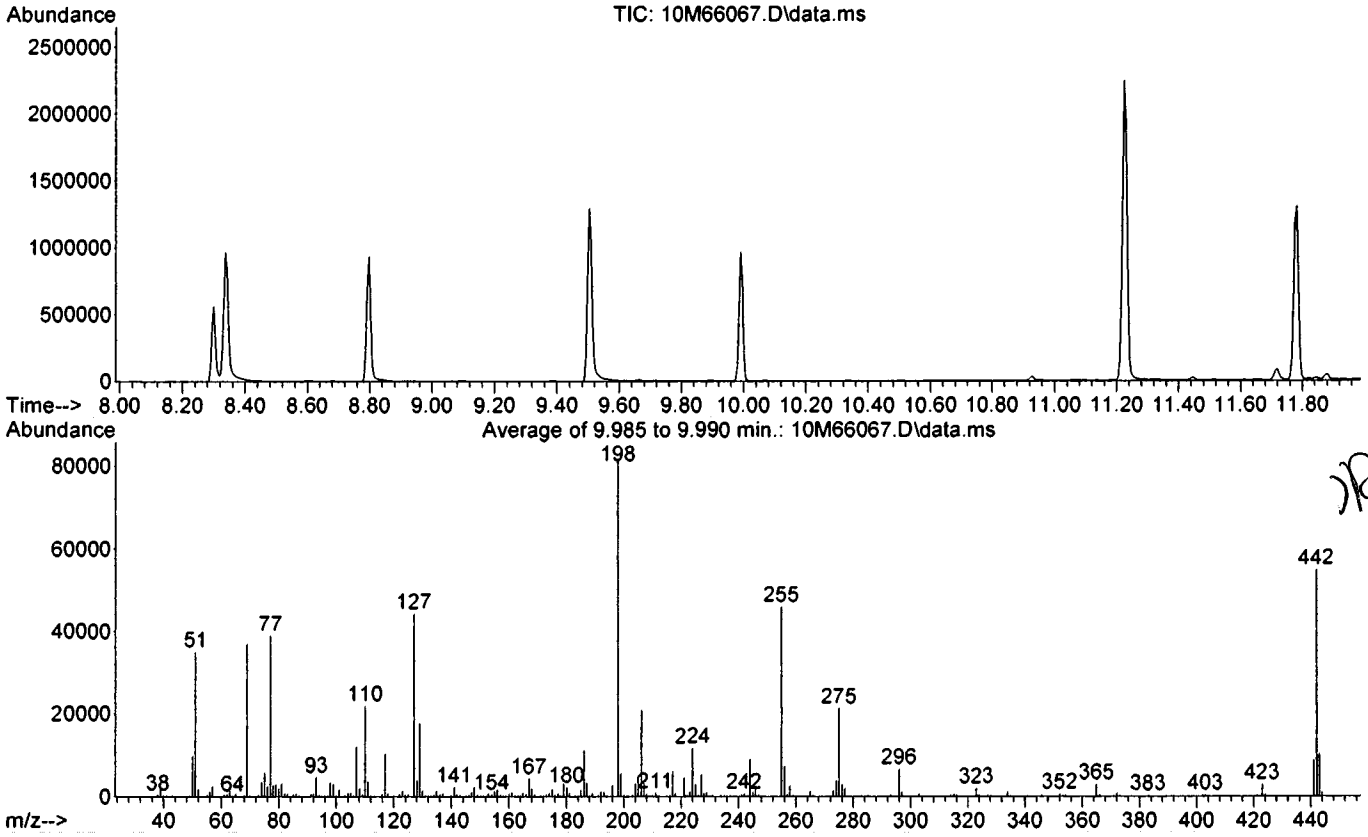
Tgt Mass	Rel Mass	Lo Lim	Hi Lim	Rel Abund	Raw Abund	Pass/ Fail
51	198	30	60	42.9	35052	PASS
68	69	0.00	2	0.8	302	PASS
69	198	0.00	100	45.2	37000	PASS
70	69	0.00	2	0.8	292	PASS
127	198	40	60	54.1	44216	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	81788	PASS
199	198	5	9	6.8	5588	PASS
275	198	10	30	26.0	21305	PASS
365	198	1	100	3.6	2932	PASS
441	443	0.01	100	84.8	8675	PASS
442	198	40	100	67.0	54836	PASS
443	442	17	23	18.6	10225	PASS

Data File	Sample Number	Analysis Date:
10M66068.D	CAL BNA@50PPM	11/16/17 09:32
10M66069.D	AD01097-014	11/16/17 10:32
10M66070.D	AD01097-015	11/16/17 10:54
10M66071.D	AD01097-016	11/16/17 11:16
10M66072.D	AD01097-017	11/16/17 11:39
10M66073.D	AD01119-004(5X)	11/16/17 12:01
10M66074.D	AD01119-002	11/16/17 12:23
10M66075.D	AD01119-008	11/16/17 12:46
10M66076.D	AD01119-003	11/16/17 13:09
10M66077.D	AD01119-005	11/16/17 13:31
10M66078.D	AD01119-006	11/16/17 13:53
10M66079.D	AD01119-007	11/16/17 14:16
10M66080.D	AD01179-001	11/16/17 14:38
10M66081.D	AD01179-003	11/16/17 15:00
10M66082.D	AD01179-004	11/16/17 15:23
10M66083.D	SMB63420	11/16/17 15:45
10M66084.D	AD01119-001	11/16/17 16:08
10M66085.D	AD01055-005	11/16/17 16:30
10M66086.D	AD01145-002(MSD	11/16/17 16:52

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-16-17\
Data File : 10M66067.D
Acq On : 16 Nov 2017 9:10
Operator : AH/JB
Sample : CAL DFTPP
Misc : A,BNA
ALS Vial : 1 Sample Multiplier: 1

Integration File: LSCINT.P

Method : G:\GCMSDATA\2017\GCMS_10\METHODQT\10M_1011.M
Title : @GCMS_10,mg,625,8270
Last Update : Wed Oct 11 16:38:16 2017



Spectrum Information: Average of 9.985 to 9.990 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	42.9	35052	PASS
68	69	0.00	2	0.8	302	PASS
69	198	0.00	100	45.2	37000	PASS
70	69	0.00	2	0.8	292	PASS
127	198	40	60	54.1	44216	PASS
197	198	0.00	1	0.0	0	PASS
198	198	100	100	100.0	81788	PASS
199	198	5	9	6.8	5588	PASS
275	198	10	30	26.0	21305	PASS
365	198	1	100	3.6	2932	PASS
441	443	0.01	100	84.8	8675	PASS
442	198	40	100	67.0	54836	PASS
443	442	17	23	18.6	10225	PASS

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB63402
Client Id:
Data File: 7M87639.D
Analysis Date: 11/14/17 16:09
Date Rec/Extracted: NA-11/14/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0279

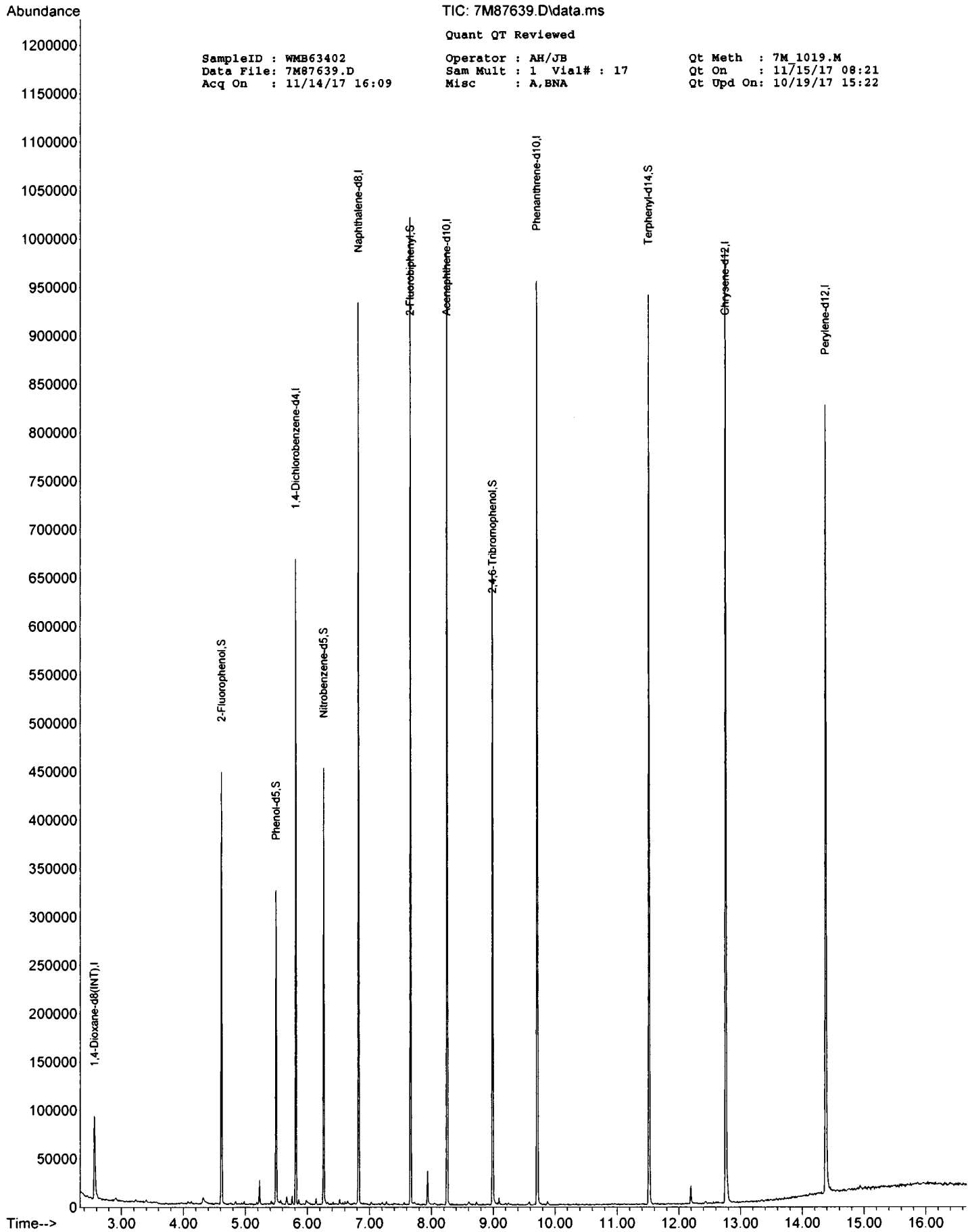
SampleID : WMB63402 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87639.D Sam Mult : 1 Vial# : 17 Qt On : 11/15/17 08:21
Acq On : 11/14/17 16:09 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.562	96	45857	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	85399	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	351354	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	214997	40.00	ng	-0.01
77) Phenanthrene-d10	9.710	188	383411	40.00	ng	-0.01
91) Chrysene-d12	12.760	240	381701	40.00	ng	-0.01
103) Perylene-d12	14.384	264	327915	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	123575	44.52	ng	0.00
Spiked Amount 100.000			Recovery = 44.52%			
16) Phenol-d5	5.495	99	106770	30.06	ng	0.00
Spiked Amount 100.000			Recovery = 30.06%			
32) Nitrobenzene-d5	6.264	128	56868	40.17	ng	0.00
Spiked Amount 50.000			Recovery = 80.34%			
55) 2-Fluorobiphenyl	7.663	172	274396	41.04	ng	-0.01
Spiked Amount 50.000			Recovery = 82.08%			
80) 2,4,6-Tribromophenol	8.994	330	66247	80.99	ng	0.00
Spiked Amount 100.000			Recovery = 80.99%			
94) Terphenyl-d14	11.515	244	283471	48.03	ng	0.00
Spiked Amount 50.000			Recovery = 96.06%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed




Abundance
TIC: 7M87639.D\data.ms
Quant QT Reviewed
SampleID : WMB63402
Data File: 7M87639.D
Acq On : 11/14/17 16:09
Operator : AH/JB
Sam Mult : 1 Vial# : 17
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 08:21
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Form1

ORGANICS SEMIVOLATILE REPORT

Sample Number: WMB63412
Client Id:
Data File: 10M66053.D
Analysis Date: 11/15/17 16:23
Date Rec/Extracted: NA-11/15/17
Column: DB-5MS 30M 0.250mm ID 0.25um film

Method: EPA 8270D
Matrix: Aqueous
Initial Vol: 1000ml
Final Vol: 0.5ml
Dilution: 1
Solids: 0

Units: ug/L

Cas #	Compound	RL	Conc	Cas #	Compound	RL	Conc
123-91-1	1,4-Dioxane	0.25	U				

Worksheet #: 444635

Total Target Concentration 0

ColumnID: (^) Indicates results from 2nd column

U - Indicates the compound was analyzed but not detected.
B - Indicates the analyte was found in the blank as well as in the sample.
E - Indicates the analyte concentration exceeds the calibration range of the instrument.
R - Retention Time Out
J - Indicates an estimated value when a compound is detected at less than the specified detection limit.
d - Pesticide %Diff>40% between columns due to coelution. Lower concentration usea
Chlordane (Total) is sum of a-Chlordane and y-Chlordane.

Quantitation Report (QT Reviewed)

7111018 0282

SampleID : WMB63412 Operator : AH/JB Qt Meth : 10M_1011-M
Data File: 10M66053.D Sam Mult : 1 Vial# : 16 Qt On : 11/16/17 12:03
Acq On : 11/15/17 16:23 Misc : A,BN Qt Upd On: 10/11/17 16:43

Data Path : G:\GcMsData\2017\GCMS_10\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_10\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.588	96	29139	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.824	152	66640	40.00	ng	-0.01
31) Naphthalene-d8	6.829	136	266975	40.00	ng	-0.01
50) Acenaphthene-d10	8.258	164	165397	40.00	ng	0.00
77) Phenanthrene-d10	9.718	188	286643	40.00	ng	0.00
91) Chrysene-d12	12.761	240	321672	40.00	ng	0.00
103) Perylene-d12	14.376	264	309863	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.273	128	44229	42.57	ng	0.00
Spiked Amount 50.000			Recovery =	85.14%		
55) 2-Fluorobiphenyl	7.664	172	228687	44.18	ng	-0.01
Spiked Amount 50.000			Recovery =	88.36%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	274414	55.80	ng	0.00
Spiked Amount 50.000			Recovery =	111.60%		

Target Compounds	Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed



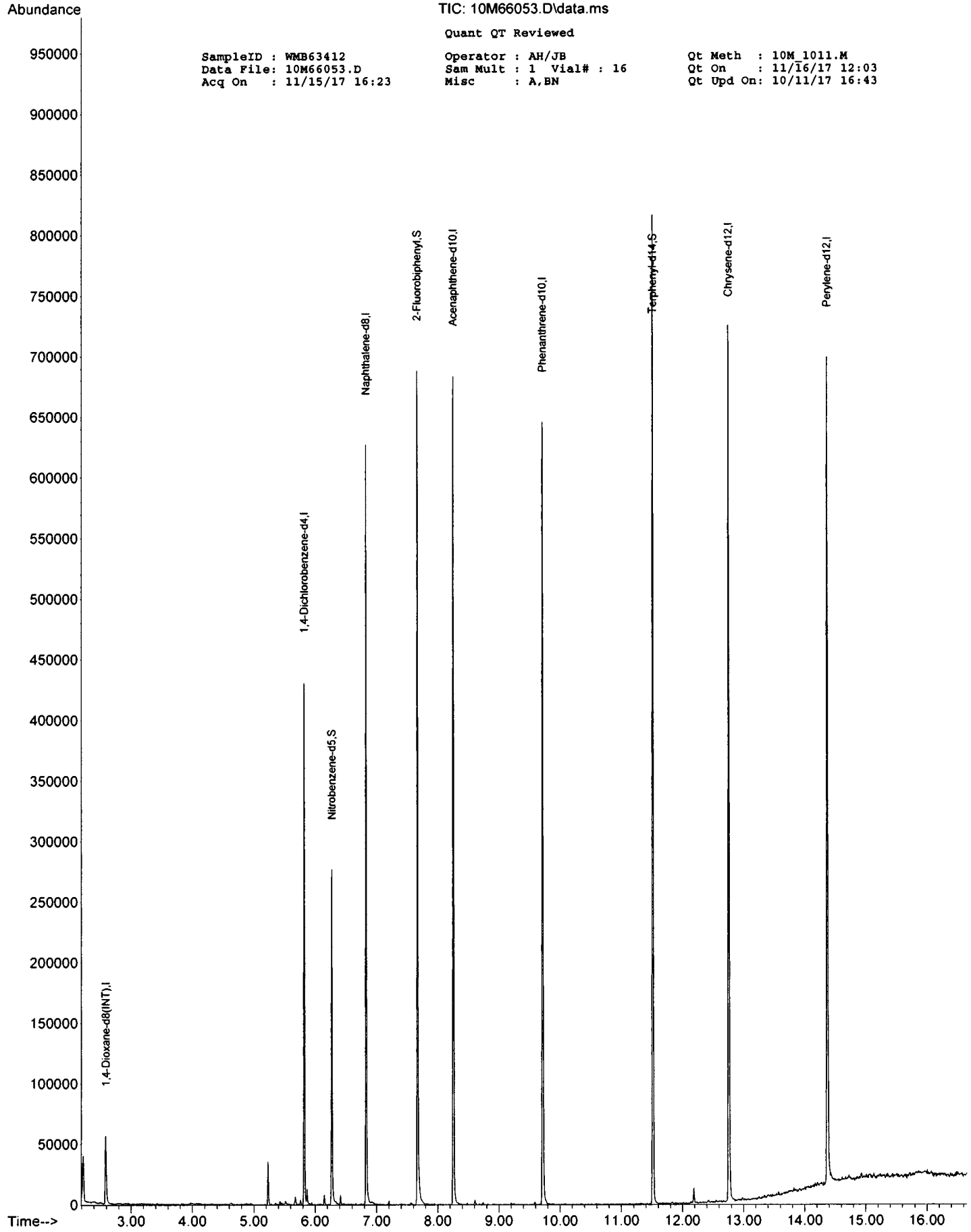
TIC: 10M66053.D\data.ms

Quant QT Reviewed

SampleID : WMB63412
Data File: 10M66053.D
Acq On : 11/15/17 16:23

Operator : AH/JB
Sam Mult : 1 Vial# : 16
Misc : A,BN

Qt Meth : 10M_1011.M
Qt On : 11/16/17 12:03
Qt Upd On: 10/11/17 16:43



Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

Data File	Sample ID:	Analysis Date
Spike or Dup: 5M101521.D	WMB63402(MS)	11/14/2017 4:03:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		

Method: 8270D | Matrix: Aqueous | QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	49.9529	0	100	50	20	160
Pyridine	1	19.0685	0	100	19	5	150
N-Nitrosodimethylamine	1	58.6835	0	100	59	50	150
Benzaldehyde	1	153.3343	0	100	153*	20	150
Aniline	1	58.7328	0	100	59	20	150
Pentachloroethane	1	73.3319	0	100	73	50	130
bis(2-Chloroethyl)ether	1	68.7274	0	100	69	50	130
N-Decane	1	72.9829	0	100	73	40	130
1,3-Dichlorobenzene	1	67.5967	0	100	68	50	130
1,4-Dichlorobenzene	1	72.62	0	100	73	50	130
1,2-Dichlorobenzene	1	71.8741	0	100	72	50	130
Benzyl alcohol	1	79.4509	0	100	79	70	130
bis(2-chloroisopropyl)ether	1	66.8501	0	100	67	40	130
Acetophenone	1	80.5303	0	100	81	50	130
Hexachloroethane	1	70.3293	0	100	70	50	130
N-Nitroso-di-n-propylamine	1	73.5566	0	100	74	50	130
Nitrobenzene	1	84.4794	0	100	84	70	130
Isophorone	1	80.2206	0	100	80	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	80.8099	0	100	81	70	130
1,2,4-Trichlorobenzene	1	77.4962	0	100	77	50	130
Naphthalene	1	79.3445	0	100	79	70	130
4-Chloroaniline	1	104.4723	0	100	104	50	150
Hexachlorobutadiene	1	74.5177	0	100	75	70	130
Caprolactam	1	44.4522	0	100	44	20	130
2-Methylnaphthalene	1	85.4268	0	100	85	70	130
1-Methylnaphthalene	1	83.5029	0	100	84	70	130
1,1'-Biphenyl	1	89.2628	0	100	89	70	130
1,2,4,5-Tetrachlorobenzene	1	79.3569	0	100	79	70	130
Hexachlorocyclopentadiene	1	71.1393	0	100	71	20	130
2-Chloronaphthalene	1	83.3392	0	100	83	70	130
1,4-Dimethylnaphthalene	1	86.5972	0	100	87	70	130
Diphenyl Ether	1	85.1721	0	100	85	70	130
2-Nitroaniline	1	94.5187	0	100	95	50	150
Coumarin	1	97.8607	0	100	98	70	130
Acenaphthylene	1	87.3458	0	100	87	70	130
Dimethylphthalate	1	80.5363	0	100	81	70	130
2,6-Dinitrotoluene	1	84.2459	0	100	84	70	130
Acenaphthene	1	85.7503	0	100	86	70	130
3-Nitroaniline	1	107.5075	0	100	108	50	150
Dibenzofuran	1	93.7978	0	100	94	70	130
2,4-Dinitrotoluene	1	86.2501	0	100	86	40	130
Fluorene	1	86.0013	0	100	86	70	130
4-Chlorophenyl-phenylether	1	83.9435	0	100	84	70	130
Diethylphthalate	1	87.7048	0	100	88	50	130
4-Nitroaniline	1	97.1829	0	100	97	50	150
Atrazine	1	100.5962	0	100	101	50	130
n-Nitrosodiphenylamine	1	71.2806	0	100	71	50	130
1,2-Diphenylhydrazine	1	92.7447	0	100	93	70	130
4-Bromophenyl-phenylether	1	85.9169	0	100	86	70	130
Hexachlorobenzene	1	85.082	0	100	85	70	130
N-Octadecane	1	90.7742	0	100	91	70	130
Phenanthrene	1	83.8456	0	100	84	70	130
Anthracene	1	83.0623	0	100	83	70	130
Carbazole	1	92.2082	0	100	92	70	130
Di-n-butylphthalate	1	91.7287	0	100	92	70	130
Fluoranthene	1	87.3598	0	100	87	70	130
Pyrene	1	82.1346	0	100	82	70	130
Benzidine	1	12.5592	0	100	13	1	130
Butylbenzylphthalate	1	84.5783	0	100	85	50	130
3,3'-Dichlorobenzidine	1	86.0023	0	100	86	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63402

Benzo[a]anthracene	1	86.4387	0	100	86	70	130
Chrysene	1	85.9827	0	100	86	50	130
bis(2-Ethylhexyl)phthalate	1	88.7645	0	100	89	70	130
Di-n-octylphthalate	1	89.0383	0	100	89	70	130
Benzo[b]fluoranthene	1	85.0336	0	100	85	70	130
Benzo[k]fluoranthene	1	84.0297	0	100	84	70	130
Benzo[a]pyrene	1	81.4479	0	100	81	70	130
Indeno[1,2,3-cd]pyrene	1	96.7298	0	100	97	70	130
Dibenzo[a,h]anthracene	1	93.8976	0	100	94	70	130
Benzo[g,h,i]perylene	1	93.2974	0	100	93	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

SampleID : WMB63402(MS) Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101521.D Sam Mult : 1 Vial# : 15 Qt On : 11/15/17 08:20
Acq On : 11/14/17 16:03 Misc : A,BNA Qt Upd On: 10/20/17 15:15

Data Path : G:\GcMsData\2017\GCMS_5\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.434	96	29228	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.714	152	57459	40.00	ng	0.00
31) Naphthalene-d8	6.729	136	227963	40.00	ng	0.00
50) Acenaphthene-d10	8.150	164	143535	40.00	ng	0.00
77) Phenanthrene-d10	9.598	188	268148	40.00	ng	0.00
91) Chrysene-d12	12.643	240	334234	40.00	ng	0.00
103) Perylene-d12	14.245	264	320891	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.506	112	112943	56.90	ng	0.00
Spiked Amount 100.000			Recovery = 56.90%			
16) Phenol-d5	5.404	99	106319	42.25	ng	0.00
Spiked Amount 100.000			Recovery = 42.25%			
32) Nitrobenzene-d5	6.168	128	46236	53.40	ng	0.00
Spiked Amount 50.000			Recovery = 106.80%			
55) 2-Fluorobiphenyl	7.562	172	235734	52.06	ng	0.00
Spiked Amount 50.000			Recovery = 104.12%			
80) 2,4,6-Tribromophenol	8.887	330	70391	106.43	ng	0.00
Spiked Amount 100.000			Recovery = 106.43%			
94) Terphenyl-d14	11.398	244	297242	55.34	ng	0.00
Spiked Amount 50.000			Recovery = 110.68%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.466	88	38140	49.9529	ng	94
9) Pyridine	2.936	79	43005	19.0685	ng	72
10) N-Nitrosodimethylamine	2.829	74	72223	58.6835	ng	76
12) Benzaldehyde	5.329	77	143216	153.3343	ng	82
13) Aniline	5.431	93	160609	58.7328	ng	48
14) Pentachloroethane	5.473	117	48429	73.3319	ng	79
15) bis(2-Chloroethyl)ether	5.489	93	145738	68.7274	ng	83
17) Phenol	5.415	94	108907	37.5198	ng	87
18) 2-Chlorophenol	5.532	128	159701	73.5422	ng	83
19) N-Decane	5.591	57	157320	72.9829	ng	86
20) 1,3-Dichlorobenzene	5.666	146	151526	67.5967	ng	98
22) 1,4-Dichlorobenzene	5.730	146	155911	72.6200	ng	99
23) 1,2-Dichlorobenzene	5.853	146	148549	71.8741	ng	97
24) Benzyl alcohol	5.831	108	104875	79.4509	ng	74
25) bis(2-chloroisopropyl)...	5.944	45	189221	66.8501	ng	94
26) 2-Methylphenol	5.927	108	136274	72.0308	ng	99
27) Acetophenone	6.045	105	231000	80.5303	ng	68
28) Hexachloroethane	6.136	117	56989	70.3293	ng	89
29) N-Nitroso-di-n-propyla...	6.050	70	106867	73.5566	ng	69
30) 3&4-Methylphenol	6.050	108	134235	69.5730	ng	84
33) Nitrobenzene	6.184	77	166418	84.4794	ng	78
34) Isophorone	6.371	82	294970	80.2206	ng	90
35) 2-Nitrophenol	6.435	139	90738	91.7879	ng	85
36) 2,4-Dimethylphenol	6.467	107	156877	79.0571	ng	95
38) bis(2-Chloroethoxy)met...	6.536	93	186281	80.8099	ng	98
39) 2,4-Dichlorophenol	6.622	162	143176	89.4582	ng	88
40) 1,2,4-Trichlorobenzene	6.686	180	140151	77.4962	ng	96
41) Naphthalene	6.745	128	450155	79.3445	ng	99
42) 4-Chloroaniline	6.782	127	203141m	104.4723	ng	
43) Hexachlorobutadiene	6.841	225	79090	74.5177	ng	95
44) Caprolactam	7.044	113	28633	44.4522	ng	70
45) 4-Chloro-3-methylphenol	7.151	107	157568	91.7179	ng	83
46) 2-Methylnaphthalene	7.279	142	340642	85.4268	ng	99
47) 1-Methylnaphthalene	7.359	142	322904	83.5029	ng	92
48) Methylnaphthalenes (To...	7.279	142	660030m	168.4250	ng	
49) 1,1'-Biphenyl	7.648	154	425351	89.2628	ng	96
51) 1,2,4,5-Tetrachloroben...	7.413	216	162578	79.3569	ng	98
52) Hexachlorocyclopentadiene	7.407	237	75107	71.1393	ng	97
53) 2,4,6-Trichlorophenol	7.498	196	106633	89.1202	ng	99
54) 2,4,5-Trichlorophenol	7.530	196	121556	93.2515	ng	98
56) 2-Chloronaphthalene	7.669	162	313518	83.3392	ng	93
57) 1,4-Dimethylnaphthalene	7.952	156	254879	86.5972	ng	88
58) Dimethylnaphthalenes (...	7.952	156	254879	86.5972	ng	88
59) Diphenyl Ether	7.733	170	241986	85.1721	ng	80
60) 2-Nitroaniline	7.749	65	124655	94.5187	ng	56
61) Coumarin	7.931	146	147500	97.8607	ng	80
62) Acenaphthylene	8.027	152	500885	87.3458	ng	99
63) Dimethylphthalate	7.899	163	359876	80.5363	ng	99
64) 2,6-Dinitrotoluene	7.952	165	80955	84.2459	ng	64
65) Acenaphthene	8.177	153	332783	85.7503	ng	96
66) 3-Nitroaniline	8.102	138	105927	107.5075	ng	74

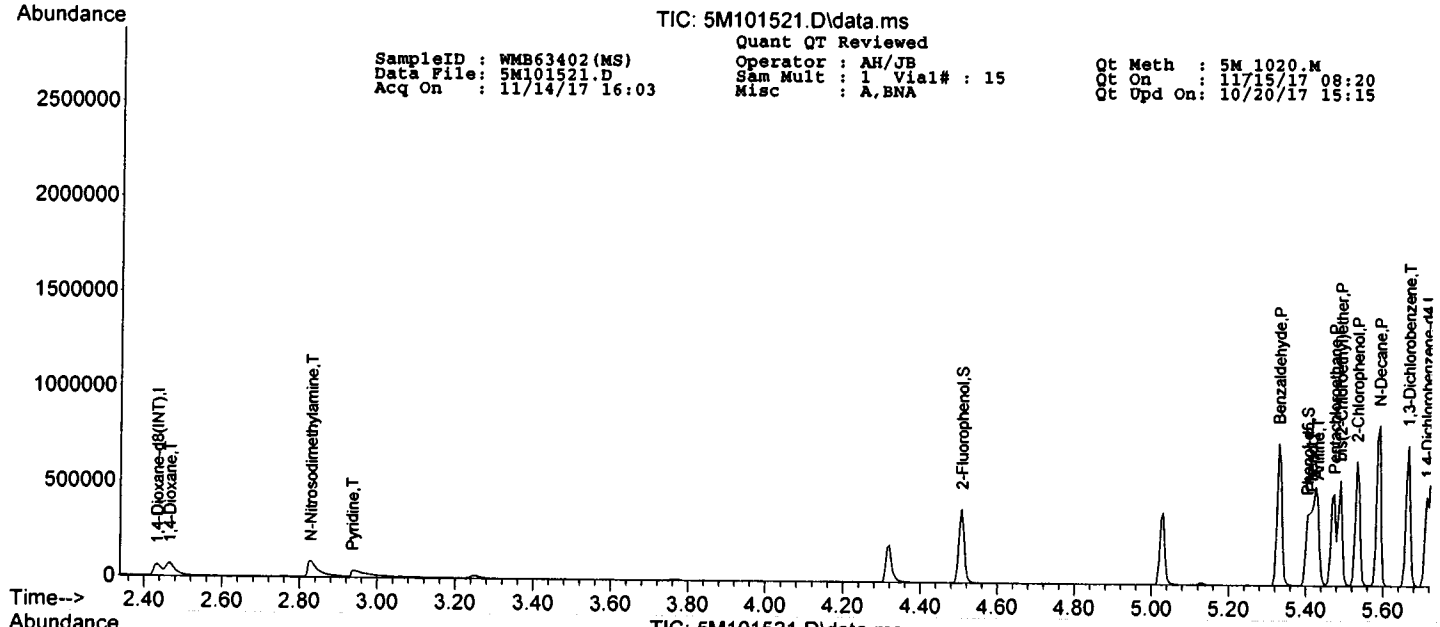
Quantitation Report (QT Reviewed)

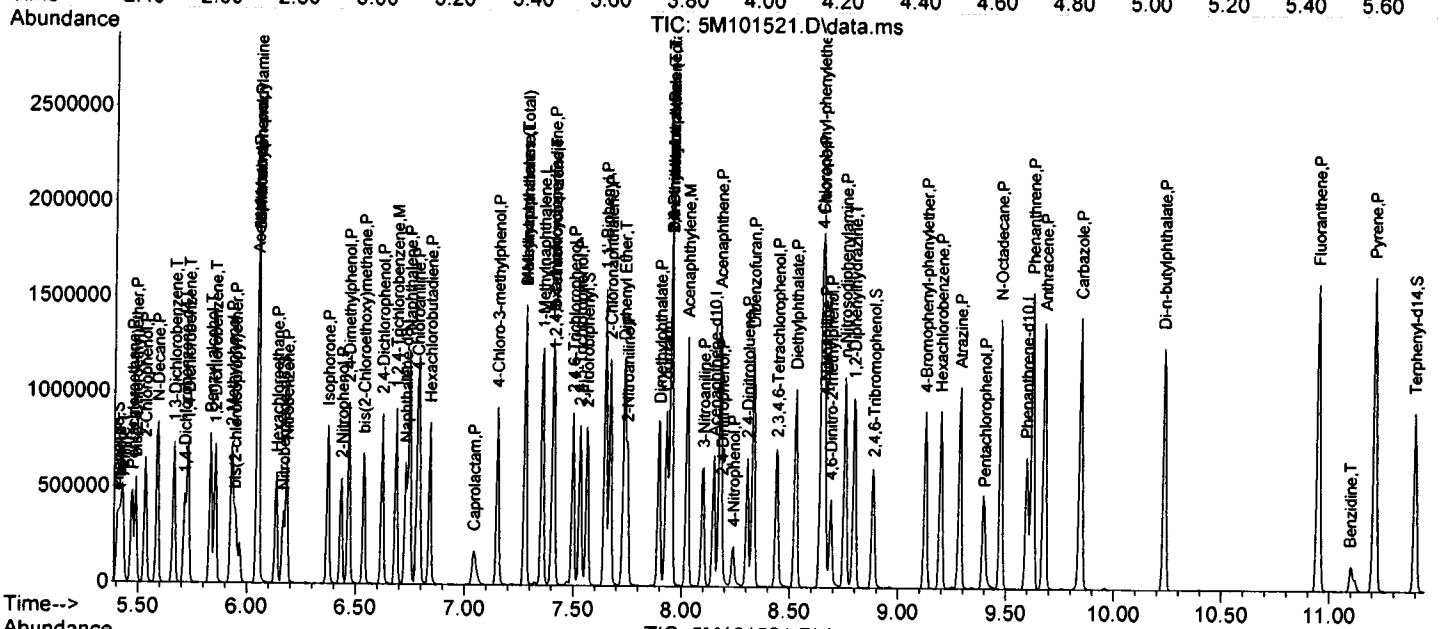
SampleID : WMB63402(MS) Operator : AH/JB Qt Meth : 5M_1020.M
Data File: 5M101521.D Sam Mult : 1 Vial# : 15 Qt On : 11/15/17 08:20
Acq On : 11/14/17 16:03 Misc : A,BNA Qt Upd On: 10/20/17 15:15

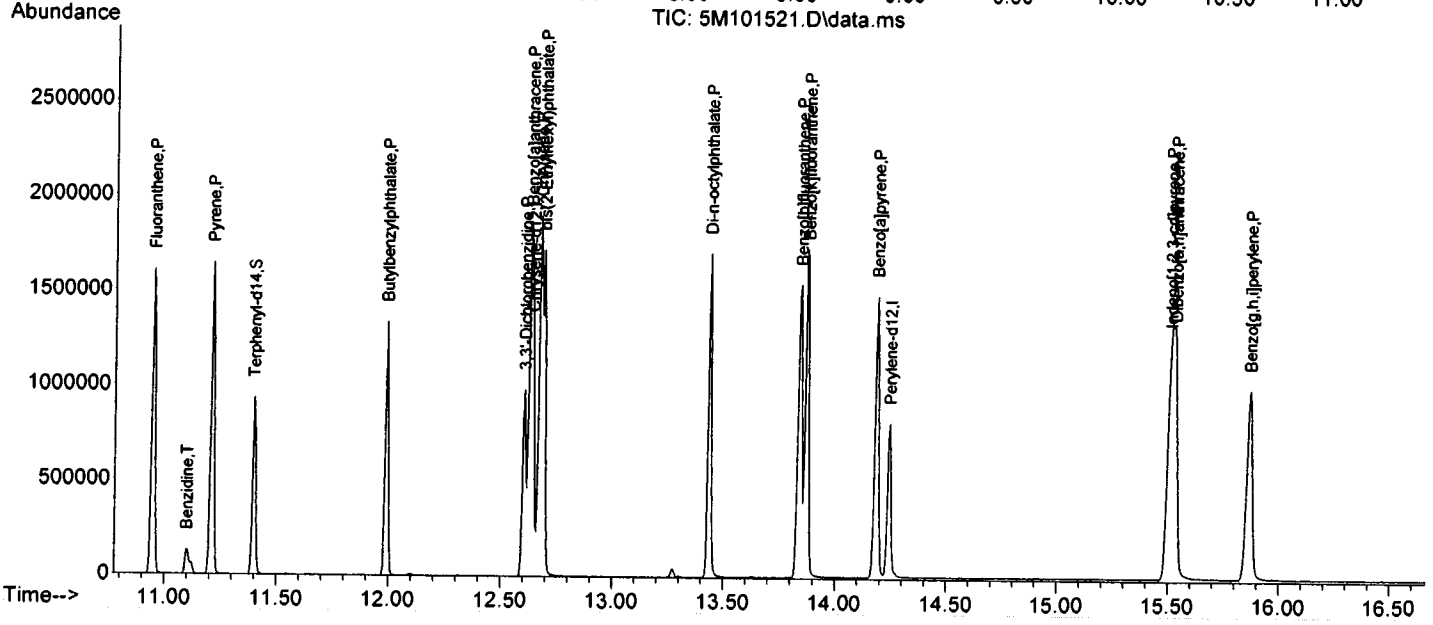
Data Path : G:\GcMsData\2017\GCMS_5\Data\11-14-17\
Qt Path : G:\GCMSDATA\2017\GCMS_5\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	2,4-Dinitrophenol	8.187	184	21406	39.3687	ng	58
68)	Dibenzofuran	8.331	168	498432	93.7978	ng	88
69)	2,4-Dinitrotoluene	8.305	165	117423	86.2501	ng	63
70)	4-Nitrophenol	8.241	65	33689	42.5446	ng	87
71)	2,3,4,6-Tetrachlorophenol	8.444	232	94886	83.4523	ng	84
72)	Fluorene	8.652	166	382496	86.0013	ng	99
73)	4-Chlorophenyl-phenyle...	8.647	204	187001	83.9435	ng	80
74)	Diethylphthalate	8.529	149	387011	87.7048	ng	97
75)	4-Nitroaniline	8.663	138	119102	97.1829	ng	76
76)	Atrazine	9.288	200	126185	100.5962	ng	96
78)	4,6-Dinitro-2-methylph...	8.689	198	70560	79.5294	ng	62
79)	n-Nitrosodiphenylamine	8.754	169	283041	71.2806	ng	99
81)	1,2-Diphenylhydrazine	8.796	77	420043	92.7447	ng	87
82)	4-Bromophenyl-phenylether	9.127	248	114463	85.9169	ng	82
83)	Hexachlorobenzene	9.197	284	120331	85.0820	ng	69
84)	N-Octadecane	9.475	57	248562	90.7742	ng	82
85)	Pentachlorophenol	9.400	266	60911	69.0382	ng	98
86)	Phenanthrene	9.624	178	599497	83.8456	ng	100
87)	Anthracene	9.683	178	601076	83.0623	ng	99
88)	Carbazole	9.849	167	612775	92.2082	ng	98
89)	Di-n-butylphthalate	10.233	149	687008	91.7287	ng	98
90)	Fluoranthene	10.949	202	702152	87.3598	ng	93
92)	Pyrene	11.211	202	733420	82.1346	ng	90
93)	Benzidine	11.099	184	58640	12.5592	ng	89
97)	Butylbenzylphthalate	11.991	149	324419	84.5783	ng	73
99)	3,3'-Dichlorobenzidine	12.605	252	221230	86.0023	ng	95
100)	Benzo[a]anthracene	12.632	228	758256	86.4387	ng	99
101)	Chrysene	12.675	228	735107	85.9827	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.691	149	486906	88.7645	ng	94
104)	Di-n-octylphthalate	13.439	149	834187	89.0383	ng	99
105)	Benzo[b]fluoranthene	13.845	252	742700	85.0336	ng	93
106)	Benzo[k]fluoranthene	13.877	252	713869	84.0297	ng	92
107)	Benzo[a]pyrene	14.187	252	672512	81.4479	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.511	276	828398	96.7298	ng	85
109)	Dibenzo[a,h]anthracene	15.533	278	689924	93.8976	ng	89
110)	Benzo[g,h,i]perylene	15.869	276	663499	93.2974	ng	77

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 5M101521.D\data.ms
Quant QT Reviewed
SampleID : WMB63402(MS)
Data File: 5M101521.D
Acq On : 11/14/17 16:03
Operator : AH/JB
Sam Mult : 1 Vial# : 15
Misc : A,BNA
Qt Meth : 5M_1020.M
Qt On : 11/15/17 08:20
Qt Upd On: 10/20/17 15:15
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
2-Fluorophenol,S
Benzaldehyde,P
2-Chlorophenol,P
N-Decane,P
1,3-Dichlorobenzene,T
Time-->


Abundance
TIC: 5M101521.D\data.ms
Caprolactam,P
4-Chloro-3-methylphenol,P
Isophorone,P
2-Nitrophenol,P
2,4-Dichlorophenol,P
Hexachlorobutadiene,P
Acenaphthylene,M
3-Nitroaniline,P
4-Nitrophenol,P
2,3,4,6-Tetrachlorophenol,P
Diethylphthalate,P
4-Chlorophenyl-phenylether,P
4,6-Dinitro-2-methylphenol,P
2,4,6-Tribromophenol,S
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
Pentachlorophenol,P
N-Octadecane,P
Phenanthrene,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
Time-->


Abundance
TIC: 5M101521.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
Butylbenzylphthalate,P
3,3'-Dichlorobenzidine,P
Benzo[a]anthracene,P
Chrysene-d12,I
bis(2-Ethylhexyl)phthalate,P
Di-n-octylphthalate,P
Benzo[b]fluoranthene,P
Benzo[k]fluoranthene,P
Benzo[a]pyrene,P
Perylene-d12,I
Indeno[1,2,3-cd]pyrene,P
Dibenz[a,h]anthracene,P
Benzo[g,h,i]perylene,P
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M87665.D	WMB63412(MS)	11/15/2017 3:42:00 PM
Non Spike(If applicable):		
Inst Blank(If applicable):		
Method: 8270D	Matrix: Aqueous	QC Type: MBS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	33.946	0	100	34	20	160
Pyridine	1	51.0353	0	100	51	5	150
N-Nitrosodimethylamine	1	42.5783	0	100	43*	50	150
Benzaldehyde	1	137.5595	0	100	138	20	150
Aniline	1	93.0788	0	100	93	20	150
Pentachloroethane	1	11.4651	0	100	11*	50	130
bis(2-Chloroethyl)ether	1	73.0584	0	100	73	50	130
N-Decane	1	70.1459	0	100	70	40	130
1,3-Dichlorobenzene	1	56.723	0	100	57	50	130
1,4-Dichlorobenzene	1	56.6261	0	100	57	50	130
1,2-Dichlorobenzene	1	57.6614	0	100	58	50	130
Benzyl alcohol	1	65.3234	0	100	65*	70	130
bis(2-chloroisopropyl)ether	1	59.6235	0	100	60	40	130
Acetophenone	1	79.313	0	100	79	50	130
Hexachloroethane	1	55.7262	0	100	56	50	130
N-Nitroso-di-n-propylamine	1	81.5422	0	100	82	50	130
Nitrobenzene	1	76.8755	0	100	77	70	130
Isophorone	1	77.7909	0	100	78	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	79.0411	0	100	79	70	130
1,2,4-Trichlorobenzene	1	62.7875	0	100	63	50	130
Naphthalene	1	68.3769	0	100	68*	70	130
4-Chloroaniline	1	130.4469	0	100	130	50	150
Hexachlorobutadiene	1	59.4151	0	100	59*	70	130
Caprolactam	1	21.9953	0	100	22	20	130
2-Methylnaphthalene	1	83.8934	0	100	84	70	130
1-Methylnaphthalene	1	81.5339	0	100	82	70	130
1,1'-Biphenyl	1	84.5998	0	100	85	70	130
1,2,4,5-Tetrachlorobenzene	1	79.2693	0	100	79	70	130
Hexachlorocyclopentadiene	1	53.6572	0	100	54	20	130
2-Chloronaphthalene	1	74.2267	0	100	74	70	130
1,4-Dimethylnaphthalene	1	84.5753	0	100	85	70	130
Diphenyl Ether	1	80.7512	0	100	81	70	130
2-Nitroaniline	1	94.5229	0	100	95	50	150
Coumarin	1	0	0	100	0*	70	130
Acenaphthylene	1	84.8652	0	100	85	70	130
Dimethylphthalate	1	47.7943	0	100	48*	70	130
2,6-Dinitrotoluene	1	88.6559	0	100	89	70	130
Acenaphthene	1	81.0976	0	100	81	70	130
3-Nitroaniline	1	106.9424	0	100	107	50	150
Dibenzofuran	1	93.2757	0	100	93	70	130
2,4-Dinitrotoluene	1	83.9362	0	100	84	40	130
Fluorene	1	86.2784	0	100	86	70	130
4-Chlorophenyl-phenylether	1	86.1633	0	100	86	70	130
Diethylphthalate	1	63.7373	0	100	64	50	130
4-Nitroaniline	1	89.2172	0	100	89	50	150
Atrazine	1	101.1125	0	100	101	50	130
n-Nitrosodiphenylamine	1	74.4213	0	100	74	50	130
1,2-Diphenylhydrazine	1	86.3793	0	100	86	70	130
4-Bromophenyl-phenylether	1	90.4347	0	100	90	70	130
Hexachlorobenzene	1	88.7527	0	100	89	70	130
N-Octadecane	1	90.4632	0	100	90	70	130
Phenanthrene	1	84.9428	0	100	85	70	130
Anthracene	1	86.3803	0	100	86	70	130
Carbazole	1	89.1311	0	100	89	70	130
Di-n-butylphthalate	1	93.9531	0	100	94	70	130
Fluoranthene	1	87.9	0	100	88	70	130
Pyrene	1	97.8351	0	100	98	70	130
Benzidine	1	69.7955	0	100	70	1	130
Butylbenzylphthalate	1	95.5714	0	100	96	50	130
3,3'-Dichlorobenzidine	1	118.0559	0	100	118	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63412

Benzo[a]anthracene	1	90.9995	0	100	91	70	130
Chrysene	1	88.5502	0	100	89	50	130
bis(2-Ethylhexyl)phthalate	1	106.1241	0	100	106	70	130
Di-n-octylphthalate	1	105.9058	0	100	106	70	130
Benzo[b]fluoranthene	1	100.6541	0	100	101	70	130
Benzo[k]fluoranthene	1	98.3743	0	100	98	70	130
Benzo[a]pyrene	1	87.3509	0	100	87	70	130
Indeno[1,2,3-cd]pyrene	1	95.6063	0	100	96	70	130
Dibenzo[a,h]anthracene	1	96.2243	0	100	96	70	130
Benzo[g,h,i]perylene	1	89.318	0	100	89	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Quantitation Report (QT Reviewed)

SampleID : WMB63412(MS) Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87665.D Sam Mult : 1 Vial# : 16 Qt On : 11/15/17 16:07
Acq On : 11/15/17 15:42 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	47880	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	88965	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	362309	40.00	ng	0.00
50) Acenaphthene-d10	8.256	164	217694	40.00	ng	0.00
77) Phenanthrene-d10	9.715	188	389731	40.00	ng	0.00
91) Chrysene-d12	12.765	240	371357	40.00	ng	0.00
103) Perylene-d12	14.384	264	319901	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.269	128	74609	51.11	ng	0.00
Spiked Amount 50.000			Recovery =	102.22%		
55) 2-Fluorobiphenyl	7.663	172	252911	37.36	ng	-0.01
Spiked Amount 50.000			Recovery =	74.72%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	386967	67.39	ng	0.00
Spiked Amount 50.000			Recovery =	134.78%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.604	88	41981	33.9460	ng	99
9) Pyridine	3.080	79	172784	51.0353	ng	70
10) N-Nitrosodimethylamine	3.005	74	85718	42.5783	ng	69
12) Benzaldehyde	5.441	77	196409	137.5595	ng	75
13) Aniline	5.537	93	403357	93.0788	ng	44
14) Pentachloroethane	5.580	117	11083	11.4651	ng	88
15) bis(2-Chloroethyl)ether	5.591	93	236670	73.0584	ng	80
19) N-Decane	5.676	57	198182	70.1459	ng	92
20) 1,3-Dichlorobenzene	5.767	146	176721	56.7230	ng	97
22) 1,4-Dichlorobenzene	5.831	146	179816	56.6261	ng	97
23) 1,2-Dichlorobenzene	5.954	146	176111	57.6614	ng	99
24) Benzyl alcohol	5.927	108	133587	65.3234	ng	71
25) bis(2-chloroisopropyl)...	6.039	45	226214	59.6235	ng	96
27) Acetophenone	6.146	105	349949	79.3130	ng	57
28) Hexachloroethane	6.232	117	69053	55.7262	ng	85
29) N-Nitroso-di-n-propyla...	6.141	70	164244	81.5422	ng	84
33) Nitrobenzene	6.280	77	248757	76.8755	ng	80
34) Isophorone	6.467	82	469652	77.7909	ng	86
38) bis(2-Chloroethoxy)met...	6.632	93	301384	79.0411	ng	97
40) 1,2,4-Trichlorobenzene	6.782	180	166519	62.7875	ng	97
41) Naphthalene	6.846	128	600510	68.3769	ng	99
42) 4-Chloroaniline	6.878	127	352374m	130.4469	ng	
43) Hexachlorobutadiene	6.931	225	80584	59.4151	ng	96
44) Caprolactam	7.129	113	25115	21.9953	ng	69
46) 2-Methylnaphthalene	7.380	142	525743	83.8934	ng	99
47) 1-Methylnaphthalene	7.460	142	489184	81.5339	ng	92
48) Methylnaphthalenes (To...	7.380	142	1015095m	165.5460	ng	
49) 1,1'-Biphenyl	7.749	154	622945	84.5998	ng	96
51) 1,2,4,5-Tetrachloroben...	7.508	216	217376	79.2693	ng	98
52) Hexachlorocyclopentadiene	7.498	237	82522	53.6572	ng	98
56) 2-Chloronaphthalene	7.776	162	430515	74.2267	ng	91
57) 1,4-Dimethylnaphthalene	8.053	156	380365	84.5753	ng	84
58) Dimethylnaphthalenes (...	8.053	156	380365	84.5753	ng	84
59) Diphenyl Ether	7.840	170	348664	80.7512	ng	75
60) 2-Nitroaniline	7.856	65	191567	94.5229	ng	44
61) Coumarin	8.037	146	2399m	0.9966	ng	
62) Acenaphthylene	8.133	152	765232	84.8652	ng	99
63) Dimethylphthalate	7.995	163	319619	47.7943	ng	98
64) 2,6-Dinitrotoluene	8.053	165	128871	88.6559	ng	65
65) Acenaphthene	8.283	153	478742	81.0976	ng	97
66) 3-Nitroaniline	8.203	138	174723	106.9424	ng	80
68) Dibenzofuran	8.438	168	759020	93.2757	ng	85
69) 2,4-Dinitrotoluene	8.411	165	179917	83.9362	ng	59
72) Fluorene	8.759	166	586349	86.2784	ng	97
73) 4-Chlorophenyl-phenyle...	8.748	204	272037	86.1633	ng	85
74) Diethylphthalate	8.625	149	442363	63.7373	ng	98
75) 4-Nitroaniline	8.769	138	179001	89.2172	ng	74
76) Atrazine	9.389	200	173260	101.1125	ng	96
79) n-Nitrosodiphenylamine	8.860	169	436356	74.4213	ng	98
81) 1,2-Diphenylhydrazine	8.903	77	608374	86.3793	ng	86
82) 4-Bromophenyl-phenylether	9.234	248	166146	90.4347	ng	85

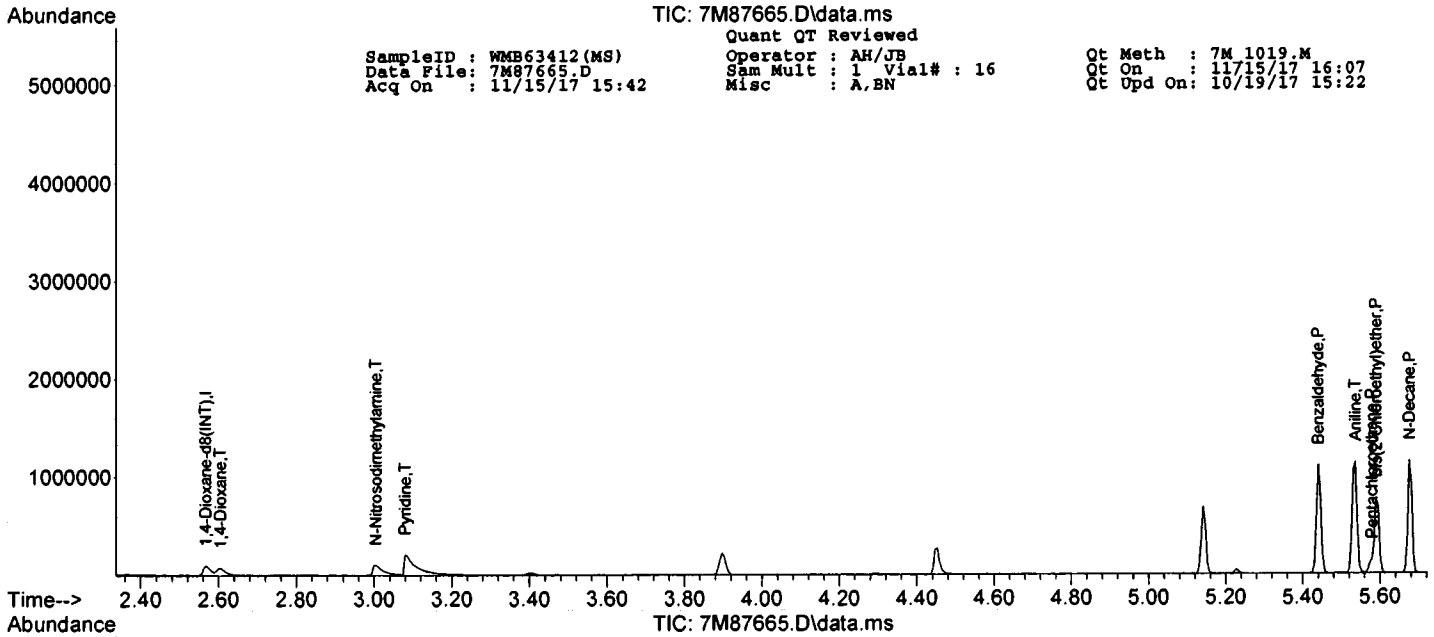
Quantitation Report (QT Reviewed)

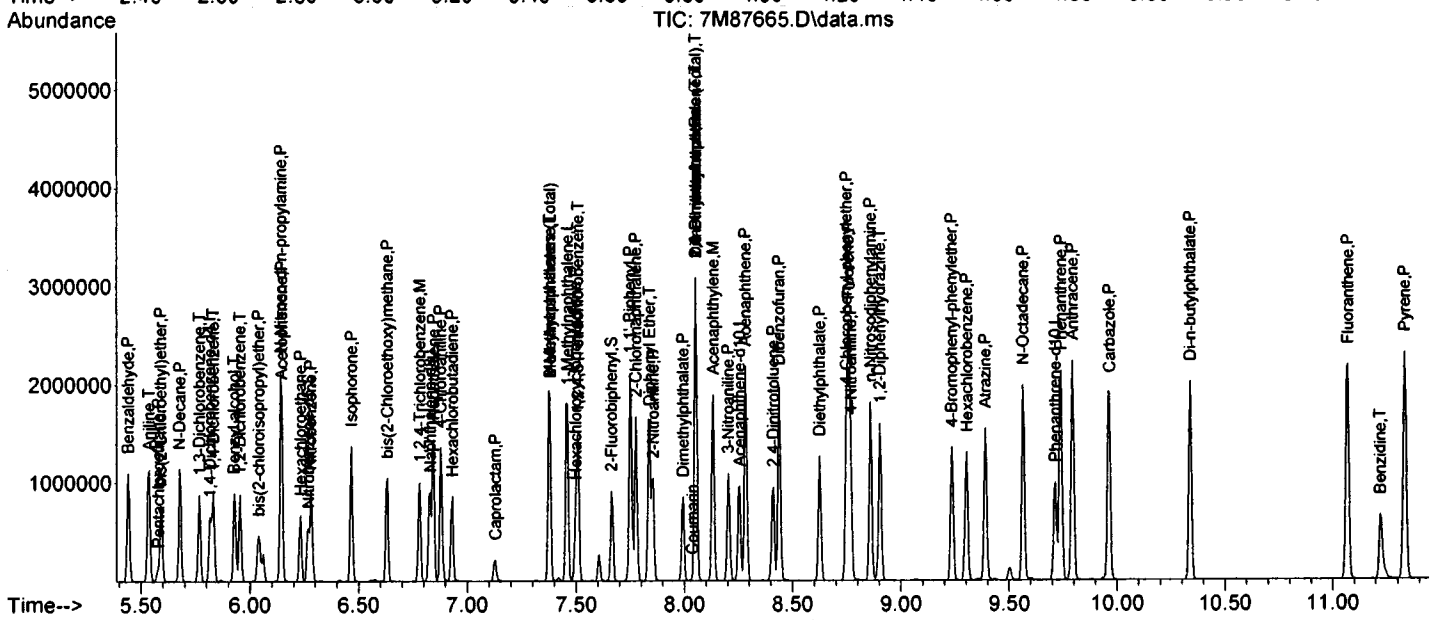
SampleID : WMB63412(MS) Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87665.D Sam Mult : 1 Vial# : 16 Qt On : 11/15/17 16:07
Acq On : 11/15/17 15:42 Misc : A,BN Qt Upd On: 10/19/17 15:22

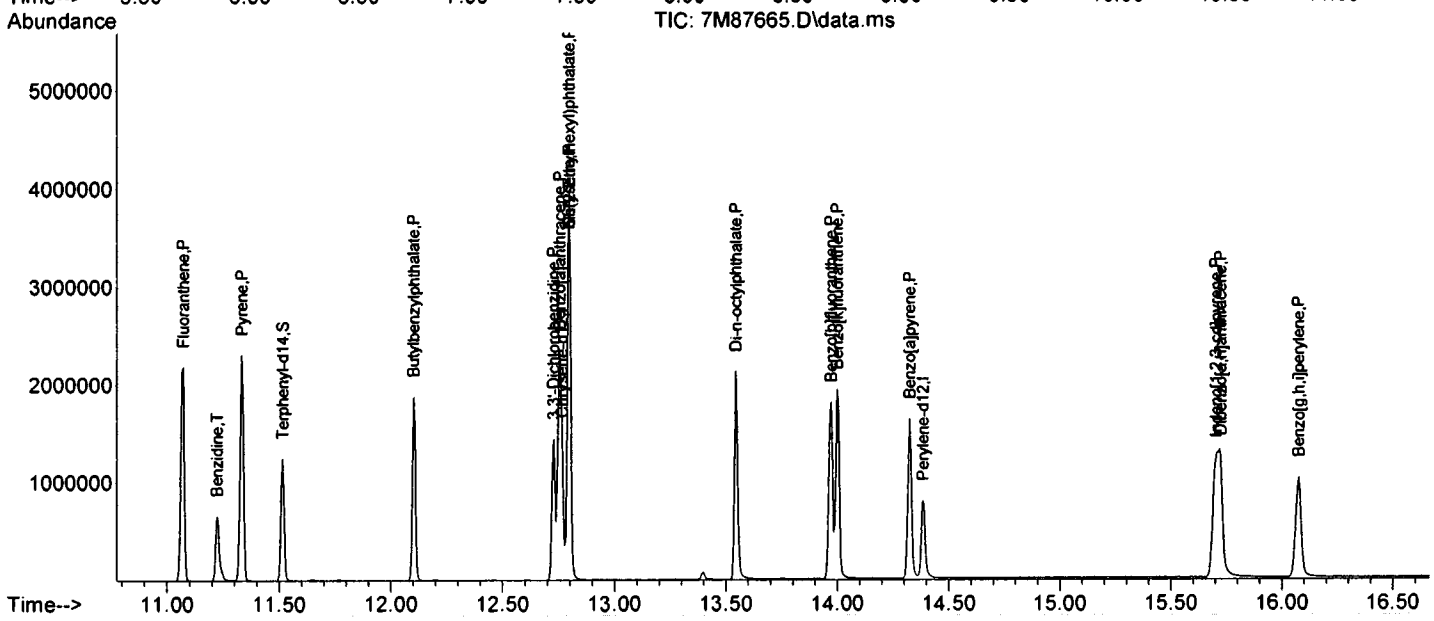
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83)	Hexachlorobenzene	9.303	284	171899	88.7527	ng	65
84)	N-Octadecane	9.565	57	351108	90.4632	ng	77
86)	Phenanthrene	9.742	178	870895	84.9428	ng	99
87)	Anthracene	9.795	178	887707	86.3803	ng	100
88)	Carbazole	9.966	167	876754	89.1311	ng	97
89)	Di-n-butylphthalate	10.340	149	1050117	93.9531	ng	97
90)	Fluoranthene	11.072	202	999544	87.9000	ng	93
92)	Pyrene	11.334	202	1011515	97.8351	ng	93
93)	Benzidine	11.221	184	301453	69.7955	ng	91
97)	Butylbenzylphthalate	12.103	149	471425	95.5714	ng	74
99)	3,3'-Dichlorobenzidine	12.728	252	325527	118.0559	ng	97
100)	Benzo[a]anthracene	12.755	228	886136	90.9995	ng	100
101)	Chrysene	12.797	228	801352	88.5502	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.797	149	638523	106.1241	ng	93
104)	Di-n-octylphthalate	13.545	149	1102803	105.9058	ng	99
105)	Benzo[b]fluoranthene	13.973	252	845855	100.6541	ng	94
106)	Benzo[k]fluoranthene	13.999	252	833799	98.3743	ng	95
107)	Benzo[a]pyrene	14.325	252	714833	87.3509	ng	95
108)	Indeno[1,2,3-cd]pyrene	15.703	276	813726	95.6063	ng	90
109)	Dibenzo[a,h]anthracene	15.725	278	677414	96.2243	ng	91
110)	Benzo[g,h,i]perylene	16.077	276	648304	89.3180	ng	81

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87665.D\data.ms
Quant QT Reviewed
SampleID : WMB63412(MS)
Data File: 7M87665.D
Acq On : 11/15/17 15:42
Operator : AH/JB
Sam Mult : 1 Vial# : 16
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/15/17 16:07
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
Benzaldehyde,P
Aniline,T
N-Decane,P
Time-->


Abundance
TIC: 7M87665.D\data.ms
Benzaldehyde,P
N-Decane,P
Isophorone,P
bis(2-Chloroethoxy)methane,P
Caprolactam,P
2-Fluorobiphenyl,S
Dimethylphthalate,P
Acenaphthylene,M
3-Nitroaniline,P
Acenaphthene,P
2,4-Dinitrotoluene,P
Dibenzofuran,P
Diethylphthalate,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
N-Octadecane,P
Phenanthrene-d10,I
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->


Abundance
TIC: 7M87665.D\data.ms
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
Butylbenzylphthalate,P
Di-n-octylphthalate,P
Benzo(a)pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87653.D	AD01097-007(MS:AD01097-006	11/15/2017 11:00:00 A
Non Spike(If applicable):	7M87652.D	AD01097-006	11/15/2017 10:36:00 A
Inst Blank(If applicable):			

Method: 8270D | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	47.6012	0	100	48	20	160
Pyridine	1	2.0492	0	100	2*	5	150
N-Nitrosodimethylamine	1	62.2184	0	100	62	50	150
Benzaldehyde	1	159.1943	0	100	159*	20	150
Aniline	1	0	0	100	0*	20	150
Pentachloroethane	1	76.156	0	100	76	50	130
bis(2-Chloroethyl)ether	1	73.4713	0	100	73	50	130
N-Decane	1	73.0773	0	100	73	40	130
1,3-Dichlorobenzene	1	69.9701	0	100	70	50	130
1,4-Dichlorobenzene	1	75.6101	0	100	76	50	130
1,2-Dichlorobenzene	1	76.4888	0	100	76	50	130
Benzyl alcohol	1	90.3944	0	100	90	70	130
bis(2-chloroisopropyl)ether	1	70.0213	0	100	70	40	130
Acetophenone	1	84.8418	0	100	85	50	130
Hexachloroethane	1	75.9796	0	100	76	50	130
N-Nitroso-di-n-propylamine	1	85.9558	0	100	86	50	130
Nitrobenzene	1	86.833	0	100	87	70	130
Isophorone	1	84.4526	0	100	84	70	130
Benzoic Acid	1	13.5785	0	100	14*	20	130
bis(2-Chloroethoxy)methane	1	85.6772	0	100	86	70	130
1,2,4-Trichlorobenzene	1	84.2663	0	100	84	50	130
Naphthalene	1	89.6997	0	100	90	70	130
4-Chloroaniline	1	2.4127	0	100	2.4*	50	150
Hexachlorobutadiene	1	84.4307	0	100	84	70	130
Caprolactam	1	46.5972	0	100	47	20	130
2-Methylnaphthalene	1	92.4686	0	100	92	70	130
1-Methylnaphthalene	1	90.2074	0	100	90	70	130
1,1'-Biphenyl	1	92.9831	0	100	93	70	130
1,2,4,5-Tetrachlorobenzene	1	88.4855	0	100	88	70	130
Hexachlorocyclopentadiene	1	88.1685	0	100	88	20	130
2-Chloronaphthalene	1	86.7289	0	100	87	70	130
1,4-Dimethylnaphthalene	1	89.6622	0	100	90	70	130
Diphenyl Ether	1	88.7189	0	100	89	70	130
2-Nitroaniline	1	86.7517	0	100	87	50	150
Coumarin	1	98.5572	0	100	99	70	130
Acenaphthylene	1	92.1028	0	100	92	70	130
Dimethylphthalate	1	88.0173	0	100	88	70	130
2,6-Dinitrotoluene	1	91.0547	0	100	91	70	130
Acenaphthene	1	88.0361	0	100	88	70	130
3-Nitroaniline	1	13.1901	0	100	13*	50	150
Dibenzofuran	1	99.9194	0	100	100	70	130
2,4-Dinitrotoluene	1	90.3367	0	100	90	40	130
Fluorene	1	90.4678	0	100	90	70	130
4-Chlorophenyl-phenylether	1	89.0641	0	100	89	70	130
Diethylphthalate	1	89.8258	0	100	90	50	130
4-Nitroaniline	1	41.9601	0	100	42*	50	150
Atrazine	1	102.1942	0	100	102	50	130
n-Nitrosodiphenylamine	1	64.4279	0	100	64	50	130
1,2-Diphenylhydrazine	1	88.0194	0	100	88	70	130
4-Bromophenyl-phenylether	1	93.0396	0	100	93	70	130
Hexachlorobenzene	1	91.8499	0	100	92	70	130
N-Octadecane	1	93.7872	0	100	94	70	130
Phenanthrene	1	87.6054	0	100	88	70	130
Anthracene	1	87.9642	0	100	88	70	130
Carbazole	1	89.3249	0	100	89	70	130
Di-n-butylphthalate	1	99.7149	0	100	100	70	130
Fluoranthene	1	90.5933	0	100	91	70	130
Pyrene	1	93.6447	0	100	94	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	96.0896	0	100	96	50	130
3,3'-Dichlorobenzidine	1	0	0	100	0*	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

Benzo[a]anthracene	1	91.7672	0	100	92	70	130
Chrysene	1	88.8218	0	100	89	50	130
bis(2-Ethylhexyl)phthalate	1	107.4277	0	100	107	70	130
Di-n-octylphthalate	1	105.6345	0	100	106	70	130
Benzo[b]fluoranthene	1	99.146	0	100	99	70	130
Benzo[k]fluoranthene	1	95.5071	0	100	96	70	130
Benzo[a]pyrene	1	85.746	0	100	86	70	130
Indeno[1,2,3-cd]pyrene	1	94.7625	0	100	95	70	130
Dibenzo[a,h]anthracene	1	93.8522	0	100	94	70	130
Benzo[g,h,i]perylene	1	87.0451	0	100	87	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63402

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87654.D	AD01097-008(MSD:AD01097-0	11/15/2017 11:23:00 A
Non Spike(If applicable):	7M87652.D	AD01097-006	11/15/2017 10:36:00 A
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	58.4903	0	100	58	20	160
Pyridine	1	0	0	100	0*	5	150
N-Nitrosodimethylamine	1	67.3296	0	100	67	50	150
Benzaldehyde	1	178.3723	0	100	178*	20	150
Aniline	1	1.4643	0	100	1.5*	20	150
Pentachloroethane	1	85.7446	0	100	86	50	130
bis(2-Chloroethyl)ether	1	78.2146	0	100	78	50	130
N-Decane	1	83.5563	0	100	84	40	130
1,3-Dichlorobenzene	1	73.5825	0	100	74	50	130
1,4-Dichlorobenzene	1	77.8937	0	100	78	50	130
1,2-Dichlorobenzene	1	78.811	0	100	79	50	130
Benzyl alcohol	1	88.3807	0	100	88	70	130
bis(2-chloroisopropyl)ether	1	70.8922	0	100	71	40	130
Acetophenone	1	87.76	0	100	88	50	130
Hexachloroethane	1	79.5882	0	100	80	50	130
N-Nitroso-di-n-propylamine	1	87.8445	0	100	88	50	130
Nitrobenzene	1	87.9251	0	100	88	70	130
Isophorone	1	86.1424	0	100	86	70	130
Benzoic Acid	1	25.6777	0	100	26	20	130
bis(2-Chloroethoxy)methane	1	85.879	0	100	86	70	130
1,2,4-Trichlorobenzene	1	86.2695	0	100	86	50	130
Naphthalene	1	88.6396	0	100	89	70	130
4-Chloroaniline	1	4.9487	0	100	4.9*	50	150
Hexachlorobutadiene	1	85.195	0	100	85	70	130
Caprolactam	1	48.3733	0	100	48	20	130
2-Methylnaphthalene	1	91.2653	0	100	91	70	130
1-Methylnaphthalene	1	91.2307	0	100	91	70	130
1,1'-Biphenyl	1	94.5087	0	100	95	70	130
1,2,4,5-Tetrachlorobenzene	1	88.5043	0	100	89	70	130
Hexachlorocyclopentadiene	1	87.0945	0	100	87	20	130
2-Chloronaphthalene	1	85.4362	0	100	85	70	130
1,4-Dimethylnaphthalene	1	91.5309	0	100	92	70	130
Diphenyl Ether	1	89.9842	0	100	90	70	130
2-Nitroaniline	1	88.7918	0	100	89	50	150
Coumarin	1	98.8806	0	100	99	70	130
Acenaphthylene	1	92.0117	0	100	92	70	130
Dimethylphthalate	1	87.6965	0	100	88	70	130
2,6-Dinitrotoluene	1	91.8517	0	100	92	70	130
Acenaphthene	1	87.9207	0	100	88	70	130
3-Nitroaniline	1	24.5155	0	100	25*	50	150
Dibenzofuran	1	97.8762	0	100	98	70	130
2,4-Dinitrotoluene	1	88.3371	0	100	88	40	130
Fluorene	1	89.2221	0	100	89	70	130
4-Chlorophenyl-phenylether	1	88.394	0	100	88	70	130
Diethylphthalate	1	89.4268	0	100	89	50	130
4-Nitroaniline	1	53.9939	0	100	54	50	150
Atrazine	1	98.679	0	100	99	50	130
n-Nitrosodiphenylamine	1	64.37	0	100	64	50	130
1,2-Diphenylhydrazine	1	89.1523	0	100	89	70	130
4-Bromophenyl-phenylether	1	92.7427	0	100	93	70	130
Hexachlorobenzene	1	91.7205	0	100	92	70	130
N-Octadecane	1	96.1115	0	100	96	70	130
Phenanthrene	1	87.1157	0	100	87	70	130
Anthracene	1	87.2546	0	100	87	70	130
Carbazole	1	93.2798	0	100	93	70	130
Di-n-butylphthalate	1	99.9258	0	100	100	70	130
Fluoranthene	1	91.3109	0	100	91	70	130
Pyrene	1	92.9766	0	100	93	70	130
Benzidine	1	0	0	100	0*	1	130
Butylbenzylphthalate	1	96.4049	0	100	96	50	130
3,3'-Dichlorobenzidine	1	0	0	100	0*	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63402

Benzo[a]anthracene	1	93.0883	0	100	93	70	130
Chrysene	1	90.2358	0	100	90	50	130
bis(2-Ethylhexyl)phthalate	1	106.3575	0	100	106	70	130
Di-n-octylphthalate	1	101.8316	0	100	102	70	130
Benzo[b]fluoranthene	1	95.0438	0	100	95	70	130
Benzo[k]fluoranthene	1	97.5839	0	100	98	70	130
Benzo[a]pyrene	1	82.0759	0	100	82	70	130
Indeno[1,2,3-cd]pyrene	1	98.6388	0	100	99	70	130
Dibenzo[a,h]anthracene	1	98.0034	0	100	98	70	130
Benzo[g,h,i]perylene	1	90.3737	0	100	90	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB63402

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87654.D	AD01097-008(MSD:AD01097-0	11/15/2017 11:23:00 A
Duplicate(If applicable):	7M87653.D	AD01097-007(MS:AD01097-006	11/15/2017 11:00:00 A
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	58.4903	47.6012	21*	20
Pyridine	1	0	2.0492	200*	40
N-Nitrosodimethylamine	1	67.3296	62.2184	7.9	20
Benzaldehyde	1	178.3723	159.1943	11	20
Aniline	1	1.4643	0	200*	20
Pentachloroethane	1	85.7446	76.156	12	20
bis(2-Chloroethyl)ether	1	78.2146	73.4713	6.3	20
N-Decane	1	83.5563	73.0773	13	20
1,3-Dichlorobenzene	1	73.5825	69.9701	5	20
1,4-Dichlorobenzene	1	77.8937	75.6101	3	40
1,2-Dichlorobenzene	1	78.811	76.4888	3	20
Benzyl alcohol	1	88.3807	90.3944	2.3	20
bis(2-chloroisopropyl)ether	1	70.8922	70.0213	1.2	20
Acetophenone	1	87.76	84.8418	3.4	20
Hexachloroethane	1	79.5882	75.9796	4.6	40
N-Nitroso-di-n-propylamine	1	87.8445	85.9558	2.2	40
Nitrobenzene	1	87.9251	86.833	1.2	40
Isophorone	1	86.1424	84.4526	2	20
Benzoic Acid	1	25.6777	13.5785	62*	20
bis(2-Chloroethoxy)methane	1	85.879	85.6772	0.24	20
1,2,4-Trichlorobenzene	1	86.2695	84.2663	2.3	40
Naphthalene	1	88.6396	89.6997	1.2	40
4-Chloroaniline	1	4.9487	2.4127	69*	20
Hexachlorobutadiene	1	85.195	84.4307	0.9	40
Caprolactam	1	48.3733	46.5972	3.7	20
2-Methylnaphthalene	1	91.2653	92.4686	1.3	20
1-Methylnaphthalene	1	91.2307	90.2074	1.1	20
1,1'-Biphenyl	1	94.5087	92.9831	1.6	20
1,2,4,5-Tetrachlorobenzene	1	88.5043	88.4855	0.02	20
Hexachlorocyclopentadiene	1	87.0945	88.1685	1.2	20
2-Chloronaphthalene	1	85.4362	86.7289	1.5	20
1,4-Dimethylnaphthalene	1	91.5309	89.6622	2.1	20
Diphenyl Ether	1	89.9842	88.7189	1.4	20
2-Nitroaniline	1	88.7918	86.7517	2.3	20
Coumarin	1	98.8806	98.5572	0.33	20
Acenaphthylene	1	92.0117	92.1028	0.1	20
Dimethylphthalate	1	87.6965	88.0173	0.37	20
2,6-Dinitrotoluene	1	91.8517	91.0547	0.87	20
Acenaphthene	1	87.9207	88.0361	0.13	40
3-Nitroaniline	1	24.5155	13.1901	60*	20
Dibenzofuran	1	97.8762	99.9194	2.1	20
2,4-Dinitrotoluene	1	88.3371	90.3367	2.2	40
Fluorene	1	89.2221	90.4678	1.4	40
4-Chlorophenyl-phenylether	1	88.394	89.0641	0.76	20
Diethylphthalate	1	89.4268	89.8258	0.45	20
4-Nitroaniline	1	53.9939	41.9601	25*	20
Atrazine	1	98.679	102.1942	3.5	20
n-Nitrosodiphenylamine	1	64.37	64.4279	0.09	20
1,2-Diphenylhydrazine	1	89.1523	88.0194	1.3	20
4-Bromophenyl-phenylether	1	92.7427	93.0396	0.32	20
Hexachlorobenzene	1	91.7205	91.8499	0.14	40
N-Octadecane	1	96.1115	93.7872	2.4	20
Phenanthrene	1	87.1157	87.6054	0.56	20
Anthracene	1	87.2546	87.9642	0.81	20
Carbazole	1	93.2798	89.3249	4.3	20
Di-n-butylphthalate	1	99.9258	99.7149	0.21	20
Fluoranthene	1	91.3109	90.5933	0.79	20
Pyrene	1	92.9766	93.6447	0.72	40
Benzidine	1	0	0	NA	20
Butylbenzylphthalate	1	96.4049	96.0896	0.33	40
3,3'-Dichlorobenzidine	1	0	0	NA	20
Benzo[a]anthracene	1	93.0883	91.7672	1.4	20
Chrysene	1	90.2358	88.8218	1.6	20

Form3
RPD Data Laboratory Limits
QC Batch: WMB63402

bis(2-Ethylhexyl)phthalate	1	106.3575	107.4277	1	20
Di-n-octylphthalate	1	101.8316	105.6345	3.7	20
Benzo[b]fluoranthene	1	95.0438	99.146	4.2	20
Benzo[k]fluoranthene	1	97.5839	95.5071	2.2	20
Benzo[a]pyrene	1	82.0759	85.746	4.4	20
Indeno[1,2,3-cd]pyrene	1	98.6388	94.7625	4	20
Dibenzo[a,h]anthracene	1	98.0034	93.8522	4.3	20
Benzo[g,h,i]perylene	1	90.3737	87.0451	3.8	20

* - Indicates outside of limits

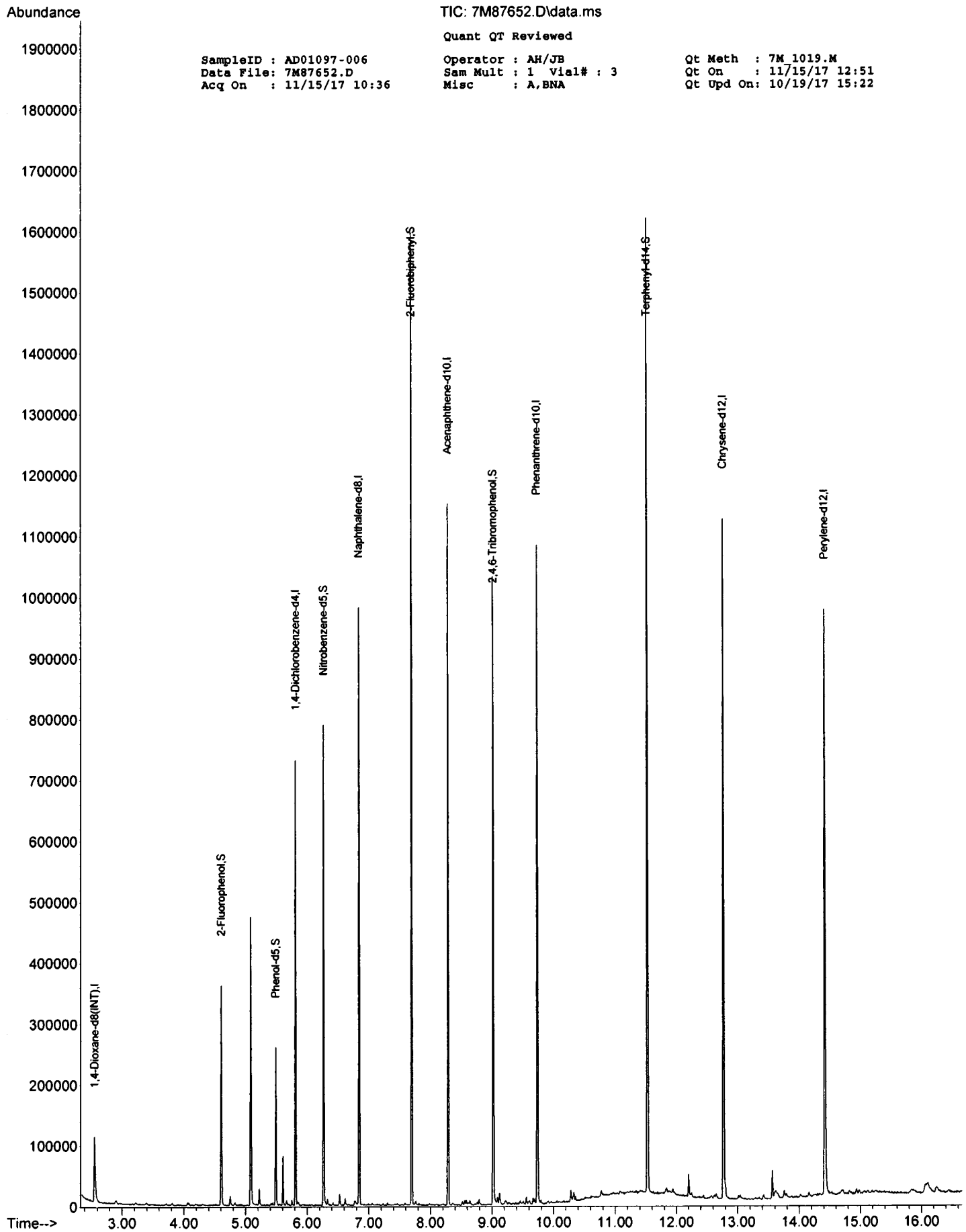
NA - Both concentrations=0... no result can be calculated

SampleID : AD01097-006 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87652.D Sam Mult : 1 Vial# : 3 Qt On : 11/15/17 12:51
Acq On : 11/15/17 10:36 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.556	96	57391	40.00	ng	-0.01
21) 1,4-Dichlorobenzene-d4	5.815	152	102837	40.00	ng	0.00
31) Naphthalene-d8	6.841	136	401749	40.00	ng	0.01
50) Acenaphthene-d10	8.289	164	235195	40.00	ng	0.03
77) Phenanthrene-d10	9.736	188	409841	40.00	ng	0.02
91) Chrysene-d12	12.771	240	428043	40.00	ng	0.00
103) Perylene-d12	14.421	264	393491	40.00	ng	0.02
System Monitoring Compounds						
11) 2-Fluorophenol	4.608	112	103706	29.85	ng	0.00
Spiked Amount 100.000			Recovery = 29.85%			
16) Phenol-d5	5.489	99	82495	18.56	ng	0.00
Spiked Amount 100.000			Recovery = 18.56%			
32) Nitrobenzene-d5	6.269	128	108153	66.82	ng	0.00
Spiked Amount 50.000			Recovery = 133.64%			
55) 2-Fluorobiphenyl	7.696	172	470727	64.37	ng	0.02
Spiked Amount 50.000			Recovery = 128.74%			
80) 2,4,6-Tribromophenol	9.026	330	107318	119.13	ng	0.03
Spiked Amount 100.000			Recovery = 119.13%			
94) Terphenyl-d14	11.526	244	489534	73.96	ng	0.00
Spiked Amount 50.000			Recovery = 147.92%			
Target Compounds						Qvalue

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87652.D\data.ms
Quant QT Reviewed
SampleID : AD01097-006
Data File: 7M87652.D
Acq On : 11/15/17 10:36
Operator : AH/JB
Sam Mult : 1 Vial# : 3
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 12:51
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
2-Fluorophenol,S
Phenol-d5,S
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
2,4,6-Tribromophenol,S
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

SampleID : AD01097-007(MS:AD01 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87653.D Sam Mult : 1 Vial# : 4 Qt On : 11/15/17 12:52
Acq On : 11/15/17 11:00 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	55528	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	93838	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	373239	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	223617	40.00	ng	-0.01
77) Phenanthrene-d10	9.715	188	403323	40.00	ng	0.00
91) Chrysene-d12	12.765	240	412846	40.00	ng	0.00
103) Perylene-d12	14.395	264	370778	40.00	ng	-0.01
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	37569	11.18	ng	0.00
Spiked Amount 100.000			Recovery = 11.18%			
16) Phenol-d5	5.495	99	28442	6.61	ng	0.00
Spiked Amount 100.000			Recovery = 6.61%			
32) Nitrobenzene-d5	6.264	128	81642	54.29	ng	0.00
Spiked Amount 50.000			Recovery = 108.58%			
55) 2-Fluorobiphenyl	7.664	172	353422	50.83	ng	-0.01
Spiked Amount 50.000			Recovery = 101.66%			
80) 2,4,6-Tribromophenol	8.994	330	81054	93.29	ng	0.00
Spiked Amount 100.000			Recovery = 93.29%			
94) Terphenyl-d14	11.515	244	400675	62.76	ng	0.00
Spiked Amount 50.000			Recovery = 125.52%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	68516	47.6012	ng	97
9) Pyridine	3.197	79	8046	2.0492	ng	85
10) N-Nitrosodimethylamine	2.994	74	145265	62.2184	ng	70
12) Benzaldehyde	5.441	77	254038	159.1943	ng	75
14) Pentachloroethane	5.575	117	85377	76.1560	ng	86
15) bis(2-Chloroethyl)ether	5.591	93	276025	73.4713	ng	80
17) Phenol	5.505	94	29530	5.8792	ng	82
18) 2-Chlorophenol	5.633	128	164490	46.3170	ng	80
19) N-Decane	5.676	57	239443	73.0773	ng	93
20) 1,3-Dichlorobenzene	5.767	146	252813	69.9701	ng	99
22) 1,4-Dichlorobenzene	5.831	146	253251	75.6101	ng	97
23) 1,2-Dichlorobenzene	5.954	146	246410	76.4888	ng	97
24) Benzyl alcohol	5.927	108	194983	90.3944	ng	73
25) bis(2-chloroisopropyl)...	6.040	45	280215	70.0213	ng	96
26) 2-Methylphenol	6.018	108	21623	7.1544	ng	98
27) Acetophenone	6.141	105	394848	84.8418	ng	61
28) Hexachloroethane	6.232	117	99307	75.9796	ng	86
29) N-Nitroso-di-n-propyla...	6.141	70	182128	85.9558	ng	85
30) 3&4-Methylphenol	6.141	108	12827	4.2899	ng	70
33) Nitrobenzene	6.280	77	289454	86.8330	ng	79
34) Isophorone	6.467	82	525253	84.4526	ng	85
35) 2-Nitrophenol	6.531	139	166639	98.7511	ng	84
36) 2,4-Dimethylphenol	6.552	107	15527	4.9309	ng	96
37) Benzoic Acid	6.606	105	41388	13.5785	ng	38
38) bis(2-Chloroethoxy)met...	6.632	93	336543	85.6772	ng	94
39) 2,4-Dichlorophenol	6.713	162	169204	70.1692	ng	89
40) 1,2,4-Trichlorobenzene	6.782	180	230225	84.2663	ng	96
41) Naphthalene	6.846	128	807349	89.6997	ng	99
42) 4-Chloroaniline	6.878	127	8935	2.4127	ng	79
43) Hexachlorobutadiene	6.932	225	117967	84.4307	ng	97
44) Caprolactam	7.140	113	56840	46.5972	ng	70
45) 4-Chloro-3-methylphenol	7.236	107	97248	34.9410	ng	86
46) 2-Methylnaphthalene	7.375	142	596964	92.4686	ng	99
47) 1-Methylnaphthalene	7.455	142	557550	90.2074	ng	92
48) Methylnaphthalenes (To...	7.375	142	1154562m	182.7769	ng	
49) 1,1'-Biphenyl	7.749	154	705330	92.9831	ng	96
51) 1,2,4,5-Tetrachloroben...	7.509	216	249251	88.4855	ng	98
52) Hexachlorocyclopentadiene	7.498	237	139288	88.1685	ng	99
53) 2,4,6-Trichlorophenol	7.594	196	146158m	78.7988	ng	
54) 2,4,5-Trichlorophenol	7.626	196	179769	99.5063	ng	98
56) 2-Chloronaphthalene	7.776	162	516714	86.7289	ng	91
57) 1,4-Dimethylnaphthalene	8.054	156	414214	89.6622	ng	85
58) Dimethylnaphthalenes (...	8.054	156	414214	89.6622	ng	85
59) Diphenyl Ether	7.834	170	393489	88.7189	ng	79
60) 2-Nitroaniline	7.851	65	180601	86.7517	ng	55
61) Coumarin	8.037	146	243702	98.5572	ng	79
62) Acenaphthylene	8.134	152	853090	92.1028	ng	99
63) Dimethylphthalate	7.995	163	604620	88.0173	ng	98
64) 2,6-Dinitrotoluene	8.054	165	135959	91.0547	ng	64
65) Acenaphthene	8.283	153	533842	88.0361	ng	98
66) 3-Nitroaniline	8.203	138	23210	13.1901	ng	77

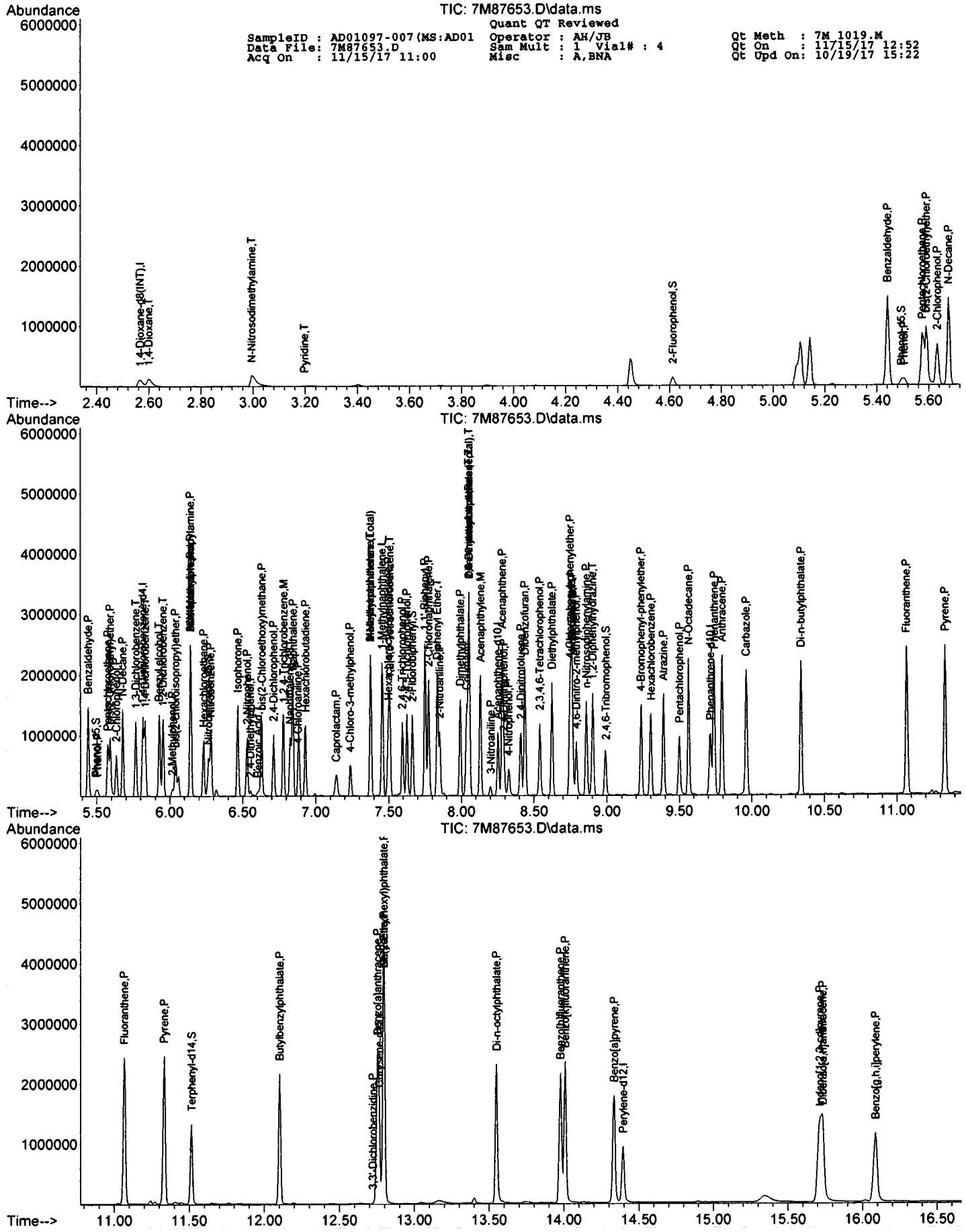
Quantitation Report (QT Reviewed)

SampleID : AD01097-007(MS:AD01 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87653.D Sam Mult : 1 Vial# : 4 Qt On : 11/15/17 12:52
Acq On : 11/15/17 11:00 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
67)	2,4-Dinitrophenol	8.294	184	89773	106.3182	ng	37
68)	Dibenzofuran	8.438	168	834425	99.9194	ng	84
69)	2,4-Dinitrotoluene	8.411	165	199395	90.3367	ng	60
70)	4-Nitrophenol	8.326	65	71879	51.6508	ng	90
71)	2,3,4,6-Tetrachlorophenol	8.540	232	134566	79.6577	ng	86
72)	Fluorene	8.759	166	631548	90.4678	ng	97
73)	4-Chlorophenyl-phenyle...	8.748	204	288846	89.0641	ng	84
74)	Diethylphthalate	8.625	149	640390	89.8258	ng	97
75)	4-Nitroaniline	8.764	138	84522	41.9601	ng	70
76)	Atrazine	9.389	200	179878	102.1942	ng	94
78)	4,6-Dinitro-2-methylph...	8.791	198	131570	110.8636	ng	65
79)	n-Nitrosodiphenylamine	8.860	169	390936	64.4279	ng	98
81)	1,2-Diphenylhydrazine	8.903	77	641545	88.0194	ng	86
82)	4-Bromophenyl-phenylether	9.234	248	176893	93.0396	ng	85
83)	Hexachlorobenzene	9.304	284	184102	91.8499	ng	63
84)	N-Octadecane	9.565	57	376704	93.7872	ng	77
85)	Pentachlorophenol	9.501	266	119829	95.3873	ng	99
86)	Phenanthrene	9.742	178	929519	87.6054	ng	99
87)	Anthracene	9.795	178	935511	87.9642	ng	100
88)	Carbazole	9.961	167	909304	89.3249	ng	98
89)	Di-n-butylphthalate	10.340	149	1153386	99.7149	ng	97
90)	Fluoranthene	11.067	202	1066098	90.5933	ng	97
92)	Pyrene	11.334	202	1076359	93.6447	ng	92
97)	Butylbenzylphthalate	12.103	149	527141	96.0896	ng	74
99)	3,3'-Dichlorobenzidine	12.723	252	3523	1.0645	ng	90
100)	Benzo[a]anthracene	12.755	228	993448	91.7672	ng	100
101)	Chrysene	12.797	228	893614	88.8218	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.797	149	718580	107.4277	ng	92
104)	Di-n-octylphthalate	13.551	149	1274579	105.6345	ng	99
105)	Benzo[b]fluoranthene	13.978	252	965691m	99.1460	ng	
106)	Benzo[k]fluoranthene	14.010	252	938240	95.5071	ng	95
107)	Benzo[a]pyrene	14.336	252	813298	85.7460	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.714	276	934816	94.7625	ng	88
109)	Dibenzo[a,h]anthracene	15.736	278	765794	93.8522	ng	91
110)	Benzo[g,h,i]perylene	16.088	276	732289	87.0451	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87653.D\data.ms
Quant QT Reviewed
SampleID : AD01097-007(MS:AD01
Data File: 7M87653.D
Acq On : 11/15/17 11:00
Operator : AH/JB
Sam Mult : 1 Vial# : 4
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 12:52
Qt Upd On: 10/19/17 15:22
Abundance
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD01097-008(MSD:AD0 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87654.D Sam Mult : 1 Vial# : 5 Qt On : 11/15/17 13:02
Acq On : 11/15/17 11:23 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	46786	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	82271	40.00	ng	0.00
31) Naphthalene-d8	6.830	136	328138	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	198180	40.00	ng	-0.01
77) Phenanthrene-d10	9.715	188	354265	40.00	ng	0.00
91) Chrysene-d12	12.765	240	365129	40.00	ng	0.00
103) Perylene-d12	14.405	264	340932	40.00	ng	0.00
System Monitoring Compounds						
11) 2-Fluorophenol	4.613	112	79706	28.14	ng	0.00
Spiked Amount 100.000			Recovery = 28.14%			
16) Phenol-d5	5.495	99	61730	17.03	ng	0.00
Spiked Amount 100.000			Recovery = 17.03%			
32) Nitrobenzene-d5	6.264	128	71323	53.95	ng	0.00
Spiked Amount 50.000			Recovery = 107.90%			
55) 2-Fluorobiphenyl	7.664	172	308790	50.11	ng	-0.01
Spiked Amount 50.000			Recovery = 100.22%			
80) 2,4,6-Tribromophenol	8.994	330	77790	101.29	ng	0.00
Spiked Amount 100.000			Recovery = 101.29%			
94) Terphenyl-d14	11.515	244	349808	61.96	ng	0.00
Spiked Amount 50.000			Recovery = 123.92%			
Target Compounds						Qvalue
8) 1,4-Dioxane	2.604	88	71137	58.4903	ng	98
9) Pyridine	3.240	79	1961m	0.5928	ng	
10) N-Nitrosodimethylamine	3.000	74	132450	67.3296	ng	74
12) Benzaldehyde	5.441	77	231822	178.3723	ng	76
13) Aniline	5.537	93	6158m	1.4643	ng	
14) Pentachloroethane	5.575	117	80993	85.7446	ng	85
15) bis(2-Chloroethyl)ether	5.591	93	247584	78.2146	ng	79
17) Phenol	5.505	94	64858	15.3255	ng	83
18) 2-Chlorophenol	5.633	128	202427	67.6496	ng	81
19) N-Decane	5.676	57	230676	83.5563	ng	92
20) 1,3-Dichlorobenzene	5.767	146	224009	73.5825	ng	98
22) 1,4-Dichlorobenzene	5.831	146	228740	77.8937	ng	97
23) 1,2-Dichlorobenzene	5.954	146	222595	78.8110	ng	99
24) Benzyl alcohol	5.927	108	167140	88.3807	ng	74
25) bis(2-chloroisopropyl)...	6.040	45	248730	70.8922	ng	99
26) 2-Methylphenol	6.018	108	68195	25.7361	ng	95
27) Acetophenone	6.146	105	358084	87.7600	ng	56
28) Hexachloroethane	6.232	117	91201	79.5882	ng	86
29) N-Nitroso-di-n-propyla...	6.141	70	162999	87.8445	ng	84
30) 3&4-Methylphenol	6.141	108	33411	12.7450	ng	84
33) Nitrobenzene	6.280	77	257678	87.9251	ng	80
34) Isophorone	6.467	82	471023	86.1424	ng	87
35) 2-Nitrophenol	6.531	139	152871	102.8777	ng	84
36) 2,4-Dimethylphenol	6.552	107	26834	9.6929	ng	97
37) Benzoic Acid	6.606	105	70272	25.6777	ng	45
38) bis(2-Chloroethoxy)met...	6.633	93	296573	85.8790	ng	92
39) 2,4-Dichlorophenol	6.713	162	185288	87.4004	ng	90
40) 1,2,4-Trichlorobenzene	6.782	180	207217	86.2695	ng	97
41) Naphthalene	6.846	128	701584	88.6396	ng	99
42) 4-Chloroaniline	6.884	127	16033	4.9487	ng	77
43) Hexachlorobutadiene	6.932	225	104651	85.1950	ng	96
44) Caprolactam	7.145	113	52010	48.3733	ng	69
45) 4-Chloro-3-methylphenol	7.242	107	158046	64.5905	ng	81
46) 2-Methylnaphthalene	7.380	142	517999	91.2653	ng	99
47) 1-Methylnaphthalene	7.455	142	495738	91.2307	ng	92
48) Methylnaphthalenes (To...	7.380	142	1016768m	183.0865	ng	
49) 1,1'-Biphenyl	7.749	154	630274	94.5087	ng	96
51) 1,2,4,5-Tetrachloroben...	7.509	216	220945	88.5043	ng	98
52) Hexachlorocyclopentadiene	7.498	237	121940	87.0945	ng	99
53) 2,4,6-Trichlorophenol	7.599	196	146416m	88.7828	ng	
54) 2,4,5-Trichlorophenol	7.626	196	170377	106.4123	ng	98
56) 2-Chloronaphthalene	7.776	162	451111	85.4362	ng	92
57) 1,4-Dimethylnaphthalene	8.054	156	374747	91.5309	ng	85
58) Dimethylnaphthalenes (...	8.054	156	374747	91.5309	ng	85
59) Diphenyl Ether	7.835	170	353702	89.9842	ng	79
60) 2-Nitroaniline	7.851	65	163821	88.7918	ng	54
61) Coumarin	8.038	146	216689	98.8806	ng	78
62) Acenaphthylene	8.134	152	755301	92.0117	ng	99
63) Dimethylphthalate	7.995	163	533890	87.6965	ng	98
64) 2,6-Dinitrotoluene	8.054	165	121548	91.8517	ng	63
65) Acenaphthene	8.283	153	472496	87.9207	ng	99

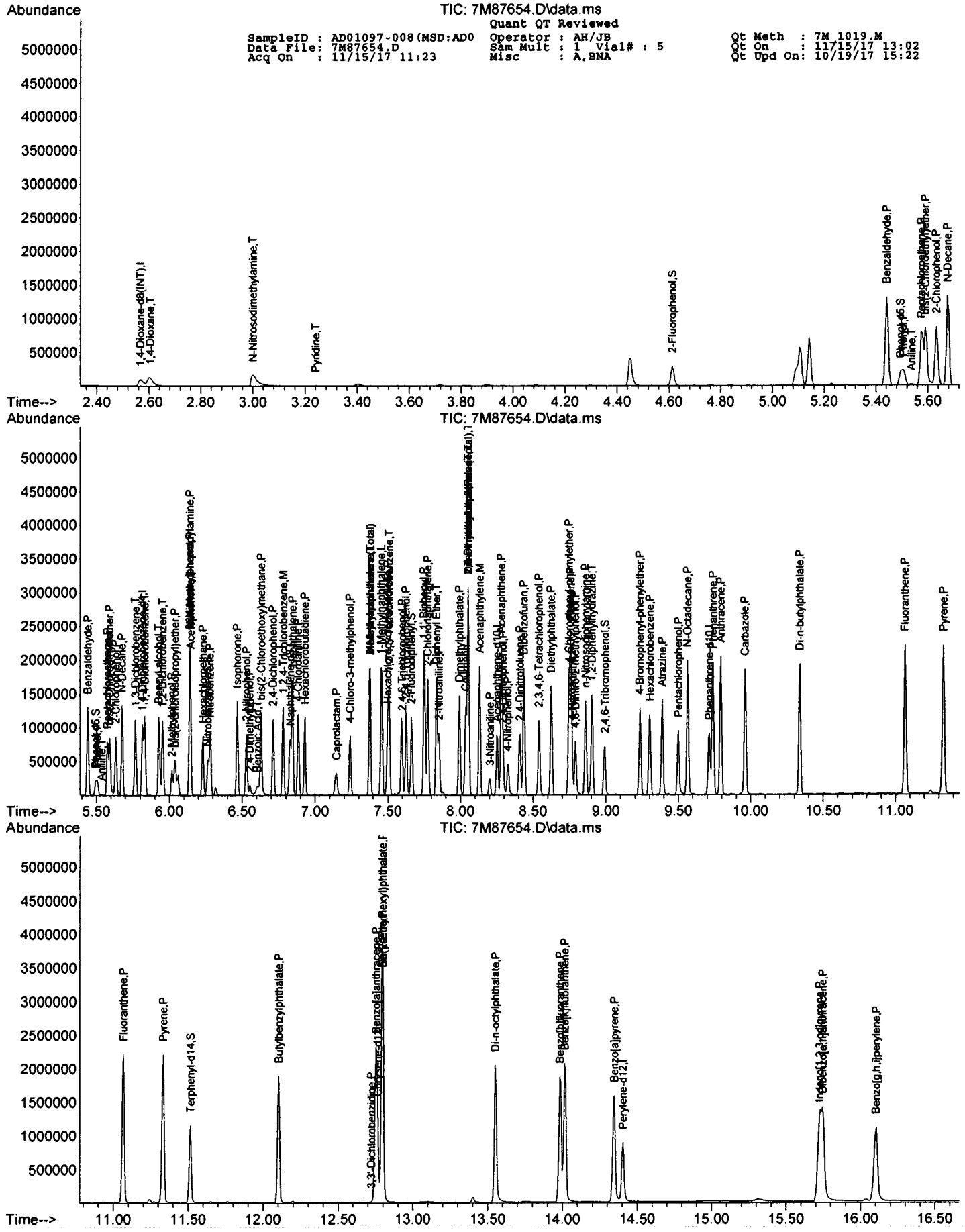
Quantitation Report (QT Reviewed)

SampleID : AD01097-008(MSD:AD0 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87654.D Sam Mult : 1 Vial# : 5 Qt On : 11/15/17 13:02
Acq On : 11/15/17 11:23 Misc : A,BNA Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
66)	3-Nitroaniline	8.203	138	38018	24.5155	ng	77
67)	2,4-Dinitrophenol	8.294	184	79586	106.3456	ng	40
68)	Dibenzofuran	8.438	168	724593	97.8762	ng	84
69)	2,4-Dinitrotoluene	8.411	165	172669	88.3371	ng	60
70)	4-Nitrophenol	8.326	65	75887	61.2496	ng	93
71)	2,3,4,6-Tetrachlorophenol	8.540	232	129263	86.0723	ng	86
72)	Fluorene	8.759	166	552001	89.2221	ng	96
73)	4-Chlorophenyl-phenyle...	8.748	204	254063	88.3940	ng	85
74)	Diethylphthalate	8.625	149	565023	89.4268	ng	98
75)	4-Nitroaniline	8.769	138	96958	53.9939	ng	72
76)	Atrazine	9.389	200	153933	98.6790	ng	96
78)	4,6-Dinitro-2-methylph...	8.791	198	117219	112.2392	ng	61
79)	n-Nitrosodiphenylamine	8.860	169	343076	64.3700	ng	98
81)	1,2-Diphenylhydrazine	8.903	77	570764	89.1523	ng	86
82)	4-Bromophenyl-phenylether	9.234	248	154881	92.7427	ng	86
83)	Hexachlorobenzene	9.304	284	161481	91.7205	ng	64
84)	N-Octadecane	9.565	57	339084	96.1115	ng	76
85)	Pentachlorophenol	9.501	266	111373	100.3606	ng	99
86)	Phenanthrene	9.742	178	811894	87.1157	ng	99
87)	Anthracene	9.795	178	815092	87.2546	ng	99
88)	Carbazole	9.961	167	834064	93.2798	ng	97
89)	Di-n-butylphthalate	10.340	149	1015237	99.9258	ng	97
90)	Fluoranthene	11.067	202	943841	91.3109	ng	96
92)	Pyrene	11.334	202	945162	92.9766	ng	91
97)	Butylbenzylphthalate	12.103	149	467854	96.4049	ng	73
99)	3,3'-Dichlorobenzidine	12.723	252	3854	1.3169	ng	98
100)	Benzo[a]anthracene	12.755	228	891274	93.0883	ng	99
101)	Chrysene	12.797	228	802911	90.2358	ng	98
102)	bis(2-Ethylhexyl)phtha...	12.797	149	629195	106.3575	ng	93
104)	Di-n-octylphthalate	13.551	149	1125569	101.8316	ng	100
105)	Benzo[b]fluoranthene	13.983	252	851217	95.0438	ng	96
106)	Benzo[k]fluoranthene	14.015	252	881475m	97.5839	ng	
107)	Benzo[a]pyrene	14.347	252	715822	82.0759	ng	93
108)	Indeno[1,2,3-cd]pyrene	15.725	276	894729	98.6388	ng	89
109)	Dibenzo[a,h]anthracene	15.746	278	735297	98.0034	ng	94
110)	Benzo[g,h,i]perylene	16.104	276	699091	90.3737	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87654.D\data.ms
Quant QT Reviewed
SampleID : AD01097-008(MSD:AD0
Data File: 7M87654.D
Acq On : 11/15/17 11:23
Operator : AH/JB
Sam Mult : 1 Vial# : 5
Misc : A,BNA
Qt Meth : 7M_1019.M
Qt On : 11/15/17 13:02
Qt Upd On: 10/19/17 15:22
Time-->

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87670.D	AD01106-002(MS)	11/15/2017 5:39:00 PM
Non Spike(If applicable):	7M87669.D	AD01106-002	11/15/2017 5:15:00 PM
Inst Blank(If applicable):			

Method: 8270D | Matrix: Aqueous | QC Type: MS

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	49.1249	0	100	49	20	160
Pyridine	1	62.364	0	100	62	5	150
N-Nitrosodimethylamine	1	65.1646	0	100	65	50	150
Benzaldehyde	1	120.2079	0	100	120	20	150
Aniline	1	103.4236	0	100	103	20	150
Pentachloroethane	1	12.6847	0	100	13*	50	130
bis(2-Chloroethyl)ether	1	82.0178	0	100	82	50	130
N-Decane	1	80.8959	0	100	81	40	130
1,3-Dichlorobenzene	1	79.9482	0	100	80	50	130
1,4-Dichlorobenzene	1	77.9992	0	100	78	50	130
1,2-Dichlorobenzene	1	78.4051	0	100	78	50	130
Benzyl alcohol	1	83.6258	0	100	84	70	130
bis(2-chloroisopropyl)ether	1	70.1621	0	100	70	40	130
Acetophenone	1	83.5527	0	100	84	50	130
Hexachloroethane	1	77.2022	0	100	77	50	130
N-Nitroso-di-n-propylamine	1	89.0725	0	100	89	50	130
Nitrobenzene	1	86.9945	0	100	87	70	130
Isophorone	1	86.999	0	100	87	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	85.8825	0	100	86	70	130
1,2,4-Trichlorobenzene	1	86.1755	0	100	86	50	130
Naphthalene	1	88.7435	0	100	89	70	130
4-Chloroaniline	1	144.6091	0	100	145	50	150
Hexachlorobutadiene	1	85.6276	0	100	86	70	130
Caprolactam	1	66.3657	0	100	66	20	130
2-Methylnaphthalene	1	87.8947	0	100	88	70	130
1-Methylnaphthalene	1	86.714	0	100	87	70	130
1,1'-Biphenyl	1	89.0926	0	100	89	70	130
1,2,4,5-Tetrachlorobenzene	1	87.9569	0	100	88	70	130
Hexachlorocyclopentadiene	1	69.2201	0	100	69	20	130
2-Chloronaphthalene	1	88.5592	0	100	89	70	130
1,4-Dimethylnaphthalene	1	91.5503	0	100	92	70	130
Diphenyl Ether	1	87.8989	0	100	88	70	130
2-Nitroaniline	1	100.3509	0	100	100	50	150
Coumarin	1	0	0	100	0*	70	130
Acenaphthylene	1	96.6794	0	100	97	70	130
Dimethylphthalate	1	33.1725	0	100	33*	70	130
2,6-Dinitrotoluene	1	95.1851	0	100	95	70	130
Acenaphthene	1	93.0356	0	100	93	70	130
3-Nitroaniline	1	116.357	0	100	116	50	150
Dibenzofuran	1	102.3912	0.7708	100	102	70	130
2,4-Dinitrotoluene	1	89.0259	0	100	89	40	130
Fluorene	1	93.2749	0	100	93	70	130
4-Chlorophenyl-phenylether	1	94.2477	0	100	94	70	130
Diethylphthalate	1	85.3094	0	100	85	50	130
4-Nitroaniline	1	97.6711	0	100	98	50	150
Atrazine	1	110.9832	0	100	111	50	130
n-Nitrosodiphenylamine	1	82.2332	0	100	82	50	130
1,2-Diphenylhydrazine	1	98.5364	0	100	99	70	130
4-Bromophenyl-phenylether	1	98.4999	0	100	98	70	130
Hexachlorobenzene	1	97.3868	0	100	97	70	130
N-Octadecane	1	95.3569	0	100	95	70	130
Phenanthrene	1	91.6151	0	100	92	70	130
Anthracene	1	93.2148	0	100	93	70	130
Carbazole	1	97.4695	0	100	97	70	130
Di-n-butylphthalate	1	103.2912	0	100	103	70	130
Fluoranthene	1	93.3533	0	100	93	70	130
Pyrene	1	107.8872	0	100	108	70	130
Benzidine	1	81.4218	0	100	81	1	130
Butylbenzylphthalate	1	107.8208	0	100	108	50	130
3,3'-Dichlorobenzidine	1	134.5762	0	100	135	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3

Recovery Data Laboratory Limits

QC Batch: WMB63412

Benzo[a]anthracene	1	99.9205	0	100	100	70	130
Chrysene	1	96.6953	0	100	97	50	130
bis(2-Ethylhexyl)phthalate	1	119.3419	0	100	119	70	130
Di-n-octylphthalate	1	115.7467	0	100	116	70	130
Benzo[b]fluoranthene	1	101.9743	0	100	102	70	130
Benzo[k]fluoranthene	1	103.6268	0	100	104	70	130
Benzo[a]pyrene	1	93.3832	0	100	93	70	130
Indeno[1,2,3-cd]pyrene	1	104.851	0	100	105	70	130
Dibenzo[a,h]anthracene	1	104.2351	0	100	104	70	130
Benzo[g,h,i]perylene	1	98.047	0	100	98	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

Data File	Sample ID:	Analysis Date
Spike or Dup: 7M87671.D	AD01106-002(MSD)	11/15/2017 6:02:00 PM
Non Spike(If applicable): 7M87669.D	AD01106-002	11/15/2017 5:15:00 PM
Inst Blank(If applicable):		

Method: 8270D | Matrix: Aqueous | QC Type: MSD

Analyte:	Col	Spike Conc	Sample Conc	Expected Conc	Recovery	Lower Limit	Upper Limit
1,4-Dioxane	1	55.7739	0	100	56	20	160
Pyridine	1	69.3472	0	100	69	5	150
N-Nitrosodimethylamine	1	72.1297	0	100	72	50	150
Benzaldehyde	1	133.7563	0	100	134	20	150
Aniline	1	110.0364	0	100	110	20	150
Pentachloroethane	1	21.7164	0	100	22*	50	130
bis(2-Chloroethyl)ether	1	85.7483	0	100	86	50	130
N-Decane	1	85.6248	0	100	86	40	130
1,3-Dichlorobenzene	1	86.1281	0	100	86	50	130
1,4-Dichlorobenzene	1	84.0014	0	100	84	50	130
1,2-Dichlorobenzene	1	83.4467	0	100	83	50	130
Benzyl alcohol	1	89.0216	0	100	89	70	130
bis(2-chloroisopropyl)ether	1	72.5409	0	100	73	40	130
Acetophenone	1	84.5341	0	100	85	50	130
Hexachloroethane	1	83.4242	0	100	83	50	130
N-Nitroso-di-n-propylamine	1	91.0211	0	100	91	50	130
Nitrobenzene	1	89.8486	0	100	90	70	130
Isophorone	1	88.574	0	100	89	70	130
Benzoic Acid	1	0	0	100	0*	20	130
bis(2-Chloroethoxy)methane	1	90.0079	0	100	90	70	130
1,2,4-Trichlorobenzene	1	90.8525	0	100	91	50	130
Naphthalene	1	93.3116	0	100	93	70	130
4-Chloroaniline	1	157.9141	0	100	158*	50	150
Hexachlorobutadiene	1	91.0525	0	100	91	70	130
Caprolactam	1	64.3214	0	100	64	20	130
2-Methylnaphthalene	1	93.4019	0	100	93	70	130
1-Methylnaphthalene	1	87.7694	0	100	88	70	130
1,1'-Biphenyl	1	89.9139	0	100	90	70	130
1,2,4,5-Tetrachlorobenzene	1	87.4594	0	100	87	70	130
Hexachlorocyclopentadiene	1	70.8443	0	100	71	20	130
2-Chloronaphthalene	1	89.4621	0	100	89	70	130
1,4-Dimethylnaphthalene	1	90.1394	0	100	90	70	130
Diphenyl Ether	1	87.8	0	100	88	70	130
2-Nitroaniline	1	102.477	0	100	102	50	150
Coumarin	1	22.3039	0	100	22*	70	130
Acenaphthylene	1	98.043	0	100	98	70	130
Dimethylphthalate	1	56.2682	0	100	56*	70	130
2,6-Dinitrotoluene	1	96.3629	0	100	96	70	130
Acenaphthene	1	94.0647	0	100	94	70	130
3-Nitroaniline	1	119.0321	0	100	119	50	150
Dibenzofuran	1	104.4842	0.7708	100	104	70	130
2,4-Dinitrotoluene	1	88.7366	0	100	89	40	130
Fluorene	1	93.9313	0	100	94	70	130
4-Chlorophenyl-phenylether	1	95.4996	0	100	95	70	130
Diethylphthalate	1	90.1595	0	100	90	50	130
4-Nitroaniline	1	98.5837	0	100	99	50	150
Atrazine	1	108.4895	0	100	108	50	130
n-Nitrosodiphenylamine	1	83.1316	0	100	83	50	130
1,2-Diphenylhydrazine	1	100.5225	0	100	101	70	130
4-Bromophenyl-phenylether	1	98.8326	0	100	99	70	130
Hexachlorobenzene	1	97.9843	0	100	98	70	130
N-Octadecane	1	109.5299	0	100	110	70	130
Phenanthrene	1	91.7767	0	100	92	70	130
Anthracene	1	94.897	0	100	95	70	130
Carbazole	1	95.4251	0	100	95	70	130
Di-n-butylphthalate	1	105.6941	0	100	106	70	130
Fluoranthene	1	93.5711	0	100	94	70	130
Pyrene	1	106.5616	0	100	107	70	130
Benzidine	1	77.5976	0	100	78	1	130
Butylbenzylphthalate	1	107.3826	0	100	107	50	130
3,3'-Dichlorobenzidine	1	136.7419	0	100	137	1	150

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
Recovery Data Laboratory Limits
QC Batch: WMB63412

Benzo[a]anthracene	1	98.608	0	100	99	70	130
Chrysene	1	95.4047	0	100	95	50	130
bis(2-Ethylhexyl)phthalate	1	118.2437	0	100	118	70	130
Di-n-octylphthalate	1	115.9018	0	100	116	70	130
Benzo[b]fluoranthene	1	103.4736	0	100	103	70	130
Benzo[k]fluoranthene	1	102.2652	0	100	102	70	130
Benzo[a]pyrene	1	93.7946	0	100	94	70	130
Indeno[1,2,3-cd]pyrene	1	103.7129	0	100	104	70	130
Dibenzo[a,h]anthracene	1	103.5436	0	100	104	70	130
Benzo[g,h,i]perylene	1	98.0843	0	100	98	70	130

* - Indicates outside of limits # - Indicates outside of standard limits but within method exceedance limits

Form3
RPD Data Laboratory Limits
QC Batch: WMB63412

	Data File	Sample ID:	Analysis Date
Spike or Dup:	7M87671.D	AD01106-002(MSD)	11/15/2017 6:02:00 PM
Duplicate(If applicable):	7M87670.D	AD01106-002(MS)	11/15/2017 5:39:00 PM
Inst Blank(If applicable):			

Method: 8270D Matrix: Aqueous QC Type: MSD

Analyte:	Column	Dup/MSD/MBSD Conc	Sample/MS/MBS Conc	RPD	Limit
1,4-Dioxane	1	55.7739	49.1249	13	20
Pyridine	1	69.3472	62.364	11	40
N-Nitrosodimethylamine	1	72.1297	65.1646	10	20
Benzaldehyde	1	133.7563	120.2079	11	20
Aniline	1	110.0364	103.4236	6.2	20
Pentachloroethane	1	21.7164	12.6847	53*	20
bis(2-Chloroethyl)ether	1	85.7483	82.0178	4.4	20
N-Decane	1	85.6248	80.8959	5.7	20
1,3-Dichlorobenzene	1	86.1281	79.9482	7.4	20
1,4-Dichlorobenzene	1	84.0014	77.9992	7.4	40
1,2-Dichlorobenzene	1	83.4467	78.4051	6.2	20
Benzyl alcohol	1	89.0216	83.6258	6.3	20
bis(2-chloroisopropyl)ether	1	72.5409	70.1621	3.3	20
Acetophenone	1	84.5341	83.5527	1.2	20
Hexachloroethane	1	83.4242	77.2022	7.7	40
N-Nitroso-di-n-propylamine	1	91.0211	89.0725	2.2	40
Nitrobenzene	1	89.8486	86.9945	3.2	40
Isophorone	1	88.574	86.999	1.8	20
Benzoic Acid	1	0	0	NA	20
bis(2-Chloroethoxy)methane	1	90.0079	85.8825	4.7	20
1,2,4-Trichlorobenzene	1	90.8525	86.1755	5.3	40
Naphthalene	1	93.3116	88.7435	5	40
4-Chloroaniline	1	157.9141	144.6091	8.8	20
Hexachlorobutadiene	1	91.0525	85.6276	6.1	40
Caprolactam	1	64.3214	66.3657	3.1	20
2-Methylnaphthalene	1	93.4019	87.8947	6.1	20
1-Methylnaphthalene	1	87.7694	86.714	1.2	20
1,1'-Biphenyl	1	89.9139	89.0926	0.92	20
1,2,4,5-Tetrachlorobenzene	1	87.4594	87.9569	0.57	20
Hexachlorocyclopentadiene	1	70.8443	69.2201	2.3	20
2-Chloronaphthalene	1	89.4621	88.5592	1	20
1,4-Dimethylnaphthalene	1	90.1394	91.5503	1.6	20
Diphenyl Ether	1	87.8	87.8989	0.11	20
2-Nitroaniline	1	102.477	100.3509	2.1	20
Coumarin	1	22.3039	0	200*	20
Acenaphthylene	1	98.043	96.6794	1.4	20
Dimethylphthalate	1	56.2682	33.1725	52*	20
2,6-Dinitrotoluene	1	96.3629	95.1851	1.2	20
Acenaphthene	1	94.0647	93.0356	1.1	40
3-Nitroaniline	1	119.0321	116.357	2.3	20
Dibenzofuran	1	104.4842	102.3912	2	20
2,4-Dinitrotoluene	1	88.7366	89.0259	0.33	40
Fluorene	1	93.9313	93.2749	0.7	40
4-Chlorophenyl-phenylether	1	95.4996	94.2477	1.3	20
Diethylphthalate	1	90.1595	85.3094	5.5	20
4-Nitroaniline	1	98.5837	97.6711	0.93	20
Atrazine	1	108.4895	110.9832	2.3	20
n-Nitrosodiphenylamine	1	83.1316	82.2332	1.1	20
1,2-Diphenylhydrazine	1	100.5225	98.5364	2	20
4-Bromophenyl-phenylether	1	98.8326	98.4999	0.34	20
Hexachlorobenzene	1	97.9843	97.3868	0.61	40
N-Octadecane	1	109.5299	95.3569	14	20
Phenanthrene	1	91.7767	91.6151	0.18	20
Anthracene	1	94.897	93.2148	1.8	20
Carbazole	1	95.4251	97.4695	2.1	20
Di-n-butylphthalate	1	105.6941	103.2912	2.3	20
Fluoranthene	1	93.5711	93.3533	0.23	20
Pyrene	1	106.5616	107.8872	1.2	40
Benzidine	1	77.5976	81.4218	4.8	20
Butylbenzylphthalate	1	107.3826	107.8208	0.41	40
3,3'-Dichlorobenzidine	1	136.7419	134.5762	1.6	20
Benzo[a]anthracene	1	98.608	99.9205	1.3	20
Chrysene	1	95.4047	96.6953	1.3	20

Form3
RPD Data Laboratory Limits
QC Batch: WMB63412

bis(2-Ethylhexyl)phthalate	1	118.2437	119.3419	0.92	20
Di-n-octylphthalate	1	115.9018	115.7467	0.13	20
Benzo[b]fluoranthene	1	103.4736	101.9743	1.5	20
Benzo[k]fluoranthene	1	102.2652	103.6268	1.3	20
Benzo[a]pyrene	1	93.7946	93.3832	0.44	20
Indeno[1,2,3-cd]pyrene	1	103.7129	104.851	1.1	20
Dibenzo[a,h]anthracene	1	103.5436	104.2351	0.67	20
Benzo[g,h,i]perylene	1	98.0843	98.047	0.04	20

* - Indicates outside of limits

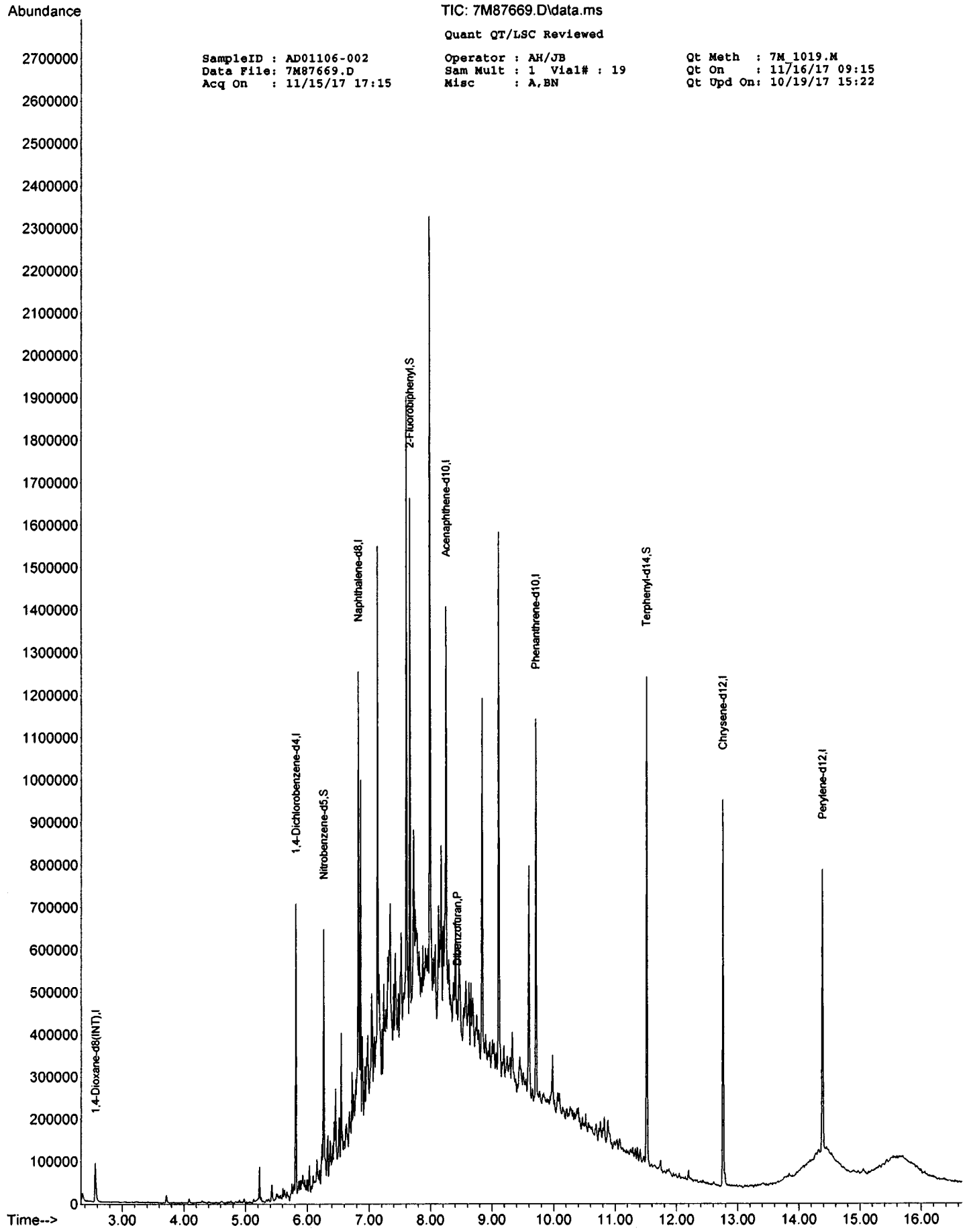
NA - Both concentrations=0... no result can be calculated

SampleID : AD01106-002 Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87669.D Sam Mult : 1 Vial# : 19 Qt On : 11/16/17 09:15
Acq On : 11/15/17 17:15 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	47498	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	89464	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	340307	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	191738	40.00	ng	-0.01
77) Phenanthrene-d10	9.710	188	340795	40.00	ng	-0.01
91) Chrysene-d12	12.760	240	338585	40.00	ng	-0.01
103) Perylene-d12	14.384	264	276648	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
16) Phenol-d5	0.000	99	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
32) Nitrobenzene-d5	6.264	128	75925	55.38	ng	0.00
Spiked Amount 50.000			Recovery = 110.76%			
55) 2-Fluorobiphenyl	7.663	172	315174	52.86	ng	-0.01
Spiked Amount 50.000			Recovery = 105.72%			
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery = 0.00%			
94) Terphenyl-d14	11.515	244	365327	69.78	ng	0.00
Spiked Amount 50.000			Recovery = 139.56%			
Target Compounds						Qvalue
68) Dibenzofuran	8.433	168	5596	0.7708	ng	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87669.D\data.ms
Quant QT/LSC Reviewed
SampleID : AD01106-002
Data File: 7M87669.D
Acq On : 11/15/17 17:15
Operator : AH/JB
Sam Mult : 1 Vial# : 19
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/16/17 09:15
Qt Upd On: 10/19/17 15:22
1,4-Dioxane-d8(INT),I
1,4-Dichlorobenzene-d4,I
Nitrobenzene-d5,S
Naphthalene-d8,I
2-Fluorobiphenyl,S
Acenaphthene-d10,I
Dibenzofuran,P
Phenanthrene-d10,I
Terphenyl-d14,S
Chrysene-d12,I
Perylene-d12,I
Time-->

Quantitation Report (QT Reviewed)

SampleID : AD01106-002(MS) Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87670.D Sam Mult : 1 Vial# : 20 Qt On : 11/16/17 09:16
Acq On : 11/15/17 17:39 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	45998	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	87930	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	345766	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	201018	40.00	ng	-0.01
77) Phenanthrene-d10	9.709	188	366055	40.00	ng	-0.01
91) Chrysene-d12	12.765	240	337575	40.00	ng	0.00
103) Perylene-d12	14.384	264	296804	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	5.676	99	12486	3.50	ng	0.18
Spiked Amount 100.000			Recovery =	3.50%		
32) Nitrobenzene-d5	6.269	128	75913	54.49	ng	0.00
Spiked Amount 50.000			Recovery =	108.98%		
55) 2-Fluorobiphenyl	7.663	172	342217	54.75	ng	-0.01
Spiked Amount 50.000			Recovery =	109.50%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	386692	74.08	ng	0.00
Spiked Amount 50.000			Recovery =	148.16%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.599	88	58597	49.1249	ng	100
9) Pyridine	3.074	79	202839	62.3640	ng	70
10) N-Nitrosodimethylamine	3.000	74	126032	65.1646	ng	71
12) Benzaldehyde	5.441	77	169688	120.2079	ng	76
13) Aniline	5.537	93	430903	103.4236	ng	44
14) Pentachloroethane	5.580	117	11780	12.6847	ng	91
15) bis(2-Chloroethyl)ether	5.591	93	255250	82.0178	ng	81
19) N-Decane	5.676	57	219570	80.8959	ng	93
20) 1,3-Dichlorobenzene	5.767	146	239289	79.9482	ng	98
22) 1,4-Dichlorobenzene	5.831	146	244805	77.9992	ng	96
23) 1,2-Dichlorobenzene	5.954	146	236681	78.4051	ng	97
24) Benzyl alcohol	5.927	108	169026	83.6258	ng	73
25) bis(2-chloroisopropyl)...	6.039	45	263101	70.1621	ng	99
27) Acetophenone	6.146	105	364367	83.5527	ng	56
28) Hexachloroethane	6.232	117	94552	77.2022	ng	86
29) N-Nitroso-di-n-propyla...	6.141	70	176514	89.0725	ng	84
33) Nitrobenzene	6.280	77	268647	86.9945	ng	80
34) Isophorone	6.467	82	501262	86.9990	ng	85
36) 2,4-Dimethylphenol	6.552	107	8070	2.7664	ng	88
38) bis(2-Chloroethoxy)met...	6.627	93	312518	85.8825	ng	98
40) 1,2,4-Trichlorobenzene	6.777	180	218111	86.1755	ng	97
41) Naphthalene	6.841	128	740122	88.7435	ng	99
42) 4-Chloroaniline	6.878	127	359152m	144.6091	ng	
43) Hexachlorobutadiene	6.926	225	110833	85.6276	ng	97
44) Caprolactam	7.129	113	77146	66.3657	ng	69
45) 4-Chloro-3-methylphenol	7.236	107	3406	1.3210	ng	60
46) 2-Methylnaphthalene	7.375	142	525668	87.8947	ng	99
47) 1-Methylnaphthalene	7.455	142	496508	86.7140	ng	92
49) 1,1'-Biphenyl	7.749	154	626073	89.0926	ng	94
51) 1,2,4,5-Tetrachloroben...	7.508	216	222723	87.9569	ng	95
52) Hexachlorocyclopentadiene	7.498	237	98302	69.2201	ng	98
56) 2-Chloronaphthalene	7.776	162	474297	88.5592	ng	90
57) 1,4-Dimethylnaphthalene	8.053	156	380194	91.5503	ng	84
59) Diphenyl Ether	7.834	170	350453	87.8989	ng	77
60) 2-Nitroaniline	7.850	65	187799	100.3509	ng	49
61) Coumarin	7.925	146	1519	0.6834	ng	1
62) Acenaphthylene	8.128	152	804982	96.6794	ng	99
63) Dimethylphthalate	7.989	163	204844	33.1725	ng	96
64) 2,6-Dinitrotoluene	8.048	165	127763	95.1851	ng	66
65) Acenaphthene	8.283	153	507144	93.0356	ng	97
66) 3-Nitroaniline	8.203	138	174687	116.3570	ng	76
68) Dibenzofuran	8.438	168	768386	102.3912	ng	84
69) 2,4-Dinitrotoluene	8.406	165	176554	89.0259	ng	63
72) Fluorene	8.758	166	585339	93.2749	ng	98
73) 4-Chlorophenyl-phenyle...	8.748	204	274767	94.2477	ng	82
74) Diethylphthalate	8.620	149	546727	85.3094	ng	98
75) 4-Nitroaniline	8.764	138	181683	97.6711	ng	75
76) Atrazine	9.389	200	175606	110.9832	ng	96
79) n-Nitrosodiphenylamine	8.860	169	452869	82.2332	ng	99
81) 1,2-Diphenylhydrazine	8.903	77	651837	98.5364	ng	81
82) 4-Bromophenyl-phenylether	9.234	248	169970	98.4999	ng	83

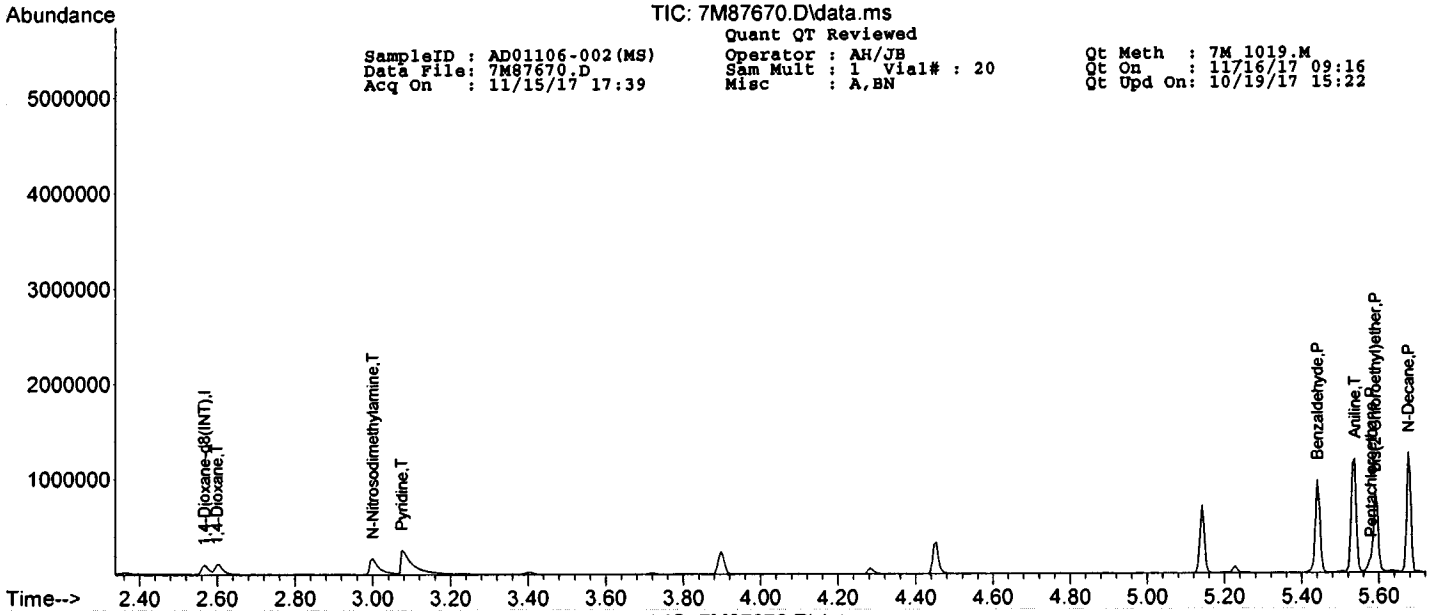
Quantitation Report (QT Reviewed)

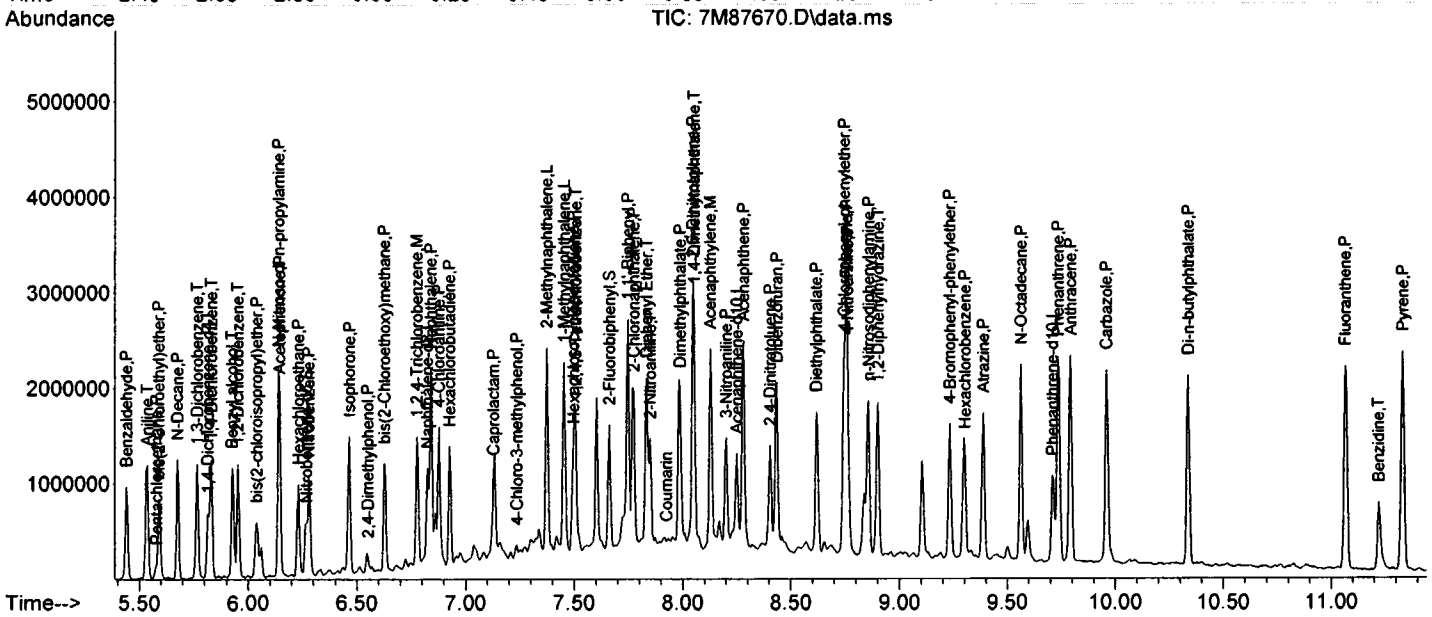
SampleID : AD01106-002(MS) Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87670.D Sam Mult : 1 Vial# : 20 Qt On : 11/16/17 09:16
Acq On : 11/15/17 17:39 Misc : A,BN Qt Upd On: 10/19/17 15:22

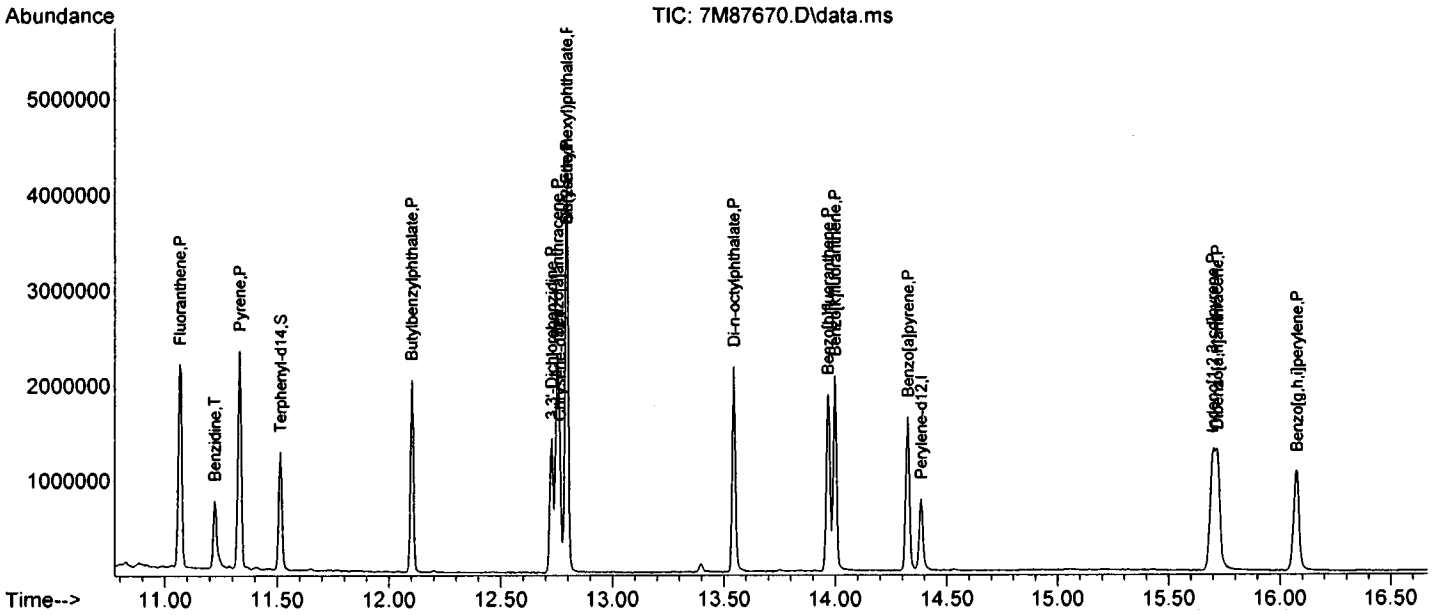
Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
83) Hexachlorobenzene	9.303	284	177163	97.3868	ng	61
84) N-Octadecane	9.565	57	347618	95.3569	ng	75
86) Phenanthrene	9.736	178	882242	91.6151	ng	99
87) Anthracene	9.795	178	899748	93.2148	ng	99
88) Carbazole	9.960	167	900531	97.4695	ng	97
89) Di-n-butylphthalate	10.340	149	1084355	103.2912	ng	97
90) Fluoranthene	11.066	202	997067	93.3533	ng	97
92) Pyrene	11.333	202	1013973	107.8872	ng	91
93) Benzidine	11.221	184	317360	81.4218	ng	89
97) Butylbenzylphthalate	12.103	149	487919	107.8208	ng	74
99) 3,3'-Dichlorobenzidine	12.728	252	333531	134.5762	ng	97
100) Benzo[a]anthracene	12.754	228	884493	99.9205	ng	100
101) Chrysene	12.797	228	795459	96.6953	ng	98
102) bis(2-Ethylhexyl)phtha...	12.797	149	652731	119.3419	ng	93
104) Di-n-octylphthalate	13.545	149	1129059	115.7467	ng	99
105) Benzo[b]fluoranthene	13.967	252	795077m	101.9743	ng	
106) Benzo[k]fluoranthene	13.999	252	814903	103.6268	ng	94
107) Benzo[a]pyrene	14.325	252	709023	93.3832	ng	93
108) Indeno[1,2,3-cd]pyrene	15.698	276	827977	104.8510	ng	87
109) Dibenzo[a,h]anthracene	15.719	278	680828	104.2351	ng	91
110) Benzo[g,h,i]perylene	16.077	276	660280	98.0470	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


Abundance
TIC: 7M87670.D\data.ms
Quant QT Reviewed
SampleID : AD01106-002(MS)
Data File: 7M87670.D
Acq On : 11/15/17 17:39
Operator : AH/JB
Sam Mult : 1 Vial# : 20
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/16/17 09:16
Qt Upd On: 10/19/17 15:22
5000000
4000000
3000000
2000000
1000000
1,4-Dioxane-d8(INT),I
1,4-Dioxane,T
N-Nitrosodimethylamine,T
Pyridine,T
Benzaldehyde,P
Aniline,T
N-Decane,P
Time-->
2.40
2.60
2.80
3.00
3.20
3.40
3.60
3.80
4.00
4.20
4.40
4.60
4.80
5.00
5.20
5.40
5.60


Abundance
TIC: 7M87670.D\data.ms
5000000
4000000
3000000
2000000
1000000
Benzaldehyde,P
Aniline,T
N-Decane,P
Isophorone,P
2,4-Dimethylphenol,P
Caprolactam,P
4-Chloro-3-methylphenol,P
2-Methylnaphthalene,L
2-Fluorobiphenyl,S
Coumarin
Dimethylphthalate,P
Acenaphthylene,M
Diethylphthalate,P
4-Bromophenyl-phenylether,P
Hexachlorobenzene,P
Atrazine,P
N-Octadecane,P
Anthracene,P
Carbazole,P
Di-n-butylphthalate,P
Fluoranthene,P
Benzidine,T
Pyrene,P
Time-->
5.50
6.00
6.50
7.00
7.50
8.00
8.50
9.00
9.50
10.00
10.50
11.00


Abundance
TIC: 7M87670.D\data.ms
5000000
4000000
3000000
2000000
1000000
Fluoranthene,P
Benzidine,T
Pyrene,P
Terphenyl-d14,S
Butylbenzylphthalate,P
Di-n-octylphthalate,P
Benzo[a]pyrene,P
Perylene-d12,I
Benzo[g,h,i]perylene,P
Time-->
11.00
11.50
12.00
12.50
13.00
13.50
14.00
14.50
15.00
15.50
16.00
16.50

Quantitation Report (QT Reviewed)

SampleID : AD01106-002(MSD) Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87671.D Sam Mult : 1 Vial# : 21 Qt On : 11/16/17 09:16
Acq On : 11/15/17 18:02 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
7) 1,4-Dioxane-d8(INT)	2.567	96	48775	40.00	ng	0.00
21) 1,4-Dichlorobenzene-d4	5.815	152	94016	40.00	ng	0.00
31) Naphthalene-d8	6.825	136	367800	40.00	ng	0.00
50) Acenaphthene-d10	8.251	164	218939	40.00	ng	-0.01
77) Phenanthrene-d10	9.709	188	393795	40.00	ng	-0.01
91) Chrysene-d12	12.765	240	368477	40.00	ng	0.00
103) Perylene-d12	14.384	264	323667	40.00	ng	-0.02
System Monitoring Compounds						
11) 2-Fluorophenol	0.000	112	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
16) Phenol-d5	0.000	99	0d	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
32) Nitrobenzene-d5	6.269	128	86813	58.59	ng	0.00
Spiked Amount 50.000			Recovery =	117.18%		
55) 2-Fluorobiphenyl	7.663	172	387850	56.97	ng	-0.01
Spiked Amount 50.000			Recovery =	113.94%		
80) 2,4,6-Tribromophenol	0.000	330	0	0.00	ng	
Spiked Amount 100.000			Recovery =	0.00%		
94) Terphenyl-d14	11.515	244	418447	73.44	ng	0.00
Spiked Amount 50.000			Recovery =	146.88%		
Target Compounds						Qvalue
8) 1,4-Dioxane	2.604	88	70667	55.7739	ng	99
9) Pyridine	3.074	79	239169	69.3472	ng	69
10) N-Nitrosodimethylamine	3.000	74	147925	72.1297	ng	72
12) Benzaldehyde	5.441	77	195790	133.7563	ng	75
13) Aniline	5.537	93	486373	110.0364	ng	44
14) Pentachloroethane	5.580	117	21385	21.7164	ng	84
15) bis(2-Chloroethyl)ether	5.591	93	282971	85.7483	ng	80
19) N-Decane	5.676	57	246436	85.6248	ng	93
20) 1,3-Dichlorobenzene	5.767	146	273349	86.1281	ng	98
22) 1,4-Dichlorobenzene	5.831	146	281891	84.0014	ng	96
23) 1,2-Dichlorobenzene	5.954	146	269335	83.4467	ng	98
24) Benzyl alcohol	5.932	108	192386	89.0216	ng	68
25) bis(2-chloroisopropyl)...	6.039	45	290849	72.5409	ng	97
27) Acetophenone	6.146	105	394162	84.5341	ng	56
28) Hexachloroethane	6.232	117	109244	83.4242	ng	85
29) N-Nitroso-di-n-propyla...	6.141	70	192631	91.0211	ng	86
33) Nitrobenzene	6.280	77	295142	89.8486	ng	80
34) Isophorone	6.467	82	542858	88.5740	ng	85
38) bis(2-Chloroethoxy)met...	6.627	93	348402	90.0079	ng	98
40) 1,2,4-Trichlorobenzene	6.782	180	244602	90.8525	ng	97
41) Naphthalene	6.841	128	826892	93.3116	ng	99
42) 4-Chloroaniline	6.878	127	402302m	157.9141	ng	
43) Hexachlorobutadiene	6.931	225	125365	91.0525	ng	99
44) Caprolactam	7.134	113	79305	64.3214	ng	64
45) 4-Chloro-3-methylphenol	7.236	107	3057	1.1146	ng	72
46) 2-Methylnaphthalene	7.375	142	594202	93.4019	ng	100
47) 1-Methylnaphthalene	7.455	142	534576	87.7694	ng	92
48) Methylnaphthalenes (To...	7.375	142	1129879m	181.5145	ng	
49) 1,1'-Biphenyl	7.749	154	672109	89.9139	ng	95
51) 1,2,4,5-Tetrachloroben...	7.508	216	241207	87.4594	ng	98
52) Hexachlorocyclopentadiene	7.498	237	109578	70.8443	ng	99
56) 2-Chloronaphthalene	7.776	162	521848	89.4621	ng	91
57) 1,4-Dimethylnaphthalene	8.053	156	407707	90.1394	ng	85
58) Dimethylnaphthalenes (...	8.053	156	407707	90.1394	ng	85
59) Diphenyl Ether	7.834	170	381267	87.8000	ng	77
60) 2-Nitroaniline	7.850	65	208875	102.4770	ng	53
61) Coumarin	8.032	146	53997m	22.3039	ng	
62) Acenaphthylene	8.128	152	889113	98.0430	ng	99
63) Dimethylphthalate	7.989	163	378439	56.2682	ng	98
64) 2,6-Dinitrotoluene	8.053	165	140875	96.3629	ng	60
65) Acenaphthene	8.283	153	558466	94.0647	ng	98
66) 3-Nitroaniline	8.203	138	194364	119.0321	ng	77
68) Dibenzofuran	8.438	168	853744	104.4842	ng	85
69) 2,4-Dinitrotoluene	8.406	165	191648	88.7366	ng	67
72) Fluorene	8.759	166	642009	93.9313	ng	95
73) 4-Chlorophenyl-phenyle...	8.748	204	303238	95.4996	ng	83
74) Diethylphthalate	8.625	149	629322	90.1595	ng	97
75) 4-Nitroaniline	8.769	138	199816	98.5837	ng	71
76) Atrazine	9.389	200	186964	108.4895	ng	96
78) 4,6-Dinitro-2-methylph...	8.748	198	698	0.7083	ng	1
79) n-Nitrosodiphenylamine	8.860	169	492510	83.1316	ng	97

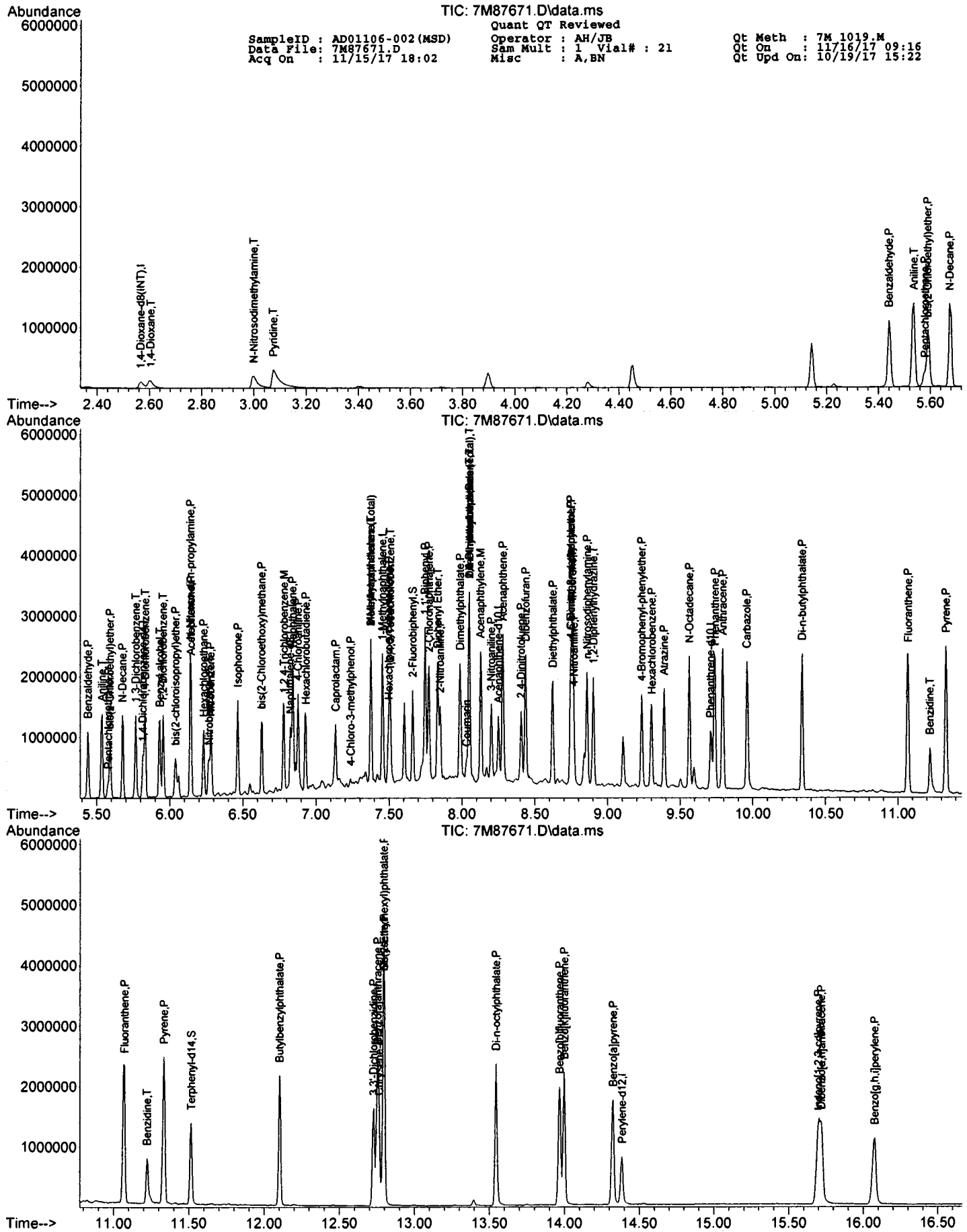
Quantitation Report (QT Reviewed)

SampleID : AD01106-002(MSD) Operator : AH/JB Qt Meth : 7M_1019.M
Data File: 7M87671.D Sam Mult : 1 Vial# : 21 Qt On : 11/16/17 09:16
Acq On : 11/15/17 18:02 Misc : A,BN Qt Upd On: 10/19/17 15:22

Data Path : G:\GcMsData\2017\GCMS_7\Data\11-15-17\
Qt Path : G:\GCMSDATA\2017\GCMS_7\METHODQT\
Qt Resp Via : Initial Calibration

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
81)	1,2-Diphenylhydrazine	8.903	77	715368	100.5225	ng	82
82)	4-Bromophenyl-phenylether	9.234	248	183468	98.8326	ng	84
83)	Hexachlorobenzene	9.303	284	191758	97.9843	ng	61
84)	N-Octadecane	9.565	57	429543	109.5299	ng	75
86)	Phenanthrene	9.742	178	950774	91.7767	ng	99
87)	Anthracene	9.795	178	985400	94.8970	ng	100
88)	Carbazole	9.961	167	948454	95.4251	ng	97
89)	Di-n-butylphthalate	10.340	149	1193666	105.6941	ng	97
90)	Fluoranthene	11.072	202	1075128	93.5711	ng	91
92)	Pyrene	11.333	202	1093194	106.5616	ng	91
93)	Benzidine	11.221	184	330934	77.5976	ng	90
97)	Butylbenzylphthalate	12.103	149	530246	107.3826	ng	73
99)	3,3'-Dichlorobenzidine	12.728	252	369370	136.7419	ng	97
100)	Benzo[a]anthracene	12.755	228	952779	98.6080	ng	100
101)	Chrysene	12.797	228	856687	95.4047	ng	99
102)	bis(2-Ethylhexyl)phtha...	12.797	149	705926	118.2437	ng	92
104)	Di-n-octylphthalate	13.545	149	1233083	115.9018	ng	99
105)	Benzo[b]fluoranthene	13.967	252	879786m	103.4736	ng	
106)	Benzo[k]fluoranthene	13.999	252	876982	102.2652	ng	93
107)	Benzo[a]pyrene	14.325	252	776601	93.7946	ng	92
108)	Indeno[1,2,3-cd]pyrene	15.698	276	893114	103.7129	ng	88
109)	Dibenzo[a,h]anthracene	15.719	278	737523	103.5436	ng	91
110)	Benzo[g,h,i]perylene	16.077	276	720314	98.0843	ng	80

(#) = qualifier out of range (m) = manual integration (+) = signals summed


TIC: 7M87671.D\data.ms
Quant QT Reviewed
SampleID : AD01106-002(MSD)
Data File: 7M87671.D
Acq On : 11/15/17 18:02
Operator : AH/JB
Sam Mult : 1 Vial# : 21
Misc : A,BN
Qt Meth : 7M_1019.M
Qt On : 11/16/17 09:16
Qt Upd On: 10/19/17 15:22
Abundance
Time-->

GC/MS Base Neutral/Acid Extractable Data
Logbook Data

QC63402

Hampton-Clarke

Extraction of Semi-volatile – Aqueous
Method 3510 C

Method Blank No. WMB- _____
Blank Spike (MBS): _____
Start extraction time: 10:54
End extraction time: _____
Recirculator: Start temp: 15.5
End temp: 15.5

Date: 11/14/17
Matrix Spike: 63402
Shaker Used: 4213
Condenser used: 4215
Condenser Flow: 2500 CCM

Sample Number	Number in Batch	Initial Volume	Final Volume	Fraction			Extracted By/ Comments	Ext. by	TCLP QC	Extract Fluid
				BN	BNA	AE				
MB 63402	X	1000ml	0.5ml		X		½ surr	LV		
MBS 63402	X	↓	1ml		↓			↓		
MS 01097-007	X	1000ml	↓							
MSD 01097-008	X	980ml								
AD 01097-006	1	1000ml	0.5ml				Full surr			
AD01080-017	2	↓	1ml							
AD 00920-009	R	250ml	1ml		↓					
AD 01097-001	3	1000ml	0.5ml	X			½ surr			
-002	4	↓	↓	↓			↓			
-003	5									
-004	6									
-005	7									
AD01096-017	8									
AD01116-001	9									
AD01116-002	10		↓							
AD01077-007	11	1000 ml	1ml							
AD01081-008	12	↓	↓							
AD01083-001	13									
-002	14									
-003	15									
AD01089-001	16									
-002	17									
-003	18	↓	↓	↓				↓		

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	2000	11074	BN MIX
		11078	toxic MIX
		11071	Acid comp
↓	↓	264605	CLP MIX

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50	1000/2000	264805	BN Surr

Reagent Lots: MeCl2 11240 Acetone _____ Hexane _____ Na2SO4 11260

Other _____

Relinquished By: LV Date: 11/14/17

Received By: JRyn Date: 11/14/17

T:\QC\FORMS\LOGBOOK FORMS\extractions\BN Aqu_ Ext Log 2016.doc

QC63412

Hampton-Clarke

Extraction of Semi-volatile – Aqueous
Method 3510 C

Method Blank No. WMB- _____
Blank Spike (MBS): _____
Start extraction time: 10:34
End extraction time: 4:50
Recirculator: Start temp: 15-5
End temp: 15.5

Date: 11/15/17
Matrix Spike: 63412
Shaker Used: 1, 2, 3
Condenser used: 1, 2, 5
Condenser Flow: 2500 CCM

Sample Number	Number in Batch	Initial Volume	Final Volume	Fraction			Extracted By/ Comments	Ext. by	TCLP QC	Extract Fluid
				BN	BNA	AE				
MB 63412	X	1000 ml	0.5 ml	X			½ surr	LV		
MBS 63412	X	↓	1 ml							
MS 01106-002	X	500 ml	↓							
MSD 01106-002	X	↓	0.5 ml				½ surr			
AD01106-002	1	1000 ml	1 ml							
-001	2	↓	0.5 ml				½ surr			
AD01097-009	3	↓	↓				↓	↓		
-010	4	↓	↓				↓	↓		
-011	5	↓	↓				↓	↓		
-012	6	↓	↓				↓	↓		
-013	7	↓	↓				↓	↓		
-014	8	↓	↓				↓	↓		
-015	9	↓	↓				↓	↓		
-016	10	↓	↓				↓	↓		
-017	11	↓	↓				↓	↓		
AD01119-001	12	↓	↓				↓	↓		
-002	13	↓	↓				↓	↓		
-003	14	↓	↓				↓	↓		
-004	15	↓	↓				↓	↓		
-005	16	↓	↓				↓	↓		
-006	17	↓	↓				↓	↓		
-007	18	↓	↓				↓	↓		
-008	19	↓	↓				↓	↓		
AD01096-015	R	900 ml	↓	↓			↓	↓		

Spike Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50/50	2000	11074	BN Mix
		11071	Acid comp
		11070	Toxic Mix
		264405	CLP Mix

Surrogate Standard

Vol (ul's)	Conc. (ppm/ppb)	Lot No.	
50/25	1000/2000	261805	BNA Surr

Reagent Lots: MeCl2 11240 Acetone _____ Hexane _____ Na2SO4 11266

Other _____

Relinquished By: LV Date: 11/15/17

Received By: JPyn Date: 11/16/17

RUN LOG

Instrument: GCMS_10Year: 2017
Analyst: AH/JB

1-1-10M65424

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
10M65424.	CAL DFTPP	Ed1=1.3;	OK, V-261052	JB 10/12/17		Aqueous	1	1		10/11 11:02
10M65425.	CAL BNA@10PPM	IsC16C18	RR	JB 10/12/17		Aqueous	1	1	625\827	10/11 12:08
10M65426.	CAL BNA@2PPM		OK, V-265146	JB 10/12/17		Aqueous	1	1	625\827	10/11 12:48
10M65427.	CAL BNA@196PPM		OK, V-265144	JB 10/12/17		Aqueous	1	1	625\827	10/11 13:10
10M65428.	CAL BNA@160PPM		OK, V-265143	JB 10/12/17		Aqueous	1	1	625\827	10/11 13:33
10M65429.	CAL BNA@120PPM		OK, V-265142	JB 10/12/17		Aqueous	1	1	625\827	10/11 13:55
10M65430.	CAL BNA@80PPM		OK, V-265141	JB 10/12/17		Aqueous	1	1	625\827	10/11 14:17
10M65431.	CAL BNA@50PPM	IsC18	RR	JB 10/12/17		Aqueous	1	1	625\827	10/11 14:39
10M65432.	CAL BNA@20PPM		OK, V-265139	JB 10/12/17		Aqueous	1	1	625\827	10/11 15:01
10M65433.	CAL BNA@.5PPM		OK, V-265147	JB 10/12/17		Aqueous	1	1	625\827	10/11 15:24
10M65434.	CAL BNA@10PPM		OK, V-265138	JB 10/12/17		Aqueous	1	1	625\827	10/11 15:51
10M65435.	CAL BNA@50PPM		OK, V-265140	JB 10/12/17		Aqueous	1	1	625\827	10/11 16:13
10M65436.	ICV BNA@50PPM	IsIvo	OK, V-265149	JB 10/12/17		Aqueous	1	1	625\827	10/11 16:35

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tclp/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	FvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evo	Eval Mix missing drt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_7 Year: 2017
Analyst: AH/JB

1-1-7M87268

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M87268.D	CAL DFTPP	Ed1=1.3;	OK, V-261052	JB 10/20/17		Aqueous	1	1		10/19 09:03
7M87269.D	CAL BNA@10PPM	IsC16C18	RR	JB 10/20/17		Aqueous	1	1	625\827	10/19 09:26
7M87270.D	CAL BNA@2PPM		OK, V-265651	JB 10/20/17		Aqueous	1	1	625\827	10/19 10:27
7M87271.D	CAL BNA@10PPM		OK, V-265643	JB 10/20/17		Aqueous	1	1	625\827	10/19 10:51
7M87272.D	CAL BNA@196PPM		OK, V-265649	JB 10/20/17		Aqueous	1	1	625\827	10/19 11:15
7M87273.D	CAL BNA@160PPM		OK, V-265648	JB 10/20/17		Aqueous	1	1	625\827	10/19 11:38
7M87274.D	CAL BNA@120PPM		OK, V-265647	JB 10/20/17		Aqueous	1	1	625\827	10/19 12:02
7M87275.D	CAL BNA@80PPM		OK, V-265646	JB 10/20/17		Aqueous	1	1	625\827	10/19 12:25
7M87276.D	CAL BNA@20PPM		OK, V-265644	JB 10/20/17		Aqueous	1	1	625\827	10/19 12:48
7M87277.D	CAL BNA@.5PPM		OK, V-265652	JB 10/20/17		Aqueous	1	1	625\827	10/19 13:11
7M87278.D	CAL BNA@50PPM		OK, V-265645	JB 10/20/17		Aqueous	1	1	625\827	10/19 13:35
7M87279.D	ICV BNA@50PPM	Isivo	OK, V-265149	JB 10/20/17		Aqueous	1	1	625\827	10/19 13:58

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samp	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_5 Year: 2017
Analyst: AH/JB

1-1-5M101319

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M101319.	CAL DFTPP	Ed1=0.73;	OK, V-261052	JB 10/20/17		Aqueous	1	1		10/20 08:27
5M101320.	CAL BNA@50PPM	IsC16	RR	JB 10/20/17		Aqueous	1	1	625\827	10/20 08:56
5M101321.	CAL BNA@10PPM		OK, V-265643	JB 10/20/17		Aqueous	1	1	625\827	10/20 09:25
5M101322.	CAL BNA@2PPM		OK, V-265651	JB 10/20/17		Aqueous	1	1	625\827	10/20 09:48
5M101323.	CAL BNA@196PPM		OK, V-265649	JB 10/20/17		Aqueous	1	1	625\827	10/20 10:26
5M101324.	CAL BNA@160PPM		OK, V-265648	JB 10/20/17		Aqueous	1	1	625\827	10/20 10:49
5M101325.	CAL BNA@120PPM		OK, V-265647	JB 10/20/17		Aqueous	1	1	625\827	10/20 11:12
5M101326.	CAL BNA@80PPM		OK, V-265646	JB 10/20/17		Aqueous	1	1	625\827	10/20 11:34
5M101327.	CAL BNA@20PPM		OK, V-265644	JB 10/20/17		Aqueous	1	1	625\827	10/20 11:57
5M101328.	CAL BNA@.5PPM		OK, V-265652	JB 10/20/17		Aqueous	1	1	625\827	10/20 12:20
5M101329.	CAL BNA@50PPM		OK, V-265645	JB 10/20/17		Aqueous	1	1	625\827	10/20 12:43
5M101330.	ICV BNA@50PPM	IsIvo	OK, V-265149	JB 10/20/17		Aqueous	1	1	625\827	10/20 13:06

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evnr	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt.csv for init calibration chek rls	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Co	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_5 Year: 2017
Analyst: AH/JB

1-1-5M101507

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
5M101507.	CAL DFTPP	Ed1=0.96;	OK, V-261052	JB 11/14/17		Aqueous	1	1		11/14 08:38
5M101508.	CAL BNA@50PPM		OK, V-265645	JB 11/14/17		Aqueous	1	1	625\827	11/14 09:01
5M101509.	EF-1 V-266631(11/0		OK	JB 11/14/17		Aqueous	1	11	8270D	11/14 09:37
5M101510.	EF-1 V-266631(11/0		OK	JB 11/14/17		Aqueous	1	11	8270D	11/14 10:00
5M101511.	AD01055-009		OK	JB 11/14/17	BNA-8270	Aqueous	1	1	8270D	11/14 10:23
5M101512.	AD01028-013(R)		OK	JB 11/14/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 10:46
5M101513.	AD01050-005(R)		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 11:09
5M101514.	AD01066-001		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 11:47
5M101515.	WMB63387(MS)		OK WMB63387	JB 11/14/17		Aqueous	1	1	625\827	11/14 12:10
5M101516.	WMB63394(MS)		OK WMB63394	JB 11/14/17		Aqueous	1	1	625\827	11/14 12:33
5M101517.	WMB63394		OK	JB 11/14/17		Aqueous	1	1	625\827	11/14 12:57
5M101518.	AD01067-001		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 13:20
5M101519.	AD01067-002		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 13:43
5M101520.	AD01063-014(10X)		OK WMB63394	JB 11/15/17	BNPAH-8270	Aqueous	10	10	625\827	11/14 15:39
5M101521.	WMB63402(MS)	M18	OK WMB63402	JB 11/15/17		Aqueous	1	1	625\827	11/14 16:03
5M101522.	WMB63402		OK	JB 11/15/17		Aqueous	1	1	625\827	11/14 16:27
5M101523.	AD01063-017(10X)(Sd		OK WMB63394	JB 11/15/17	BNPAH-8270	Aqueous	10	10	625\827	11/14 16:52
5M101524.	AD01063-018(10X)(Sd		OK WMB63394	JB 11/15/17	BNPAH-8270	Aqueous	10	10	625\827	11/14 17:15
5M101525.	AD01063-015		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 17:38
5M101526.	AD01063-016		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 18:02
5M101527.	AD01063-019		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 18:25
5M101528.	AD01063-020		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 18:49
5M101529.	AD01063-021		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 19:12
5M101530.	AD01063-022		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 19:36
5M101531.	AD01063-023		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 19:59
5M101532.	AD01063-024		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 20:23

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tclp/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for enh
B8m	Blank 8000 series missing	Eto	Tclp Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evnr	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Rn	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cma	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a samol	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_7 Year: 2017
Analyst: AH/JB

1-1-7M87623

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M87623.D	CAL DFTPP	Ed1=0.95;	OK, V-261052	JB 11/14/17		Aqueous	1	1		11/14 08:38
7M87624.D	CAL BNA@50PPM	C16	OK, V-265645	JB 11/14/17		Aqueous	1	1	625\827	11/14 09:03
7M87625.D	WMB63390	C6f	RR	JB 11/14/17		Aqueous	1	1	625\827	11/14 09:33
7M87626.D	AD00971-001(T)		OK	JB 11/14/17	BNATCLP-82	Aqueous	1	1	8270D	11/14 09:56
7M87627.D	AD00920-009(T)	Sa8	RR 10X	JB 11/14/17	BNATCLP-82	Aqueous	1	1	8270D	11/14 10:20
7M87628.D	AD01015-001(T)	Esm	OK	JB 11/14/17	BNATCLP-82	Aqueous	1	1	8270D	11/14 10:43
7M87629.D	AD00920-009(10X)(	Sd	RE-EXTRACT	JB 11/14/17	BNATCLP-82	Aqueous	10	10	8270D	11/14 11:06
7M87630.D	WMB63390	C6f	OK, FOR 8270 METHOD	JB 11/14/17		Aqueous	1	1	625\827	11/14 11:30
7M87631.D	AD01071-001		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 11:53
7M87632.D	AD01071-002		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 12:17
7M87633.D	AD01071-003		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 12:40
7M87634.D	AD01071-004		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 13:04
7M87635.D	AD01071-005		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 13:27
7M87636.D	AD01071-006		OK	JB 11/14/17	BN15-8270	Aqueous	1	1	8270D	11/14 13:50
7M87637.D	WMB63394	C6f	OK, FOR 8270 METHOD	JB 11/14/17		Aqueous	1	1	625\827	11/14 14:14
7M87638.D	AD00920-009(T)(R)	Sa8	SURR CONFIRMED	JB 11/14/17	BNATCLP-82	Aqueous	1	1	8270D	11/14 15:45
7M87639.D	WMB63402	C6f	OK FOR 8270 METHOD	JB 11/15/17		Aqueous	1	1	625\827	11/14 16:09
7M87640.D	SMB63407(MS)		OK SMB63407	JB 11/15/17		Soil	1	1	8270D	11/14 16:33
7M87641.D	SMB63407		OK	JB 11/15/17		Soil	1	1	8270D	11/14 16:57
7M87642.D	AD01063-001		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 17:21
7M87643.D	AD01063-002(10X)		OK	JB 11/15/17	BNPAH-8270	Aqueous	10	10	8270D	11/14 17:44
7M87644.D	AD01063-003		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 18:08
7M87645.D	AD01063-004		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 18:31
7M87646.D	AD01063-006		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 18:55
7M87647.D	AD01063-008		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 19:19
7M87648.D	AD01063-011		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 19:42
7M87649.D	AD01063-013		OK	JB 11/15/17	BNPAH-8270	Aqueous	1	1	8270D	11/14 20:05

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Etn	Tdn/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for anh
B8m	Blank 8000 series missing	Eto	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmb with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-7M87650

Instrument: GCMS_7 Year: 2017
Analyst: AH/JB

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
7M87650.D	CAL DFTPP	Ed1=0.93;	OK, V-261052	JB 11/15/17		Aqueous	1	1		11/15 09:04
7M87651.D	CAL BNA@50PPM		OK, V-265645	JB 11/15/17		Aqueous	1	1	625\827	11/15 09:29
7M87652.D	AD01097-006	Sb6Sb8	OK WMB63402	JB 11/16/17	BN-8270	Aqueous	1	1	625\827	11/15 10:36
7M87653.D	AD01097-007(MS:A	Sa6Sa8M16M18	OK WMB63402	JB 11/16/17	BN-8270	Aqueous	1	1	625\827	11/15 11:00
7M87654.D	AD01097-008(MSD:	Sa6Sa8R18M16M18	OK WMB63402	JB 11/16/17	BN-8270	Aqueous	1	1	625\827	11/15 11:23
7M87655.D	AD01097-001		OK	JB 11/15/17	BN-8270	Aqueous	1	1	8270D	11/15 11:46
7M87656.D	AD01097-002		OK	JB 11/15/17	BN-8270	Aqueous	1	1	8270D	11/15 12:09
7M87657.D	AD01097-003		OK	JB 11/15/17	BN-8270	Aqueous	1	1	8270D	11/15 12:33
7M87658.D	AD01097-004		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 12:56
7M87659.D	AD01097-005		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 13:20
7M87660.D	AD01063-010(50X)	Sd	OK	JB 11/15/17	BNPAH-8270	Aqueous	50	50	8270D	11/15 13:43
7M87661.D	WMB63410(MS)		OK WMB63410	JB 11/15/17		Aqueous	1	1	625\827	11/15 14:06
7M87662.D	WMB63410		RR	JB 11/16/17		Aqueous	1	1	625\827	11/15 14:31
7M87663.D	AD01096-017		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 14:55
7M87664.D	AD01080-017	Sa8	OK	JB 11/15/17	BNA-8270	Aqueous	1	1	8270D	11/15 15:18
7M87665.D	WMB63412(MS)	M18	OK WMB63412	JB 11/15/17		Aqueous	1	1	625\827	11/15 15:42
7M87666.D	WMB63412		RR	JB 11/16/17		Aqueous	1	1	625\827	11/15 16:05
7M87667.D	WMB63410		OK	JB 11/16/17		Aqueous	1	1	625\827	11/15 16:28
7M87668.D	AD01106-001		OK	JB 11/16/17	BN15-8270	Aqueous	1	1	8270D	11/15 16:52
7M87669.D	AD01106-002		OK WMB63412	JB 11/16/17	BN15-8270	Aqueous	1	1	625\827	11/15 17:15
7M87670.D	AD01106-002(MS)	Sb6Sb8M18	OK WMB63412	JB 11/16/17	BN15-8270	Aqueous	1	1	625\827	11/15 17:39
7M87671.D	AD01106-002(MSD)	Sb6Sb8R16R18M18	OK WMB63412	JB 11/16/17	BN15-8270	Aqueous	1	1	625\827	11/15 18:02
7M87672.D	AD01082-013	Sb6Sb8Ocf	RR 30X WMB63410	JB 11/16/17	BNPAH-8270	Aqueous	1	1	625\827	11/15 18:26
7M87673.D	AD01082-022(MS:A	Sb6Sb8Ocf	RR 30X WMB63410	JB 11/16/17	BNPAH-8270	Aqueous	1	1	625\827	11/15 18:49
7M87674.D	AD01082-024(MSD:	Sb6Sb8Ocf	RR 30X WMB63410	JB 11/16/17	BNPAH-8270	Aqueous	1	1	625\827	11/15 19:12
7M87675.D	AD01082-020		OK	JB 11/16/17	BNPAH-8270	Aqueous	1	1	8270D	11/15 19:36
7M87676.D	AD01082-021	Ocf	RR 30X	JB 11/16/17	BNPAH-8270	Aqueous	1	1	8270D	11/15 19:59
7M87677.D	AD01082-026		OK	JB 11/16/17	BNPAH-8270	Aqueous	1	1	8270D	11/15 20:23
7M87678.D	AD01082-027		OK	JB 11/16/17	BNPAH-8270	Aqueous	1	1	8270D	11/15 20:46
7M87679.D	AD01083-001		OK	JB 11/16/17	BN-625	Aqueous	1	1	625	11/15 21:09
7M87680.D	AD01083-002		OK	JB 11/16/17	BN-625	Aqueous	1	1	625	11/15 21:33
7M87681.D	AD01083-003	Ocf	RR 2X	JB 11/16/17	BN-625	Aqueous	1	1	625	11/15 21:56

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
Bm	Blank 600 series missing	Etn	Tdn/Solvent Extraction Date Missing/Not check'd	Cro	C30/C20 failed for epn
Bm	Blank 8000 series missing	Eto	Tdo Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evrc	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rto	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Pmh with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Endmo Cal missing for sample (8000 series)	Iw	Initial cal warning. Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

Instrument: GCMS_10Year: 2017
Analyst: AH/JB

1-1-10M66038

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
10M66038.	CAL DFTPP	Ed1=1.1;	OK, V-261052	JB 11/15/17		Aqueous	1	1		11/15 10:42
10M66039.	CAL BNA@50PPM	C16	OK, V-265645	JB 11/15/17		Aqueous	1	1	625\827	11/15 11:11
10M66040.	AD01055-002		OK	JB 11/15/17	BNA-8270	Soil	1	1	8270D	11/15 11:35
10M66041.	AD01055-004		OK	JB 11/15/17	BNA-8270	Soil	1	1	8270D	11/15 11:57
10M66042.	AD01055-006		OK	JB 11/15/17	BNA-8270	Soil	1	1	8270D	11/15 12:19
10M66043.	AD01055-008		OK	JB 11/15/17	BNA-8270	Soil	1	1	8270D	11/15 12:41
10M66044.	AD01055-001		OK	JB 11/15/17	BNA-8270	Soil	1	1	8270D	11/15 13:03
10M66045.	SMB63406(MS)		OK SMB63406	JB 11/15/17		Soil	1	1	8270D	11/15 13:25
10M66046.	OMB63405(MS)		OK OMB63405	JB 11/15/17		OIL/OTH	1	1	8270D	11/15 13:48
10M66047.	AD01111-001(3X)(RSd		SURR CONFIRMED	JB 11/15/17	BNA-8270	Soil	6	3	8270D	11/15 14:10
10M66048.	AD01111-006(3X)(RSd		SURR CONFIRMED	JB 11/15/17	BNA-8270	Soil	6	3	8270D	11/15 14:32
10M66049.	AD01111-010(3X)(RSd		SURR CONFIRMED	JB 11/15/17	BNA-8270	Soil	12	3	8270D	11/15 14:54
10M66050.	SMB63406		OK	JB 11/16/17		Soil	1	1	8270D	11/15 15:17
10M66051.	OMB63405		OK	JB 11/16/17		OIL/OTH	1	1	8270D	11/15 15:39
10M66052.	WMB63410	C6f	OK FOR 8270 METHOD	JB 11/16/17		Aqueous	1	1	625\827	11/15 16:01
10M66053.	WMB63412	C6f	OK FOR 8270 METHOD	JB 11/16/17		Aqueous	1	1	625\827	11/15 16:23
10M66054.	AD01055-003		OK	JB 11/16/17	BNA-8270	Soil	1	1	8270D	11/15 16:46
10M66055.	AD01055-005	Ao	RR	JB 11/16/17	BNA-8270	Soil	1	1	8270D	11/15 17:08
10M66056.	AD01055-007		OK	JB 11/16/17	BNA-8270	Soil	1	1	8270D	11/15 17:30
10M66057.	AD01145-002(MS)		OK SMB63406	JB 11/16/17	BNPAH-8270	Soil	1	1	8270D	11/15 17:52
10M66058.	AD01145-002(MSD)Ao		RR	JB 11/16/17	BNPAH-8270	Soil	1	1	8270D	11/15 18:15
10M66059.	AD01145-002		OK SMB63406	JB 11/16/17	BNPAH-8270	Soil	1	1	8270D	11/15 18:37
10M66060.	AD01080-002(R)		OK	JB 11/16/17	BNA-8270	Soil	1	1	8270D	11/15 18:59
10M66061.	AD01097-009		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 19:21
10M66062.	AD01097-010		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 19:44
10M66063.	AD01097-011		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 20:06
10M66064.	AD01097-012		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 20:28
10M66065.	AD01097-013		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/15 20:50
10M66066.	AD01096-015(5X)(RSd		SURR CONFIRMED	JB 11/16/17	BN-8270	Aqueous	5	5	8270D	11/15 21:12

Anc	Area Not Checked	Fo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
An	Area Out	Fsm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
B6m	Blank 600 series missing	Ftn	Tdn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for enh
B8m	Blank 8000 series missing	Fto	Tdn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hb	Analysis Before Collection Date	Evrc	Eval Mix missing drft or endrin
C18	Calibration Column 1 Out (8000 Series)	Ho	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C6f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

RUN LOG

1-1-10M66067

Instrument: GCMS_10 Year: 2017
Analyst: AH/JB

Data File	Sample Number	Flags	Comments	Reviewed By	Test Group	Matrix	Surr Dil	Sam Dil	Method(s)	Analysis Date
10M66067.	CAL DFTPP	Ed1=1.2;	OK, V-261052	JB 11/16/17		Aqueous	1	1		11/16 09:10
10M66068.	CAL BNA@50PPM	C16	OK, V-265645	JB 11/16/17		Aqueous	1	1	625\827	11/16 09:32
10M66069.	AD01097-014		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/16 10:32
10M66070.	AD01097-015		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/16 10:54
10M66071.	AD01097-016		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/16 11:16
10M66072.	AD01097-017		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/16 11:39
10M66073.	AD01119-004(5X)	Sd	RE-EXTRACT	JB 11/16/17	BN-8270	Aqueous	5	5	8270D	11/16 12:01
10M66074.	AD01119-002	Sb8	OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/16 12:23
10M66075.	AD01119-008		OK	JB 11/16/17	BN-8270	Aqueous	1	1	8270D	11/16 12:46
10M66076.	AD01119-003		OK	JB 11/17/17	BN-8270	Aqueous	1	1	8270D	11/16 13:09
10M66077.	AD01119-005		OK	JB 11/17/17	BN-8270	Aqueous	1	1	8270D	11/16 13:31
10M66078.	AD01119-006		OK	JB 11/17/17	BN-8270	Aqueous	1	1	8270D	11/16 13:53
10M66079.	AD01119-007		OK	JB 11/17/17	BN-8270	Aqueous	1	1	8270D	11/16 14:16
10M66080.	AD01179-001		OK	JB 11/16/17	BNA15-8270	Soil	1	1	8270D	11/16 14:38
10M66081.	AD01179-003		OK	JB 11/16/17	BNA15-8270	Soil	1	1	8270D	11/16 15:00
10M66082.	AD01179-004		OK	JB 11/16/17	BNA15-8270	Soil	1	1	8270D	11/16 15:23
10M66083.	SMB63420		OK	JB 11/16/17		Soil	1	1	8270D	11/16 15:45
10M66084.	AD01119-001		OK	JB 11/17/17	BN-8270	Aqueous	1	1	8270D	11/16 16:08
10M66085.	AD01055-005		OK	JB 11/17/17	BNA-8270	Soil	1	1	8270D	11/16 16:30
10M66086.	AD01145-002(MSD)		OK SMB63406	JB 11/17/17	BNPAH-8270	Soil	1	1	8270D	11/16 16:52

Anc	Area Not Checked	Eo	Extraction Performed Past Hold	Co	Warning Possible Carry Over
Ao	Area Out	Esm	Solvent Extraction Date Missing/Not check'd	CRN	Warning c30/c20 not checked
Bem	Blank 600 series missing	Etn	Tnbn/Solvent Extraction Date Missing/Not check'd	Cm	C30/C20 failed for anh
Bsm	Blank 8000 series missing	Eto	Tnbn Extraction Performed Outside of Hold	EvF	Eval Mix Failed
Bnf	Blank Not Found/Assigned	Ev	Eval Time Exceeded	Evnc	Eval Mix Not Checked
C16	Calibration Column 1 Out (600 Series)	Hh	Analysis Before Collection Date	Evm	Eval Mix missing ddt or endrin
C18	Calibration Column 1 Out (8000 Series)	Hn	Sample Analyzed outside of hold time	R16 R26	Rnd Out on MsMsd (col1 and or col2) 600 series
C26	Calibration Column 2 Out (600 Series)	I16 I26	Initial cal 600 series failed Column 1 and or 2	R18 R28	Rnd Out on MsMsd (col1 and or col2) 8000 series
C28	Calibration Column 2 Out (8000 Series)	I18 I28	Initial cal 8000 series failed Column 1 and or 2	Ro	Retention Time Out Or %Diff Out
C8f	600 series sample/blank did not have passing cal	Is	Initial Cal Not Checked	Rtn	Can't Calculate Drift
C8f	8000 series sample/blank did not have passing cal	Iv	Prob with calmt csv for init calibration chek rfs	S6	600 series surrogate out
Cme	Ending Cal missing for sample (8000 series)	Iw	Initial cal warning Ini cal file <> method	S8	8000 series surrogate out
Cn	Calibration Not Checked for sample/blank/eval	Ix	Initial Cal Files Not Updated Properly for a sampl	Sa6 Sb6	Acid and or BN Surrogate Out (600 series)

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-247746

Prepared By: Hamid, Akmal
Description: BNA-Pest Mix
Prep Date: 1/5/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber:
Concentration: 5000 ppm
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 01/05/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7907	4,4'-DDD	.05 g	neat neat	5000 ppm
7908	4,4'-DDE	.05 g	neat neat	5000 ppm
9939	4,4'-DDT	.05 g	neat neat	5000 ppm
10602	methylene chloride	10 ml	neat neat	

Veritech Lot Number: V-250672

Prepared By: Hamid, Akmal
Description: DFTPP STOCK STD.
Prep Date: 2/22/2017
Expiration Date: 2/5/2018
Department: Organics
BatchNumber:
Concentration: 2000 ppm
Final Volume: 5 ml
ApprovedBy: akmal
ApproveDate: 02/22/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9618	DFTPP	.01 g	Neat neat	2000 ppm
9231	Dichloromethane	5 ml	NEAT neat	

Veritech Lot Number: V-251296

Prepared By: Hamid, Akmal
Description: 8270 EXTRA MIX#1(2nd Source)(DAN
Prep Date: 3/2/2017
Expiration Date: 3/2/2018
Department: Organics
BatchNumber:
Concentration: 10000 ppm
Final Volume: 25 ml
ApprovedBy: akmal
ApproveDate: 03/03/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9403	CAPROLACTUM	.25 g	NEAT neat	10000 ppm
9155	1,2,4,5-Tetrachlorobenzene	.25 g	NEAT neat	10000 ppm
10779	Atrazine	.25 g	Neat neat	10000 ppm
9402	ACETOPHENONE	.25 g	NEAT neat	10000 ppm
9149	Diphenyl Ether	.25 g	NEAT neat	10000 ppm
9150	Benzaldehyde	.25 g	NEAT neat	10000 ppm
10781	1-Methylnaphthalene	.2626 g	95.2% neat	10000 ppm
10780	1,4-Dioxane	.25 g	NEAT neat	10000 ppm
10750	ACETONE	25 ml	neat neat	

Veritech Lot Number: V-251297

Prepared By: Hamid, Akmal
Description: 8270 EXTRA MIX#1
Prep Date: 3/2/2017
Expiration Date: 3/2/2018
Department: Organics
BatchNumber:
Concentration: 10000 ppm
Final Volume: 10 ml
ApprovedBy: Jean
ApproveDate: 03/15/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9403	CAPROLACTUM	.1 g	NEAT neat	10000 ppm
9155	1,2,4,5-Tetrachlorobenzene	.1 g	NEAT neat	10000 ppm
10779	Atrazine	.1 g	Neat neat	10000 ppm
9153	Acetophenone	.1 g	NEAT neat	10000 ppm
9149	Diphenyl Ether	.1 g	NEAT neat	10000 ppm
9150	Benzaldehyde	.1 g	NEAT neat	10000 ppm
10780	1,4-Dioxane	.1 g	NEAT neat	10000 ppm
10750	ACETONE	10 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-260254

Prepared By: Hamid, Akmal
Description: BNA Internal Std.
Prep Date: 7/24/2017
Expiration Date: 7/24/2018
Department: Organics
BatchNumber:
Concentration: 2000 ppm
Final Volume: 250 ml
ApprovedBy: akmal
ApproveDate: 07/24/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9325	Naphthlene,d8	.5 g	NEAT neat	2000 ppm
9326	Phenanthrene, d10	.5 g	NEAT neat	2000 ppm
9327	Chrysene,d12	.5 g	NEAT neat	2000 ppm
9328	Perylene, d12	.5 g	NEAT neat	2000 ppm
6948	1,4-Dichlorobenzene(D4)	.5 g	neat neat	2000 ppm
9329	Acenaphthene, d10	.5 g	NEAT neat	2000 ppm
10051	1,4-Dioxane-D8	.5 g	NEAT neat	2000 ppm
10789	methylene chloride	250 ml	neat neat	

Veritech Lot Number: V-261052

Prepared By: Bis, Yolanta
Description: DFTPP Mix
Prep Date: 8/8/2017
Expiration Date: 2/5/2018
Department: Organics
BatchNumber:
Concentration: 50 ppm
Final Volume: 2 ml
ApprovedBy: akmal
ApproveDate: 08/08/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
v-250672	DFTPP STOCK STD.	50 ul	2000 ppm	50 ppm
9619	DDT-Endrin Mix	400 ul	500 ppm	100 ppm
10493	TCL Phenol/Benzidine Mix	100 ul	2000 ppm	100 ppm
11041	Mehylene Chloride	1450 ul	neat neat	

Veritech Lot Number: V-263094

Prepared By: Bis, Yolanta
Description: Pyridine Stock Std.
Prep Date: 9/11/2017
Expiration Date: 9/11/2018
Department: Organics
BatchNumber:
Concentration: 10,000 ppm
Final Volume: 1 ml
ApprovedBy: akmal
ApproveDate: 09/13/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9045	PYRIDINE	10 ul	NEAT neat	10000 ppm
10789	methylene chloride	990 ul	neat neat	

Veritech Lot Number: V-264390

Prepared By: Hamid, Akmal
Description: 8270 EXTRA MIX#2A
Prep Date: 9/29/2017
Expiration Date: 9/29/2018
Department: Organics
BatchNumber:
Concentration: 10000 ppm
Final Volume: 25 ml
ApprovedBy: akmal
ApproveDate: 09/29/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11044	Pyridine	.25 g	neat neat	10000 ppm
9753	Carbazole	.25 g	neat neat	10000 ppm
9726	Biphenyl	.25 g	Neat neat	10000 ppm
11201	N-Decane	.25 g	NEAT neat	10000 ppm
11200	n-Octadecane	.25 g	NEAT neat	10000 ppm
9756	Pentachloroethane	.25 g	neat neat	10000 ppm
9435	1,4-Dimethylnaphthalene	.263 g	95 %	10000 ppm
9755	Coumarin	.25 g	neat neat	10000 ppm
11164	Acetone	25 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-264405

Prepared By: Bis, Yolanta
Description: CLP SPK (AQ)(DANGER)
Prep Date: 9/29/2017
Expiration Date: 3/2/2018
Department: Organics
BatchNumber:
Concentration: 2000 ppm
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/04/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-251296	8270 EXTRA MIX#1(2nd Source)(DANGER)	2 ml	10000 ppm	2000 ppm
V-264390	8270 EXTRA MIX#2A	2 ml	10000 ppm	2000 ppm
11139	Acetone	6 ml	neat neat	

Veritech Lot Number: V-264693

Prepared By: Hamid, Akmal
Description: BNA-7 MIX
Prep Date: 10/5/2017
Expiration Date: 10/5/2018
Department: Organics
BatchNumber:
Concentration: 5000 ppm
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/06/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
9757	3,4-Dichlorophenol	.05 g	neat neat	5000 ppm
9726	Biphenyl	.05 g	Neat neat	5000 ppm
9755	Coumarin	.05 g	neat neat	5000 ppm
11200	n-Octadecane	.05 g	NEAT neat	5000 ppm
9756	Pentachloroethane	.05 g	neat neat	5000 ppm
9435	1,4-Dimethylnaphthalene	.0518 g	95 %	5000 ppm
11201	N-Decane	.05 g	NEAT neat	5000 ppm
11184	acetone	10 ml	neat neat	

Veritech Lot Number: V-264694

Prepared By: Hamid, Akmal
Description: BNA-8 MIX
Prep Date: 10/5/2017
Expiration Date: 10/5/2018
Department: Organics
BatchNumber:
Concentration: 5000 ppm
Final Volume: 10 ml
ApprovedBy: akmal
ApproveDate: 10/06/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7460	2,3,4,6,-Tetrachlorophenol	.05 g	Neat neat	5000 ppm
9757	3,4-Dichlorophenol	.05 g	neat neat	5000 ppm
9726	Biphenyl	.05 g	Neat neat	5000 ppm
9755	Coumarin	.05 g	neat neat	5000 ppm
11200	n-Octadecane	.05 g	NEAT neat	5000 ppm
9756	Pentachloroethane	.05 g	neat neat	5000 ppm
9435	1,4-Dimethylnaphthalene	.0518 g	95 %	5000 ppm
11201	N-Decane	.05 g	NEAT neat	5000 ppm
11184	acetone	10 ml	neat neat	

Veritech Lot Number: V-264805

Prepared By: Hamid, Akmal
Description: BNA Surrog.Std.
Prep Date: 10/6/2017
Expiration Date: 10/6/2018
Department: Organics
BatchNumber:
Concentration: 1000-2000 pp
Final Volume: 1000 ml
ApprovedBy: akmal
ApproveDate: 10/06/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
7755	2-Fluorobiphenyl	1 g	Neat neat	1000 ppm
8748	p-Terphenyl-d14	1 g	Neat neat	1000 ppm
10521	Phenol-2,3,4,5,6-d5	2 g	NEAT neat	2000 ppm
10572	2,4,6-Tribromophenol	2 g	NEAT neat	2000 ppm
8746	Nitrobenzene-d5	800 ul	NEAT neat	1000 ppm
8747	2-Fluorophenol	1.6 ml	NEAT neat	2000 ppm
11184	acetone	1000 ml	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265004

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA STOCK Std.A (DANGER) | BatchNumber: | ApproveDate: 10/11/17
Prep Date: 10/10/2017 | Concentration: 250 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 1.2 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
11084	8270 MegaMix	300 ul	1000 ppm	250 ppm
11085	Benzoic Acid	150 ul	2000 ppm	250 ppm
10923	TCL Benzidines Mix	150 ul	2000 ppm	250 ppm
V-264805	BNA Surrog.Std.	150 ul	1000-2000 pp	125-250 pp
V-247746	BNA-Pest Mix	60 ul	5000 ppm	250 ppm
V-264693	BNA-7 MIX	60 ul	5000 ppm	250 ppm
10789	methylene chloride	330 ul	neat neat	

Veritech Lot Number: V-265137

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA STOCK Std.(DANGER) | BatchNumber: | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 200 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 500 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-251297	8270 EXTRA MIX#1	10 ul	10000 ppm	250 ppm
V-265004	BNA STOCK Std.A (DANGER)	400 ul	250 ppm	250 ppm
10789	methylene chloride	90 ul	neat neat	

Veritech Lot Number: V-265138

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 10 ppm curve(DANGER) | BatchNumber: B-23832 | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 10 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	5 ul	200 ppm	10 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	93 ul	neat neat	

Veritech Lot Number: V-265139

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 20 ppm curve(DANGER) | BatchNumber: B-23832 | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 20 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	10 ul	200 ppm	20 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	88 ul	neat neat	

Veritech Lot Number: V-265140

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 50 ppm curve(DANGER) | BatchNumber: B-23832 | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 50 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 600 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	150 ul	200 ppm	50 ppm
V-260254	BNA Internal Std.	12 ul	2000 ppm	40 ppm
10789	methylene chloride	438 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265141

Prepared By: Bis, Yolanta
Description: BNA 80 ppm curve(DANGER)
Prep Date: 10/11/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23832
Concentration: 80 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/13/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	40 ul	200 ppm	80 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	58 ul	neat neat	

Veritech Lot Number: V-265142

Prepared By: Bis, Yolanta
Description: BNA 120 ppm curve(DANGER)
Prep Date: 10/11/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23832
Concentration: 120 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/13/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	60 ul	200 ppm	120 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	38 ul	neat neat	

Veritech Lot Number: V-265143

Prepared By: Bis, Yolanta
Description: BNA 160 ppm curve(DANGER)
Prep Date: 10/11/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23832
Concentration: 160 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/13/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	80 ul	200 ppm	160 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	18 ul	neat neat	

Veritech Lot Number: V-265144

Prepared By: Bis, Yolanta
Description: BNA 196 ppm curve(DANGER)
Prep Date: 10/11/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23832
Concentration: 196 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/13/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	98 ul	200 ppm	196 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	0	neat neat	

Veritech Lot Number: V-265145

Prepared By: Bis, Yolanta
Description: BNA 50 ppm curve(DANGER)
Prep Date: 10/11/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23832
Concentration: 50 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/13/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265137	BNA STOCK Std.(DANGER)	25 ul	200 ppm	50 ppm
10789	methylene chloride	75 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265146

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 2 ppm curve(DANGER) | BatchNumber: B-23832 | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 2 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265145	BNA 50 ppm curve(DANGER)	4 ul	50 ppm	2 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	94 ul	neat neat	

Veritech Lot Number: V-265147

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 0.5 ppm curve(DANGER) | BatchNumber: B-23832 | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 0.5 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265145	BNA 50 ppm curve(DANGER)	1 ul	50 ppm	2 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	97 ul	neat neat	

Veritech Lot Number: V-265148

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA STOCK Std.B(DANGER) | BatchNumber: | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 250 ppm | Checked: Yes
Expiration Date: 4/11/2018 | Final Volume: 1.2 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
10705	TCL PAH MIX	150 ul	2000 ppm	250 ppm
10706	TCL PHENOLS/BENZIDINE MIX	150 ul	2000 ppm	250 ppm
10707	TCL Hazardous Substances Mix	150 ul	2000 ppm	250 ppm
10708	TCL Base-Neutral Mix	150 ul	2000 ppm	250 ppm
V-264805	BNA Surrog.Std.	150 ul	1000-2000 pp	125-250 pp
V-263094	Pyridine Stock Std.	30 ul	10,000 ppm	250 ppm
V-264694	BNA-8 MIX	60 ul	5000 ppm	250 ppm
10789	methylene chloride	360 ul	neat neat	

Veritech Lot Number: V-265149

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA ICV CAL@50ppm(DANGER) | BatchNumber: | ApproveDate: 10/13/17
Prep Date: 10/11/2017 | Concentration: 50 ppm | Checked: Yes
Expiration Date: 3/2/2018 | Final Volume: 0.2 ml

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265148	BNA STOCK Std.B(DANGER)	40 ul	250 ppm	50 ppm
V-251296	8270 EXTRA MIX#1(2nd Source)(DANGER)	1 ul	10000 ppm	50 ppm
V-260254	BNA Internal Std.	4 ul	2000 ppm	40 ppm
10789	methylene chloride	155 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265642

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA STOCK Std.(DANGER) | BatchNumber: | ApproveDate: 10/24/17
Prep Date: 10/19/2017 | Concentration: 200 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 500 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-251297	8270 EXTRA MIX#1	10 ul	10000 ppm	250 ppm
V-265004	BNA STOCK Std.A (DANGER)	400 ul	250 ppm	250 ppm
10789	methylene chloride	90 ul	neat neat	

Veritech Lot Number: V-265643

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 10 ppm curve(DANGER) | BatchNumber: B-23869 | ApproveDate: 10/24/17
Prep Date: 10/19/2017 | Concentration: 10 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	5 ul	200 ppm	10 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	93 ul	neat neat	

Veritech Lot Number: V-265644

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 20 ppm curve(DANGER) | BatchNumber: B-23869 | ApproveDate: 10/24/17
Prep Date: 10/19/2017 | Concentration: 20 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	10 ul	200 ppm	20 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	88 ul	neat neat	

Veritech Lot Number: V-265645

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 50 ppm curve(DANGER) | BatchNumber: B-23869 | ApproveDate: 10/24/17
Prep Date: 10/19/2017 | Concentration: 50 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 600 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	150 ul	200 ppm	50 ppm
V-260254	BNA Internal Std.	12 ul	2000 ppm	40 ppm
10789	methylene chloride	438 ul	neat neat	

Veritech Lot Number: V-265646

Prepared By: Bis, Yolanta | Department: Organics | ApprovedBy: akmal
Description: BNA 80 ppm curve(DANGER) | BatchNumber: B-23869 | ApproveDate: 10/24/17
Prep Date: 10/19/2017 | Concentration: 80 ppm | Checked: Yes
Expiration Date: 1/5/2018 | Final Volume: 100 ul

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	40 ul	200 ppm	80 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	58 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265647

Prepared By: Bis, Yolanta
Description: BNA 120 ppm curve(DANGER)
Prep Date: 10/19/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23869
Concentration: 120 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/24/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	60 ul	200 ppm	120 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	38 ul	neat neat	

Veritech Lot Number: V-265648

Prepared By: Bis, Yolanta
Description: BNA 160 ppm curve(DANGER)
Prep Date: 10/19/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23869
Concentration: 160 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/24/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	80 ul	200 ppm	160 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	18 ul	neat neat	

Veritech Lot Number: V-265649

Prepared By: Bis, Yolanta
Description: BNA 196 ppm curve(DANGER)
Prep Date: 10/19/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23869
Concentration: 196 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/24/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	98 ul	200 ppm	196 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	0	neat neat	

Veritech Lot Number: V-265650

Prepared By: Bis, Yolanta
Description: BNA 50 ppm curve(DANGER)
Prep Date: 10/19/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23869
Concentration: 50 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/24/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265642	BNA STOCK Std.(DANGER)	25 ul	200 ppm	50 ppm
10789	methylene chloride	75 ul	neat neat	

Veritech Lot Number: V-265651

Prepared By: Bis, Yolanta
Description: BNA 2 ppm curve(DANGER)
Prep Date: 10/19/2017
Expiration Date: 1/5/2018
Department: Organics
BatchNumber: B-23869
Concentration: 2 ppm
Final Volume: 100 ul
ApprovedBy: akmal
ApproveDate: 10/24/17
Checked: Yes

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265650	BNA 50 ppm curve(DANGER)	4 ul	50 ppm	2 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	94 ul	neat neat	

Veritech Internally Prepared Standard Log

Veritech Lot Number: V-265652

Prepared By:	Bis, Yolanta	Department: Organics	ApprovedBy: akmal
Description:	BNA 0.5 ppm curve(DANGER)	BatchNumber: B-23869	ApproveDate: 10/24/17
Prep Date:	10/19/2017	Concentration: 0.5 ppm	Checked: Yes
Expiration Date:	1/5/2018	Final Volume: 100 ul	

Veritech Lot# /Rec#	Lot Description	Amount Used	Conc of Std	Final Conc
V-265650	BNA 50 ppm curve(DANGER)	1 ul	50 ppm	2 ppm
V-260254	BNA Internal Std.	2 ul	2000 ppm	40 ppm
10789	methylene chloride	97 ul	neat neat	

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 6948

Description
1,4-Dichlorobenzene(D4)

ApprovedBy: akmal
ApproveDate: 04/23/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-268-0	PR-18488/07257CB2	04/19/12	04/19/20	Hamid, Akmal	1	5g	neat	neat

Veritech Control/Receipt Number: 7460

Description
2,3,4,6,-Tetrachlorophenol

ApprovedBy: akmal
ApproveDate: 11/11/12
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-10599-50MG	973100	11/09/12	11/30/18	Hamid, Akmal	10	50mg	Neat	Neat

Veritech Control/Receipt Number: 7755

Description
2-Fluorobiphenyl

ApprovedBy: jean
ApproveDate: 03/11/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	102741-10G	MKBN8688V	03/07/13	03/07/23	Hamid, Akmal	1	10G	Neat	Neat

Veritech Control/Receipt Number: 7907

Description
4,4'-DDD

ApprovedBy: akmal
ApproveDate: 05/22/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ChemService	N-10874-250MG	1520000	05/22/13	08/30/18	Hamid, Akmal	4	250m	neat	neat

Veritech Control/Receipt Number: 7908

Description
4,4'-DDE

ApprovedBy: akmal
ApproveDate: 05/22/13
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
ChemService	N-10875-100MG	1487800	05/22/13	11/30/18	Hamid, Akmal	5	100m	neat	neat

Veritech Control/Receipt Number: 8746

Description
Nitrobenzene-d5

ApprovedBy: akmal
ApproveDate: 06/10/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	151955-5g	MBBB1337V	06/10/14	03/17/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 8747

Description
2-Fluorophenol

ApprovedBy: akmal
ApproveDate: 06/10/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	F12804	STBC5591V	06/10/14	03/17/25	Hamid, Akmal	1	10G	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 8748

Description
p-Terphenyl-d14

ApprovedBy: akmal
ApproveDate: 06/10/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	364630-500mg	EB2136V	06/10/14	03/17/25	Hamid, Akmal	3	500m	Neat	Neat

Veritech Control/Receipt Number: 9045

Description
PYRIDINE

ApprovedBy: aurora
ApproveDate: 03/11/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
FISHER	P368-1	140622	10/31/14	04/30/19	Wonge, Janee	2	1 L	NEAT	NEAT

Veritech Control/Receipt Number: 9149

Description
Diphenyl Ether

ApprovedBy: akmal
ApproveDate: 12/15/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	240834-5g	MKBH5698V	12/12/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 9150

Description
Benzaldehyde

ApprovedBy: akmal
ApproveDate: 12/15/14
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	B1334-5g	MKBP5021V	12/12/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 9153

Description
Acetophenone

ApprovedBy: jean
ApproveDate: 03/05/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fluka	42163-1ML-F	BCBH9875V	12/15/14	12/31/25	Hamid, Akmal	1	1ML	NEAT	NEAT

Veritech Control/Receipt Number: 9155

Description
1,2,4,5-Tetrachlorobenzene

ApprovedBy: jean
ApproveDate: 03/05/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	131857-5G	06024IV	12/15/14	12/31/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number;9231

Description
Dichloromethane

ApprovedBy: akmal
ApproveDate: 02/05/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
EMD	DX0837-1	54052	02/05/15	02/05/18	Hamid, Akmal	1	4L	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9325

Description
Naphthlene,d8

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-365-1	PR-25998	03/11/15	06/30/24	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9326

Description
Phenanthrene, d10

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM370-1	PR-23065/081711PN	03/11/15	09/07/21	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9327

Description
Chrysene,d12

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLI261-1	PR24875	03/11/15	05/09/23	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9328

Description
Perylene, d12

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-366-1	PR-24113	03/11/15	10/10/22	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9329

Description
Acenaphthene, d10

ApprovedBy: akmal
ApproveDate: 03/12/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-108-1	PR-25443	03/11/15	10/25/23	Hamid, Akmal	2	1G	NEAT	NEAT

Veritech Control/Receipt Number: 9402

Description
ACETOPHENONE

ApprovedBy: akmal
ApproveDate: 04/14/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CHEM SERVICE	N-11020-1G	3707800	04/14/15	01/31/23	Hamid, Akmal	1	IG	NEAT	NEAT

Veritech Control/Receipt Number: 9403

Description
CAPROLACTUM

ApprovedBy: akmal
ApproveDate: 04/14/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CHEM SERVICE	N11397-1G	3232400	04/14/15	10/31/20	Hamid, Akmal	1	1G	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9435

Description
1,4-Dimethylnaphthalene

ApprovedBy: akmal
ApproveDate: 04/24/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	D170305-5G	STBD6188V	04/24/15	04/24/25	Hamid, Akmal	5	5G	95	%

Veritech Control/Receipt Number: 9618

Description
DFTPP

ApprovedBy: akmal
ApproveDate: 07/29/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	44-2543	LC13253V	07/29/15	03/31/18	Hamid, Akmal	1	100m	Neat	Neat

Veritech Control/Receipt Number: 9619

Description
DDT-Endrin Mix

ApprovedBy: akmal
ApproveDate: 07/29/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	48282	XA12639V	07/29/15	03/31/18	Hamid, Akmal	2	1ml	500	ppm

Veritech Control/Receipt Number: 9726

Description
Biphenyl

ApprovedBy: akmal
ApproveDate: 10/09/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11207-1G	3936400	10/01/15	12/31/20	Hamid, Akmal	2	1ml	Neat	Neat

Veritech Control/Receipt Number: 9753

Description
Carbazole

ApprovedBy: akmal
ApproveDate: 10/16/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11403-1G	4417700	10/16/15	10/31/20	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number: 9755

Description
Coumarin

ApprovedBy: akmal
ApproveDate: 10/16/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-11508-1G	4171300	10/16/15	07/31/23	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number: 9756

Description
Pentachloroethane

ApprovedBy: akmal
ApproveDate: 10/16/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-12829-1G	4377000	10/16/15	11/30/19	Hamid, Akmal	1	1g	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 9757

Description
3,4-Dichlorophenol

ApprovedBy: akmal
ApproveDate: 10/16/15
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N10766-1G	3407700	10/16/15	12/31/21	Hamid, Akmal	1	1g	neat	neat

Veritech Control/Receipt Number: 9939

Description
4,4'-DDT

ApprovedBy: akmal
ApproveDate: 01/27/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service	N-10876-100MG	4679800	01/27/16	01/31/23	Hamid, Akmal	2	100m	neat	neat

Veritech Control/Receipt Number: 10051

Description
1,4-Dioxane-D8

ApprovedBy: jean
ApproveDate: 03/11/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
CIL	DLM-28-5	I-19239A	03/10/16	03/10/30	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 10493

Description
TCL Phenol/Benzidine Mix

ApprovedBy: akmal
ApproveDate: 10/19/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	47992-U	XA14572V	10/19/16	06/30/18	Hamid, Akmal	1	1ml	2000	PPM

Veritech Control/Receipt Number: 10521

Description
Phenol-2,3,4,5,6-d5

ApprovedBy: akmal
ApproveDate: 11/02/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	425370-5G	MBBC0235V	11/02/16	11/02/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 10572

Description
2,4,6-Tribromophenol

ApprovedBy: akmal
ApproveDate: 11/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Aldrich	137715-5G	29699MJV	11/07/16	11/07/25	Hamid, Akmal	1	5G	NEAT	NEAT

Veritech Control/Receipt Number: 10602

Description
methylene chloride

ApprovedBy: akmal
ApproveDate: 12/28/16
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9364-03	157298	12/15/16	01/05/18	Lopez, Jose	4	4L	neat	neat

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10705

Description
TCL PAH MIX

ApprovedBy: akmal
ApproveDate: 01/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	CRM48905	XA21530V	01/17/17	06/30/19	Hamid, Akmal	2	1ML	2000	PPM

Veritech Control/Receipt Number: 10706

Description
TCL PHENOLS/BENZIDINE MIX

ApprovedBy: akmal
ApproveDate: 01/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	47992-U	XA14572V	01/17/17	06/30/18	Hamid, Akmal	2	1ML	2000	PPM

Veritech Control/Receipt Number: 10707

Description
TCL Hazardous Substances Mix

ApprovedBy: akmal
ApproveDate: 01/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	47990-U	XA14035V	01/17/17	05/31/18	Hamid, Akmal	2	1	2000	PPM

Veritech Control/Receipt Number: 10708

Description
TCL Base-Neutral Mix

ApprovedBy: akmal
ApproveDate: 01/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	47991-U	XA14793V	01/17/17	06/30/18	Hamid, Akmal	1	1ML	2000	PPM

Veritech Control/Receipt Number: 10750

Description
ACETONE

ApprovedBy: akmal
ApproveDate: 02/22/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.BAKER	9254-03	164214	02/14/17	01/13/20	Burwell, John	25	4 L	neat	neat

Veritech Control/Receipt Number: 10779

Description
Atrazine

ApprovedBy: akmal
ApproveDate: 03/03/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	49085	LC25183V	03/02/17	02/29/20	Hamid, Akmal	5	100m	Neat	Neat

Veritech Control/Receipt Number: 10780

Description
1,4-Dioxane

ApprovedBy: akmal
ApproveDate: 03/03/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	76887-5ML-F	BCBR4405V	03/02/17	12/31/18	Hamid, Akmal	1	5ML	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 10781

Description
1-Methylnaphthalene

ApprovedBy: akmal
ApproveDate: 03/03/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Sigma-Aldrich	38383-100MG	BCBQ5833V	03/02/17	09/30/19	Hamid, Akmal	3	100M	95.2%	NEAT

Veritech Control/Receipt Number: 10789

Description
methylene chloride

ApprovedBy: akmal
ApproveDate: 03/09/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	D151-4	170232	03/07/17	02/28/22	Lopez, Jose	4	4L	neat	neat

Veritech Control/Receipt Number: 10923

Description
TCL Benzidines Mix

ApprovedBy: akmal
ApproveDate: 05/02/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	48906	XA14364V	05/02/17	05/31/18	Hamid, Akmal	1	1ML	2000	PPM

Veritech Control/Receipt Number: 11041

Description
Mehylene Chloride

ApprovedBy: akmal
ApproveDate: 07/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9264-03	166495	07/05/17	05/10/18	Lopez, Jose	80	4L	neat	neat

Veritech Control/Receipt Number: 11044

Description
Pyridine

ApprovedBy: akmal
ApproveDate: 09/29/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Fisher	P368-1	170503	06/30/17	08/31/21	Wonge, Janee	2	1 L	neat	neat

Veritech Control/Receipt Number: 11084

Description
8270 MegaMix

ApprovedBy: akmal
ApproveDate: 07/18/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Restek	31850	A0124078	07/18/17	07/31/18	Hamid, Akmal	2	1ML	1000	PPM

Veritech Control/Receipt Number: 11085

Description
Benzoic Acid

ApprovedBy: akmal
ApproveDate: 07/20/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Supelco	CRM47508	XA20010V	07/18/17	04/30/19	Hamid, Akmal	2	1ML	2000	PPM

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11139

Description
Acetone

ApprovedBy: akmal
ApproveDate: 08/30/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	170015	08/29/17	01/30/20	Lopez, Jose	16	4L	neat	neat

Veritech Control/Receipt Number: 11164

Description
Acetone

ApprovedBy: akmal
ApproveDate: 09/13/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9254-03	170015	09/12/17	01/30/20	Lopez, Jose	16	4L	neat	neat

Veritech Control/Receipt Number: 11184

Description
acetone

ApprovedBy: akmal
ApproveDate: 09/26/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T. BAKER	9254-03	176288	09/26/17	05/08/20	Burwell, John	20	4 L	neat	neat

Veritech Control/Receipt Number: 11200

Description
n-Octadecane

ApprovedBy: akmal
ApproveDate: 09/29/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service Inc	N-12582-1G	6095500	09/28/17	05/31/21	Hamid, Akmal	2	1ML	NEAT	NEAT

Veritech Control/Receipt Number: 11201

Description
N-Decane

ApprovedBy: akmal
ApproveDate: 09/29/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Chem Service Inc	N-12526-1G	6585700	09/28/17	05/31/22	Hamid, Akmal	2	1ML	NEAT	NEAT

Veritech Standard Receipt Log

Veritech Control/Receipt Number: 11070

Description
Compos.Mix#1(Toxic Subs.Mix #2)

ApprovedBy: akmal
ApproveDate: 07/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AccuStandard	Z-014E-PAK	217021030	07/14/17	03/01/19	Hamid, Akmal	15	1ML	2.0	MG/ML

Veritech Control/Receipt Number: 11071

Description
Acid composite Mixture

ApprovedBy: akmal
ApproveDate: 07/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AccuStandard	CLP-HC-A-R-PAK	217011100	07/14/17	01/19/20	Hamid, Akmal	15	1ML	2	MG/ML

Veritech Control/Receipt Number: 11074

Description
Base/Neutral Composite Mix

ApprovedBy: akmal
ApproveDate: 07/17/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
AccuStandard	CLP-HC-BN-PAK	217031389	07/14/17	05/06/18	Hamid, Akmal	15	1ML	2.0	MG/ML

Veritech Control/Receipt Number: 11240

Description
Methylene Chloride

ApprovedBy: jean
ApproveDate: 10/24/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
J.T.Baker	9264-03	166495	10/24/17	05/10/18	Lopez, Jose	60	4L	neat	neat

Veritech Control/Receipt Number: 11266

Description
Sodium Sulfate

ApprovedBy: akmal
ApproveDate: 11/08/17
Checked: Yes

Manufacturer	Catalog Num:	Lot Num:	Date Rec:	Exp Date:	Rec By:	Num of Cont	Volume /Cont	Conc:	Units:
Seidler	SC-3375-1C	631104	11/07/17	11/06/22	Lopez, Jose	2	100L	neat	neat

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Hampton-Clarke
Analytical & Field Services

175 ROUTE 46 WEST, UNIT D · FAIRFIELD, NJ 07004
2 MADISON ROAD, FAIRFIELD, NJ 07004
800-426-9992 · 973-244-9770
FAX: 973-244-9787
WWW.HCVLAB.COM

Project: Dzus

Client PO: Not Available

Report To: AECOM
100 Red School House Rd.
Suite B-1
Chestnut Ridge, NY 10977

Attn: Paul Kareth

Received Date: 9/21/2017

Report Date: 10/6/2017

Deliverables: NYDOH-CatA

Lab ID: AD00167

Lab Project No: 7092116

This report is a true report of results obtained from our tests of this material. The report relates only to those samples received and analyzed by the laboratory. All results meet the requirements of the NELAC Institute standards. Laboratory reports may not be reproduced, except in full, without the written approval of the laboratory.

In lieu of a formal contract document, the total aggregate liability of Hampton-Clarke to all parties shall not exceed Hampton-Clarke's total fee for analytical services rendered.

Robin Cousineau - Quality Assurance Director OR **Jean Revolus - Laboratory Director**

NJ (07071) NY (ELAP11408) CT (PH-0671)
PA (68-00463) KY (90124)

Hampton-Clarke
Analytical & Field Services

7092116

THIS CATEGORY "A" REPORT
IS NUMBERED FROM
1 to103

HC Case Narrative

Client: AECOM
Project: Dzus

HC Project: 7092116

This case narrative is in the form of an exception report. Method specific and/or QA/QC anomalies related to this report only are detailed below.

Metals Analysis:

The Matrix Spike and/or Matrix Spike Duplicate for batches 61436 and 61437 had recoveries outside QC limits. Please refer to the applicable Form 5/7 for the recoveries.

The RPD between the QC sample and the Method Replicate had recoveries outside QC limits in batches 61436 and 61437. Please refer to the applicable Form 6/9 for the recoveries.

The MS/MSD RPD had recoveries outside QC limits in batch 61436. Please refer to the applicable Form 6/9 for the recoveries.

The serial dilution for batches 91436 and 61438 is outside QC limits for one or more analytes. Please refer to the applicable Form 6/9 for the recoveries.

Robin Cousineau
Quality Assurance Director

Or

Jean Revolus
Laboratory Director

10/6/2017
Date

7092116 0002

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
Ph (Service Center): 856-780-6057 Fax: 856-780-6056

Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 7092116

Page 1 of 2

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
8 Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: Chestnut Ridge NY
1b) Email/Cell/Fax/Ph: Paul.Kareth@Aecom.com
1c) Send Invoice to: Paul Kareth
1d) Send Report to: " "

Project Information

2a) Project: DZUS
2b) Project Mgr: Paul Kareth
2c) Project Location (City/State): Chestnut Ridge NY
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # A700167

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

===> Check If Contingent ===>

7) Analysis (specify methods & parameter lists)

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	TAL Metals	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
001	SED - 06	S	9/21/17	8:15	X		X	1X								
002	SW - 06	OT	↓	↓		X	X							1X		SURFACE WATER
003	SED - 05	S	9/21/17	8:50	X		X	1X								
004	SW - 05	OT	↓	↓		X	X							1X		SURFACE WATER
005	SED - 07	S	9/21/17	8:30	X		X	1X								
006	SW - 07	OT	9/21/17	↓		X	X							1X		SURFACE WATER
007	SED - 01	S	9/21/17	10:30	X		X	1X								
008	SW - 01	OT	9/21/17	10:30		X	X							1X		SURFACE WATER
009	SED - 02	S	9/21/17	10:45	X		X	1X								
010	SW - 02	OT	9/21/17	10:45		X	X							1X		SURFACE WATER

10) Relinquished by:	Accepted by:	Date	Time
Thomas Peck		9/21/17	1405

11) Sampler (print name): THOMAS PECK Date: 9/21/17

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-9

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

Hampton-Clarke, Inc. (WBE/DBE/SBE)

175 Route 46 West and 2 Madison Road, Fairfield, New Jersey 07004
Ph: 800-426-9992 | 973-244-9770 Fax: 973-244-9787 | 973-439-1458
Service Center: 137-D Gaither Drive, Mount Laurel, New Jersey 08054
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Hampton-Clarke WBE/DBE/SBE 800-426-9992

A Women-Owned, Disadvantaged, Small Business Enterprise

NELAC/NJ #07071 | PA #68-00463 | NY #11408 | CT #PH-0671 | KY #90124 | DE HSCA Approved

CHAIN OF CUSTODY RECORD

Project # (Lab Use Only): 709216

Page 2 of 2

709216 0003

3) Reporting Requirements (Please Circle)

Turnaround	Report Type	Electronic Data Deliv.
When Available:	Summary	NJ Hazsite
1 Business Day (100%)*	Results + QC (Waste)	Excel Reg. NJ / NY / PA
2 Business Days (75%)*	Reduced:	EnviroData
3 Business Days (50%)*	[ ] NJ [ ] NY	EQuIS:
4 Business Days (35%)*	[ ] PA [ ] Other___	[ ] 4-File [ ] EZ
5 Business Days (25%)	NJ Full / NY ASP CatB	[ ] NYDEC
(8) Business Days (Stand.)	NY ASP CatA	[ ] Region 2 or 5
Other:		Other:

* Expedited TAT Not Always Available. Please Check with Lab.

Customer Information

1a) Customer: AECOM
Address: CHESTNUT RIDGE NY
1b) Email/Cell/Fax/Ph: PAUL.KARETH@AECOM.COM
1c) Send Invoice to: PAUL KARETH
1d) Send Report to: " "

Project Information

2a) Project: DZUS
2b) Project Mgr: PAUL KARETH
2c) Project Location (City/State): CHESTNUT RIDGE, NY
2d) Quote/PO # (If Applicable):

FOR LAB USE ONLY ↓

Batch # A000167

Matrix Codes
DW - Drinking Water; S - Soil; A - Air; GW - Ground Water; SL - Sludge; WW - Waste Water; OL - Oil; OT - Other (please specify under item 9, Comments)

===> Check If Contingent ===>

<=== Check If Contingent <===

Lab Sample #	4) Customer Sample ID	5) Matrix	6) Sample Date	6) Sample Time	Sample Type: Composite (C)	Sample Type: Grab (G)	7) Analysis: TAL METALS	8) # of Bottles: None	MeOH	En Core	NaOH	HCl	H2SO4	HNO3	Other:	9) Comments
011	SED-03	S	9/21/17	11:00	X		X	X1								
012	SW-03	OT	9/21/17	11:00		X	X							X1		SURFACE WATER
013	SED-04	S	9/21/17	11:15	X		X	X1								
014	SW-04	OT	9/21/17	11:15		X	X							X1		SURFACE WATER
015	SED-01 MS	S	9/21/17	10:30	X		X	1X								
016	SED-01 MSD	S	9/21/17	10:30	X		X	1X								
017	SW-01 MS	OT	9/21/17	10:30		X	X							1X		SURFACE WATER
018	SW-01 MSD	OT	9/21/17	10:30		X	X							1X		SURFACE WATER
019	SW-FB	OT	9/21/17	11:30		X	X							1X		FIELD BLANK
620	SED-FB	S	9/21/17	11:35	X		X	X1						1		FIELD BLANIC

10) Relinquished by:	Accepted by:	Date	Time
Thomas Peck		9/21/17	1405

11) Sampler (print name): THOMAS PECK Date: 9/21/17

Additional Notes

Comments, Notes, Special Requirements, HAZARDS

Indicate if low-level methods required to meet current groundwater standards (SPLP for soil):
- [ ] BN or BNA (8270D SIM)
- [ ] VOC (8260C SIM or 8011)
- [ ] SPLP (BN, BNA, Metals)
- [ ] 1,4 Dioxane

For NJ LSRP projects, indicate which standards need to be met:
- [ ] NJDEP GWQS
- [ ] NJDEP SRS
- [ ] NJDEP SPLP
- [ ] Other (specify):

Check if applicable:
- [ ] Project-Specific Reporting Limits
- [ ] High Contaminant Concentrations
- [ ] NJ LSRP Project (also check boxes above/right)

Cooler Temperature: 2-4

Please note NUMBERED items. If not completed your analytical work may be delayed.
A fee of $5/sample will be assessed for storage should sample not be activated for any analysis.

Internal use: sampling plan (check box) HC [ ] or client [ ] FSP#

CONDITION UPON RECEIPT

Batch Number AD00167 Entered By: maxwell
Date Entered 9/21/2017 2:31:00 PM

1	Yes	Is there a corresponding COC included with the samples?
2	Yes	Are the samples in a container such as a cooler or Ice chest?
3	NO	Are the COC seals intact?
4	T0054	<--- Thermometer ID. Please specify the Temperature inside the container (in degC). 2.9
5	Yes	Are the samples refrigerated (where required)/have they arrived on ice?
6	Yes	Are the samples within the holding times for the parameters listed on the COC? IF no, list parameters and samples:
7	Yes	Are all of the sample bottles intact? If no, specify sample numbers broken/leaking
8	Yes	Are all of the sample labels or numbers legible? If no specify:
9	Yes	Do the contents match the COC? If no, specify
10	Yes	Is there enough sample sent for the analyses listed on the COC? If no, specify:
11	Yes	Are samples preserved correctly?
12	Yes	Was temperature blank present (Place comment below if not)? If not was temperature of samples verified?
13	NA	Other comments ...Specify
14	NA	Corrective actions (Specify item number and corrective action taken).

PRESERVATION DOCUMENT

Batch Number AD00167 Entered By: maxwell

Date Entered 9/21/2017 2:31:00 PM

Lab#:	Container Size	Container/Vial Check	Parameter	Preservative	Preservative Lot#	PH	pH Lot#
AD00167-001	NA	NA	NA	NA	NA	NA	NA
AD00167-002	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-003	NA	NA	NA	NA	NA	NA	NA
AD00167-004	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-005	NA	NA	NA	NA	NA	NA	NA
AD00167-006	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-007	NA	NA	NA	NA	NA	NA	NA
AD00167-008	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-009	NA	NA	NA	NA	NA	NA	NA
AD00167-010	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-011	NA	NA	NA	NA	NA	NA	NA
AD00167-012	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-013	NA	NA	NA	NA	NA	NA	NA
AD00167-014	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-015	NA	NA	NA	NA	NA	NA	NA
AD00167-016	NA	NA	NA	NA	NA	NA	NA
AD00167-017	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-018	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-019	1L	P	METALS	HNO3	169331	1	HC693124
AD00167-020	1L	P	METALS	HNO3	169331	1	HC693124

Internal Chain of Custody

Lab#:	DateTime:	Loc or User	Bot Nu	A/M	Analysis
AD00167-001	09/21/17 14:05	MAXW	0	M	Received
AD00167-001	09/21/17 14:20	MAXW	0	M	Login
AD00167-001	09/21/17 15:33	R12	1	A	NONE
AD00167-001	09/21/17 22:14	R12	1	A	NONE
AD00167-001	09/21/17 22:14	PA	1	A	mix
AD00167-001	09/22/17 07:41	JMP	1	A	solids
AD00167-001	09/22/17 10:07	R12	1	A	NONE
AD00167-001	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-001	09/23/17 14:40	R12	1	A	NONE
AD00167-002	09/21/17 14:05	MAXW	0	M	Received
AD00167-002	09/21/17 14:20	MAXW	0	M	Login
AD00167-002	09/21/17 15:33	R12	1	A	NONE
AD00167-002	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-002	09/28/17 08:56	R12	1	A	NONE
AD00167-003	09/21/17 14:05	MAXW	0	M	Received
AD00167-003	09/21/17 14:20	MAXW	0	M	Login
AD00167-003	09/21/17 15:33	R12	1	A	NONE
AD00167-003	09/21/17 22:14	PA	1	A	mix
AD00167-003	09/21/17 22:14	R12	1	A	NONE
AD00167-003	09/22/17 07:41	JMP	1	A	solids
AD00167-003	09/22/17 10:07	R12	1	A	NONE
AD00167-003	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-003	09/23/17 14:40	R12	1	A	NONE
AD00167-004	09/21/17 14:05	MAXW	0	M	Received
AD00167-004	09/21/17 14:20	MAXW	0	M	Login
AD00167-004	09/21/17 15:33	R12	1	A	NONE
AD00167-004	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-004	09/28/17 08:56	R12	1	A	NONE
AD00167-005	09/21/17 14:05	MAXW	0	M	Received
AD00167-005	09/21/17 14:20	MAXW	0	M	Login
AD00167-005	09/21/17 15:33	R12	1	A	NONE
AD00167-005	09/21/17 22:14	PA	1	A	mix
AD00167-005	09/21/17 22:14	R12	1	A	NONE
AD00167-005	09/22/17 07:41	JMP	1	A	solids
AD00167-005	09/22/17 10:07	R12	1	A	NONE
AD00167-005	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-005	09/23/17 14:40	R12	1	A	NONE
AD00167-006	09/21/17 14:05	MAXW	0	M	Received
AD00167-006	09/21/17 14:20	MAXW	0	M	Login
AD00167-006	09/21/17 15:33	R12	1	A	NONE
AD00167-006	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-006	09/28/17 08:56	R12	1	A	NONE
AD00167-007	09/21/17 14:05	MAXW	0	M	Received
AD00167-007	09/21/17 14:20	MAXW	0	M	Login
AD00167-007	09/21/17 15:33	R12	1	A	NONE
AD00167-007	09/21/17 22:14	R12	1	A	NONE
AD00167-007	09/21/17 22:14	PA	1	A	mix
AD00167-007	09/22/17 07:41	JMP	1	A	solids
AD00167-007	09/22/17 10:07	R12	1	A	NONE
AD00167-007	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-007	09/23/17 14:40	R12	1	A	NONE
AD00167-008	09/21/17 14:05	MAXW	0	M	Received
AD00167-008	09/21/17 14:20	MAXW	0	M	Login
AD00167-008	09/21/17 15:33	R12	1	A	NONE
AD00167-008	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-008	09/28/17 08:56	R12	1	A	NONE
AD00167-009	09/21/17 14:05	MAXW	0	M	Received
AD00167-009	09/21/17 14:20	MAXW	0	M	Login
AD00167-009	09/21/17 15:33	R12	1	A	NONE
AD00167-009	09/21/17 22:14	PA	1	A	mix
AD00167-009	09/21/17 22:14	R12	1	A	NONE
AD00167-009	09/22/17 07:41	JMP	1	A	solids
AD00167-009	09/22/17 10:07	R12	1	A	NONE
AD00167-009	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-009	09/23/17 14:40	R12	1	A	NONE
AD00167-010	09/21/17 14:05	MAXW	0	M	Received
AD00167-010	09/21/17 14:20	MAXW	0	M	Login
AD00167-010	09/21/17 15:33	R12	1	A	NONE
AD00167-010	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-010	09/28/17 08:56	R12	1	A	NONE
AD00167-011	09/21/17 14:05	MAXW	0	M	Received
AD00167-011	09/21/17 14:20	MAXW	0	M	Login
AD00167-011	09/21/17 15:33	R12	1	A	NONE
AD00167-011	09/21/17 22:14	PA	1	A	mix
AD00167-011	09/21/17 22:14	R12	1	A	NONE
AD00167-011	09/22/17 07:41	JMP	1	A	solids
AD00167-011	09/22/17 10:07	R12	1	A	NONE
AD00167-011	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-011	09/23/17 14:40	R12	1	A	NONE
AD00167-012	09/21/17 14:05	MAXW	0	M	Received
AD00167-012	09/21/17 14:20	MAXW	0	M	Login
AD00167-012	09/21/17 15:33	R12	1	A	NONE
AD00167-012	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-012	09/28/17 08:56	R12	1	A	NONE
AD00167-013	09/21/17 14:05	MAXW	0	M	Received
AD00167-013	09/21/17 14:20	MAXW	0	M	Login
AD00167-013	09/21/17 15:33	R12	1	A	NONE
AD00167-013	09/21/17 22:14	PA	1	A	mix
AD00167-013	09/21/17 22:14	R12	1	A	NONE
AD00167-013	09/22/17 07:41	JMP	1	A	solids
AD00167-013	09/22/17 10:07	R12	1	A	NONE
AD00167-013	09/23/17 14:40	R12	1	A	NONE
AD00167-013	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-014	09/21/17 14:05	MAXW	0	M	Received
AD00167-014	09/21/17 14:20	MAXW	0	M	Login
AD00167-014	09/21/17 15:33	R12	1	A	NONE
AD00167-014	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-014	09/28/17 08:56	R12	1	A	NONE
AD00167-015	09/21/17 14:05	MAXW	0	M	Received
AD00167-015	09/21/17 14:20	MAXW	0	M	Login
AD00167-015	09/21/17 15:33	R12	1	A	NONE
AD00167-015	09/21/17 22:14	R12	1	A	NONE
AD00167-015	09/21/17 22:14	PA	1	A	mix
AD00167-015	09/22/17 07:41	JMP	1	A	solids
AD00167-015	09/22/17 10:07	R12	1	A	NONE
AD00167-015	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-015	09/23/17 14:40	R12	1	A	NONE
AD00167-016	09/21/17 14:05	MAXW	0	M	Received
AD00167-016	09/21/17 14:20	MAXW	0	M	Login
AD00167-016	09/21/17 15:33	R12	1	A	NONE
AD00167-016	09/21/17 22:14	PA	1	A	mix
AD00167-016	09/21/17 22:14	R12	1	A	NONE
AD00167-016	09/22/17 07:41	JMP	1	A	solids
AD00167-016	09/22/17 10:07	R12	1	A	NONE
AD00167-016	09/23/17 14:40	CJA	1	A	tdsi-hg
AD00167-016	09/23/17 14:40	R12	1	A	NONE
AD00167-017	09/21/17 14:05	MAXW	0	M	Received
AD00167-017	09/21/17 14:20	MAXW	0	M	Login
AD00167-017	09/21/17 15:33	R12	1	A	NONE
AD00167-017	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-017	09/28/17 08:56	R12	1	A	NONE
AD00167-018	09/21/17 14:05	MAXW	0	M	Received
AD00167-018	09/21/17 14:20	MAXW	0	M	Login
AD00167-018	09/21/17 15:33	R12	1	A	NONE
AD00167-018	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-018	09/28/17 08:56	R12	1	A	NONE
AD00167-019	09/21/17 14:05	MAXW	0	M	Received
AD00167-019	09/21/17 14:20	MAXW	0	M	Login
AD00167-019	09/21/17 15:33	R12	1	A	NONE
AD00167-019	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-019	09/28/17 08:56	R12	1	A	NONE
AD00167-020	09/21/17 14:05	MAXW	0	M	Received
AD00167-020	09/21/17 14:20	MAXW	0	M	Login
AD00167-020	09/21/17 15:33	R12	1	A	NONE
AD00167-020	09/28/17 08:54	AM	1	A	TDWI/HG
AD00167-020	09/28/17 08:56	R12	1	A	NONE

Samples marked as received are stored in coolers or refrigerator R12, or R24 at 4 deg C until Login

Laboratory Chronicle

Client: AECOM
Project: Dzus

HC Project #: 7092116

Lab#: AD00167-001 **Sample ID: SED-06**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 17:56	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:39	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 16:04	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 20:27	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 17:38	PC

Lab#: AD00167-002 **Sample ID: SW-06**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:17	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 19:29	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 21:53	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:04	PC

Lab#: AD00167-003 **Sample ID: SED-05**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 18:01	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 20:31	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:42	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 16:08	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 17:44	PC

Lab#: AD00167-004 **Sample ID: SW-05**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:18	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 19:32	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:03	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:10	PC

Laboratory Chronicle

Client: AECOM
Project: Dzus

HC Project #: 7092116

Lab#: AD00167-005 **Sample ID: SED-07**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 18:02	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 20:34	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 16:11	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:46	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 17:50	PC

Lab#: AD00167-006 **Sample ID: SW-07**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:19	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 19:36	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:06	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:16	PC

Lab#: AD00167-007 **Sample ID: SED-01**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 17:50	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:08	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 15:25	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 19:56	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 16:40	PC

Lab#: AD00167-008 **Sample ID: SW-01**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:10	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 21:13	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 18:05	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 20:06	PC

Laboratory Chronicle

Client: AECOM
Project: Dzus

HC Project #: 7092116

Lab#: AD00167-009 **Sample ID: SED-02**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 18:03	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:49	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 16:15	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 20:38	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 17:56	PC

Lab#: AD00167-010 **Sample ID: SW-02**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:24	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:10	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 19:39	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:22	PC

Lab#: AD00167-011 **Sample ID: SED-03**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 18:05	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 17:12	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 16:41	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 21:00	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 18:02	PC

Lab#: AD00167-012 **Sample ID: SW-03**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:25	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 19:43	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:13	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:28	PC

Laboratory Chronicle

Client: AECOM
Project: Dzus

HC Project #: 7092116

Lab#: AD00167-013 **Sample ID: SED-04**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 18:06	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 16:45	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 21:04	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 17:15	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 18:07	PC

Lab#: AD00167-014 **Sample ID: SW-04**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:27	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 19:46	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:16	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:34	PC

Lab#: AD00167-015 **Sample ID: SED-01 MS**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 17:53	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:15	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 20:03	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 15:33	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 16:58	PC

Lab#: AD00167-016 **Sample ID: SED-01 MSD**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
% Solids SM2540G				SM 2540G	9/22/17 00:00	jessica
Mercury (Soil/Waste) 7471B	EPA 7471B	09/25/17 11:00	carmela	EPA 7471B	9/25/17 17:55	OA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/23/17 16:18	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/25/17 15:38	CJA
TAL Metals 6010	3005&10/3050	09/23/17 11:00	Carmela	EPA 6010C	9/26/17 20:07	CJA
TAL Metals 6020	3005&10/3050	09/23/17 10:30	Carmela	EPA 6020A	9/23/17 17:03	PC

Laboratory Chronicle

Client: AECOM
Project: Dzus

HC Project #: 7092116

Lab#: AD00167-017 **Sample ID: SW-01 MS**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:13	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 21:20	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 18:12	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 20:23	PC

Lab#: AD00167-018 **Sample ID: SW-01 MSD**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:15	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 18:17	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 21:23	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 20:29	PC

Lab#: AD00167-019 **Sample ID: SW-FB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:28	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 20:01	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:29	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:40	PC

Lab#: AD00167-020 **Sample ID: SED-FB**

Test Code	Prep Method	Prep Date	By	Analytical Method	Analysis Date	By
Mercury (Water) 7470A	EPA 7470A	09/28/17 08:20	aadewusi	EPA 7470A	9/28/17 21:29	OA
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/28/17 20:05	SRB
TAL Metals 6010	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6010C	9/29/17 11:32	SRB
TAL Metals 6020	3005&10/3050	09/28/17 08:20	aadewusi	EPA 6020A	9/28/17 21:46	PC

HC Reporting Limit Definitions/Data Qualifiers

REPORTING DEFINITIONS

DF = Dilution Factor

MDL = Method Detection Limit

RL* = Reporting Limit

ND = Not Detected

RT = Retention Time

NA = Not Applicable

**Samples with elevated Reporting Limits (RLs) as a result of a dilution may not achieve client reporting limits in some cases. The elevated RLs are unavoidable consequences of sample dilution required to quantitate target analytes that exceed the calibration range of the instrument.*

DATA QUALIFIERS

A- Indicates that the Tentatively Identified Compound (TIC) is suspected to be an aldol-condensation product. These compounds are by-products of acetone and methylene chloride used in the extraction process.

B- Indicates analyte was present in the Method Blank and sample.

d- For Pesticide and PCB analysis, the concentration between primary and secondary columns is greater than 40%. The lower concentration is generally reported.

E- Indicates the concentration exceeded the upper calibration range of the instrument.

J- Indicates the value is estimated because it is either a Tentatively Identified Compound (TIC) or the reported concentration is greater than the MDL but less than the RL. For samples results between the MDL and RL there is a possibility of false positives or misidentification at the quantitation levels. Additionally, the acceptance criteria for QC samples may not be met.

R- Retention Time is out.

Y- Indicates a contaminant found in the blank at less than 10% of the concentration of a contaminant found in the sample.

HC Report of Analysis

Client: AECOM
Project: Dzus

HC Project #: 7092116

Sample ID: SED-06
Lab#: AD00167-001
Matrix: Sediment

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	260	4800
Barium	1	mg/kg	13	36
Calcium	1	mg/kg	1300	5800
Chromium	1	mg/kg	6.5	22
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.5	47
Iron	1	mg/kg	260	14000
Lead	1	mg/kg	6.5	85
Magnesium	1	mg/kg	650	2400
Manganese	1	mg/kg	13	320
Nickel	1	mg/kg	6.5	11
Potassium	1	mg/kg	650	ND
Sodium	1	mg/kg	320	ND
Vanadium	1	mg/kg	13	21
Zinc	1	mg/kg	13	290

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	1	mg/kg	0.26	3.0
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	1.3
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID: SW-06 **Collection Date:** 9/21/2017
Lab#: AD00167-002 **Receipt Date:** 9/21/2017
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**ug/l**	**200**	**1400**
Barium	**1**	**ug/l**	**50**	**69**
Calcium	**1**	**ug/l**	**5000**	**29000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**4600**
Magnesium	**1**	**ug/l**	**5000**	**6900**
Manganese	**1**	**ug/l**	**40**	**2700**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**13000**
Vanadium	1	ug/l	50	ND
Zinc	**1**	**ug/l**	**50**	**210**

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	**1**	**ug/l**	**2.0**	**3.6**
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	**1**	**ug/l**	**2.0**	**3.3**
Lead	**1**	**ug/l**	**3.0**	**39**
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-05 **Collection Date:** 9/21/2017
Lab#: AD00167-003 **Receipt Date:** 9/21/2017
Matrix: Sediment

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		72

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.12	0.15

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	280	6600
Barium	1	mg/kg	14	42
Calcium	1	mg/kg	1400	15000
Chromium	1	mg/kg	6.9	26
Cobalt	1	mg/kg	3.5	4.2
Copper	1	mg/kg	6.9	38
Iron	1	mg/kg	280	15000
Lead	1	mg/kg	6.9	100
Magnesium	1	mg/kg	690	9000
Manganese	1	mg/kg	14	220
Nickel	1	mg/kg	6.9	13
Potassium	1	mg/kg	690	730
Sodium	1	mg/kg	350	ND
Vanadium	1	mg/kg	14	42
Zinc	1	mg/kg	14	340

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	1	mg/kg	0.28	1.4
Beryllium	1	mg/kg	0.28	ND
Cadmium	1	mg/kg	0.56	8.6
Selenium	1	mg/kg	2.8	ND
Silver	1	mg/kg	0.28	ND
Thallium	1	mg/kg	0.56	ND

Sample ID: SW-05
Lab#: AD00167-004
Matrix: Aqueous

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**13000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**390**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**590**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**24000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**5.6**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-07 **Collection Date:** 9/21/2017
Lab#: AD00167-005 **Receipt Date:** 9/21/2017
Matrix: Sediment

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		75

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	270	3200
Barium	1	mg/kg	13	25
Calcium	1	mg/kg	1300	60000
Chromium	1	mg/kg	6.7	28
Cobalt	1	mg/kg	3.3	4.4
Copper	1	mg/kg	6.7	22
Iron	1	mg/kg	270	16000
Lead	1	mg/kg	6.7	91
Magnesium	1	mg/kg	670	34000
Manganese	1	mg/kg	13	130
Nickel	1	mg/kg	6.7	15
Potassium	1	mg/kg	670	ND
Sodium	1	mg/kg	330	ND
Vanadium	1	mg/kg	13	23
Zinc	1	mg/kg	13	250

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.1	ND
Arsenic	1	mg/kg	0.27	1.2
Beryllium	1	mg/kg	0.27	ND
Cadmium	1	mg/kg	0.53	6.1
Selenium	1	mg/kg	2.7	ND
Silver	1	mg/kg	0.27	ND
Thallium	1	mg/kg	0.53	ND

Sample ID: SW-07
Lab#: AD00167-006
Matrix: Aqueous
Collection Date: 9/21/2017
Receipt Date: 9/21/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**14000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**400**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**630**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**25000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**5.9**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-01 | **Collection Date:** 9/21/2017
Lab#: AD00167-007 | **Receipt Date:** 9/21/2017
Matrix: Sediment

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	260	2500
Barium	1	mg/kg	13	13
Calcium	1	mg/kg	1300	1300
Chromium	1	mg/kg	6.5	7.0
Cobalt	1	mg/kg	3.2	ND
Copper	1	mg/kg	6.5	18
Iron	1	mg/kg	260	4800
Lead	1	mg/kg	6.5	22
Magnesium	1	mg/kg	650	770
Manganese	1	mg/kg	13	170
Nickel	1	mg/kg	6.5	ND
Potassium	1	mg/kg	650	ND
Sodium	1	mg/kg	320	ND
Vanadium	1	mg/kg	13	ND
Zinc	1	mg/kg	13	55

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	ND
Arsenic	1	mg/kg	0.26	1.2
Beryllium	1	mg/kg	0.26	ND
Cadmium	1	mg/kg	0.52	5.8
Selenium	1	mg/kg	2.6	ND
Silver	1	mg/kg	0.26	ND
Thallium	1	mg/kg	0.52	ND

Sample ID: SW-01 **Collection Date:** 9/21/2017
Lab#: AD00167-008 **Receipt Date:** 9/21/2017
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**16000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	**1**	**ug/l**	**300**	**800**
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**1400**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**28000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	**1**	**ug/l**	**2.0**	**2.7**
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-02 **Collection Date:** 9/21/2017
Lab#: AD00167-009 **Receipt Date:** 9/21/2017
Matrix: Sediment

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	**1**	**percent**		**10**

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.83	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	**1**	**mg/kg**	**2000**	**8500**
Barium	**1**	**mg/kg**	**100**	**360**
Calcium	1	mg/kg	10000	ND
Chromium	1	mg/kg	50	ND
Cobalt	1	mg/kg	25	ND
Copper	**1**	**mg/kg**	**50**	**120**
Iron	**1**	**mg/kg**	**2000**	**61000**
Lead	**1**	**mg/kg**	**50**	**190**
Magnesium	1	mg/kg	5000	ND
Manganese	**1**	**mg/kg**	**100**	**14000**
Nickel	1	mg/kg	50	ND
Potassium	1	mg/kg	5000	ND
Sodium	1	mg/kg	2500	ND
Vanadium	1	mg/kg	100	ND
Zinc	**1**	**mg/kg**	**100**	**480**

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	8.0	ND
Arsenic	**1**	**mg/kg**	**2.0**	**17**
Beryllium	1	mg/kg	2.0	ND
Cadmium	**1**	**mg/kg**	**4.0**	**79**
Selenium	1	mg/kg	20	ND
Silver	1	mg/kg	2.0	ND
Thallium	1	mg/kg	4.0	ND

Sample ID: SW-02 **Collection Date:** 9/21/2017
Lab#: AD00167-010 **Receipt Date:** 9/21/2017
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**17000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**250**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**28000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-03 **Collection Date:** 9/21/2017
Lab#: AD00167-011 **Receipt Date:** 9/21/2017
Matrix: Sediment

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		32

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.26	0.29

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	620	4300
Barium	1	mg/kg	31	47
Calcium	1	mg/kg	3100	3400
Chromium	1	mg/kg	16	18
Cobalt	1	mg/kg	7.8	9.1
Copper	1	mg/kg	16	46
Iron	1	mg/kg	620	9600
Lead	1	mg/kg	16	100
Magnesium	1	mg/kg	1600	ND
Manganese	1	mg/kg	31	390
Nickel	1	mg/kg	16	ND
Potassium	1	mg/kg	1600	ND
Sodium	1	mg/kg	780	ND
Vanadium	1	mg/kg	31	ND
Zinc	1	mg/kg	31	200

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	2.5	ND
Arsenic	1	mg/kg	0.62	5.1
Beryllium	1	mg/kg	0.62	ND
Cadmium	1	mg/kg	1.2	53
Selenium	1	mg/kg	6.3	ND
Silver	1	mg/kg	0.62	ND
Thallium	1	mg/kg	1.2	ND

Sample ID: SW-03 **Collection Date:** 9/21/2017
Lab#: AD00167-012 **Receipt Date:** 9/21/2017
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**16000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**180**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**27000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-04 **Collection Date:** 9/21/2017
Lab#: AD00167-013 **Receipt Date:** 9/21/2017
Matrix: Sediment

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		23

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.36	1.1

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	870	13000
Barium	1	mg/kg	43	110
Calcium	1	mg/kg	4300	4500
Chromium	1	mg/kg	22	48
Cobalt	1	mg/kg	11	20
Copper	1	mg/kg	22	140
Iron	1	mg/kg	870	20000
Lead	1	mg/kg	22	400
Magnesium	1	mg/kg	2200	ND
Manganese	1	mg/kg	43	830
Nickel	1	mg/kg	22	30
Potassium	1	mg/kg	2200	ND
Sodium	1	mg/kg	1100	ND
Vanadium	1	mg/kg	43	45
Zinc	1	mg/kg	43	510

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	3.5	ND
Arsenic	1	mg/kg	0.87	5.8
Beryllium	1	mg/kg	0.87	ND
Cadmium	1	mg/kg	1.7	74
Selenium	1	mg/kg	8.7	ND
Silver	1	mg/kg	0.87	ND
Thallium	1	mg/kg	1.7	ND

Sample ID: SW-04 | **Collection Date:** 9/21/2017
Lab#: AD00167-014 | **Receipt Date:** 9/21/2017
Matrix: Aqueous

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	**1**	**ug/l**	**5000**	**16000**
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	**1**	**ug/l**	**40**	**250**
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	**1**	**ug/l**	**5000**	**27000**
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-01 MS
Lab#: AD00167-015
Matrix: Sediment

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		78

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	2.2

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	260	1900
Barium	1	mg/kg	13	69
Calcium	1	mg/kg	1300	7300
Chromium	1	mg/kg	6.4	77
Cobalt	1	mg/kg	3.2	63
Copper	1	mg/kg	6.4	88
Iron	1	mg/kg	260	6200
Lead	1	mg/kg	6.4	77
Magnesium	1	mg/kg	640	6700
Manganese	1	mg/kg	13	170
Nickel	1	mg/kg	6.4	69
Potassium	1	mg/kg	640	6300
Sodium	1	mg/kg	320	6300
Vanadium	1	mg/kg	13	74
Zinc	1	mg/kg	13	97

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	37
Arsenic	1	mg/kg	0.26	57
Beryllium	1	mg/kg	0.26	56
Cadmium	1	mg/kg	0.51	62
Selenium	1	mg/kg	2.6	53
Silver	1	mg/kg	0.26	10
Thallium	1	mg/kg	0.51	55

Sample ID: SED-01 MSD
Lab#: AD00167-016
Matrix: Sediment

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

% Solids SM2540G

Analyte	DF	Units	RL	Result
% Solids	1	percent		77

Mercury (Soil/Waste) 7471B

Analyte	DF	Units	RL	Result
Mercury	1	mg/kg	0.11	2.2

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	mg/kg	260	2700
Barium	1	mg/kg	13	72
Calcium	1	mg/kg	1300	7300
Chromium	1	mg/kg	6.5	67
Cobalt	1	mg/kg	3.2	63
Copper	1	mg/kg	6.5	73
Iron	1	mg/kg	260	1900
Lead	1	mg/kg	6.5	89
Magnesium	1	mg/kg	650	6600
Manganese	1	mg/kg	13	160
Nickel	1	mg/kg	6.5	66
Potassium	1	mg/kg	650	6300
Sodium	1	mg/kg	320	6300
Vanadium	1	mg/kg	13	72
Zinc	1	mg/kg	13	95

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	mg/kg	1.0	38
Arsenic	1	mg/kg	0.26	57
Beryllium	1	mg/kg	0.26	55
Cadmium	1	mg/kg	0.52	67
Selenium	1	mg/kg	2.6	54
Silver	1	mg/kg	0.26	10
Thallium	1	mg/kg	0.52	53

Sample ID: SW-01 MS
Lab#: AD00167-017
Matrix: Aqueous

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	9.8

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5200
Barium	1	ug/l	50	550
Calcium	1	ug/l	5000	69000
Chromium	1	ug/l	50	520
Copper	1	ug/l	50	520
Iron	1	ug/l	300	5700
Magnesium	1	ug/l	5000	55000
Manganese	1	ug/l	40	1800
Nickel	1	ug/l	50	520
Potassium	1	ug/l	5000	52000
Silver	1	ug/l	20	100
Sodium	1	ug/l	5000	79000
Vanadium	1	ug/l	50	520
Zinc	1	ug/l	50	530

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	520
Arsenic	1	ug/l	2.0	500
Beryllium	1	ug/l	1.0	520
Cadmium	1	ug/l	2.0	510
Cobalt	1	ug/l	2.0	480
Lead	1	ug/l	3.0	510
Selenium	1	ug/l	10	480
Thallium	1	ug/l	2.0	510

Sample ID: SW-01 MSD
Lab#: AD00167-018
Matrix: Aqueous

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	9.6

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	5100
Barium	1	ug/l	50	540
Calcium	1	ug/l	5000	68000
Chromium	1	ug/l	50	510
Copper	1	ug/l	50	520
Iron	1	ug/l	300	5700
Magnesium	1	ug/l	5000	54000
Manganese	1	ug/l	40	1800
Nickel	1	ug/l	50	510
Potassium	1	ug/l	5000	52000
Silver	1	ug/l	20	100
Sodium	1	ug/l	5000	77000
Vanadium	1	ug/l	50	510
Zinc	1	ug/l	50	520

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	500
Arsenic	1	ug/l	2.0	480
Beryllium	1	ug/l	1.0	500
Cadmium	1	ug/l	2.0	490
Cobalt	1	ug/l	2.0	480
Lead	1	ug/l	3.0	480
Selenium	1	ug/l	10	470
Thallium	1	ug/l	2.0	480

Sample ID: SW-FB
Lab#: AD00167-019
Matrix: Aqueous

Collection Date: 9/21/2017
Receipt Date: 9/21/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Sample ID: SED-FB
Lab#: AD00167-020
Matrix: Aqueous
Collection Date: 9/21/2017
Receipt Date: 9/21/2017

Mercury (Water) 7470A

Analyte	DF	Units	RL	Result
Mercury	1	ug/l	0.50	ND

TAL Metals 6010

Analyte	DF	Units	RL	Result
Aluminum	1	ug/l	200	ND
Barium	1	ug/l	50	ND
Calcium	1	ug/l	5000	ND
Chromium	1	ug/l	50	ND
Copper	1	ug/l	50	ND
Iron	1	ug/l	300	ND
Magnesium	1	ug/l	5000	ND
Manganese	1	ug/l	40	ND
Nickel	1	ug/l	50	ND
Potassium	1	ug/l	5000	ND
Silver	1	ug/l	20	ND
Sodium	1	ug/l	5000	ND
Vanadium	1	ug/l	50	ND
Zinc	1	ug/l	50	ND

TAL Metals 6020

Analyte	DF	Units	RL	Result
Antimony	1	ug/l	3.0	ND
Arsenic	1	ug/l	2.0	ND
Beryllium	1	ug/l	1.0	ND
Cadmium	1	ug/l	2.0	ND
Cobalt	1	ug/l	2.0	ND
Lead	1	ug/l	3.0	ND
Selenium	1	ug/l	10	ND
Thallium	1	ug/l	2.0	ND

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61436 (100) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61436 (100) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	0.5	50	09/25/17	61436	S21507D3	11	P	PEICPRAD3A
7440-36-0	Antimony	4.0	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-38-2	Arsenic	4.0	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-39-3	Barium	10	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-41-7	Beryllium	1.2	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-43-9	Cadmium	1.2	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-70-2	Calcium	1000	ND	1	0.5	50	09/25/17	61436	S21507D3	11	P	PEICPRAD3A
7440-47-3	Chromium	5.0	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-48-4	Cobalt	2.5	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-50-8	Copper	5.0	ND	1	0.5	50	09/26/17	61436	S21507E3	12	P	PEICP3A
7439-89-6	Iron	200	ND	1	0.5	50	09/25/17	61436	S21507D3	11	P	PEICPRAD3A
7439-92-1	Lead	5.0	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7439-95-4	Magnesium	500	ND	1	0.5	50	09/25/17	61436	S21507D3	11	P	PEICPRAD3A
7439-96-5	Manganese	10	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7439-98-7	Molybdenum	2.5	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-02-0	Nickel	5.0	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-09-7	Potassium	500	ND	1	0.5	50	09/25/17	61436	S21507D3	11	P	PEICPRAD3A
7782-49-2	Selenium	3.0	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-22-4	Silver	1.5	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-23-5	Sodium	250	ND	1	0.5	50	09/25/17	61436	S21507D3	11	P	PEICPRAD3A
7440-28-0	Thallium	1.5	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-31-5	Tin	20	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-32-6	Titanium	10	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-62-2	Vanadium	10	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A
7440-66-6	Zinc	10	ND	1	0.5	50	09/23/17	61436	S21507A3	12	P	PEICP3A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61438 (1) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61438 (1) Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	11	CV	HGCV1A
7439-98-7	Molybdenum	20	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/28/17	61438	SW21509B2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	09/28/17	61438	SW21509B2	11	P	PEICPRAD2A
7440-31-5	Tin	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-32-6	Titanium	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	SW21509A2	15	P	PEICP2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61437 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61437 Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	0.80	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA
7440-38-2	Arsenic	0.20	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA
7440-41-7	Beryllium	0.20	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA
7440-43-9	Cadmium	0.40	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA
7782-49-2	Selenium	2.0	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA
7440-22-4	Silver	0.20	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA
7440-28-0	Thallium	0.40	ND	1	0.5	100	09/23/17	61437	S092317B	17	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61438 % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61438 Units: UG/L Lab Code:
Matrix: AQUEOUS
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	17	MS	MS2_7500SWA

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID: MB 61436 (167) % Solid: 0 Lab Name: Hampton-Clarke
Client Id: MB 61436 (167) Units: MG/KG Lab Code:
Matrix: SOIL
Level: LOW

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7439-97-6	Mercury	0.083	ND	1	0.15	25	09/25/17	61436	H21507S	11	CV	HGCV2A

Comments: _____

Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-001	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-06	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	260	4800	1	0.5	50	09/25/17	61436	S21507D3	23	P	PEICPRAD3A
7440-39-3	Barium	13	36	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7440-70-2	Calcium	1300	5800	1	0.5	50	09/25/17	61436	S21507D3	23	P	PEICPRAD3A
7440-47-3	Chromium	6.5	22	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7440-48-4	Cobalt	3.2	ND	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7440-50-8	Copper	6.5	47	1	0.5	50	09/26/17	61436	S21507E3	24	P	PEICP3A
7439-89-6	Iron	260	14000	1	0.5	50	09/25/17	61436	S21507D3	23	P	PEICPRAD3A
7439-92-1	Lead	6.5	85	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7439-95-4	Magnesium	650	2400	1	0.5	50	09/25/17	61436	S21507D3	23	P	PEICPRAD3A
7439-96-5	Manganese	13	320	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	09/25/17	61436	H21507S	20	CV	HGCV2A
7440-02-0	Nickel	6.5	11	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7440-09-7	Potassium	650	ND	1	0.5	50	09/25/17	61436	S21507D3	23	P	PEICPRAD3A
7440-23-5	Sodium	320	ND	1	0.5	50	09/25/17	61436	S21507D3	23	P	PEICPRAD3A
7440-62-2	Vanadium	13	21	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A
7440-66-6	Zinc	13	290	1	0.5	50	09/23/17	61436	S21507A3	24	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-001	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-06	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.0	ND	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA
7440-38-2	Arsenic	0.26	3.0	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA
7440-41-7	Beryllium	0.26	ND	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA
7440-43-9	Cadmium	0.52	1.3	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA
7440-28-0	Thallium	0.52	ND	1	0.5	100	09/23/17	61437	S092317B	31	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-06	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	1400	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-39-3	Barium	50	69	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-70-2	Calcium	5000	29000	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7439-89-6	Iron	300	4600	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7439-95-4	Magnesium	5000	6900	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7439-96-5	Manganese	40	2700	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	18	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/28/17	61438	W21509B2	27	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-23-5	Sodium	5000	13000	1	50	50	09/28/17	61438	W21509B2	27	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A
7440-66-6	Zinc	50	210	1	50	50	09/28/17	61438	W21509A2	38	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-002	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-06	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	3.6	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	3.3	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7439-92-1	Lead	3.0	39	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	30	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-003	% Solid:	72	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-05	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	280	6600	1	0.5	50	09/25/17	61436	S21507D3	24	P	PEICPRAD3A
7440-39-3	Barium	14	42	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7440-70-2	Calcium	1400	15000	1	0.5	50	09/25/17	61436	S21507D3	24	P	PEICPRAD3A
7440-47-3	Chromium	6.9	26	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7440-48-4	Cobalt	3.5	4.2	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7440-50-8	Copper	6.9	38	1	0.5	50	09/26/17	61436	S21507E3	25	P	PEICP3A
7439-89-6	Iron	280	15000	1	0.5	50	09/25/17	61436	S21507D3	24	P	PEICPRAD3A
7439-92-1	Lead	6.9	100	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7439-95-4	Magnesium	690	9000	1	0.5	50	09/25/17	61436	S21507D3	24	P	PEICPRAD3A
7439-96-5	Manganese	14	220	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7439-97-6	Mercury	0.12	0.15	1	0.15	25	09/25/17	61436	H21507S	23	CV	HGCV2A
7440-02-0	Nickel	6.9	13	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7440-09-7	Potassium	690	730	1	0.5	50	09/25/17	61436	S21507D3	24	P	PEICPRAD3A
7440-23-5	Sodium	350	ND	1	0.5	50	09/25/17	61436	S21507D3	24	P	PEICPRAD3A
7440-62-2	Vanadium	14	42	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A
7440-66-6	Zinc	14	340	1	0.5	50	09/23/17	61436	S21507A3	25	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-003	% Solid:	72	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-05	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.1	ND	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA
7440-38-2	Arsenic	0.28	1.4	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA
7440-41-7	Beryllium	0.28	ND	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA
7440-43-9	Cadmium	0.56	8.6	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA
7782-49-2	Selenium	2.8	ND	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA
7440-22-4	Silver	0.28	ND	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA
7440-28-0	Thallium	0.56	ND	1	0.5	100	09/23/17	61437	S092317B	32	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-05	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-70-2	Calcium	5000	13000	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7439-89-6	Iron	300	390	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7439-96-5	Manganese	40	590	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	19	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	11	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-23-5	Sodium	5000	24000	1	50	50	09/29/17	61438	W21509C2	11	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	39	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-004	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-05	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	5.6	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	31	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-005	% Solid:	75	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-07	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	270	3200	1	0.5	50	09/25/17	61436	S21507D3	25	P	PEICPRAD3A
7440-39-3	Barium	13	25	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7440-70-2	Calcium	1300	60000	1	0.5	50	09/25/17	61436	S21507D3	25	P	PEICPRAD3A
7440-47-3	Chromium	6.7	28	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7440-48-4	Cobalt	3.3	4.4	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7440-50-8	Copper	6.7	22	1	0.5	50	09/26/17	61436	S21507E3	26	P	PEICP3A
7439-89-6	Iron	270	16000	1	0.5	50	09/25/17	61436	S21507D3	25	P	PEICPRAD3A
7439-92-1	Lead	6.7	91	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7439-95-4	Magnesium	670	34000	1	0.5	50	09/25/17	61436	S21507D3	25	P	PEICPRAD3A
7439-96-5	Manganese	13	130	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	09/25/17	61436	H21507S	24	CV	HGCV2A
7440-02-0	Nickel	6.7	15	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7440-09-7	Potassium	670	ND	1	0.5	50	09/25/17	61436	S21507D3	25	P	PEICPRAD3A
7440-23-5	Sodium	330	ND	1	0.5	50	09/25/17	61436	S21507D3	25	P	PEICPRAD3A
7440-62-2	Vanadium	13	23	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A
7440-66-6	Zinc	13	250	1	0.5	50	09/23/17	61436	S21507A3	26	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-005	% Solid:	75	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-07	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.1	ND	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA
7440-38-2	Arsenic	0.27	1.2	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA
7440-41-7	Beryllium	0.27	ND	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA
7440-43-9	Cadmium	0.53	6.1	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA
7782-49-2	Selenium	2.7	ND	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA
7440-22-4	Silver	0.27	ND	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA
7440-28-0	Thallium	0.53	ND	1	0.5	100	09/23/17	61437	S092317B	33	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-07	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-70-2	Calcium	5000	14000	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7439-89-6	Iron	300	400	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7439-96-5	Manganese	40	630	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	20	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	12	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-23-5	Sodium	5000	25000	1	50	50	09/29/17	61438	W21509C2	12	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	40	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-006	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-07	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	5.9	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	32	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-007	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-01	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	260	2500	1	0.5	50	09/25/17	61436	S21507D3	14	P	PEICPRAD3A
7440-39-3	Barium	13	13	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7440-70-2	Calcium	1300	1300	1	0.5	50	09/25/17	61436	S21507D3	14	P	PEICPRAD3A
7440-47-3	Chromium	6.5	7.0	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7440-48-4	Cobalt	3.2	ND	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7440-50-8	Copper	6.5	18	1	0.5	50	09/26/17	61436	S21507E3	15	P	PEICP3A
7439-89-6	Iron	260	4800	1	0.5	50	09/25/17	61436	S21507D3	14	P	PEICPRAD3A
7439-92-1	Lead	6.5	22	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7439-95-4	Magnesium	650	770	1	0.5	50	09/25/17	61436	S21507D3	14	P	PEICPRAD3A
7439-96-5	Manganese	13	170	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7439-97-6	Mercury	0.11	ND	1	0.15	25	09/25/17	61436	H21507S	16	CV	HGCV2A
7440-02-0	Nickel	6.5	ND	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7440-09-7	Potassium	650	ND	1	0.5	50	09/25/17	61436	S21507D3	14	P	PEICPRAD3A
7440-23-5	Sodium	320	ND	1	0.5	50	09/25/17	61436	S21507D3	14	P	PEICPRAD3A
7440-62-2	Vanadium	13	ND	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A
7440-66-6	Zinc	13	55	1	0.5	50	09/23/17	61436	S21507A3	15	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-007	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-01	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.0	ND	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA
7440-38-2	Arsenic	0.26	1.2	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA
7440-41-7	Beryllium	0.26	ND	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA
7440-43-9	Cadmium	0.52	5.8	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA
7782-49-2	Selenium	2.6	ND	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA
7440-22-4	Silver	0.26	ND	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA
7440-28-0	Thallium	0.52	ND	1	0.5	100	09/23/17	61437	S092317B	21	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-01	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-39-3	Barium	50	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-47-3	Chromium	50	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-50-8	Copper	50	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7439-89-6	Iron	300	800	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7439-96-5	Manganese	40	1400	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	14	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	100	100	09/28/17	61438	W21509B2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-23-5	Sodium	5000	28000	1	100	100	09/28/17	61438	W21509B2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A
7440-66-6	Zinc	50	ND	1	100	100	09/28/17	61438	W21509A2	18	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-008	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-01	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	2.7	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	100	200	09/28/17	61438	A092817A	20	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-009	% Solid:	10	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-02	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	2000	8500	1	0.5	50	09/25/17	61436	S21507D3	26	P	PEICPRAD3A
7440-39-3	Barium	100	360	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7440-70-2	Calcium	10000	ND	1	0.5	50	09/25/17	61436	S21507D3	26	P	PEICPRAD3A
7440-47-3	Chromium	50	ND	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7440-48-4	Cobalt	25	ND	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7440-50-8	Copper	50	120	1	0.5	50	09/26/17	61436	S21507E3	27	P	PEICP3A
7439-89-6	Iron	2000	61000	1	0.5	50	09/25/17	61436	S21507D3	26	P	PEICPRAD3A
7439-92-1	Lead	50	190	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7439-95-4	Magnesium	5000	ND	1	0.5	50	09/25/17	61436	S21507D3	26	P	PEICPRAD3A
7439-96-5	Manganese	100	14000	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7439-97-6	Mercury	0.83	ND	1	0.15	25	09/25/17	61436	H21507S	25	CV	HGCV2A
7440-02-0	Nickel	50	ND	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7440-09-7	Potassium	5000	ND	1	0.5	50	09/25/17	61436	S21507D3	26	P	PEICPRAD3A
7440-23-5	Sodium	2500	ND	1	0.5	50	09/25/17	61436	S21507D3	26	P	PEICPRAD3A
7440-62-2	Vanadium	100	ND	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A
7440-66-6	Zinc	100	480	1	0.5	50	09/23/17	61436	S21507A3	27	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-009	% Solid:	10	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-02	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	8.0	ND	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	17	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA
7440-41-7	Beryllium	2.0	ND	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA
7440-43-9	Cadmium	4.0	79	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA
7782-49-2	Selenium	20	ND	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA
7440-22-4	Silver	2.0	ND	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA
7440-28-0	Thallium	4.0	ND	1	0.5	100	09/23/17	61437	S092317B	34	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-02	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-70-2	Calcium	5000	17000	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7439-96-5	Manganese	40	250	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	23	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	13	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-23-5	Sodium	5000	28000	1	50	50	09/29/17	61438	W21509C2	13	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	41	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-010	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-02	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	33	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-011	% Solid:	32	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-03	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	620	4300	1	0.5	50	09/25/17	61436	S21507D3	32	P	PEICPRAD3A
7440-39-3	Barium	31	47	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7440-70-2	Calcium	3100	3400	1	0.5	50	09/25/17	61436	S21507D3	32	P	PEICPRAD3A
7440-47-3	Chromium	16	18	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7440-48-4	Cobalt	7.8	9.1	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7440-50-8	Copper	16	46	1	0.5	50	09/26/17	61436	S21507E3	33	P	PEICP3A
7439-89-6	Iron	620	9600	1	0.5	50	09/25/17	61436	S21507D3	32	P	PEICPRAD3A
7439-92-1	Lead	16	100	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7439-95-4	Magnesium	1600	ND	1	0.5	50	09/25/17	61436	S21507D3	32	P	PEICPRAD3A
7439-96-5	Manganese	31	390	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7439-97-6	Mercury	0.26	0.29	1	0.15	25	09/25/17	61436	H21507S	26	CV	HGCV2A
7440-02-0	Nickel	16	ND	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7440-09-7	Potassium	1600	ND	1	0.5	50	09/25/17	61436	S21507D3	32	P	PEICPRAD3A
7440-23-5	Sodium	780	ND	1	0.5	50	09/25/17	61436	S21507D3	32	P	PEICPRAD3A
7440-62-2	Vanadium	31	ND	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A
7440-66-6	Zinc	31	200	1	0.5	50	09/23/17	61436	S21507A3	33	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-011	% Solid:	32	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-03	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	2.5	ND	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA
7440-38-2	Arsenic	0.62	5.1	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA
7440-41-7	Beryllium	0.62	ND	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA
7440-43-9	Cadmium	1.2	53	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA
7782-49-2	Selenium	6.3	ND	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA
7440-22-4	Silver	0.62	ND	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA
7440-28-0	Thallium	1.2	ND	1	0.5	100	09/23/17	61437	S092317B	35	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-03	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7439-96-5	Manganese	40	180	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	24	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	14	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-23-5	Sodium	5000	27000	1	50	50	09/29/17	61438	W21509C2	14	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	42	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-012	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-03	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	34	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-013	% Solid:	23	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-04	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	870	13000	1	0.5	50	09/25/17	61436	S21507D3	33	P	PEICPRAD3A
7440-39-3	Barium	43	110	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7440-70-2	Calcium	4300	4500	1	0.5	50	09/25/17	61436	S21507D3	33	P	PEICPRAD3A
7440-47-3	Chromium	22	48	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7440-48-4	Cobalt	11	20	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7440-50-8	Copper	22	140	1	0.5	50	09/26/17	61436	S21507E3	34	P	PEICP3A
7439-89-6	Iron	870	20000	1	0.5	50	09/25/17	61436	S21507D3	33	P	PEICPRAD3A
7439-92-1	Lead	22	400	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7439-95-4	Magnesium	2200	ND	1	0.5	50	09/25/17	61436	S21507D3	33	P	PEICPRAD3A
7439-96-5	Manganese	43	830	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7439-97-6	Mercury	0.36	1.1	1	0.15	25	09/25/17	61436	H21507S	27	CV	HGCV2A
7440-02-0	Nickel	22	30	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7440-09-7	Potassium	2200	ND	1	0.5	50	09/25/17	61436	S21507D3	33	P	PEICPRAD3A
7440-23-5	Sodium	1100	ND	1	0.5	50	09/25/17	61436	S21507D3	33	P	PEICPRAD3A
7440-62-2	Vanadium	43	45	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A
7440-66-6	Zinc	43	510	1	0.5	50	09/23/17	61436	S21507A3	34	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-013	% Solid:	23	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-04	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.5	ND	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA
7440-38-2	Arsenic	0.87	5.8	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA
7440-41-7	Beryllium	0.87	ND	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA
7440-43-9	Cadmium	1.7	74	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA
7782-49-2	Selenium	8.7	ND	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA
7440-22-4	Silver	0.87	ND	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA
7440-28-0	Thallium	1.7	ND	1	0.5	100	09/23/17	61437	S092317B	36	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-04	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-70-2	Calcium	5000	16000	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7439-96-5	Manganese	40	250	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	25	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	15	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-23-5	Sodium	5000	27000	1	50	50	09/29/17	61438	W21509C2	15	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	43	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-014	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-04	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	35	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-015	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-01 MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	260	1900	1	0.5	50	09/25/17	61436	S21507D3	16	P	PEICPRAD3A
7440-39-3	Barium	13	69	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7440-70-2	Calcium	1300	7300	1	0.5	50	09/25/17	61436	S21507D3	16	P	PEICPRAD3A
7440-47-3	Chromium	6.4	77	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7440-48-4	Cobalt	3.2	63	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7440-50-8	Copper	6.4	88	1	0.5	50	09/26/17	61436	S21507E3	17	P	PEICP3A
7439-89-6	Iron	260	6200	1	0.5	50	09/25/17	61436	S21507D3	16	P	PEICPRAD3A
7439-92-1	Lead	6.4	77	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7439-95-4	Magnesium	640	6700	1	0.5	50	09/25/17	61436	S21507D3	16	P	PEICPRAD3A
7439-96-5	Manganese	13	170	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7439-97-6	Mercury	0.11	2.2	1	0.15	25	09/25/17	61436	H21507S	18	CV	HGCV2A
7440-02-0	Nickel	6.4	69	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7440-09-7	Potassium	640	6300	1	0.5	50	09/25/17	61436	S21507D3	16	P	PEICPRAD3A
7440-23-5	Sodium	320	6300	1	0.5	50	09/25/17	61436	S21507D3	16	P	PEICPRAD3A
7440-62-2	Vanadium	13	74	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A
7440-66-6	Zinc	13	97	1	0.5	50	09/23/17	61436	S21507A3	17	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-015	% Solid:	78	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-01 MS	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.0	37	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA
7440-38-2	Arsenic	0.26	57	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA
7440-41-7	Beryllium	0.26	56	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA
7440-43-9	Cadmium	0.51	62	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA
7782-49-2	Selenium	2.6	53	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA
7440-22-4	Silver	0.26	10	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA
7440-28-0	Thallium	0.51	55	1	0.5	100	09/23/17	61437	S092317B	24	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-016	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-01 MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	260	2700	1	0.5	50	09/25/17	61436	S21507D3	17	P	PEICPRAD3A
7440-39-3	Barium	13	72	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7440-70-2	Calcium	1300	7300	1	0.5	50	09/25/17	61436	S21507D3	17	P	PEICPRAD3A
7440-47-3	Chromium	6.5	67	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7440-48-4	Cobalt	3.2	63	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7440-50-8	Copper	6.5	73	1	0.5	50	09/26/17	61436	S21507E3	18	P	PEICP3A
7439-89-6	Iron	260	1900	1	0.5	50	09/25/17	61436	S21507D3	17	P	PEICPRAD3A
7439-92-1	Lead	6.5	89	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7439-95-4	Magnesium	650	6600	1	0.5	50	09/25/17	61436	S21507D3	17	P	PEICPRAD3A
7439-96-5	Manganese	13	160	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7439-97-6	Mercury	0.11	2.2	1	0.15	25	09/25/17	61436	H21507S	19	CV	HGCV2A
7440-02-0	Nickel	6.5	66	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7440-09-7	Potassium	650	6300	1	0.5	50	09/25/17	61436	S21507D3	17	P	PEICPRAD3A
7440-23-5	Sodium	320	6300	1	0.5	50	09/25/17	61436	S21507D3	17	P	PEICPRAD3A
7440-62-2	Vanadium	13	72	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A
7440-66-6	Zinc	13	95	1	0.5	50	09/23/17	61436	S21507A3	18	P	PEICP3A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-016	% Solid:	77	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-01 MSD	Units:	MG/KG	Lab Code:		Sdg No:	
Matrix:	SOIL	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	1.0	38	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA
7440-38-2	Arsenic	0.26	57	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA
7440-41-7	Beryllium	0.26	55	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA
7440-43-9	Cadmium	0.52	67	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA
7782-49-2	Selenium	2.6	54	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA
7440-22-4	Silver	0.26	10	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA
7440-28-0	Thallium	0.52	53	1	0.5	100	09/23/17	61437	S092317B	25	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-01 MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5200	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-39-3	Barium	50	550	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-70-2	Calcium	5000	69000	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-47-3	Chromium	50	520	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-50-8	Copper	50	520	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7439-89-6	Iron	300	5700	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7439-95-4	Magnesium	5000	55000	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7439-96-5	Manganese	40	1800	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7439-97-6	Mercury	0.50	9.8	1	25	25	09/28/17	61438	H21509SW	16	CV	HGCV1A
7440-02-0	Nickel	50	520	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-09-7	Potassium	5000	52000	1	50	50	09/28/17	61438	W21509B2	16	P	PEICPRAD2A
7440-22-4	Silver	20	100	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-23-5	Sodium	5000	79000	1	50	50	09/28/17	61438	W21509B2	16	P	PEICPRAD2A
7440-62-2	Vanadium	50	520	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A
7440-66-6	Zinc	50	530	1	50	50	09/28/17	61438	W21509A2	20	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-017	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-01 MS	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	520	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	500	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	520	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	510	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	480	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7439-92-1	Lead	3.0	510	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7782-49-2	Selenium	10	480	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	510	1	50	100	09/28/17	61438	A092817A	23	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-018	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-01 MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	5100	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-39-3	Barium	50	540	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-70-2	Calcium	5000	68000	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-47-3	Chromium	50	510	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-50-8	Copper	50	520	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7439-89-6	Iron	300	5700	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7439-95-4	Magnesium	5000	54000	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7439-96-5	Manganese	40	1800	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7439-97-6	Mercury	0.50	9.6	1	25	25	09/28/17	61438	H21509SW	17	CV	HGCV1A
7440-02-0	Nickel	50	510	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-09-7	Potassium	5000	52000	1	50	50	09/28/17	61438	W21509B2	17	P	PEICPRAD2A
7440-22-4	Silver	20	100	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-23-5	Sodium	5000	77000	1	50	50	09/28/17	61438	W21509B2	17	P	PEICPRAD2A
7440-62-2	Vanadium	50	510	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A
7440-66-6	Zinc	50	520	1	50	50	09/28/17	61438	W21509A2	21	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-018	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-01 MSD	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	500	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	480	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	500	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	490	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	480	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7439-92-1	Lead	3.0	480	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7782-49-2	Selenium	10	470	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	480	1	50	100	09/28/17	61438	A092817A	24	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-019	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	26	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	19	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	09/29/17	61438	W21509C2	19	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	47	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-019	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SW-FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	36	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-020	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7429-90-5	Aluminum	200	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-39-3	Barium	50	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-70-2	Calcium	5000	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-47-3	Chromium	50	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-50-8	Copper	50	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7439-89-6	Iron	300	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7439-95-4	Magnesium	5000	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7439-96-5	Manganese	40	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7439-97-6	Mercury	0.50	ND	1	25	25	09/28/17	61438	H21509SW	27	CV	HGCV1A
7440-02-0	Nickel	50	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-09-7	Potassium	5000	ND	1	50	50	09/29/17	61438	W21509C2	20	P	PEICPRAD2A
7440-22-4	Silver	20	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-23-5	Sodium	5000	ND	1	50	50	09/29/17	61438	W21509C2	20	P	PEICPRAD2A
7440-62-2	Vanadium	50	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A
7440-66-6	Zinc	50	ND	1	50	50	09/28/17	61438	W21509A2	48	P	PEICP2A

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

Form1
Inorganic Analysis Data Sheet

Sample ID:	AD00167-020	% Solid:	0	Lab Name:	Hampton-Clarke	Nras No:	
Client Id:	SED-FB	Units:	UG/L	Lab Code:		Sdg No:	
Matrix:	AQUEOUS	Date Rec:	9/21/2017	Contract:		Case No:	
Level:	LOW						

Cas No.	Analyte	RL	Conc	Dil Fact	Initial Wt/Vol	Final Wt/Vol	Analysis Date	Prep Batch	File:	Seq Num	M	Instr
7440-36-0	Antimony	3.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7440-38-2	Arsenic	2.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7440-41-7	Beryllium	1.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7440-43-9	Cadmium	2.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7440-48-4	Cobalt	2.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7439-92-1	Lead	3.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7782-49-2	Selenium	10	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA
7440-28-0	Thallium	2.0	ND	1	50	100	09/28/17	61438	A092817A	37	MS	MS2_7500SWA

Comments: _____

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Flag Codes:

U or ND - Indicates Compound was not found above the detection/reporting limit
P - ICP-AES
CV -ColdVapor
MS - ICP-MS

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/23/17
Data File: S21507A3
Prep Batch: 61436
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB V-261851-22	CCB V-261851-32	CCB V-261851-42	MB 61436 (100)-12
Barium	.1 U	.1 U	.1 U	.1 U	10 U
Beryllium	.012 U	.012 U	.012 U	.012 U	1.2 U
Chromium	.05 U	.05 U	.05 U	.05 U	5 U
Cobalt	.025 U	.025 U	.025 U	.025 U	2.5 U
Lead	.05 U	.05 U	.05 U	.05 U	5 U
Manganese	.1 U	.1 U	.1 U	.1 U	10 U
Nickel	.05 U	.05 U	.05 U	.05 U	5 U
Vanadium	.1 U	.1 U	.1 U	.1 U	10 U
Zinc	.1 U	.1 U	.1 U	.1 U	10 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/25/17
Data File: S21507D3
Prep Batch: 61436
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB V-261851-21	CCB V-261851-31	CCB V-261851-38	MB 61436 (100)-11
Aluminum	2 U	2 U	2 U	2 U	200 U
Calcium	10 U	10 U	10 U	10 U	1000 U
Iron	2 U	2 U	2 U	2 U	200 U
Magnesium	5 U	5 U	5 U	5 U	500 U
Potassium	5 U	5 U	5 U	5 U	500 U
Sodium	2.5 U	2.5 U	2.5 U	2.5 U	250 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/26/17
Data File: S21507E3
Prep Batch: 61436
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP3A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB V-261851-22	CCB V-261851-32	CCB V-261851-41	MB 61436 (100)-12
Copper	.05 U	.05 U	.05 U	.05 U	5 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/23/17
Data File: S092317B
Prep Batch: 61437
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-263907-10	CCB V-263907-16	CCB V-263907-29	CCB V-263907-42	CCB V-263907-48	MB 61437-17	
Antimony	4 U	4 U	4 U	4 U	4 U	800 U	
Arsenic	1 U	1 U	1 U	1 U	1 U	200 U	
Beryllium	1 U	1 U	1 U	1 U	1 U	200 U	
Cadmium	2 U	2 U	2 U	2 U	2 U	400 U	
Selenium	10 U	10 U	10 U	10 U	10 U	2000 U	
Silver	1 U	1 U	1 U	1 U	1 U	200 U	
Thallium	2 U	2 U	2 U	2 U	2 U	400 U	

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/28/17
Data File: A092817A
Prep Batch: 61438
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: MS2_7500SWA
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-263907-10	CCB V-263907-16	CCB V-263907-29	CCB V-263907-42	CCB V-263907-50	MB 61438-17
Antimony	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Arsenic	1 U	1 U	1 U	1 U	1 U	2 U
Beryllium	.5 U	.5 U	.5 U	.5 U	.5 U	1 U
Cadmium	1 U	1 U	1 U	1 U	1 U	2 U
Cobalt	1 U	1 U	1 U	1 U	1 U	2 U
Lead	1.5 U	1.5 U	1.5 U	1.5 U	1.5 U	3 U
Selenium	5 U	5 U	5 U	5 U	5 U	10 U
Thallium	1 U	1 U	1 U	1 U	1 U	2 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/28/17
Data File: SW21509A2
Prep Batch: 61438
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICP2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-9	CCB-14	CCB-25	CCB-37	CCB-46	CCB-53	MB 61438 (1)-15
Aluminum	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U
Barium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Calcium	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Chromium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Copper	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Iron	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U	.3 U
Magnesium	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Manganese	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U	.04 U
Nickel	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Silver	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U	.02 U
Vanadium	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U
Zinc	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U	.05 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/28/17
Data File: SW21509B2
Prep Batch: 61438
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB-21	CCB-32	MB 61438 (1)-11				
Potassium	5 U	5 U	5 U	5 U				
Sodium	5 U	5 U	5 U	5 U				

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/29/17
Data File: SW21509C2
Prep Batch: 61438
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: PEICPRAD2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB V-261851-8	CCB-18	CCB-25					
Potassium	5 U	5 U	5 U					
Sodium	5 U	5 U	5 U					

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/28/17
Data File: H21509SW
Prep Batch: 61438
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV1A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-34	CCB-37	MB 61438 (1)-11
Mercury	.5 U	.5 U	.5 U	.5 U	.5 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM 3
(ICB/CCB/MB Summary)

Date Analyzed: 09/25/17
Data File: H21507S
Prep Batch: 61436
Reporting Limits Used: 6010B/6010C/7470A,7471A/7471B(Hg),6020/6020A
Instrument: HGCV2A
Units: All units in ppm except Hg and icp-ms in ppb
Project Number: 7092116

Lab Name: Hampton-Clarke
Lab Code:
Contract:
Nras No:
Sdg No:
Case No:

Analyte	ICB-10	CCB-22	CCB-30	MB 61436 (167)-11
Mercury	.5 U	.5 U	.5 U	83 U

Notes: a-indicates absolute value of result found above the reporting limits in CCB/ICB or result found above reporting limit in the MB
u-indicates result below reporting limit

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61436

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61436

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61436	1	S21507D3	13	68.7786	80.80	85		49	151
Barium	61436	1	S21507A3	14	1.0551	1.10	96		82	118
Calcium	61436	1	S21507D3	13	67.2640	64.50	104		82	118
Chromium	61436	1	S21507A3	14	0.6661	0.650	102		79	121
Cobalt	61436	1	S21507A3	14	0.5578	0.588	95		84	116
Copper	61436	1	S21507E3	14	0.5722	0.564	101		80	120
Iron	61436	1	S21507D3	13	169.0400	147.00	115		46	154
Lead	61436	1	S21507A3	14	0.8238	0.856	96		82	118
Magnesium	61436	1	S21507D3	13	25.5532	27.10	94		76	124
Manganese	61436	1	S21507A3	14	2.9422	2.73	108		81	119
Mercury	61436	5	H21507S	15	13.3900	73.8	91		64	136
Nickel	61436	1	S21507A3	14	0.5994	0.613	98		83	117
Potassium	61436	1	S21507D3	13	23.1501	24.20	96		69	131
Sodium	61436	1	S21507D3	13	9.0470	9.14	99		72	128
Vanadium	61436	1	S21507A3	14	0.6134	0.563	109		77	123
Zinc	61436	1	S21507A3	14	2.0285	1.98	102		82	117

TxtQcType: LCS Matrix: SOIL SampleID: LCS 61436

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61436	1	S21507D3	12	69.4138	80.80	86		49	151
Barium	61436	1	S21507A3	13	1.0617	1.10	97		82	118
Calcium	61436	1	S21507D3	12	66.7213	64.50	103		82	118
Chromium	61436	1	S21507A3	13	0.6612	0.650	102		79	121
Cobalt	61436	1	S21507A3	13	0.5483	0.588	93		84	116
Copper	61436	1	S21507E3	13	0.5692	0.564	101		80	120
Iron	61436	1	S21507D3	12	163.4270	147.00	111		46	154
Lead	61436	1	S21507A3	13	0.8133	0.856	95		82	118
Magnesium	61436	1	S21507D3	12	25.1163	27.10	93		76	124
Manganese	61436	1	S21507A3	13	2.6615	2.73	97		81	119
Mercury	61436	5	H21507S	14	13.4200	73.8	91		64	136
Nickel	61436	1	S21507A3	13	0.5952	0.613	97		83	117
Potassium	61436	1	S21507D3	12	22.8252	24.20	94		69	131
Sodium	61436	1	S21507D3	12	8.8960	9.14	97		72	128
Vanadium	61436	1	S21507A3	13	0.6178	0.563	110		77	123
Zinc	61436	1	S21507A3	13	1.9991	1.98	101		82	117

TxtQcType: MSD Matrix: SOIL SampleID: AD00167-016

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61436	1	S21507D3	17	S21507D3	14	20.9866	19.2526	5.0	35	a	75	125
Barium	61436	1	S21507A3	18	S21507A3	15	0.5512	0.1021	0.5	90		75	125
Calcium	61436	1	S21507D3	17	S21507D3	14	55.8717	10.2245	50	91		75	125
Chromium	61436	1	S21507A3	18	S21507A3	15	0.5129	0.0536	0.5	92		75	125
Cobalt	61436	1	S21507A3	18	S21507A3	15	0.4883	0.025U	0.5	98		75	125
Copper	61436	1	S21507E3	18	S21507E3	15	0.5606	0.1353	0.5	85		75	125
Iron	61436	1	S21507D3	17	S21507D3	14	14.6362	36.9297	5.0	-450	b	75	125
Lead	61436	1	S21507A3	18	S21507A3	15	0.6818	0.1694	0.5	102		75	125
Magnesium	61436	1	S21507D3	17	S21507D3	14	51.1094	5.9380	50	90		75	125
Manganese	61436	1	S21507A3	18	S21507A3	15	1.1956	1.2788	0.5	-17	a	75	125
Mercury	61436	1	H21507S	19	H21507S	16	10.2800	.5U	10	103		75	125
Nickel	61436	1	S21507A3	18	S21507A3	15	0.5061	0.05U	0.5	101		75	125
Potassium	61436	1	S21507D3	17	S21507D3	14	48.1670	5U	50	96		75	125
Sodium	61436	1	S21507D3	17	S21507D3	14	48.6762	2.5U	50	97		75	125
Vanadium	61436	1	S21507A3	18	S21507A3	15	0.5562	0.1U	0.5	111		75	125
Zinc	61436	1	S21507A3	18	S21507A3	15	0.7317	0.4198	0.5	62	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61436

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MS Matrix: SOIL SampleID: AD00167-015

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61436	1	S21507D3	16	S21507D3	14	14.7566	19.2526	5.0	-90	a	75	125
Barium	61436	1	S21507A3	17	S21507A3	15	0.5393	0.1021	0.5	87		75	125
Calcium	61436	1	S21507D3	16	S21507D3	14	56.7072	10.2245	50	93		75	125
Chromium	61436	1	S21507A3	17	S21507A3	15	0.6014	0.0536	0.5	110		75	125
Cobalt	61436	1	S21507A3	17	S21507A3	15	0.4929	0.025U	0.5	99		75	125
Copper	61436	1	S21507E3	17	S21507E3	15	0.6841	0.1353	0.5	110		75	125
Iron	61436	1	S21507D3	16	S21507D3	14	48.2468	36.9297	5.0	226	b	75	125
Lead	61436	1	S21507A3	17	S21507A3	15	0.6029	0.1694	0.5	87		75	125
Magnesium	61436	1	S21507D3	16	S21507D3	14	52.5680	5.9380	50	93		75	125
Manganese	61436	1	S21507A3	17	S21507A3	15	1.3065	1.2788	0.5	5.5	a	75	125
Mercury	61436	1	H21507S	18	H21507S	16	10.1100	.5U	10	101		75	125
Nickel	61436	1	S21507A3	17	S21507A3	15	0.5376	0.05U	0.5	108		75	125
Potassium	61436	1	S21507D3	16	S21507D3	14	49.2367	5U	50	98		75	125
Sodium	61436	1	S21507D3	16	S21507D3	14	48.8776	2.5U	50	98		75	125
Vanadium	61436	1	S21507A3	17	S21507A3	15	0.5767	0.1U	0.5	115		75	125
Zinc	61436	1	S21507A3	17	S21507A3	15	0.7591	0.4198	0.5	68	a	75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61436

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: SOIL SampleID: AD00167-007

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	S21507D3	18	S21507D3	14	23.7901	19.2526	5.0	91		80	120
Barium	1	S21507A3	19	S21507A3	15	0.6083	0.1021	0.50	101		80	120
Calcium	1	S21507D3	18	S21507D3	14	64.0906	10.2245	50	108		80	120
Chromium	1	S21507A3	19	S21507A3	15	0.5647	0.0536	0.50	102		80	120
Cobalt	1	S21507A3	19	S21507A3	15	0.5154	0.025U	0.50	103		80	120
Copper	1	S21507E3	19	S21507E3	15	0.6455	0.1353	0.50	102		80	120
Iron	1	S21507D3	18	S21507D3	14	41.4427	36.9297	5.0	90		80	120
Lead	1	S21507A3	19	S21507A3	15	0.6616	0.1694	0.50	98		80	120
Magnesium	1	S21507D3	18	S21507D3	14	57.9416	5.9380	50	104		80	120
Manganese	1	S21507A3	19	S21507A3	15	1.6590	1.2788	0.50	76	a	80	120
Nickel	1	S21507A3	19	S21507A3	15	0.5405	0.05U	0.50	108		80	120
Potassium	1	S21507D3	18	S21507D3	14	53.4640	5U	50	107		80	120
Sodium	1	S21507D3	18	S21507D3	14	52.4719	2.5U	50	105		80	120
Vanadium	1	S21507A3	19	S21507A3	15	0.6211	0.1U	0.50	124	a	80	120
Zinc	1	S21507A3	19	S21507A3	15	0.9202	0.4198	0.50	100		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61437

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61437

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61437	1	S092317B	19	46.8700	88.2	53		0.02	197.3
Arsenic	61437	1	S092317B	19	53.6700	57	94		75.1	124.9
Beryllium	61437	1	S092317B	19	58.7000	67.5	87		82.8	117.2
Cadmium	61437	1	S092317B	19	73.2900	77.8	94		82.8	117.2
Selenium	61437	1	S092317B	19	72.8000	78.9	92		77.6	122.4
Silver	61437	1	S092317B	19	50.9800	54.2	94		74.7	125.3
Thallium	61437	1	S092317B	19	169.6000	178	95		79.2	120.2

TxtQcType: LCS Matrix: SOIL SampleID: LCS 61437

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61437	1	S092317B	18	46.9700	88.2	53		0.02	197.3
Arsenic	61437	1	S092317B	18	53.9000	57	95		75.1	124.9
Beryllium	61437	1	S092317B	18	58.2600	67.5	86		82.8	117.2
Cadmium	61437	1	S092317B	18	72.7900	77.8	94		82.8	117.2
Selenium	61437	1	S092317B	18	71.5100	78.9	91		77.6	122.4
Silver	61437	1	S092317B	18	50.8800	54.2	94		74.7	125.3
Thallium	61437	1	S092317B	18	171.0000	178	96		79.2	120.2

TxtQcType: MSD Matrix: SOIL SampleID: AD00167-016

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61437	1	S092317B	25	S092317B	21	146.0000	4U	250	58	a	75	125
Arsenic	61437	1	S092317B	25	S092317B	21	218.9000	4.6080	250	86		75	125
Beryllium	61437	1	S092317B	25	S092317B	21	212.9000	1U	250	85		75	125
Cadmium	61437	1	S092317B	25	S092317B	21	259.5000	22.4400	250	95		75	125
Selenium	61437	1	S092317B	25	S092317B	21	209.5000	10U	250	84		75	125
Silver	61437	1	S092317B	25	S092317B	21	38.6600	1U	50	77		75	125
Thallium	61437	1	S092317B	25	S092317B	21	204.3000	2U	250	82		75	125

TxtQcType: MS Matrix: SOIL SampleID: AD00167-015

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61437	1	S092317B	24	S092317B	21	146.2000	4U	250	58	a	75	125
Arsenic	61437	1	S092317B	24	S092317B	21	222.1000	4.6080	250	87		75	125
Beryllium	61437	1	S092317B	24	S092317B	21	216.8000	1U	250	87		75	125
Cadmium	61437	1	S092317B	24	S092317B	21	243.6000	22.4400	250	88		75	125
Selenium	61437	1	S092317B	24	S092317B	21	207.6000	10U	250	83		75	125
Silver	61437	1	S092317B	24	S092317B	21	38.9100	1U	50	78		75	125
Thallium	61437	1	S092317B	24	S092317B	21	214.3000	2U	250	86		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61438

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 61438

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61438	1	SW21509	16	4.9785	5.000	100		80	120
Barium	61438	1	SW21509	16	0.4931	0.500	99		80	120
Calcium	61438	1	SW21509	16	49.7727	50.00	100		80	120
Chromium	61438	1	SW21509	16	0.4950	0.500	99		80	120
Copper	61438	1	SW21509	16	0.5029	0.500	101		80	120
Iron	61438	1	SW21509	16	4.9434	5.000	99		80	120
Magnesium	61438	1	SW21509	16	49.7545	50.00	100		80	120
Manganese	61438	1	SW21509	16	0.4924	0.500	98		80	120
Mercury	61438	1	H21509S	12	9.6781	10	97		80	120
Nickel	61438	1	SW21509	16	0.4970	0.500	99		80	120
Potassium	61438	1	SW21509	12	49.0457	50	98		80	120
Silver	61438	1	SW21509	16	0.0972	0.100	97		80	120
Sodium	61438	1	SW21509	12	49.8755	50	100		80	120
Vanadium	61438	1	SW21509	16	0.4938	0.500	99		80	120
Zinc	61438	1	SW21509	16	0.4924	0.500	98		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 61438

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61438	1	SW21509	17	5.0643	5.000	101		80	120
Barium	61438	1	SW21509	17	0.5052	0.500	101		80	120
Calcium	61438	1	SW21509	17	50.9571	50.00	102		80	120
Chromium	61438	1	SW21509	17	0.5069	0.500	101		80	120
Copper	61438	1	SW21509	17	0.5149	0.500	103		80	120
Iron	61438	1	SW21509	17	5.0902	5.000	102		80	120
Magnesium	61438	1	SW21509	17	50.9346	50.00	102		80	120
Manganese	61438	1	SW21509	17	0.5057	0.500	101		80	120
Mercury	61438	1	H21509S	13	10.0032	10	100		80	120
Nickel	61438	1	SW21509	17	0.5068	0.500	101		80	120
Potassium	61438	1	SW21509	13	49.6613	50	99		80	120
Silver	61438	1	SW21509	17	0.0992	0.100	99		80	120
Sodium	61438	1	SW21509	13	50.8700	50	102		80	120
Vanadium	61438	1	SW21509	17	0.5066	0.500	101		80	120
Zinc	61438	1	SW21509	17	0.5059	0.500	101		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD00167-017

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61438	1	SW21509	20	SW21509	18	5.1517	0.2U	5.00	103		75	125
Barium	61438	1	SW21509	20	SW21509	18	0.5462	0.05U	0.50	109		75	125
Calcium	61438	1	SW21509	20	SW21509	18	69.1781	16.4879	50.0	105		75	125
Chromium	61438	1	SW21509	20	SW21509	18	0.5191	0.05U	0.50	104		75	125
Copper	61438	1	SW21509	20	SW21509	18	0.5242	0.05U	0.50	105		75	125
Iron	61438	1	SW21509	20	SW21509	18	5.7315	0.8015	5.00	99		75	125
Magnesium	61438	1	SW21509	20	SW21509	18	54.9476	5U	50.0	110		75	125
Manganese	61438	1	SW21509	20	SW21509	18	1.8159	1.3562	0.50	92		75	125
Mercury	61438	1	H21509S	16	H21509S	14	9.8407	0.50U	10	98		75	125
Nickel	61438	1	SW21509	20	SW21509	18	0.5160	0.05U	0.50	103		75	125
Potassium	61438	1	SW21509	16	SW21509	14	51.8021	5U	50.00	104		75	125
Silver	61438	1	SW21509	20	SW21509	18	0.1019	0.02U	.100	102		75	125
Sodium	61438	1	SW21509	16	SW21509	14	79.1922	27.7998	50.00	103		75	125
Vanadium	61438	1	SW21509	20	SW21509	18	0.5188	0.05U	0.50	104		75	125
Zinc	61438	1	SW21509	20	SW21509	18	0.5267	0.05U	0.50	105		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7
SPIKE RECOVERY DATA
PREP BATCH: 61438

Instrument Type: ICP/HG
Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD00167-018

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	61438	1	SW21509	21	SW21509	18	5.1092	0.2U	5.00	102		75	125
Barium	61438	1	SW21509	21	SW21509	18	0.5392	0.05U	0.50	108		75	125
Calcium	61438	1	SW21509	21	SW21509	18	67.6934	16.4879	50.0	102		75	125
Chromium	61438	1	SW21509	21	SW21509	18	0.5126	0.05U	0.50	103		75	125
Copper	61438	1	SW21509	21	SW21509	18	0.5164	0.05U	0.50	103		75	125
Iron	61438	1	SW21509	21	SW21509	18	5.6724	0.8015	5.00	97		75	125
Magnesium	61438	1	SW21509	21	SW21509	18	54.4747	5U	50.0	109		75	125
Manganese	61438	1	SW21509	21	SW21509	18	1.7596	1.3562	0.50	81		75	125
Mercury	61438	1	H21509S	17	H21509S	14	9.5637	0.50U	10	96		75	125
Nickel	61438	1	SW21509	21	SW21509	18	0.5129	0.05U	0.50	103		75	125
Potassium	61438	1	SW21509	17	SW21509	14	51.6857	5U	50.0	103		75	125
Silver	61438	1	SW21509	21	SW21509	18	0.1006	0.02U	0.100	101		75	125
Sodium	61438	1	SW21509	17	SW21509	14	77.3989	27.7998	50	99		75	125
Vanadium	61438	1	SW21509	21	SW21509	18	0.5122	0.05U	0.50	102		75	125
Zinc	61438	1	SW21509	21	SW21509	18	0.5235	0.05U	0.50	105		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61438

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCS Matrix: AQUEOUS SampleID: LCSW 61438

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61438	1	A092817A	18	233.0000	250	93		80	120
Arsenic	61438	1	A092817A	18	247.8000	250	99		80	120
Beryllium	61438	1	A092817A	18	242.3000	250	97		80	120
Cadmium	61438	1	A092817A	18	231.9000	250	93		80	120
Cobalt	61438	1	A092817A	18	248.4000	250	99		80	120
Lead	61438	1	A092817A	18	227.8000	250	91		80	120
Selenium	61438	1	A092817A	18	241.5000	250	97		80	120
Thallium	61438	1	A092817A	18	226.9000	250	91		80	120

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 61438

Analyte	BatchId	DF	Data Fil	Seq#:	Spk Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61438	1	A092817A	19	254.5000	250	102		80	120
Arsenic	61438	1	A092817A	19	247.0000	250	99		80	120
Beryllium	61438	1	A092817A	19	264.6000	250	106		80	120
Cadmium	61438	1	A092817A	19	253.3000	250	101		80	120
Cobalt	61438	1	A092817A	19	251.0000	250	100		80	120
Lead	61438	1	A092817A	19	247.0000	250	99		80	120
Selenium	61438	1	A092817A	19	239.2000	250	96		80	120
Thallium	61438	1	A092817A	19	247.4000	250	99		80	120

TxtQcType: MS Matrix: AQUEOUS SampleID: AD00167-017

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61438	1	A092817A	23	A092817A	20	260.9000	1.5U	250	104		75	125
Arsenic	61438	1	A092817A	23	A092817A	20	251.7000	1U	250	101		75	125
Beryllium	61438	1	A092817A	23	A092817A	20	262.4000	0.5U	250	105		75	125
Cadmium	61438	1	A092817A	23	A092817A	20	256.3000	1.3570	250	102		75	125
Cobalt	61438	1	A092817A	23	A092817A	20	242.3000	1U	250	97		75	125
Lead	61438	1	A092817A	23	A092817A	20	253.1000	1.5U	250	101		75	125
Selenium	61438	1	A092817A	23	A092817A	20	238.9000	5U	250	96		75	125
Thallium	61438	1	A092817A	23	A092817A	20	254.0000	1U	250	102		75	125

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD00167-018

Analyte	BatchId	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	61438	1	A092817A	24	A092817A	20	249.4000	1.5U	250	100		75	125
Arsenic	61438	1	A092817A	24	A092817A	20	240.6000	1U	250	96		75	125
Beryllium	61438	1	A092817A	24	A092817A	20	252.2000	0.5U	250	101		75	125
Cadmium	61438	1	A092817A	24	A092817A	20	245.8000	1.3570	250	98		75	125
Cobalt	61438	1	A092817A	24	A092817A	20	240.2000	1U	250	96		75	125
Lead	61438	1	A092817A	24	A092817A	20	240.5000	1.5U	250	96		75	125
Selenium	61438	1	A092817A	24	A092817A	20	233.9000	5U	250	94		75	125
Thallium	61438	1	A092817A	24	A092817A	20	240.8000	1U	250	96		75	125

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61438

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS | Matrix: AQUEOUS | SampleID: AD00167-008

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Aluminum	1	SW21509	22	SW21509	18	4.8669	0.2U	5.000	97		80	120
Barium	1	SW21509	22	SW21509	18	0.5153	0.05U	.5	103		80	120
Calcium	1	SW21509	22	SW21509	18	65.7543	16.4879	50.0	99		80	120
Chromium	1	SW21509	22	SW21509	18	0.4862	0.05U	.5000	97		80	120
Copper	1	SW21509	22	SW21509	18	0.4886	0.05U	0.5	98		80	120
Iron	1	SW21509	22	SW21509	18	5.6681	0.8015	5.000	97		80	120
Magnesium	1	SW21509	22	SW21509	18	52.7943	5U	50.0	106		80	120
Manganese	1	SW21509	22	SW21509	18	1.8321	1.3562	.5000	95		80	120
Nickel	1	SW21509	22	SW21509	18	0.4851	0.05U	.5000	97		80	120
Potassium	1	SW21509	18	SW21509	14	49.7652	5U	50.00	100		80	120
Silver	1	SW21509	22	SW21509	18	0.0966	0.02U	0.100	97		80	120
Sodium	1	SW21509	18	SW21509	14	74.5278	27.7998	50.00	93		80	120
Vanadium	1	SW21509	22	SW21509	18	0.4864	0.05U	.5000	97		80	120
Zinc	1	SW21509	22	SW21509	18	0.4917	0.05U	0.500	98		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM5/FORM7

SPIKE RECOVERY DATA

PREP BATCH: 61438

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: PS Matrix: AQUEOUS SampleID: AD00167-008

Analyte	DF	Data Fil	Seq#:	NS Data Fil	Seq#	Spk Conc:	NS Conc:	Spk Adde	Recov	Qual	Lo Lim	Hi Lim
Antimony	1	A092817A	25	A092817A	20	47.0600	1.5U	50	94		80	120
Arsenic	1	A092817A	25	A092817A	20	46.1100	1U	50	92		80	120
Beryllium	1	A092817A	25	A092817A	20	46.3200	0.5U	50	93		80	120
Cadmium	1	A092817A	25	A092817A	20	48.1700	1.3570	50	94		80	120
Cobalt	1	A092817A	25	A092817A	20	46.4500	1U	50	93		80	120
Lead	1	A092817A	25	A092817A	20	47.7000	1.5U	50	95		80	120
Selenium	1	A092817A	25	A092817A	20	214.4000	5U	250	86		80	120
Thallium	1	A092817A	25	A092817A	20	48.7600	1U	50	98		80	120

a-Indicates Recovery Failed the criteria b-Indicates Recovery Failed the criteria but non spike concentration >4*spike amount

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61436

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61436

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	61436	S21507D3	13	S21507D3	12	68.7786	69.4138	.92		20
Barium	61436	S21507A3	14	S21507A3	13	1.0551	1.0617	.63		20
Calcium	61436	S21507D3	13	S21507D3	12	67.2640	66.7213	.81		20
Chromium	61436	S21507A3	14	S21507A3	13	0.6661	0.6612	.74		20
Cobalt	61436	S21507A3	14	S21507A3	13	0.5578	0.5483	1.7		20
Copper	61436	S21507E3	14	S21507E3	13	0.5722	0.5692	.52		20
Iron	61436	S21507D3	13	S21507D3	12	169.0400	163.4270	3.4		20
Lead	61436	S21507A3	14	S21507A3	13	0.8238	0.8133	1.3		20
Magnesium	61436	S21507D3	13	S21507D3	12	25.5532	25.1163	1.7		20
Manganese	61436	S21507A3	14	S21507A3	13	2.9422	2.6615	10		20
Mercury	61436	H21507S	15	H21507S	14	13.3900	13.4200	.22		20
Nickel	61436	S21507A3	14	S21507A3	13	0.5994	0.5952	.7		20
Potassium	61436	S21507D3	13	S21507D3	12	23.1501	22.8252	1.4		20
Sodium	61436	S21507D3	13	S21507D3	12	9.0470	8.8960	1.7		20
Vanadium	61436	S21507A3	14	S21507A3	13	0.6134	0.6178	.72		20
Zinc	61436	S21507A3	14	S21507A3	13	2.0285	1.9991	1.5		20

TxtQcType: MR Matrix: SOIL SampleID: AD00167-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	61436	S21507D3	15	S21507D3	14	10.4388	19.2526	59	a	20
Barium	61436	S21507A3	16	S21507A3	15	0.1U	0.1021	---		20
Calcium	61436	S21507D3	15	S21507D3	14	10U	10.2245	---		20
Chromium	61436	S21507A3	16	S21507A3	15	0.05U	0.0536	---		20
Cobalt	61436	S21507A3	16	S21507A3	15	0.025U	0.025U	---		20
Copper	61436	S21507E3	16	S21507E3	15	0.0712	0.1353	62	b	20
Iron	61436	S21507D3	15	S21507D3	14	19.3722	36.9297	62	a	20
Lead	61436	S21507A3	16	S21507A3	15	0.1260	0.1694	29	b	20
Magnesium	61436	S21507D3	15	S21507D3	14	5U	5.9380	---		20
Manganese	61436	S21507A3	16	S21507A3	15	0.7399	1.2788	53	a	20
Mercury	61436	H21507S	17	H21507S	16	.5U	.5U	---		20
Nickel	61436	S21507A3	16	S21507A3	15	0.05U	0.05U	---		20
Potassium	61436	S21507D3	15	S21507D3	14	5U	5U	---		20
Sodium	61436	S21507D3	15	S21507D3	14	2.5U	2.5U	---		20
Vanadium	61436	S21507A3	16	S21507A3	15	0.1U	0.1U	---		20
Zinc	61436	S21507A3	16	S21507A3	15	0.2715	0.4198	43	b	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61436

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: MSD Matrix: SOIL SampleID: AD00167-016

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Aluminum	61436	S21507D3	17	S21507D3	16	20.9866	14.7566	35	a	20
Barium	61436	S21507A3	18	S21507A3	17	0.5512	0.5393	2.2		20
Calcium	61436	S21507D3	17	S21507D3	16	55.8717	56.7072	1.5		20
Chromium	61436	S21507A3	18	S21507A3	17	0.5129	0.6014	16		20
Cobalt	61436	S21507A3	18	S21507A3	17	0.4883	0.4929	.94		20
Copper	61436	S21507E3	18	S21507E3	17	0.5606	0.6841	20		20
Iron	61436	S21507D3	17	S21507D3	16	14.6362	48.2468	107	a	20
Lead	61436	S21507A3	18	S21507A3	17	0.6818	0.6029	12		20
Magnesium	61436	S21507D3	17	S21507D3	16	51.1094	52.5680	2.8		20
Manganese	61436	S21507A3	18	S21507A3	17	1.1956	1.3065	8.9		20
Mercury	61436	H21507S	19	H21507S	18	10.2800	10.1100	1.7		20
Nickel	61436	S21507A3	18	S21507A3	17	0.5061	0.5376	6		20
Potassium	61436	S21507D3	17	S21507D3	16	48.1670	49.2367	2.2		20
Sodium	61436	S21507D3	17	S21507D3	16	48.6762	48.8776	.41		20
Vanadium	61436	S21507A3	18	S21507A3	17	0.5562	0.5767	3.6		20
Zinc	61436	S21507A3	18	S21507A3	17	0.7317	0.7591	3.7		20

TxtQcType: SD Matrix: SOIL SampleID: AD00167-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	61436	S21507D3	22	S21507D3	14	5	3.9176	19.2526	1.7		10
Barium	61436	S21507A3	23	S21507A3	15	5	0.0170	0.1021	17	a	10
Calcium	61436	S21507D3	22	S21507D3	14	5	1.9978	10.2245	2.3		10
Chromium	61436	S21507A3	23	S21507A3	15	5	0.0083	0.0536	23	a	10
Cobalt	61436	S21507A3	23	S21507A3	15	5	0.0017	0.0194	57	c	10
Copper	61436	S21507E3	23	S21507E3	15	5	0.0315	0.1353	16	a	10
Iron	61436	S21507D3	22	S21507D3	14	5	7.5331	36.9297	2		10
Lead	61436	S21507A3	23	S21507A3	15	5	0.0293	0.1694	14	a	10
Magnesium	61436	S21507D3	22	S21507D3	14	5	1.2086	5.9380	1.8		10
Manganese	61436	S21507A3	23	S21507A3	15	5	0.2486	1.2788	2.8		10
Nickel	61436	S21507A3	23	S21507A3	15	5	0.0027	0.0303	55	c	10
Potassium	61436	S21507D3	22	S21507D3	14	5	0.5347	2.2245	20	c	10
Sodium	61436	S21507D3	22	S21507D3	14	5	0.3975	1.1228	77	c	10
Vanadium	61436	S21507A3	23	S21507A3	15	5	0.0142	0.0731	2.7		10
Zinc	61436	S21507A3	23	S21507A3	15	5	0.0811	0.4198	3.4		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61437

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: SOIL SampleID: LCS MR 61437

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	61437	S092317B	19	S092317B	18	46.8700	46.9700	.21		20
Arsenic	61437	S092317B	19	S092317B	18	53.6700	53.9000	.43		20
Beryllium	61437	S092317B	19	S092317B	18	58.7000	58.2600	.75		20
Cadmium	61437	S092317B	19	S092317B	18	73.2900	72.7900	.68		20
Selenium	61437	S092317B	19	S092317B	18	72.8000	71.5100	1.8		20
Silver	61437	S092317B	19	S092317B	18	50.9800	50.8800	.2		20
Thallium	61437	S092317B	19	S092317B	18	169.6000	171.0000	.82		20

TxtQcType: MR Matrix: SOIL SampleID: AD00167-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	61437	S092317B	22	S092317B	21	4U	4U	---		20
Arsenic	61437	S092317B	22	S092317B	21	2.3390	4.6080	65	b	20
Beryllium	61437	S092317B	22	S092317B	21	1U	1U	---		20
Cadmium	61437	S092317B	22	S092317B	21	16.6900	22.4400	29	a	20
Selenium	61437	S092317B	22	S092317B	21	10U	10U	---		20
Silver	61437	S092317B	22	S092317B	21	1U	1U	---		20
Thallium	61437	S092317B	22	S092317B	21	2U	2U	---		20

TxtQcType: MSD Matrix: SOIL SampleID: AD00167-016

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD		Limit
Antimony	61437	S092317B	25	S092317B	24	146.0000	146.2000	.14		20
Arsenic	61437	S092317B	25	S092317B	24	218.9000	222.1000	1.5		20
Beryllium	61437	S092317B	25	S092317B	24	212.9000	216.8000	1.8		20
Cadmium	61437	S092317B	25	S092317B	24	259.5000	243.6000	6.3		20
Selenium	61437	S092317B	25	S092317B	24	209.5000	207.6000	.91		20
Silver	61437	S092317B	25	S092317B	24	38.6600	38.9100	.64		20
Thallium	61437	S092317B	25	S092317B	24	204.3000	214.3000	4.8		20

TxtQcType: SD Matrix: SOIL SampleID: AD00167-007

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	61437	S092317B	23	S092317B	21	5	0.0300	0.2724	45	c	10
Arsenic	61437	S092317B	23	S092317B	21	5	0.9493	4.6080	3		10
Beryllium	61437	S092317B	23	S092317B	21	5	0.0637	0.3002	---		10
Cadmium	61437	S092317B	23	S092317B	21	5	4.4700	22.4400	0.4		10
Selenium	61437	S092317B	23	S092317B	21	5	0.4289	1.9160	---		10
Silver	61437	S092317B	23	S092317B	21	5	0.0296	0.1696	13	c	10
Thallium	61437	S092317B	23	S092317B	21	5	0.0715	0.3619	1.2		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61438

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 61438

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	61438	SW21509	17	SW21509	16	5.0643	4.9785	1.7	20
Barium	61438	SW21509	17	SW21509	16	0.5052	0.4931	2.4	20
Calcium	61438	SW21509	17	SW21509	16	50.9571	49.7727	2.4	20
Chromium	61438	SW21509	17	SW21509	16	0.5069	0.4950	2.4	20
Copper	61438	SW21509	17	SW21509	16	0.5149	0.5029	2.4	20
Iron	61438	SW21509	17	SW21509	16	5.0902	4.9434	2.9	20
Magnesium	61438	SW21509	17	SW21509	16	50.9346	49.7545	2.3	20
Manganese	61438	SW21509	17	SW21509	16	0.5057	0.4924	2.7	20
Mercury	61438	H21509S	13	H21509S	12	10.0032	9.6781	3.3	20
Nickel	61438	SW21509	17	SW21509	16	0.5068	0.4970	1.9	20
Potassium	61438	SW21509	13	SW21509	12	49.6613	49.0457	1.2	20
Silver	61438	SW21509	17	SW21509	16	0.0992	0.0972	2	20
Sodium	61438	SW21509	13	SW21509	12	50.8700	49.8755	2	20
Vanadium	61438	SW21509	17	SW21509	16	0.5066	0.4938	2.6	20
Zinc	61438	SW21509	17	SW21509	16	0.5059	0.4924	2.7	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD00167-008

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	61438	SW21509	19	SW21509	18	0.2U	0.2U	---	20
Barium	61438	SW21509	19	SW21509	18	0.05U	0.05U	---	20
Calcium	61438	SW21509	19	SW21509	18	15.5854	16.4879	5.6	20
Chromium	61438	SW21509	19	SW21509	18	0.05U	0.05U	---	20
Copper	61438	SW21509	19	SW21509	18	0.05U	0.05U	---	20
Iron	61438	SW21509	19	SW21509	18	0.7957	0.8015	0.73	20
Magnesium	61438	SW21509	19	SW21509	18	5U	5U	---	20
Manganese	61438	SW21509	19	SW21509	18	1.2843	1.3562	5.5	20
Mercury	61438	H21509S	15	H21509S	14	0.50U	0.50U	---	20
Nickel	61438	SW21509	19	SW21509	18	0.05U	0.05U	---	20
Potassium	61438	SW21509	15	SW21509	14	5U	5U	---	20
Silver	61438	SW21509	19	SW21509	18	0.02U	0.02U	---	20
Sodium	61438	SW21509	15	SW21509	14	26.1190	27.7998	6.2	20
Vanadium	61438	SW21509	19	SW21509	18	0.05U	0.05U	---	20
Zinc	61438	SW21509	19	SW21509	18	0.05U	0.05U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD00167-018

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Aluminum	61438	SW21509	21	SW21509	20	5.1092	5.1517	.83	20
Barium	61438	SW21509	21	SW21509	20	0.5392	0.5462	1.3	20
Calcium	61438	SW21509	21	SW21509	20	67.6934	69.1781	2.2	20
Chromium	61438	SW21509	21	SW21509	20	0.5126	0.5191	1.2	20
Copper	61438	SW21509	21	SW21509	20	0.5164	0.5242	1.5	20
Iron	61438	SW21509	21	SW21509	20	5.6724	5.7315	1	20
Magnesium	61438	SW21509	21	SW21509	20	54.4747	54.9476	.86	20
Manganese	61438	SW21509	21	SW21509	20	1.7596	1.8159	3.1	20
Mercury	61438	H21509S	17	H21509S	16	9.5637	9.8407	2.9	20
Nickel	61438	SW21509	21	SW21509	20	0.5129	0.5160	.61	20
Potassium	61438	SW21509	17	SW21509	16	51.6857	51.8021	.22	20
Silver	61438	SW21509	21	SW21509	20	0.1006	0.1019	1.2	20
Sodium	61438	SW21509	17	SW21509	16	77.3989	79.1922	2.3	20
Vanadium	61438	SW21509	21	SW21509	20	0.5122	0.5188	1.3	20
Zinc	61438	SW21509	21	SW21509	20	0.5235	0.5267	.61	20

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61438

Instrument Type: ICP/HG

Analytical Method(s):6010/200.7/7470A/7471A/245.1 ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: SD Matrix: AQUEOUS SampleID: AD00167-008

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Aluminum	61438	SW21509	26	SW21509	18	5	-0.0025	0.0424	---		10
Barium	61438	SW21509	26	SW21509	18	5	0.0056	0.0321	12	a	10
Calcium	61438	SW21509	26	SW21509	18	5	3.1135	16.4879	5.6		10
Chromium	61438	SW21509	26	SW21509	18	5	-0.0013	-0.0002	---		10
Copper	61438	SW21509	26	SW21509	18	5	-0.0012	0.0003	---		10
Iron	61438	SW21509	26	SW21509	18	5	0.1472	0.8015	8.2		10
Magnesium	61438	SW21509	26	SW21509	18	5	0.3972	3.2838	40	a	10
Manganese	61438	SW21509	26	SW21509	18	5	0.2787	1.3562	2.7		10
Nickel	61438	SW21509	26	SW21509	18	5	-0.0006	-0.0009	---		10
Potassium	61438	SW21509	22	SW21509	14	5	0.6024	2.3487	28	c	10
Silver	61438	SW21509	26	SW21509	18	5	0.0001	0.0001	---		10
Sodium	61438	SW21509	22	SW21509	14	5	5.6135	27.7998	0.96		10
Vanadium	61438	SW21509	26	SW21509	18	5	-0.0003	0.0010	---		10
Zinc	61438	SW21509	26	SW21509	18	5	0.0014	0.0088	---		10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

FORM6/FORM9

RPD/%Difference Data

PREP BATCH: 61438

Instrument Type: ICPMS

Analytical Method(s):6020/200.8

ICP units in ppm, ICPMS and Hg in ppb

TxtQcType: LCSMR Matrix: AQUEOUS SampleID: LCSW MR 61438

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	61438	A092817A	19	A092817A	18	254.5000	233.0000	8.8	20
Arsenic	61438	A092817A	19	A092817A	18	247.0000	247.8000	.32	20
Beryllium	61438	A092817A	19	A092817A	18	264.6000	242.3000	8.8	20
Cadmium	61438	A092817A	19	A092817A	18	253.3000	231.9000	8.8	20
Cobalt	61438	A092817A	19	A092817A	18	251.0000	248.4000	1	20
Lead	61438	A092817A	19	A092817A	18	247.0000	227.8000	8.1	20
Selenium	61438	A092817A	19	A092817A	18	239.2000	241.5000	.96	20
Thallium	61438	A092817A	19	A092817A	18	247.4000	226.9000	8.6	20

TxtQcType: MR Matrix: AQUEOUS SampleID: AD00167-008

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	61438	A092817A	21	A092817A	20	1.5U	1.5U	---	20
Arsenic	61438	A092817A	21	A092817A	20	1U	1U	---	20
Beryllium	61438	A092817A	21	A092817A	20	0.5U	0.5U	---	20
Cadmium	61438	A092817A	21	A092817A	20	1.2580	1.3570	7.6	20
Cobalt	61438	A092817A	21	A092817A	20	1U	1U	---	20
Lead	61438	A092817A	21	A092817A	20	1.5U	1.5U	---	20
Selenium	61438	A092817A	21	A092817A	20	5U	5U	---	20
Thallium	61438	A092817A	21	A092817A	20	1U	1U	---	20

TxtQcType: MSD Matrix: AQUEOUS SampleID: AD00167-018

Analyte	BatchId	Data Fil	Seq#:	MS File	Seq#	Result 1	Result 2	RPD	Limit
Antimony	61438	A092817A	24	A092817A	23	249.4000	260.9000	4.5	20
Arsenic	61438	A092817A	24	A092817A	23	240.6000	251.7000	4.5	20
Beryllium	61438	A092817A	24	A092817A	23	252.2000	262.4000	4	20
Cadmium	61438	A092817A	24	A092817A	23	245.8000	256.3000	4.2	20
Cobalt	61438	A092817A	24	A092817A	23	240.2000	242.3000	.87	20
Lead	61438	A092817A	24	A092817A	23	240.5000	253.1000	5.1	20
Selenium	61438	A092817A	24	A092817A	23	233.9000	238.9000	2.1	20
Thallium	61438	A092817A	24	A092817A	23	240.8000	254.0000	5.3	20

TxtQcType: SD Matrix: AQUEOUS SampleID: AD00167-008

Analyte	BatchId	Data Fil	Seq#:	NS File	Seq#	DF	Result 1	Result 2	%Diff		Limit
Antimony	61438	A092817A	22	A092817A	20	5	0.0670	0.2639	27	c	10
Arsenic	61438	A092817A	22	A092817A	20	5	0.1369	0.5474	25	c	10
Beryllium	61438	A092817A	22	A092817A	20	5	0.0480	0.1032	---		10
Cadmium	61438	A092817A	22	A092817A	20	5	0.3012	1.3570	11	a	10
Cobalt	61438	A092817A	22	A092817A	20	5	0.1059	0.4620	---		10
Lead	61438	A092817A	22	A092817A	20	5	0.2366	0.9067	30	c	10
Selenium	61438	A092817A	22	A092817A	20	5	0.0552	0.4590	---		10
Thallium	61438	A092817A	22	A092817A	20	5	0.0809	0.3533	14	c	10

a-Indicates Rpd Failed the criteria

b-Method Rep Out but concentrations < 5*RL

c-Serial dilution Out but conc < 10 * IDL

Hampton-Clarke
Analytical & Field Services

Last Page of Report

Appendix D

Site Inspection Form

AECOM

SITE INSPECTION FORM

Dzus Fasteners Site
425 Union Boulevard, West Islip, Suffolk County, NY
NYSDEC Site ID # 1-52-033

Client: New York State Department of Environmental Conservation

Preparer's Name: Celeste Foster Date/Time: 09/12/2017 10:00

Asphalt Cap

Has the condition of the asphalt degraded since the last inspection?	☐ YES	■ NO	☐ NA
Are any cracks visible in the asphalt pavement?	■ YES	☐ NO	☐ NA
Is there evidence of uneven settling and or ponding?	☐ YES	■ NO	☐ NA
Is there damage to any surface coverage?	☐ YES	■ NO	☐ NA

Willetts Creek

Has the riprap in the creek been disturbed?	☐ YES	☐ NO	■ NA

Lake Capri

Is there evidence of excessive weed growth in the Lake?	☐ YES	☐ NO	■ NA
Is the fence/gate along Sunrise Highway functioning properly?	☐ YES	☐ NO	■ NA
Has the Lake level changed significantly from the previous inspection?	☐ YES	☐ NO	■ NA

Site Condition

Is there any evidence of illegal disposal?	☐ YES	■ NO	☐ NA
Is there uncontrolled vegetation growth?	■ YES	☐ NO	☐ NA
Is there any evidence of unauthorized entry?	☐ YES	■ NO	☐ NA

If yes to any question above, provide additional information below.

Some cracks visible in the pavement. They do not appear to be detrimental to the cap.

The site is no longer occupied. Site is overgrown.

It appears that the building has been vandalized and there are signs of entry.

The site contains excavated areas left open that create hazardous conditions.

Excavated Areas















Excavated Areas (cont.)









Site Photos









Site Photos (cont.)





