Prepared for:

DREXEL CHEMICAL COMPANY
120 Cape Road
Cordele, GA 31015

SIXTH SEMIANNUAL VRP PROGRESS REPORT DREXEL CHEMICAL COMPANY Cordele, Georgia

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April, 2014

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EPS

PROFESSIONAL GEOLOGIST CERTIFICATION

"I certify under penalty of law that this report and all attachments were prepared by me or under my direct supervision in accordance with the Voluntary Remediation Program Act (O.C.G.A. Section 12-8-101, et seq.). I am a professional engineer/professional geologist who is registered with the Georgia State Board of Registration for Professional Engineers and Land Surveyors/Georgia State Board of Registration for Professional Geologists and I have the necessary experience and am in charge of the investigation and remediation of this release of regulated substances.

Furthermore, to document my direct oversight of the Voluntary Remediation Plan development, implementation of corrective action, and long term monitoring, I have attached a monthly summary of hours invoiced and description of services provided by me to the Voluntary Remediation Program participant since the previous submittal to the Georgia Environmental Protection Division.

The information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Kirk Kessler GA000685

Printed Name and GA PE/PG Number

4/23/2014

Date

Signature and Stamp

1 INTRODUCTION

Drexel Chemical Company (Drexel) submitted a Voluntary Remediation Program (VRP) Application (which the EPD refers to as the Voluntary Investigation and Remediation Plan, (VIRP) in February 2011. In a letter dated April 28, 2011, the Georgia Environmental Protection Division (EPD) accepted Drexel as a participant into the VRP. Pursuant to the conditions of the acceptance letter, this document is the Sixth Semiannual Progress Report (Progress Report) for the Drexel Site.

The Drexel facility is located at 120 Cape Road, Cordele, Crisp County, Georgia (Facility). The Facility is a Pesticide Blending Facility, which is located approximately four miles east of downtown Cordele in a primarily agricultural and wooded area. The Drexel Facility (as originally accepted into the VRP) is approximately 6.89 acres, which consists of two parcels owned by Drexel. With the Second Progress Report (submitted in April, 2012), Drexel requested that other property bordering the facility and owned by Drexel be added to the VRP. Additionally, on August 29, 2012 Drexel and CSX Transportation (CSX) submitted a request to include the CSX property bordering the facility to the north, to be added as an eligible property in the VRP. In a letter dated December 5, 2012, the EPD accepted the CSX and additional Drexel parcels into the VRP. For discussion purposes, these properties will be referred to as "Drexel Facility," "CSX," and "Drexel Additional Property" and are jointly referred to as the "Site." Figure 1 shows the locations of these properties.

This Progress Report summarizes (by task) what actions have been taken since the previous Progress Report (December 2013), presents the expected upcoming activities.

2 VRP PROJECT MANAGEMENT

2.1 Professional Geologist Oversight

This Progress Report includes certification by the Professional Geologist (Kirk Kessler) specified in the VIRP. Appendix A contains a monthly summary of hours invoiced and description of services provided.

2.2 Milestone Schedule

An updated projected milestone schedule has been attached as Figure 2.

2.3 Conceptual Site Model

The Conceptual Site Model (CSM) has been revised to include the results of recent remedial action and confirmation sampling and is included as Appendix B.

3 SEMIANNUAL GROUNDWATER SAMPLING

3.1 Actions Completed

The Drexel VIRP specifies that semiannual groundwater sampling will be conducted for a period of at least three years. The wells specified in the VIRP to be sampled include the four monitoring wells (BW-1, BW-2, BW-3, BW-4), the new monitoring well (near PW-1, called BW-6-1), and the nearest offsite downgradient drinking water well (Aiken residence). As described more fully in the Fourth Progress Report, since power has been turned off at the Aiken property, well "D" (water supply well at former residence, on the new Drexel land parcel) is now being used instead of the Aiken residence as the Point of Exposure well. EPS conducted the last of the groundwater sampling event the third week of February, 2014. Monitoring wells BW-1 to BW-4 were sampled during this event, along with BW-5, BW-6-1 and Well D.

3.1.1 Methods

Well purging was performed using low stress purging techniques with Grundfos submersible pumps connected to Teflon-lined polyethylene tubing. For each well purged, water quality and geochemical parameters were recorded during purging and recorded on Monitoring Well Sampling Forms (in Appendix C).

Prior to purging, two of the wells (BW-2 and BW-4) were re-developed by the air lift method to remove accumulated sediment at the bottom of the wells, that likely contributed to some higher metals concentrations in BW-2 during the previous sampling event.

Disposable sampling equipment (bailers, tubing, gloves, etc.) was utilized during sample collection. VOC samples were collected using weighted disposable bailers, while other analytical parameters samples were collected from down-hole pumps. Bailers were carefully lowered into the wells to minimize disturbance of the water column. The samples were collected in laboratory supplied containers.

Samples were placed in coolers with ice and sent via overnight delivery to ALS Environmental for the following analyses: total metals (Method 200.7 and 200.8), EDB and DBCP (Method 504.1), pesticides and PCB aroclors (Method 508.1), organophosphorus pesticides (Method 8270D), chlorinated herbicides (Method 515.4), volatile organic compounds (VOC, Method 8260), semivolatile organic compounds (SVOC, Method 525.2), carbamates and carbamoyloximes (Method 531.1).

During the first semiannual sampling event in August 2011, the VOC sample vials contained no air headspace at the time of sample collection. However, when the laboratory received the samples some air headspace was observed in the vials. Some amount of particulate matter was noted during sampling. It is probable that the particulate matter was limestone, which dissolved

in the presence of the hydrochloric acid preservative present in the VOC vial. Therefore, during the second and subsequent semiannual sampling events, VOC samples were collected in unpreserved sample vials and analyzed using Method 8260 to meet hold time requirements for unpreserved samples.

3.2 Potentiometric Surface

The depth to water was determined for each well sampled. Groundwater elevations were calculated and a potentiometric surface was developed and shown on Figure 3. In this sampling event the direction of groundwater flow appears to be to the southeast (SE). Historically the potentiometric surface has varied between east-southeast to due south inferred direction of groundwater flow.

3.3 Water Quality Testing

The results from the Februrary 2014 sampling event have been added to historical data summary tables (Tables 1 and 2). These tables include the approved Type 1 risk reduction standards (RRS), applicable to delineation, and the Residential RRS (higher of Type 1 and 2 RRS). The only constituent that is consistently above the Residential RRS is 1,2-dibromoethane, also known as ethylene dibromide (EDB), with concentrations similar to past sampling events (0.16 µg/L in well BW-1, 0.11 µg/L in BW-5 and 0.17 µg/L in BW-6-1). During the previous sampling event, the concentrations for chromium and lead in BW-2 were elevated, likely due to the high turbidity. As mentioned above this well was air lifted to remove accumulated sediments from the well. The metals concentrations during this sampling event were considerably lower, with no metals at concentrations exceeding the Residential RRS. The laboratory data report is included on a CD in Appendix D.

3.4 Upcoming Actions

This was the last of the semi-annual sampling events specified in the VIRP. Future groundwater sampling will be conducted after implementation of the pump and treat system in accordance with the Remediation Plan presented in the Fifth Progress Report.

4 SURFACE IMPOUNDMENT REMEDIATION

4.1 Background

The majority of the Site is being evaluated based on an area-averaging approach, originally presented in Drexel's Voluntary Remediation Plan Application (VIRP), and as described more fully in the Fifth Progress Report, which was submitted in December, 2013. Although averaging techniques (allowed under the VRP) would likely indicate that very little (if any) of the former Surface Impoundments (SIs) would need to be remediated, Drexel decided to remove any former SIs where the environmental condition of the materials in the SIs were in excess of the residential RRSs. EPS sent a memo on November 11, 2013 to notify the EPD of the intended remedial action to allow an opportunity for the EPD to comment on the action prior to it being implemented. In response, the EPD requested that six confirmation samples be taken at each SI (where existing data was not already available): three at the base of the excavation and three along the side-walls. EPD further specified that the samples should be analyzed for metals and pesticides. Drexel began implementation of the SI remediation in late November 2013.

4.2 Former Surface Impoundments

There are eight former SIs at the facility (see Figure 4). Based on aerial photography, the units were constructed at least by 1962. According to the 2001 Compliance Status Report (prepared by Peachtree Environmental for the former site owner, Gold Kist):

> Prior to the pesticide operation, the liquid fertilizer operation was designed to use eight SIs as part of the production process. However, USEPA recorded in its February 1985 Site Inspection that the Gold Kist Plant Manger reported that the basins were used to collect rainwater, but did also receive "floor sweepings" and pesticide residues and waste containers. This practice dates back until at least 1973 when an EPD inspector noted the impoundments were used for this purpose, and that sodium hydroxide was being used to "break down the pesticides." For a period of time in the late 1970's, and possibly into the early 1980's dust from air pollution control systems was placed in at least one impoundment. The quantity has been described by the former Gold Kist Plant Manger as "a few wheelbarrow loads per year" and reportedly consisted mainly of inert clays (Pyrax dust) which were carriers for liquid pesticides.

The SIs were constructed of poured concrete, each approximately 45 ft in diameter at the surface and sloping down (in a bell-like shape) to the bottoms, which are at approximately 7-8ft below the ground surface (bgs) in the center.

In approximately 1985, some of the contents in each SI were removed and the SIs were backfilled and graded. The majority of the concrete structure from SI 9 was also removed at some unknown date. The remaining seven SIs still had the entire concrete structure underground. Each SI was buried beneath a concrete surface, either outside in a paved area or inside under a floor slab.

4.3 Soil Data Associated with Surface Impoundments

Soil in and around the SIs have been investigated since 2000. As the SIs were covered by concrete, the boundaries of the concrete SI structures were estimated by historical aerial photographs. Thus, some historical samples designated as being associated with an SI, may not have actually been soil from within the SI. Figure 4 shows the locations of the soil borings associated with the SIs prior to the remedial action. Table 3 shows a comparison of the maximum concentration of each detected constituent from soil borings related to the SIs (prior to the remedial action) to the residential and industrial RRSs. Table 4 shows the analytical data for the metals and pesticides that have a maximum concentration higher than the residential RRS (included on this table are both the samples collected prior to remediation and the post-remediation confirmation samples). Note that one of the columns in this table indicates whether the boring logs indicate that the samples are collected in an SI, under an SI, or just outside an SI.

SI 4, SI 14, SI 19 As shown in Table 4, for these three SIs, none of the associated soil results exceed the residential RRS. Thus, no remedial action was taken for these SIs.

SI 10 For the soils associated with SI 10, only one result (disulfoton in SI-10 at the surface) exceeds its residential RRS. The result (0.16 mg/kg), is above the residential RRS (0.03 mg/kg), and barely above the industrial RRS (0.15 mg/kg). However, the boring log for this boring does not indicate that concrete was encountered and, instead it indicates the presence of root matter at 7ft bgs. It is believed that this boring was located just outside the SI and is not representative of the material within the SI. Thus, none of the soils within the SI exceed the residential RRS and no remedial action will be taken for this SI. Therefore, the SI-10 boring results are included in the area-averaging analysis for the site.

SI 5 The soils collected within SI 5 exceeded at least one residential RRS from the surface to 15ft bgs. The soil samples collected from 18-20ft had no residential RRSs exceedances. Drexel decided to conduct remedial action at this SI.

SI 9 The soils collected within SI 9 exceeded at least one residential RRS from the surface to 10ft bgs. However, the samples collected at 13-15ft and 18-20ft bgs did not exceed any residential RRSs. Drexel decided to conduct remedial action at this SI.

SI 15 The soils collected from 3 to 6ft bgs exceeded residential RRSs. However, none of the soil beneath the SI structure exceeded the residential RRSs. Drexel decided to conduct remedial action at this SI.

SI 20 The soils collected from 4 to 6ft bgs exceeded residential RRSs. However, none of the soil beneath the SI structure exceeded the residential RRSs. Drexel decided to conduct remedial action at this SI.

4.4 Remediation Plan

The remediation plan consisted of the following:

- SI #5: Removal of the concrete SI structure, excavation of soils contained within the structure, and soils beneath the structure to an estimated total depth of 15 ft.
- SI #9: The SI structure was removed in earlier remedial action at the site. This remedial work will consist of excavation of the soils in the former SI area and soils below the former impoundment to an estimated total depth of 10 ft.
- SI #15: Removal of the concrete SI structure and excavation of soils contained within the structure. The total depth is approximately 7 ft.
- SI #20: Removal of the concrete SI structure and excavation of soils contained within the structure. The total depth is approximately 7 ft.

At the request of the EPD, 6 confirmation samples were to be collected at each SI, where existing data was not already available. Three of the confirmation samples were to be collected at the base of the excavation. The remaining three confirmation samples were to be collected along the side-wall of the excavation approximately half way down the slope of excavation. All confirmation samples were to be analyzed for metals and pesticides. Note, the remediation was not a “point-by-point” cleanup where every point above the Residential RRS would be excavated. Instead, it was designed to remove specific SIs and surrounding soil with elevated concentrations. The confirmation samples were then to be used in the area-averaging analysis for the facility.

The selected contractor (A&D Environmental) mobilized to the Site on November 18, 2013 to begin this remedial action. A summary of the actual amounts excavated is shown below and details for each SI are provided in the following section. The equipment was decontaminated between/ after each SI excavation. The excavated material was temporarily stock-piled on-site in approximately 500 cubic yard (CY) piles. Representative samples of the material were collected and analyzed for TCLP to determine whether the material could be disposed of as hazardous or non-hazardous. The material was then transported to the appropriate disposal facility. The excavation areas were backfilled with stone and the concrete slab was replaced.

Summary of Surface Impoundment Remediation

SI #	Concrete Bottom	Anticipated Depth of Excavation	Actual Depth of Excavation	Soil and Concrete Debris Excavated
5	7.5 ft	15 ft	15 ft	Approx 550 tons
9	Partial 7.5 ft	11 ft	15 ft	907 tons
15	7.5 ft	7 ft	9 ft	438 tons
20	7.5 ft	7 ft	11-15 ft	612.5 tons
TOTAL				2,507.5 tons

4.5 Implementation

4.5.1 SI-20

SI-20 was the first SI addressed. The surface concrete was removed and then the concrete SI structure along with the soil contained within and just outside it was excavated. The SI structure was found to be a bowl-shaped concrete structure approximately 45 ft in diameter and 7.5 ft in depth. The SI was initially excavated to a depth of 9 ft. Initial confirmation samples were collected. The three sidewall samples (CS1 through CS3) were collected at a depth of 5 ft from the surface. The results (see Table 4) were all low Three base of excavation samples (CS4 through CS6) were collected at 9ft. One of the base of excavation samples (CS4) was low, but the other two had elevated concentrations for toxaphene. Therefore, Drexel decided to extend the excavation an additional two feet, to 11 ft. Three additional base of excavation samples were collected (CS7 through CS9). One of these samples (CS7) had elevated concentrations DDT, chlordane and toxaphene. Thus, Drexel extended the excavation in the area of CS7 an additional two feet, where another confirmation sample (CS10-13) was still elevated. After an additional two feet of excavation (to a total depth of 15ft in the southeast corner of the SI excavation), the confirmation sample (CS10-15) had low concentrations. Thus, approximately two-thirds of the SI-20 excavation area was to a depth of 11ft, while the remaining third was to a depth of 15ft. The locations of the confirmation samples are shown on Figure 5. Note all laboratory reports are included in Appendix D.

During the excavation, a few remnant structures were discovered underground. A pipe ("pipe 1") was found approximately two feet below ground on the north side of the SI. Additionally, what appears to be a French drain was uncovered around the south side of the SI. Initially it was thought that there were two pipes: "pipe 2" on the southwest side of the SI and "pipe 3" on the southeast side of the SI. However, after additional excavations it was discovered that they were part of the same structure, what appears to be a French drain that may have run alongside the SI when it was in use. As a precaution, EPS collected samples of the soil at each of the locations and had them analyzed for metals, pesticides and VOCs. All results had low concentrations.

The excavated material was stockpiled and TCLP testing indicated that the soil was non-hazardous. Lab reports are included in Appendix D. A total of 612.5 tons of soil from SI-20 was transported off-site and disposed of at the Crisp County Landfill. The truck logs are contained in Appendix E.

4.5.2 SI-15

SI-15 was the second SI addressed. The surface concrete was removed and then the concrete SI structure along with the soil contained within and just outside of it were excavated. The SI structure was found to be a bowl-shaped concrete structure approximately 45 ft in diameter and 7.5 ft in depth. The SI was excavated to a depth of 9ft. Initial confirmation samples were collected. The three base of excavation samples (CS4 through CS6) were collected at 9ft. All three base of excavation samples had low concentrations. The three sidewall samples (CS1 through CS3) were collected at a depth of 5 ft from the surface. The results (see Table 4) for two of the sidewall samples (CS2 and CS3) were low. However, the other sidewall sample (CS1) had an elevated concentration of toxaphene. Therefore, Drexel decided to extend the excavation laterally in the direction of CS1 (to the northeast). A replacement confirmation sample (CS1R) was collected along the newly cut sidewall. This sample had low concentrations. In summary, SI-15 was excavated to 9ft and additional lateral excavation was conducted on the northeast side. The locations of the confirmation samples are shown on Figure 5.

During the excavation, a terracotta pipe was discovered approximately 8ft underground on the north/northeast side of the excavation. As a precaution, EPS collected samples of the small amount of sediment contained within the pipe (Pipe1Content) and soil located outside of the pipe (Pipe1) and had them analyzed for metals, pesticides and VOCs. Some of the metal (arsenic, cadmium and copper) results were elevated. When the excavation was extended in the direction of CS1 (mentioned above), this also included additional excavation of the pipe. Therefore, additional samples (Pipe1R and Pipe1ContentR) were collected. The soil sample outside the pipe (Pipe1R) had results that were all low. However, the contents inside the pipe were still elevated for several metals. After the pipe was flushed with water, an additional sample of the sediment in the pipe was sampled (Pipe1ContentRs). Although this sample had some elevated metals concentrations, they are included in the area-averaging analysis, which shows that condition at the site is acceptable. At this point, the pipe was sealed with concrete.

The excavated material was stockpiled and TCLP testing demonstrated that the soil was non-hazardous. Lab reports are included in Appendix D. A total of 438 tons of soil from SI-15 was transported off-site and disposed of at the Crisp County Landfill. The truck logs are contained in Appendix D.

4.5.3 SI-5

SI-5 was the third SI addressed. As this SI was located inside an active building, shoring was put into place to retain the building's integrity after the surface concrete was removed. Next the concrete SI structure along with the soil contained within and just outside of it were excavated. The SI structure was found to be a bowl-shaped concrete structure approximately 45 ft in

diameter and 7-8 ft in depth that was to the southeast of where it was anticipated to be located. The soil underneath the SI was excavated to a total depth of 15ft. Confirmation samples were collected. Three sidewall samples (CS1 through CS3) were collected at a depth of 7ft. The three base of excavation samples (CS4 through CS6) were collected at 15ft. All six confirmation samples had low concentrations (see Table 4). Therefore, the excavation area was backfilled and resurfaced.

The excavated material was stockpiled and the TCLP results failed for chlordane. Lab reports are included in Appendix D. Based on TCLP and totals concentrations, land disposal restrictions dictate that the soil must either be incinerated or be treated such that the resulting concentrations are below ten times the universal treatment standard concentration. Drexel contracted with ExoTech to conduct a treatability test to determine whether the soil could be treated to levels such that incineration would not be required. ExoTech is evaluating the use of five different chemical combinations (persulfate with iron activator, persulfate with sodium hydroxide activator, zero valent iron, calcium polysulfide, dithianite and zero valent iron with surfactant). This evaluation is ongoing. Preliminary results indicate that chemical reduction is the most promising treatment technology.

4.5.4 SI-9

SI-9 was the last SI addressed. As this SI was located inside an active building, shoring was put into place to retain the building's integrity after the surface concrete was removed. It was believed that the concrete SI had been removed at some point in the past. However, during some exploratory trenching, the concrete bottom of the SI was discovered at a depth of 7-8ft and part of the eastern side of the SI was discovered. What was left of the concrete SI structure along with the soil contained in a 45ft diameter area was excavated. The middle part of the excavation (where the concrete bottom was located) was excavated an additional 3 ft beyond the concrete, to a total depth of 10ft. Confirmation samples were then collected. Three sidewall samples (CS1 through CS3) were collected at a depth of 6ft and the three base of excavation samples (CS4 through CS6) were collected at 10ft. All six confirmation samples had elevated concentrations of at least one constituent (see Table 4). Therefore, the excavation area was extended both laterally and vertically to a total depth of 15ft in the middle. The lateral excavation extended to where the shoring was in place and extended vertically down to a depth of 7ft. Three sidewall confirmation samples (CS7 through CS9) were collected (see Table 4), and all had low concentrations. Three base of excavation confirmation samples (CS6, CS10 and CS11) were collected at a depth of 15ft. CS6 was analyzed for pesticides and metals. However, CS10 and CS11 were only analyzed for metals as two historical borings (BHS1C-9-1 and BHS1C-9-2, both at a depth of 13-15ft) serve as confirmation samples for pesticides.

The excavated material was stockpiled and TCLP testing demonstrated that the soil was nonhazardous. Lab reports are included in Appendix D. A total of 907 tons of soil from SI-9 was transported off-site and disposed of at the Crisp County Landfill. The truck logs are contained in Appendix E.

4.6 Storm Water Handling

SI-15 and SI-20 were located outside. Some amount of stormwater accumulated within these excavation pits while awaiting results of confirmation samples. Despite creating berms around the SIs, rainwater accumulated in the excavation pits. The storm water was pumped into frac tanks and samples of the water were analyzed prior to sending the stormwater offsite for appropriate disposal.

4.7 Incorporation into Site-wide Certification

The Fifth Progress Report contained the results of the area-averaging modeling for each of five exposure domains at the Site. All of the former SIs are located within the Drexel West exposure domain. Thus, now that the remediation has been completed, the confirmation samples have been incorporated into the area-averaging model for the Drexel West domain using the same methodology presented in the Fifth Progress Report.

A screening process was first used to determine which constituents needed to be evaluated further. Table 5 shows some general statistics for each detected constituent in each depth interval (0-2 ft, 2-5 ft, 5-15 ft and greater than 15 ft). The maximum concentration observed is compared to the Residential RRS. This comparison (shown in Table 5) shows that a number of constituents in the 0-2 ft and 5-15 ft depth ranges were selected to be evaluated further by interpolation. Using the methodology presented in the Fifth Progress Report, the concentrations of each of these constituents across the entire domain were estimated using interpolation techniques and concentrations were assigned to 10x10ft square grids. These concentrations were then imported into EPA's ProUCL software to determine the 95% Upper Confidence Limit (UCL) on the mean. These 95% UCL values are also shown on Table 5 and are included in Appendix F. The 95% UCL values are all well below the residential RRSs. Thus, the Drexel West domain is in compliance with residential RRSs.

5 PHASE 2 REMEDIATION

5.1 Actions Complete

The Fifth Progress Report contains details of the Final Remediation Plan. Phase 2 of the remediation plan includes the rail line and drainage swale remediation. Phase 3 includes groundwater remediation and monitoring and Phase 4 includes implementation of uniform environmental covenants.

5.2 Next Step

Drexel will request bids from multiple remediation contractors to conduct the rail line and drainage swale remediation work. The contractor will propose the most efficient manner to conduct this remedial work. A shoring plan will be developed and submitted to CSX for their approval prior to commencement of the remedial work.

6 REFERENCES

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TABLES

Table 1 Groundwater Analytical Results: Inorganics above the Detection Limit

Location	Date Sampled	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Lead (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Silver (µg/L)	Thallium (µg/L)	Zinc (µg/L)
Type 1 RRS		**6**	**10**	**2000**	**4**	**5**	**100**	**1300**	**15**	**100**	**50**	**100**	**2**	**2000**
Residential RRS		**6**	**10**	**3100**	**30**	**8**	**100**	**1300**	**15**	**310**	**80**	**100**	**2**	**4700**
BW-1	11/16/2005	<0.2	0.67	160	0.11	0.21	6.8	1.2	0.54	7.4	0.17J	NA	0.46	NA
BW-1	4/27/2006	<0.2	0.96	270	0.11	0.18	25	2	1	16	0.14J	<0.05	0.26	8
BW-1	6/30/2010	0.03J	0.74	160	0.6	1.58	13.5	2.72	3.65	17.8	0.4J	0.053	0.146	7.01
BW-1	8/10/2011	<0.02	0.15J	80.2	0.014J	0.018J	2.23	0.29*	0.07	1.48	<0.3	<0.004	0.046	0.29J
BW-1 (Dup)	8/10/2011	<0.02	0.18J	80.6	0.01J	0.015J	2.35	0.22*	0.079	1.55	0.4J	<0.004	0.046	0.32J
BW-1	2/15/2012	<0.02	0.28J	90.2	0.161	0.328	4.9	1.5	1.04	1.81	0.4J	0.02J	0.083	3.16
BW-1	8/9/2012	0.012J	<0.1	73.1	0.011J	0.029	5.05	1.05	0.102	3.34	<0.3	0.034	0.038	2
BW-1	3/7/2013	<0.02	0.16J	80.7	0.053	0.11	3.84	0.72	0.426	2.56	0.3J	<0.004	0.045	1.71
BW-1 (Dup)	3/7/2013	<0.02	0.22J	81.7	0.059	0.14	4.57	0.8	0.482	3.04	0.6J	<0.004	0.046	1.98
BW-1	9/12/2013	<0.01	0.12J	87.9	0.026	0.082	3.79	0.57	0.153	1.57	<0.4	0.062	0.049	1.85
BW-1	9/12/2013	<0.01	0.1J	90.6	0.019J	0.052	3.63	0.59	0.114	1.54	<0.4	0.041	0.052	1.47
BW-1	2/20/2014	0.006J	0.1J	83.3	0.025	0.082	2.51	1	0.115	1.26	<0.3	<0.004	0.05	1
BW-1 (Dup)	2/20/2014	0.008J	0.1J	83.1	0.026	0.059	2.43	1.03	0.088	1.11	<0.3	<0.004	0.052	0.9
BW-2	11/16/2005	<0.2	0.42	57	0.33	0.094J	13	3.1	1.2	9.7	0.1J	NA	0.049J	NA
BW-2 (Dup)	11/16/2005	<0.2	0.42	56	0.24	0.083J	20	3.3	0.94	13	<0.1	NA	<0.04	NA
BW-2	4/27/2006	<0.2	0.71	75	0.39	0.16	20	3.3	1.8	10	<0.1	<0.05	0.068J	12B
BW-2	6/30/2010	<0.02	0.18J	76.1	0.146	0.051	1.83	0.67	0.522	1.52	<0.3	0.006J	0.022	1.86
BW-2	8/9/2011	<0.02	0.13J	73.4	0.234	0.072	6.1	0.89*	0.748	4.01	<0.3	0.007J	0.026	1.42
BW-2	2/15/2012	<0.02	0.09J	72.1	0.028	0.013J	2.92	0.43	0.21	1.22	<0.3	0.007J	0.012J	0.72
BW-2 (Dup)	2/15/2012	0.03J	0.17J	72.5	0.027	0.012J	2.96	0.47	0.182	1.14	0.4J	0.006J	0.01J	1.47
BW-2	8/9/2012	0.067	0.1J	78.3	0.296	0.113	20.5	3.81	1.07	12.7	<0.3	0.163	0.035	5.1
BW-2	3/5/2013	<0.02	0.2J	77.5	0.079	0.028	7.53	1.36	0.319	4.96	0.5J	0.01J	0.018J	1.96
BW-2	9/11/2013	0.02J	6.02	226	3.97	1.72	**144**	14.1	**15.5**	94.3	10.5	4.04	0.313	23
BW-2	2/20/2014	0.012J	0.2J	81.9	0.404	0.083	3.49	4.12	1.39	2.21	<0.3	0.009J	0.034	44.9
BW-3	11/16/2005	<0.2	0.91	120	0.78	0.56	21	3.5	3.1	9.6	0.12J	NA	0.12J	NA
BW-3	4/27/2006	<0.2	0.47	120	0.18	0.24	29	4.5	1.3	16	<0.1	<0.05	<0.04	11
BW-3	7/1/2010	<0.02	0.2J	120	0.175	0.22	2.62	0.81	0.532	3.18	0.3J	0.016J	0.023	1.9
BW-3	8/10/2011	<0.02	0.14J	104	0.054	0.051	7.63	0.44*	0.122	5.27	<0.3	0.005J	0.012J	0.43J
BW-3 (Dup)	8/10/2011	<0.02	0.14J	104	0.056	0.047	7.91	0.33	0.125	5.25	<0.3	<0.004	0.009J	0.44J
BW-3	2/14/2012	0.1	<0.07	107	0.056	0.029	4.47	0.55	0.368	2.24	<0.3	0.023	0.009J	0.88
BW-3	8/10/2012	0.015J	<0.1	107	0.055	0.049	7.15	0.54	0.188	5.31	<0.3	0.031	0.01J	0.9
BW-3	3/6/2013	<0.02	0.14J	109	0.044	0.033	3.54	1.8	0.102	1.69	<0.3	0.007J	0.009J	2.64
BW-3	9/10/2013	<0.01	0.09J	118	0.031	<0.005	1.46	0.63	0.045	0.37	<0.4	<0.005	0.003J	1.04
BW-3	2/19/2014	0.012J	0.2J	111	0.032	0.006J	1.29	0.32	0.031	0.75	<0.3	<0.004	0.008J	0.5J
BW-4	6/30/2010	0.03J	0.28J	91.7	0.127	0.145	4.17	1.06	0.88	3.02	<0.3	0.008J	0.03	7.96
BW-4 (Dup)	6/30/2010	0.03J	0.26J	87.2	0.076	0.074	2.51	0.67	0.457	2.26	0.4J	0.012J	0.023	4.33
BW-4	8/9/2011	<0.02	0.17J	80.6	0.018J	0.017J	11.9	0.28*	0.088	4.93	0.4J	0.006J	0.014J	1.18
BW-4 (Dup)	8/9/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
BW-4	2/14/2012	0.06	0.08J	88.7	0.013J	0.008J	2.41	0.58	0.455	1.59	<0.3	0.006J	0.01J	1.61
BW-4	8/9/2012	0.026J	<0.1	90.2	0.057	0.048	5.73	0.8	0.453	3.78	<0.3	0.033	0.018J	3.6
BW-4 (Dup)	8/9/2012	0.022J	0.1J	89.4	0.063	0.049	7.11	0.82	0.457	5.43	<0.3	0.025	0.013J	3.8
BW-4	3/5/2013	<0.02	0.14J	95.6	0.015J	0.015J	6.07	1.6	0.094	4.19	0.3J	0.009J	0.007J	2.54
BW-4	9/11/2013	<0.01	0.09J	95.6	0.027	0.013J	2.27	0.8	0.123	0.7	<0.4	<0.005	<0.002	1.95
BW-4	2/20/2014	0.021J	0.2J	96.4	0.219	0.058	9.5	2.88	0.708	7.46	0.5J	0.005J	0.025	51.3
BW-5	3/7/2013	0.09	0.22J	82.8	0.009J	0.049	5.88	2.89	0.31	3.61	0.4J	0.006J	0.057	134

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Table 1 Groundwater Analytical Results: Inorganics above the Detection Limit

Location	Date Sampled	Antimony (µg/L)	Arsenic (µg/L)	Barium (µg/L)	Beryllium (µg/L)	Cadmium (µg/L)	Chromium (µg/L)	Copper (µg/L)	Lead (µg/L)	Nickel (µg/L)	Selenium (µg/L)	Silver (µg/L)	Thallium (µg/L)	Zinc (µg/L)
Type 1 RRS		**6**	**10**	**2000**	**4**	**5**	**100**	**1300**	**15**	**100**	**50**	**100**	**2**	**2000**
Residential RRS		**6**	**10**	**3100**	**30**	**8**	**100**	**1300**	**15**	**310**	**80**	**100**	**2**	**4700**
D	3/6/2013	<0.02	0.27J	96.7	0.272	0.01J	5.75	1.66	0.48	4.4	1.3	<0.004	0.025	18.1
D	9/10/2013	<0.01	0.39J	101	0.082	0.006J	1.66	0.66	0.14	0.66	1	<0.005	0.005J	13
D	2/18/2014	0.036J	0.3J	94.9	0.065	0.009J	1.74	2.88	0.238	0.95	0.6J	0.013J	0.014J	20.1
PW-1	10/5/2000	NA	<20	82.8	NA	<10	<10	NA	<10	NA	<20	<10	NA	140
PW-1	11/22/2000	NA	<20	29.8	NA	<10	<10	NA	<10	NA	<20	<10	NA	NA
PW-1	7/22/2003	<3	<5	97	<2	<2.5	<25	BDL	BDL	<40	<25	NA	<1	130
PW-1	11/16/2005	<0.2	0.34	100	<0.03	<0.02	4.7	5.8	1.7	2.3	7.1	NA	0.056J	NA
PW-1	6/30/2010	0.04J	0.45J	126	0.007J	0.028	1.98	2.33	0.058	1.2	7.7	0.014J	0.052	59.9
PW-1	8/10/2011	<0.02	0.36J	102	0.016J	0.013J	7.17	3.48*	0.82	4.2	2.7	<0.004	0.036	11.8
PW-1 (Dup)	8/10/2011	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PW-1	2/15/2012	0.11	0.56	120	0.011J	0.01J	2.8	2.04	0.318	0.54	9.2	0.012J	0.065	12.6
PW-2	10/5/2000	NA	<20	112	NA	<10	<10	NA	<10	NA	<20	<10	NA	<20
PW-2	7/31/2003	<2	<2	110	<3	<5	<16	<12	<1	30	<2	<12	<1	13
PW-2	11/16/2005	<0.2	0.62	85	0.27	0.077J	14	110	**20**	11	4.1	NA	0.2	NA
PW-2	6/30/2010	<0.02	0.19J	119	0.038	0.009J	0.74	1.87	0.58	2.02	0.6J	0.015J	0.074	37.4
PW-AIKEN	8/11/2003	<3	<5	68	<2	<2.5	<25	BDL	BDL	<40	<25	NA	<1	<50
PW-AIKEN	5/3/2005	<0.2	0.15J	77	<0.03	<0.02	1.2	21	0.64	0.24	0.21J	<0.05	0.13J	23
PW-AIKEN	4/27/2006	<0.2	0.44	140	<0.03	<0.02	3.7	5	0.62	0.12J	9.4	<0.05	0.052J	11B
PW-AIKEN	7/1/2010	0.03J	0.37J	121	0.004J	<0.003	0.6	3.79	0.657	1.66	1.4	0.005J	0.068	3.71
PW-AIKEN	8/10/2011	0.04J	0.66	130	0.013J	0.005J	3.2	2.08*	0.294	0.77	8	<0.004	0.046	3.17
PW-Farrow1	5/3/2005	<0.2	0.2	110	<0.03	0.05J	0.82J	0.95	0.52	0.065J	0.22J	<0.05	<0.04	82
PW-Farrow1	4/27/2006	<0.2	0.19J	110	0.03J	0.093J	1.1	8.7	1.4	0.21	0.3J	<0.05	0.056J	140B
PW-Farrow1	6/30/2010	<0.02	0.19J	98.1	0.013J	0.084	0.61	1.7	0.719	0.82	0.4J	0.006J	0.013J	173
PW-Farrow2 (Dup)	5/3/2005	<0.2	0.67	110	<0.03	0.036J	1.3	2.4	0.24J	0.15J	18	<0.05	0.23	90
PW-Farrow2	5/3/2005	<0.2	0.69	110	<0.03	0.032J	1.4	15	1.3	0.19J	17	<0.05	0.25	95
PW-Farrow2	4/26/2006	<0.2	0.78	150	<0.03	0.079J	1.9	11	5.7	0.23	23	<0.05	0.33	130B
PW-Farrow2	6/30/2010	0.08	1.58	142	0.011J	0.075	3.39	13.1	8.94	1.18	23.8	0.019J	0.277	185
PW-SANDERS	8/11/2003	<3	<5	170	<2	<2.5	<25	BDL	BDL	<40	<25	NA	<1	<50
PW-SANDERS	5/4/2005	<0.2	0.15J	190	<0.03	0.054J	1.2	1.1	0.29J	<0.059	<0.1	<0.05	<0.04	56
PW-Scoggins	5/3/2005	<0.2	0.13J	150	<0.03	<0.02	1.1	1.8	0.32	0.13J	0.14J	<0.05	<0.04	190
PW-Scoggins	4/27/2006	<0.2	0.081J	160	<0.03	<0.02	1	67	12	0.33	0.14J	<0.05	<0.04	440
PW-Scoggins	6/30/2010	<0.02	0.08J	171	0.012J	0.01J	1.01	6.4	1.56	1.12	<0.3	0.009J	0.011J	441
PW-STEWART	7/23/1985	<3	<5	100	<2	<2.5	<25	BDL	2.5	<40	<25	NA	<1	110
PW-STEWART	8/11/2003	<0.2	0.17J	110	<0.03	<0.02	1.2	0.43J	0.86	0.11J	<0.1	<0.05	0.12J	91
PW-STEWART	5/4/2005	<0.0002	0.00017 J	0.11	<0.00003	<0.00002	0.0012	0.00043 J	0.00086	0.00011 J	<0.0001	<0.00005	0.00012 J	0.091

BDL - below detection limit; detection limit not available

Dup - duplicate sample

NA - not analyzed

Bold: Above Residential RRS

Qualifiers:

J The associated numerical value is an estimated quantity.

B Analyte present in the blank and the sample.

* Spike recovery is equal to or outside the control criteria used.

P > 40% difference for detected concentrations between two columns - changed from 25% per DOE SOW Rev. 4 (6/30/04)

D Analytes analyzed at a secondary dilution.

E Reported value is estimated because of the presence of interference.

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Table 2 Groundwater Analytical Results: Organic Constituents above the Detection Limit

		Herbicide	Pesticides					SVOCs		VOCs									
Location	Date Sampled	Dinoseb (DNBP) (µg/L)	Endrin (µg/L)	gamma-BHC (Lindane) (µg/L)	Heptachlor (µg/L)	Heptachlor epoxide (µg/L)	Methoxyl-chlor (µg/L)	1,4-Dichloro-benzene (µg/L)	bis(2-Ethylhexyl) phthalate (µg/L)	1,2-Dibromo-3-chloropropane (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	Benzene (µg/L)	Carbon tetrachloride (µg/L)	Dimethoate (µg/L)	Ethyl benzene (µg/L)	o-Xylene (µg/L)	Toluene (µg/L)
Type 1 RRS		**7**	**2**	**0.2**	**0.4**	**0.2**	**40**	**75**	**6**	**2***	**0.05**	**5***	**5**	**5**	**5**	**7**	**700**	**DL**	**1000**
Residential RRS		**20**	**5**	**0.8**	**0.4**	**0.2**	**80**	**75**	**60**	**2***	**0.09**	**5***	**5**	**5**	**6**	**7**	**700**	**0.37**	**1000**
BW-1	11/16/2005	<0.39	<0.094	<0.13	<0.097	<0.11	<0.057	<0.23	2.3	<0.0024	<0.002	<0.24	<0.24	<0.21	<0.24	NA	<0.23	NA	<0.22
BW-1	4/27/2006	<0.39	<0.089	<0.12	<0.092	<0.1	<0.054	<0.23	<1	<0.0021	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.13	<0.23	NA	<0.22
BW-1	6/30/2010	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	0.08J	<0.0036	0.039	<0.038	<0.057	<0.022	0.25J	<0.0047	<0.023	0.04J	0.15J
BW-1	8/10/2011	<0.048	<0.00077	<0.00041	<0.00049	0.0053J	<0.0013	<0.05	0.28J	<0.0036	**0.37**	<0.038	0.13J	<0.022	0.35J	<0.0047	<0.023	<0.023	<0.05
BW-1 (Dup)	8/10/2011	NA	<0.00077	<0.00041	<0.00049	0.00091JP	<0.0013	<0.05	0.11J	<0.0036	**0.38**	<0.038	0.15J	<0.022	0.39J	<0.0047	<0.023	<0.023	<0.05
BW-1	2/15/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	0.28J	<0.0036	**0.33**	<0.038	0.19J	<0.022	0.49J	<0.0047	<0.023	<0.023	<0.05
BW-1	8/9/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	0.31J	<0.0036	**0.48**	<0.038	0.22J	<0.022	0.55	<0.0047	<0.023	<0.023	0.05J
BW-1	3/7/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.12	0.21J	<0.0036	**0.42**	<0.08	0.22J	<0.062	0.43J	<0.0047	<0.05	<0.074	<0.054
BW-1 (Dup)	3/7/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.12	0.18J	<0.0036	**0.46**	<0.08	0.25J	<0.062	0.44J	<0.0047	<0.05	<0.074	<0.054
BW-1	9/12/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.00049	<0.0013	<0.12	0.19J	<0.0036	**0.19**	<0.08	0.12J	<0.062	0.2J	<0.0047	<0.05	<0.074	0.08J
BW-1	9/12/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.00049	<0.0013	<0.12	0.16J	<0.0036	**0.19**	<0.08	0.11J	<0.062	0.21J	<0.0047	<0.05	<0.074	0.09J
BW-1	2/20/2014	<0.048	<0.00077	<0.00041	0.00053JP	<0.047i	<0.0013	<0.12	0.083J	<0.0036	**0.17**	<0.08	0.11J	0.09J	0.23J	<0.0047	0.06J	0.15J	<0.054
BW-1 (Dup)	2/20/2014	<0.048	<0.00077	<0.00041	0.00065J	<0.022i	<0.0013	<0.12	0.11J	<0.0036	**0.16**	<0.08	0.11J	0.1J	0.23J	<0.0047	0.06J	0.16J	<0.054
BW-2	11/16/2005	<0.39	<0.091	<0.12	<0.094	<0.1	<0.055	<0.23	<1	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	NA	<0.23	NA	<0.22
BW-2 (Dup)	11/16/2005	<0.4	<0.093	<0.13	<0.096	<0.11	<0.056	<0.23	<1.1	<0.0024	<0.0021	<0.24	<0.24	<0.21	<0.24	NA	<0.23	NA	<0.22
BW-2	4/27/2006	<0.4	<0.088	<0.12	<0.091	<0.1	<0.053	<0.23	<1	<0.0022	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.14	<0.23	NA	<0.22
BW-2	6/30/2010	<0.048	<0.00077	0.0021JP	<0.00049	<0.0006	<0.0088i	<0.05	0.069J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-2	8/9/2011	<0.048	<0.00077	<0.0012i	<0.00049	0.0057JPD	0.0074JP	<0.05	0.095J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-2	2/15/2012	<0.048	<0.00077	0.0035JP	<0.00049	0.17D	<0.0013	0.06J	0.14J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-2 (Dup)	2/15/2012	<0.048	<0.00077	0.0034JP	<0.00049	<0.067i	<0.0013	0.05J	0.24J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-2	8/9/2012	<0.048	<0.00077	<0.00066i	<0.00049	0.061JD	<0.0013	0.05J	0.26J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-2	3/5/2013	<0.048	<0.00077	<0.0037	<0.00049	0.051P	0.008JP	<0.12	0.16J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	<0.05	<0.074	<0.054
BW-2	9/11/2013	<0.048	0.0046J	<0.00041	<0.00049	<0.00049	0.0079J	<0.12	0.19J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	<0.05	<0.074	0.14J
BW-2	2/20/2014	<0.048	<0.00077	<0.00041	<0.00049	<0.056i	0.0087J	<0.12	0.58	<0.0036	<0.003	<0.08	<0.095	0.11J	<0.096	<0.0047	0.05J	0.13J	<0.054
BW-3	11/16/2005	<0.4	<0.091	<0.12	<0.094	<0.1	<0.055	<0.23	<1	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	NA	<0.23	NA	<0.22
BW-3	4/27/2006	<0.4	<0.089	<0.12	<0.092	<0.1	<0.054	<0.23	<1	<0.0022	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.14	<0.23	NA	<0.22
BW-3	7/1/2010	<0.048	<0.00077	0.00097J	<0.00049	<0.0006	<0.0013	<0.05	<0.06	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-3	8/10/2011	<0.048	<0.00077	<0.00041	<0.00049	0.051	<0.0013	<0.05	0.091J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-3	2/14/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.0029i	<0.0013	<0.05	0.43J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-3	8/10/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	0.14J	NA**	NA**	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-3	3/6/2013	<0.048	<0.00077	<0.00041	<0.00049	0.0073J	<0.0013	<0.12	0.12J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	<0.05	<0.074	<0.054
BW-3	9/10/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.00049	<0.0013	<0.12	0.13J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	<0.05	<0.074	0.1J
BW-3	2/19/2014	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.12	0.087J	<0.0036	<0.003	<0.08	<0.095	0.12J	<0.096	<0.0047	<0.05	0.12J	<0.054
BW-4	6/30/2010	<0.048	<0.00077	<0.00041	<0.00049	<0.008i	<0.0013	<0.05	0.43J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-4 (Dup)	6/30/2010	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	0.35J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	0.05J
BW-4	8/9/2011	<0.048	<0.00077	<0.00041	<0.00049	0.0056J	<0.0013	<0.05	0.089J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-4	2/14/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.00094i	<0.0013	<0.05	0.14J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
BW-4	8/9/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.072i	<0.0013	<0.05	0.19J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0048	<0.023	<0.023	<0.05
BW-4 (Dup)	8/9/2012	<0.048	<0.00077	<0.00041	<0.00049	<0.086i	<0.0013	<0.05	0.22J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	0.06J
BW-4	3/5/2013	<0.048	<0.00077	<0.00041	<0.00049	0.0032J	<0.0013	<0.12	0.14J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	0.013J	<0.05	<0.074	<0.054
BW-4	9/11/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.00049	<0.0013	<0.12	0.14J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	<0.05	<0.074	0.08J
BW-4	2/20/2014	<0.048	<0.00077	<0.00041	<0.00049	<0.014i	<0.0013	<0.12	7.4D	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	0.12J	0.26J	<0.054
BW-5	3/7/2013	0.11J	<0.00077	0.0097JP	<0.00049	0.016	<0.0013	<0.12	0.38J	0.082	0.06	<0.08	<0.095	<0.062	<0.096	<0.013i	<0.05	<0.074	0.37J
BW-5	9/12/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.1**	NA	NA	NA	NA	NA	NA	NA	NA
BW-5	2/18/2014	NA	NA	NA	NA	NA	NA	NA	NA	0.018	**0.11**	NA	NA	NA	NA	NA	NA	NA	NA
BW-6-1	7/1/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.21**	NA	NA	NA	NA	NA	NA	NA	NA
BW-6-1	2/20/2014	0.08J	<0.0056i	0.0046JP	<0.0024i	<0.077i	0.0079J	<0.12	<0.06	0.17	**0.17**	<0.08	0.1J	<0.062	<0.096	<0.0047	<0.05	<0.074	3.2
BW-6-2	7/1/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
BW-6-3	7/1/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA
BW-6-3 (Dup)	7/1/2013	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.003	NA	NA	NA	NA	NA	NA	NA	NA

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Table 2 Groundwater Analytical Results: Organic Constituents above the Detection Limit

		Herbicide	Pesticides					SVOCs		VOCs									
Location	Date Sampled	Dinoseb (DNBP) (µg/L)	Endrin (µg/L)	gamma-BHC (Lindane) (µg/L)	Heptachlor (µg/L)	Heptachlor epoxide (µg/L)	Methoxyl-chlor (µg/L)	1,4-Dichloro-benzene (µg/L)	bis(2-Ethylhexyl) phthalate (µg/L)	1,2-Dibromo-3-chloropropane (µg/L)	1,2-Dibromoethane (µg/L)	1,2-Dichloroethane (µg/L)	1,2-Dichloropropane (µg/L)	Benzene (µg/L)	Carbon tetrachloride (µg/L)	Dimethoate (µg/L)	Ethyl benzene (µg/L)	o-Xylene (µg/L)	Toluene (µg/L)
Type 1 RRS		**7**	**2**	**0.2**	**0.4**	**0.2**	**40**	**75**	**6**	**2***	**0.05**	**5***	**5**	**5**	**5**	**7**	**700**	**DL**	**1000**
Residential RRS		**20**	**5**	**0.8**	**0.4**	**0.2**	**80**	**75**	**60**	**2***	**0.09**	**5***	**5**	**5**	**6**	**7**	**700**	**0.37**	**1000**
D	3/6/2013	<0.048	<0.00077	<0.00041	<0.00049	0.015	<0.011i	<0.12	0.21J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	0.05J	<0.074	0.32J
D	9/10/2013	<0.048	<0.00077	<0.00041	<0.00049	<0.00049	<0.0013	<0.12	0.25J	<0.0036	<0.003	<0.08	<0.095	0.51	<0.096	<0.0047	0.16J	0.13J	0.6
D	2/18/2014	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.12	0.16J	<0.0036	<0.003	<0.08	<0.095	<0.062	<0.096	<0.0047	0.14J	0.35J	<0.054
PW-1	10/5/2000	<0.5	<0.1	<0.05	<0.05	<0.05	<0.5	<10	<10	NA	<5	<5	<5	<5	<5	NA	<5	NA	<5
PW-1	11/22/2000	<0.5	<0.1	<0.05	<0.05	<0.05	<0.5	<10	<10	NA	NA	<5	<5	<5	<5	<2	<5	NA	<5
PW-1	7/22/2003	<0.88	<1	<0.1	<0.1	<0.1	<2	<0.5	<4	<0.5	**0.131**	<0.5	<0.5	<0.5	<0.5	NA	<0.5	NA	<0.5
PW-1	7/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	**0.13**	NA	NA	NA	NA	NA	NA	NA	NA
PW-1	8/7/2003	NA	NA	NA	NA	NA	NA	NA	NA	<0.012	**0.213**	NA	NA	NA	NA	NA	NA	NA	NA
PW-1 (150 ft)	5/5/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.0082J	NA	NA	NA	NA	NA	NA	NA	NA
PW-1 (190 ft)	5/5/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0021	NA	NA	NA	NA	NA	NA	NA	NA
PW-1	11/16/2005	1.1J	<0.097	<0.13	<0.1	<0.11	<0.059	<0.23	<1.1	<0.0025	**0.29**	<0.24	<0.24	<0.21	0.29J	NA	<0.23	NA	<0.22
PW-1	6/30/2010	1.6	<0.0098i	0.0037JP	<0.00049	<0.045i	<0.069i	<0.05	0.16J	<0.0036	**0.11**	0.26J	0.12J	<0.022	0.21J	<0.0047	<0.023	<0.023	<0.05
PW-1	8/10/2011	3.7	<0.00077	0.0071J	<0.00049	<0.012i	0.037P	<0.05	0.14J	0.023	**1.4D**	0.53	0.35J	<0.022	0.46J	<0.0047	<0.023	<0.023	<0.05
PW-1	2/15/2012	0.63	<0.0098i	0.0042J	<0.00049	<0.0006	<0.0013	<0.05	0.15J	0.0047J	**0.14**	0.41J	0.14J	<0.022	0.2J	<0.0047	<0.023	<0.023	<0.05
PW-2	10/5/2000	<0.5	<0.1	<0.05	<0.05	<0.05	<0.5	<10	<10	NA	<5	<5	<5	<5	<5	NA	<5	NA	<5
PW-2	7/31/2003	<0.1	<0.001	<0.01	<0.005	<0.005	<0.01	<0.2	<0.1	<0.02	0.074	<0.2	<0.2	<0.2	<0.2	NA	<0.2	NA	<0.2
PW-2	8/7/2003	NA	NA	NA	NA	NA	NA	NA	NA	<0.012	0.053	NA	NA	NA	NA	NA	NA	NA	NA
PW-2 (190 ft)	5/5/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0021	NA	NA	NA	NA	NA	NA	NA	NA
PW-2 (235 ft)	5/5/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.0021	NA	NA	NA	NA	NA	NA	NA	NA
PW-2	11/16/2005	<0.39	<0.096	<0.13	0.036	<0.11	<0.058	<0.23	7.5	0.05	0.02	<0.24	<0.24	<0.21	<0.24	NA	<0.23	NA	35
PW-2	6/30/2010	<0.048	<0.0062i	0.0037J	<0.00049	<0.0086i	<0.0013	<0.05	0.11J	0.046	0.012	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
PW-AIKEN	8/11/2003	<0.88	<1	<0.1	<0.1	<0.1	<2	<0.5	<4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<0.5	NA	<0.5
PW-AIKEN	5/3/2005	<0.38	<0.087	<0.12	<0.09	<0.099	<0.052	<0.23	<0.99	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22
PW-AIKEN	4/27/2006	<0.4	<0.09	<0.12	<0.093	<0.1	<0.054	<0.23	<1	<0.0022	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.13	<0.23	NA	<0.22
PW-AIKEN	7/1/2010	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	0.43J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
PW-AIKEN	8/10/2011	<0.048	<0.00077	<0.00041	<0.00049	0.0028J	<0.0013	<0.05	0.15J	<0.0036	<0.003	<0.038	<0.057	0.04J	<0.039	<0.0047	<0.023	<0.023	<0.05
PW-Farrow1	5/3/2005	<0.38	<0.088	<0.12	<0.091	<0.1	<0.053	<0.23	<1	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22
PW-Farrow1	4/27/2006	<0.4	<0.089	<0.12	<0.092	<0.1	<0.054	<0.23	<1	<0.0022	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.13	<0.23	NA	<0.22
PW-Farrow1	6/30/2010	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	<0.06	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
PW-Farrow2 (Dup)	5/3/2005	<0.38	<0.089	<0.12	<0.092	<0.1	<0.054	<0.23	<1	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22
PW-Farrow2	5/3/2005	<0.38	<0.088	<0.12	<0.091	<0.1	<0.053	<0.23	<1	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22
PW-Farrow2	4/26/2006	<0.38	<0.097	<0.13	0.1 *	<0.11	<0.058	<0.23	<1.1	<0.0022	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.13	<0.23	NA	<0.22
PW-Farrow2	6/30/2010	<0.048	<0.00077	<0.00041	<0.00049	<0.0006	<0.0013	<0.05	<0.06	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
PW-SANDERS	8/11/2003	<0.88	<1	<0.1	<0.1	<0.1	<2	<0.5	<4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<0.5	NA	<0.5
PW-SANDERS	5/4/2005	<0.38	<0.087	<0.12	<0.09	<0.099	<0.052	<0.23	<0.99	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22
PW-Scoggins	5/3/2005	<0.4	<0.087	<0.12	<0.09	<0.099	<0.052	<0.23	<0.99	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22
PW-Scoggins	4/27/2006	<0.4	<0.09	<0.12	<0.093	<0.1	<0.054	<0.23	<1	<0.0022	<0.0018	<0.24	<0.24	<0.21	<0.24	<0.13	<0.23	NA	<0.22
PW-Scoggins	6/30/2010	<0.048	<0.00082	<0.00044	<0.00052	<0.00064	<0.0014	<0.05	0.098J	<0.0036	<0.003	<0.038	<0.057	<0.022	<0.039	<0.0047	<0.023	<0.023	<0.05
PW-STEWART	8/11/2003	<0.88	<1	<0.1	<0.1	<0.1	<2	<0.5	<4	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	NA	<0.5	NA	<0.5
PW-STEWART	5/4/2005	<0.38	<0.087	<0.12	<0.09	<0.099	<0.052	<0.23	<0.99	<0.0025	<0.0021	<0.24	<0.24	<0.21	<0.24	<0.2	<0.23	NA	<0.22

Dup - duplicate sample

* RRS not calculated, HSRA Type 1 Groundwater criteria value shown.

NA - not analyzed

NA** - not analyzed due to laboratory error

Bold: Above Residential RRS

Qualifiers:

J The associated numerical value is an estimated quantity.

B Analyte present in the blank and the sample.

* Spike recovery is equal to or outside the control criteria used.

P > 40% difference for detected concentrations between two columns - changed from 25% per DOE SOW Rev. 4 (6/30/04)

D Analytes analyzed at a secondary dilution.

E Reported value is estimated because of the presence of interference.

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Table 3. Screening of Former Surface Impoundment Soil Data

Parameter	Residential RRS (mg/kg)	Industrial Surface Soil RRS (mg/kg)	Industrial Subsurface Soil RRS (mg/kg)	Maximum Concentration (mg/kg)
1,2,3-Trichloropropane	0.5	1.9	4	ND
1,2,4-Trichlorobenzene	10.83	10.83	10.83	1.5
1,2-Dibromoethane	0.01	0.01	0.01	ND
1,2-Dichlorobenzene	60	60	60	3.5
1,2-Dichloropropane	0.5	0.5	0.5	ND
1,4-Dichlorobenzene	7.5	7.5	7.5	1
2,4,5-TC (Silvex)	10	10	10	0.018
2,4-D	7	7	7	0.020
2,4-Dimethylphenol	70	70	70	0.13
2-Butanone (MEK)	200	200	200	ND
3/4-Methylphenol	13	82	82	ND
4,4'-DDD	19	47	47	**60**
4,4'-DDE	14	38	38	**32**
4,4'-DDT	20	54	54	**340**
4-Nitrophenol	6	6	6	ND
Acenaphthene	408	1244	1244	1.6
Acenaphthylene	130	130	130	ND
Acetone	400	400	400	7.3
Aldrin	0.66	0.66	0.66	**3.1**
alpha-BHC	0.66	0.66	0.66	**8.3**
Anthracene	3121	20584	20584	0.092
Antimony	5.4	36	36	**11**
Arsenic	20	38	41	**190**
Azinphos-methyl	10	10	10	ND
Barium	2554	16480	16480	80
Benzene	0.5	0.5	0.5	0.11
Benzo(a)anthracene	7.1	28	28	0.17
Benzo(a)pyrene	1.6	7.8	9.4	0.28
Benzo(b)fluoranthene	12	78	96	0.39
Benzo(g,h,i)perylene	500	500	500	0.096
Benzo(k)fluoranthene	125	784	940	0.18
Beryllium	156	3161	3161	2.2
beta-BHC	0.66	0.66	0.66	**56**
bis(2-Ethylhexyl) phthalate	287	957	957	3.6
Bromomethane	1	1	1	ND
Cadmium	7.5	150	150	**21**
Carbaryl	70	182	182	3.0
Carbon disulfide	400	400	400	0.48
Chlordane	9.2	9.2	9.2	**170**
Chlorobenzene	10	10	10	**290**
Chloroethane	34	163	163	ND
Chlorpyrifos	15	94	94	0.016000001

EPS

Table 3. Screening of Former Surface Impoundment Soil Data

Parameter	Residential RRS (mg/kg)	Industrial Surface Soil RRS (mg/kg)	Industrial Subsurface Soil RRS (mg/kg)	Maximum Concentration (mg/kg)
Chromium	100/100000	109/100000	1200/100000	160
Chrysene	867	2817	2817	0.21
cis-1,2-Dichloroethene	782	20440	0.53	ND
Copper	915	2886	2886	**4900**
Coumaphos	1	1	1	**5.4**
Cyclohexanone	359	2351	2351	ND
Dalapon	20	20	20	0.044
Diazinon	1.3	8.8	8.8	0.013
Dibenzo(a,h)anthracene	2	7.8	31	0.03
Dibenzofuran	78	2044	1.55	0.17
Dicamba	20	20	20	0.024
Dichloromethane (Methylene chloride)	0.5	0.6	0.6	ND
Dieldrin	0.66	0.66	0.66	**1.7**
Dimethoate	0.7	0.7	0.7	0.03
Di-n-butylphthalate	400	500	500	0.035
Di-n-octylphthalate	5491	5491	5491	ND
Dinoseb (DNBP)	3.5	18	18	0.06
Disulfoton	0.03	0.15	0.15	**42**
Endosulfan I	26	170	170	**140**
Endosulfan II	10	10	10	**18**
Endosulfan sulfate	1.65	1.65	1.65	1.2
Endrin	10	24	24	**160**
Endrin Aldehyde	10	10	10	**38**
EPN	6.4	20	6.4	2.3
Ethyl benzene	70	70	70	**650**
Fensulfothion	10	10	10	ND
Fluoranthene	2224	9118	9118	1.8
Fluorene	364	1492	1492	1.3
gamma-BHC (Lindane)	0.66	0.66	0.66	**4.4**
Heptachlor	0.67	0.83	0.83	**0.87**
Heptachlor epoxide	1.6	1.65	1.65	**20**
Indeno(1,2,3-cd)pyrene	12	78	312	0.096
Isopropylbenzene	22	33	33	1.8
Lead	270	400	400	**2700**
Malathion	20	20	20	0.040
Mercury	2.1	17	17	0.46
Methoxychlor	87	542	542	4.3
Methyl parathion	0.2	1	1	**0.24**
Mevinphos	10	10	10	ND
Naphthalene	100	100	100	68
Nickel	404	2608	2608	27
Nitrobenzene	2	2	2	ND
o-Xylene	20	38	38	**390**

Table 3. Screening of Former Surface Impoundment Soil Data

Parameter	Residential RRS (mg/kg)	Industrial Surface Soil RRS (mg/kg)	Industrial Subsurface Soil RRS (mg/kg)	Maximum Concentration (mg/kg)
Parathion	20	60	60	1.1
Pentachlorophenol	3.3	4	4	**4.4**
Phenanthrene	110	110	110	2
Pyrene	2184	6770	6770	1.3
Selenium	8.3	52	52	ND
Silver	17	85	85	2.6
Styrene	14	57	57	ND
Tetrachloroethene	0.5	0.5	0.5	ND
Toluene	100	100	100	64
Toxaphene	10.88	10.88	10.88	**1000**
Trichloroethene	0.5	0.5	0.5	ND
Zinc	5847	38564	38564	640

ND: Not detected

Maximum exceeds Residential RRS

Table 4. Soil Analytical Results Associated with Former Surface Impoundments

Sample ID	Location	Date Sampled	Depth	Metals - Method 6010							Pesticides - Method 8081															
				Antimony (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)	4,4'-DDD (mg/kg)	4,4'-DDE (mg/kg)	4,4'-DDT (mg/kg)	Aldrin (mg/kg)	alpha-BHC (mg/kg)	beta-BHC (mg/kg)	Chlordane (mg/kg)	Dieldrin (mg/kg)	Endosulfan I (mg/kg)	Endosulfan II (mg/kg)	Endrin (mg/kg)	Endrin Aldehyde (mg/kg)	gamma-BHC (Lindane) (mg/kg)	Heptachlor (mg/kg)	Heptachlor epoxide (mg/kg)	Toxaphene (mg/kg)
Residential RRS				5.4	20	7.5	100	915	270	2.8	5847	19	14	20	0.66	0.66	0.66	9.2	0.66	26	10	10	10	0.66	0.67	1.6	10.88
Industrial SS RRS				36	38	150	109/1200	2886	400	10	38564	47	38	54	0.66	0.66	0.66	9.2	0.66	170	10	24	10	0.66	0.83	1.65	10.88
Industrial SB RRS				36	41	150	1200	2886	400	10	38564	47	38	54	0.66	0.66	0.66	9.2	0.66	170	10	24	10	0.66	0.83	1.65	10.88
Surface Impoundment 4																											
SI-4	In SI	10/20/2000	0		1.2			0.92			8.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-4	In SI	10/20/2000	4-5		<4.71	<2.36	19.7		<4.71																		
SI-4	In SI	10/20/2000	5		0.62			35			8.9	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	0.1	<0.02	<0.02	<0.02	0.046	<0.02	<0.02	<0.4
SI-4-1	In SI	9/20/2005	2-4	<0.47	4.1	<0.23	19	4.3	3.8	<1.4	5.5	0.37	0.05	0.38	<0.0016	<0.0059	<0.0054	<0.034	<0.004	<0.0018	<0.0031	<0.0037	<0.0074	<0.0016	<0.0037	<0.0024	<0.14
SI-4-2	In SI	9/20/2005	4-6	<0.46	3.2	<0.22	17	3.9	3.3	<1.3	7.7	0.029	0.015	0.0079	<0.00016	0.00096J	<0.00054	<0.0034	<0.0004	<0.00018	<0.00031	<0.00037	<0.00075	<0.00016	<0.00037	<0.00024	<0.014
SI-4-3	In SI	9/20/2005	2-4	<0.5	5.1	<0.24	19	3.6	3.2	<1.4	3.1	<8.6E-03	0.037J	0.12	<0.004	<0.015	<0.013	<0.086	<0.01	<0.0046	<0.0077	<0.0091	<0.019	<0.004	<0.0091	<0.006	<0.34
Surface Impoundment 5																											
BHS1C-5-1	Under SI	7/7/2006	13-15									<0.00035	<0.00035	<0.00031	<0.00016	<0.0006	<0.00054	<0.0035	<0.0004	<0.00019	0.00033J	<0.00037	<0.00075	<0.00016	<0.00037	<0.00024	<0.014
BHS1C-5-1	Under SI	7/7/2006	18-20									<0.00034	<0.00034	<0.00031	<0.00016	<0.00059	<0.00054	<0.0034	<0.0004	<0.00018	<0.00031	<0.00036	<0.00074	<0.00016	<0.00036	<0.00024	<0.014
BHS1C-5-1	Under SI	7/7/2006	8-10									<0.00034	0.0022JP	<0.00031	<0.00016	<0.00059	<0.00054	<0.0034	<0.0004	0.0018J	0.0028JP	<0.00036	<0.00074	<0.00016	<0.00036	<0.00024	<0.014
BHS1C-5-2	Under SI	7/7/2006	13-15									<0.034	<0.034	<0.031	0.2P	<0.059	<0.053	**10**	<0.04	<0.018	<0.031	<0.036	<0.074	<0.016	0.17J	<0.024	32P
BHS1C-5-2	Under SI	7/7/2006	18-20									<0.0013	<0.0013	<0.0012	<0.00063	<0.0023	<0.0021	0.22P	<0.0016	<7.2E-04	<0.0012	<0.0014	<0.0029	<0.00063	<0.0014	<9.4E-04	1
BHS1C-5-2	Under SI	7/7/2006	8-10									<0.34	<0.34	<0.3	**3.1P**	<0.58	<0.53	<3.4	<0.39	<0.18	**18**	<0.36	<0.73	<0.16	<0.36	<0.24	480P
SI-1	Outside S	12/20/2000	0		2.4			3.1			15	<0.0035	0.0035	<0.0035	<0.0018	<0.0018	<0.0018		<0.0035	<0.0018	<0.0035	<0.0035	<0.0035	<0.0018	<0.0018	<0.0018	<0.18
SI-1	Outside S	12/20/2000	10		2.8			7.3			6	<0.0039	<0.0039	<0.0039	<0.0019	<0.0019	<0.0019		<0.0039	<0.0019	<0.0039	<0.0039	<0.0039	<0.0019	<0.0019	<0.0019	<0.19
SI-1	Under SI	12/20/2000	14		6.26	<2.47	75.4		6.83			<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0017		<0.0033	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.17
SI-1	Under SI	12/20/2000	15		5.4			8.7			10	<0.0043	<0.0043	<0.0043	<0.0022	<0.0022	<0.0022		<0.0043	<0.0022	<0.0043	<0.0043	<0.0043	<0.0022	<0.0022	<0.0022	<0.22
SI-1	In SI	12/20/2000	5		7			9.9			15	<0.004	<0.004	<0.004	<0.0019	<0.0019	<0.0019		<0.004	<0.002	<0.004	<0.004	<0.004	<0.004	<0.002	<0.002	<0.2
SI-5	Outside S	10/20/2000	0		3.1			230			110	<2	<2	<2	<2	<2	<2	**170**	<2	<2	<2	<2	<2	<2	<2	<2	<40
SI-5	In SI	10/20/2000	4-5		<4.7	<2.35	<2.35		5.25			**32**	<0.0033	**34**	<0.0017	<0.0017	<0.0017		<0.0033	15	<0.0033	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	98
SI-5	In SI	10/20/2000	5		14			72			46	<2	<2	<2	<2	<2	<2	**130**	<2	<2	<2	<2	<2	<2	<2	<2	<40
SI-5-1	In SI	9/20/2005	1-3	<0.46	<0.69	<0.23	5.6	1.7J	2.5	<1.3	2.2	<0.0034	0.3P	<0.003	<0.0016	<0.0058	<0.0053	<0.034	<0.0039	<0.0018	<0.003	<0.0036	<7.3E-03	<0.0016	<0.0036	<0.0024	<0.13
SI-5-2	In SI	9/20/2005	3-5	<0.45	<0.67	<0.22	8.2	100	5.2	<1.3	5.5	<0.0013	0.019	<0.0012	<0.00061	<0.0023	<0.0021	<0.013	<0.0015	<0.0007	<0.0012	<0.0014	<0.0029	<0.00061	<0.0014	<9.2E-04	<0.053
SI-5-3	In SI	9/20/2005	4-6	<0.48	1.8	<0.23	6.1	51	10	<1.4	30	0.9400001	0.3J	0.12J	<0.016	<0.06	<0.054	<0.35	<0.04	<0.018	<0.031	<0.037	<0.075	<0.016	<0.037	<0.024	<1.4
SI-5-4	In SI	9/20/2005	4-6	0.86J	3.2	0.43J	10	110	15B	<1.4	94	<0.36	<0.36	<0.33	<0.17	<0.63	<0.57	<3.6	<0.42	<0.19	<0.33	<0.39	<0.78	<0.17	<0.39	<0.25	<14
Confirmation Samples																											
SI5-CS1		1/3/2014	7	<5.12	<5.12	<2.56	6.62	12	6.44	<5.12	8.1	0.012	<0.0037	0.0058	<0.0019	<0.0019	<0.0019	<0.037	<0.0037	<0.0019	<0.0037	<0.0037	<0.0037	<0.0019	<0.0019	<0.0019	<0.19
SI5-CS2		1/3/2014	7	<5.5	<5.5	<2.75	6.31	<2.75	<5.5	<5.5	<5.5	<0.0037	<0.0037	<0.0037	<0.0019	<0.0019	<0.0019	0.24	<0.0037	<0.0019	<0.0037	<0.0037	<0.0037	<0.0019	<0.0019	<0.0019	<0.19
SI5-CS3		1/3/2014	7	<5.23	<5.23	<2.62	5.13	4.28	<5.23	<5.23	11.5	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.038	<0.0038	<0.0019	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.19
SI5-CS4		1/3/2014	15	<5.48	<5.48	<2.74	4.92	3.6	6.22	<5.48	5.93	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	0.038	<0.0038	<0.0019	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.19
SI5-CS5		1/3/2014	15	<6.16	<6.16	<3.08	10.1	4.71	9.21	<6.16	<6.16	<0.0042	<0.0042	0.017	<0.0021	<0.0021	<0.0021	2.8	<0.0042	<0.0021	<0.0042	<0.0042	<0.0042	<0.0021	<0.0021	<0.0021	<0.21
SI5-CS6		1/3/2014	15	<5.83	<5.83	<2.91	10.3	3.89	6.84	<5.83	6.19	<0.004	<0.004	0.025	<0.002	<0.002	<0.002	**11**	<0.004	<0.002	<0.004	<0.004	<0.004	<0.002	<0.002	<0.002	<0.2
Surface Impoundment 9																											
BHS1C-9-1	Under SI	7/1/2006	13-15									<7.3E-03	<7.3E-03	0.12	<0.0034	<0.013	<0.012	4.9	<8.6E-03	6.5E-02P	<0.0066	<7.8E-03	<0.016	<0.0034	0.13	<0.0051	6
BHS1C-9-1	Under SI	7/1/2006	18-20									<0.0014	<0.0014	0.019	0.0022J	<0.0024	<0.0022	<0.014	<0.0016	<0.00075	<0.0013	<0.0015	<0.003	<0.00065	0.0027J	<0.00098	0.89
BHS1C-9-1	Under SI	7/1/2006	8-10									<0.034	1.3P	1.2	0.18J P	<0.06	<0.054	**41**	<0.04	1P	<0.031	<0.037	<0.075	<0.016	**0.77**	<0.024	**110DJP**
BHS1C-9-2	Under SI	7/1/2006	13-15									<0.0016	0.015JP	<0.0015	<0.00076	<0.0028	<0.0026	0.78	<0.0019	<0.00087	<0.0015	<0.0017	<0.0035	<0.00076	<0.0017	<0.0011	<6.5E-02
BHS1C-9-2	Under SI	7/1/2006	18-20									<0.0015	0.027P	0.025	<0.00071	<0.0026	<0.0024	0.54	<0.0018	0.021P	<0.0014	<0.0016	<0.0033	<0.00071	0.0065J	<0.0011	1.7
BHS1C-9-2	Under SI	7/1/2006	8-10									<0.068	<0.068	1.8	<0.032	<0.12	<0.11	**47**	<0.079	1.7P	<0.061	<0.072	<0.15	<0.032	0.6	<0.048	**160**
GP13-2004	Under SI	6/3/2004	10		<3.56							<3.75E-02	<3.75E-02	<3.75E-02	<1.8E-02	<1.8E-02	<1.8E-02		<3.75E-02	<1.8E-02	<3.75E-02	<3.75E-02	<3.75E-02	<3.75E-02	<1.88E-02	<1.88E-02	0.48
SI-9	In SI	10/17/2000	0		1.1			2.3			2.6	<0.02	<0.02	0.42	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-9	In SI	10/17/2000	7		5.45	<2.46	47.9		7.18																		
SI-9	In SI	10/17/2000	7		1.5			3.3			2.1	<0.02	<0.02	0.15	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-9-1	In SI	9/19/2005	0-2	<0.49	1.1	<0.24	13	3.5	4.7	<1.4	2.5	1.1	<0.036	6.6	<0.017	<0.062	<0.056	<0.36	<0.042	<0.019	<0.032	<0.038	<7.7E-02	<0.017	<0.038	<0.025	**14J**
SI-9-2	In SI	9/19/2005	6-8	<0.49	1.9	<0.24	11	7.8	5.7	<1.4	6.1	0.04	0.008P	0.0011J	<0.00016	<0.00059	<0.00053	<0.0034	<0.0004	<0.00018	<0.00031	<0.00036	<0.00074	<0.00016	0.0058P	<0.00024	<0.014
SI-9-3	In SI	9/19/2005	6-8	<0.49	3.3	<0.24	25	220	7.9	<1.4	12	3.6	<0.18	3.7D	<0.085	<0.32	<0.29	<1.8	<0.21	3.2P	<0.16	<0.19	<0.4	<0.085	<0.19	<0.13	**130**
SI-9-4	In SI	9/19/2005	4-6	<0.51	1.4	<0.25	12	5.2	6	<1.5	3.5	0.012J	<0.0014	0.07	<0.00067	<0.0025	<0.0022	<0.014	<0.0017	<0.00076	0.0094J	<0.0015	<0.0031	0.0017J P	<0.0015	<0.001	<0.057
SI-9-5	In SI	9/20/2005	2-4	<0.48	1.7	<0.24	15	4.4	5.6	<1.4	2.3	0.021P	9.3E-03P	0.094	<6.8E-04	<0.0025	0.001J	<0.015	<0.0017	<0.00077	<0.0013	<0.0015	<0.0031	0.00045JP	<0.0015	<0.001	0.25
SI-9-6	In SI	9/20/2005	6-8	<0.48	4.6	<0.24	19	6.9	6.3	<1.4	4	<0.071	<0.071	2.8	<0.033	<0.12	<0.11	<0.71	<0.083	0.9300001	<0.064	<7.6E-02	<0.15	<0.033	**0.87**	<0.05	**130**
SI-9-6	Under SI	9/20/2005	8-10	<0.52	2.5	<0.25	11	5.9	3.7	<1.5	3.9	<0.00035	<0.00035	0.034	<0.00016	<0.00061	<5.5E-04	<0.0035	<0.00041	<0.00019	<0.00032	<0.00037	<0.00076	<0.00016	0.0063	<0.00025	1.3

EPS

Table 4. Soil Analytical Results Associated with Former Surface Impoundments

Sample ID	Location	Date Sampled	Depth	Metals - Method 6010								Pesticides - Method 8081															
				Antimony (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)	4,4'-DDD (mg/kg)	4,4'-DDE (mg/kg)	4,4'-DDT (mg/kg)	Aldrin (mg/kg)	alpha-BHC (mg/kg)	beta-BHC (mg/kg)	Chlordane (mg/kg)	Dieldrin (mg/kg)	Endosulfan I (mg/kg)	Endosulfan II (mg/kg)	Endrin (mg/kg)	Endrin Aldehyde (mg/kg)	gamma-BHC (Lindane) (mg/kg)	Heptachlor (mg/kg)	Heptachlor epoxide (mg/kg)	Toxaphene (mg/kg)
Residential RRS				5.4	20	7.5	100	915	270	2.8	5847	19	14	20	0.66	0.66	0.66	9.2	0.66	26	10	10	10	0.66	0.67	1.6	10.88
Industrial SS RRS				36	38	150	109/1200	2886	400	10	38564	47	38	54	0.66	0.66	0.66	9.2	0.66	170	10	24	10	0.66	0.83	1.65	10.88
Industrial SB RRS				36	41	150	1200	2886	400	10	38564	47	38	54	0.66	0.66	0.66	9.2	0.66	170	10	24	10	0.66	0.83	1.65	10.88
Confirmation Samples																											
SI9-CS1		1/17/2014	6	<5.4	<5.4	<2.7	9.88	17.2	<5.4	<5.4	9.56	<7.2	<7.2	<7.2	<3.6	<3.6	<3.6	**180**	<7.2	<3.6	<7.2	<7.2	<7.2	<3.6	<3.6	<3.6	**2100**
SI9-CS2		1/17/2014	6	<4.96	<4.96	<2.48	8.62	11.9	<4.96	<4.96	9.74	<0.71	<0.71	<0.71	<0.36	<0.36	<0.36	**61**	<0.71	<0.36	<0.71	<0.71	<0.71	<0.36	<0.36	<0.36	**39**
SI9-CS3		1/17/2014	6	<5.29	<5.29	<2.65	19.8	22.1	5.93	<5.29	7.61	<0.77	<0.77	<0.77	<0.39	<0.39	<0.39	**18**	<0.77	<0.39	<0.77	<0.77	<0.77	<0.39	<0.39	<0.39	<39
SI9-CS4		1/17/2014	10	<6.12	<6.12	<3.06	23.2	14.6	9.94	<6.12	19.6	<0.83	<0.83	<0.83	<0.41	<0.41	<0.41	<8.3	<0.83	<0.41	<0.83	<0.83	<0.83	<0.41	<0.41	<0.41	<41
SI9-CS5		1/17/2014	10	<5.13	<5.13	<2.56	5.31	20.2	<5.13	<5.13	11.9	<0.071	<0.071	<0.071	<0.036	<0.036	<0.036	6	<0.071	<0.036	<0.071	<0.071	<0.071	<0.036	<0.036	<0.036	<3.6
SI9-CS6		1/17/2014	10	<5.37	<5.37	<2.69	60.6	5.96	<5.37	<5.37	<5.37	<7.6	<7.6	<7.6	<3.8	<3.8	<3.8	**120**	<7.6	<3.8	<7.6	<7.6	<7.6	<3.8	<3.8	<3.8	**430**
SI9-CS6		1/22/2014	15	<5.53	<5.53	<2.77	16.7	5.45	<5.53	<5.53	7.83	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.038	<0.0038	<0.0019	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.19
SI9-CS7		1/21/2014	7	<5.14	<5.14	<2.57	4.65	<2.57	<5.14	<5.14	16.1	<0.0037	<0.0037	<0.0037	<0.0018	<0.0018	<0.0018	<0.037	<0.0037	<0.0018	<0.0037	<0.0037	<0.0037	<0.0018	<0.0018	<0.0018	<0.18
SI9-CS8		1/21/2014	7	<5.12	<5.12	<2.56	5.65	2.75	<5.12	<5.12	<5.12	0.0099	<0.0037	0.016	<0.0018	<0.0018	<0.0018	0.15	<0.0037	<0.0018	<0.0037	<0.0037	<0.0037	<0.0018	<0.0018	<0.0018	0.31
SI9-CS9		1/21/2014	7	<5.05	<5.05	<2.53	8.4	7.73	<5.05	<5.05	5.39	0.2	<0.037	0.7600001	<0.018	<0.018	<0.018	**15**	<0.037	<0.018	<0.037	<0.037	<0.037	<0.018	<0.018	<0.018	**36**
SI9-CS10		1/22/2014	15	<5.38	<5.38	<2.69	3.46	<2.69	<5.38	<5.38	<5.38																
SI9-CS11		1/22/2014	15	<5.46	<5.46	<2.73	4.14	<2.73	<5.46	<5.46	<5.46																
Surface Impoundment 10																											
BHS1C-10-1	Under SI	6/30/2006	13-15									<0.00035	<0.00035	<0.00031	<0.00016	<0.00061	<5.5E-04	<0.0035	<0.00041	<0.00019	<0.00031	<0.00037	<0.00076	<0.00016	<0.00037	<0.00024	<0.014
BHS1C-10-1	Under SI	6/30/2006	18-20									<0.00036	<0.00036	<0.00032	<0.00017	<0.00062	<0.00056	<0.0036	<0.00042	<0.00019	<0.00032	<0.00038	<0.00077	<0.00017	<0.00038	<0.00025	<0.014
BHS1C-10-1	Under SI	6/30/2006	8-10									<0.00034	<0.00034	0.0022J	<0.00016	<0.00059	<0.00053	<0.0034	<0.00039	0.062PE	0.00046J	<0.00036	<0.00073	<0.00016	<0.00036	<0.00024	<0.014
BHS1C-10-2	Under SI	6/30/2006	13-15									<0.00037	<0.00037	<0.00033	<0.00017	<0.00064	<0.00058	<0.0037	<0.00043	<0.0002	<0.00033	<0.00039	<0.0008	<0.00017	<0.00039	<0.00026	<0.015
BHS1C-10-2	Under SI	6/30/2006	18-20									<0.00035	<0.00035	<0.00032	<0.00016	<0.00061	<5.5E-04	<0.0035	<0.00041	<0.00019	<0.00032	<0.00037	<0.00076	<0.00016	<0.00037	<0.00025	<0.014
BHS1C-10-2	Under SI	6/30/2006	8-10									<0.00034	<0.00034	<0.00031	<0.00016	<0.00059	<0.00053	<0.0034	<0.0004	<0.00018	<0.00031	<0.00036	<0.00074	<0.00016	<0.00036	<0.00024	<0.014
SI-10	Outside S	10/17/2000	0		1.8			1.7			8.8	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-10	Outside S	10/17/2000	5		2			2.9			4.3	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-10	Outside S	10/17/2000	7		<4.7	<2.35	21.4		<4.7																		
SI-10-1	In SI	9/20/2005	0-2	<0.44	0.71J	<0.21	8.4	3.1	3.3	<1.3	5.6	0.083J	0.053J P	0.28	<0.0059	<0.022	<0.02	<0.13	<0.015	<6.8E-03	<0.011	<0.014	<0.028	<0.0059	<0.014	<0.0089	<0.51
SI-10-2	In SI	9/20/2005	4-6	<0.49	3.3	<0.24	9.4	15	7.8	<1.4	64	0.3D	0.056P	0.061JD	<0.0031	<0.012	<0.01	<0.067	<7.8E-03	<0.0036	<0.006	<0.0071	<0.014	<0.0031	<0.0071	<0.0047	<0.27
SI-10-3	In SI	9/20/2005	4-6	<0.45	1.4	<0.22	7.4	8.9	7.9	<1.3	13	0.35D	0.12P	0.026J	<0.0031	<0.012	<0.01	<0.067	<7.8E-03	<0.0036	<0.006	<0.0071	<0.014	<0.0031	<0.0071	<0.0047	<0.27
SI-10-4	In SI	9/20/2005	0-2	<0.46	<0.68	<0.22	5.3	8.1	5.3	<1.3	8.1	12	2.9	7.400001	0.23J	<0.29	<0.26	<1.6	<0.19	<8.8E-02	<0.15	<0.18	<0.36	<7.7E-02	<0.18	<0.12	<6.6
Surface Impoundment 14																											
SI-14	In SI	10/19/2000	0		<0.25			<0.5			3.9	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	0.032	<0.02	<0.02	<0.02	<0.02	<0.4
SI-14	In SI	10/19/2000	0																								
SI-14	In SI	10/19/2000	6		<0.25			<0.5			2.6	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-14	In SI	10/18/2000	7		<4.8	<2.4	10		<4.8			<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.0017		<0.0033	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	<0.17
SI-14-1	In SI	9/21/2005	2-4	<0.44	1.6	<0.21	17	2.2	2.6	<1.3	2.7	0.081	0.029J	0.086	<0.0015	<0.0056	<0.0051	<0.032	<0.0038	<0.0017	<0.0029	<0.0034	<0.007	<0.0015	<0.0034	<0.0023	<0.13
SI-14-2	In SI	9/21/2005	3-5	<0.46	<0.68	<0.22	5.5	2.5	1.4B	<1.3	2.6	6.9E-02P	0.025PJ	0.0016J	<0.0015	<0.0056	<0.005	<0.032	<0.0037	<0.0017	<0.0029	<0.0034	<0.007	<0.0015	<0.0034	<0.0022	<0.13
SI-14-3	In SI	9/21/2005	3-6	<0.49	1.6	<0.24	10	30	5B	<1.4	37	0.16D	0.11J P D	<0.012	<0.0064	<0.024	0.016J	<0.14	<0.016	<7.3E-03	<0.012	<0.015	<0.03	<0.0064	<0.015	<0.0096	<0.55
SI-14-4	In SI	9/21/2005	1-3	<0.44	0.74J	<0.22	5.8	2.5	1.6B	<1.3	2.5	<0.00032	4.9E-03P	0.0047	<0.00015	<5.5E-04	<0.0005	<0.0032	<0.00037	<0.00017	<0.00029	<0.00034	<0.00069	<0.00015	<0.00034	<0.00022	<0.013
Surface Impoundment 15																											
BHS1C-15-1	Under SI	6/30/2006	13-15		3.2							0.0079	0.0031JP	0.037	<0.00017	0.00089J	<0.00056	<0.0036	<0.00042	<0.00019	0.0025J	<0.00038	<0.00078	<0.00017	<0.00038	0.0019JP	<0.014
BHS1C-15-1	Under SI	6/30/2006	18-20		2							<0.00036	<0.00036	<0.00033	<0.00017	<0.00063	<0.00057	<0.0036	<0.00043	<0.00019	<0.00033	<0.00039	<7.9E-04	<0.00017	<0.00039	<0.00026	<0.015
BHS1C-15-1	Under SI	6/30/2006	8-10		1J							0.031P	0.0097PJ	0.12	<6.8E-04	0.0014J	0.0011J	<0.015	0.0022JP	<0.00078	<0.0013	<0.0016	<0.0032	0.00073JP	<0.0016	<0.001	<0.058
BHS1C-15-2	Under SI	6/30/2006	13-15		2.2							<0.00034	<0.00034	<0.00031	<0.00016	<0.0006	<0.00054	<0.0034	<0.0004	<0.00018	<0.00031	<0.00037	<0.00075	<0.00016	<0.00037	<0.00024	<0.014
BHS1C-15-2	Under SI	6/30/2006	18-20		<0.79							<0.00036	<0.00036	<0.00033	<0.00017	<0.00063	<0.00057	<0.0036	<0.00042	<0.00019	<0.00033	<0.00039	<7.9E-04	<0.00017	<0.00039	<0.00025	<0.015
BHS1C-15-2	Under SI	6/30/2006	8-10		1.6							<0.00033	<0.00033	<0.0003	<0.00016	<0.00058	<0.00052	<0.0033	<0.00039	0.00084J	<0.0003	<0.00036	<7.2E-04	<0.00016	<0.00036	<0.00023	<0.013
SI-15	In SI	10/19/2000	0		0.28			2.2			34	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	0.041	0.024	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-15	In SI	10/19/2000	0																								
SI-15	In SI	10/19/2000	4		5.4			130			250	<2	<2	<2	<2	<2	<2	<20	<2	**40**	<2	<2	<2	<2	<2	<2	<40
SI-15	In SI	10/18/2000	4-6		5.25	**15.8**	40		8.28			**22**	2.9	9.3	<0.0017	<0.0017	<0.0017		<0.0033	**140**	<0.0033	**160**	**15**	<0.0033	<0.0017	<0.0017	**120**
SI-15-1	In SI	9/21/2005	3-5	**11**	**190**	1.6	29	**4900**	27B	<1.7	530	**60P**	**21P**	**340**	<0.8	**8.3J**	<2.7	<17	<2	12	<1.5	**28**	<3.7	**4.4J**	<1.8	<1.2	**650J**
SI-15-2	In SI	9/21/2005	3-5	<3.3	8.3	**11**	**110**	**940**	34B	<9.4	280	**21D**	12P	**71D**	<0.88	**1.3J**	<3	<19	<2.2	6.8	<1.7	**150D**	**38P**	0.6J	<2	<1.3	**1000J**
SI-15-3	In SI	9/21/2005	3-5	<3.1	6.4J	**21**	55	490	13B	<9	100	**49**	<2.2	**110**	<1	<3.9	<3.5	<22	<2.6	7.1J	2.9J	<2.4	<4.9	**1.9J**	<2.4	<1.6	<90

EPS

Table 4. Soil Analytical Results Associated with Former Surface Impoundments

Sample ID	Location	Date Sampled	Depth	Metals - Method 6010								Pesticides - Method 8081															
				Antimony (mg/kg)	Arsenic (mg/kg)	Cadmium (mg/kg)	Chromium (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Thallium (mg/kg)	Zinc (mg/kg)	4,4'-DDD (mg/kg)	4,4'-DDE (mg/kg)	4,4'-DDT (mg/kg)	Aldrin (mg/kg)	alpha-BHC (mg/kg)	beta-BHC (mg/kg)	Chlordane (mg/kg)	Dieldrin (mg/kg)	Endosulfan I (mg/kg)	Endosulfan II (mg/kg)	Endrin (mg/kg)	Endrin Aldehyde (mg/kg)	gamma-BHC (Lindane) (mg/kg)	Heptachlor (mg/kg)	Heptachlor epoxide (mg/kg)	Toxaphene (mg/kg)
Residential RRS				5.4	20	7.5	100	915	270	2.8	5847	19	14	20	0.66	0.66	0.66	9.2	0.66	26	10	10	10	0.66	0.67	1.6	10.88
Industrial SS RRS				36	38	150	109/1200	2886	400	10	38564	47	38	54	0.66	0.66	0.66	9.2	0.66	170	10	24	10	0.66	0.83	1.65	10.88
Industrial SB RRS				36	41	150	1200	2886	400	10	38564	47	38	54	0.66	0.66	0.66	9.2	0.66	170	10	24	10	0.66	0.83	1.65	10.88
Confirmation Samples																											
SI15-CS1		11/22/2013	5	<5.93	12.3	<2.96	29.9	172	<5.93	<5.93	124	2.5	<0.4	9.9	<0.2	<0.2	<0.2	<4	<0.4	3.3	<0.4	<0.4	<0.4	<0.2	<0.2	<0.2	**120**
SI15-CS1R		12/2/2013	5	<5.66	<5.66	<2.83	19	38.5	<5.66	<12.7	19.7	<0.0039	0.01	0.022	<0.0019	<0.0019	<0.0019	0.058	<0.0039	<0.0019	<0.0039	<0.0039	<0.0039	<0.0019	<0.0019	<0.0019	0.48
SI15-CS2		11/22/2013	5	<5.12	<5.12	<2.56	9.58	111	<5.12	<5.12	37.9	3.3	<0.037	3	<0.019	0.38	0.13	<0.37	<0.037	0.054	<0.037	<0.037	<0.037	0.065	<0.019	<0.019	3.2
SI15-CS3		11/22/2013	5	<5.33	5.37	<2.67	19.7	99.3	<5.33	<5.33	92.6	0.049	<0.0037	0.14	<0.0019	<0.0019	0.0051	0.16	<0.0037	0.024	<0.0037	<0.0037	<0.0037	0.0038	<0.0019	<0.0019	1.9
SI15-CS4		11/22/2013	9	<5.42	5.45	<2.71	22.8	258	<5.42	<5.42	55.5	0.87	0.1	1.7	<0.019	0.085	<0.019	1.4	<0.038	0.14	<0.038	<0.038	<0.038	0.041	<0.019	<0.019	<19
SI15-CS5		11/22/2013	9	<5.65	<5.65	<2.83	8.24	38	<5.65	<5.65	39.4																
SI15-CS6		11/22/2013	9	<5.39	<5.39	<2.69	20.2	29.1	<5.39	<5.39	14.9																
SI15-PIPE1		11/22/2013	8	<5.9	**117**	**45.6**	74.9	**4230**	<5.9	<5.9	3490	0.85	<0.042	1.5	<0.021	<0.021	0.023	<0.42	<0.042	1.6	1.3	<0.042	<0.042	<0.021	<0.021	<0.021	10
SI15-PIPE1		11/22/2013	8	<7.99	**187**	**76.7**	91.5	**12000**	<7.99	<7.99	**15300**	<0.0054	<0.0054	<0.0054	<0.0027	<0.0027	<0.0027	<0.054	<0.0054	<0.0027	<0.0054	<0.0054	<0.0054	<0.0027	<0.0027	<0.0027	<0.27
SI15-PIPE1R		12/2/2013	8	<5.71	**104**	**37.5**	61.4	**6880**	10.4	<13.7	4350	2.2	0.24	4	0.017	<0.0021	<0.0021	2	<0.042	0.24	<0.042	<0.042	<0.042	0.014	<0.0021	<0.021	**28**
SI15-PIPE1R		12/2/2013	8	<5.2	<5.2	<2.6	8.29	16.4	<5.2	<5.2	45	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.038	<0.0038	<0.0019	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.19
SI15-PIPE1R		12/6/2013	8	<8.69	**132**	**96**	94.6	**14400**	<8.69	<8.69	**6720**	1.3	0.056	2.3	<0.003	0.067	0.033	<1.2	<0.006	0.014	0.093	<0.12	0.047	0.0095	<0.003	<0.003	7.6
Surface Impoundment 19																											
SI-19	In SI	10/17/2000	0		0.82			0.75			2.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-19	In SI	10/17/2000	2-3									0.38	0.065	0.081	<0.0017	<0.0017	<0.0017		<0.0033	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	<0.0017	<0.0017	0.95
SI-19	In SI	10/17/2000	4		1.2			7.4			48	<0.02	<0.02	1.92	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-19-1	In SI	9/21/2005	5-7	<2.4	9.3	<1.2	19	18	12B	<7	38	0.49	0.094P	0.61	<0.0033	<0.012	0.023J	<0.072	<0.0084	<0.0038	<0.0065	<0.0077	<0.016	<0.0033	<0.0077	<0.005	<0.29
SI-19-2	In SI	9/21/2005	4-6	0.56J	7	0.66	15	37	19B	<1.4	47	0.33	0.079PD	0.085D	8.6E-03JD	<0.0063	0.015J D	<0.036	<0.0042	<0.0019	<0.0033	0.014JP	<7.9E-03	<0.0017	0.0096J D	<0.0025	<0.15
SI-19-3	In SI	9/21/2005	4-6	<2.6	4.2J	7.4	38	9.8J	9.3B	<7.6	53	0.82PD	0.41PD	0.16J	<0.017	<0.063	<0.056	<0.36	<0.042	<0.019	<0.032	<0.038	<0.078	<0.017	<0.038	<0.025	<1.4
SI-19-4	In SI	9/21/2005	2-4	<0.52	5	0.36J	23B	9.1	15	<1.5	26	0.23D	0.035J P D	0.086	<0.0045	<0.017	<0.015	<0.097	<0.011	<0.0052	<8.8E-03	<0.01	<0.021	<0.0045	<0.01	<6.8E-03	<0.39
Surface Impoundment 20																											
GP18-2004	In SI	6/3/2004	6		**78**							**43**	**29**	19	<2.64	<2.64	<2.64		<5.27	<2.64	<5.27	<5.27	<5.27	<5.27	<2.64	<2.64	<264
SI-20	In SI	10/19/2000	0		<0.25			0.97			4.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	0.068	<0.02	<0.02	<0.02	<0.02	<0.4
SI-20	In SI	10/18/2000	7		5.81	<2.46	10.2		13.9			5.9	0.45	0.71	<0.0017	<0.0017	<0.0017		<0.0033	<0.0017	<0.0033	<0.0033	<0.0033	<0.0033	0.034	<0.0017	<0.17
SI-20	In SI	10/19/2000	7		3.1			74			370	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2	<0.02	6.5	1.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4
SI-20-1	In SI	9/21/2005	4-6	<5.8	**26**	<2.8	**160**	540	**2700B**	<17	640	3.7P	**32PD**	<9.2E-02	<0.048	<0.18	**56PDE**	<1	**1.7P**	<0.055	<9.2E-02	<0.11	<0.22	<0.048	<0.11	**20P**	<4.1
SI-20-2	In SI	9/21/2005	4-6	<0.48	2.5	<0.23	13	17	7.8B	<1.4	20	**59D**	11P	<0.31	<0.16	<0.6	<0.54	<3.4	<0.4	9.5	2.1JPD	<0.37	<0.75	<0.16	<0.37	<0.24	<14
SI-20-3	In SI	9/21/2005	2-4	<0.46	<0.68	<0.22	2.7	27	1.7B	<1.3	4.7	3.2D	0.43PD	0.2	<0.015	<0.056	0.026JP	<0.33	<0.038	0.16J D	<0.029	<0.035	<0.07	<0.015	<0.035	<0.023	<1.3
SI-20-4	Outside S	9/21/2005	6-8	<0.45	1.6	<0.22	12	4.7	4B	<1.3	2.8	<0.00034	<0.00034	0.00084J	<0.00016	<0.00059	<0.00053	<0.0034	<0.0004	<0.00018	<0.0003	<0.00036	<0.00073	<0.00016	<0.00036	<0.00024	<0.014
Confirmation Samples																											
SI20-CS1		11/22/2013	5	<5.29	<5.29	<2.64	14.1	3.68	<5.29	<5.29	8.93	<0.0036	<0.0036	<0.0036	<0.0018	<0.0018	<0.0018	<0.036	<0.0036	<0.0018	<0.0036	<0.0036	<0.0036	<0.0018	<0.0018	<0.0018	<0.18
SI20-CS2		11/22/2013	5	<5.32	<5.32	<2.66	14.1	135	<5.32	<5.32	23.7	0.2	0.074	<0.038	<0.019	<0.019	<0.019	0.43	<0.038	0.038	<0.038	<0.038	<0.038	<0.019	<0.019	<0.019	<1.9
SI20-CS3		11/22/2013	5	<5.27	<5.27	<2.63	9.24	3.12	<5.27	<5.27	6.63	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.038	<0.0038	<0.0019	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.19
SI20-CS4		11/22/2013	9	<5.3	<5.3	<2.65	12	5.3	<5.3	<5.3	11.8	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.038	<0.0038	<0.0019	<0.0038	<0.0038	<0.0038	<0.0019	<0.0019	<0.0019	<0.19
SI20-CS5		11/22/2013	9	<5.53	<5.53	<2.77	7.17	3.73	<5.53	<5.53	5.75	0.27	<0.038	0.96	<0.019	<0.019	<0.019	2.7	<0.038	<0.019	<0.038	<0.038	<0.038	<0.019	<0.019	<0.019	**25**
SI20-CS6		11/22/2013	9	<5.79	<5.79	<2.9	15.9	6.07	<5.79	<5.79	15.9	2.5	<0.4	0.66	<0.2	<0.2	<0.2	8.2	<0.4	<0.2	<0.4	1.3	<0.4	<0.2	<0.2	<0.2	**61**
SI20-CS7		12/3/2013	11	<5.52	<5.52	<2.76	9.03	4.91	<5.52	<11	<5.52	<0.39	0.53	**29**	<0.2	<0.2	<0.2	**48**	<0.39	<0.2	<0.39	<0.39	<0.39	<0.2	<0.2	<0.2	**630**
SI20-CS8		12/3/2013	11	<5.76	<5.76	<2.88	14.7	5.74	<5.76	<11.5	<5.76	1.2	0.025	1.1	0.014	<0.002	<0.002	1.2	<0.0039	<0.002	<0.0039	0.065	<0.0039	0.0065	<0.002	<0.002	10
SI20-CS9		12/3/2013	11	<5.42	<5.42	<2.71	9.96	5.47	<5.42	<10.8	<5.42	0.029	<0.0039	0.004	<0.002	<0.002	<0.002	0.067	<0.0039	<0.002	<0.0039	<0.0039	<0.0039	<0.002	<0.002	<0.002	<0.2
SI20-CS10		12/6/2013	13	<5.39	<5.39	<2.69	11.6	5.01	<5.39	<5.39	<5.39	0.98	<3.9	**29**	<0.19	<0.19	<0.19	**45**	<0.39	0.4	1.3	7.1	5.4	<0.19	**1.1**	<0.19	**470**
SI20-CS10		12/10/2013	15	<5.86	<5.86	<2.93	4.54	<2.93	<5.86	<5.86	<5.86	0.026	<0.0041	0.11	<0.0021	<0.0021	<0.0021	0.22	<0.0041	<0.0021	<0.0041	0.022	<0.0041	<0.0021	<0.0021	<0.0021	<2.1
SI20-PIPE 2		11/22/2013	2	<5.85	<5.85	<2.93	8.08	8.48	<5.85	<5.85	11	<0.0039	<0.0039	<0.0039	<0.002	<0.002	<0.002	<0.039	<0.0039	<0.002	<0.0039	<0.0039	<0.0039	<0.002	<0.002	<0.002	<0.2
SI20-PIPE1		11/22/2013	3	<5.34	<5.34	<2.67	13.8	47.6	<5.34	<5.34	25.2	0.0047	<0.0039	<0.0039	<0.0019	<0.0019	<0.0019	<0.039	<0.0039	<0.0019	<0.0039	<0.0039	<0.0039	<0.0019	<0.0019	<0.0019	<0.19
SI20-PIPE3		11/22/2013	3	<5.72	<5.72	<2.86	10.7	185	<5.72	<5.72	45.6	0.027	0.017	<0.0039	<0.002	<0.002	<0.002	<0.039	<0.0039	<0.002	<0.0039	<0.0039	<0.0039	<0.002	<0.002	<0.002	<0.2

Bold - Above Residential RRS

Excavated during remedial action

EPS

Table 5. Reevaluation of Drexel West Domain - Post-Surface Impoundment Remediation

Parameter	Residential RRS (mg/kg)	Industrial SS RRS (mg/kg)	Industrial SB RRS (mg/kg)	# Samples	# Detects	Frequency of Detections	Maximum Detected Conc (mg/kg)	Evaluate Further*	Interpolated 95% UCL (mg/kg)
0-2 ft									
4,4'-DDD	19	47	47	29	6	21%	12		
4,4'-DDE	14	38	38	29	9	31%	2.9		
4,4'-DDT	20	54	54	29	6	21%	7.4		
Acetone	400	400	400	29	2	7%	0.085		
Aldrin	0.66	0.66	0.66	29	1	3%	0.23		
Arsenic	20	38	41	29	25	86%	**42**	Yes	2.5
Azinphos-methyl	10	10	10	29	1	3%	0.024		
Barium	2554	16480	16480	6	5	83%	136		
Benzene	0.5	0.5	0.5	29	2	7%	0.007		
Benzo(a)pyrene	1.6	7.8	9.4	27	2	7%	0.36		
Benzo(b)fluoranthene	12	78	96	27	2	7%	0.67		
Beryllium	156	3161	3161	5	4	80%	0.24		
bis(2-Ethylhexyl) phthalate	287	957	957	27	2	7%	0.21		
Cadmium	7.5	150	150	6	2	33%	**47**	Yes	2.2
Carbaryl	70	182	182	2	2	100%	1.9		
Chlorobenzene	10	10	10	29	1	3%	0.009		
Chlorpyrifos	15	94	94	25	2	8%	0.57		
Chromium	100/100000	109/100000	1200/100000	6	6	100%	67		
Chrysene	867	2817	2817	27	2	7%	0.35		
Copper	915	2886	2886	28	25	89%	94		
Coumaphos	1	1	1	29	1	3%	0.006		
Cyclohexanone	359	2351	2351	1	1	100%	29		
Dalapon	20	20	20	28	3	11%	0.092		
Diazinon	1.3	8.8	8.8	25	2	8%	0.074		
Dicamba	20	20	20	28	1	4%	0.003		
Dimethoate	0.7	0.7	0.7	29	2	7%	0.27		
Disulfoton	0.03	0.15	0.15	25	1	4%	**0.16**		
Endosulfan I	26	170	170	29	3	10%	0.044		
Endosulfan II	10	10	10	29	4	14%	0.045		
Endrin	10	24	24	29	3	10%	0.068		
Endrin aldehyde	10	10	10	29	1	3%	0.018		
EPN	6.4	20	6.4	29	1	3%	0.090		
Ethyl benzene	70	70	70	29	1	3%	0.001		
Fensulfothion	10	10	10	29	1	3%	0.028		
gamma-BHC (Lindane)	0.66	0.66	0.66	29	2	7%	**1.10**		
Indeno(1,2,3-cd)pyrene	12	78	312	27	1	4%	0.33		
Isopropylbenzene	22	33	33	29	1	3%	0.014		
Lead	270	400	400	6	5	83%	61		
Mercury	2.1	17	17	6	4	67%	0.017		
Methoxychlor	87	542	542	29	4	14%	0.34		
Mevinphos	10	10	10	25	1	4%	0.017		
Nickel	404	2608	2608	5	4	80%	3.6		
Parathion	20	60	60	29	2	7%	0.030		
Pentachlorophenol	3.3	4	4	27	1	4%	0.010		
Pyrene	2184	6770	6770	27	1	4%	0.43		
Selenium	8.3	52	52	6	1	17%	**42**		
Silver	17	85	85	6	1	17%	4.7		
Toluene	100	100	100	29	1	3%	0.004		
Toxaphene	10.88	10.88	10.88	29	1	3%	5.6		
Zinc	5847	38564	38564	28	28	100%	42		

EPS

Table 5. Reevaluation of Drexel West Domain - Post-Surface Impoundment Remediation

Parameter	Residential RRS (mg/kg)	Industrial SS RRS (mg/kg)	Industrial SB RRS (mg/kg)	# Samples	# Detects	Frequency of Detections	Maximum Detected Conc (mg/kg)	Evaluate Further*	Interpolated 95% UCL (mg/kg)
2-5 ft									
1,4-Dichlorobenzene	7.5	7.5	7.5	38	3	8%	0.060		
2,4,5-TC (Silvex)	10	10	10	36	1	3%	0.002		
2,4-D	7	7	7	36	2	6%	0.007		
2,4-Dimethylphenol	70	70	70	34	1	3%	0.13		
2-Butanone (MEK)	200	200	200	37	2	5%	0.054		
4,4'-DDD	19	47	47	45	16	36%	3.3		
4,4'-DDE	14	38	38	45	18	40%	0.41		
4,4'-DDT	20	54	54	45	16	36%	3.0		
Acetone	400	400	400	37	2	5%	0.29		
Aldrin	0.66	0.66	0.66	43	1	2%	0.009		
alpha-BHC	0.66	0.66	0.66	44	2	5%	0.380		
Antimony	5.4	36	36	20	1	5%	0.56		
Arsenic	20	38	41	44	33	75%	7.0		
Barium	2554	16480	16480	22	17	77%	46		
Benzene	0.5	0.5	0.5	37	1	3%	0.002		
Benzo(a)anthracene	7.1	28	28	34	1	3%	0.10		
Benzo(a)pyrene	1.6	7.8	9.4	34	2	6%	0.15		
Benzo(b)fluoranthene	12	78	96	34	3	9%	0.18		
Benzo(g,h,i)perylene	500	500	500	34	1	3%	0.10		
Benzo(k)fluoranthene	125	784	940	34	2	6%	0.18		
Beryllium	156	3161	3161	20	12	60%	0.87		
beta-BHC	0.66	0.66	0.66	44	4	9%	0.13		
bis(2-Ethylhexyl) phthalate	287	957	957	34	7	21%	0.54		
Cadmium	7.5	150	150	22	3	14%	7.4		
Carbaryl	70	182	182	2	2	100%	3.8		
Carbon disulfide	400	400	400	16	2	13%	0.014		
Chlordane	9.2	9.2	9.2	32	3	9%	0.43		
Chlorobenzene	10	10	10	37	3	8%	0.094		
Chromium	100/100000	109/100000	1200/100000	22	22	100%	38		
Chrysene	867	2817	2817	34	2	6%	0.13		
Copper	915	2886	2886	41	41	100%	185		
Dalapon	20	20	20	36	1	3%	0.026		
Dibenzo(a,h)anthracene	2	7.8	31	34	1	3%	0.032		
Dinoseb (DNBP)	3.5	18	18	36	1	3%	0.055		
Endosulfan I	26	170	170	44	4	9%	0.10		
Endosulfan II	10	10	10	44	2	5%	0.007		
Endrin	10	24	24	44	1	2%	0.014		
Ethyl benzene	70	70	70	37	5	14%	14		
Fluoranthene	2224	9118	9118	34	2	6%	0.46		
gamma-BHC (Lindane)	0.66	0.66	0.66	44	3	7%	0.065		
Heptachlor	0.67	0.83	0.83	45	1	2%	0.010		
Indeno(1,2,3-cd)pyrene	12	78	312	34	1	3%	0.10		
Isopropylbenzene	22	33	33	37	3	8%	0.36		
Lead	270	400	400	22	13	59%	19		
Mercury	2.1	17	17	22	12	55%	0.043		
Methoxychlor	87	542	542	44	7	16%	0.12		
Naphthalene	100	100	100	34	1	3%	0.046		
Nickel	404	2608	2608	20	12	60%	5.1		
o-Xylene	20	38	38	16	2	13%	8.5		
Pentachlorophenol	3.3	4	4	34	3	9%	0.006		
Phenanthrene	110	110	110	34	2	6%	0.43		
Pyrene	2184	6770	6770	34	2	6%	0.40		
Toluene	100	100	100	37	3	8%	0.54		
Toxaphene	10.88	10.88	10.88	45	4	9%	3.2		
Zinc	5847	38564	38564	41	41	100%	93		
5-15 ft									

EPS

Table 5. Reevaluation of Drexel West Domain - Post-Surface Impoundment Remediation

Parameter	Residential RRS (mg/kg)	Industrial SS RRS (mg/kg)	Industrial SB RRS (mg/kg)	# Samples	# Detects	Frequency of Detections	Maximum Detected Conc (mg/kg)	Evaluate Further*	Interpolated 95% UCL (mg/kg)
2,4-D	7	7	7	42	1	2%	0.009		
4,4'-DDD	19	47	47	70	11	16%	1.3		
4,4'-DDE	14	38	38	70	11	16%	0.10		
4,4'-DDT	20	54	54	70	16	23%	2.3		
Acetone	400	400	400	46	2	4%	0.12		
Aldrin	0.66	0.66	0.66	68	1	1%	0.014		
alpha-BHC	0.66	0.66	0.66	68	4	6%	0.085		
Antimony	5.4	36	36	23	3	13%	5.1		
Arsenic	20	38	41	70	40	57%	**132**	Yes	2.5
Barium	2554	16480	16480	32	14	44%	74		
Benzo(a)pyrene	1.6	7.8	9.4	41	1	2%	0.032		
Benzo(b)fluoranthene	12	78	96	41	1	2%	0.038		
Benzo(k)fluoranthene	125	784	940	41	1	2%	0.050		
Beryllium	156	3161	3161	23	6	26%	2.6		
beta-BHC	0.66	0.66	0.66	68	3	4%	0.033		
bis(2-Ethylhexyl) phthalate	287	957	957	41	1	2%	0.13		
Cadmium	7.5	150	150	32	1	3%	**96**		
Carbaryl	70	182	182	2	2	100%	0.098		
Chlordane	9.2	9.2	9.2	44	12	27%	**15**	Yes	0.11
Chlorobenzene	10	10	10	46	2	4%	0.056		
Chromium	100/100000	109/100000	1200/100000	32	32	100%	95		
Chrysene	867	2817	2817	41	1	2%	0.047		
Copper	915	2886	2886	55	49	89%	**14400**	Yes	19.85
Dalapon	20	20	20	42	3	7%	0.11		
Dieldrin	0.66	0.66	0.66	68	1	1%	0.002		
Endosulfan I	26	170	170	68	10	15%	0.14		
Endosulfan II	10	10	10	68	4	6%	0.093		
Endosulfan sulfate	1.65	1.65	1.65	68	1	1%	0.13		
Endrin	10	24	24	68	3	4%	0.065		
Endrin aldehyde	10	10	10	68	1	1%	0.047		
Ethyl benzene	70	70	70	46	2	4%	0.44		
Fluoranthene	2224	9118	9118	41	1	2%	0.075		
gamma-BHC (Lindane)	0.66	0.66	0.66	68	4	6%	0.041		
Heptachlor	0.67	0.83	0.83	70	1	1%	0.13		
Heptachlor epoxide	1.6	1.65	1.65	68	1	1%	0.0019		
Lead	270	400	400	32	11	34%	12		
Malathion	20	20	20	42	1	2%	0.030		
Mercury	2.1	17	17	36	4	11%	0.25		
Naphthalene	100	100	100	41	1	2%	0.035		
Nickel	404	2608	2608	23	7	30%	14		
o-Xylene	20	38	38	5	2	40%	0.20		
Parathion	20	60	60	42	1	2%	0.015		
Pyrene	2184	6770	6770	41	1	2%	0.093		
Thallium	2.8	10	10	23	3	13%	**5**	Yes	2.2
Toxaphene	10.88	10.88	10.88	70	5	7%	**36**		
Zinc	5847	38564	38564	55	48	87%	**6720**	Yes	16.33

Table 5. Reevaluation of Drexel West Domain - Post-Surface Impoundment Remediation

Parameter	Residential RRS (mg/kg)	Industrial SS RRS (mg/kg)	Industrial SB RRS (mg/kg)	# Samples	# Detects	Frequency of Detections	Maximum Detected Conc (mg/kg)	Evaluate Further*	Interpolated 95% UCL (mg/kg)
Greater than 15 ft									
4,4'-DDE	14	38	38	10	1	10%	0.027		
4,4'-DDT	20	54	54	10	2	20%	0.025		
Aldrin	0.66	0.66	0.66	9	1	11%	0.002		
Arsenic	20	38	41	4	2	50%	6		
Chlordane	9.2	9.2	9.2	10	2	20%	0.54		
Copper	915	2886	2886	1	1	100%	16		
Endosulfan I	26	170	170	9	1	11%	0.021		
Endosulfan sulfate	1.65	1.65	1.65	9	2	22%	0.029		
Heptachlor	0.67	0.83	0.83	10	2	20%	0.007		
Methoxychlor	87	542	542	9	1	11%	0.13		
Toxaphene	10.88	10.88	10.88	10	3	30%	1.7		
Zinc	5847	38564	38564	1	1	100%	65		

Bold: Exceeds Residential RRS

* Evaluated further if maximum concentration exceed Residential RRS, there is more than one detect, and the detection frequency > 10%

FIGURES

0 250 500 1,000
Feet

Legend

- Drexel Facility
- CSX
- Drexel Additional Property

VRP Properties

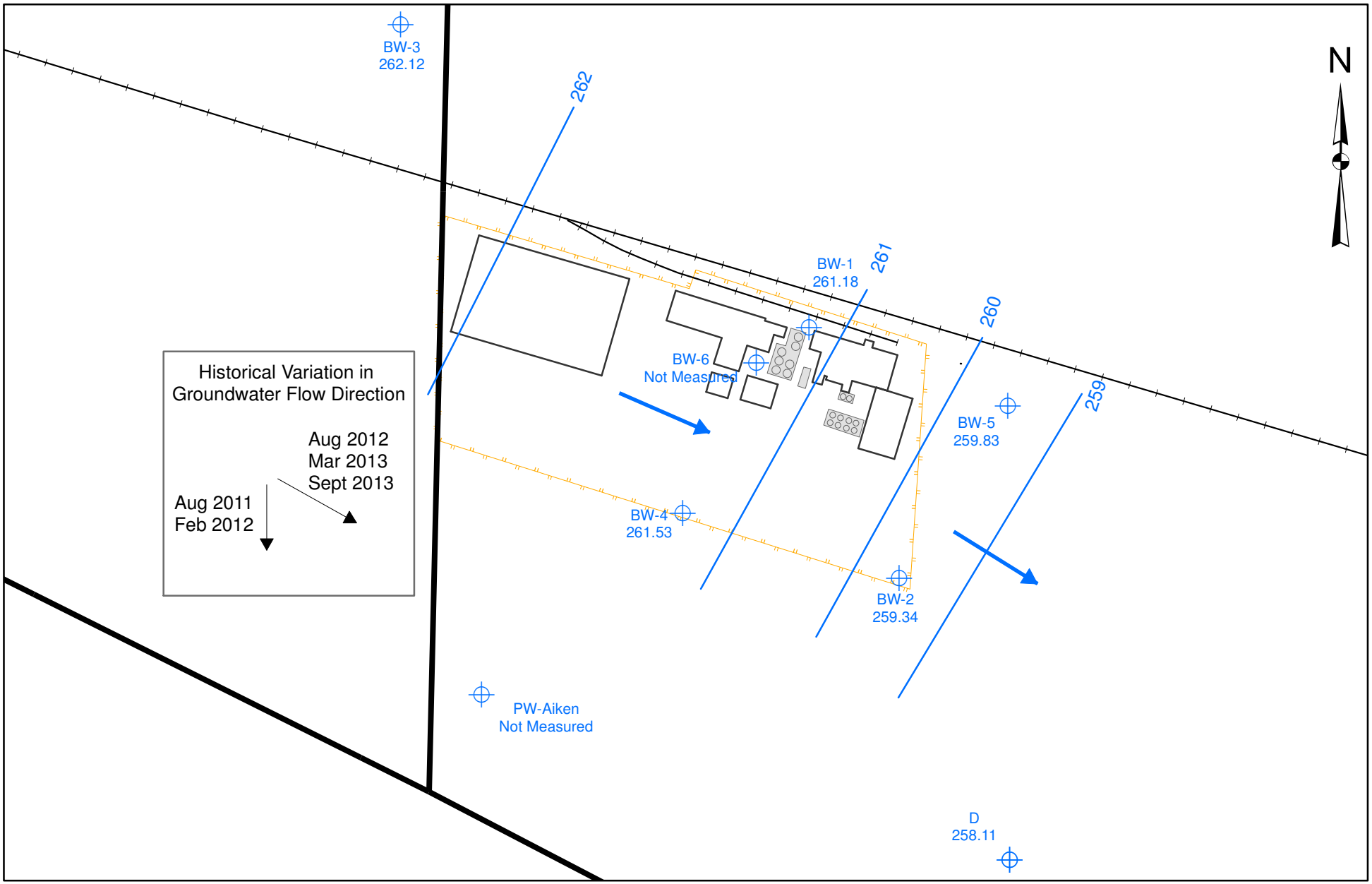
EPS
F:\Drexel Cordele\VRP Program\GIS\4thProgRep\Property Boundaries.mxd

Figure No. 1

Figure 2. Projected Milestone Schedule

ID	Task Name	2011			2012				2013				2014				2015				2016	
		Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1	Project Management																					
	Semi-Annual Progress Reports			Oct 28		Apr 28		Oct 28		Apr 28		Dec 28		Apr 28		Oct 28		Apr 28		Oct 28		CSR Apr 28
	Horizontal delineation on Property					Apr 28																
	Horizontal delineation off-Property									Apr 28												
	Vertical delineation, final remediation plan, cost estimate for remediation											Dec 28										
2	Abandon Production Wells (PW-1, PW-2) and Install New Monitoring Well																					
	Develop Plan																					
	EPD Approval																					
	Perform Work																					
3	Groundwater Sampling																					
4	Additional Characterization																					
	Develop Scope																					
	Perform Work																					
5	Ecological Risk Assessment																					
	Revised SLERA																					
	Ecological Remediation Plan																					
6	Soil Remediation																					
	Surface Impoundments: Develop Plan																					
	Surface Impoundments: Remediation																					
	Develop Rail Car Unloading and Drainage Swale Plan																					
	Bid Rail/Swale Soil Remediation																					
	Submit Shoring Plan to CSX for Approval																					
	Perform Rail/Swale Soil Remedial Work																					
7	Groundwater Remediation																					
	Install Pump and Treat System																					
	Groundwater Monitoring																					

Complete
Anticipated



0 100 200 400
Feet

Legend

- Well Locations
- Direction of Groundwater Flow
- Groundwater Elevation (ft)
- Railroad
- Tank Farms
- Roads
- Fenceline
- Buildings

Potentiometric Surface - February 2014

EPS
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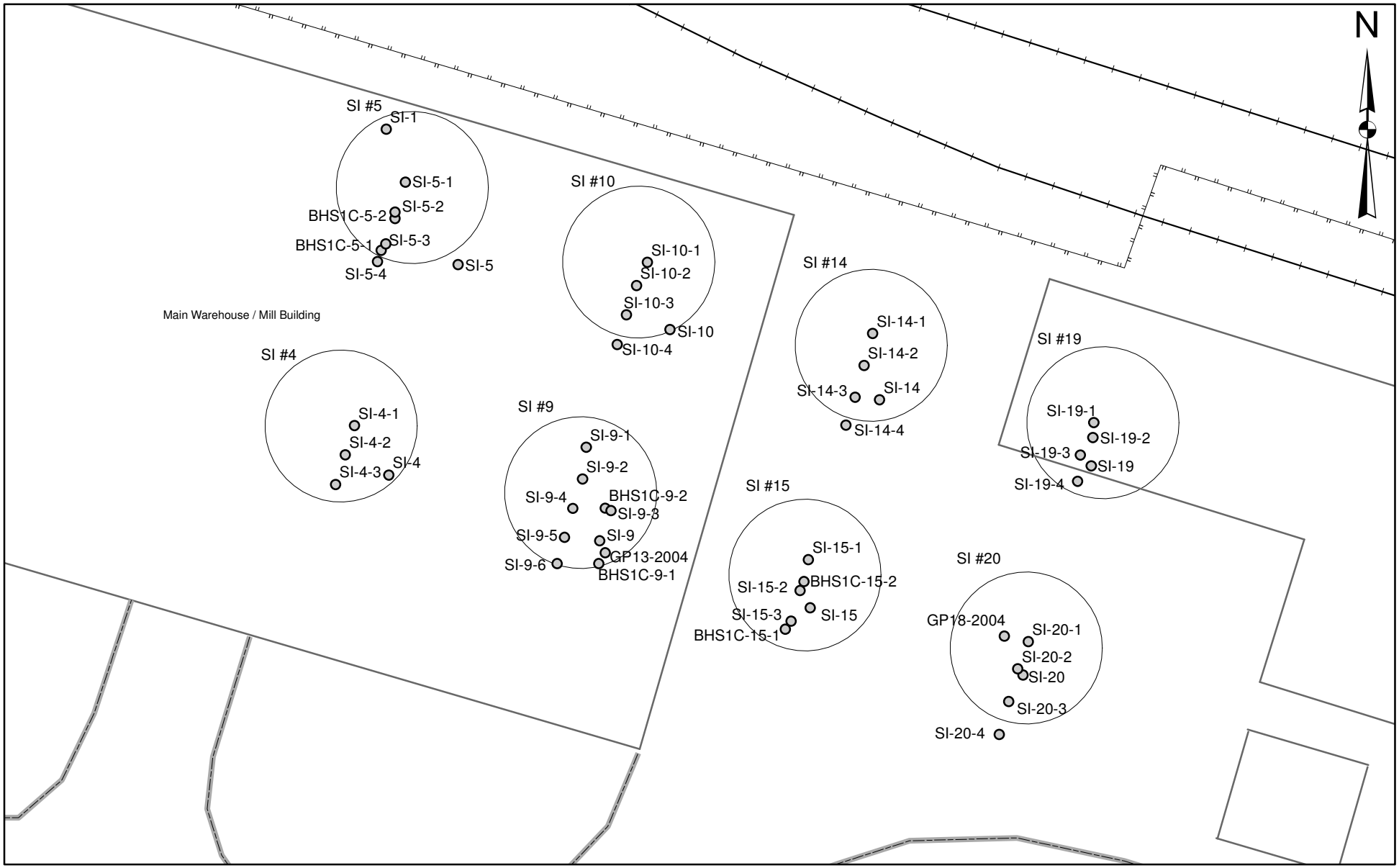
Figure No. 3



0 20 40 80
Feet

Legend

Surface Impoundments

Soil Boring

Former Surface Impoundment Boring Locations

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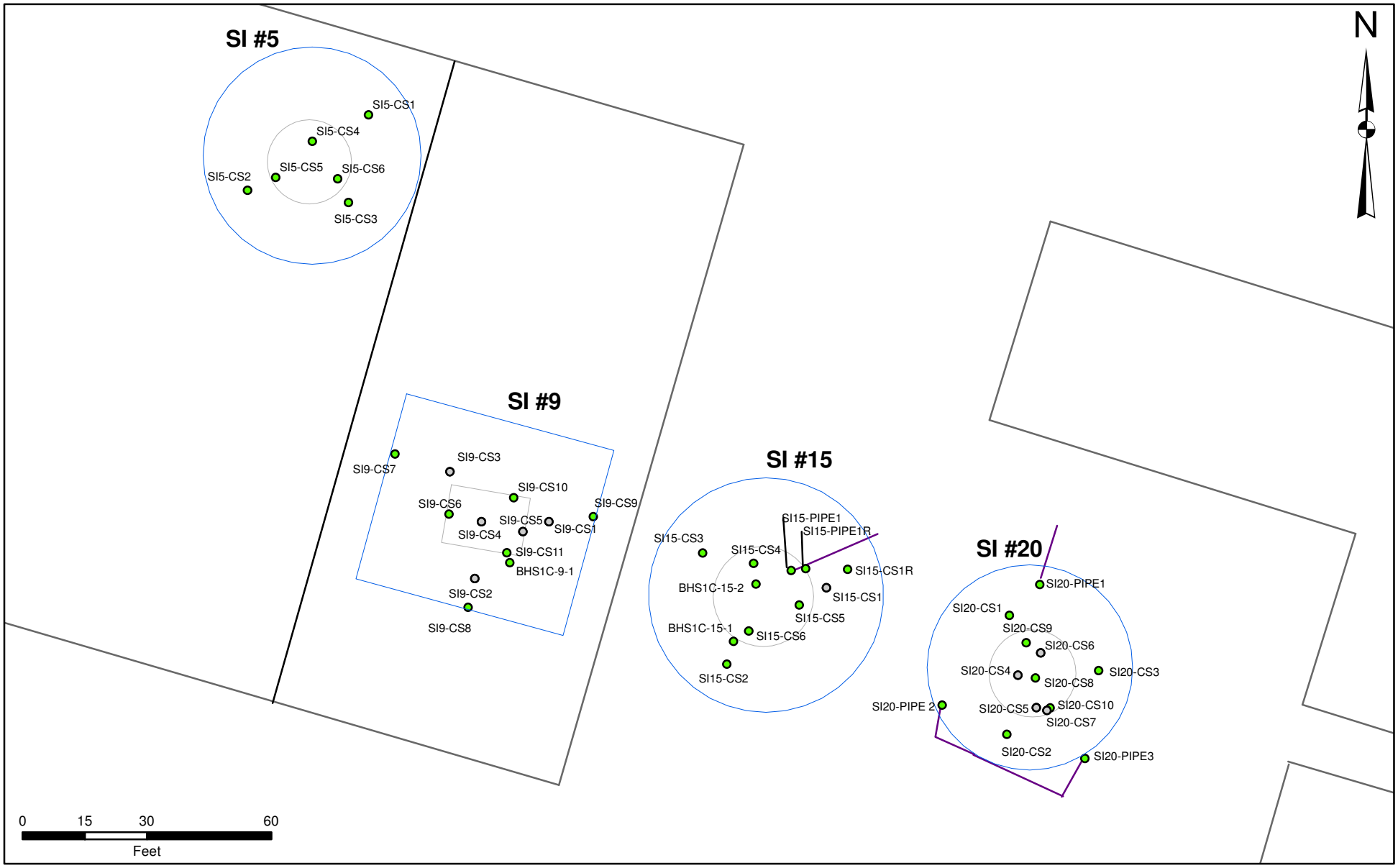
F:\Drexel Cordele\VRP Program\GIS\6thProgRep\Fig4_Borings.mxd

Figure No.4



Legend

- Start of Excavations
- Base of Excavations
- Excavated Confirmation Samples
- Final Confirmation Samples
- Pipes
- Buildings

Surface Impoundment Remediation

EPS
F:\Drexel Cordele\VRP Program\GIS\6thProgReport\Excavations.mxd

Figure No.5

APPENDIX A

PROFESSIONAL GEOLOGIST SUMMARY OF HOURS

Environmental Planning Specialists, Inc.
Kirk Kessler - PG Hours
January through April 2014

	Jan 14	Feb 14	Mar 14	Apr 14	TOTAL
Drexel:Project Management					
SP-Senior Principal:SP-Project Support	0.00	2.00	1.00	4.00	7.00
Total Drexel:Project Management	0.00	2.00	1.00	4.00	7.00
Drexel:Remediation					
SP-Senior Principal:SP-Project Support	2.50	4.50	0.00	2.00	9.00
Total Drexel:Remediation	2.50	4.50	0.00	2.00	9.00
Drexel:Status Report					
SP-Senior Principal:SP-Project Support	0.00	0.00	1.00	8.00	9.00
Total Drexel:Status Report	0.00	0.00	1.00	8.00	9.00
TOTAL	**2.50**	**6.50**	**2.00**	**14.00**	**25.00**

APPENDIX B

CONCEPTUAL SITE MODEL

APPENDIX B
CONCEPTUAL SITE MODEL

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B CONCEPTUAL SITE MODEL

B.1 Introduction

The CSM is intended to establish a common knowledge base about the Site (which includes all the VRP properties) and its environmental condition, to facilitate the development of basic remedial action objectives, and to allow an informed decision regarding possible remedial action measures. This section describes the surface and subsurface features at the Site, discusses the extent of contamination at the Site and discusses the potential receptors and exposure pathways.

B.2 Site Location and Description

Drexel's Pesticide Blending Facility is located approximately four miles east of downtown Cordele and two miles east of U.S. Interstate 75 off of U.S. Highway 280 East. Facility coordinates are 31° 57' 12" North latitude and 83° 43' 02" West longitude. The facility is set in a primarily agricultural and wooded area. The Drexel land parcel (the Facility) is approximately 6.89 acres, bounded on the west by Cape Road, to the north by a railroad, and to the south and east by agricultural land. Figure 1 shows the location of the Site with respect to the City of Cordel. Figure 2 is an aerial photograph (dated 2007) of the Site and immediate vicinity, along with an inset map of the land use interpreted from aerial photography.

The pesticide blending facility contains the following structures (see Figure 3):

- Main Warehouse / Mill Building,
- Middle Warehouse / Munsen Building,
- Liquid Production Building,
- several tank farms,
- Break Room/Locker Building, and
- Laboratory/Office Building.

The facility is served by a side track rail spur, owned by CSX and leased to Drexel, and located on the northern part of the Facility within the Facility's fence line. A chain link fence surrounds the facility. There are two former water supply wells, PW-1 and PW-2, which were used during most of the operational period of the facility. These wells were taken offline in 2003 due to the detection of 1,2-dibromoethane (also referred to as ethylene dibromide, EDB) in the water and were abandoned in 2012. An overall facility layout plan is shown on Figure 3.

In 1902, the property was obtained by the Atlantic and Birmingham Railroad Company from John Bulla. From 1902 until 1960, the Facility was owned and utilized by that railroad and/or its successors (i.e. Atlanta, Birmingham & Coast Railroad Co., and Atlantic Coast Line Railroad Co.). We do not know the specific use of the property by the railroad; however, aerial

photographs between 1937 and 1952 show four residences on the property, which was surrounded by cropland. In November 1960, the facility was purchased by Cotton Producers Association, which later changed its name to Gold Kist, Inc. (Gold Kist). Reportedly, fertilizer production began in the early 1960's and pesticide production followed thereafter. In 1985 Drexel purchased the property from Gold Kist and purchased an adjacent 3 acre agricultural parcel south of the Gold Kist property, bringing the total property size of the Facility to its current size of 6.89 acres.

Records and aerial photography indicate that, by 1962, the facility consisted of a production building, office, rail spur, eight subgrade surface impoundments, and a 235-foot deep water well (PW-1) reportedly used for both potable water and industrial purposes. Aerial photography indicates that, by 1968, an additional production (liquid production) building, attached warehouse, and bulk storage tanks had been constructed. It is unknown exactly when and/or how the first four of the eight surface impoundments were removed from service, or exactly how any were closed out. However, it appears from historical Georgia Environmental Protection Division (GAEPD) inspection reports that, of the eight noted in aerial photography, only four remained in operation by 1982, and none remained in operation by March 1984. It is believed the four western-most impoundments were filled with soil and graded in 1983 (USEPA, 1985). In 1986, Drexel constructed a 40,000 square foot warehouse (referred to as the Mill or New Warehouse) and attached production building over the location of the former (westernmost) surface impoundments. For more information about the operational history, please see the Revised 3013 Site Assessment Report (EPS, 2008).

B.3 Ground Surface Features

The majority of the Facility is flat (0-2% slopes) with a small rise in elevation on the southeast part of the Facility. Drainage features on the Site are indicated on Figure 4. Drainage in the surrounding area, the majority of which is in agricultural use, is primarily to the east, parallel to the CSX rail line along two drainage features, one on each side of the tracks. The north drainage ditch is about 40 feet (ft) wide, and has generally wet soils with areas of standing water. The south drainage is a shallower swale that is also about 40 ft wide, but has generally dry soils. The railroad manages the vegetation along these swales/ditches with intermittent herbicide application. During wet periods, surface water in the south swale flows to the northeast until it reaches a culvert beneath the rail line approximately 800 ft to the east of the Drexel Facility where it runs under a small culvert and joins with the north ditch. The north ditch continues to flow in a southeasterly direction to join with other intermittent stream flowing from the forested area to the north, at which point it turns south through a box culvert under the rail line approximately 3,000 ft to the east of the Drexel Facility. The ditch continues in a southeasterly direction and merges with several other drainage features to become Deep Creek.

The drainage swale that runs along the southern side of the rail is predominantly a dry ditch except during rainfall events (Photograph 1). In contrast, the swale along the north side of the rail line becomes comingled with an intermittent stream and wetlands feature eastward of the Facility. The National Wetlands Inventory classifies this area as a "freshwater forested/shrub wetland." The intermittent stream is a part of this low relief wetland and is not a discrete, incised

channel. Photograph 2 shows where the intermittent stream flows underneath the rail line (approximately 3,000 ft east of the Facility). Irrigation ponds are common in the area and there is one located approximately 100 ft to the north of the Facility and another is located just under 450 ft to the east of the Facility.

Photograph 1 Drainage Swale on Southern Side of Rail Line
(Facility is on the left; photograph taken facing northwest)

Photograph 2 Intermittent Stream on the North Side of the Rail Line East of the Facility (photograph taken facing west-northwest back toward the Facility)

The majority of the facility is covered with a concrete apron. A concrete culvert runs underneath the Liquid Production building to the northeast corner of the property. Drexel operates under a National Pollution Discharge Elimination System (NPDES) permit to discharge stormwater runoff at multiple permitted discharge locations; however, the majority of stormwater runoff occurs at Outfall #001 (northeast corner of property) and to a lesser extent, at Outfall #002 (between the Mill and Middle Warehouse buildings). Both outfalls convey surface runoff to the southern CSX mainline railroad swale. The swale pitches to the east. The locations of the outfalls are shown on Figure 4.

Historically, Drexel operations produced a non-contact cooling water discharge from extraction of groundwater from the two production wells. In 2003, Drexel converted to an oil-cooled unit and discontinued the use of both production wells, which were subsequently abandoned in 2012. Drexel provided notice to GAEPD that it was ceasing that permitted discharge.

B.4 Subsurface Features

B.4.1 Geological Setting

B.4.1.1 Regional Geological Setting

Crisp County is located on the western flank of the Coastal Plain Physiographic Province. This province is bounded to the north by the Fall Line separating the Coastal Plain and Piedmont Physiographic Provinces. The coastal plain contains unconsolidated sediments (sands, silts and clays) and consolidated sediments (cemented sands and limestones) dating from Late Cretaceous to Recent age. These sedimentary sequences crop out at progressively younger ages away from the Fall Line to the Atlantic coast. The sedimentary formations dip gently to the south-southeast while thickening in the downdip direction forming wedge-shaped stratigraphic layers (Wait, 1960).

The Coastal Plain Physiographic Province in Crisp County is further divided into three districts. The Fall Line Hills District is exposed in the northwestern portion of the county. The central-southwestern portion of the county contains the Dougherty Plain District, a northeast-trending, wedge-shaped feature characterized by gently rolling low land. The Tifton District occurs in eastern Crisp County characterized by well developed dendritic drainage patterns. The Tifton District slopes in elevation from 480 ft above mean sea level (amsl) in the north to 150 ft amsl in the southeast (Clarke et al., 1976). The city of Cordele is located along the boundary between the Fall Line Hills and Tifton Districts.

The Ocala Limestone of upper Eocene age crops out along the western margin of the county and dips to the south-southeast, underlying the Flint River Formation. The Oligocene-age Flint River Formation is exposed from the western portion of the county to a line (north-south) approximately immediately west of Cordele. The Flint River Formation is also described in the scientific literature as the Suwannee Limestone and residuum. The Flint River Formation underlies the younger Hawthorne Formation of Miocene age from Cordele to the eastern margin of the county (Figure 5). The Hawthorne Formation is also described in the scientific literature as undifferentiated Neogene sediments. Chemical weathering of underlying rocks (especially limestones) creates a thick mantle of sandy clay or residuum. This residuum may be 50 ft or more in thickness.

The Hawthorne Formation is a pale to dark green phosphatic sandy clay with lesser amounts of sand and sandy limestone. The Flint River Formation is a siliceous limestone, sandy limestone and recrystalized limestone. The Ocala Limestone is a white to yellowish-white pure fossiliferous limestone. The Ocala thickens up to 130 ft in the southeastern corner of the county. Beneath the Ocala Limestone exists the Claiborne Group, a sandy limestone and sand with some clay beds. The Claiborne Group is 120 ft thick in the northwest portion of the county, thickening

to 320 ft in the southeastern portion of the county. Underlying the Claiborne is the Wilcox Group, a gray sandy clay and fine sand. The Wilcox Group is nearly uniform in thickness within the county, varying from 120 to 140 ft.

B.4.1.1.2 Site Geology – Residuum (overburden)

Numerous soil borings have been advanced across the Site (see Appendix E of the VIRP for more information about the different site investigations conducted since 1984). Boring logs from soil borings conducted since 2005 are presented in Appendix F of the VIRP. Similarly, well construction diagrams for wells constructed from 2005 - 2012 are presented in Appendix G of the VIRP and the wells constructed in 2013 are presented in Appendix C of the 5th Progress Report. The Lithologic cross-sections are shown in Figures 6 and 7.

The investigations revealed that beneath the topsoil layer, residuum is characterized by a predominantly clay soil texture with pockets of coarser-grained soil. Soil density and clay content increase with depth, with gradational changes in texture beginning at approximately 60-70 ft below ground surface (bgs) to a weathered rock (limestone) condition. As the degree of weathering decreases with further depth, the weathered rock transitions into competent limestone around 100 ft or more bgs.

B.4.2 Hydrogeological Setting

B.4.2.1 Regional Hydrogeological Setting

The Hawthorne and Flint River Formations supply modest yield of water to dug and shallow wells drilled in the eastern half of the county. These formations are not significant in terms of a regional water supply, and are considered as a semi-confining unit to the underlying Floridian aquifer (Ocala Limestone). The clay layer of chemically-weathered residuum of the Ocala is laterally continuous and of substantial thickness in places to create a hydraulic barrier to vertical flow of water, causing perched groundwater conditions.

The Ocala is the uppermost regional water supply of significant yield potential. In the area of the Site, water supply wells may yield up to 400 to 500 gallons per minute (gpm). Structure contour and isopach maps of the Ocala limestone in northeastern Crisp County show the top of the unit occurs as an approximate elevation of 290 ft amsl and the base at about 60 ft amsl (Arora, 1984). The depth to water in the Ocala varies across the county and may be as much as 150 ft bgs in eastern Crisp County.

The Claiborne Group is the principal regional water supply, capable of yields of 1200 gpm. The four City of Cordele water supply wells obtain their supply primarily from the Claiborne and to a lesser extent the underlying Wilcox Group (well numbers 1 and 2 were previously decommissioned; presently the city is served by well numbers 3, 4, 5, and 6). These water supply wells are dispersed and as far as three miles east of the city in the direction of the Drexel Facility. The nearest of the city water supply wells (well number 6) is approximately 4,000 ft northwest of the Facility; well number 6 is cased to a depth of 364 ft bgs with multiple screened intervals extending to a total depth of 600 ft bgs. Structure contour and isopach maps of the Claiborne Group in northeastern Crisp County show the top of the unit occurs as an approximate

elevation of 40 to 80 ft amsl and the base at about 245 to 280 ft below mean sea level (bmsl) (Arora, 1984).

Based upon a regional hydrologic study of the aquifer (Hydrologic Atlas 22), the groundwater flow direction is to the east-southeast (Peck et al., 1999).

B.4.2.2 Site Hydrogeology: Perched Water in Residuum

As mentioned above, perched groundwater conditions are often found in the residuum of the Ocala. Fifteen shallow perched water zone monitoring wells and one deeper perched water zone well offset were installed during the Compliance Status Report (CSR) investigation (Peachtree, 1999 and 2001). Water was reported to occur in each of the well installations, although the depth-to-water varied greatly from 1.3 ft below top of casing to as much as 35.4 ft below top of casing. At the well cluster location (MW-15), the depth-to-water varied from 3.3 ft below top of casing in the shallow well to 27.2 ft below top of casing in the deeper overburden well. In 2004, GeoSyntec Consultants (GeoSyntec) advanced 19 soil borings and direct-push well points (at some locations in excess of 40 ft bgs) across the Site to better understand the Site hydrogeology of the overburden; groundwater was not encountered in any of these borings or well points. Based on this, GeoSyntec concluded at that time that the shallow groundwater is either a localized perched water table condition, or the soils have such low permeabilities in places that water is extremely slow to release from the formation into the borehole/well point. Subsequent studies performed during the RCRA 3013 site assessment (EPS, 2008) proved the hypothesis that the water in the overburden (i.e., subsurface soils overlying the bedrock) is perched water (further detail is provided in Section 4.2.2.1 of Appendix E of the VIRP).

B.4.2.3 Site Hydrogeology: Ocala Limestone Aquifer

The Ocala Limestone underlies the overburden. Two former water supply wells (PW-1 and -2) were installed within the Ocala. PW-1 was approximately 235 ft deep while PW-2 was approximately 270 ft deep. These former water supply wells were cased through the overburden (to prevent soil from collapsing into the well) and partially into the limestone (likely where the rock is loosely cemented and easily friable), and were open-hole installations to their termination depth. These wells were abandoned in 2012. Groundwater at the Site is encountered at approximately 150 ft bgs.

In 2005 three groundwater wells were installed at and near the Site (see Figure 8). Well BW-1 was installed to a depth of 170 ft between Tank Farm #1 and the rail unloading area. Well BW-2 is 179 ft deep and is located at the southeastern corner of the Drexel Facility. Well BW-3, which is 175 ft deep, is located just over 300 ft from the northwest corner of the Drexel Facility. The first approximation of the potentiometric surface at the Site (based on these three wells) was presented in the RCRA 3013 Report (EPS, 2008) and is shown in Figure 8.1 The groundwater flow direction based on these wells was determined to be to the south-southeast. Based on this direction of groundwater flow, a more ideally situated well downgradient from the area of greatest contamination was needed. Therefore, in 2010 another well (BW-4) was installed per an

[1] Note the elevations from the production wells (PW-1 and PW-2) are not used in developing the potentiometric contours as they are not as discrete with screened intervals. It is improper to combine elevations from the production wells with the other on-Site wells that do have discrete screened intervals.

EPD-approved Work Plan (EPS, 2010A). The total depth of the well is 180 ft and is located near the middle of the Drexel Facility's southern fence line. Groundwater depths from BW-1, BW-2, BW-3, and BW-4 were measured in August 2012, which indicated a groundwater flow direction with a more easterly component. Thus, for the purposes of delineation, EPS installed two additional wells in 2013. EPS installed BW-5 with a total well depth of 170 ft east of the Drexel Facility for horizontal delineation. EPS installed BW-5 near former well PW-1 for vertical delineation. BW-6 is a multi-level sampling well (specifically a FLUTeTM well) with sample ports screened at 180-190ft, 280-290ft, and 380-390ft. The potentiometric surface from February 2014 is shown on Figure 9.

B.5 Environmental Conditions

The Site has been investigated on numerous occasions over the years by a number of different parties. EPS has compiled all of these environmental data records into a relational database library. Throughout these investigations, the primary focus has been characterization of soil at the Drexel Facility and rail spur, and soil/sediment along drainage areas off the property. Groundwater has also been investigated. Hundreds of surficial and subsurface soil samples have been characterized for pesticides, herbicides, metals, volatile organic compounds (VOCs), and semi-VOCs (SVOCs). Appendix E of the VIRP contains a summary of the previous site characterization and response actions.

B.5.1 Risk Reduction Standards and Delineation

Drexel has worked with the GAEPD to develop Risk Reduction Standards (RRSs) for the Site. The methodology used to determine the RRS is presented in a technical memorandum to the GAEPD (EPS, 2010B). The RRSs were revised according to EPD's comments in a letter dated December 2, 2010 and presented in the VIRP. These RRSs were approved by the EPD in a letter dated April 28, 2011. The approved soil and groundwater RRSs are shown in Table 1 and Table 2, respectively.

Based on section 12-8-108 of the Georgia Voluntary Remediation Program Act, the soil and groundwater was to be delineated to default residential cleanup standards. Type 1 RRSs were used as the delineation standards and are shown in Tables 1 and 2 for soil and groundwater, respectively. Delineation was discussed in the Fifth Progress Report.

B.5.2 Surface Impoundment Remediation

In November 2013-January 2014 four of the former surface impoundments were remediated by removing the concrete impoundment, soil contained within the impoundment and some soils located around and under the impoundments. See the Sixth Progress Report for more detailed information. The analytical data associated with the soils excavated during this action were excluded from the following section describing the nature of the contamination.

B.5.3 Nature of Contamination (Post Surface Impoundment Remediation)

B.5.3.1 Soil

A summary of the surface soil (<= 2 ft bgs) data2 compared to residential and non-residential soil RRSs is shown in Table 3. Similarly, a summary of subsurface soil (> 2 ft bgs) data compared to subsurface soil RRSs is shown in Table 4. The data set represents a compilation of all data obtained through the multiple phases of the RCRA Section 3013 site assessment as well as the data records from past site assessments3 (dating back to the 1996 Kiber investigation), and recent sampling events. Data associated with soils excavated during the surface impoundment remediation were excluded. Appendix E of the VIRP contains tables showing the historical analytical data. Tables 3 and 4 show comparisons of the maximum concentration of each detected constituent found in the soils to the RRSs. Comparisons are provided for both the non-Residential RRSs (higher of Type 3 and Type 4) and the Residential RRSs (higher of Type 1 and Type 2). These tables also show the number of samples that exceeded the RRS and the number of samples that were analyzed for each constituent (called the frequency of exceedance). For example, a frequency of exceedance of "3/122" means that of 122 samples that were analyzed for that constituent, 3 were above the RRS. This frequency of exceedance is equivalent to 2.5% of the samples (3 divided by 122) exceeding the RRS. An average magnitude of exceedance was calculated for the constituents that had concentrations higher than the Residential RRS. The average magnitude of exceedence is the average detected concentration divided by the Residential RRS. The purpose of this analysis is to identify the primary constituents of potential concern (COPC), which will be the drivers for evaluating potentially applicable remedial action technologies and to establish a preliminary remedial action plan. The COPC can be identified by looking at both the average magnitude of exceedance and the frequency of exceedance. The tables below show the COPCs for surface and subsurface soils. These tables list the constituents that have an average magnitude of exceedance greater than one and have more than 3% of the results exceeding the RRS.

Primary Surface Soil COPCs

Constituent	Average Magnitude of Exceedance	Frequency of Exceedance
Toxaphene	22	12/247 (5%)
Endosulfan sulfate	5.3	6/163 (4%)
Chlordane	2.2	7/198 (4%)
Dimethoate	1.7	5/127 (4%)
Endosulfan II	1.3	8/163 (5%)

[2] For corrective action at the Site, Drexel considers sediments to be material covered by water the majority of the time. There are many samples that have been designated as sediments that may actually be soils based on this definition. Samples that do not appear (based on GIS coordinates and aerial photographs) to be under water are being considered as soils.

[3] Data records from the 1984 and two 1985 sampling events (by EPA) are not incorporated into the presentation of the nature and extent of contamination, due to the age of these data and that the more recent CSR investigations sampled in the same areas as the past events.

Primary Subsurface Soil COPCs

Constituent	Average Magnitude of Exceedance	Frequency of Exceedance
Methyl parathion	142	9/241 (4%)
Disulfoton	72	7/161 (4%)
EDB	40	25/284 (9%)
Toxaphene	15	34/439 (8%)
Chlordane	4.9	18/365 (5%)
o-Xylene	7.1	18/145 (12%)
Ethyl benzene	1.4	11/267 (4%)

The primary COPCs are a mixture of chlorinated pesticides, VOCs and organophosphorus pesticides. The most frequent exceedances are for EDB (9%), toxaphene (8%) and o-xylene (12%) in subsurface soils. The highest average magnitude of exceedance is for methyl parathion in subsurface soils.

B.5.3.2 Groundwater

A summary of groundwater data compared to RRSs is shown in Table 5. The data set represents groundwater data collected from 2010 to the present. This table shows comparisons of the maximum concentration of each detected constituent found in the groundwater to both the Residential and Non-Residential RRSs. The only RRS exceedance in more than one sample is for EDB.

B.5.4 Extent of Soil Contamination

B.5.4.1 Soil

A comparison of the soil characterization to RRSs (Residential and Industrial) is demonstrated graphically in Figures 10 through 18. Each figure corresponds to a depth interval progression in the overburden. Depth intervals are chosen based, in part, upon standard USEPA exposure pathways (e.g., 0-2 ft for surficial exposure) and to provide the vertical dimensions; depth intervals are from 0-2 ft, 2-5 ft, 5-10 ft and 10 ft intervals deeper into subsurface soil thereafter. The green circles indicate locations where all constituents are below the Residential RRS. The purple circles indicate locations where at least one constituent exceeded the Industrial RRS and the blue circles indication locations with at least one exceedance of a Residential RRS. These figures show that the primary areas of contamination occur along the rail car unloading area and Tank Farm #1 corridor.

B.5.4.2 Groundwater

A comparison of the current groundwater conditions to Residential RRSs is illustrated in Figure 19. This figure shows the locations of the monitoring wells (and the nearest off-Site residential wells) and where the RRS exceedances occur. As mentioned previously, the only RRS exceedance in more than one sample is EDB. The groundwater will be monitored through the allowable timeframe under the VRP regulations to see whether all wells achieve the RRS criteria.

B.5.4.3 Off-Site Sediment and Surface Water

In 2010, sediment and surface water samples were collected from background locations (pond and stream settings) outside the potential influence from the Drexel facility. (More information about this sampling event and the data obtained is presented in Appendix E of the VIRP.) Sediment and surface water background values were determined based on this dataset (see Appendix H of the VIRP).

Surface water samples have been collected in off-Site ponds and drainage features. Several samples were also collected from the two drainage ditches that run parallel to the CSX rail line. The southern swale rarely holds standing water and both are subject to desiccation during periods of low rainfall. The samples from these locations were evaluated in a Revised Screening-Level Ecological Risk Assessment (SLERA) report submitted to GAEPD in January 2012 (EPS 2012). Figure 20 shows the surface water sample locations.

Several sediment samples have been collected in the pond to the east of the main facility and in a pond to the north of the facility. Figure 21 shows the locations of these sediment samples.

B.6 Conceptual Model for EDB

The primary constituent of concern in groundwater (the only constituent that consistently exceeds its RRS) is EDB. This section provides a description of the potential fate and transport mechanisms for EDB and an empirical model for its fate and transport at the Site.

B.6.1 General Physical/Chemical Properties of EDB

EDB is a low-molecular-weight (187.88 g/mol) halogenated hydrocarbon that is more dense than water (specific gravity of 2.172 at 25° C; Windholz, 1983). The fate and transport of EDB through the overburden (soil) to the groundwater table depends on the soil adsorption properties and bioavailability for microbial degradation. The log Koc (soil organic carbon/water partition coefficient) value for EDB is 1.45 (USEPA, 1998), which indicates that EDB has low to moderate soil adsorption and a high mobility in soil. The vapor pressure is 11 mm Hg at 25° C (ATSDR, 1992) and the dimensionless Henry's Law Constant is 0.0133 (USEPA, 1998) indicating that EDB readily volatilizes from dry or moist surfaces. Aerobic biodegradation of EDB in surface soil occurs readily (USEPA, 2004A) and EDB is moderately persistent in deeper soil with a representative half-life of 100 days (Extension Toxicology Network, 2004). Anaerobic biodegradation and abiotic degradation in soil are limited (USEPA, 2004B).

The fate and transport mechanisms of EDB in the groundwater include advection, dispersion, sorption to native organic matter, biodegradation, neutral hydrolysis, and non-biological reactions with sulfide. Adsorption of EDB to suspended solids in the groundwater table is not expected based on its log Koc. The range of retardation ratios (rate of movement of water divided by the rate of movement of EDB) that is expected from sorption of EDB to native organic carbon in aquifers is 1 to 4.1, which corresponds to fraction of organic carbon range of 0.01% to 1% (USEPA, 2008). This indicates very little retardation due to sorption would be expected unless there is a significant amount of organic carbon (which is not characteristic of a limestone aquifer matrix). EDB is resistant to abiotic hydrolysis, with a hydrolytic half-life

ranging from 6 to 13.2 years (USEPA, 2004A and 2004B). However, at higher concentrations (above 0.2 mg/L), EDB can be abiotically transformed through a reaction with sulfide (USEPA, 2008). The biodegradation half-life under anaerobic conditions (which is the state of the groundwater at the Site) is 15 to 50 days (USEPA, 2006). The range of first order rate constants for anaerobic degradation of EDB in aquifer sediments is 0.03 to 17 per year (USEPA, 2008). Using these decay rates and the following reaction equation

$$C_t / C_o = e^{kt}$$

where

C_t = concentration at some time t; use the RRS of 0.00009 mg/L

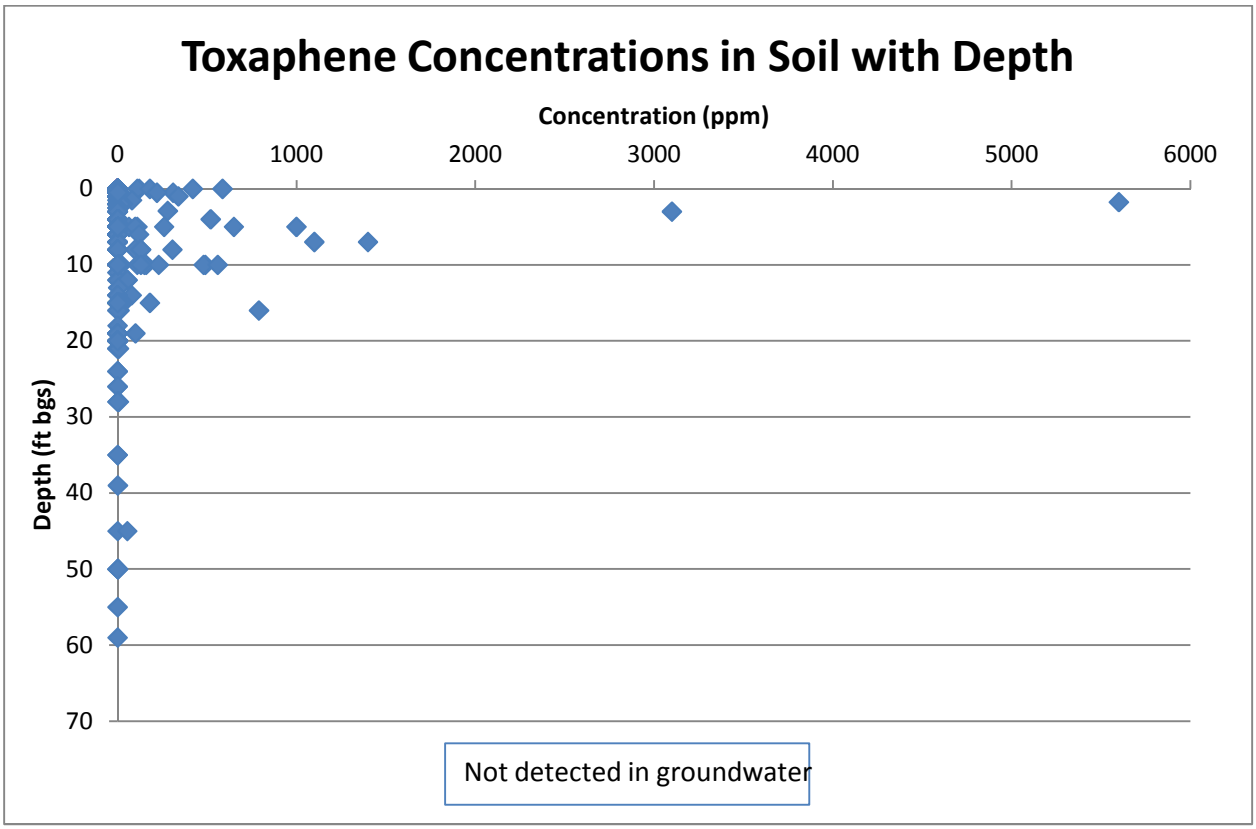
C_o = initial concentration; use March 2013 result of 0.00042 mg/L from BW-1

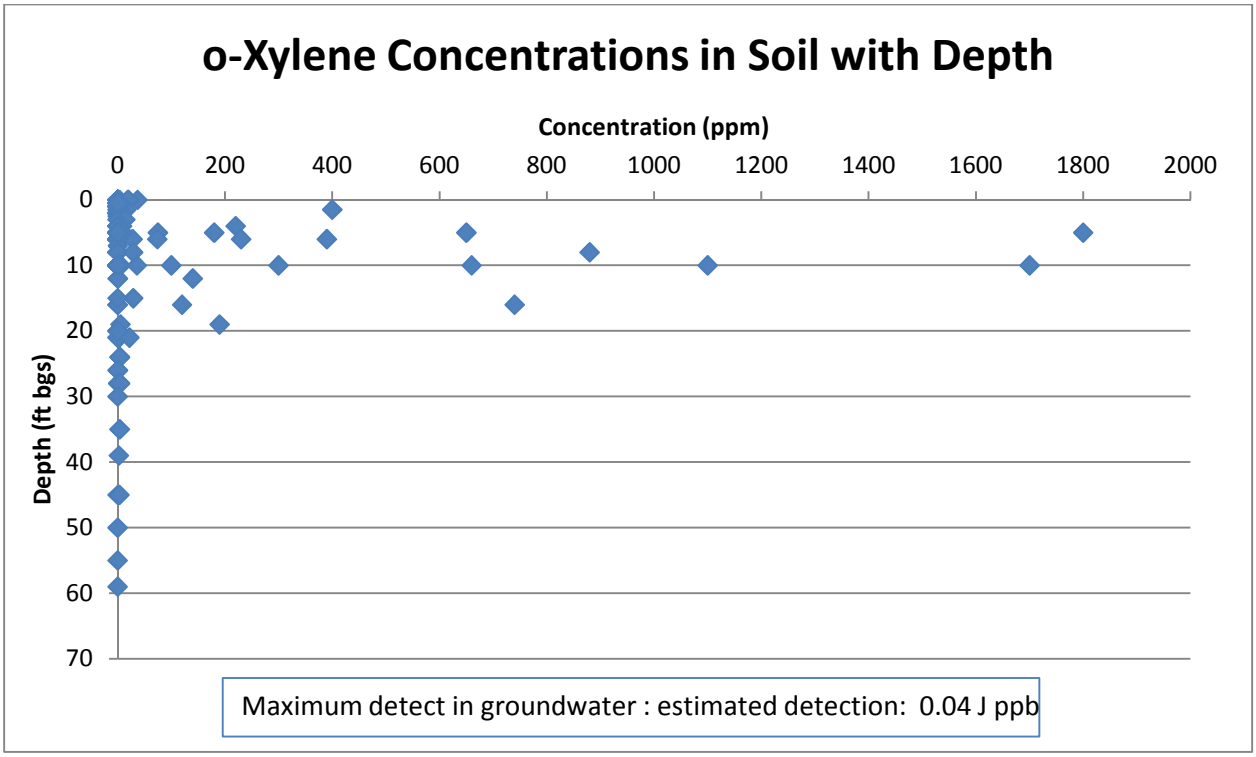
k = first order rate constant; to be conservative, use 0.1 per year,

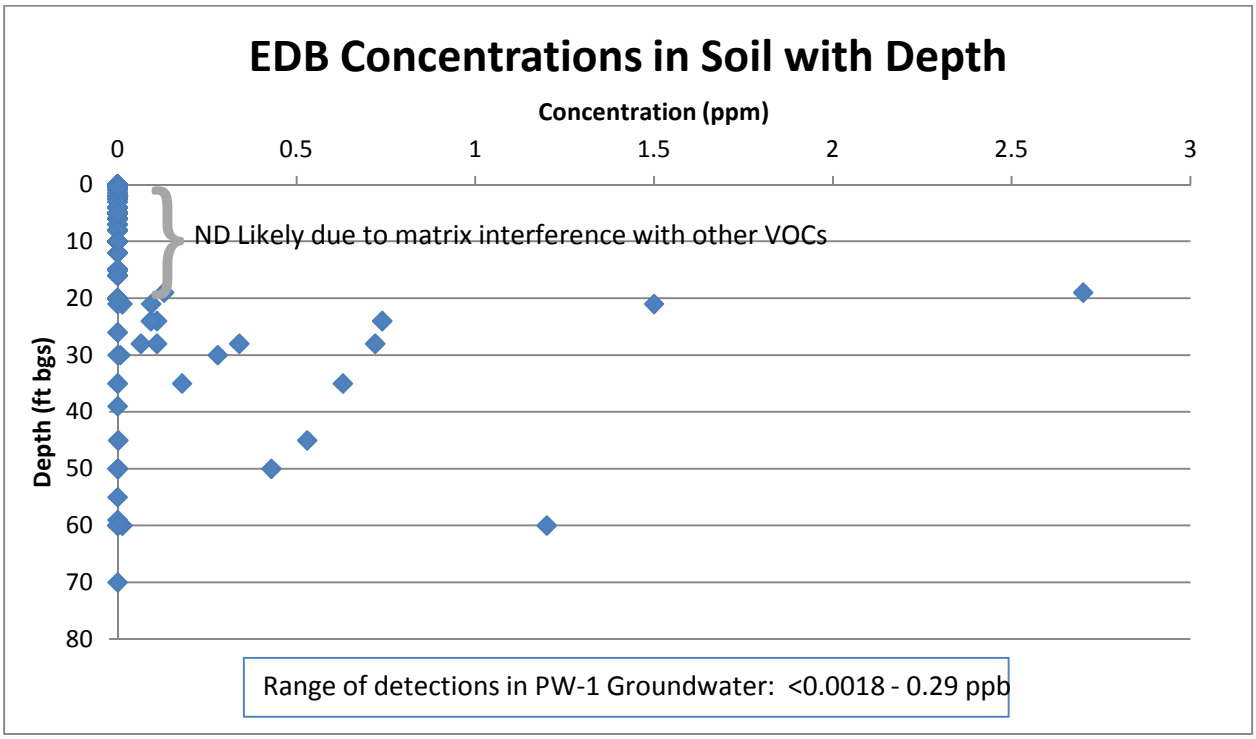
the resulting time until the RRS is reached (using a conservative rate constant) is modeled to be 15.4 years.

B.6.2 Empirical On-Site Model

The empirical evidence indicates that the leaching of constituents to groundwater is either not occurring or is not significant. The concentrations of constituents in the overburden decrease with depth. The graphs below for three of the primary soil COPCs demonstrate this decreasing concentration with depth below the ground surface. Despite the age of the facility (in operation since the 1960s) and the high concentrations seen in the overburden, only one constituent has been consistently detected above its RRS in groundwater. And this constituent (EDB) has only been above its RRS consistently in three existing wells (BW-1, BW-5, and BW-6) and one abandoned well (PW-1) and at low concentrations.


Toxaphene Concentrations in Soil with Depth
Concentration (ppm)
0
1000
2000
3000
4000
5000
6000
Depth (ft bgs)
0
10
20
30
40
50
60
70
Not detected in groundwater


o-Xylene Concentrations in Soil with Depth
Concentration (ppm)
0
200
400
600
800
1000
1200
1400
1600
1800
2000
Depth (ft bgs)
0
10
20
30
40
50
60
70
Maximum detect in groundwater : estimated detection: 0.04 J ppb



The highest concentrations of toxaphene and o-xylene in soil (along with other constituents) occur in the 0-20 ft bgs range. EDB is not detected at these shallow depths in soil, but is detected below 20 ft bgs. It is believed that the high concentrations of VOCs and pesticides in the 0-20 ft bgs range are causing matrix interferences for EDB.

The model described below and shown on Figure 22 provides an explanation as to how EDB may be found in the groundwater when leaching is not a significant factor at the Site. The groundwater aquifer, which is located in the limestone has very low concentrations of EDB. Considerably higher concentrations of EDB have been reported in perched water found in the overburden. Samples of the perched water have been collected in the area of high soil contamination (DC-14N) and near this area (MW-15, MW-15D). In 2000, a high concentration (3,200 µg/L) of EDB was found in perched water that was sampled while collecting a soil sample at location DC-14N. Nearby monitoring wells placed in the overburden (MW-15 and associated deeper overburden well MW-15D) had a concentration of 53 µg/L in 2000 and 80 µg/L in July of 20034. During the same time period (2000-2003) PW-1 (which was located in the limestone aquifer downgradient of the area of high soil concentrations) had concentrations of <0.0021 – 0.21 µg/L. Well BW-1 (located near DC-14N in the area of higher soil contamination) was constructed in 2005 in the limestone aquifer. Concentrations in this well have ranged from non-detect to 0.42 µg/L.

[4] Samples collected in 2000 were labeled MW-15 and DW-1. Samples collected in 2000 by the EPD were labeled as MW-7 and MW-7D.

The production wells had an open borehole construction in the limestone bedrock. In 2005 downhole geophysical logging was performed on PW-1 and PW-2 (see Appendix E of the VIRP for more information). It was determined that the casings for these wells were not sealed. It is likely that the contaminated perched water migrated downward through the overburden then migrated vertically downward through the unsealed casings of PW-1, resulting in the presence of constituents in the limestone aquifer.

B.7 Potential Receptors and Exposure Pathways

The Drexel plant is an isolated industrial facility that is set in a primarily agricultural area. The facility is not connected to city water or city sewer. The Facility is approximately 6.89 acres bounded on the west by Cape Road, to the north by a railroad, and to the south and east by private agricultural land. All of the facility's pesticide blending operations take place on the northern half of the property; the southern half was purchased for future expansion and is presently used primarily for employee and visitor parking. A septic drain field is also present on the southern half of the property. The Facility is completely enclosed with an 8-foot chain link fence.

Drexel currently employs approximately 25 people at the Cordele facility. Potable water for employee use has been delivered to the facility from an outside vendor since Drexel ceased operations of the facility water supply wells. A literature-based well survey (Peachtree, 2001), identified three public water supply wells within a three mile radius of the property. These wells were determined to be located approximately 11,000 ft northwest, 4,000 ft northwest, 8,500 ft northeast of the Property, with depths upwards of 600 ft bgs. Nine private domestic-supply wells have been identified within a one half-mile radius of the property. The nearest private well downgradient of the Facility is at the Akin residence (100 Cape Rd.), approximately 383 ft south of the Facility's fence line. However, this well is not currently in operation and the power supply has been shut-off. There is an abandoned residential well (Well D) that is approximately 460 ft southeast of the Facility's fenceline. There is also a private well approximately 110 ft north of the Facility's fence line at the Stewart residence (140 Cape Rd.); this well is upgradient of the groundwater flow direction.

The adjoining properties are used for residential or agricultural purposes or are currently vacant. In October 2009, Drexel purchased additional parcels of land comprising approximately 35.2 acres. Several of these are contiguous parcels, totaling 32.2 acres, which border the southern and eastern boundaries of the Facility. These additional parcels owned by Drexel are currently vacant.

Now that the surface impoundment remediation is complete, the remaining area of soil contamination is focused on one operational area of the Facility: the Rail Car Unloading Area. Note that most areas are covered by buildings, pavement, or rock ballast. The current and/or potential future human receptors are listed below along with a brief discussion of the rationale behind their identification and the pathways through which they could potentially be exposed to regulated substances associated with releases at the Site.

- Current/Future Site Worker: There are currently approximately 25 workers at the Site, the majority of which work approximately 40 hours per week. It is anticipated that the facility will continue to operate in its current capacity for the foreseeable future. Receptors associated with this type of land use can potentially have long-term exposure to site-related chemicals in surface soil (0-2 ft bgs) via ingestion, dermal contact, and inhalation of volatiles in outdoor air. There is some potential for Site workers to be exposed to several of the more volatile COPC potentially migrating from impacted perched water and vadose zone soils to the indoor air of existing and/or future buildings. It is anticipated that if such vapor migration is occurring that the concentrations of these chemicals in indoor air would be well below the applicable OSHA standards.
- Future Construction Worker: No construction activities are currently planned at the Property, however, it is possible that additional buildings could be constructed on the Property in the future. Construction workers could potentially have short-term (<1 year) exposure to chemicals in mixed surface and subsurface soil (0-10 ft bgs) via ingestion, dermal contact, and inhalation of volatiles and particulates.
- Current/Future Off-Site Residents: There are several residential properties in relatively close proximity to the Site. Drexel's purchase of several adjoining parcels in 2009 serves to limit the potential for expanding residential use of the off-Site areas. In general, it is assumed that nearby residents could have long term exposure, as children through adulthood, to Site-related chemicals in surface soil (0-2 ft bgs) via ingestion, dermal contact, and inhalation of volatiles and particulates. Although no Site-related chemicals have been detected above relevant drinking water standards in off-Site groundwater, the presence of private residential water supply wells in close proximity to the Site offers the potential for exposure of future residents via ingestion, dermal contact, and inhalation of vapors associated with groundwater.

The on-Site areas impacted by the release of regulated substances are mostly covered by pavement, buildings, or rock ballast with rail. The area does not represent quality habitat for wildlife as it lacks natural vegetative cover and is unlikely to have substantial vegetative cover in the future due to ongoing facility operations. Facility operations and maintenance activities will continue to disrupt wildlife and cause animals to seek less frequently disturbed areas. In addition, any remedial actions to reduce potential human health exposures should also serve to reduce any potential ecological exposures.

The Georgia Natural Heritage Program provides a listing of "Known Locations of Rare and Other Special Concern Animals, Plants and Natural Communities within Georgia" organized by topographic quadrangle. The Site is located within the Penia Quadrangle. No sensitive animals were identified within this quadrangle. The sensitive plants within this quadrangle are the Cutleaf Beardtongue (*Penstemon dissectus*) and the Awned Meadowbeauty (*Rhexia aristosa*). Neither of these plants has been observed at the Site or in the surrounding area.

Because of documented releases of regulated substances into the drainage swales along the rail line to the northeast of the Site, the Screening Level Environmental Risk Assessment (SLERA; EPS 2010B) included a preliminary evaluation of terrestrial and aquatic organisms that could potentially be exposed in these areas. Theoretical potential exposure pathways for terrestrial and aquatic organisms are root absorption, ingestion (e.g., surface soil/sediment, surface water, and biota), dermal absorption, and inhalation.

With respect to potential ecological risks to off-Site receptors, the SLERA report (EPS 2010B) concluded that there is a modest potential for adverse ecological effects to terrestrial and semi-aquatic receptors from several Site-related substances in off-Site soil and sediments. The potential risk appears to be driven by relatively localized impacts in the drainage swale and ditch that border the rail line immediately north of the Site.

B.8 References

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Table 1. Soil Risk Reduction Standards and Delineation Criteria (mg/kg)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential RRS*	Type 3 SS RRS	Type 3 SbS RRS	Type 4 SS RRS	Type 4 SbS RRS	Cleanup Standard: Non-Residential SS RRS**	Cleanup Standard: Non-Residential SbS RRS**
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (PAHs)										
83-32-9	Acenaphthene	300	408	**408**	300	300	1244	1244	**1244**	**1244**
120-12-7	Anthracene	500	3121	**3121**	500	500	20584	20584	**20584**	**20584**
208-96-8	Acenaphthylene	130	Bkg/DL	**130**	130	130	Bkg/DL	Bkg/DL	**130**	**130**
191-24-2	Benzo(g,h,i)perylene	500	Bkg/DL	**500**	500	500	Bkg/DL	Bkg/DL	**500**	**500**
206-44-0	Fluoranthene	500	2224	**2224**	500	500	9118	9118	**9118**	**9118**
86-73-7	Fluorene	360	364	**364**	360	360	1492	1492	**1492**	**1492**
91-20-3	Naphthalene	100	1.3	**100**	100	100	1.3	1.3	**100**	**100**
85-01-8	Phenanthrene	110	Bkg/DL	**110**	110	110	Bkg/DL	Bkg/DL	**110**	**110**
129-00-0	Pyrene	500	2184	**2184**	500	500	6770	6770	**6770**	**6770**
Carcinogenic PAHs										
56-55-3	Benzo(a)anthracene	5	7.1	**7.1**	5	5	28	28	**28**	**28**
205-99-2	Benzo(b)fluoranthene	5	12	**12**	5	5	78	96	**78**	**96**
207-08-9	Benzo(k)fluoranthene	5	125	**125**	5	5	784	940	**784**	**940**
50-32-8	Benzo(a)pyrene	1.6	1.2	**1.6**	1.64	1.64	7.8	9.4	**7.8**	**9.4**
218-01-9	Chrysene	5	867	**867**	5	5	2817	2817	**2817**	**2817**
53-70-3	Dibenzo(a,h)anthracene	2	1.2	**2**	5	5	7.8	31	**7.8**	**31**
193-39-5	Indeno(1,2,3-cd)pyrene	5	12	**12**	5	5	78	312	**78**	**312**
Inorganic chemicals										
7440-36-0	Antimony	4	5.4	**5.4**	10	10	36	36	**36**	**36**
7440-38-2	Arsenic	20	5.8	**20**	38	41	5.8	5.8	**38**	**41**
7440-39-3	Barium	1000	2554	**2554**	1000	1000	16480	16480	**16480**	**16480**
7440-41-7	Beryllium	2	156	**156**	3	3	3161	3161	**3161**	**3161**
7440-43-9	Cadmium (food or soil)	2	7.5	**7.5**	39	39	150	150	**150**	**150**
	Chromium (unspeciated)	100	38	**100**	1200	1200	38	38	**1200**	**1200**
16065-83-1	Chromium (III)	100	117321	**100000**	1200	1200	3000000	6E+09	**100000**	**100000** ***
18540-29-9	Chromium (VI)	100	18	**100**	109	1200	38	38	**109**	**1200**
7440-50-8	Copper	100	915	**915**	1500	1500	2886	2886	**2886**	**2886**
57-12-5	Cyanide	20	40	**40**	20	20	40	40	**40**	**40**
7439-92-1	Lead	75	270	**270**	400	400	270	270	**400**	**400**
7439-97-6	Mercury	0.5	2.1	**2.1**	17	17	2.1	2.1	**17**	**17**
7440-02-0	Nickel	50	404	**404**	420	420	2608	2608	**2608**	**2608**
7782-49-2	Selenium	2	8.3	**8.3**	36	36	52	52	**52**	**52**
7440-22-4	Silver	2	17	**17**	10	10	85	85	**85**	**85**

EPS

Table 1. Soil Risk Reduction Standards and Delineation Criteria (mg/kg)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential RRS*	Type 3 SS RRS	Type 3 SbS RRS	Type 4 SS RRS	Type 4 SbS RRS	Cleanup Standard: Non-Residential SS RRS**	Cleanup Standard: Non-Residential SbS RRS**
7440-28-0	Thallium	2	2.8	**2.8**	10	10	2.8	2.8	**10**	**10**
7440-66-6	Zinc	100	5847	**5847**	2800	2800	38564	38564	**38564**	**38564**
Other Chemicals										
540-54-5	1-Chloropropane (2,2'-Oxybis)	DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	Bkg/DL	Bkg/DL	**Bkg/DL**	**Bkg/DL**
96-18-4	1,2,3-Trichloropropane	0.5	0.3	**0.5**	1.9	4	0.35	0.35	**1.9**	**4**
120-82-1	1,2,4-Trichlorobenzene	10.83	4.1	**10.83**	10.83	10.83	4.1	4.1	**10.83**	**10.83**
106-93-4	1,2-Dibromoethane (EDB)	0.01	0.0006	**0.01**	0.01	0.01	0.0006	0.0006	**0.01**	**0.01**
95-50-1	1,2-Dichlorobenzene	60	12	**60**	60	60	12	12	**60**	**60**
78-87-5	1,2-Dichloropropane	0.5	0.03	**0.5**	0.5	0.5	0.05	0.05	**0.5**	**0.5**
541-73-1	1,3-Dichlorobenzene	60	13	**60**	60	60	13	13	**60**	**60**
106-46-7	1,4-Dichlorobenzene	7.5	1.4	**7.5**	7.5	7.5	1.4	1.4	**7.5**	**7.5**
95-95-4	2,4,5-Trichlorophenol	400	304	**400**	400	400	760	760	**760**	**760**
93-72-1	2,4,5-TP (Silvex)	10	1.4	**10**	10	10	8.8	8.8	**10**	**10**
88-06-2	2,4,6-Trichlorophenol	3	2.3	**3**	3	3	7.6	7.6	**7.6**	**7.6**
94-75-7	2,4-D	7	0.83	**7**	7	7	5.2	5.2	**7**	**7**
120-83-2	2,4-Dichlorophenol	2	1.2	**2**	2	2	7.3	7.3	**7.3**	**7.3**
105-67-9	2,4-Dimethylphenol	70	17	**70**	70	70	47	47	**70**	**70**
51-28-5	2,4-Dinitrophenol	7	1.6	**7**	7	7	4.5	4.5	**7**	**7**
121-14-2	2,4-Dinitrotoluene	0.66	0.08	**0.66**	0.66	0.66	0.25	0.25	**0.66**	**0.66**
606-20-2	2,6-Dinitrotoluene	0.76	0.56	**0.76**	0.76	0.76	2.8	2.8	**2.8**	**2.8**
78-93-3	2-Butanone (MEK)	200	9.6	**200**	200	200	50	50	**200**	**200**
91-58-7	2-Chloronaphthalene	25	135	**135**	25	25	853	853	**853**	**853**
95-57-8	2-Chlorophenol	4	1.3	**4**	4	4	8.1	8.1	**8.1**	**8.1**
95-48-7	2-Methylphenol	3.8	13	**13**	3.8	3.8	83	83	**83**	**83**
88-75-5	2-Nitrophenol	DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	Bkg/DL	Bkg/DL	**Bkg/DL**	**Bkg/DL**
91-94-1	3,3'-Dichlorobenzidine	25	0.26	**25**	25	25	0.79	0.79	**25**	**25**
108-39-4	3-Methylphenol	3.8	13	**13**	3.8	3.8	82	82	**82**	**82**
106-44-5	4-Methylphenol	3.8	1.3	**3.8**	3.8	3.8	8	8	**8**	**8**
7005-72-3	4-Chlorophenyl-phenylether	DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	Bkg/DL	Bkg/DL	**Bkg/DL**	**Bkg/DL**
72-54-8	4,4'-DDD	0.66	19	**19**	0.66	0.66	47	47	**47**	**47**
72-55-9	4,4'-DDE	0.66	14	**14**	0.66	0.66	38	38	**38**	**38**
50-29-3	4,4'-DDT	0.66	20	**20**	0.66	0.66	54	54	**54**	**54**
106-47-8	4-Chloroaniline	10	0.86	**10**	10	10	0.86	0.86	**10**	**10**
59-50-7	4-Chloro-3-methylphenol	13	38	**38**	13.2	13.2	236	236	**236**	**236**

Table 1. Soil Risk Reduction Standards and Delineation Criteria (mg/kg)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential RRS*	Type 3 SS RRS	Type 3 SbS RRS	Type 4 SS RRS	Type 4 SbS RRS	Cleanup Standard: Non-Residential SS RRS**	Cleanup Standard: Non-Residential SbS RRS**
100-02-7	4-Nitrophenol	6	0.98	**6**	6	6	0.98	0.98	**6**	**6**
67-64-1	Acetone	400	33	**400**	400	400	189	189	**400**	**400**
309-00-2	Aldrin	0.66	0.16	**0.66**	0.66	0.66	0.66	0.66	**0.66**	**0.66**
319-84-6	alpha-BHC	0.66	0.01	**0.66**	0.66	0.66	0.06	0.06	**0.66**	**0.66**
86-50-0	Azinphos-methyl	10	0.3	**10**	10	10	1.9	1.9	**10**	**10**
71-43-2	Benzene	0.5	0.05	**0.5**	0.5	0.5	0.09	0.09	**0.5**	**0.5**
319-85-7	beta-BHC (Hexachlorocyclohexane, Beta-)	0.66	0.06	**0.66**	0.66	0.66	0.23	0.23	**0.66**	**0.66**
111-91-1	bis(2-Chloroethoxy)methane	0.03	0.23	**0.23**	0.027	0.027	1.4	1.4	**1.4**	**1.4**
111-44-4	bis(2-Chloroethyl) ether	0.6	0.001	**0.6**	0.6	0.6	0.001	0.001	**0.6**	**0.6**
117-81-7	bis(2-Ethylhexyl) phthalate	50	287	**287**	50	50	957	957	**957**	**957**
74-83-9	Bromomethane	1	0.05	**1**	1	1	0.05	0.05	**1**	**1**
85-68-7	Butylbenzylphthalate	50	128	**128**	50	50	426	426	**426**	**426**
63-25-2	Carbaryl	70	29	**70**	70	70	182	182	**182**	**182**
75-15-0	Carbon disulfide	400	23	**400**	400	400	23	23	**400**	**400**
56-23-5	Carbon tetrachloride	0.5	0.05	**0.5**	0.5	0.5	0.08	0.08	**0.5**	**0.5**
57-74-9	Chlordane	9.2	2.7	**9.2**	9.2	9.2	2.7	2.7	**9.2**	**9.2**
108-90-7	Chlorobenzene	10	1.4	**10**	10	10	1.9	1.9	**10**	**10**
75-00-3	Chloroethane	0.17	34	**34**	0.17	0.17	163	163	**163**	**163**
2921-88-2	Chlorpyrifos	2	15	**15**	2	2	94	94	**94**	**94**
56-72-4	Coumaphos	1	Bkg/DL	**1**	1	1	Bkg/DL	Bkg/DL	**1**	**1**
108-94-1	Cyclohexanone	20	359	**359**	20	20	2351	2351	**2351**	**2351**
75-99-0	Dalapon	20	1.9	**20**	20	20	13	13	**20**	**20**
319-86-8	delta-BHC	DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	Bkg/DL	Bkg/DL	**Bkg/DL**	**Bkg/DL**
333-41-5	Diazinon	1	1.3	**1.3**	1	1	8.8	8.8	**8.8**	**8.8**
124-48-1	Dibromochloromethane	10	0.53	**10**	10	10	0.53	0.53	**10**	**10**
1918-00-9	Dicamba	20	2.4	**20**	20	20	16	16	**20**	**20**
75-09-2	Dichloromethane (Methylene chloride)	0.5	0.3	**0.5**	0.5	0.5	0.6	0.6	**0.6**	**0.6**
60-57-1	Dieldrin	0.66	0.04	**0.66**	0.66	0.66	0.16	0.16	**0.66**	**0.66**
84-66-2	Diethylphthalate	500	107	**500**	500	500	672	672	**672**	**672**
60-51-5	Dimethoate	0.7	0.03	**0.7**	0.7	0.7	0.09	0.09	**0.7**	**0.7**
131-11-3	Dimethylphthalate	40000	6240	**40000**	40000	40000	6240	6240	**40000**	**40000**
87-74-2	Di-n-butylphthalate	400	200	**400**	400	400	500	500	**500**	**500**
117-84-0	Di-n-octylphthalate	70	5491	**5491**	70	70	5491	5491	**5491**	**5491**
88-85-7	Dinoseb (DNBP)	0.7	3.5	**3.5**	0.7	0.7	18	18	**18**	**18**
298-04-4	Disulfoton	0.03	0.02	**0.03**	0.03	0.03	0.15	0.15	**0.15**	**0.15**

Table 1. Soil Risk Reduction Standards and Delineation Criteria (mg/kg)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential RRS*	Type 3 SS RRS	Type 3 SbS RRS	Type 4 SS RRS	Type 4 SbS RRS	Cleanup Standard: Non-Residential SS RRS**	Cleanup Standard: Non-Residential SbS RRS**
115-29-7	Endosulfan I	10	26	**26**	10	10	170	170	**170**	**170**
33213-65-9	Endosulfan II	10	1.8	**10**	10	10	1.8	1.8	**10**	**10**
1031-07-8	Endosulfan sulfate	1.65	Bkg/DL	**1.65**	1.65	1.65	Bkg/DL	Bkg/DL	**1.65**	**1.65**
72-20-8	Endrin	10	4	**10**	10	10	24	24	**24**	**24**
7421-93-4	Endrin aldehyde	10	Bkg/DL	**10**	10	10	Bkg/DL	Bkg/DL	**10**	**10**
2104-64-5	EPN	6.4	0.12	**6.4**	20	Bkg/DL	0.62	0.62	**20**	**6.4** ****
100-41-4	Ethyl benzene	70	16	**70**	70	70	16	16	**70**	**70**
115-90-2	Fensulfothion	10	Bkg/DL	**10**	10	10	Bkg/DL	Bkg/DL	**10**	**10**
58-89-9	gamma-BHC (Lindane)	0.66	0.12	**0.66**	0.66	0.66	0.35	0.35	**0.66**	**0.66**
76-44-8	Heptachlor	0.66	0.67	**0.67**	0.66	0.66	0.83	0.83	**0.83**	**0.83**
1024-57-3	Heptachlor epoxide	1.6	0.08	**1.6**	1.65	1.65	0.12	0.12	**1.65**	**1.65**
118-74-1	Hexachlorobenzene	2.1	0.24	**2.1**	2.14	2.14	0.49	0.49	**2.14**	**2.14**
87-68-3	Hexachlorobutadiene	17.5	0.78	**17.5**	17.5	17.5	3.9	3.9	**17.5**	**17.5**
77-47-4	Hexachlorocyclopentadiene	15	5.6	**15**	15.2	15.2	37	37	**37**	**37**
67-72-1	Hexachloroethane	10	0.24	**10**	10.0	10.0	1.2	1.2	**10**	**10**
78-59-1	Isophorone	10	5.9	**10**	10	10	20	20	**20**	**20**
98-82-8	Isopropylbenzene (cumene)	22	6.9	**22**	21.88	21.88	33	33	**33**	**33**
121-75-5	Malathion	20	1.6	**20**	20	20	10	10	**20**	**20**
72-43-5	Methoxychlor	10	87	**87**	10	10	542	542	**542**	**542**
298-00-0	Methyl parathion	0.2	0.14	**0.2**	0.2	0.2	1	1	**1**	**1**
7786-34-7	Mevinphos	10	Bkg/DL	**10**	10	10	Bkg/DL	Bkg/DL	**10**	**10**
98-95-3	Nitrobenzene	2	0.26	**2**	2	2	0.26	0.26	**2**	**2**
56-38-2	Parathion	20	20	**20**	20	20	60	60	**60**	**60**
87-86-5	Pentachlorophenol	3.3	1.4	**3.3**	3.3	3.3	4	4	**4**	**4**
108-95-2	Phenol	400	54	**400**	400	400	353	353	**400**	**400**
100-42-5	Styrene	14	11	**14**	14	14	57	57	**57**	**57**
127-18-4	Tetrachloroethene	0.5	0.05	**0.5**	0.5	0.5	0.05	0.05	**0.5**	**0.5**
108-88-3	Toluene	100	14	**100**	100	100	72	72	**100**	**100**
8001-35-2	Toxaphene	10.88	8.3	**10.88**	10.88	10.88	9.3	9.3	**10.88**	**10.88**
79-01-6	Trichloroethene	0.5	0.21	**0.5**	0.5	0.5	0.28	0.28	**0.5**	**0.5**
95-47-6	o-Xylene	20	7.3	**20**	20	20	38	38	**38**	**38**

* Higher of Type 1 and Type 2 RRS
** Higher of Type 3 and Type 4 RRS
*** Maximum value is 100,000
**** If Type 3/4 RRS is less than Type 1/2 value, then Type 1/2 value used
SS = Surface Soil (<= 2')
SbS = Subsurface Soil (>2')

EPS

Table 2. Groundwater Risk Reduction Standards (mg/L)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential GW RRS*	Type 3 RRS	Type 4 RRS	Non-Residential RRS**
Noncarcinogenic Polycyclic Aromatic Hydrocarbons (PAHs)							
83-32-9	Acenaphthene	2	0.94	**2**	2	6.1	**6.1**
120-12-7	Anthracene	Bkg/DL	4.7	**4.7**	Bkg/DL	31	**31**
208-96-8	Acenaphthylene	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
191-24-2	Benzo(g,h,i)perylene	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
206-44-0	Fluoranthene	1	0.63	**1**	1	4.1	**4.1**
86-73-7	Fluorene	1	0.63	**1**	1	4.1	**4.1**
91-20-3	Naphthalene	0.02	0.002	**0.02**	0.02	0.009	**0.02**
85-01-8	Phenanthrene	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
129-00-0	Pyrene	1	0.47	**1**	1	3.1	**3.1**
Carcinogenic PAHs							
56-55-3	Benzo(a)anthracene	0.0001	0.001	**0.001**	0.0001	0.004	**0.004**
205-99-2	Benzo(b)fluoranthene	0.0002	0.001	**0.001**	0.0002	0.004	**0.004**
207-08-9	Benzo(k)fluoranthene	Bkg/DL	0.01	**0.01**	Bkg/DL	0.04	**0.04**
50-32-8	Benzo(a)pyrene	0.0002	0.0001	**0.0002**	0.0002	0.0004	**0.0004**
218-01-9	Chrysene	0.0002	0.12	**0.12**	0.0002	0.39	**0.39**
53-70-3	Dibenzo(a,h)anthracene	0.0003	0.0001	**0.0003**	0.0003	0.0004	**0.0004**
193-39-5	Indeno(1,2,3-cd)pyrene	0.0004	0.001	**0.001**	0.0004	0.004	**0.004**
Inorganic chemicals							
7440-36-0	Antimony	0.006	0.006	**0.006**	0.006	0.04	**0.04**
7440-38-2	Arsenic	0.01	0.0006	**0.01**	0.01	0.002	**0.01**
7440-39-3	Barium	2	3.1	**3.1**	2	20	**20**
7440-41-7	Beryllium	0.004	0.03	**0.03**	0.004	0.2	**0.2**
7440-43-9	Cadmium (water)	0.005	0.008	**0.008**	0.005	0.05	**0.05**
7440-43-9	Cadmium (food or soil)	0.005	0.000006	**0.005**	0.005	0.1	**0.1**
	Chromium (unspeciated)	0.1	0.1	**0.1**	0.1	0.1	**0.1**
16065-83-1	Chromium (III)	0.1	23	**23**	0.1	153	**153**
18540-29-9	Chromium (VI)	0.1	0.002	**0.1**	0.1	0.006	**0.1**
7440-50-8	Copper	1.3	0.63	**1.3**	1.3	4.1	**4.1**
57-12-5	Cyanide	0.2	0.2	**0.2**	0.2	0.2	**0.2**
7439-92-1	Lead	0.015	0.015	**0.015**	0.015	0.015	**0.015**
7439-97-6	Mercury	0.002	0.0002	**0.002**	0.002	0.0008	**0.002**
7440-02-0	Nickel	0.1	0.31	**0.31**	0.1	2	**2**
7782-49-2	Selenium	0.05	0.08	**0.08**	0.05	0.51	**0.51**
7440-22-4	Silver	0.1	0.08	**0.1**	0.1	0.51	**0.51**
7440-28-0	Thallium	0.002	0.002	**0.002**	0.002	0.002	**0.002**
7440-66-6	Zinc	2	4.7	**4.7**	2	31	**31**

EPS

Table 2. Groundwater Risk Reduction Standards (mg/L)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential GW RRS*	Type 3 RRS	Type 4 RRS	Non-Residential RRS**
Other Chemicals							
540-54-5	1-Chloropropane (2,2'-Oxybis)	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
96-18-4	1,2,3-Trichloropropane	0.04	0.00003	**0.04**	0.04	0.0001	**0.04**
120-82-1	1,2,4-Trichlorobenzene	0.07	0.001	**0.07**	0.07	0.006	**0.07**
106-93-4	1,2-Dibromoethane (EDB)	0.00005	0.00009	**0.00009**	0.00005	0.0001	**0.0001**
95-50-1	1,2-Dichlorobenzene	0.6	0.11	**0.6**	0.6	0.55	**0.6**
78-87-5	1,2-Dichloropropane	0.005	0.002	**0.005**	0.005	0.007	**0.007**
541-73-1	1,3-Dichlorobenzene	0.6	0.6	**0.6**	0.6	0.6	**0.6**
106-46-7	1,4-Dichlorobenzene	0.075	0.006	**0.075**	0.075	0.007	**0.075**
95-95-4	2,4,5-Trichlorophenol	4	1.6	**4**	4	10	**10**
93-72-1	2,4,5-TP (Silvex)	0.05	0.13	**0.13**	0.05	0.82	**0.82**
88-06-2	2,4,6-Trichlorophenol	0.03	0.02	**0.03**	0.03	0.1	**0.1**
94-75-7	2,4-D	0.07	0.16	**0.16**	0.07	1	**1**
120-83-2	2,4-Dichlorophenol	0.02	0.05	**0.05**	0.02	0.31	**0.31**
105-67-9	2,4-Dimethylphenol	0.7	0.31	**0.7**	0.7	2	**2**
51-28-5	2,4-Dinitrophenol	0.07	0.03	**0.07**	0.07	0.2	**0.2**
121-14-2	2,4-Dinitrotoluene	0.00005	0.003	**0.003**	0.00005	0.009	**0.009**
606-20-2	2,6-Dinitrotoluene	Bkg/DL	0.02	**0.02**	Bkg/DL	0.1	**0.1**
78-93-3	2-Butanone (MEK)	2	2.3	**2.3**	2	12	**12**
91-58-7	2-Chloronaphthalene	Bkg/DL	1.3	**1.3**	Bkg/DL	8.2	**8.2**
95-57-8	2-Chlorophenol	0.04	0.08	**0.08**	0.04	0.51	**0.51**
95-48-7	2-Methylphenol	Bkg/DL	0.78	**0.78**	Bkg/DL	5.1	**5.1**
88-75-5	2-Nitrophenol	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
91-94-1	3,3'-Dichlorobenzidine	0.00008	0.002	**0.002**	0.00008	0.006	**0.006**
108-39-4	3-Methylphenol	Bkg/DL	0.78	**0.78**	Bkg/DL	5.1	**5.1**
106-44-5	4-Methylphenol	Bkg/DL	0.08	**0.08**	Bkg/DL	0.51	**0.51**
7005-72-3	4-Chlorophenyl-phenylether	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
72-54-8	4,4'-DDD	0.0001	0.004	**0.004**	0.0001	0.01	**0.01**
72-55-9	4,4'-DDE	0.0001	0.003	**0.003**	0.0001	0.008	**0.008**
50-29-3	4,4'-DDT	0.0001	0.003	**0.003**	0.0001	0.008	**0.008**
106-47-8	4-Chloroaniline	0.1	0.004	**0.1**	0.1	0.01	**0.1**
59-50-7	4-Chloro-3-methylphenol	Bkg/DL	1.6	**1.6**	Bkg/DL	10	**10**
100-02-7	4-Nitrophenol	0.06	0.06	**0.06**	0.06	0.06	**0.06**
67-64-1	Acetone	4	8	**8**	4	46	**46**
309-00-2	Aldrin	0.00002	0.00005	**0.00005**	0.00002	0.0002	**0.0002**
319-84-6	alpha-BHC	0.000006	0.0001	**0.0001**	0.000006	0.0005	**0.0005**
86-50-0	Azinphos-methyl	Bkg/DL	0.05	**0.05**	Bkg/DL	0.31	**0.31**

Table 2. Groundwater Risk Reduction Standards (mg/L)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential GW RRS*	Type 3 RRS	Type 4 RRS	Non-Residential RRS**
71-43-2	Benzene	0.005	0.005	**0.005**	0.005	0.009	**0.009**
319-85-7	beta-BHC (Hexachlorocyclohexane, Beta-)	0.00002	0.0005	**0.0005**	0.00002	0.002	**0.002**
111-91-1	bis(2-Chloroethoxy)methane	Bkg/DL	0.05	**0.05**	Bkg/DL	0.31	**0.31**
111-44-4	bis(2-Chloroethyl) ether	0.00003	0.0002	**0.0002**	0.00003	0.0002	**0.0002**
117-81-7	bis(2-Ethylhexyl) phthalate	0.006	0.06	**0.06**	0.006	0.2	**0.2**
74-83-9	Bromomethane	0.01	0.003	**0.01**	0.01	0.01	**0.01**
85-68-7	Butylbenzylphthalate	0.1	0.45	**0.45**	0.1	1.5	**1.5**
63-25-2	Carbaryl	0.7	1.6	**1.6**	0.7	10	**10**
75-15-0	Carbon disulfide	4	0.33	**4**	4	1.7	**4**
56-23-5	Carbon tetrachloride	0.005	0.006	**0.006**	0.005	0.01	**0.01**
57-74-9	Chlordane	0.002	0.0004	**0.002**	0.002	0.0007	**0.002**
108-90-7	Chlorobenzene	0.1	0.03	**0.1**	0.1	0.14	**0.14**
75-00-3	Chloroethane	Bkg/DL	6	**6**	Bkg/DL	29	**29**
2921-88-2	Chlorpyrifos	0.02	0.05	**0.05**	0.02	0.31	**0.31**
56-72-4	Coumaphos	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
108-94-1	Cyclohexanone	Bkg/DL	78	**78**	Bkg/DL	511	**511**
110-82-7	Cyclohexane	Bkg/DL	3.6	**3.6**	Bkg/DL	18	**18**
75-99-0	Dalapon	0.2	0.47	**0.47**	0.2	3.1	**3.1**
319-86-8	delta-BHC	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
333-41-5	Diazinon	0.0006	0.01	**0.01**	0.0006	0.07	**0.07**
124-48-1	Dibromochloromethane	0.1	0.02	**0.1**	0.1	0.03	**0.1**
1918-00-9	Dicamba	0.2	0.47	**0.47**	0.2	3.1	**3.1**
75-09-2	Dichloromethane (Methylene chloride)	0.005	0.06	**0.06**	0.005	0.12	**0.12**
60-57-1	Dieldrin	0.00002	0.00005	**0.00005**	0.00002	0.0002	**0.0002**
84-66-2	Diethylphthalate	5	13	**13**	5	82	**82**
60-51-5	Dimethoate	0.007	0.003	**0.007**	0.007	0.02	**0.02**
131-11-3	Dimethylphthalate	400	400	**400**	400	400	**400**
84-74-2	Di-n-butylphthalate	4	1.6	**4**	4	10	**10**
117-84-0	Di-n-octylphthalate	0.7	0.7	**0.7**	0.7	0.7	**0.7**
88-85-7	Dinoseb (DNBP)	0.007	0.02	**0.02**	0.007	0.1	**0.1**
298-04-4	Disulfoton	0.0003	0.0006	**0.0006**	0.0003	0.004	**0.004**
115-29-7	Endosulfan I	0.002	0.09	**0.09**	0.002	0.61	**0.61**
33213-65-9	Endosulfan II	0.002	0.002	**0.002**	0.002	0.002	**0.002**
1031-07-8	Endosulfan sulfate	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
72-20-8	Endrin	0.002	0.005	**0.005**	0.002	0.03	**0.03**
7421-93-4	Endrin aldehyde	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
2104-64-5	EPN	Bkg/DL	0.0002	**0.0002**	Bkg/DL	0.001	**0.001**

Table 2. Groundwater Risk Reduction Standards (mg/L)

CAS #	Constituent	Delineation Standard: Type 1 RRS	Type 2 RRS	Residential GW RRS*	Type 3 RRS	Type 4 RRS	Non-Residential RRS**
100-41-4	Ethyl benzene	0.7	0.02	**0.7**	0.7	0.03	**0.7**
115-90-2	Fensulfothion	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
58-89-9	gamma-BHC (Lindane)	0.0002	0.0008	**0.0008**	0.0002	0.003	**0.003**
76-44-8	Heptachlor	0.0004	0.0002	**0.0004**	0.0004	0.0006	**0.0006**
1024-57-3	Heptachlor epoxide	0.0002	0.00009	**0.0002**	0.0002	0.0003	**0.0003**
118-74-1	Hexachlorobenzene	0.001	0.0005	**0.001**	0.001	0.002	**0.002**
87-68-3	Hexachlorobutadiene	0.001	0.02	**0.02**	0.001	0.1	**0.1**
77-47-4	Hexachlorocyclopentadiene	0.05	0.09	**0.09**	0.05	0.61	**0.61**
67-72-1	Hexachloroethane	0.001	0.02	**0.02**	0.001	0.1	**0.1**
78-59-1	Isophorone	0.1	0.9	**0.9**	0.1	3	**3**
98-82-8	Isopropylbenzene (cumene)	Bkg/DL	0.21	**0.21**	Bkg/DL	1	**1**
121-75-5	Malathion	0.2	0.31	**0.31**	0.2	2	**2**
72-43-5	Methoxychlor	0.04	0.08	**0.08**	0.04	0.51	**0.51**
298-00-0	Methyl parathion	0.002	0.004	**0.004**	0.002	0.03	**0.03**
7786-34-7	Mevinphos	Bkg/DL	Bkg/DL	**Bkg/DL**	Bkg/DL	Bkg/DL	**Bkg/DL**
98-95-3	Nitrobenzene	0.02	0.002	**0.02**	0.02	0.002	**0.02**
56-38-2	Parathion	0.2	0.09	**0.2**	0.2	0.61	**0.61**
87-86-5	Pentachlorophenol	0.001	0.007	**0.007**	0.001	0.02	**0.02**
108-95-2	Phenol	4	4.7	**4.7**	4	31	**31**
100-42-5	Styrene	0.1	0.5	**0.5**	0.1	2.6	**2.6**
127-18-4	Tetrachloroethene	0.005	0.001	**0.005**	0.005	0.004	**0.005**
108-88-3	Toluene	1	0.88	**1**	1	5.2	**5.2**
8001-35-2	Toxaphene	0.003	0.0008	**0.003**	0.003	0.003	**0.003**
79-01-6	Trichloroethene	0.005	0.03	**0.03**	0.005	0.04	**0.04**
95-47-6	o-Xylene	Bkg/DL	0.37	**0.37**	Bkg/DL	1.9	**1.9**

* Higher of Type 1 and Type 2 RRS

** Higher of Type 3 and Type 4 RRS

Table 3. Summary Comparison of Surface Soil Results to RRSs (mg/kg)

CAS #	Constituent		Maximum Concentration (ppm)	Residential SS RRS	Non-Residential SS RRS	Frequency of Exceedance (Res)	Frequency of Exceedance (Non-Res)	Average Magnitude of Res Exceedance
Inorganics								
7440-38-2	Arsenic		**58**	20	38	5/228	5/228	0.27
7440-39-3	Barium		327	2554	16480	0/62	0/62	
7440-41-7	Beryllium		1.5	156	3161	0/39	0/39	
7440-43-9	Cadmium		**47**	7.5	150	1/62	0/62	3.2
7440-47-3	Chromium	Chromium (III)	97	100000	100000	0/62	0/62	
7440-47-3		Chromium (unspeciated)	97	100	1200	0/62	0/62	
7440-47-3		Chromium (VI)	97	100	109	0/62	0/62	
7440-50-8	Copper		**18100**	915	2886	3/121	2/121	0.25
7439-92-1	Lead		61	270	400	0/62	0/62	
7439-97-6	Mercury		0.220	2.1	17	0/62	0/62	
744-00-2	Nickel		21	404	2608	0/39	0/39	
7782-49-2	Selenium		**42**	8.3	52	1/62	0/62	5.1
7440-22-4	Silver		4.7	17	85	0/62	0/62	
7440-66-6	Zinc		240	5847	38564	0/104	0/104	
Organics								
120-82-1	1,2,4-Trichlorobenzene		0.0050	10.83	10.83	0/190	0/190	
106-93-4	1,2-Dibromoethane		0.0020	0.01	0.01	0/133	0/133	
95-50-1	1,2-Dichlorobenzene		0.0046	60	60	0/172	0/172	
106-46-7	1,4-Dichlorobenzene		0.17	7.5	7.5	0/172	0/172	
93-72-1	2,4,5-TC (Silvex)		0.0069	10	10	0/119	0/119	
78-93-3	2-Butanone (MEK)		0.090	200	200	0/134	0/134	
72-54-8	4,4'-DDD		**190**	19	47	12/256	7/256	0.65
72-55-9	4,4'-DDE		**31**	14	38	4/249	0/249	0.10
50-29-3	4,4'-DDT		**660**	20	54	11/256	5/256	0.98
100-02-7	4-Nitrophenol		**70**	6	6	1/109	1/109	12
67-64-1	Acetone		0.99	400	400	0/134	0/134	
309-00-2	Aldrin		**14**	0.66	0.66	1/156	1/156	4.4
319-84-6	alpha-BHC		**3.3**	0.66	0.66	2/156	2/156	1.6
86-50-0	Azinphos-methyl		0.025	10	10	0/131	0/131	

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Table 3. Summary Comparison of Surface Soil Results to RRSs (mg/kg)

CAS #	Constituent	Maximum Concentration (ppm)	Residential SS RRS	Non-Residential SS RRS	Frequency of Exceedance (Res)	Frequency of Exceedance (Non-Res)	Average Magnitude of Res Exceedance
71-43-2	Benzene	**45**	0.5	0.5	1/134	1/134	13
56-55-3	Benzo(a)anthracene	0.037	7.1	28	0/102	0/102	
50-32-8	Benzo(a)pyrene	0.36	1.6	7.8	0/102	0/102	
205-99-2	Benzo(b)fluoranthene	6.3	12	78	0/102	0/102	
191-24-2	Benzo(g,h,i)perylene	0.043	500	500	0/102	0/102	
207-08-9	Benzo(k)fluoranthene	0.081	125	784	0/102	0/102	
319-85-7	beta-BHC	0.051	0.66	0.66	0/160	0/160	
117-81-7	bis(2-Ethylhexyl) phthalate	6.1	287	957	0/102	0/102	
63-25-2	Carbaryl	36	70	182	0/24	0/24	
75-15-0	Carbon disulfide	0.369	400	400	0/71	0/71	
57-74-9	Chlordane	**450**	9.2	9.2	7/198	7/198	2.2
108-90-7	Chlorobenzene	**61**	10	10	1/134	1/134	0.87
2921-88-2	Chlorpyrifos	**690.0**	15	94	1/113	1/113	2.9
218-01-9	Chrysene	0.35	867	2817	0/102	0/102	
56-72-4	Coumaphos	0.0064	1	1	0/131	0/131	
108-94-1	Cyclohexanone	29	359	2351	0/26	0/26	
75-99-0	Dalapon	0.092	20	20	0/111	0/111	
333-41-5	Diazinon	**2**	1.3	8.8	1/103	0/103	0.38
53-70-3	Dibenzo(a,h)anthracene	0.031	2	7.8	0/102	0/102	
1918-00-9	Dicamba	0.0026	20	20	0/110	0/110	
60-57-1	Dieldrin	**21**	0.66	0.66	1/156	1/156	11
60-51-5	Dimethoate	**8.0**	0.7	0.7	5/127	5/127	1.69
298-04-4	Disulfoton	**2**	0.03	0.15	2/102	2/102	36
959-98-8	Endosulfan I	**160**	26	170	7/163	0/163	0.62
33213-65-9	Endosulfan II	**170**	10	10	8/163	8/163	1.3
1031-07-8	Endosulfan sulfate	**79**	1.65	1.65	6/163	6/163	5.3
72-20-8	Endrin	**140**	10	24	1/156	1/156	1.56
	Endrin Aldehyde	**61**	10	10	1/156	1/156	1.5
2104-64-5	EPN	0.19	6.4	20	0/131	0/131	
100-41-4	Ethyl benzene	**170**	70	70	2/134	2/134	0.32
115-90-2	Fensulfothion	1.000	10	10	0/131	0/131	

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Table 3. Summary Comparison of Surface Soil Results to RRSs (mg/kg)

CAS #	Constituent	Maximum Concentration (ppm)	Residential SS RRS	Non-Residential SS RRS	Frequency of Exceedance (Res)	Frequency of Exceedance (Non-Res)	Average Magnitude of Res Exceedance
206-44-0	Fluoranthene	0.059	2224	9118	0/102	0/102	
59-89-9	gamma-BHC (Lindane)	**2.7**	0.66	0.66	2/156	2/156	0.65
76-44-8	Heptachlor	**60**	0.67	0.83	3/256	3/256	13
1024-57-3	Heptachlor epoxide	0.22	1.6	1.65	0/156	0/156	
193-39-5	Indeno(1,2,3-cd)pyrene	0.33	12	78	0/102	0/102	
98-82-8	Isopropylbenzene	**81**	22	33	1/133	1/133	0.31
121-75-5	Malathion	0.082	20	20	0/131	0/131	
72-43-5	Methoxychlor	0.42	87	542	0/147	0/147	
7786-34-7	Mevinphos	0.017	10	10	0/102	0/102	
91-20-3	Naphthalene	8.6	100	100	0/129	0/129	
95-47-6	o-Xylene	**400**	20	38	2/70	1/70	1.7
56-38-2	Parathion	0.17	20	60	0/131	0/131	
87-86-5	Pentachlorophenol	0.0096	3.3	4	0/137	0/137	
85-01-8	Phenanthrene	0.041	110	110	0/102	0/102	
129-00-0	Pyrene	0.43	2184	6770	0/102	0/102	
127-18-4	Tetrachloroethene	0.084	0.5	0.5	0/134	0/134	
108-88-3	Toluene	0.15	100	100	0/134	0/134	
8001-35-2	Toxaphene	**5600**	10.88	10.88	12/247	12/247	22
79-01-6	Trichloroethene	0.0086	0.5	0.5	0/134	0/134	

ND: not detected

Nonresidential RRS: Higher of Type 3 and Type 4

Maximum concentration exceeds Non-Residential RRS

Maximum concentration exceeds Residential RRS

Frequency of exceedance: Number of results above RRS / Number of results

Average magnitude of exceedance: Average detected concentration divided by the Residential RRS

Table 4. Summary Comparison of Subsurface Soil Results to RRSs (mg/kg)

CAS #	Constituent		Maximum Concentration (ppm)	Residential SS RRS	Non-Residential SB RRS	Frequency of Exceedance (Res)	Frequency of Exceedance (Non-Res)	Average Magnitude of Res Exceedance
Inorganics								
7440-36-0	Antimony		5.1	5.4	36	0/110	0/110	
7440-38-2	Arsenic		**219**	20	41	2/350	2/350	0.23
7440-39-3	Barium		74	2554	16480	0/125	0/125	
7440-41-7	Beryllium		2.6	156	3161	0/110	0/110	
7440-43-9	Cadmium		**96**	7.5	150	1/125	0/125	2.8
7440-47-3	Chromium	Chromium (III)	95	100000	100000	0/125	0/125	
7440-47-3		Chromium (unspeciated)	95	100	1200	0/125	0/125	
7440-47-3		Chromium (VI)	95	100	1200	0/125	0/125	
7440-50-8	Copper		**14400**	915	2886	1/235	1/235	0.09
7439-92-1	Lead		65	270	400	0/125	0/125	
7439-97-6	Mercury		0.25	2.1	17	0/129	0/129	
744-00-2	Nickel		14.4	404	2608	0/110	0/110	
7440-22-4	Silver		0.2	17	85	0/125	0/125	
7440-28-0	Thallium		**5.1**	2.8	10	3/110	0/110	
7440-66-6	Zinc		**6720**	5847	38564	1/234	0/234	0.01
Organics								
96-18-4	1,2,3-Trichloropropane		**16**	0.5	4	1/222	1/222	32
120-82-1	1,2,4-Trichlorobenzene		0.2	10.83	10.83	0/393	0/393	
96-12-8	1,2-Dibromoethane		**2.7**	0.01	0.01	25/284	25/284	40
95-50-1	1,2-Dichloropropane		0.075	0.5	0.5	0/267	0/267	
78-87-5	1,4-Dichlorobenzene		2.8	7.5	7.5	0/346	0/346	
106-46-7	2,4,5-TC (Silvex)		0.002	10	10	0/241	0/241	
93-72-1	2,4-D		0.025	7	7	0/241	0/241	
94-75-7	2,4-Dimethylphenol		0.13	70	70	0/217	0/217	
105-67-9	2-Butanone (MEK)		3.1	200	200	0/266	0/266	
78-93-3	3/4-Methylphenol		0.069	13	82	0/82	0/82	
	4,4'-DDD		**140**	19	47	8/438	3/438	0.30
72-54-8	4,4'-DDE		**17**	14	38	2/409	0/409	0.06
72-55-9	4,4'-DDT		**340**	20	54	15/449	11/449	0.69
50-29-3	4-Nitrophenol		5.7	6	6	0/218	0/218	
83-32-9	Acenaphthylene		0.022	130	130	0/217	0/217	
208-96-8	Acetone		0.6	400	400	0/265	0/265	
67-64-1	Aldrin		**7.6**	0.66	0.66	1/306	1/306	2.5
309-00-2	alpha-BHC		**2.2**	0.66	0.66	1/307	1/307	0.43
120-12-7	Benzene		0.01	0.5	0.5	0/267	0/267	

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Table 4. Summary Comparison of Subsurface Soil Results to RRSs (mg/kg)

CAS #	Constituent	Maximum Concentration (ppm)	Residential SS RRS	Non-Residential SB RRS	Frequency of Exceedance (Res)	Frequency of Exceedance (Non-Res)	Average Magnitude of Res Exceedance
71-43-2	Benzo(a)anthracene	0.14	7.1	28	0/217	0/217	
56-55-3	Benzo(a)pyrene	0.15	1.6	9.4	0/217	0/217	
50-32-8	Benzo(b)fluoranthene	0.59	12	96	0/217	0/217	
205-99-2	Benzo(g,h,i)perylene	0.096	500	500	0/217	0/217	
191-24-2	Benzo(k)fluoranthene	0.18	125	940	0/217	0/217	
207-08-9	beta-BHC	**3**	0.66	0.66	1/312	1/312	0.55
319-85-7	bis(2-Ethylhexyl) phthalate	2.5	287	957	0/217	0/217	
117-81-7	Bromomethane	0.0062	1	1	0/267	0/267	
74-83-9	Carbaryl	3.8	70	182	0/26	0/26	
63-25-2	Carbon disulfide	0.01	400	400	0/141	0/141	
75-15-0	Chlordane	**640**	9.2	9.2	18/365	18/365	4.9
57-74-9	Chlorobenzene	0.094	10	10	0/267	0/267	
108-90-7	Chloroethane	0.98	34	163	0/267	0/267	
75-00-3	Chlorpyrifos	0.71	15	94	0/153	0/153	
2921-88-2	Chrysene	0.16	867	2817	0/217	0/217	
218-01-9	cis-1,2-Dichloroethene	0.0022	782	0.53	0/253	0/253	
156-59-2	Coumaphos	**4.5**	1	1	1/240	1/240	2.3
56-72-4	Cyclohexanone	47	359	2351	0/38	0/38	
108-94-1	Dalapon	0.11	20	20	0/241	0/241	
75-99-0	Diazinon	0.016	1.3	8.8	0/158	0/158	
333-41-5	Dibenzo(a,h)anthracene	0.032	2	31	0/217	0/217	
1918-00-9	Dichloromethane (Methylene chloride)	0.26	0.5	0.6	0/267	0/267	
75-09-2	Dieldrin	**25**	0.66	0.66	5/307	5/307	8.5
60-57-1	Dimethoate	**0.80**	0.7	0.7	1/240	1/240	0.16
60-51-5	Di-n-butylphthalate	11	400	500	0/217	0/217	
84-74-2	Di-n-octylphthalate	0.10	5491	5491	0/217	0/217	
117-84-0	Dinoseb (DNBP)	0.055	3.5	18	0/241	0/241	
88-85-7	Disulfoton	**8.6**	0.03	0.15	7/161	5/161	72
298-04-4	Endosulfan I	**91**	26	170	2/336	0/336	0.12
959-98-8	Endosulfan II	**92**	10	10	2/336	2/336	0.35
33213-65-9	Endosulfan sulfate	**34**	1.65	1.65	1/336	1/336	1.6
1031-07-8	Endrin	**62**	10	24	1/307	1/307	0.70
72-20-8	Endrin Aldehyde	**31**	10	10	1/307	1/307	1.0
	EPN	0.1	6.4	6.4	0/240	0/240	
2104-64-5	Ethyl benzene	**1500**	70	70	11/267	11/267	1.4

Table 4. Summary Comparison of Subsurface Soil Results to RRSs (mg/kg)

CAS #	Constituent	Maximum Concentration (ppm)	Residential SS RRS	Non-Residential SB RRS	Frequency of Exceedance (Res)	Frequency of Exceedance (Non-Res)	Average Magnitude of Res Exceedance
100-41-4	Fensulfothion	0.034	10	10	0/240	0/240	
115-90-2	Fluoranthene	0.5	2224	9118	0/217	0/217	
86-73-7	gamma-BHC (Lindane)	1	0.66	0.66	0/303	0/303	
59-89-9	Heptachlor	**16**	0.67	0.83	8/434	6/434	2.3
76-44-8	Heptachlor epoxide	0.0042	1.6	1.65	0/307	0/307	
1024-57-3	Indeno(1,2,3-cd)pyrene	0.098	12	312	0/217	0/217	
193-39-5	Isopropylbenzene	**96**	22	33	3/255	3/255	0.57
98-82-8	Malathion	**470**	20	20	5/240	5/240	1.9
121-75-5	Methoxychlor	0.1	87	542	0/307	0/307	
72-43-5	Methyl parathion	**160**	0.2	1	9/241	6/241	142
298-00-0	Mevinphos	**17**	10	10	1/158	1/158	1.7
7786-34-7	Naphthalene	2.7	100	100	0/266	0/266	
91-20-3	Nitrobenzene	**4.4**	2	2	1/217	1/217	2.2
98-95-3	o-Xylene	**1800**	20	38	18/145	15/145	7.1
95-47-6	Parathion	**260**	20	60	2/240	1/240	0.88
56-38-2	Pentachlorophenol	**98**	3.3	4	1/302	1/302	7.4
87-86-5	Phenanthrene	0.43	110	110	0/217	0/217	
85-01-8	Pyrene	0.4	2184	6770	0/217	0/217	
129-00-0	Styrene	**20**	14	57	1/267	0/267	0.71
100-42-5	Tetrachloroethene	0.0067	0.5	0.5	0/267	0/267	
127-18-4	Toluene	22	100	100	0/267	0/267	
108-88-3	Toxaphene	**3100**	10.88	10.88	34/439	34/439	15
8001-35-2	Trichloroethene	0.011	0.5	0.5	0/267	0/267	

Nonresident Maximum concentration exceeds Non-Residential RRS

Maximum concentration exceeds Residential RRS

No RRS calculated, notification criterion shown

*

Frequency of exceedance: Number of results above RRS / Number of results

Average magnitude of exceedance: Average detected concentration divided by the RRS

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Table 5. Summary Comparison of Groundwater Results to RRSs (mg/L)

Constituent		Maximum Concentration*	Residential RRS	Residential Frequency of Exceedance	Non-Residential RRS	Non-Residential Frequency of Exceedance
Inorganics						Su
Antimony		0.000178	0.006	0/42	0.04	0/42
Arsenic		0.0060	0.01	0/42	0.01	0/42
Barium		0.23	3.1	0/42	20	0/42
Beryllium		0.00397	0.03	0/42	0.2	0/42
Cadmium		0.0017	0.008	0/42	0.05	0/42
Chromium	Chromium (III)	0.144	23	0/42	153	0/42
	Chromium (unspeciated)		0.1	1/42	0.1	1/42
	Chromium (VI)		0.1	1/42	0.1	1/42
Copper		0.014	1.3	0/42	4.1	0/42
Lead		0.0155	0.015	1/42	0.015	1/42
Mercury		0.000050	0.002	0/16	0.002	0/16
Nickel		0.094	0.31	0/42	2	0/42
Selenium		0.024	0.08	0/42	0.51	0/42
Silver		0.004040	0.1	0/42	0.51	0/42
Thallium		0.00031	0.002	0/42	0.002	0/42
Zinc		0.44	4.7	0/42	31	0/42
Organics						
1,2-Dibromo-3-chloropropane		0.00017	0.002**	0/42		0/42
1,2-Dibromoethane (EDB)		0.0014000	0.00009	17/48	0.0001	16/48
1,2-Dichloroethane		0.00053	0.005**	0/42		0/42
1,2-Dichloropropane		0.000350	0.005	0/42	0.007	0/42
1,4-Dichlorobenzene		6E-05	0.075	0/42	0.075	0/42
Benzene		0.00051	0.005	0/42	0.009	0/42
bis(2-Ethylhexyl) phthalate		0.0074	0.06	0/42	0.2	0/42
Carbon tetrachloride		0.00055	0.006	0/42	0.01	0/42
Dimethoate		1.3E-05	0.007	0/42	0.02	0/42
Dinoseb (DNBP)		0.0037	0.02	0/42	0.1	0/42
Endrin		4.6E-06	0.005	0/42	0.03	0/42
Ethyl benzene		0.00016	0.7	0/42	0.7	0/42

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Table 5. Summary Comparison of Groundwater Results to RRSs (mg/L)

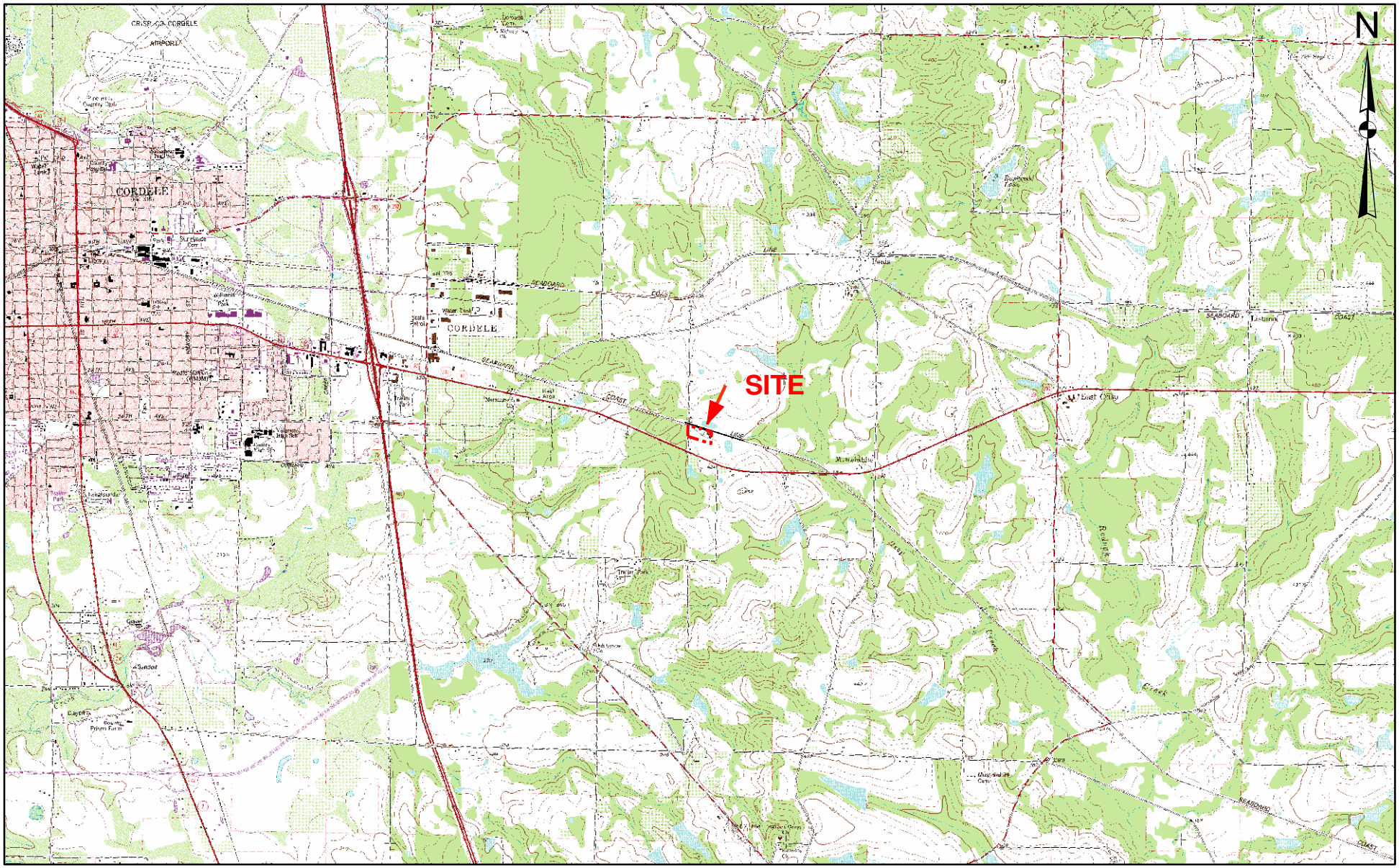
Constituent	Maximum Concentration*	Residential RRS	Residential Frequency of Exceedance	Non-Residential RRS	Non-Residential Frequency of Exceedance
gamma-BHC (Lindane)	9.7E-06	0.0008	0/42	0.003	0/42
Heptachlor	5.3E-07	0.0004	0/42	0.0006	0/42
Heptachlor epoxide	0.00017	0.0002	0/42	0.0003	0/42
Methoxychlor	0.00004	0.08	0/42	0.51	0/42
o-Xylene	0.00035	0.37	0/42	1.9	0/42
Toluene	0.00320	1	0/42	5.2	0/42

* Results from 2010-2014 used

** RRS not calculated, HSRA Table 1 Groundwater cirteria value shown

Maximum concentration exceeds RRS in more than one result

EPS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SITE
CORDELE
CRISP CO. CORDELE
AIRPORT
SEABOARD
COAST
LINE
East Cordele
Penia
Lisbon
Sandal
Cayce
County
Prison Farm
Water Tank
Trailer Park
Mt. Vernon
Cemetery
Mt. Vernon
Baptist Church
Mt. Vernon
Baptist Church
Cemetery
Mt. Vernon
Baptist Church
Cemetery
Mt. Vernon
Baptist Church
Cemetery

Land Cover and Use

- Agricultural
- Disturbed Ground
- Facility
- Pond
- Wooded

Legend

- Site Fenceline
- Railroad Lines

Aerial Photo Source: Geo Community 2007

0 345 690 1,380

Feet

Site Vicinity - Aerial and Land Use

EPS

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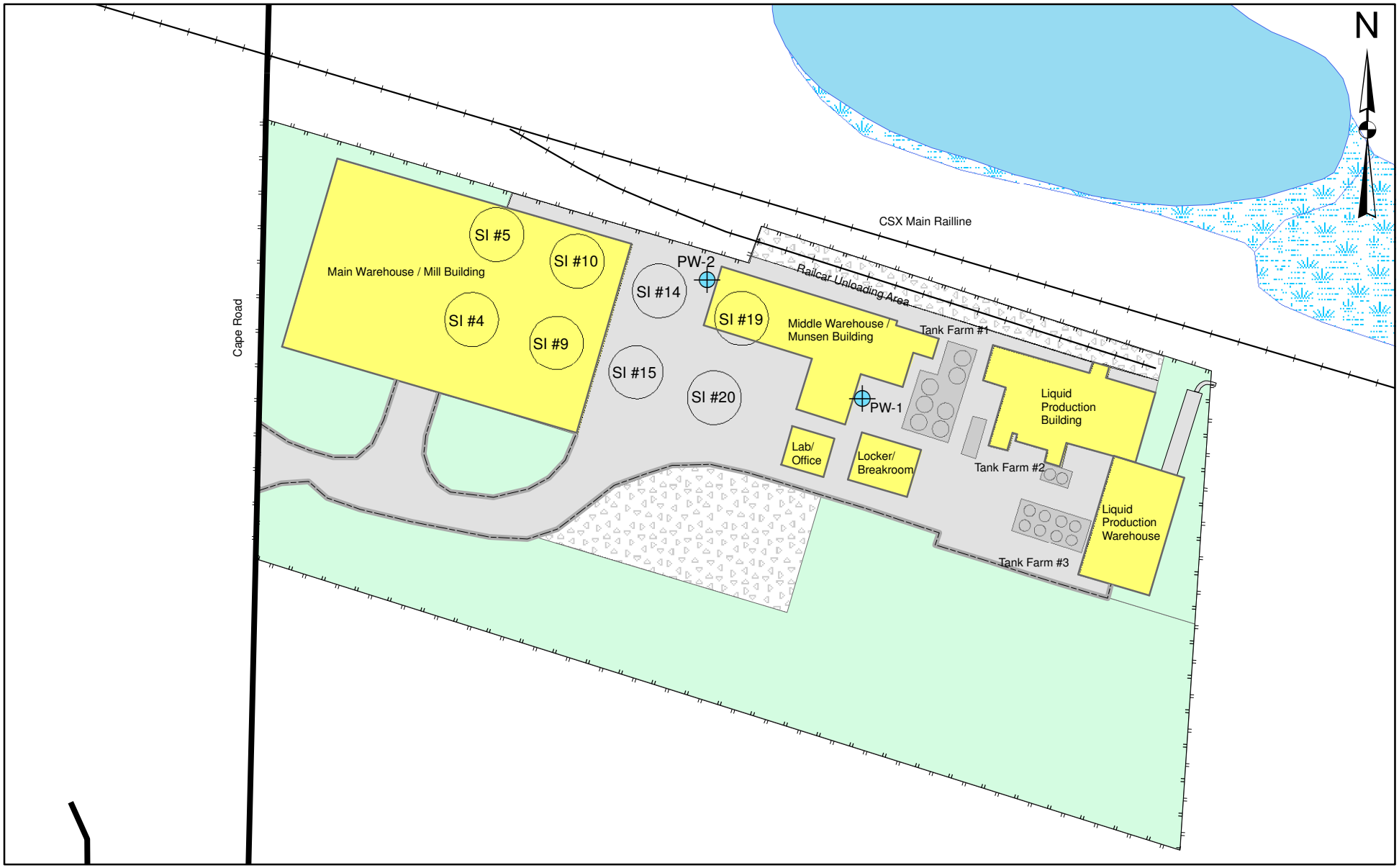
Figure No.2



0 55 110 220
Feet

Legend

- Former Production Wells
- Surface Impoundments
- Railroad
- Roads
- Fenceline
- Buildings
- Tank Farms
- Ponds
- Wetlands
- Grass
- Concrete (paved)
- Gravel or Railroad Ballast

Facility Layout Plan

EPS
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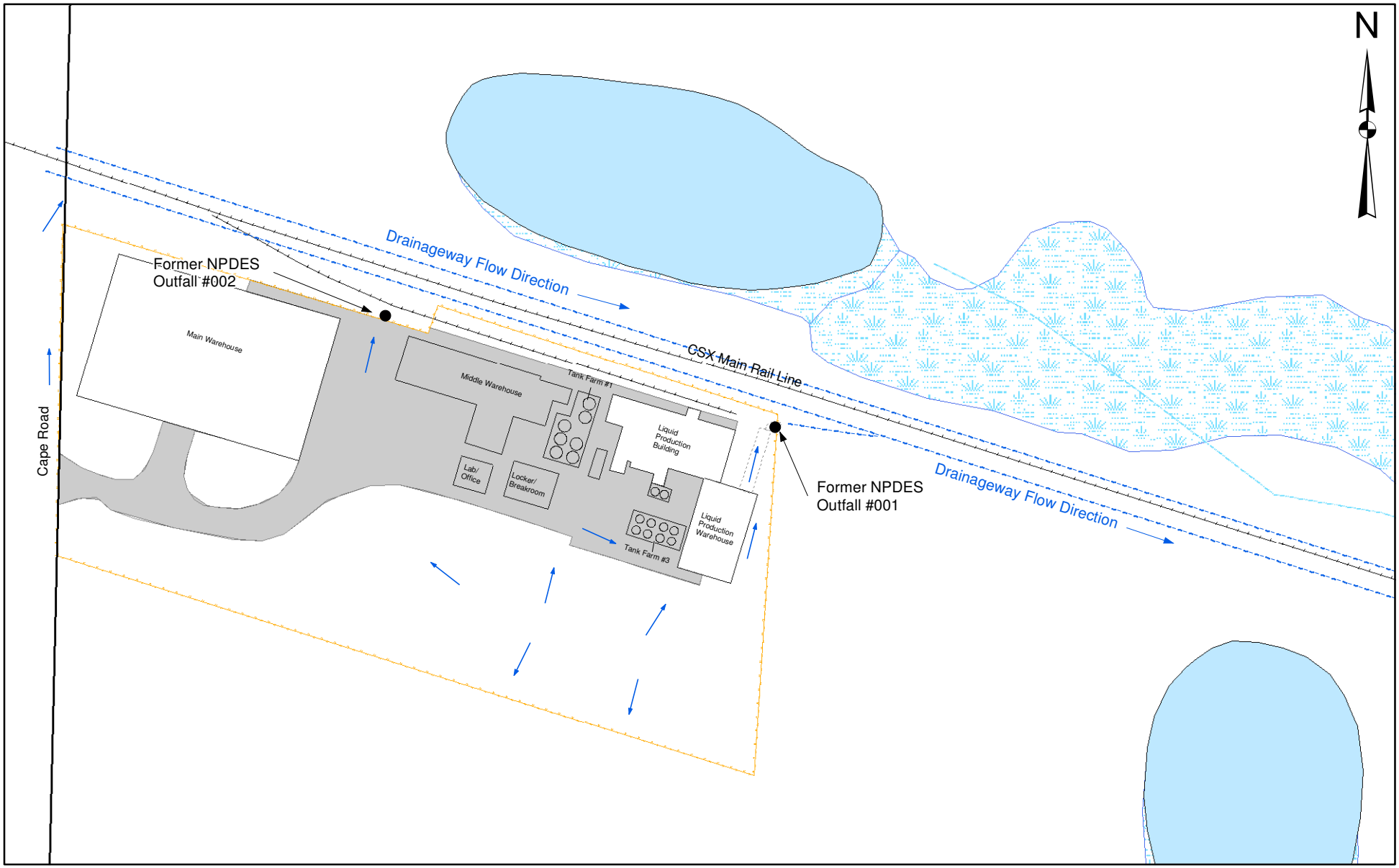
Figure No.3



0 75 150 300
Feet

- Roads
- USGS Intermittent Streams
- Fenceline
- Railroad
- Drainage
- Pavement
- Concrete paved
- Irrigation Ponds
- Wetland Polygons

Site Drainage Features

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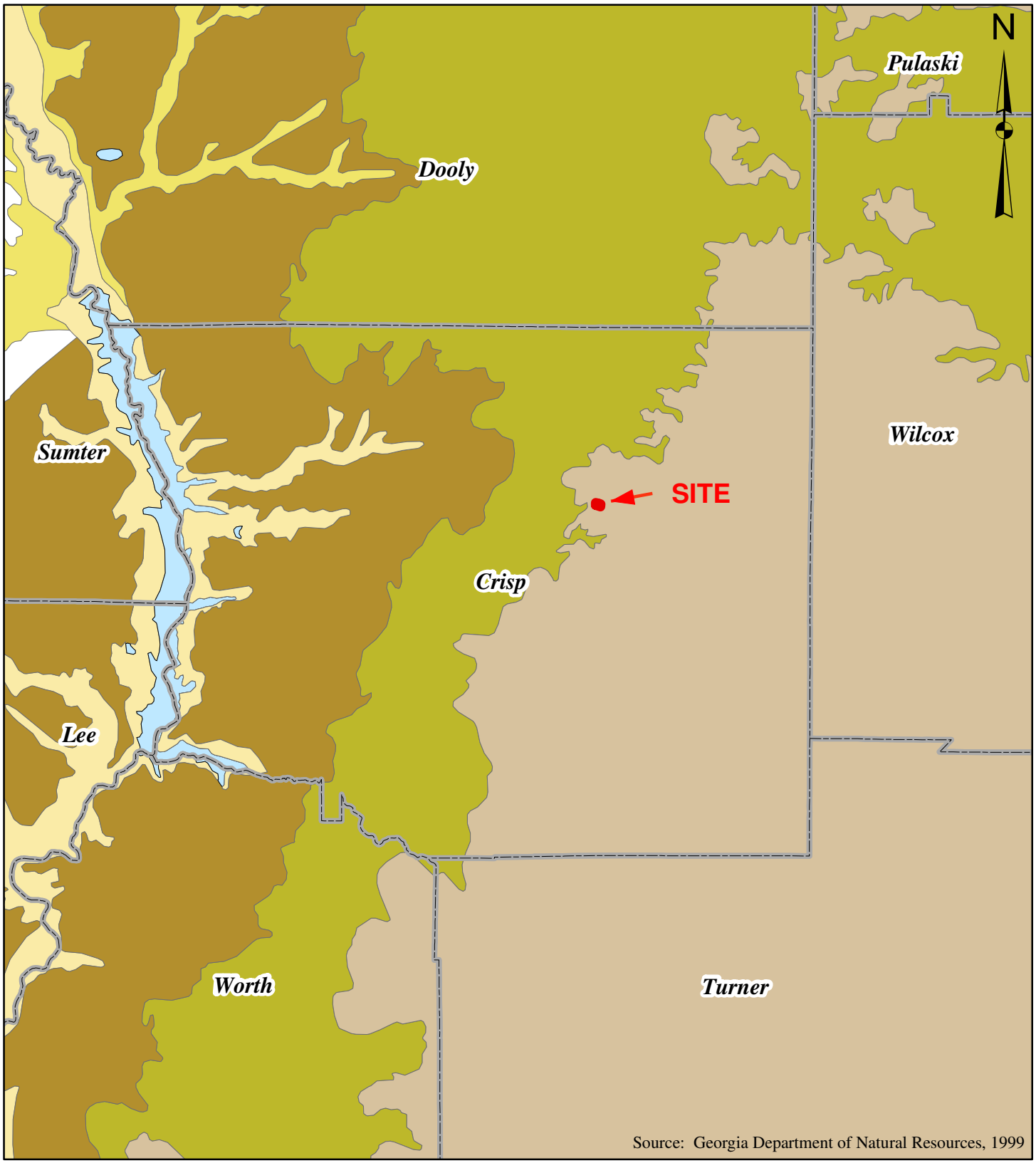
Figure No.4

Geologic Map
Drexel Cordele



0 1 2 4
Miles

Legend

- Site Boundary
- County Boundary

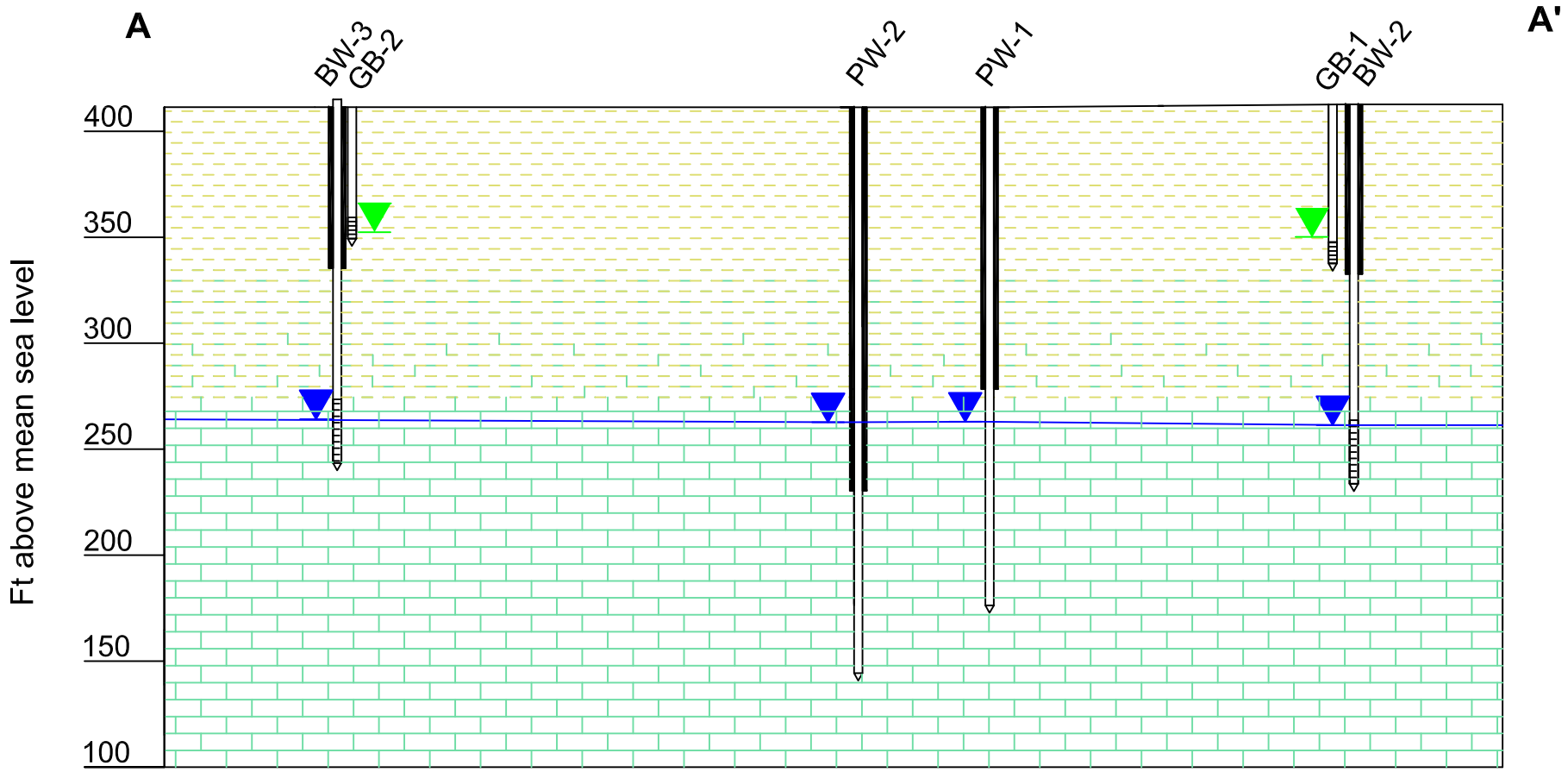
Geologic Unit

- Claiborne Undifferentiated
- Neogene Undifferentiated (Hawthorne Formation)
- Ocala Limestone
- Stream Alluvium
- Suwannee Limestone and its Residuum (Flint River Formation)
- Water

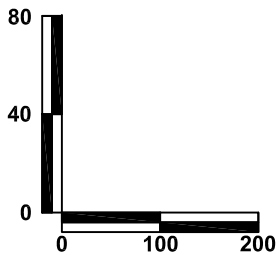
EPS

F:\Drexel Cordele\VRP Program\GIS\4th Progress Report\CSM_Geologic Map.mxd

Figure No.5



Scale



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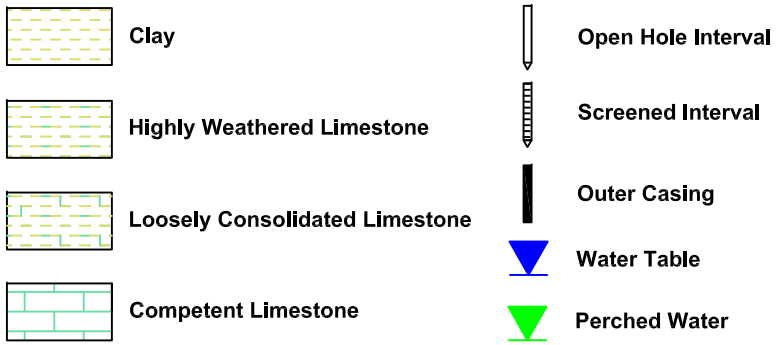
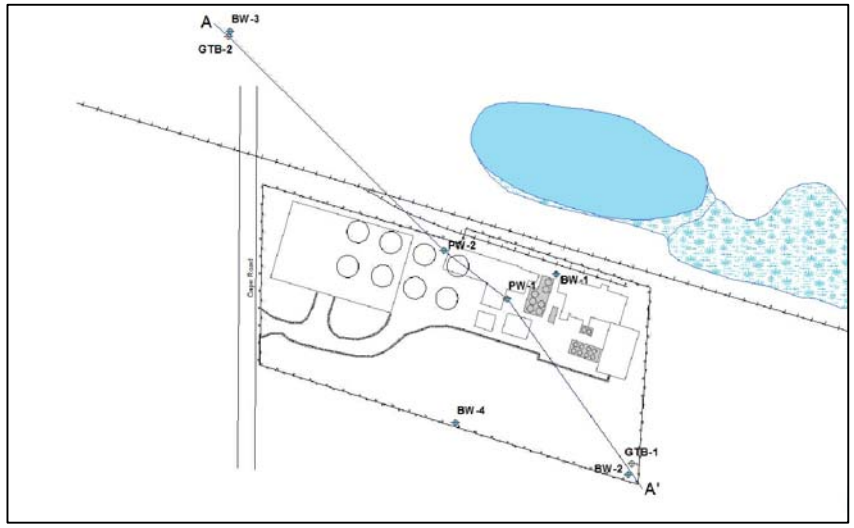
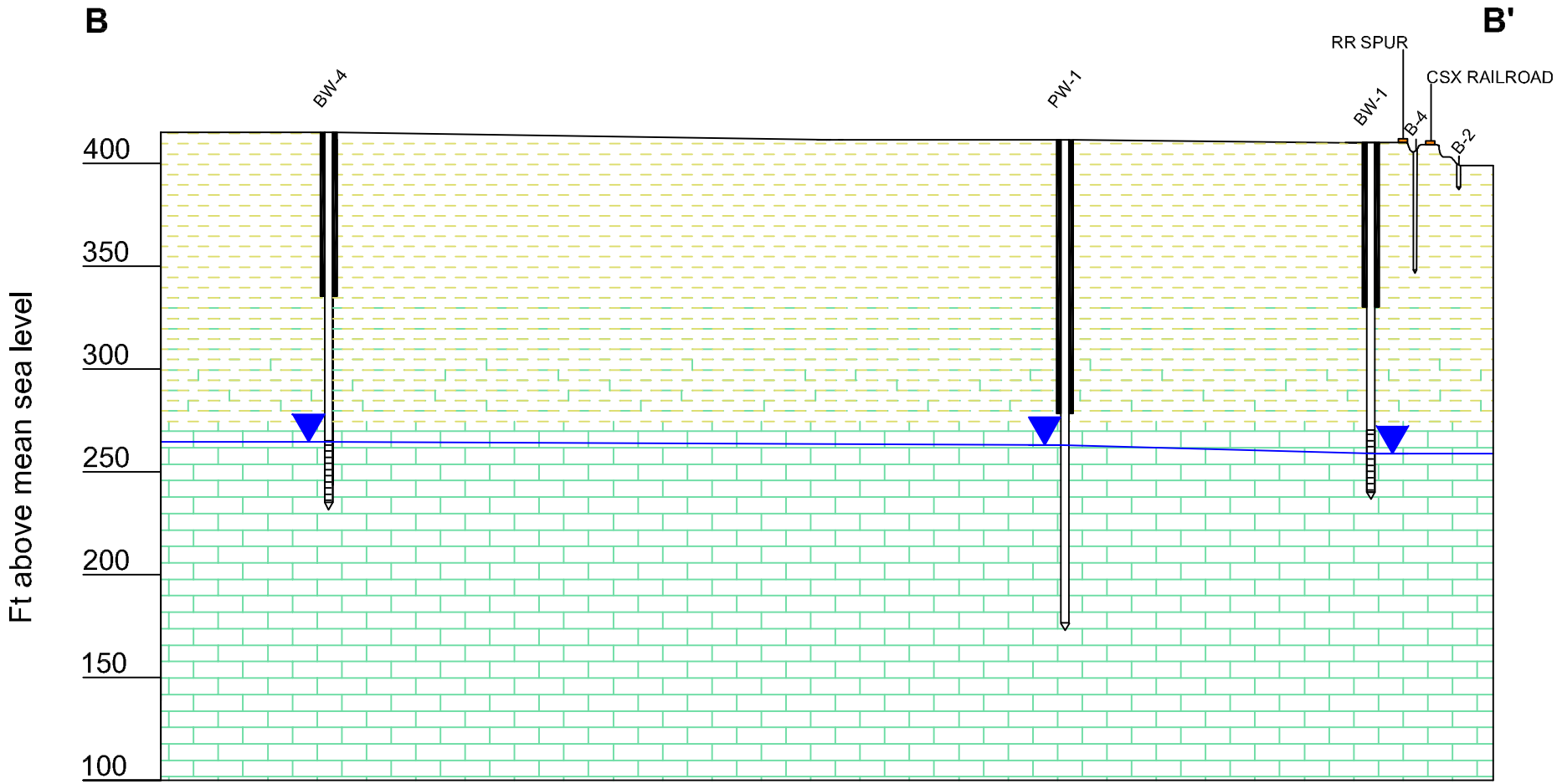
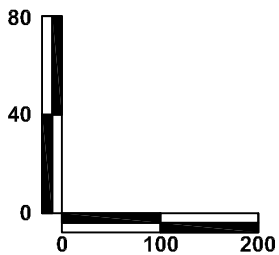




Cross-Section A-A'

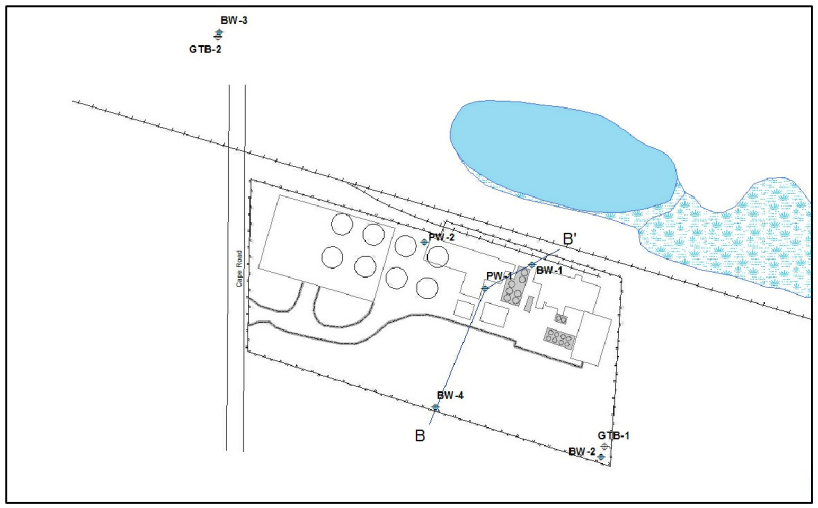


Scale



Legend

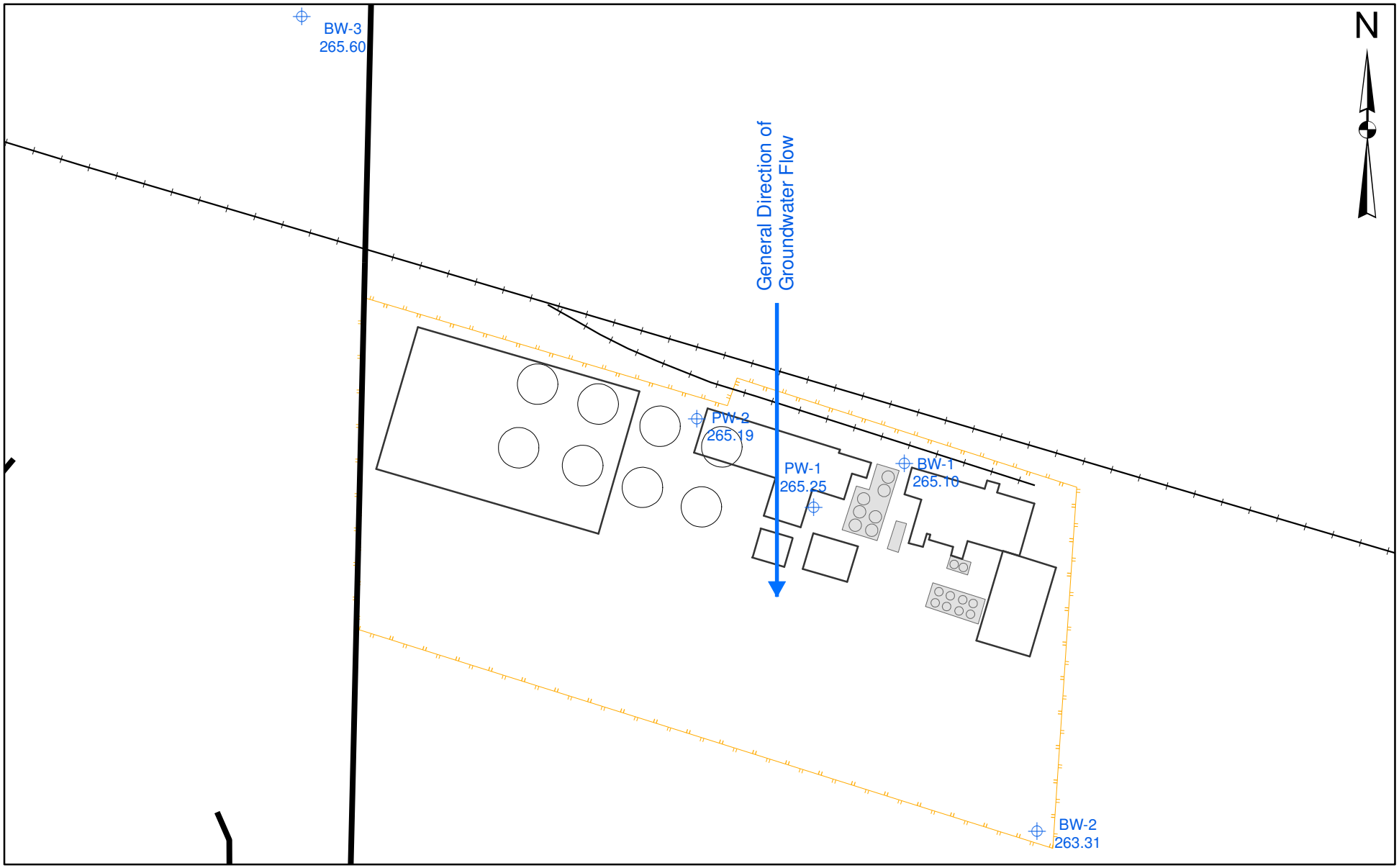
- Clay
- Highly Weathered Limestone
- Loosely Consolidated Limestone
- Competent Limestone
- Open Hole Interval
- Screened Interval
- Outer Casing
- Water Table



Cross-Section B-B'

Environmental Planning Specialists, Inc.

Figure No. 7



0 75 150 300
Feet

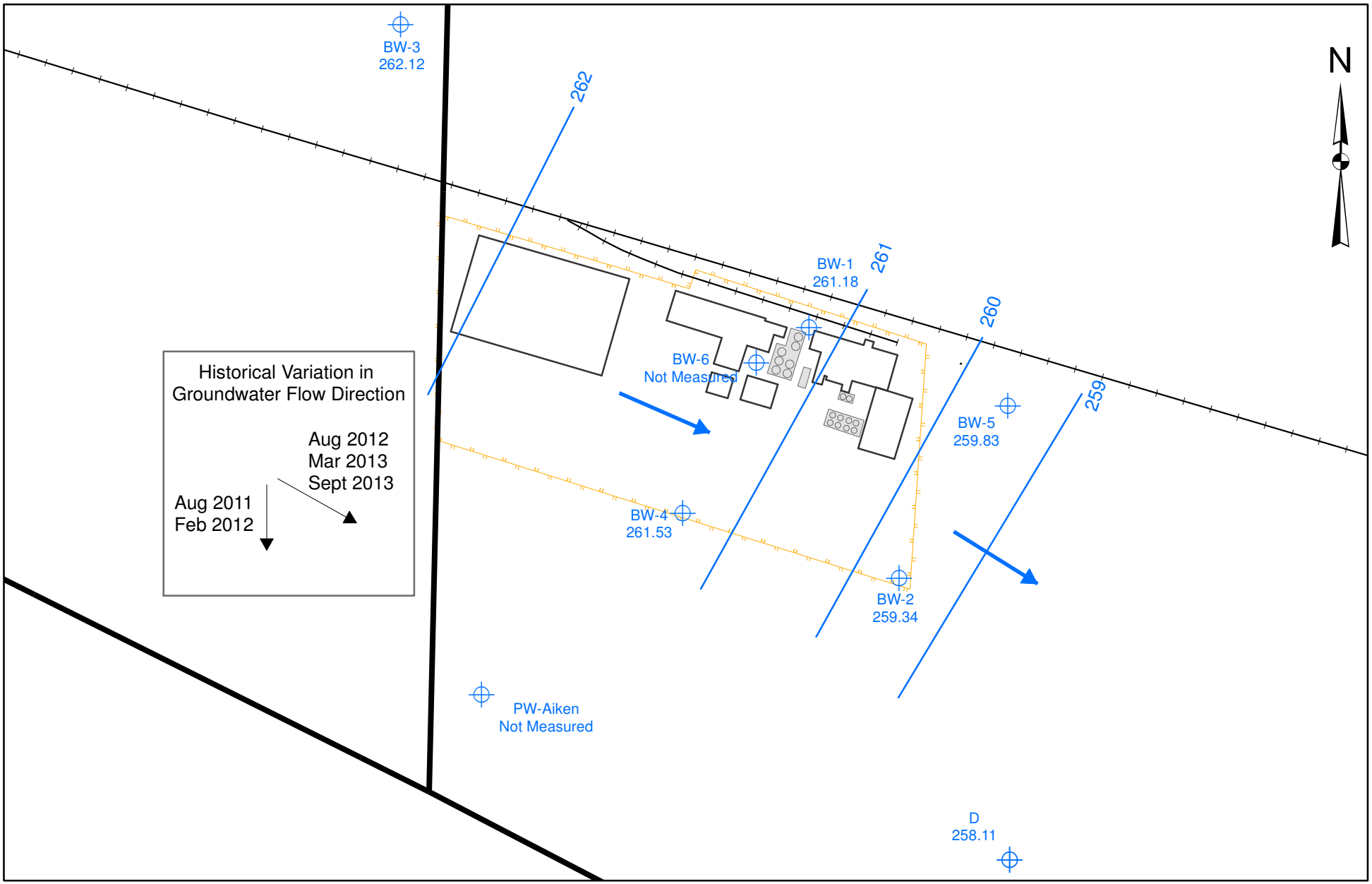
Legend

- Well Locations
- General Direction of Groundwater Flow
- Roads
- Railroad
- Tank Farms
- Buildings
- Fenceline
- Surface Impoundments

Groundwater Elevations - November 2005

EPS
F:\Drexel Cordele\VRP Program\GIS\4th Progress Report\CSM_Pot_map_2005.mxd

Figure No.8



0 100 200 400
Feet

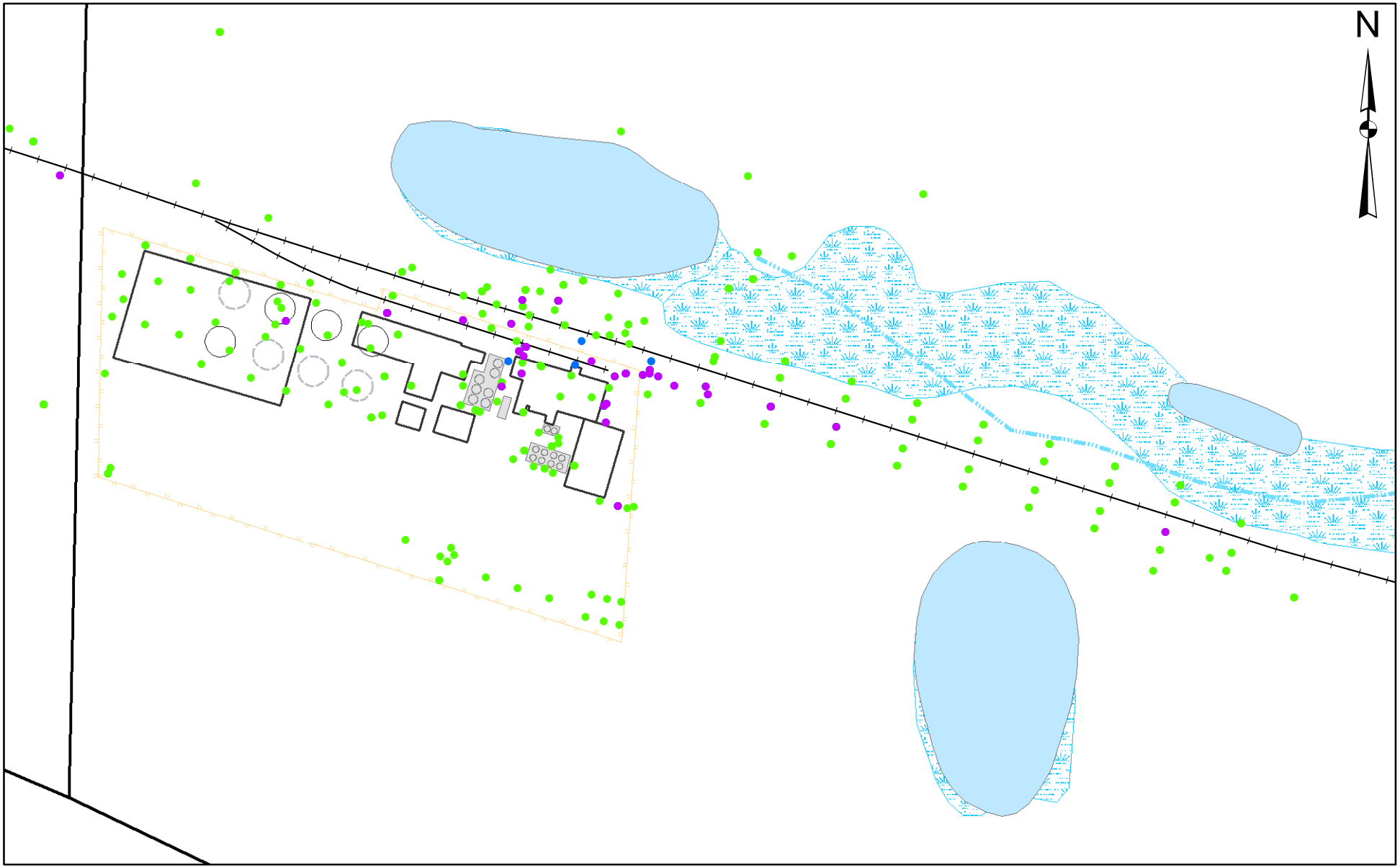
Legend

- Well Locations
- Direction of Groundwater Flow
- Groundwater Elevation (ft)
- Railroad
- Tank Farms
- Roads
- Fenceline
- Buildings

Potentiometric Surface - February 2014

EPS
F:\Drexel Cordele\VRP Program\GIS\6thProgRep\CSM_POT_Feb2014.mxd

Figure No. 9



0 100 200 400
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

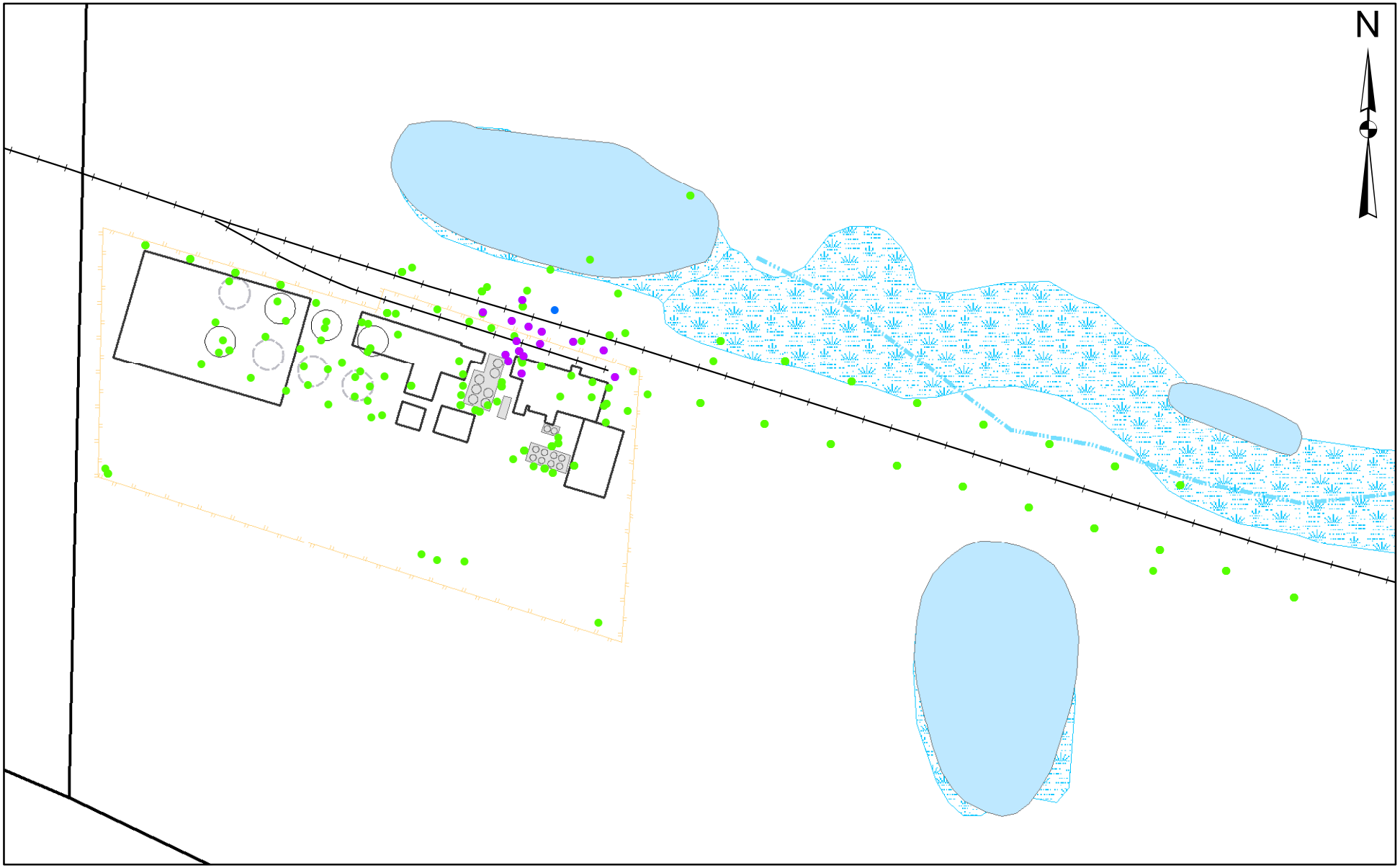
Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Surface Soils from 0 to 2 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\6th Progress Report\CSM_0-2_RRS.mxd

Figure No.10



0 100 200 400
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 2 to 5 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\6th Progress Report\CSM_2-5_RRS.mxd

Figure No.11

0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 5 to 10 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\6th Progress Report\CSM_5-10_RRS.mxd

Figure No.12

0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 10 to 20 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\4th Progress Report\CSM_10-20_RRS.mxd

Figure No.13

0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

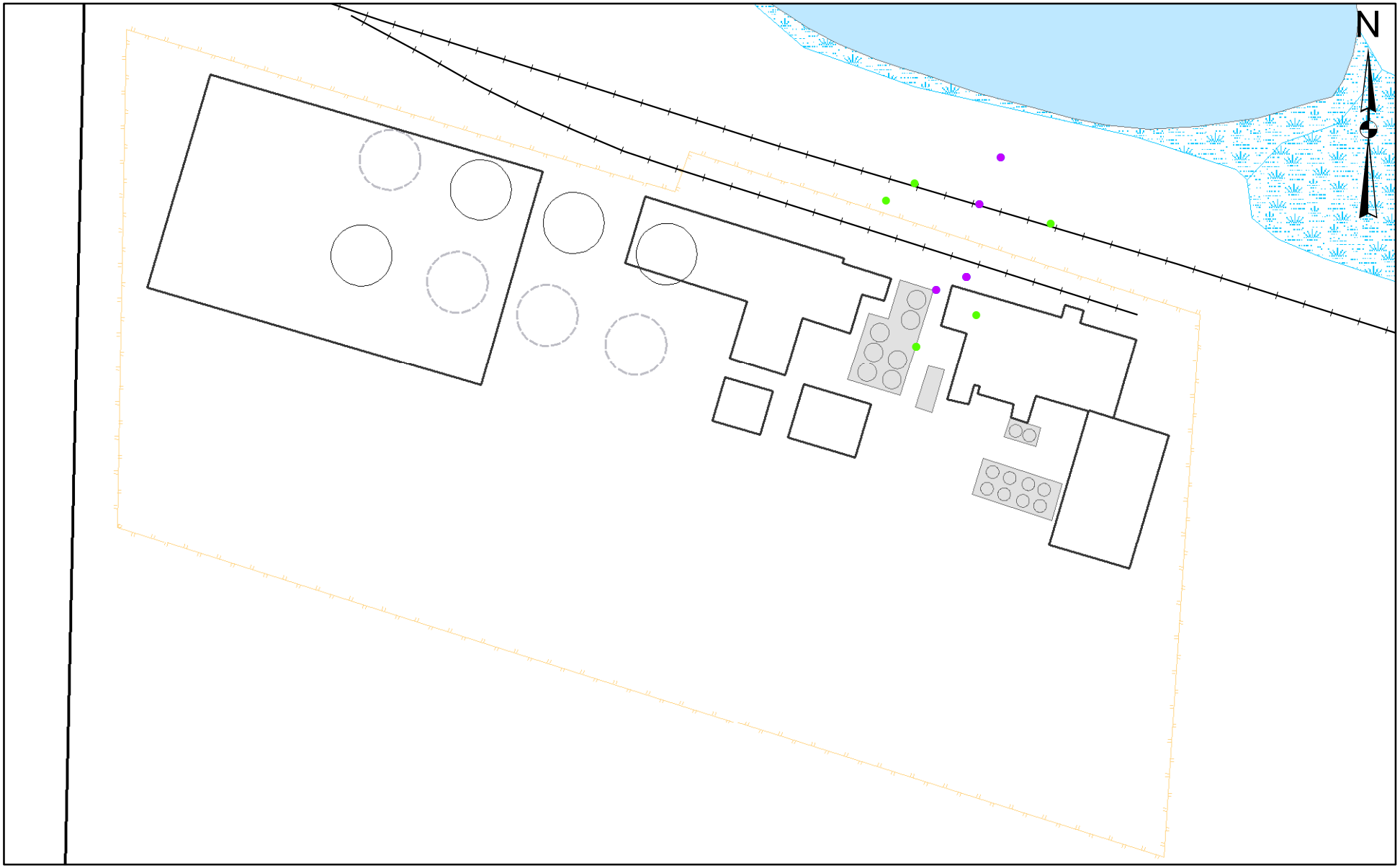
Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 20 to 30 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\5th Progress Report\CSM_20-30_RRS.mxd

Figure No.14



0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

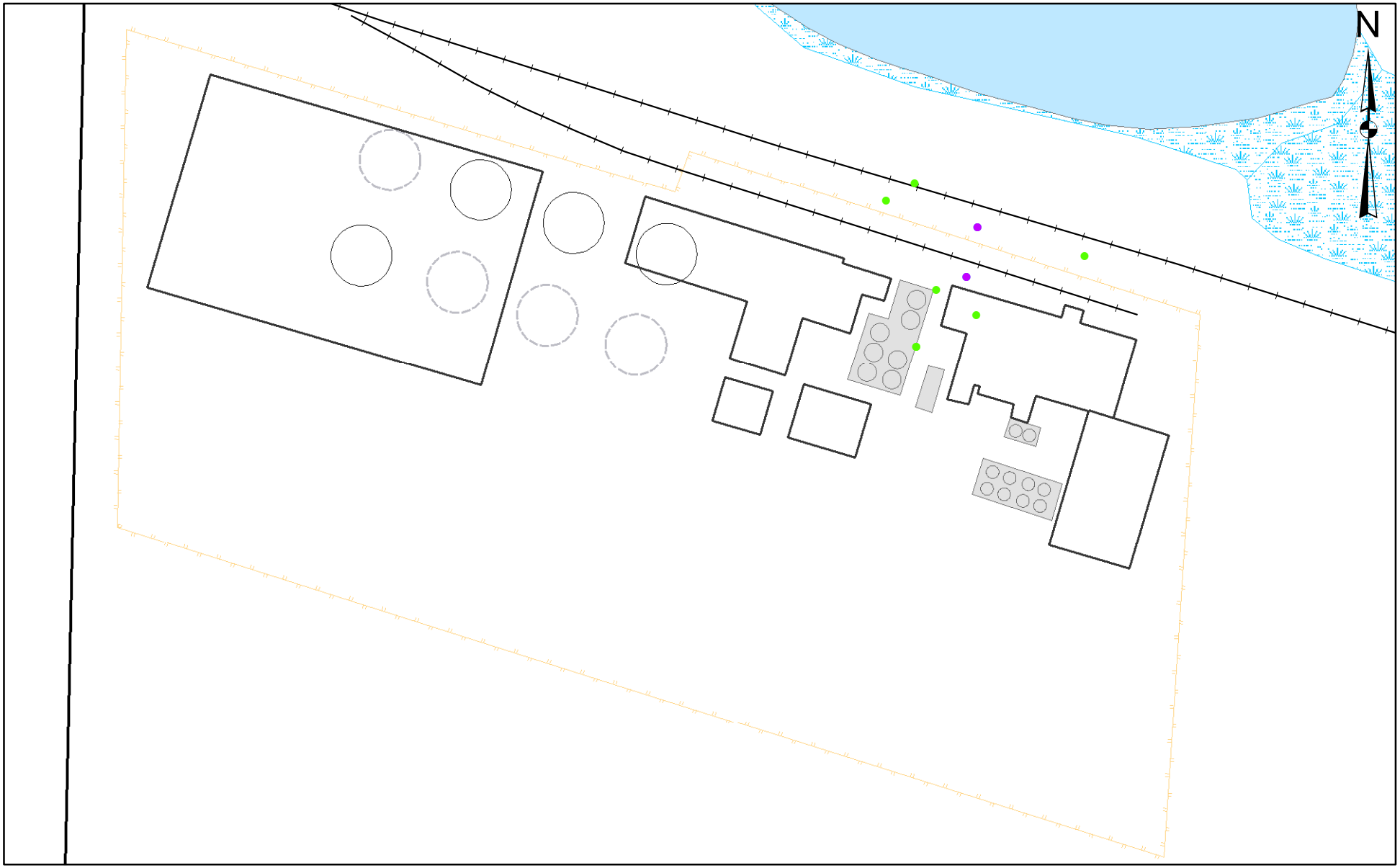
Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 30 to 40 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\5th Progress Report\CSM_30-40_RRS.mxd

Figure No.15



0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

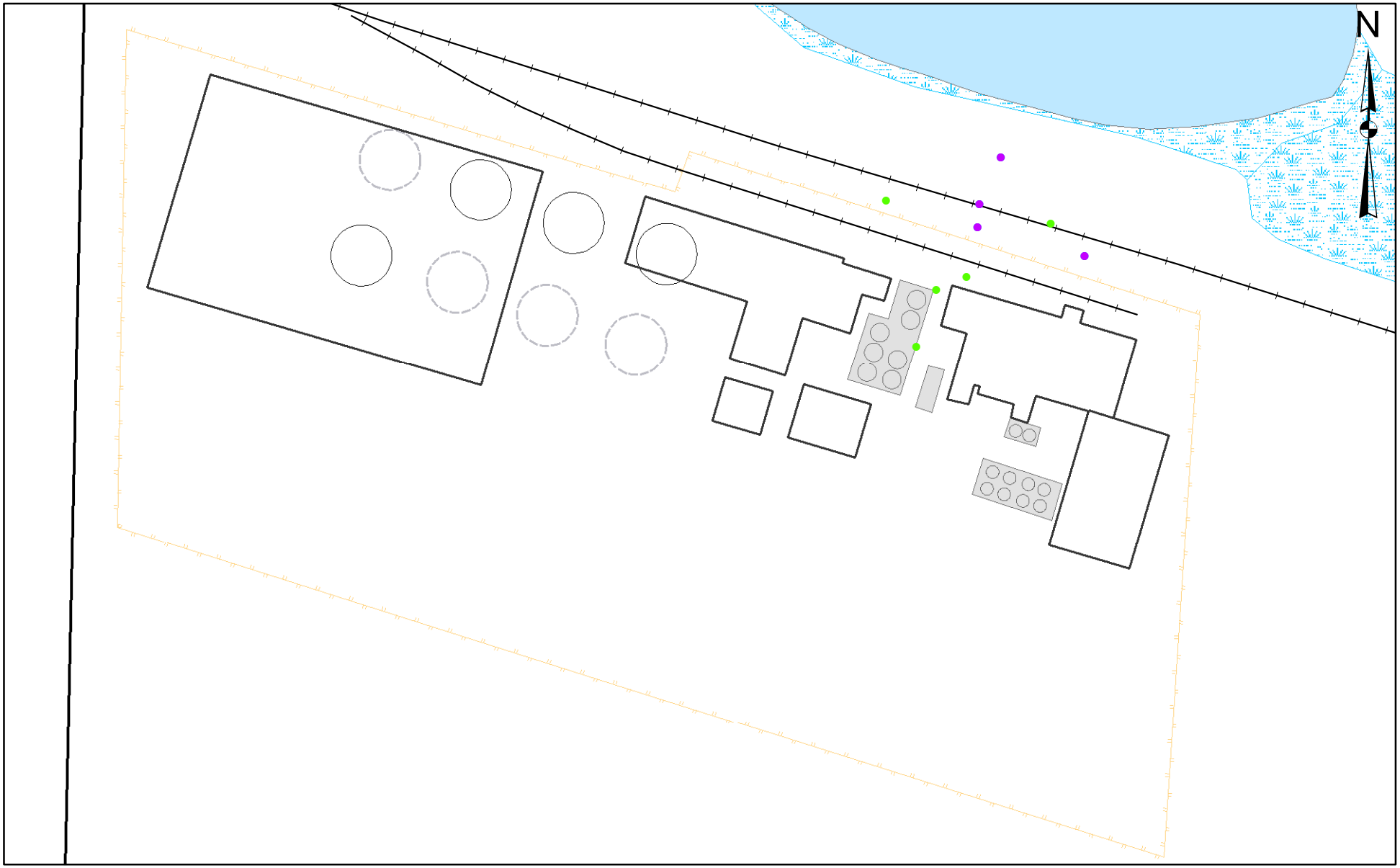
Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 40 to 50 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\5th Progress Report\CSM_40-50_RRS.mxd

Figure No.16



0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

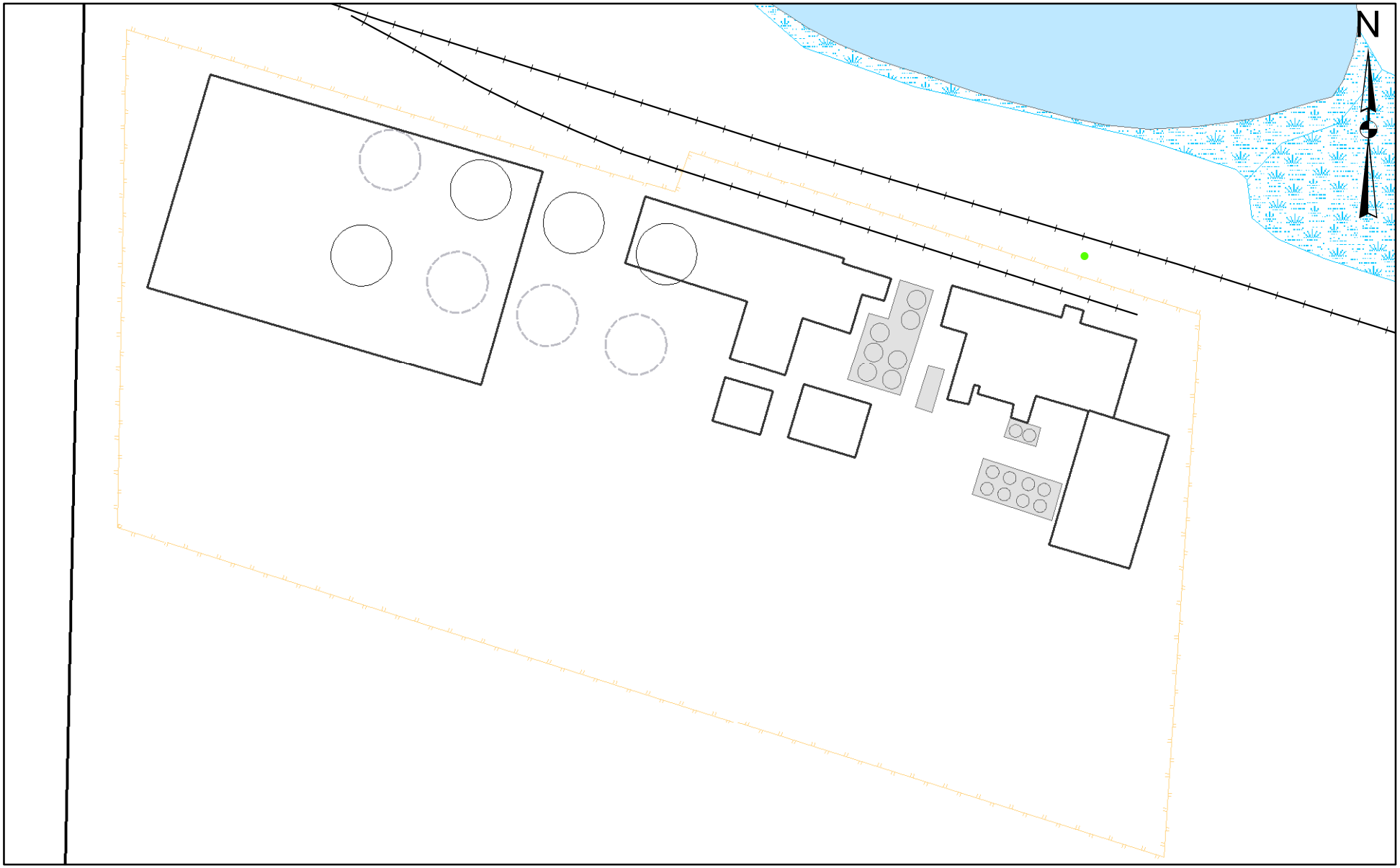
Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils from 50 to 60 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\5th Progress Report\CSM_50_RRS.mxd

Figure No.17



0 50 100 200
Feet

Legend

- USGS Intermittent Streams
- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Former Surface Impoundments
- Excavated Surface Impoundments
- Ponds
- Wetlands

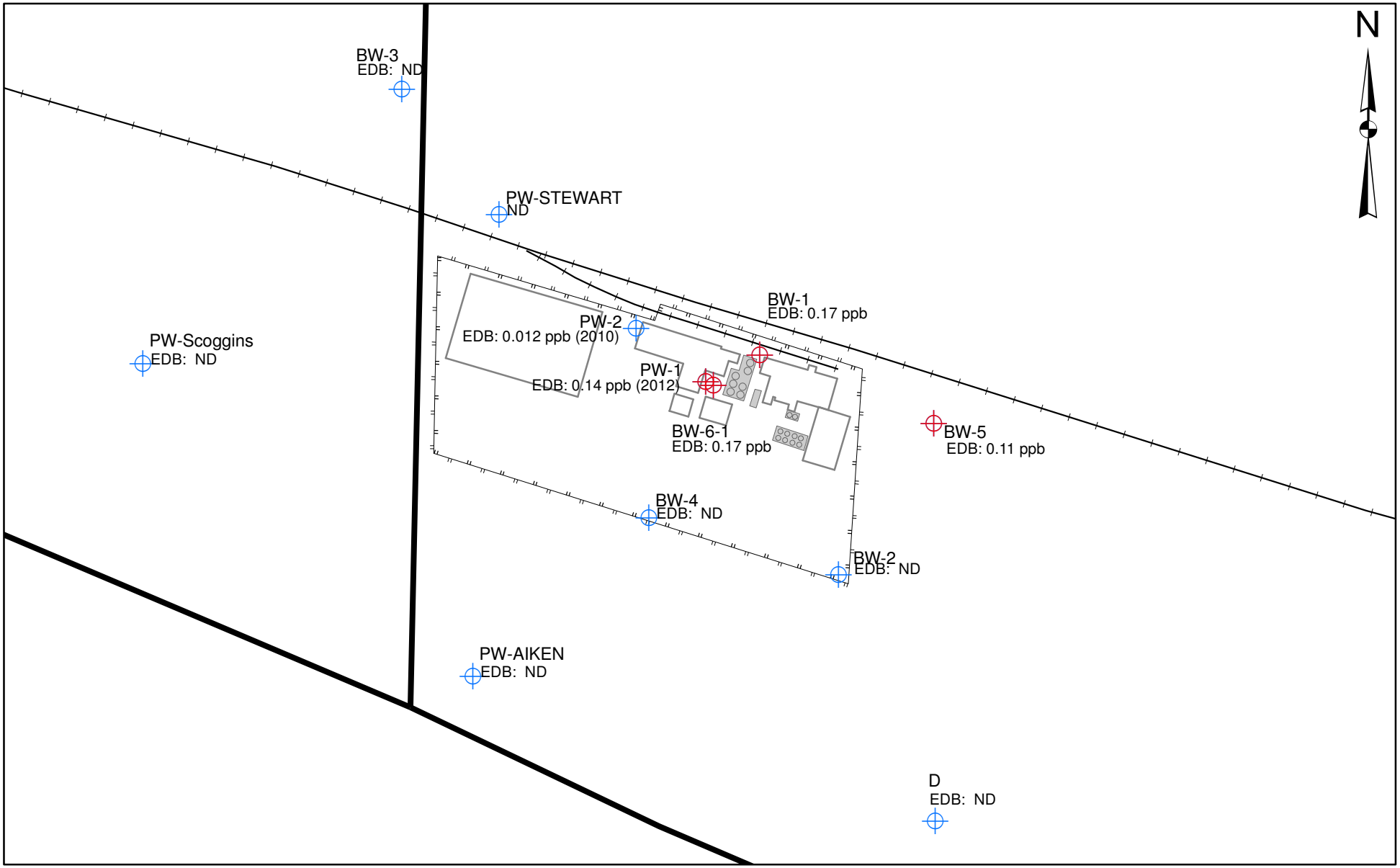
Soil Sample Location

- No Exceedances
- Residential RRS Exceedances
- Industrial RRS Exceedances

Comparison of Subsurface Soils greater than 60 ft to RRS

EPS
F:\Drexel Cordele\VRP Program\GIS\5th Progress Report\CSM_60_RRS.mxd

Figure No.18



0 100 200 400
Feet

Legend

Groundwater Wells

- Below GW RRSs
- Above at least one GW RRSs

EDB Concentrations from most recent time well sampled

Note: EDB is the only constituent that exceeds its RRS more than once.

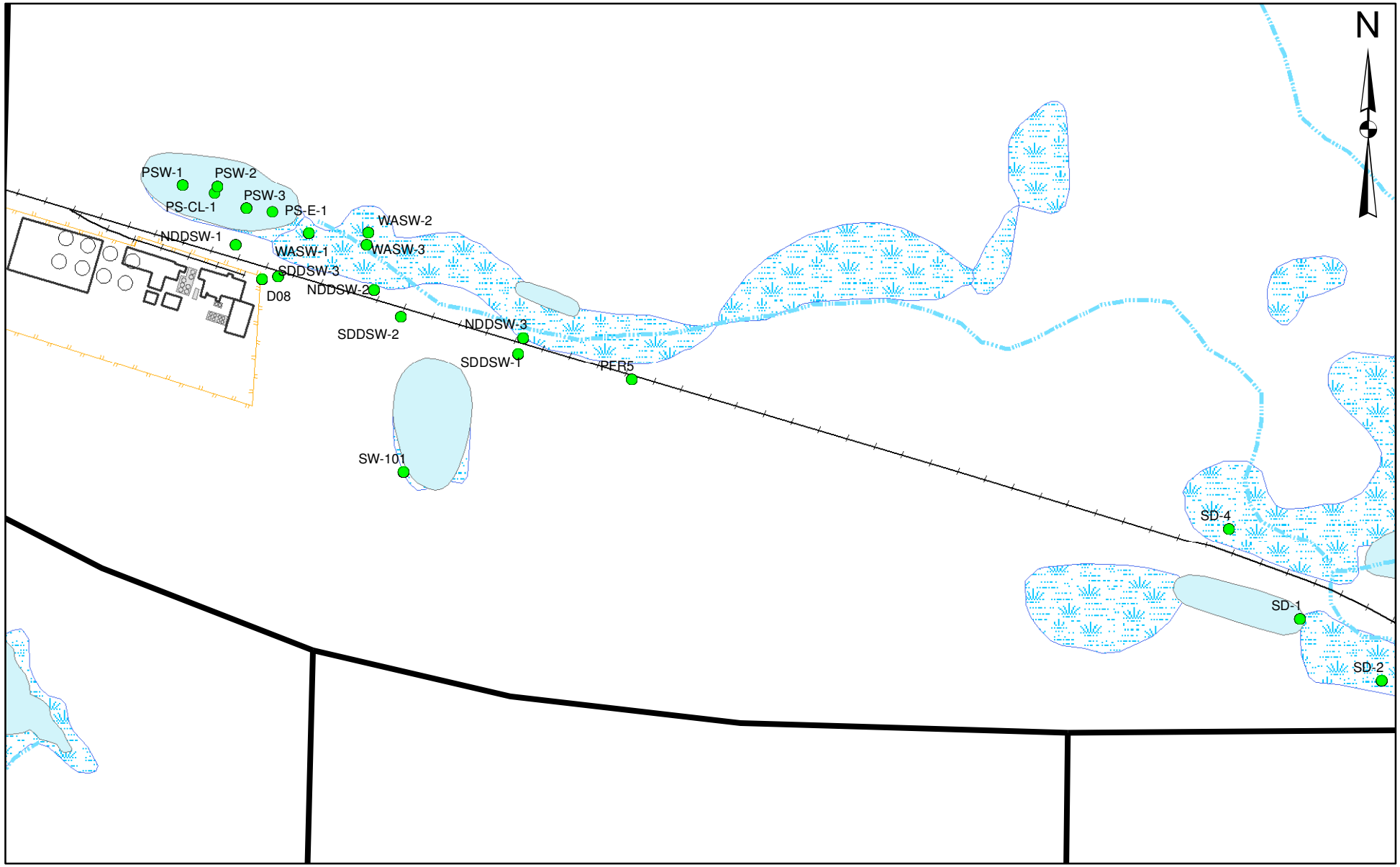
- Roads
- Railroad
- Tank Farms
- Sewer Alignment
- Buildings
- Fenceline

Comparison to Groundwater Residential RRSs

EPS

F:\Drexel Cordele\VRP Program\GIS\5th Progress Report\CSM_GW_RRS.mxd

Figure No.19



0 215 430 860
Feet

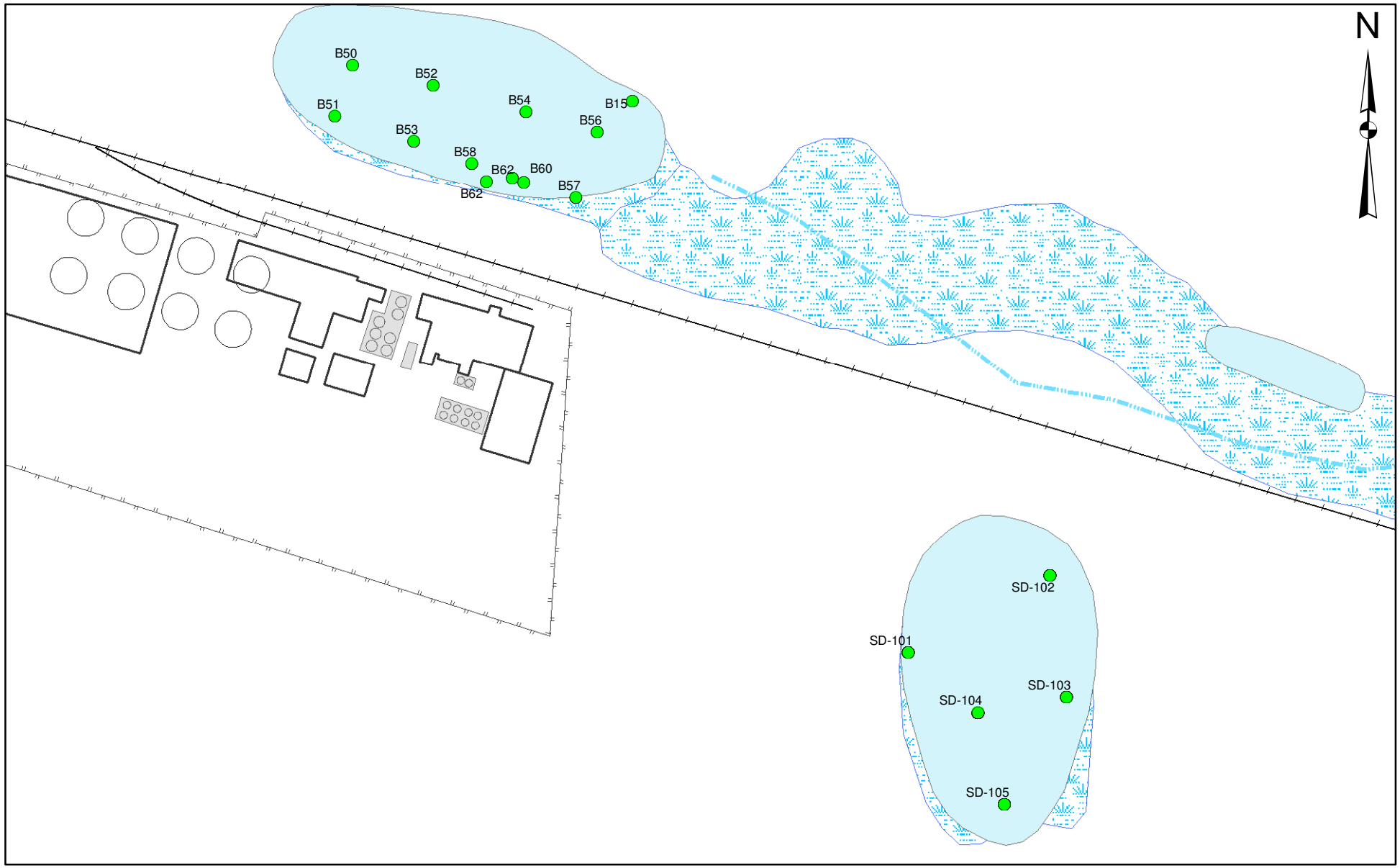
Legend

- Building
- Fenceline
- Railroad
- Roads
- Tank Farms
- Surface Impoundments
- Ponds
- Wetlands
- Sample Location

Surface Water Sample Locations

EPS
F:\Drexel Cordele\VRP Program\GIS\4th Progress Report\CSM_SW_rev.mxd

Figure No.20



0 85 170 340
Feet

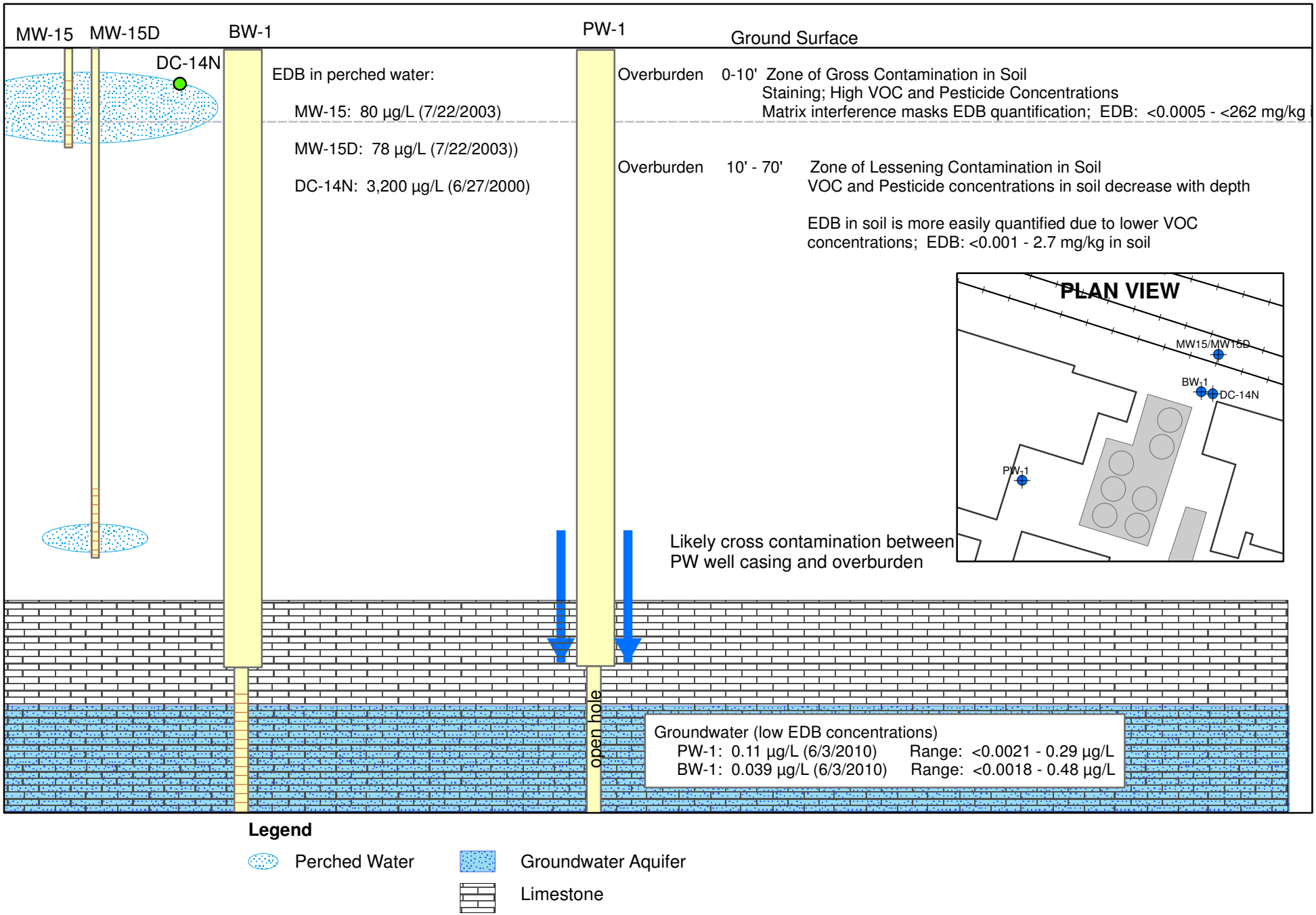
Legend

- Building
- Fenceline
- Railroad
- Tank Farms
- Surface Impoundments
- Ponds
- Wetlands
- Sample Locations

Sediment Sample Locations

EPS
F:\Drexel Cordele\VRP Program\GIS\4th Progress Report\CSM_Sediment_rev.mxd

Figure No.21



Conceptual Site Model

EPS

F:\Drexel Cordele\VRP Program\GIS\4th Progress Report\CSM_CSM_rev.mxd

Figure No.22

APPENDIX C

MONITORING WELL SAMPLING FORMS

EPS

Monitoring Well Sampling Form

EPS Project: Drexel **Date:** 2.18.14

Well ID: BW-5 **Field Conditions:** Sunny 60°

Sampling Performed By: Colt W.C.

Well Construction: 2" Stick up **General Condition of Well:** Good

Well Labeled: Yes **Well Cap:** Yes **Well Locked:** Yes **Condition of surrounding area:** Good

Well depth from TOC: 174.35 **Depth to Water from TOC:** 149.03

Well Diameter (in): 2" **Method of measure:** wlm

Height (Ht) of water in well (Well depth from TOC - Static level from TOC):

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): 4.05 **Three Well Volumes (gal):** 12.15

Purging Method: Downhole pump Low Flow/Stress **Time @ Start of Purge:** 1135

Sample Method: Direct **Sample Parameters:**

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
1136	7		21.48	7.25	170	.347	139	6.23	150.10	
1140	8		21.56	7.53	167	.347	63.3	6.54	150.17	
1144	9		21.56	7.59	164	.347	43.7	6.50	150.17	
1148	10		21.58	7.60	163	.347	33.7	6.47	150.17	
1152	11		21.64	7.62	158	.347	26.6	6.31	150.18	
1156	12		21.67	7.62	155	.348	21.2	6.31	150.20	
1200	13		21.71	7.63	151	.348	16.2	6.24	150.19	
1204	14		21.75	7.64	144	.347	13.4	6.01	150.14	
1208	15		21.78	7.65	136	.347	9.4	5.97	150.15	

Temp probe ID:

Ferrous Iron (Fe^{2+})= mg/L

Sample ID: 14049-BW-5 Time Collected: 1210 Technician Signature

EPS

Monitoring Well Sampling Form

.25 gram

EPS Project: Drexel

Date: 2.08.14

Well ID: Homestead

Field Conditions: Sunny 60°

Sampling Performed By: Gillenwater w/ Crouse

Well Construction: 4" Stickup

General Condition of Well: Good

Well Labeled: No

Well Cap: Yes

Well Locked: No

Condition of surrounding area: Good

Well depth from TOC: 195.19

Depth to Water from TOC: 159.40

Well Diameter (in): 4"

Method of measure: w/lm

Height (Ht) of water in well (Well depth from TOC - Static level from TOC): 35.79

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): 23.37

Three Well Volumes (gal): 70.11

Purging Method: Downhole - Low flow/stress

Time @ Start of Purge: 0835

Sample Method: Direct

Sample Parameters:

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
1230	Ran out of Gas in Generator									
1330	68		21.01	7.61	126	.381	64.7	7.28	160.24	
1340	70.5		21.06	7.62	123	.381	58.7	5.93	160.28	
1350	73		21.23	7.61	121	.385	50.8	5.65	160.21	
1400	75.5		21.26	7.60	119	.390	40.0	5.41	160.19	
1410	78		21.24	7.60	115	.390	27.1	5.05	160.17	
1415	79.25		21.24	7.60	110	.390	25.0	4.65	160.21	
1455	87.25		21.07	7.61	105	.388	15.2	4.11	160.20	
1510	93.0		21.01	7.61	105	.388	8.74	4.20	160.20	

Temp probe ID:

Ferrous Iron (Fe^{2+})= mg/L

Sample ID: 14049-Homestead

Time Collected: 1515

Technician Signature

EPS

Monitoring Well Sampling Form

EPS Project: Drexel **Date:** 2.19.14

Well ID: BW-3 **Field Conditions:** Windy 57°

Sampling Performed By: Goldenry WCrowne

Well Construction: 2" Stick up **General Condition of Well:** Good

Well Labeled: Yes **Well Cap:** Yes **Well Locked:** No **Condition of surrounding area:** weeds

Well depth from TOC: 178.68 **Depth to Water from TOC:** 152.35

Well Diameter (in): 2" **Method of measure:** column

Height (Ht) of water in well (Well depth from TOC - Static level from TOC): 26.33

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): 4.21 **Three Well Volumes (gal):** 12.63

Purging Method: **Time @ Start of Purge:** 0801

Sample Method: **Sample Parameters:**

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
0854	10		20.60	7.66	143	.363	38.9	7.77	152.35	
0859	11		21.66	7.64	141	.364	37.8	7.03	152.45	
0904	12		21.24	7.65	140	.362	20.9	7.11	152.45	
0910	13		21.12	7.64	139	.363	13.3	6.82	152.46	
0915	14		21.14	7.65	138	.363	10.2	6.79	152.46	
0920	15		21.18	7.65	137	.363	9.22	6.72	152.46	

Temp probe ID:

Ferrous Iron (Fe^{2+})= mg/L

Sample ID: 14050-BW-3 Time Collected: 0925 Technician Signature

EPS

Monitoring Well Sampling Form

EPS Project: Drexel **Date:** 2.20.14

Well ID: BW-6-1 (FLUTE well) **Field Conditions:** Sunny 55°

Sampling Performed By: G. Harry W. Grove

Well Construction: FLUTE well **General Condition of Well:** Good

Well Labeled: **Well Cap:** **Well Locked:** **Condition of surrounding area:** Good

Well depth from TOC: **Depth to Water from TOC:**

Well Diameter (in): **Method of measure:**

Height (Ht) of water in well (Well depth from TOC - Static level from TOC):

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): .75 **Three Well Volumes (gal):** 1.5

Purging Method: AIR LIFT (Nitrogen) **Time @ Start of Purge:** 1030

Sample Method: Direct **Sample Parameters:**

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
		Purged Two well volumes from FLUTE well #1								
1148	1.5		21.69	7.13	96	.604	1.26	4.47		

Temp probe ID:

Ferrous Iron (Fe^{2+})= mg/L

Sample ID: 14051-BW-6-1 Time Collected: 1150 Technician Signature

EPS

Monitoring Well Sampling Form

EPS Project: Drexel

Date: 2.20.14

Well ID: BW-2

Field Conditions: Overcast, windy 50°

Sampling Performed By: G. Henry, W. Greene

Well Construction: 2" forest

General Condition of Well: good

Well Labeled: No **Well Cap:** Yes **Well Locked:** Yes

Condition of surrounding area: grass

Well depth from TOC: 178.22

Depth to Water from TOC: 153.0

Well Diameter (in):

Method of measure: water

Height (Ht) of water in well (Well depth from TOC - Static level from TOC): 25.22

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): 4.03

Three Well Volumes (gal): 12.1

Purging Method:

Time @ Start of Purge: 0748

Sample Method:

Sample Parameters:

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
	Greene Well Service Air Lifted well on 2.18.14									
	Sat overnight. purged 15 gallons, still very cloudy. (>500)									
	Let well sit, then collected sample by pumping/collecting from top of water column.									
0800	15		21.11	7.82	156	.378	546	11.33	154.40	

Temp probe ID:

Ferrous Iron (Fe^{2+})= mg/L

Sample ID: 140551-BW-2

Time Collected: 1435

Technician Signature

EPS

Monitoring Well Sampling Form

EPS Project: Drexel **Date:** 2-20-14

Well ID: BW-4 **Field Conditions:** Overcast, Windy 50°

Sampling Performed By: G Henry, W. Crowe

Well Construction: 2" flush **General Condition of Well:** Good

Well Labeled: No **Well Cap:** Yes **Well Locked:** Yes **Condition of surrounding area:** Good / grass

Well depth from TOC: 179.60 **Depth to Water from TOC:** 153.18

Well Diameter (in): 2" **Method of measure:** wam

Height (Ht) of water in well (Well depth from TOC - Static level from TOC): 26.44

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): 4.23 **Three Well Volumes (gal):** 12.69

Purging Method: **Time @ Start of Purge:**

Sample Method: **Sample Parameters:**

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
		Greene	well Service	Air	Lifted	well on	2-18-14			
		Let sit	overnight.	pumped	15 gallons,	still	very cloudy	(7,000)		
		Let well	sit, then	collected	sample by	collecting	from			
		top of	water	column.						

Temp probe ID: **Ferrous Iron (Fe^{2+})=** mg/L

Sample ID: 14051-BW-4 Time Collected: 1400 Technician Signature

EPS

Monitoring Well Sampling Form

EPS Project: Drexel **Date:** 2-20-14

Well ID: BW-1 **Field Conditions:** Sunny, 55°

Sampling Performed By: G. Henry W. Crane

Well Construction: 2" Forsit **General Condition of Well:** Good

Well Labeled: NO **Well Cap:** Yes **Well Locked:** Yes **Condition of surrounding area:** Good

Well depth from TOC: 169.21 **Depth to Water from TOC:** 148.62

Well Diameter (in): 24 **Method of measure:** wem

Height (Ht) of water in well (Well depth from TOC - Static level from TOC): 20.59

Volume of water in well (Ht. x(.16 for 2")(.653 for 4")(1.469 for 6"): 3.29 **Three Well Volumes (gal):** 9.88

Purging Method: Downhole pump - low flow/Sheis **Time @ Start of Purge:** 1544

Sample Method: Direct **Sample Parameters:**

Time	Volume (gal)	Down hole Temp (°C)	Flow Cell Temp (°C)	pH	ORP (mV)	Cond. (mS/cm)	Turbidity (NTU)	DO (mg/L)	Depth to Water (ft)	Comments
1637	11		23.11	7.56	90	0.336	161	9.83	151.32	
1647	13		23.16	7.53	94	.334	122	8.13	151.33	
1657	15		23.15	7.51	96	.333	95.9	7.91	151.28	Spurred a bit
1707	17		23.19	7.53	97	.333	71.6	7.64	151.27	
1717	19		23.20	7.52	98	.332	43.9	7.48	151.27	
1727	21		23.19	7.52	98	.333	32.7	7.44	151.27	
1737	23		23.19	7.52	100	.332	23.7	7.31	151.26	
1747	25		23.19	7.52	101	.332	17.0	7.29	151.27	
1757	27		23.11	7.52	101	.332	9.8	7.29	151.27	

Temp probe ID:

Ferrous Iron (Fe^{2+})= mg/L

Sample ID: 14051-BW-1
14051-DUP

Time Collected: 1800

Technician Signature

APPENDIX D

LABORATORY DATA REPORTS
(ON CD)

ALS Environmental
ALS Group USA, Corp.
1317 South 13th Avenue
Kelso, WA 98626
T: +1 360 577 7222
F: +1 360 636 1068
www.alsglobal.com

March 20, 2014

Analytical Report for Service Request No: K1401786

Sofie Weber-Snapp
Environmental Planning Specialists
1050 Crown Pointe Parkway
Suite 550
Atlanta, GA 30338

RE: Drexel

Dear Sofie:

Enclosed are the results of the samples submitted to our laboratory on February 22, 2014. For your reference, these analyses have been assigned our service request number K1401786.

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current NELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. All results are intended to be considered in their entirety, and ALS Group USA Corp. dba ALS Environmental (ALS) is not responsible for use of less than the complete report. Results apply only to the items submitted to the laboratory for analysis and individual items (samples) analyzed, as listed in the report.

Please call if you have any questions. My extension is 3376. You may also contact me via Email at Gregory.Salata@alsglobal.com.

Respectfully submitted,

ALS Group USA Corp. dba ALS Environmental

Gregory Salata, Ph.D.
Client Services Manager

GS/aj

RIGHT SOLUTIONS | RIGHT PARTNER

Acronyms

ASTM	American Society for Testing and Materials
A2LA	American Association for Laboratory Accreditation
CARB	California Air Resources Board
CAS Number	Chemical Abstract Service registry Number
CFC	Chlorofluorocarbon
CFU	Colony-Forming Unit
DEC	Department of Environmental Conservation
DEQ	Department of Environmental Quality
DHS	Department of Health Services
DOE	Department of Ecology
DOH	Department of Health
EPA	U. S. Environmental Protection Agency
ELAP	Environmental Laboratory Accreditation Program
GC	Gas Chromatography
GC/MS	Gas Chromatography/Mass Spectrometry
LOD	Limit of Detection
LOQ	Limit of Quantitation
LUFT	Leaking Underground Fuel Tank
M	Modified
MCL	Maximum Contaminant Level is the highest permissible concentration of a substance allowed in drinking water as established by the USEPA.
MDL	Method Detection Limit
MPN	Most Probable Number
MRL	Method Reporting Limit
NA	Not Applicable
NC	Not Calculated
NCASI	National Council of the Paper Industry for Air and Stream Improvement
ND	Not Detected
NIOSH	National Institute for Occupational Safety and Health
PQL	Practical Quantitation Limit
RCRA	Resource Conservation and Recovery Act
SIM	Selected Ion Monitoring
TPH	Total Petroleum Hydrocarbons
tr	Trace level is the concentration of an analyte that is less than the PQL but greater than or equal to the MDL.

Inorganic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
E	The result is an estimate amount because the value exceeded the instrument calibration range.
J	The result is an estimated value.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.
H	The holding time for this test is immediately following sample collection. The samples were analyzed as soon as possible after receipt by the laboratory.

Metals Data Qualifiers

#	The control limit criteria is not applicable. See case narrative.
J	The result is an estimated value.
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
M	The duplicate injection precision was not met.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
S	The reported value was determined by the Method of Standard Additions (MSA).
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
i	The MRL/MDL or LOQ/LOD is elevated due to a matrix interference.
X	See case narrative.
+	The correlation coefficient for the MSA is less than 0.995.
Q	See case narrative. One or more quality control criteria was outside the limits.

Organic Data Qualifiers

*	The result is an outlier. See case narrative.
#	The control limit criteria is not applicable. See case narrative.
A	A tentatively identified compound, a suspected aldol-condensation product.
B	The analyte was found in the associated method blank at a level that is significant relative to the sample result as defined by the DOD or NELAC standards.
C	The analyte was qualitatively confirmed using GC/MS techniques, pattern recognition, or by comparing to historical data.
D	The reported result is from a dilution.
E	The result is an estimated value.
J	The result is an estimated value.
N	The result is presumptive. The analyte was tentatively identified, but a confirmation analysis was not performed.
P	The GC or HPLC confirmation criteria was exceeded. The relative percent difference is greater than 40% between the two analytical results.
U	The analyte was analyzed for, but was not detected ("Non-detect") at or above the MRL/MDL. *DOD-QSM 4.2 definition* : Analyte was not detected and is reported as less than the LOD or as defined by the project. The detection limit is adjusted for dilution.
i	The MRL/MDL or LOQ/LOD is elevated due to a chromatographic interference.
X	See case narrative.
Q	See case narrative. One or more quality control criteria was outside the limits.

Additional Petroleum Hydrocarbon Specific Qualifiers

F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
Y	The chromatographic fingerprint of the sample resembles a petroleum product eluting in approximately the correct carbon range, but the elution pattern does not match the calibration standard.
Z	The chromatographic fingerprint does not resemble a petroleum product.

ALS Group USA Corp. dba ALS Environmental (ALS) - Kelso
State Certifications, Accreditations, and Licenses

Agency	Web Site	Number
Alaska DEC UST	http://dec.alaska.gov/applications/eh/ehllabreports/USTLabs.aspx	UST-040
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0339
Arkansas - DEQ	http://www.adeq.state.ar.us/techsvs/labcert.htm	88-0637
California DHS (ELAP)	http://www.cdph.ca.gov/certlic/labs/Pages/ELAP.aspx	2286
DOD ELAP	http://www.denix.osd.mil/edqw/Accreditation/AccreditedLabs.cfm	L12-28
Florida DOH	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E87412
Georgia DNR	http://www.gaepd.org/Documents/techguide_pcb.html#cel	881
Hawaii DOH	Not available	-
Idaho DHW	http://www.healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx	-
Indiana DOH	http://www.in.gov/isdh/24859.htm	C-WA-01
ISO 17025	http://www.pjlabs.com/	L12-27
Louisiana DEQ	http://www.deq.louisiana.gov/portal/DIVISIONS/PublicParticipationandPermitSupport/LouisianaLaboratoryAccreditationProgram.aspx	3016
Maine DHS	Not available	WA0035
Michigan DEQ	http://www.michigan.gov/deq/0,1607,7-135-3307_4131_4156---,00.html	9949
Minnesota DOH	http://www.health.state.mn.us/accreditation	053-999-368
Montana DPHHS	http://www.dphhs.mt.gov/publichealth/	CERT0047
Nevada DEP	http://ndep.nv.gov/bsdw/labservice.htm	WA35
New Jersey DEP	http://www.nj.gov/dep/oqa/	WA005
North Carolina DWQ	http://www.dwqlab.org/	605
Oklahoma DEQ	http://www.deq.state.ok.us/CSDnew/labcert.htm	9801
Oregon – DEQ (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	WA200001
South Carolina DHEC	http://www.scdhec.gov/environment/envserv/	61002
Texas CEQ	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	704427-08-TX
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C1203
Wisconsin DNR	http://dnr.wi.gov/	998386840
Wyoming (EPA Region 8)	http://www.epa.gov/region8/water/dwhome/wyomingdi.html	-
Kelso Laboratory Website	www.alsglobal.com	NA

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. A complete listing of specific NELAP-certified analytes, can be found in the certification section at www.caslab.com or at the accreditation bodies web site

Please refer to the certification and/or accreditation body's web site if samples are submitted for compliance purposes. The states highlighted above, require the analysis be listed on the state certification if used for compliance purposes and if the method/anlayte is offered by that state.

ALS ENVIRONMENTAL

Client:	Environmental Planning Specialist	**Service Request No.:**	K1401786
Project:	Drexel	**Date Received:**	02/22/14
Sample Matrix:	Water		

Case Narrative

All analyses were performed consistent with the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II data deliverables. When appropriate to the method, method blank results have been reported with each analytical test. Surrogate recoveries have been reported for all applicable organic analyses. Additional quality control analyses reported herein include: Laboratory Duplicate (DUP), Matrix Spike (MS), Matrix/Duplicate Matrix Spike (MS/DMS), Laboratory Control Sample (LCS), and Laboratory/Duplicate Laboratory Control Sample (LCS/DLCS).

Sample Receipt

Ten water samples were received for analysis at ALS Environmental on 02/22/14. The samples were received in good condition and consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Total and Dissolved Metals

Matrix Spike Recovery Exceptions:
The control criteria for matrix spike recovery of Calcium for sample 14049-Homesstead was not applicable. The analyzed concentration in the sample was significantly higher than the added spike concentration, preventing accurate evaluation of the spike recovery.

No other anomalies associated with the analysis of these samples were observed.

EDB and DBCP by EPA Method 504.1

No anomalies associated with the analysis of these samples were observed.

Pesticides and Polychlorinated Biphenyls by EPA Method 508.1

Elevated Detection Limits:
The detection limit was elevated for a number of analytes in the samples. The chromatogram indicated the presence of non-target background components. The matrix interference prevented adequate resolution of the target compounds at the normal limit. The results were flagged to indicate the matrix interference.

No other anomalies associated with the analysis of these samples were observed.

Chlorinated Acides by EPA Method 515.4

Calibration Verification Exceptions:
The analysis of Chlorinated Herbicides EPA 515.4 requires the use of dual column confirmation. When the Continuing Calibration Verification (CCV) criterion is met for both columns, the lower of the two sample results is generally reported. The primary evaluation criteria were not met on the confirmation column for Dinoseb. The results were reported from the column with an acceptable CCV. The data quality was not affected. No further corrective action was necessary.

No other anomalies associated with the analysis of these samples were observed.

Approved by_____

Semivolatile Organic Compounds by EPA Method 525.2

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for Benzo(a)pyrene in the replicate matrix spike analyses of batch QC was outside control criteria. All spike recoveries in associated Laboratory Control Sample (LCS) were within acceptance limits, indicating the analytical batch was in control. No further corrective action was appropriate.

Matrix Spike Recovery Exceptions:
The matrix spike recovery of Benzo(a)pyrene for sample batch QC was outside control criteria. Recovery in the Laboratory Control Sample (LCS) was acceptable, which indicated the analytical batch was in control. The matrix spike outlier suggested a potential bias in this matrix. No further corrective action was appropriate.

Elevated Detection Limits:
Sample 14051-BW-4 required dilution due to the presence of elevated levels of target analyte. The reporting limits were adjusted to reflect the dilution.

Surrogate Exceptions and Internal Standard Exceptions:
The control criteria were exceeded for the following surrogate in sample 14051-BW-4 due to suspected matrix interferences: Perylene-d12. The control criteria were exceeded for the following surrogate in sample 14051-BW-2 due to suspected matrix interferences: Triphenyl Phosphate. The sample contained particulate matter that collected on the extraction disk during sample elution. Historical results have shown that particulate matter can cause low recoveries for this surrogate. The control criteria are designed for drinking water matrices and can only be used as default limits for wastewaters. .No further corrective action was appropriate.

No other anomalies associated with the analysis of these samples were observed.

Volatile Organic Compounds by EPA Method 8260

No anomalies associated with the analysis of these samples were observed.

Organophosphorus Pesticides by HRGC/MS/MS

Lab Control Sample Exceptions:
The lower control criterion was exceeded for Demeton-O,S, Naled, Merphos,Total, Monocrotophos, Dimethoate, Fensulfothion, and Azinphos-methyl in Laboratory Control Sample (LCS) KWG1401390-3, and Duplicate Laboratory Control Sample (DLCS) KWG1401390-4. The %recovery limits are default limits in use until enough data points have been acquired to generate control limits. The recoveries of these analytes are within the range of historical data for this analysis.

Relative Percent Difference Exceptions:
The Relative Percent Difference (RPD) for Demeton-O,S in the replicate Laboratory Control Sample (LCS) analyses (KWG1401390-3 and KWG1401390-4) was outside control criteria. The analyte in question was not detected in the associated field samples. The sample data was not significantly affected. No further corrective action was appropriate.

Second Source Exceptions:
The upper control criterion was exceeded for Merphos in Second Source Calibration Verification (ICV) 0226F013.D. The field samples analyzed in this sequence did not contain the analyte in question. Since the apparent problem indicated a potential high bias, the data quality was not affected. No further corrective action was required.

Carbamates by EPA Method 531.1

This analysis was performed at Eurofin Eaton Analytical, Monrovia, CA. The data for this analysis is included in the corresponding section of this report.

Approved by_____

ALS Environmental

CHAIN OF CUSTODY
46911

003

SR# K1401986

COC Set 1 of 1

COC#

1317 South 13th Ave, Kelso, WA 98626 Phone (360) 577-7222 / 800-695-7222 / FAX (360) 636-1068
www.alsglobal.com

Project Name: Drexel
Project Number:
Project Manager: Timmerlin Bullman
Company: EPS Inc.
Address: 1050 Crown Point Pkwy, Suite 550, ATL, GA 30338
Phone #: 404-315-9113
email:
Sampler Signature:
Sampler Printed Name: G. Henry, W. Crowe

CLIENT SAMPLE ID	LABID	SAMPLING Date	SAMPLING Time	Matrix	NUMBER OF CONTAINERS	7D 8260C / VOC Unp	7D 8270D / Pest OP	14D 504.1 / EDB DBCP 123TCP	14D 508.1 / PEST_CL	14D 515.4 / CL_ACID_HERB	14D 525.2 / SVO	28D 531.1 / CARBAM	180D 200.7 LL / Metals T	180D 200.8 / Metals T	1	2	3	4	5	Remarks
1. 14049-BW-5		2.18.14	1210	GW	3			X												
2. 14049-Homestead		2.18.14	1515	GW	13	X	X	X	X	X	X	X	X	X						
3. 14050-BW-3		2.19.14	0925	GW	13	X	X	X	X	X	X	X	X	X						
4. 14051-BW-6-1		2.20.14	1150	GW	13	X	X	X	X	X	X	X	X	X						
5. 14051-BW-4		2.20.14	1400	GW	13	X	X	X	X	X	X	X	X	X						
6. 14051-BW-2		2.20.14	1435	GW	13	X	X	X	X	X	X	X	X	X						
7. 14051-BW-1		2.20.14	1800	GW	13	X	X	X	X	X	X	X	X	X						
8. 14051-DUP		2.20.14		GW	13	X	X	X	X	X	X	X	X	X						
9. 14051-Rinse		2.20.14	1500	W	13	X	X	X	X	X	X	X	X	X						
10.																				

4 Total Coolers

Cooler 1 of 4

See Comments.

Report Requirements

- X I. Routine Report: Method Blank, Surrogate, as required
- X II. Report Dup., MS, MSD as required
- ___ III. CLP Like Summary (no raw data)
- ___ IV. Data Validation Report
- X V. EDD

Invoice Information

P.O.#
Bill To:

Turnaround Requirements

- ___ 24 hr.
- ___ 48 hr.
- ___ 5 Day
- X Standard

Requested Report Date:

Circle which metals are to be analyzed

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Tl Sn V Zn Hg

Special Instructions/Comments:
Please Run a Filtered & Unfiltered sample of Metals for sample 14051-BW-2.

& 4 Trips

*Indicate State Hydrocarbon Procedure: AK CA WI Northwest Other____ (Circle One)

Relinquished By:	Received By:	Relinquished By:	Received By:	Relinquished By:	Received By:
Signature	Signature	Signature	Signature	Signature	Signature
Printed Name: Gregg Henry	Printed Name: ALS	Printed Name	Printed Name	Printed Name	Printed Name
Firm: EPS Inc.	Firm: 2/22/14 1015	Firm	Firm	Firm	Firm
Date/Time: 2.21.14 1845	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time

PC GREG

Cooler Receipt and Preservation Form

Client / Project: EPS Service Request K14 1786

Received: 2/22/14 Opened: 2/22/14 By: AR Unloaded: 2/22/14 By: AR

1. Samples were received via? *Mail* *Fed Ex* *UPS* *DHL* *PDX* *Courier* *Hand Delivered*
2. Samples were received in: (circle) *Cooler* *Box* *Envelope* *Other* _____ *NA*
3. Were custody seals on coolers? NA Y N If yes, how many and where? 4 FRONT 4 SIDE
   If present, were custody seals intact? Y N If present, were they signed and dated? Y N

Raw Cooler Temp	Corrected Cooler Temp	Raw Temp Blank	Corrected Temp Blank	Corr. Factor	Thermometer ID	Cooler/COC ID NA	Tracking Number NA	Filed
0.3	0.2	4.0	3.9	-0.1	340		804572055923	(M)
0.5	0.5	0.3	0.3	0	339			
1.9	2.0	0.6	0.7	0.1	336			
0.3	0.2	1.6	1.5	-0.1	334			

4. Packing material: *Inserts* *Baggies* *Bubble Wrap* *Gel Packs* *Wet Ice* *Dry Ice* *Sleeves* _____
5. Were custody papers properly filled out (ink, signed, etc.)? NA Y N
6. Did all bottles arrive in good condition (unbroken)? *Indicate in the table below.* NA Y N
7. Were all sample labels complete (i.e analysis, preservation, etc.)? NA Y N
8. Did all sample labels and tags agree with custody papers? *Indicate major discrepancies in the table on page 2.* NA Y N
9. Were appropriate bottles/containers and volumes received for the tests indicated? NA Y N
10. Were the pH-preserved bottles (*see SMO GEN SOP*) received at the appropriate pH? *Indicate in the table below* NA Y N
11. Were VOA vials received without headspace? *Indicate in the table below.* NA Y N
12. Was C12/Res negative? NA Y N

Sample ID on Bottle	Sample ID on COC	Identified by:

Sample ID	Bottle Count Bottle Type	Out of Temp	Head-space	Broke	pH	Reagent	Volume added	Reagent Lot Number	Initials	Time

Notes, Discrepancies, & Resolutions: _____

Page ____ *of* ____

ALS Group USA, Corp.
dba ALS Environmental

- Cover Page -
INORGANIC ANALYSIS DATA PACKAGE

Client: Environmental Planning Specialists
Project Name: Drexel
Project No.:

Service Request: K1401786

Sample Name:	Lab Code:
14049-Holmestead	K1401786-002
14049-HolmesteadD	K1401786-002D
14049-HolmesteadS	K1401786-002S
14050-BW-3	K1401786-003
14051-BW-6-1	K1401786-004
14051-BW-4	K1401786-005
14051-BW-2	K1401786-006
14051-BW-2	K1401786-006DISS
14051-BW-1	K1401786-007
14051-DUP	K1401786-008
14051-Rinse	K1401786-009
Method Blank	K1401786-MB

Comments:

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/18/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14049-Homestead Lab Code: K1401786-002

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	46.9		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.036	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/04/14	0.3	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	94.9		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.065		
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	8.0	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.009	J	
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	58600		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	1.74		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.386		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	2.88		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	812		
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.238		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	1230		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	19.5		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/04/14	0.089		
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.95		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	573		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/04/14	0.6	J	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.013	J	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	2140		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	99.3		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.014	J	
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	7.7		
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	1.15		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	20.1		

Metals

- 1 -

INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	**Service Request:**	K1401786
Project No.:	NA	**Date Collected:**	02/19/14
Project Name:	Drexel	**Date Received:**	02/22/14
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: 14050-BW-3 **Lab Code:** K1401786-003

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	15.1		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.012	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.2	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	111		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.032		
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	8.2	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.006	J	
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	57000		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	1.29		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.139		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.32		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	31.6		
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.031		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	756		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	1.820		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.018	J	
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.75		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	299		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	2660		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	55.5		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.008	J	
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	J	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	2.4		
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	0.71		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	0.5	J	

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/20/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14051-BW-6-1 Lab Code: K1401786-004

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	3.5		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.178		
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.3	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	95.9		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.006	U	
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	9.9	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	58700		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	1.18		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.133		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	7.69		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	9.3	J	
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	3.770		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	1520		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	1.340		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.218		
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.74		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	465		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	1.9		
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	3310		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	144		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.103		
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.06	J	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	0.9	J	
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	1.14		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	11.8		

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/20/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14051-BW-4 Lab Code: K1401786-005

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	213		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.021	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.2	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	96.4		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.219		
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	7.8	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.058		
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	99800		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	9.50		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	1.050		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	2.88		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	1170		
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.708		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	1250		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	35.4		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.136		
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	7.46		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	681		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.5	J	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.005	J	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	3130		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	75.2		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.025		
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	78.6		
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	1.50		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	51.3		

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/20/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14051-BW-2 Lab Code: K1401786-006

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	487		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.012	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.2	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	81.9		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.404		
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	5.6	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.083		
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	70100		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	3.49		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	1.310		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	4.12		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	1990		
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	1.390		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	845		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	54.3		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.007	U	
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	2.21		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	632		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.009	J	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	3550		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	53.5		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.034		
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	112		
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	2.41		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	44.9		

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	**Service Request:**	K1401786
Project No.:	NA	**Date Collected:**	02/20/14
Project Name:	Drexel	**Date Received:**	02/22/14
Matrix:	WATER	**Units:**	ug/L
		Basis:	NA

Sample Name: 14051-BW-2 **Lab Code:** K1401786-006DISS

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	2.8		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.016	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.2	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	74.2		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.006	U	
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	774		
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.008	J	
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	49500		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	1.50		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.146		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	9.71		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	10.6	J	
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.296		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	625		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	2.530		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.136		
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.92		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	468		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	4450		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	45.7		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.011	J	
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.03	J	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	1.1	J	
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	0.63		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	22.7		

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/20/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14051-BW-1 Lab Code: K1401786-007

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	20.5		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.006	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.1	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	83.3		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.025		
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	5.6	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.082		
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	87800		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	2.51		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.285		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	1.00		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	88.4		
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.115		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	729		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	21.1		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.042	J	
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	1.26		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	280		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	1920		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	62.9		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.050		
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	4.0		
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	1.00		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	1.0		

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/20/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14051-DUP Lab Code: K1401786-008

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	24.6		
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.008	J	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.1	J	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	83.1		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.026		
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	4.7	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.059		
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	76200		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	2.43		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.271		
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	1.03		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	97.6		
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.088		
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	725		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	20.0		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.041	J	
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	1.11		
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	259		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	1870		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	58.6		
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.052		
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	3.8		
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	0.97		
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	0.9		

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INORGANIC ANALYSIS DATA PACKAGE

Client:	Environmental Planning Specialis	Service Request:	K1401786
Project No.:	NA	Date Collected:	02/20/14
Project Name:	Drexel	Date Received:	02/22/14
Matrix:	WATER	Units:	ug/L
		Basis:	NA

Sample Name: 14051-Rinse Lab Code: K1401786-009

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	1.1	J	
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.098		
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.1	U	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	0.67		
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.006	U	
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	10.0	J	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	102		
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.21		
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.007	J	
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.38		
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	8.1	J	
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	35.0		
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	0.227		
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.007	U	
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.07	J	
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	1360		
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	22000		
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	0.24	J	
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	0.8	U	
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	0.03	J	
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	0.3	J	

Metals

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INORGANIC ANALYSIS DATA PACKAGE

Client: Environmental Planning Specialis
Service Request: K1401786
Project No.: NA
Date Collected:
Project Name: Drexel
Date Received:
Matrix: WATER
Units: ug/L
Basis: NA

Sample Name: Method Blank
Lab Code: K1401786-MB

Analyte	Analysis Method	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Result	C	Q
Aluminum	200.8	2.0	0.3	1.0	02/27/14	03/03/14	0.3	J	
Antimony	200.8	0.050	0.005	1.0	02/27/14	03/03/14	0.005	U	
Arsenic	200.8	0.5	0.1	1.0	02/27/14	03/03/14	0.1	U	
Barium	200.8	0.05	0.02	1.0	02/27/14	03/03/14	0.02	U	
Beryllium	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.006	U	
Boron	200.7	20.0	4.0	1.0	02/27/14	02/28/14	4.0	U	
Cadmium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Calcium	200.7	20.0	0.9	1.0	02/27/14	02/28/14	1.0	J	
Chromium	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.02	U	
Cobalt	200.8	0.020	0.006	1.0	02/27/14	03/03/14	0.006	U	
Copper	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Iron	200.7	20.0	3.0	1.0	02/27/14	02/28/14	4.2	J	
Lead	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Magnesium	200.7	5.0	0.3	1.0	02/27/14	02/28/14	0.3	U	
Manganese	200.8	0.050	0.006	1.0	02/27/14	03/03/14	0.006	U	
Molybdenum	200.8	0.050	0.007	1.0	02/27/14	03/03/14	0.007	U	
Nickel	200.8	0.20	0.02	1.0	02/27/14	03/03/14	0.02	U	
Potassium	200.7	200	60.0	1.0	02/27/14	02/28/14	60.0	U	
Selenium	200.8	1.0	0.3	1.0	02/27/14	03/03/14	0.3	U	
Silver	200.8	0.020	0.004	1.0	02/27/14	03/03/14	0.004	U	
Sodium	200.7	200	20.0	1.0	02/27/14	02/28/14	20.0	U	
Strontium	200.7	1.00	0.09	1.0	02/27/14	02/28/14	0.09	U	
Thallium	200.8	0.020	0.005	1.0	02/27/14	03/03/14	0.005	U	
Tin	200.8	0.10	0.02	1.0	02/27/14	03/03/14	0.02	U	
Titanium	200.7	2.0	0.8	1.0	02/27/14	02/28/14	0.8	U	
Vanadium	200.8	0.20	0.03	1.0	02/27/14	03/03/14	0.03	U	
Zinc	200.8	0.5	0.2	1.0	02/27/14	03/03/14	0.2	U	

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Metals
- 5A -
SPIKE SAMPLE RECOVERY

Client: Environmental Planning Specialis **Service Request:** K1401786

Project No.: NA **Units:** UG/L

Project Name: Drexel **Basis:** NA

Matrix: WATER

Sample Name: 14049-HomesteadS **Lab Code:** K1401786-002S

Analyte	Control Limit %R	Spike Result	C	Sample Result	C	Spike Added	%R	Q	Method
Aluminum	70 - 130	158		46.9		100.00	111.1		200.8
Antimony	70 - 130	50.9		0.036	J	50.00	101.7		200.8
Arsenic	70 - 130	54.4		0.3	J	50.00	108.2		200.8
Barium	70 - 130	197		94.9		100.00	102.1		200.8
Beryllium	70 - 130	2.790		0.065		2.50	109.0		200.8
Boron	70 - 130	987		8.0	J	1000.00	97.9		200.7
Cadmium	70 - 130	26.2		0.009	J	25.00	104.8		200.8
Calcium		67600		58600		10000.00	90.0		200.7
Chromium	70 - 130	11.3		1.74		10.00	95.6		200.8
Cobalt	70 - 130	25.7		0.386		25.00	101.3		200.8
Copper	70 - 130	15.2		2.88		12.50	98.6		200.8
Iron	70 - 130	1820		812		1000.00	100.8		200.7
Lead	70 - 130	50.8		0.238		50.00	101.1		200.8
Magnesium	70 - 130	11300		1230		10000.00	100.7		200.7
Manganese	70 - 130	44.0		19.5		25.00	98.0		200.8
Molybdenum	70 - 130	20.0		0.089		20.00	99.6		200.8
Nickel	70 - 130	26.2		0.95		25.00	101.0		200.8
Potassium	70 - 130	10800		573		10000.00	102.3		200.7
Selenium	70 - 130	54.7		0.6	J	50.00	108.2		200.8
Silver	70 - 130	12.6		0.013	J	12.50	100.7		200.8
Sodium	70 - 130	12200		2140		10000.00	100.6		200.7
Strontium	70 - 130	9910		99.3		10000.00	98.1		200.7
Thallium	70 - 130	52.1		0.014	J	50.00	104.2		200.8
Tin	70 - 130	16.5		0.02	U	20.00	82.4		200.8
Titanium	70 - 130	9920		7.7		10000.00	99.1		200.7
Vanadium	70 - 130	25.4		1.15		25.00	97.0		200.8
Zinc	70 - 130	45.9		20.1		25.00	103.2		200.8

An empty field in the Control Limit column indicates the control limit is not applicable

Metals
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DUPLICATES

Client: Environmental Planning Specialis **Service Request:** K1401786

Project No.: NA **Units:** UG/L

Project Name: Drexel **Basis:** NA

Matrix: WATER

Sample Name: 14049-HomesteadD **Lab Code:** K1401786-002D

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	Method
Aluminum	20	46.9		44.7		4.8		200.8
Antimony		0.036	J	0.028	J	25.0		200.8
Arsenic		0.3	J	0.3	J	0.0		200.8
Barium	20	94.9		93.0		2.0		200.8
Beryllium		0.065		0.065		0.0		200.8
Boron		8.0	J	7.5	J	6.5		200.7
Cadmium		0.009	J	0.009	J	0.0		200.8
Calcium	20	58600		57700		1.5		200.7
Chromium	20	1.74		1.57		10.3		200.8
Cobalt	20	0.386		0.376		2.6		200.8
Copper	20	2.88		2.58		11.0		200.8
Iron	20	812		778		4.3		200.7
Lead	20	0.238		0.233		2.1		200.8
Magnesium	20	1230		1210		1.6		200.7
Manganese	20	19.5		20.2		3.5		200.8
Molybdenum		0.089		0.118		28.0		200.8
Nickel		0.95		0.89		6.5		200.8
Potassium		573		569		0.7		200.7
Selenium		0.6	J	0.7	J	15.4		200.8
Silver		0.013	J	0.004	U	200.0		200.8
Sodium	20	2140		2150		0.5		200.7
Strontium	20	99.3		97.5		1.8		200.7
Thallium		0.014	J	0.012	J	15.4		200.8
Tin		0.02	U	0.02	U			200.8
Titanium		7.7		7.8		1.3		200.7
Vanadium	20	1.15		1.12		2.6		200.8
Zinc	20	20.1		20.6		2.5		200.8

An empty field in the Control Limit column indicates the control limit is not applicable.

Metals
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LABORATORY CONTROL SAMPLE

Client: Environmental Planning Specialis Service Request: K1401786

Project No.: NA

Project Name: Drexel

Aqueous LCS Source: Inorganic Ventures Solid LCS Source:

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits	%R
Aluminum	100	101	101.0					
Antimony	50	53.1	106.2					
Arsenic	50	53.8	107.6					
Barium	100	103	103.0					
Beryllium	2.5	2.600	104.0					
Boron	1000	960	96.0					
Cadmium	25	26.7	106.8					
Calcium	12500	12300	98.4					
Chromium	10	10.3	103.0					
Cobalt	25	25.6	102.4					
Copper	12.5	12.9	103.2					
Iron	2500	2420	96.8					
Lead	50	51.2	102.4					
Magnesium	12500	12700	101.6					
Manganese	25	25.7	102.8					
Molybdenum	20	19.9	99.5					
Nickel	25	25.4	101.6					
Potassium	12500	12500	100.0					
Selenium	50	56.3	112.6					
Silver	12.5	12.7	101.6					
Sodium	12500	12400	99.2					
Strontium	10000	9870	98.7					
Thallium	50	52.0	104.0					
Tin	20	20.6	103.0					
Titanium	10000	9790	97.9					
Vanadium	25	24.5	98.0					
Zinc	25	27.3	109.2					

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/18/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

EPA Method 504.1

Sample Name:	14049-BW-5	**Units:**	ug/L
Lab Code:	K1401786-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	**0.11**		0.0097	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.40	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	**0.018**		0.0097	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

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Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/18/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14049-Homestead
Lab Code: K1401786-002

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0097	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

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Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/19/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14050-BW-3
Lab Code: K1401786-003

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

EPA Method 504.1

Sample Name:	14051-BW-6-1	**Units:**	ug/L
Lab Code:	K1401786-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	504.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	**0.17**		0.0096	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	**0.17**		0.0096	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

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Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14051-BW-4
Lab Code: K1401786-005

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0097	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

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Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14051-BW-2
Lab Code: K1401786-006

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

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Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14051-BW-1
Lab Code: K1401786-007

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	**0.17**		0.0097	0.00300	1	02/25/14	02/26/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/26/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0097	0.00360	1	02/25/14	02/26/14	KWG1401462	

Comments:

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14051-DUP
Lab Code: K1401786-008

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	**0.16**		0.0096	0.00300	1	02/25/14	02/26/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/26/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00360	1	02/25/14	02/26/14	KWG1401462	

Comments:

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

EPA Method 504.1

Sample Name: 14051-Rinse
Lab Code: K1401786-009

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 504.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0096	0.00300	1	02/25/14	02/26/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.39	0.037	1	02/25/14	02/26/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0096	0.00360	1	02/25/14	02/26/14	KWG1401462	

Comments:

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Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: NA
Date Received: NA

EPA Method 504.1

Sample Name: Method Blank
Lab Code: KWG1401462-6

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
1,2-Dibromoethane (EDB)	ND	U	0.0099	0.00300	1	02/25/14	02/25/14	KWG1401462	
1,2,3-Trichloropropane	ND	U	0.40	0.037	1	02/25/14	02/25/14	KWG1401462	
1,2-Dibromo-3-chloropropane (DBCP	ND	U	0.0099	0.00360	1	02/25/14	02/25/14	KWG1401462	

Comments:

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Extracted: 02/25/2014
Date Analyzed: 02/25/2014

Matrix Spike Summary
EPA Method 504.1

Sample Name: 14049-BW-5
Lab Code: K1401786-001

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA

Level: Low
Extraction Lot: KWG1401462

		14049-BW-5MS KWG1401462-1 Matrix Spike			
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
1,2-Dibromoethane (EDB)	0.11	0.320	0.243	88	65-135
1,2,3-Trichloropropane	ND	0.234	0.243	96	65-135
1,2-Dibromo-3-chloropropane (DBCP)	0.018	0.239	0.243	91	65-135

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Extracted: 02/25/2014
Date Analyzed: 02/25/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1401462

	Lab Control Sample KWG1401462-2 Lab Control Spike			Duplicate Lab Control Sample KWG1401462-3 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2-Dibromoethane (EDB)	0.228	0.250	91	0.246	0.250	98	70-130	8	20
1,2,3-Trichloropropane	0.227	0.250	91	0.236	0.250	94	70-130	4	20
1,2-Dibromo-3-chloropropane (DBCP)	0.212	0.250	85	0.228	0.250	91	70-130	7	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Extracted: 02/25/2014
Date Analyzed: 02/25/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
EPA Method 504.1

Extraction Method: METHOD
Analysis Method: 504.1

Units: ug/L
Basis: NA
Level: Low
Extraction Lot: KWG1401462

	Lab Control Sample KWG1401462-4 Lab Control Spike			Duplicate Lab Control Sample KWG1401462-5 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
1,2-Dibromoethane (EDB)	0.237	0.250	95	0.245	0.250	98	70-130	3	20
1,2,3-Trichloropropane	0.219	0.250	88	0.230	0.250	92	70-130	5	20
1,2-Dibromo-3-chloropropane (DBCP)	0.224	0.250	90	0.238	0.250	95	70-130	6	20

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/18/2014
Date Received: 02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name: 14049-Homestead
Lab Code: K1401786-002

Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	ND	U	0.0098	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	U	0.0098	0.00060	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	U	0.0098	0.00083	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0098	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0098	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.0098	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.049	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.098	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.098	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.098	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.098	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.098	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.098	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	101	70-130	03/11/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/19/2014
Date Received: 02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name: 14050-BW-3
Lab Code: K1401786-003

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 508.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	ND	U	0.0098	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	U	0.0098	0.00060	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	U	0.0098	0.00083	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0098	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0098	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.0098	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.049	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.098	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.098	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.098	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.098	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.098	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.098	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	96	70-130	03/11/14	Acceptable

Comments:

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name: 14051-BW-6-1
Lab Code: K1401786-004

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 508.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	**0.0046**	JP	0.010	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	ND	Ui	0.010	0.0024	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	Ui	0.077	0.077	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	Ui	0.010	0.0044	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	**0.017**	P	0.010	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	Ui	0.010	0.0056	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	**0.0079**	J	0.010	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	Ui	0.48	0.48	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	Ui	0.12	0.12	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	Ui	0.34	0.34	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	Ui	2.1	2.1	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	Ui	1.3	1.3	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	Ui	0.83	0.83	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	Ui	0.26	0.26	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	102	70-130	03/11/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name: 14051-BW-4
Lab Code: K1401786-005

Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0099	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	ND	U	0.0099	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	Ui	0.014	0.014	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	U	0.0099	0.00083	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0099	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0099	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.0099	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.050	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.099	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.099	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.099	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.099	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.099	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.099	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	82	70-130	03/11/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name: 14051-BW-2
Lab Code: K1401786-006

Units: ug/L
Basis: NA

Extraction Method: METHOD
Analysis Method: 508.1

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0097	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	ND	U	0.0097	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	Ui	0.097	0.056	10	03/03/14	03/14/14	KWG1401692	
gamma-Chlordane	ND	U	0.0097	0.00083	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0097	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0097	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	**0.0087**	J	0.0097	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.049	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.097	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.097	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.097	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.097	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.097	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	**0.073**	JP	0.097	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	84	70-130	03/11/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name: 14051-BW-1
Lab Code: K1401786-007

Extraction Method: METHOD
Analysis Method: 508.1

Units: ug/L
Basis: NA
Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0097	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	**0.00053**	JP	0.0097	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	Ui	0.047	0.047	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	Ui	0.0097	0.0013	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0097	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0097	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.0097	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.049	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.097	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.097	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.097	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.097	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.097	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.097	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	100	70-130	03/11/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name:	14051-DUP	**Units:**	ug/L
Lab Code:	K1401786-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0097	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	**0.00065**	J	0.0097	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	Ui	0.022	0.022	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	Ui	0.0097	0.0013	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0097	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0097	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.0097	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.049	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.097	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.097	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.097	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.097	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.097	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.097	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	98	70-130	03/11/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Pesticides/PCBs by EPA method 508.1

Sample Name:	14051-Rinse	**Units:**	ug/L
Lab Code:	K1401786-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.0098	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	**0.00092**	JP	0.0098	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	Ui	0.016	0.016	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	ND	U	0.0098	0.00083	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.0098	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.0098	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.0098	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.049	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.098	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.098	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.098	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.098	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.098	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.098	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	96	70-130	03/11/14	Acceptable

Comments:

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	NA
Sample Matrix:	Drinking water	**Date Received:**	NA

Pesticides/PCBs by EPA method 508.1

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1401692-7	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
gamma-BHC (Lindane)	ND	U	0.010	0.00041	1	03/03/14	03/11/14	KWG1401692	
Heptachlor	ND	U	0.010	0.00049	1	03/03/14	03/11/14	KWG1401692	
Heptachlor Epoxide	ND	U	0.010	0.00060	1	03/03/14	03/11/14	KWG1401692	
gamma-Chlordane	0.0032	JP	0.010	0.00083	1	03/03/14	03/11/14	KWG1401692	
alpha-Chlordane	ND	U	0.010	0.00065	1	03/03/14	03/11/14	KWG1401692	
Endrin	ND	U	0.010	0.00077	1	03/03/14	03/11/14	KWG1401692	
Methoxychlor	ND	U	0.010	0.0013	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1016	ND	U	0.050	0.023	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1221	ND	U	0.10	0.021	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1232	ND	U	0.10	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1242	ND	U	0.10	0.012	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1248	ND	U	0.10	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1254	ND	U	0.10	0.015	1	03/03/14	03/11/14	KWG1401692	
Aroclor 1260	ND	U	0.10	0.017	1	03/03/14	03/11/14	KWG1401692	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4,4'-Dibromooctafluorobiphenyl	97	70-130	03/11/14	Acceptable

Comments:

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786

Surrogate Recovery Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method: METHOD
Analysis Method: 508.1

Units: Percent
Level: Low

Sample Name	Lab Code	Sur1
14049-Homestead	K1401786-002	101
14050-BW-3	K1401786-003	96
14051-BW-6-1	K1401786-004	102
14051-BW-4	K1401786-005	82
14051-BW-2	K1401786-006	84
14051-BW-1	K1401786-007	100
14051-DUP	K1401786-008	98
14051-Rinse	K1401786-009	96
Batch QC	K1401849-001	100
Method Blank	KWG1401692-7	97
Batch QCMS	KWG1401692-1	88
Batch QCDMS	KWG1401692-2	89
Lab Control Sample	KWG1401692-3	85

Surrogate Recovery Control Limits (%)

Sur1 = 4,4'-Dibromooctafluorobiphenyl 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	03/03/2014
Sample Matrix:	Drinking water	**Date Analyzed:**	03/11/2014

Matrix Spike/Duplicate Matrix Spike Summary
Pesticides/PCBs by EPA method 508.1

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1401849-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	508.1	**Extraction Lot:**	KWG1401692

		Batch QCMS KWG1401692-1 Matrix Spike			Batch QCDMS KWG1401692-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
gamma-BHC (Lindane)	ND	0.113	0.0962	117	0.113	0.0962	117	65-135	0	30
Heptachlor	ND	0.0806	0.0962	84	0.0784	0.0962	82	65-135	3	30
Heptachlor Epoxide	ND	0.0917	0.0962	95	0.0872	0.0962	91	65-135	5	30
gamma-Chlordane	ND	0.111	0.0962	115	0.110	0.0962	115	65-135	0	30
alpha-Chlordane	ND	0.104	0.0962	109	0.103	0.0962	107	65-135	1	30
Endrin	ND	0.0762	0.0962	79	0.0693	0.0962	72	65-135	9	30
Methoxychlor	ND	0.119	0.0962	123	0.117	0.0962	122	65-135	1	30
Aroclor 1248	ND	0.359	0.481	75	0.362	0.481	75	65-135	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	03/03/2014
Sample Matrix:	Drinking water	**Date Analyzed:**	03/11/2014

Lab Control Spike Summary
Pesticides/PCBs by EPA method 508.1

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	508.1	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1401692

	Lab Control Sample KWG1401692-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
gamma-BHC (Lindane)	0.119	0.100	119	70-130
Heptachlor	0.0955	0.100	96	70-130
Heptachlor Epoxide	0.0966	0.100	97	70-130
gamma-Chlordane	0.110	0.100	110	70-130
alpha-Chlordane	0.107	0.100	107	70-130
Endrin	0.119	0.100	119	70-130
Methoxychlor	0.116	0.100	116	70-130
Aroclor 1248	0.433	0.500	87	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/18/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14049-Homestead	**Units:**	ug/L
Lab Code:	K1401786-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/11/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/11/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/11/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/11/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/11/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/11/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	126	70-130	03/11/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/19/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14050-BW-3	**Units:**	ug/L
Lab Code:	K1401786-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/11/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/11/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/11/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/11/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/11/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/11/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	122	70-130	03/11/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14051-BW-6-1	**Units:**	ug/L
Lab Code:	K1401786-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/11/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/11/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/11/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/11/14	KWG1401736	
Dinoseb	**0.080**	J	0.20	0.048	1	03/04/14	03/11/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/11/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	124	70-130	03/11/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14051-BW-4	**Units:**	ug/L
Lab Code:	K1401786-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/11/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/11/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/11/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/11/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/11/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/11/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	126	70-130	03/11/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14051-BW-2	**Units:**	ug/L
Lab Code:	K1401786-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/12/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/12/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/12/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/12/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/12/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/12/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	121	70-130	03/12/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14051-BW-1	**Units:**	ug/L
Lab Code:	K1401786-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/12/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/12/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/12/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/12/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/12/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/12/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	125	70-130	03/12/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14051-DUP	**Units:**	ug/L
Lab Code:	K1401786-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/12/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/12/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/12/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/12/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/12/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/12/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	120	70-130	03/12/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Chlorinated Acids by EPA Method 515.4

Sample Name:	14051-Rinse	**Units:**	ug/L
Lab Code:	K1401786-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/12/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/12/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/12/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/12/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/12/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/12/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	124	70-130	03/12/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	NA
Sample Matrix:	Drinking water	**Date Received:**	NA

Chlorinated Acids by EPA Method 515.4

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1401736-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Dalapon	ND	U	1.0	0.040	1	03/04/14	03/11/14	KWG1401736	
2,4-D	ND	U	0.10	0.089	1	03/04/14	03/11/14	KWG1401736	
Pentachlorophenol	ND	U	0.040	0.016	1	03/04/14	03/11/14	KWG1401736	
2,4,5-TP (Silvex)	ND	U	0.050	0.020	1	03/04/14	03/11/14	KWG1401736	
Dinoseb	ND	U	0.20	0.048	1	03/04/14	03/11/14	KWG1401736	
Picloram	ND	U	0.10	0.091	1	03/04/14	03/11/14	KWG1401736	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
2,4-Dichlorophenylacetic Acid	118	70-130	03/11/14	Acceptable

Comments:

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786

Surrogate Recovery Summary
Chlorinated Acids by EPA Method 515.4

Extraction Method: METHOD
Analysis Method: 515.4

Units: Percent
Level: Low

Sample Name	Lab Code	Sur1
14049-Homestead	K1401786-002	126
14050-BW-3	K1401786-003	122
14051-BW-6-1	K1401786-004	124
14051-BW-4	K1401786-005	126
14051-BW-2	K1401786-006	121
14051-BW-1	K1401786-007	125
14051-DUP	K1401786-008	120
14051-Rinse	K1401786-009	124
Batch QC	K1401984-001	129
Method Blank	KWG1401736-4	118
Batch QCMS	KWG1401736-1	101
Batch QCDMS	KWG1401736-2	114
Lab Control Sample	KWG1401736-3	107

Surrogate Recovery Control Limits (%)

Sur1 = 2,4-Dichlorophenylacetic Acid 70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	03/04/2014
Sample Matrix:	Drinking water	**Date Analyzed:**	03/12/2014

Matrix Spike/Duplicate Matrix Spike Summary
Chlorinated Acids by EPA Method 515.4

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1401984-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	515.4	**Extraction Lot:**	KWG1401736

		Batch QCMS KWG1401736-1 Matrix Spike			Batch QCDMS KWG1401736-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Dalapon	ND	4.81	4.97	97	5.04	4.97	101	70-130	5	30
2,4-D	ND	5.12	4.97	103	5.74	4.97	116	70-130	11	30
Pentachlorophenol	ND	4.23	4.97	85	4.86	4.97	98	70-130	14	30
2,4,5-TP (Silvex)	ND	4.16	4.97	84	4.72	4.97	95	70-130	13	30
Dinoseb	ND	4.30	4.97	86	4.85	4.97	98	70-130	12	30
Picloram	ND	5.23	4.97	105	5.31	4.97	107	70-130	1	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	03/04/2014
Sample Matrix:	Drinking water	**Date Analyzed:**	03/11/2014

Lab Control Spike Summary
Chlorinated Acids by EPA Method 515.4

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	515.4	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1401736

	Lab Control Sample KWG1401736-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Dalapon	4.83	5.00	97	70-130
2,4-D	5.38	5.00	108	70-130
Pentachlorophenol	4.87	5.00	97	70-130
2,4,5-TP (Silvex)	4.61	5.00	92	70-130
Dinoseb	5.03	5.00	101	70-130
Picloram	4.77	5.00	95	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/18/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14049-Homestead	**Units:**	ug/L
Lab Code:	K1401786-002	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.098	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.049	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.098	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.070	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.098	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.16**	J	0.59	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	97	70-130	03/04/14	Acceptable
Triphenyl Phosphate	90	70-130	03/04/14	Acceptable
Perylene-d12	94	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/19/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14050-BW-3	**Units:**	ug/L
Lab Code:	K1401786-003	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.098	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.049	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.098	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.070	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.098	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.087**	J	0.59	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	100	70-130	03/04/14	Acceptable
Triphenyl Phosphate	90	70-130	03/04/14	Acceptable
Perylene-d12	99	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14051-BW-6-1	**Units:**	ug/L
Lab Code:	K1401786-004	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.10	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.10	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.050	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	**0.088**	J	0.10	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	**0.085**		0.072	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.10	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.60	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	ND	U	0.60	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	98	70-130	03/04/14	Acceptable
Triphenyl Phosphate	82	70-130	03/04/14	Acceptable
Perylene-d12	95	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14051-BW-4	**Units:**	ug/L
Lab Code:	K1401786-005	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.099	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.099	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.050	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.099	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.071	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.099	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	7.4	D	3.0	0.30	5	03/03/14	03/11/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	100	70-130	03/04/14	Acceptable
Triphenyl Phosphate	96	70-130	03/04/14	Acceptable
Perylene-d12	50	70-130	03/04/14	Outside Control Limits

Comments:

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14051-BW-2	**Units:**	ug/L
Lab Code:	K1401786-006	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.097	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.097	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.049	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.097	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.070	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.097	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	**1.8**		0.58	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.58**		0.58	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	94	70-130	03/04/14	Acceptable
Triphenyl Phosphate	220	70-130	03/04/14	Outside Control Limits
Perylene-d12	88	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14051-BW-1	**Units:**	ug/L
Lab Code:	K1401786-007	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.097	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.097	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.049	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.097	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.070	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.097	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.58	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.083**	J	0.58	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	96	70-130	03/04/14	Acceptable
Triphenyl Phosphate	104	70-130	03/04/14	Acceptable
Perylene-d12	81	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14051-DUP	**Units:**	ug/L
Lab Code:	K1401786-008	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.097	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.097	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.049	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.097	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.070	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.097	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.58	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.11**	J	0.58	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	97	70-130	03/04/14	Acceptable
Triphenyl Phosphate	96	70-130	03/04/14	Acceptable
Perylene-d12	95	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Semivolatile Organics by EPA method 525.2

Sample Name:	14051-Rinse	**Units:**	ug/L
Lab Code:	K1401786-009	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.098	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.098	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.049	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.098	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.070	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.098	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.59	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.17**	J	0.59	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	99	70-130	03/04/14	Acceptable
Triphenyl Phosphate	95	70-130	03/04/14	Acceptable
Perylene-d12	97	70-130	03/04/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Semivolatile Organics by EPA method 525.2

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1401708-4	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Hexachlorocyclopentadiene	ND	U	0.10	0.020	1	03/03/14	03/04/14	KWG1401708	
Hexachlorobenzene	ND	U	0.10	0.0050	1	03/03/14	03/04/14	KWG1401708	
Simazine	ND	U	0.050	0.0090	1	03/03/14	03/04/14	KWG1401708	
Atrazine	ND	U	0.10	0.0060	1	03/03/14	03/04/14	KWG1401708	
Alachlor	ND	U	0.072	0.0060	1	03/03/14	03/04/14	KWG1401708	
trans-Nonachlor	ND	U	0.10	0.0080	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Adipate	ND	U	0.60	0.030	1	03/03/14	03/04/14	KWG1401708	
Bis(2-ethylhexyl) Phthalate	**0.061**	J	0.60	0.060	1	03/03/14	03/04/14	KWG1401708	
Benzo(a)pyrene	ND	U	0.020	0.0080	1	03/03/14	03/04/14	KWG1401708	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
1,3-Dimethyl-2-nitrobenzene	91	70-130	03/04/14	Acceptable
Triphenyl Phosphate	85	70-130	03/04/14	Acceptable
Perylene-d12	87	70-130	03/04/14	Acceptable

Comments:

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786

Surrogate Recovery Summary
Semivolatile Organics by EPA method 525.2

Extraction Method: METHOD
Analysis Method: 525.2

Units: Percent
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
14049-Homestead	K1401786-002	97	90	94
14050-BW-3	K1401786-003	100	90	99
14051-BW-6-1	K1401786-004	98	82	95
14051-BW-4	K1401786-005	100	96	50 *
14051-BW-2	K1401786-006	94	220 *	88
14051-BW-1	K1401786-007	96	104	81
14051-DUP	K1401786-008	97	96	95
14051-Rinse	K1401786-009	99	95	97
Batch QC	K1401849-001	95	95	100
Method Blank	KWG1401708-4	91	85	87
Batch QCMS	KWG1401708-1	90	94	101
Batch QCDMS	KWG1401708-2	97	94	77
Lab Control Sample	KWG1401708-3	90	96	96

Surrogate Recovery Control Limits (%)

Sur1	=	1,3-Dimethyl-2-nitrobenzene	70-130
Sur2	=	Triphenyl Phosphate	70-130
Sur3	=	Perylene-d12	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	03/03/2014
Sample Matrix:	Drinking water	**Date Analyzed:**	03/05/2014

Matrix Spike/Duplicate Matrix Spike Summary
Semivolatile Organics by EPA method 525.2

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1401849-001	**Basis:**	NA
Extraction Method:	METHOD	**Level:**	Low
Analysis Method:	525.2	**Extraction Lot:**	KWG1401708

		Batch QCMS KWG1401708-1 Matrix Spike			Batch QCDMS KWG1401708-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Hexachlorocyclopentadiene	ND	1.01	0.962	105	1.15	0.962	119	70-130	12	30
Hexachlorobenzene	ND	0.906	0.962	94	0.927	0.962	96	70-130	2	30
Simazine	ND	0.753	0.962	78	0.805	0.962	84	70-130	7	30
Atrazine	ND	0.832	0.962	87	0.795	0.962	83	70-130	5	30
Alachlor	ND	0.862	0.962	90	0.858	0.962	89	70-130	0	30
trans-Nonachlor	ND	0.965	0.962	100	0.972	0.962	101	70-130	1	30
Bis(2-ethylhexyl) Adipate	0.10	1.03	0.962	97	1.08	0.962	102	70-130	4	30
Bis(2-ethylhexyl) Phthalate	0.18	1.15	0.962	100	1.18	0.962	104	70-130	3	30
Benzo(a)pyrene	ND	1.03	0.962	107	0.313	0.962	33 *	70-130	106 *	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	03/03/2014
Sample Matrix:	Water	**Date Analyzed:**	03/04/2014

Lab Control Spike Summary
Semivolatile Organics by EPA method 525.2

Extraction Method:	METHOD	**Units:**	ug/L
Analysis Method:	525.2	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1401708

	Lab Control Sample KWG1401708-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Hexachlorocyclopentadiene	1.06	1.00	106	70-130
Hexachlorobenzene	1.01	1.00	101	70-130
Simazine	0.879	1.00	88	70-130
Atrazine	0.957	1.00	96	70-130
Alachlor	0.896	1.00	90	70-130
trans-Nonachlor	1.02	1.00	102	70-130
Bis(2-ethylhexyl) Adipate	0.984	1.00	98	70-130
Bis(2-ethylhexyl) Phthalate	0.980	1.00	98	70-130
Benzo(a)pyrene	1.10	1.00	110	70-130

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/18/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14049-Homestead	**Units:**	ug/L
Lab Code:	K1401786-002	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	**0.60**		0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	ND	U	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	ND	U	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	**0.14**	J	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	**0.45**	J	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	**0.35**	J	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	**0.29**	J	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	95	68-117	02/24/14	Acceptable
Dibromofluoromethane	95	73-122	02/24/14	Acceptable
Toluene-d8	99	65-144	02/24/14	Acceptable

Comments:

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/19/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14050-BW-3	**Units:**	ug/L
Lab Code:	K1401786-003	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	**0.12**	J	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	ND	U	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	ND	U	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	**0.23**	J	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	**0.12**	J	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	97	68-117	02/24/14	Acceptable
Dibromofluoromethane	95	73-122	02/24/14	Acceptable
Toluene-d8	98	65-144	02/24/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14051-BW-6-1	**Units:**	ug/L
Lab Code:	K1401786-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	ND	U	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	**0.10**	J	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	**3.2**		0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	ND	U	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	ND	U	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	97	68-117	02/24/14	Acceptable
Dibromofluoromethane	98	73-122	02/24/14	Acceptable
Toluene-d8	99	65-144	02/24/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14051-BW-4	**Units:**	ug/L
Lab Code:	K1401786-005	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	**0.43**	J	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	ND	U	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	ND	U	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	**0.12**	J	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	**0.34**	J	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	**0.26**	J	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	**0.21**	J	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	97	68-117	02/24/14	Acceptable
Dibromofluoromethane	98	73-122	02/24/14	Acceptable
Toluene-d8	100	65-144	02/24/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14051-BW-2	**Units:**	ug/L
Lab Code:	K1401786-006	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	**0.11**	J	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	ND	U	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	**0.050**	J	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	**0.26**	J	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	**0.13**	J	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	99	68-117	02/24/14	Acceptable
Dibromofluoromethane	98	73-122	02/24/14	Acceptable
Toluene-d8	99	65-144	02/24/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14051-BW-1	**Units:**	ug/L
Lab Code:	K1401786-007	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	**0.23**	J	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	**0.090**	J	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	**0.11**	J	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	**0.060**	J	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	**0.37**	J	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	**0.15**	J	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	97	68-117	02/24/14	Acceptable
Dibromofluoromethane	94	73-122	02/24/14	Acceptable
Toluene-d8	96	65-144	02/24/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14051-DUP	**Units:**	ug/L
Lab Code:	K1401786-008	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	ND	U	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	**0.23**	J	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	**0.10**	J	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	**0.11**	J	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	**0.060**	J	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	**0.36**	J	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	**0.16**	J	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	98	68-117	02/24/14	Acceptable
Dibromofluoromethane	95	73-122	02/24/14	Acceptable
Toluene-d8	98	65-144	02/24/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Volatile Organic Compounds

Sample Name:	14051-Rinse	**Units:**	ug/L
Lab Code:	K1401786-009	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	**0.20**	J	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	ND	U	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	ND	U	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	**0.070**	J	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	ND	U	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	ND	U	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	ND	U	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	96	68-117	02/24/14	Acceptable
Dibromofluoromethane	98	73-122	02/24/14	Acceptable
Toluene-d8	98	65-144	02/24/14	Acceptable

Comments:

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Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA

Volatile Organic Compounds

Sample Name:	Method Blank	**Units:**	ug/L
Lab Code:	KWG1401403-4	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Vinyl Chloride	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
Methylene Chloride	**0.39**	**J**	2.0	0.10	1	02/24/14	02/24/14	KWG1401403	
trans-1,2-Dichloroethene	ND	U	0.50	0.072	1	02/24/14	02/24/14	KWG1401403	
1,1-Dichloroethene	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
cis-1,2-Dichloroethene	ND	U	0.50	0.067	1	02/24/14	02/24/14	KWG1401403	
Carbon Tetrachloride	ND	U	0.50	0.096	1	02/24/14	02/24/14	KWG1401403	
Benzene	ND	U	0.50	0.062	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloroethane (EDC)	ND	U	0.50	0.080	1	02/24/14	02/24/14	KWG1401403	
Trichloroethene (TCE)	ND	U	0.50	0.10	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichloropropane	ND	U	0.50	0.095	1	02/24/14	02/24/14	KWG1401403	
Toluene	ND	U	0.50	0.054	1	02/24/14	02/24/14	KWG1401403	
Tetrachloroethene (PCE)	ND	U	0.50	0.099	1	02/24/14	02/24/14	KWG1401403	
Chlorobenzene	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
Ethylbenzene	ND	U	0.50	0.050	1	02/24/14	02/24/14	KWG1401403	
Styrene	ND	U	0.50	0.089	1	02/24/14	02/24/14	KWG1401403	
m,p-Xylenes	ND	U	0.50	0.11	1	02/24/14	02/24/14	KWG1401403	
o-Xylene	ND	U	0.50	0.074	1	02/24/14	02/24/14	KWG1401403	
1,1,1-Trichloroethane (TCA)	ND	U	0.50	0.075	1	02/24/14	02/24/14	KWG1401403	
1,4-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2-Dichlorobenzene	ND	U	0.50	0.12	1	02/24/14	02/24/14	KWG1401403	
1,2,4-Trichlorobenzene	**0.11**	**J**	2.0	0.096	1	02/24/14	02/24/14	KWG1401403	
1,1,2-Trichloroethane	ND	U	0.50	0.14	1	02/24/14	02/24/14	KWG1401403	

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
4-Bromofluorobenzene	98	68-117	02/24/14	Acceptable
Dibromofluoromethane	99	73-122	02/24/14	Acceptable
Toluene-d8	99	65-144	02/24/14	Acceptable

Comments:

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786

Surrogate Recovery Summary
Volatile Organic Compounds

Extraction Method: EPA 5030B
Analysis Method: 8260C

Units: Percent
Level: Low

Sample Name	Lab Code	Sur1	Sur2	Sur3
Batch QC	K1401750-004	96	96	99
14049-Homestead	K1401786-002	95	95	99
14050-BW-3	K1401786-003	97	95	98
14051-BW-6-1	K1401786-004	97	98	99
14051-BW-4	K1401786-005	97	98	100
14051-BW-2	K1401786-006	99	98	99
14051-BW-1	K1401786-007	97	94	96
14051-DUP	K1401786-008	98	95	98
14051-Rinse	K1401786-009	96	98	98
Method Blank	KWG1401403-4	98	99	99
Batch QCMS	KWG1401403-1	103	103	98
Batch QCDMS	KWG1401403-2	102	101	98
Lab Control Sample	KWG1401403-3	103	102	98

Surrogate Recovery Control Limits (%)

Sur1	=	4-Bromofluorobenzene	68-117
Sur2	=	Dibromofluoromethane	73-122
Sur3	=	Toluene-d8	65-144

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	02/24/2014
Sample Matrix:	Water	**Date Analyzed:**	02/24/2014

Matrix Spike/Duplicate Matrix Spike Summary
Volatile Organic Compounds

Sample Name:	Batch QC	**Units:**	ug/L
Lab Code:	K1401750-004	**Basis:**	NA
Extraction Method:	EPA 5030B	**Level:**	Low
Analysis Method:	8260C	**Extraction Lot:**	KWG1401403

		Batch QCMS KWG1401403-1 Matrix Spike			Batch QCDMS KWG1401403-2 Duplicate Matrix Spike					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Vinyl Chloride	ND	10.0	10.0	100	10.1	10.0	101	49-136	1	30
1,1-Dichloroethene	ND	11.3	10.0	113	11.3	10.0	113	59-171	0	30
Carbon Tetrachloride	ND	12.1	10.0	121	12.0	10.0	120	53-161	1	30
Benzene	ND	11.1	10.0	111	11.1	10.0	111	63-144	0	30
Trichloroethene (TCE)	ND	11.4	10.0	114	11.3	10.0	113	53-139	1	30
Toluene	ND	10.7	10.0	107	10.6	10.0	106	71-136	0	30
Chlorobenzene	ND	11.7	10.0	117	11.6	10.0	116	69-126	1	30
Ethylbenzene	ND	11.3	10.0	113	11.3	10.0	113	66-136	0	30
1,2-Dichlorobenzene	ND	11.0	10.0	110	11.3	10.0	113	72-119	2	30
1,1,2-Trichloroethane	ND	10.9	10.0	109	11.2	10.0	112	74-124	3	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

QA/QC Report

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Extracted:**	02/24/2014
Sample Matrix:	Water	**Date Analyzed:**	02/24/2014

Lab Control Spike Summary
Volatile Organic Compounds

Extraction Method:	EPA 5030B	**Units:**	ug/L
Analysis Method:	8260C	**Basis:**	NA
		Level:	Low
		Extraction Lot:	KWG1401403

	Lab Control Sample KWG1401403-3 Lab Control Spike			
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**
Vinyl Chloride	8.92	10.0	89	55-123
Methylene Chloride	10.1	10.0	101	71-122
trans-1,2-Dichloroethene	10.2	10.0	102	67-125
1,1-Dichloroethene	10.1	10.0	101	66-129
cis-1,2-Dichloroethene	9.86	10.0	99	71-118
Carbon Tetrachloride	10.9	10.0	109	55-140
Benzene	10.2	10.0	102	69-124
1,2-Dichloroethane (EDC)	10.1	10.0	101	56-142
Trichloroethene (TCE)	10.2	10.0	102	67-128
1,2-Dichloropropane	9.86	10.0	99	67-126
Toluene	9.76	10.0	98	69-124
Tetrachloroethene (PCE)	11.1	10.0	111	62-126
Chlorobenzene	10.9	10.0	109	72-116
Ethylbenzene	10.6	10.0	106	67-121
Styrene	11.1	10.0	111	74-121
m,p-Xylenes	21.7	20.0	109	69-121
o-Xylene	10.6	10.0	106	71-119
1,1,1-Trichloroethane (TCA)	10.4	10.0	104	59-136
1,4-Dichlorobenzene	10.4	10.0	104	73-115
1,2-Dichlorobenzene	10.4	10.0	104	72-115
1,2,4-Trichlorobenzene	10.2	10.0	102	58-126
1,1,2-Trichloroethane	10.3	10.0	103	74-118

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/18/2014
Date Received: 02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name: 14049-Homestead
Lab Code: K1401786-002

Units: ng/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: GC/MS/MS

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	98	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	98	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	98	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	49	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	49	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	49	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	49	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	49	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	49	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	49	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	49	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	49	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	49	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	98	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	49	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	67	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	98	39-124	02/28/14	Acceptable

Comments:

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/19/2014
Date Received: 02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name: 14050-BW-3
Lab Code: K1401786-003

Units: ng/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: GC/MS/MS

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	99	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	99	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	99	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	99	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	47	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	89	39-124	02/28/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name:	14051-BW-6-1	**Units:**	ng/L
Lab Code:	K1401786-004	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	GC/MS/MS		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	99	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	99	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	99	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	99	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	41	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	85	39-124	02/28/14	Acceptable

Comments:

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name:	14051-BW-4	**Units:**	ng/L
Lab Code:	K1401786-005	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	GC/MS/MS		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	99	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	99	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	99	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	99	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	81	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	81	39-124	02/28/14	Acceptable

Comments:

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: 02/20/2014
Date Received: 02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name: 14051-BW-2
Lab Code: K1401786-006

Units: ng/L
Basis: NA

Extraction Method: EPA 3535A
Analysis Method: GC/MS/MS

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	99	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	99	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	99	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	99	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	52	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	90	39-124	02/28/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name:	14051-BW-1	**Units:**	ng/L
Lab Code:	K1401786-007	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	GC/MS/MS		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	99	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	99	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	99	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	99	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	64	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	88	39-124	02/28/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name:	14051-DUP	**Units:**	ng/L
Lab Code:	K1401786-008	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	GC/MS/MS		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	100	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	100	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	100	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	100	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	69	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	91	39-124	02/28/14	Acceptable

Comments:

ALS Group USA, Corp. dba ALS Environmental

Analytical Results

Client:	Environmental Planning Specialists	**Service Request:**	K1401786
Project:	Drexel	**Date Collected:**	02/20/2014
Sample Matrix:	Water	**Date Received:**	02/22/2014

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name:	14051-Rinse	**Units:**	ng/L
Lab Code:	K1401786-009	**Basis:**	NA
Extraction Method:	EPA 3535A	**Level:**	Low
Analysis Method:	GC/MS/MS		

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	99	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	99	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	99	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	50	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	50	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	50	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	50	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	50	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	50	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	50	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	50	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	50	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	50	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	99	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	50	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	73	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	89	39-124	02/28/14	Acceptable

Comments:

Analytical Results

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Collected: NA
Date Received: NA

Organophosphorus Pesticides by HRGC/MS/MS

Sample Name: Method Blank
Lab Code: KWG1401390-5

Extraction Method: EPA 3535A
Analysis Method: GC/MS/MS

Units: ng/L
Basis: NA

Level: Low

Analyte Name	Result	Q	MRL	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Note
Demeton-O,S	ND	U	98	42	1	02/25/14	02/28/14	KWG1401390	*
Naled (Dibrom)	ND	U	98	20	1	02/25/14	02/28/14	KWG1401390	*
Phorate	ND	U	98	33	1	02/25/14	02/28/14	KWG1401390	
Monocrotophos	ND	U	200	200	1	02/25/14	03/06/14	KWG1401390	*
Dimethoate	ND	U	50	4.7	1	02/25/14	02/28/14	KWG1401390	*
Ronnel	ND	U	49	4.4	1	02/25/14	02/28/14	KWG1401390	
Methyl Parathion	ND	U	49	6.7	1	02/25/14	02/28/14	KWG1401390	
Malathion	ND	U	49	5.1	1	02/25/14	02/28/14	KWG1401390	
Fenthion	ND	U	49	4.0	1	02/25/14	02/28/14	KWG1401390	
Trichloronate	ND	U	49	5.7	1	02/25/14	02/28/14	KWG1401390	
Ethyl Parathion	ND	U	50	6.9	1	02/25/14	02/28/14	KWG1401390	
Merphos, Total	ND	U	49	6.1	1	02/25/14	02/28/14	KWG1401390	*
Tokuthion	ND	U	49	6.5	1	02/25/14	02/28/14	KWG1401390	
Fensulfothion	ND	U	49	12	1	02/25/14	02/28/14	KWG1401390	*
Bolstar (Sulprofos)	ND	U	49	7.3	1	02/25/14	02/28/14	KWG1401390	
EPN	ND	U	49	9.5	1	02/25/14	02/28/14	KWG1401390	
Azinphos-methyl	ND	U	98	27	1	02/25/14	03/06/14	KWG1401390	*
Coumaphos	ND	U	49	7.7	1	02/25/14	02/28/14	KWG1401390	

* See Case Narrative

Surrogate Name	%Rec	Control Limits	Date Analyzed	Note
Dichlorvos-d6	60	15-96	02/28/14	Acceptable
Chlorpyrifos-d10	100	39-124	02/28/14	Acceptable

Comments:

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786

Surrogate Recovery Summary
Organophosphorus Pesticides by HRGC/MS/MS

Extraction Method: EPA 3535A
Analysis Method: GC/MS/MS

Units: Percent
Level: Low

Sample Name	Lab Code	Sur1	Sur2
14049-Homestead	K1401786-002	67	98
14050-BW-3	K1401786-003	47	89
14051-BW-6-1	K1401786-004	41	85
14051-BW-4	K1401786-005	81	81
14051-BW-2	K1401786-006	52	90
14051-BW-1	K1401786-007	64	88
14051-DUP	K1401786-008	69	91
14051-Rinse	K1401786-009	73	89
Method Blank	KWG1401390-5	60	100
Lab Control Sample	KWG1401390-3	64	93
Duplicate Lab Control Sample	KWG1401390-4	55	88

Surrogate Recovery Control Limits (%)

Sur1	=	Dichlorvos-d6	15-96
Sur2	=	Chlorpyrifos-d10	39-124

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

QA/QC Report

Client: Environmental Planning Specialists
Project: Drexel
Sample Matrix: Water

Service Request: K1401786
Date Extracted: 02/25/2014
Date Analyzed: 02/28/2014 - 03/06/2014

Lab Control Spike/Duplicate Lab Control Spike Summary
Organophosphorus Pesticides by HRGC/MS/MS

Extraction Method: EPA 3535A
Analysis Method: GC/MS/MS

Units: ng/L
Basis: NA
Level: Low
Extraction Lot: KWG1401390

	Lab Control Sample KWG1401390-3 Lab Control Spike			Duplicate Lab Control Sample KWG1401390-4 Duplicate Lab Control Spike					
Analyte Name	**Result**	**Spike Amount**	**%Rec**	**Result**	**Spike Amount**	**%Rec**	**%Rec Limits**	**RPD**	**RPD Limit**
Demeton-O,S	811	1000	81	595	1000	60 *	70-120	31 *	30
Naled (Dibrom)	639	1000	64 *	638	1000	64 *	70-120	0	30
Phorate	974	1000	97	977	1000	98	70-120	0	30
Monocrotophos	ND	1000	0 *	ND	1000	0 *	70-120	NC	30
Dimethoate	109	1000	11 *	90.0	1000	9 *	70-120	19	30
Ronnel	962	1000	96	892	1000	89	70-120	8	30
Methyl Parathion	939	1000	94	812	1000	81	70-120	15	30
Malathion	949	1000	95	838	1000	84	70-120	12	30
Fenthion	924	1000	92	826	1000	83	70-120	11	30
Trichloronate	938	1000	94	889	1000	89	70-120	5	30
Ethyl Parathion	1000	1000	100	887	1000	89	70-120	12	30
Merphos, Total	564	1000	56 *	641	1000	64 *	70-120	13	30
Tokuthion	930	1000	93	901	1000	90	70-120	3	30
Fensulfothion	304	1000	30 *	249	1000	25 *	70-120	20	30
Bolstar (Sulprofos)	869	1000	87	833	1000	83	70-120	4	30
EPN	845	1000	84	797	1000	80	70-120	6	30
Azinphos-methyl	568	1000	57 *	475	1000	47 *	70-120	18	30
Coumaphos	905	1000	90	832	1000	83	70-120	8	30

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

November 29, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical

Dear Timmerly Bullman: Order No: 1311I58

Analytical Environmental Services, Inc. received 12 samples on 11/22/2013 6:05:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1311I58

Date: 11.22.13 Page 1 of 1

COMPANY: EPS Inc.
ADDRESS: 1050 Crown Point Pkwy Ste 550 Atlanta, GA 30338
PHONE: 404-315-9113
FAX:
SAMPLED BY: Gatenny
SIGNATURE:

ANALYSIS REQUESTED: Metals; Pesticides 8081

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) I	I	REMARKS	No # of Containers
1	13326-Si15-Cs1-5	11.22.13	1030	X		SO	X	X		2
2	13326-Si15-Cs2-5	11.22.13	1035	X		SO	X	X		2
3	13326-Si15-Cs3-5	11.22.13	~~1300~~ GA 1040	X		SO	X	X		2
4	13326-Si15-Cs4-9	11.22.13	1045	X		SO	X	X		2
5	13326-Si15-Cs5-9	11.22.13	1050	X		SO	X			2
6	13326-Si15-Cs6-9	11.22.13	1055	X		SO	X			2
7	~~13326-Si15-Pb~~ GA									
8	13326-Si20-Cs1-5	11.22.13	1130	X		SO	X	X		2
9	13326-Si20-Cs2-5	11.22.13	1135	X		SO	X	X		2
10	13326-Si20-Cs3-5	11.22.13	1300	X		SO	X	X		2
11	13326-Si20-Cs4-9	11.22.13	1315	X		SO	X	X		2
12	13326-Si20-Cs5-9	11.22.13	1325	X		SO	X	X		2
13	13326-Si20-Cs6-9	11.22.13	1330	X		SO	X	X		2
14										

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	11.22.13/1605	1: Latoya R	11/22/13 6:05p
2:		2:	
3:		3:	

PROJECT INFORMATION
PROJECT NAME: Drexel Chemical
PROJECT #:
SITE ADDRESS: Cordele, GA
SEND REPORT TO: TBullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 24

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ☒ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Client: Environmental Planning Specialists, Inc.
Project: Drexel Chemical
Lab ID: 1311I58

Case Narrative

Antimony, arsenic, cadmium, chromium, copper, and lead were required for metals analysis per Timmerly Bullman via email on 11/22/2013.

Full list metals including mercury were required per Timmerly Bullman via email on 11/25/2013.

Pesticide Analysis by Method 8081B:

Due to sample matrix, samples 1311I58-001A, -002A, -004A, -008A, -011A and -012A required dilution during preparation resulting in elevated reporting limits.

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS1-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:30:00 AM
Lab ID:	1311I58-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.118		mg/Kg-dry	184180	1	11/26/2013 11:49	CG
CHLORINATED PESTICIDES SW8081B					**(SW3550C)**			
4,4´-DDD	2500	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
4,4´-DDE	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
4,4´-DDT	9900	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Aldrin	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
alpha-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
alpha-Chlordane	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
beta-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Chlordane	BRL	4000		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
delta-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Dieldrin	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Endosulfan I	3300	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Endosulfan II	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Endosulfan sulfate	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Endrin	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Endrin aldehyde	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Endrin ketone	BRL	400		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
gamma-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
gamma-Chlordane	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Heptachlor	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Heptachlor epoxide	BRL	200		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Methoxychlor	BRL	2000		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Toxaphene	120000	20000		ug/Kg-dry	184093	100	11/25/2013 19:45	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	184093	100	11/25/2013 19:45	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	184093	100	11/25/2013 19:45	KD
METALS, TOTAL SW6010C					**(SW3050B)**			
Aluminum	12800	59.3		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Antimony	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Arsenic	12.3	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Barium	20.6	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Beryllium	BRL	2.96		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Cadmium	BRL	2.96		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Calcium	3070	59.3		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Chromium	29.9	2.96		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Cobalt	BRL	2.96		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Copper	172	2.96		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Iron	30100	593		mg/Kg-dry	184100	10	11/26/2013 19:46	JL
Lead	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS1-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:30:00 AM
Lab ID:	1311I58-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	141	59.3		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Manganese	11.8	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Molybdenum	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Nickel	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Potassium	346	119		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Selenium	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Silver	BRL	2.96		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Sodium	BRL	119		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Thallium	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Tin	BRL	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Titanium	68.8	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Vanadium	99.9	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
Zinc	124	5.93		mg/Kg-dry	184100	1	11/25/2013 14:21	JL
PERCENT MOISTURE D2216								
Percent Moisture	16.0	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS2-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:35:00 AM
Lab ID:	1311I58-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.111		mg/Kg-dry	184180	1	11/26/2013 12:02	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	3300	370		ug/Kg-dry	184093	100	11/25/2013 20:18	KD
4,4´-DDE	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
4,4´-DDT	3000	370		ug/Kg-dry	184093	100	11/25/2013 20:18	KD
Aldrin	BRL	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
alpha-BHC	380	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
alpha-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
beta-BHC	130	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Chlordane	BRL	370		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
delta-BHC	42	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Dieldrin	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Endosulfan I	54	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Endosulfan II	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Endosulfan sulfate	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Endrin	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Endrin aldehyde	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Endrin ketone	BRL	37		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
gamma-BHC	65	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
gamma-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Heptachlor	BRL	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Heptachlor epoxide	BRL	19		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Methoxychlor	BRL	190		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Toxaphene	3200	1900		ug/Kg-dry	184093	10	11/25/2013 20:07	KD
Surr: Decachlorobiphenyl	88.8	25.2-120		%REC	184093	1	11/25/2013 15:10	KD
Surr: Tetrachloro-m-xylene	66.2	30.5-120		%REC	184093	1	11/25/2013 15:10	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7900	51.2		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Antimony	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Arsenic	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Barium	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Beryllium	BRL	2.56		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Cadmium	BRL	2.56		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Calcium	2040	51.2		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Chromium	9.58	2.56		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Cobalt	BRL	2.56		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Copper	111	2.56		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Iron	10400	512		mg/Kg-dry	184100	10	11/26/2013 19:50	JL
Lead	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS2-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:35:00 AM
Lab ID:	1311I58-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	180	51.2		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Manganese	10.7	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Molybdenum	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Nickel	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Potassium	159	102		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Selenium	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Silver	BRL	2.56		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Sodium	BRL	102		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Thallium	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Tin	BRL	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Titanium	42.0	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Vanadium	37.2	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
Zinc	37.9	5.12		mg/Kg-dry	184100	1	11/25/2013 14:24	JL
PERCENT MOISTURE D2216								
Percent Moisture	10.1	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS3-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:40:00 AM
Lab ID:	1311I58-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.111		mg/Kg-dry	184180	1	11/26/2013 12:09	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	49	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
4,4´-DDE	BRL	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
4,4´-DDT	140	37		ug/Kg-dry	184093	10	11/25/2013 20:40	KD
Aldrin	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
beta-BHC	5.1	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Chlordane	160	37		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
delta-BHC	6.3	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Dieldrin	BRL	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Endosulfan I	24	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Endosulfan II	BRL	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Endosulfan sulfate	BRL	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Endrin	BRL	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Endrin aldehyde	BRL	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Endrin ketone	7.9	3.7		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
gamma-BHC	3.8	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Heptachlor	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Methoxychlor	BRL	19		ug/Kg-dry	184093	1	11/25/2013 15:21	KD
Toxaphene	1900	1900		ug/Kg-dry	184093	10	11/25/2013 20:40	KD
Surr: Decachlorobiphenyl	94.3	25.2-120		%REC	184093	1	11/25/2013 15:21	KD
Surr: Tetrachloro-m-xylene	81.5	30.5-120		%REC	184093	1	11/25/2013 15:21	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	10000	53.3		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Antimony	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Arsenic	5.37	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Barium	17.1	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Beryllium	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Cadmium	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Calcium	2330	53.3		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Chromium	19.7	2.67		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Cobalt	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Copper	99.3	2.67		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Iron	25100	533		mg/Kg-dry	184100	10	11/26/2013 19:01	JL
Lead	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS3-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:40:00 AM
Lab ID:	1311I58-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	226	53.3		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Manganese	16.0	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Molybdenum	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Nickel	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Potassium	178	107		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Selenium	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Silver	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Sodium	BRL	107		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Thallium	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Tin	BRL	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Titanium	73.7	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Vanadium	65.5	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
Zinc	92.6	5.33		mg/Kg-dry	184100	1	11/25/2013 13:55	JL
PERCENT MOISTURE D2216								
Percent Moisture	10.3	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS4-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:45:00 AM
Lab ID:	1311I58-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.115		mg/Kg-dry	184180	1	11/26/2013 12:11	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	870	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
4,4´-DDE	100	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
4,4´-DDT	1700	380		ug/Kg-dry	184093	100	11/25/2013 20:51	KD
Aldrin	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
alpha-BHC	85	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
alpha-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
beta-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Chlordane	1400	380		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
delta-BHC	71	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Dieldrin	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Endosulfan I	140	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Endosulfan II	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Endosulfan sulfate	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Endrin	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Endrin aldehyde	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Endrin ketone	55	38		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
gamma-BHC	41	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
gamma-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Heptachlor	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Heptachlor epoxide	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Methoxychlor	BRL	190		ug/Kg-dry	184093	10	11/25/2013 17:21	KD
Toxaphene	BRL	19000		ug/Kg-dry	184093	100	11/25/2013 20:51	KD
Surr: Decachlorobiphenyl	99.7	25.2-120		%REC	184093	10	11/25/2013 17:21	KD
Surr: Tetrachloro-m-xylene	64.7	30.5-120		%REC	184093	10	11/25/2013 17:21	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	16400	54.2		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Antimony	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Arsenic	5.45	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Barium	11.5	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Beryllium	BRL	2.71		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Cadmium	BRL	2.71		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Calcium	14400	54.2		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Chromium	22.8	2.71		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Cobalt	BRL	2.71		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Copper	258	2.71		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Iron	16000	542		mg/Kg-dry	184100	10	11/26/2013 20:00	JL
Lead	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS4-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:45:00 AM
Lab ID:	1311I58-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	247	54.2		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Manganese	28.9	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Molybdenum	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Nickel	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Potassium	393	108		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Selenium	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Silver	BRL	2.71		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Sodium	131	108		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Thallium	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Tin	BRL	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Titanium	57.9	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Vanadium	51.3	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
Zinc	55.5	5.42		mg/Kg-dry	184100	1	11/25/2013 14:28	JL
PERCENT MOISTURE D2216								
Percent Moisture	13.5	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS5-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:50:00 AM
Lab ID:	1311I58-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.113		mg/Kg-dry	184180	1	11/26/2013 12:13	CG
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	6870	56.5		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Antimony	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Arsenic	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Barium	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Beryllium	BRL	2.83		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Cadmium	BRL	2.83		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Calcium	1850	56.5		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Chromium	8.24	2.83		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Cobalt	BRL	2.83		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Copper	38.0	2.83		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Iron	10600	565		mg/Kg-dry	184100	10	11/26/2013 20:04	JL
Lead	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Magnesium	191	56.5		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Manganese	18.9	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Molybdenum	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Nickel	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Potassium	156	113		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Selenium	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Silver	BRL	2.83		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Sodium	BRL	113		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Thallium	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Tin	BRL	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Titanium	50.7	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Vanadium	35.1	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
Zinc	39.4	5.65		mg/Kg-dry	184100	1	11/25/2013 14:41	JL
PERCENT MOISTURE D2216								
Percent Moisture	12.0	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-CS6-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 10:55:00 AM
Lab ID:	1311I58-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.109		mg/Kg-dry	184180	1	11/26/2013 12:15	CG
METALS, TOTAL SW6010C					**(SW3050B)**			
Aluminum	7140	53.9		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Antimony	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Arsenic	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Barium	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Beryllium	BRL	2.69		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Cadmium	BRL	2.69		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Calcium	1800	53.9		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Chromium	20.2	2.69		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Cobalt	BRL	2.69		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Copper	29.1	2.69		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Iron	19800	539		mg/Kg-dry	184100	10	11/26/2013 20:07	JL
Lead	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Magnesium	147	53.9		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Manganese	13.8	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Molybdenum	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Nickel	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Potassium	118	108		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Selenium	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Silver	BRL	2.69		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Sodium	BRL	108		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Thallium	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Tin	BRL	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Titanium	60.5	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Vanadium	56.1	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
Zinc	14.9	5.39		mg/Kg-dry	184100	1	11/25/2013 14:45	JL
PERCENT MOISTURE D2216								
Percent Moisture	10.5	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS1-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 11:30:00 AM
Lab ID:	1311I58-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.109		mg/Kg-dry	184180	1	11/26/2013 12:18	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
4,4´-DDE	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
4,4´-DDT	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Aldrin	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
alpha-BHC	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
alpha-Chlordane	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
beta-BHC	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Chlordane	BRL	36		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
delta-BHC	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Dieldrin	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Endosulfan I	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Endosulfan II	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Endosulfan sulfate	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Endrin	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Endrin aldehyde	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Endrin ketone	BRL	3.6		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
gamma-BHC	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
gamma-Chlordane	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Heptachlor	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Heptachlor epoxide	BRL	1.8		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Methoxychlor	BRL	18		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Toxaphene	BRL	180		ug/Kg-dry	184093	1	11/26/2013 12:26	KD
Surr: Decachlorobiphenyl	90.3	25.2-120		%REC	184093	1	11/26/2013 12:26	KD
Surr: Tetrachloro-m-xylene	69.4	30.5-120		%REC	184093	1	11/26/2013 12:26	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7130	52.9		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Antimony	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Arsenic	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Barium	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Beryllium	BRL	2.64		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Cadmium	BRL	2.64		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Calcium	1490	52.9		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Chromium	14.1	2.64		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Cobalt	BRL	2.64		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Copper	3.68	2.64		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Iron	16400	529		mg/Kg-dry	184100	10	11/26/2013 20:11	JL
Lead	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS1-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 11:30:00 AM
Lab ID:	1311I58-007	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	BRL	52.9		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Manganese	8.84	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Molybdenum	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Nickel	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Potassium	107	106		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Selenium	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Silver	BRL	2.64		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Sodium	BRL	106		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Thallium	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Tin	BRL	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Titanium	56.7	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Vanadium	57.8	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
Zinc	8.93	5.29		mg/Kg-dry	184100	1	11/25/2013 14:49	JL
PERCENT MOISTURE D2216								
Percent Moisture	8.79	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS2-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 11:35:00 AM
Lab ID:	1311I58-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.113		mg/Kg-dry	184180	1	11/26/2013 12:20	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	200	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
4,4´-DDE	74	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
4,4´-DDT	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Aldrin	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
alpha-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
alpha-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
beta-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Chlordane	430	380		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
delta-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Dieldrin	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Endosulfan I	38	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Endosulfan II	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Endosulfan sulfate	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Endrin	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Endrin aldehyde	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Endrin ketone	BRL	38		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
gamma-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
gamma-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Heptachlor	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Heptachlor epoxide	BRL	19		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Methoxychlor	BRL	190		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Toxaphene	BRL	1900		ug/Kg-dry	184093	10	11/25/2013 17:55	KD
Surr: Decachlorobiphenyl	96.4	25.2-120		%REC	184093	10	11/25/2013 17:55	KD
Surr: Tetrachloro-m-xylene	67.5	30.5-120		%REC	184093	10	11/25/2013 17:55	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7830	53.2		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Antimony	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Arsenic	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Barium	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Beryllium	BRL	2.66		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Cadmium	BRL	2.66		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Calcium	2070	53.2		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Chromium	14.1	2.66		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Cobalt	BRL	2.66		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Copper	135	2.66		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Iron	21800	532		mg/Kg-dry	184100	10	11/26/2013 20:14	JL
Lead	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS2-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 11:35:00 AM
Lab ID:	1311I58-008	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	BRL	53.2		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Manganese	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Molybdenum	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Nickel	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Potassium	BRL	106		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Selenium	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Silver	BRL	2.66		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Sodium	BRL	106		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Thallium	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Tin	BRL	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Titanium	60.3	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Vanadium	72.4	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
Zinc	23.7	5.32		mg/Kg-dry	184100	1	11/25/2013 14:53	JL
PERCENT MOISTURE D2216								
Percent Moisture	13.3	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS3-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:00:00 PM
Lab ID:	1311I58-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.111		mg/Kg-dry	184180	1	11/26/2013 12:22	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
4,4´-DDE	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
4,4´-DDT	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Aldrin	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
beta-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Chlordane	BRL	38		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
delta-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Dieldrin	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Endosulfan II	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Endosulfan sulfate	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Endrin	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Endrin aldehyde	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Endrin ketone	BRL	3.8		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Heptachlor	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Methoxychlor	BRL	19		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Toxaphene	BRL	190		ug/Kg-dry	184093	1	11/25/2013 22:40	KD
Surr: Decachlorobiphenyl	95.4	25.2-120		%REC	184093	1	11/25/2013 22:40	KD
Surr: Tetrachloro-m-xylene	79.5	30.5-120		%REC	184093	1	11/25/2013 22:40	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	5640	52.7		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Antimony	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Arsenic	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Barium	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Beryllium	BRL	2.63		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Cadmium	BRL	2.63		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Calcium	1160	52.7		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Chromium	9.24	2.63		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Cobalt	BRL	2.63		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Copper	3.12	2.63		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Iron	11600	527		mg/Kg-dry	184100	10	11/26/2013 20:18	JL
Lead	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS3-5
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:00:00 PM
Lab ID:	1311I58-009	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	75.6	52.7		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Manganese	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Molybdenum	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Nickel	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Potassium	127	105		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Selenium	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Silver	BRL	2.63		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Sodium	BRL	105		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Thallium	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Tin	BRL	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Titanium	58.1	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Vanadium	43.4	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
Zinc	6.63	5.27		mg/Kg-dry	184100	1	11/25/2013 14:56	JL
PERCENT MOISTURE D2216								
Percent Moisture	11.9	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS4-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:15:00 PM
Lab ID:	1311I58-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.113		mg/Kg-dry	184180	1	11/26/2013 12:24	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
4,4´-DDE	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
4,4´-DDT	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Aldrin	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
beta-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Chlordane	BRL	38		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
delta-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Dieldrin	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Endosulfan II	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Endosulfan sulfate	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Endrin	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Endrin aldehyde	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Endrin ketone	BRL	3.8		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Heptachlor	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Methoxychlor	BRL	19		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Toxaphene	BRL	190		ug/Kg-dry	184093	1	11/26/2013 12:37	KD
Surr: Decachlorobiphenyl	92.7	25.2-120		%REC	184093	1	11/26/2013 12:37	KD
Surr: Tetrachloro-m-xylene	69.1	30.5-120		%REC	184093	1	11/26/2013 12:37	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7050	53.0		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Antimony	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Arsenic	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Barium	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Beryllium	BRL	2.65		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Cadmium	BRL	2.65		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Calcium	1980	53.0		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Chromium	12.0	2.65		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Cobalt	BRL	2.65		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Copper	5.30	2.65		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Iron	19400	530		mg/Kg-dry	184100	10	11/26/2013 20:22	JL
Lead	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS4-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:15:00 PM
Lab ID:	1311I58-010	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	79.0	53.0		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Manganese	12.7	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Molybdenum	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Nickel	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Potassium	203	106		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Selenium	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Silver	BRL	2.65		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Sodium	BRL	106		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Thallium	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Tin	BRL	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Titanium	68.2	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Vanadium	61.9	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
Zinc	11.8	5.30		mg/Kg-dry	184100	1	11/25/2013 15:07	JL
PERCENT MOISTURE D2216								
Percent Moisture	13.1	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS5-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:25:00 PM
Lab ID:	1311I58-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.114		mg/Kg-dry	184180	1	11/26/2013 12:26	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	270	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
4,4´-DDE	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
4,4´-DDT	960	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Aldrin	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
alpha-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
alpha-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
beta-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Chlordane	2700	380		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
delta-BHC	32	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Dieldrin	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Endosulfan I	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Endosulfan II	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Endosulfan sulfate	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Endrin	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Endrin aldehyde	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Endrin ketone	BRL	38		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
gamma-BHC	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
gamma-Chlordane	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Heptachlor	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Heptachlor epoxide	BRL	19		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Methoxychlor	BRL	190		ug/Kg-dry	184093	10	11/25/2013 18:29	KD
Toxaphene	25000	19000		ug/Kg-dry	184093	100	11/25/2013 21:45	KD
Surr: Decachlorobiphenyl	91.8	25.2-120		%REC	184093	10	11/25/2013 18:29	KD
Surr: Tetrachloro-m-xylene	63	30.5-120		%REC	184093	10	11/25/2013 18:29	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4960	55.3		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Antimony	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Arsenic	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Barium	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Beryllium	BRL	2.77		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Cadmium	BRL	2.77		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Calcium	1150	55.3		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Chromium	7.17	2.77		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Cobalt	BRL	2.77		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Copper	3.73	2.77		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Iron	13400	553		mg/Kg-dry	184100	10	11/26/2013 20:25	JL
Lead	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS5-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:25:00 PM
Lab ID:	1311I58-011	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	93.6	55.3		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Manganese	5.88	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Molybdenum	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Nickel	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Potassium	398	111		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Selenium	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Silver	BRL	2.77		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Sodium	BRL	111		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Thallium	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Tin	BRL	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Titanium	60.2	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Vanadium	42.9	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
Zinc	5.75	5.53		mg/Kg-dry	184100	1	11/25/2013 15:10	JL
PERCENT MOISTURE D2216								
Percent Moisture	12.9	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS6-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:30:00 PM
Lab ID:	1311I58-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.121		mg/Kg-dry	184180	1	11/26/2013 12:29	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	2500	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
4,4´-DDE	BRL	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
4,4´-DDT	660	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Aldrin	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
alpha-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
alpha-Chlordane	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
beta-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Chlordane	8200	4000		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
delta-BHC	210	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Dieldrin	BRL	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Endosulfan I	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Endosulfan II	BRL	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Endosulfan sulfate	BRL	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Endrin	1300	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Endrin aldehyde	BRL	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Endrin ketone	780	400		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
gamma-BHC	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
gamma-Chlordane	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Heptachlor	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Heptachlor epoxide	BRL	200		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Methoxychlor	BRL	2000		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Toxaphene	61000	20000		ug/Kg-dry	184093	100	11/25/2013 21:56	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	184093	100	11/25/2013 21:56	KD
Surr: Tetrachloro-m-xylene	67.9	30.5-120		%REC	184093	10	11/25/2013 18:39	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7200	57.9		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Antimony	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Arsenic	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Barium	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Beryllium	BRL	2.90		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Cadmium	BRL	2.90		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Calcium	1920	57.9		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Chromium	15.9	2.90		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Cobalt	BRL	2.90		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Copper	6.07	2.90		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Iron	24500	579		mg/Kg-dry	184100	10	11/26/2013 20:43	JL
Lead	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-CS6-9
Project Name:	Drexel Chemical	**Collection Date:**	11/22/2013 1:30:00 PM
Lab ID:	1311I58-012	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	120	57.9		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Manganese	6.75	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Molybdenum	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Nickel	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Potassium	544	116		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Selenium	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Silver	BRL	2.90		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Sodium	BRL	116		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Thallium	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Tin	BRL	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Titanium	65.6	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Vanadium	71.9	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
Zinc	15.9	5.79		mg/Kg-dry	184100	1	11/25/2013 15:14	JL
PERCENT MOISTURE D2216								
Percent Moisture	17.5	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1311I58

Checklist completed by Adam B 11/22/13
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184093

Sample ID: **MB-184093** Client ID: Units: **ug/Kg** Prep Date: **11/25/2013** Run No: **256551**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/25/2013** Seq No: **5388626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	13.83	0	16.67		82.9	25.2	120				
Surr: Tetrachloro-m-xylene	12.33	0	16.67		74.0	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184093

Sample ID: **LCS-184093** Client ID: Units: **ug/Kg** Prep Date: **11/25/2013** Run No: **256551**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/25/2013** Seq No: **5388630**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	30.77	3.3	33.33		92.3	44.7	136				
Aldrin	26.35	1.7	33.33		79.1	41.5	118				
Dieldrin	31.74	3.3	33.33		95.2	44.3	133				
Endrin	31.91	3.3	33.33		95.7	43.2	137				
gamma-BHC	26.60	1.7	33.33		79.8	40.3	126				
Heptachlor	27.62	1.7	33.33		82.9	40.1	126				
Surr: Decachlorobiphenyl	14.28	0	16.67		85.7	25.2	120				
Surr: Tetrachloro-m-xylene	10.12	0	16.67		60.7	30.5	120				

Sample ID: **1311I58-001AMS** Client ID: **13326-SI15-CS1-5** Units: **ug/Kg-dry** Prep Date: **11/25/2013** Run No: **256624**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/26/2013** Seq No: **5391552**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	4328	400	39.56	9880	-14000	33.6	126				S
Aldrin	BRL	200	39.56		153	32.6	120				S
Dieldrin	922.8	400	39.56		2330	35.1	124				S
Endrin	1204	400	39.56		3040	39.7	129				S
gamma-BHC	BRL	200	39.56		102	35.2	120				
Heptachlor	515.1	200	39.56		1300	34.9	119				S
Surr: Decachlorobiphenyl	0	0	19.79		0	25.2	120				S
Surr: Tetrachloro-m-xylene	0	0	19.79		0	30.5	120				S

Sample ID: **1311I58-001AMSD** Client ID: **13326-SI15-CS1-5** Units: **ug/Kg-dry** Prep Date: **11/25/2013** Run No: **256624**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/26/2013** Seq No: **5391555**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	6728	400	39.64	9880	-7950	33.6	126	4328	43.4	28.1	SR
Aldrin	BRL	200	39.64		227	32.6	120	60.50	0	29.9	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184093

Sample ID: **1311I58-001AMSD** Client ID: **13326-SI15-CS1-5** Units: **ug/Kg-dry** Prep Date: **11/25/2013** Run No: **256624**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/26/2013** Seq No: **5391555**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	977.4	400	39.64		2470	35.1	124	922.8	5.74	26.6	S
Endrin	1301	400	39.64		3280	39.7	129	1204	7.74	27.6	S
gamma-BHC	BRL	200	39.64		112	35.2	120	40.48	0	28.6	
Heptachlor	365.1	200	39.64		921	34.9	119	515.1	34.1	27.7	SR
Surr: Decachlorobiphenyl	0	0	19.83		0	25.2	120	0	0	30	S
Surr: Tetrachloro-m-xylene	0	0	19.83		0	30.5	120	0	0	30	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **MB-184100** Client ID: Units: **mg/Kg** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388298**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Potassium	BRL	100									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **LCS-184100** Client ID: Units: **mg/Kg** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388296**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	460.6	50.0	500.0	0.5860	92.0	80	120				
Antimony	48.78	5.00	50.00		97.6	80	120				
Arsenic	49.24	5.00	50.00		98.5	80	120				
Barium	48.89	5.00	50.00		97.8	80	120				
Beryllium	48.21	2.50	50.00		96.4	80	120				
Cadmium	48.03	2.50	50.00		96.1	80	120				
Calcium	470.2	50.0	500.0	8.820	92.3	80	120				
Chromium	50.31	2.50	50.00	0.1339	100	80	120				
Cobalt	49.29	2.50	50.00		98.6	80	120				
Copper	48.80	2.50	50.00		97.6	80	120				
Iron	477.5	50.0	500.0	1.972	95.1	80	120				
Lead	48.73	5.00	50.00		97.5	80	120				
Magnesium	470.0	50.0	500.0	0.6722	93.9	80	120				
Manganese	50.63	5.00	50.00	0.04257	101	80	120				
Molybdenum	49.32	5.00	50.00		98.6	80	120				
Nickel	48.57	5.00	50.00		97.1	80	120				
Potassium	437.2	100	500.0	0.9417	87.2	80	120				
Selenium	49.38	5.00	50.00		98.8	80	120				
Silver	4.773	2.50	5.000		95.5	80	120				
Sodium	453.0	100	500.0	3.155	90.0	80	120				
Thallium	46.96	5.00	50.00		93.9	80	120				
Tin	49.91	5.00	50.00	1.128	97.6	80	120				
Titanium	49.67	5.00	50.00	0.05451	99.2	80	120				
Vanadium	49.23	5.00	50.00		98.5	80	120				
Zinc	46.84	5.00	50.00	0.1540	93.4	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **1311I58-003AMS** Client ID: **13326-SI15-CS3-5** Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388304**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	12530	53.4	534.4	10050	465	75	125				S
Antimony	34.33	5.34	53.44	0.2853	63.7	75	125				S
Arsenic	53.95	5.34	53.44	5.375	90.9	75	125				
Barium	66.47	5.34	53.44	17.06	92.5	75	125				
Beryllium	50.11	2.67	53.44	0.2102	93.4	75	125				
Cadmium	50.01	2.67	53.44	0.1242	93.4	75	125				
Calcium	3243	53.4	534.4	2327	171	75	125				S
Chromium	71.41	2.67	53.44	19.74	96.7	75	125				
Cobalt	51.07	2.67	53.44	1.216	93.3	75	125				
Copper	141.0	2.67	53.44	99.33	77.9	75	125				
Lead	51.51	5.34	53.44	4.098	88.7	75	125				
Magnesium	700.4	53.4	534.4	226.1	88.8	75	125				
Manganese	64.88	5.34	53.44	15.97	91.5	75	125				
Molybdenum	47.91	5.34	53.44	0.9886	87.8	75	125				
Nickel	49.94	5.34	53.44	2.201	89.3	75	125				
Potassium	804.5	107	534.4	177.6	117	75	125				
Selenium	45.35	5.34	53.44		84.9	75	125				
Silver	5.029	2.67	5.344	0.05472	93.1	75	125				
Sodium	566.5	107	534.4	42.38	98.1	75	125				
Thallium	45.72	5.34	53.44		85.6	75	125				
Tin	49.61	5.34	53.44	1.655	89.7	75	125				
Titanium	120.0	5.34	53.44	73.66	86.7	75	125				
Vanadium	138.6	5.34	53.44	65.50	137	75	125				S
Zinc	191.6	5.34	53.44	92.55	185	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **1311I58-003AMS** Client ID: **13326-SI15-CS3-5** Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/26/2013** Seq No: **5391856**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	29060	534	534.4	25060	747	75	125				S

Sample ID: **1311I58-003AMSD** Client ID: **13326-SI15-CS3-5** Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388307**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	12080	53.5	535.0	10050	380	75	125	12530	3.67	20	S
Antimony	32.69	5.35	53.50	0.2853	60.6	75	125	34.33	4.89	20	S
Arsenic	57.82	5.35	53.50	5.375	98.0	75	125	53.95	6.92	20	
Barium	62.41	5.35	53.50	17.06	84.8	75	125	66.47	6.31	20	
Beryllium	51.57	2.67	53.50	0.2102	96.0	75	125	50.11	2.87	20	
Cadmium	50.55	2.67	53.50	0.1242	94.3	75	125	50.01	1.06	20	
Calcium	3823	53.5	535.0	2327	280	75	125	3243	16.4	20	S
Chromium	87.81	2.67	53.50	19.74	127	75	125	71.41	20.6	20	SR
Cobalt	50.46	2.67	53.50	1.216	92.0	75	125	51.07	1.21	20	
Copper	142.0	2.67	53.50	99.33	79.8	75	125	141.0	0.732	20	
Lead	53.04	5.35	53.50	4.098	91.5	75	125	51.51	2.91	20	
Magnesium	661.9	53.5	535.0	226.1	81.5	75	125	700.4	5.65	20	
Manganese	64.64	5.35	53.50	15.97	91.0	75	125	64.88	0.356	20	
Molybdenum	48.33	5.35	53.50	0.9886	88.5	75	125	47.91	0.861	20	
Nickel	49.61	5.35	53.50	2.201	88.6	75	125	49.94	0.659	20	
Potassium	775.9	107	535.0	177.6	112	75	125	804.5	3.62	20	
Selenium	44.51	5.35	53.50		83.2	75	125	45.35	1.89	20	
Silver	5.184	2.67	5.350	0.05472	95.9	75	125	5.029	3.03	20	
Sodium	569.3	107	535.0	42.38	98.5	75	125	566.5	0.488	20	
Thallium	46.48	5.35	53.50		86.9	75	125	45.72	1.65	20	
Tin	49.76	5.35	53.50	1.655	89.9	75	125	49.61	0.301	20	
Titanium	135.2	5.35	53.50	73.66	115	75	125	120.0	11.9	20	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **1311I58-003AMSD** Client ID: **13326-SI15-CS3-5** Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388307**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Vanadium	172.2	5.35	53.50	65.50	200	75	125	138.6	21.7	20	SR
Zinc	86.22	5.35	53.50	92.55	-11.8	75	125	191.6	75.8	20	SR

Sample ID: **1311I58-003AMSD** Client ID: **13326-SI15-CS3-5** Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/26/2013** Seq No: **5391858**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	40030	535	535.0	25060	2800	75	125	29060	31.8	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical
Workorder: 1311I58

ANALYTICAL QC SUMMARY REPORT

BatchID: 184180

Sample ID: **MB-184180** Client ID: Units: **mg/Kg** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389788**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184180** Client ID: Units: **mg/Kg** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389791**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3714	0.100	0.4000		92.9	80	120				

Sample ID: **1311I58-001AMS** Client ID: **13326-SI15-CS1-5** Units: **mg/Kg-dry** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389797**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4765	0.118	0.4732		101	70	130				

Sample ID: **1311I58-001AMSD** Client ID: **13326-SI15-CS1-5** Units: **mg/Kg-dry** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389800**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4742	0.118	0.4713		101	70	130	0.4765	0.489	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

November 29, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel

Dear Timmerly Bullman: Order No: 1311I88

Analytical Environmental Services, Inc. received 5 samples on 11/23/2013 11:50:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC

3785 Presidential Parkway, Atlanta GA 30340-3704

AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1311I88

Date: 11-22-13 Page 1 of 1

COMPANY: EPS inc

ADDRESS: 1050 Crown Pointe Pkwy Ste 550 Atlanta, GA 30338

PHONE: 404-315-9113

FAX:

SAMPLED BY: G. Henry

SIGNATURE:

ANALYSIS REQUESTED: VOC 8260; Metals; Pesticides 8081

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOC 8260 (H+I)	Metals (I)	Pesticides 8081 (I)	REMARKS	No # of Containers
1	13326-S115-Pipe1-8	11-22-13	1100	X		SO	X	X	X		6
2	13326-S115-Pipe1-Contents	11-22-13	1140	X		SE	X	X	X		6
3	13326-S120-Pipe1-3	11-22-13	1315	X		SO	X	X	X		6
4	13326-S120-Pipe2-3	11-22-13	1350	X		SO	X	X	X		6
5	13326-S120-Pipe3-3	11-22-13	1345	X		SO	X	X	X		6
6											
7											
8											
9											
10											
11											
12											
13											
14											

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	11-23-13 / 1150	1:	11/25/13
2:		2:	11:50AM 23 11/23/13
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER_____

PROJECT INFORMATION

PROJECT NAME: Drexel

PROJECT #:

SITE ADDRESS: Candler, Ga

SEND REPORT TO: TBrummer@envplanning.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #:_____ PO#:_____

RECEIPT

Total # of Containers: 30

Turnaround Time Request

- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ⊗ Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 2-Dec-13

Client: Environmental Planning Specialists, Inc.
Project: Drexel
Lab ID: 1311I88

Case Narrative

Volatile Organic Compounds Analysis by Method 8260B:

Acetone values for samples 1311I88-003A and -005A are "E" qualified indicating estimated values over linear calibration range. Samples were diluted and reanalyzed with the analyte being below the reporting limit.

Antimony, arsenic, cadmium, chromium, copper, and lead were required for metals analysis per Timmerly Bullman via email on 11/22/2013.

Full list metals including Hg were required per Timmerly Bullman via email on 11/25/2013.

Pesticide Analysis by Method 8081B:

Due to sample matrix, sample 1311I88-001D required dilution during analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-PIPE1-8
Project Name:	Drexel	**Collection Date:**	11/22/2013 11:00:00 AM
Lab ID:	1311I88-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.125		mg/Kg-dry	184180	1	11/26/2013 12:35	CG
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**			
1,1,1-Trichloroethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,1,2,2-Tetrachloroethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,1,2-Trichloroethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,1-Dichloroethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,1-Dichloroethene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,2,4-Trichlorobenzene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,2-Dibromo-3-chloropropane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,2-Dibromoethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,2-Dichlorobenzene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,2-Dichloroethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,2-Dichloropropane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,3-Dichlorobenzene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
1,4-Dichlorobenzene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
2-Butanone	BRL	0.042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
2-Hexanone	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
4-Methyl-2-pentanone	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Acetone	0.16	0.085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Benzene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Bromodichloromethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Bromoform	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Bromomethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Carbon disulfide	0.020	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Carbon tetrachloride	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Chlorobenzene	0.012	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Chloroethane	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Chloroform	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Chloromethane	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
cis-1,2-Dichloroethene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
cis-1,3-Dichloropropene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Cyclohexane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Dibromochloromethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Dichlorodifluoromethane	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Ethylbenzene	0.061	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Freon-113	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Isopropylbenzene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
m,p-Xylene	0.041	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Methyl acetate	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Methyl tert-butyl ether	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-PIPE1-8
Project Name:	Drexel	**Collection Date:**	11/22/2013 11:00:00 AM
Lab ID:	1311I88-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Methylene chloride	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
o-Xylene	0.060	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Styrene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Tetrachloroethene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Toluene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
trans-1,2-Dichloroethene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
trans-1,3-Dichloropropene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Trichloroethene	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Trichlorofluoromethane	BRL	0.0042		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Vinyl chloride	BRL	0.0085		mg/Kg-dry	184105	1	11/25/2013 13:38	MD
Surr: 4-Bromofluorobenzene	112	70-128		%REC	184105	1	11/25/2013 13:38	MD
Surr: Dibromofluoromethane	114	78.2-128		%REC	184105	1	11/25/2013 13:38	MD
Surr: Toluene-d8	92.8	76.5-116		%REC	184105	1	11/25/2013 13:38	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	850	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
4,4´-DDE	BRL	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
4,4´-DDT	1500	420		ug/Kg-dry	184093	100	11/25/2013 22:18	KD
Aldrin	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
alpha-BHC	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
alpha-Chlordane	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
beta-BHC	23	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Chlordane	BRL	420		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
delta-BHC	30	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Dieldrin	BRL	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Endosulfan I	1600	210		ug/Kg-dry	184093	100	11/25/2013 22:18	KD
Endosulfan II	1300	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Endosulfan sulfate	BRL	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Endrin	BRL	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Endrin aldehyde	BRL	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Endrin ketone	260	42		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
gamma-BHC	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
gamma-Chlordane	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Heptachlor	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Heptachlor epoxide	BRL	21		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Methoxychlor	BRL	210		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Toxaphene	10000	2100		ug/Kg-dry	184093	10	11/25/2013 18:50	KD
Surr: Decachlorobiphenyl	114	25.2-120		%REC	184093	10	11/25/2013 18:50	KD
Surr: Tetrachloro-m-xylene	56.6	30.5-120		%REC	184093	10	11/25/2013 18:50	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-PIPE1-8
Project Name:	Drexel	**Collection Date:**	11/22/2013 11:00:00 AM
Lab ID:	1311I88-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	22600	59.0		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Antimony	BRL	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Arsenic	117	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Barium	60.8	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Beryllium	BRL	2.95		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Cadmium	45.6	2.95		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Calcium	28600	59.0		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Chromium	74.9	2.95		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Cobalt	3.07	2.95		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Copper	4230	2.95		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Iron	13700	590		mg/Kg-dry	184100	10	11/26/2013 20:46	JL
Lead	BRL	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Magnesium	300	59.0		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Manganese	113	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Molybdenum	BRL	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Nickel	14.8	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Potassium	1990	118		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Selenium	BRL	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Silver	BRL	2.95		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Sodium	278	118		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Thallium	BRL	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Tin	BRL	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Titanium	205	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Vanadium	94.6	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
Zinc	3490	5.90		mg/Kg-dry	184100	1	11/25/2013 15:18	JL
PERCENT MOISTURE D2216								
Percent Moisture	21.9	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-PIPE1-CONTENTS
Project Name:	Drexel	**Collection Date:**	11/22/2013 11:40:00 AM
Lab ID:	1311I88-002	**Matrix:**	Sediment

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.160		mg/Kg-dry	184180	1	11/26/2013 12:37	CG
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**			
1,1,1-Trichloroethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,1,2,2-Tetrachloroethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,1,2-Trichloroethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,1-Dichloroethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,1-Dichloroethene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,2,4-Trichlorobenzene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,2-Dibromo-3-chloropropane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,2-Dibromoethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,2-Dichlorobenzene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,2-Dichloroethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,2-Dichloropropane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,3-Dichlorobenzene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
1,4-Dichlorobenzene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
2-Butanone	BRL	0.049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
2-Hexanone	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
4-Methyl-2-pentanone	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Acetone	0.18	0.097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Benzene	0.0063	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Bromodichloromethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Bromoform	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Bromomethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Carbon disulfide	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Carbon tetrachloride	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Chlorobenzene	0.026	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Chloroethane	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Chloroform	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Chloromethane	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
cis-1,2-Dichloroethene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
cis-1,3-Dichloropropene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Cyclohexane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Dibromochloromethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Dichlorodifluoromethane	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Ethylbenzene	0.091	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Freon-113	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Isopropylbenzene	0.0083	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
m,p-Xylene	0.061	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Methyl acetate	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Methyl tert-butyl ether	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-PIPE1-CONTENTS
Project Name:	Drexel	**Collection Date:**	11/22/2013 11:40:00 AM
Lab ID:	1311I88-002	**Matrix:**	Sediment

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Methylene chloride	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
o-Xylene	0.091	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Styrene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Tetrachloroethene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Toluene	0.0077	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
trans-1,2-Dichloroethene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
trans-1,3-Dichloropropene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Trichloroethene	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Trichlorofluoromethane	BRL	0.0049		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Vinyl chloride	BRL	0.0097		mg/Kg-dry	184105	1	11/25/2013 14:09	MD
Surr: 4-Bromofluorobenzene	111	70-128		%REC	184105	1	11/25/2013 14:09	MD
Surr: Dibromofluoromethane	112	78.2-128		%REC	184105	1	11/25/2013 14:09	MD
Surr: Toluene-d8	88.6	76.5-116		%REC	184105	1	11/25/2013 14:09	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
4,4´-DDE	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
4,4´-DDT	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Aldrin	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
alpha-BHC	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
alpha-Chlordane	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
beta-BHC	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Chlordane	BRL	54		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
delta-BHC	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Dieldrin	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Endosulfan I	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Endosulfan II	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Endosulfan sulfate	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Endrin	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Endrin aldehyde	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Endrin ketone	BRL	5.4		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
gamma-BHC	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
gamma-Chlordane	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Heptachlor	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Heptachlor epoxide	BRL	2.7		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Methoxychlor	BRL	27		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Toxaphene	BRL	270		ug/Kg-dry	184093	1	11/25/2013 23:02	KD
Surr: Decachlorobiphenyl	95.3	25.2-120		%REC	184093	1	11/25/2013 23:02	KD
Surr: Tetrachloro-m-xylene	62.6	30.5-120		%REC	184093	1	11/25/2013 23:02	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI15-PIPE1-CONTENTS
Project Name:	Drexel	**Collection Date:**	11/22/2013 11:40:00 AM
Lab ID:	1311I88-002	**Matrix:**	Sediment

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	30500	799		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Antimony	BRL	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Arsenic	187	79.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Barium	93.6	79.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Beryllium	BRL	3.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Cadmium	76.7	39.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Calcium	59900	799		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Chromium	91.5	39.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Cobalt	5.96	3.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Copper	12000	39.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Iron	20500	799		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Lead	BRL	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Magnesium	354	79.9		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Manganese	171	79.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Molybdenum	BRL	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Nickel	19.5	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Potassium	1830	1600		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Selenium	BRL	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Silver	6.17	3.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Sodium	444	160		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Thallium	BRL	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Tin	BRL	7.99		mg/Kg-dry	184100	1	11/25/2013 15:23	JL
Titanium	264	79.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Vanadium	147	79.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
Zinc	15300	79.9		mg/Kg-dry	184100	10	11/25/2013 17:36	JL
PERCENT MOISTURE D2216								
Percent Moisture	38.7	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE1-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:15:00 PM
Lab ID:	1311I88-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.116		mg/Kg-dry	184180	1	11/26/2013 12:40	CG
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**			
1,1,1-Trichloroethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,1,2,2-Tetrachloroethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,1,2-Trichloroethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,1-Dichloroethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,1-Dichloroethene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,2,4-Trichlorobenzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,2-Dibromo-3-chloropropane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,2-Dibromoethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,2-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,2-Dichloroethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,2-Dichloropropane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,3-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
1,4-Dichlorobenzene	0.0044	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
2-Butanone	0.054	0.032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
2-Hexanone	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
4-Methyl-2-pentanone	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Acetone	0.29	0.064	E	mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Benzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Bromodichloromethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Bromoform	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Bromomethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Carbon disulfide	0.014	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Carbon tetrachloride	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Chlorobenzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Chloroethane	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Chloroform	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Chloromethane	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
cis-1,2-Dichloroethene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
cis-1,3-Dichloropropene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Cyclohexane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Dibromochloromethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Dichlorodifluoromethane	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Ethylbenzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Freon-113	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Isopropylbenzene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
m,p-Xylene	0.0032	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Methyl acetate	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Methyl tert-butyl ether	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE1-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:15:00 PM
Lab ID:	1311I88-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Methylene chloride	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
o-Xylene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Styrene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Tetrachloroethene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Toluene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
trans-1,2-Dichloroethene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
trans-1,3-Dichloropropene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Trichloroethene	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Trichlorofluoromethane	BRL	0.0032		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Vinyl chloride	BRL	0.0064		mg/Kg-dry	184105	1	11/25/2013 16:16	MD
Surr: 4-Bromofluorobenzene	109	70-128		%REC	184105	1	11/25/2013 16:16	MD
Surr: Dibromofluoromethane	111	78.2-128		%REC	184105	1	11/25/2013 16:16	MD
Surr: Toluene-d8	87.5	76.5-116		%REC	184105	1	11/25/2013 16:16	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	4.7	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
4,4´-DDE	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
4,4´-DDT	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Aldrin	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
beta-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Chlordane	BRL	39		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
delta-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Endrin	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Endrin ketone	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Heptachlor	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Methoxychlor	BRL	19		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Toxaphene	BRL	190		ug/Kg-dry	184093	1	11/26/2013 12:49	KD
Surr: Decachlorobiphenyl	90.7	25.2-120		%REC	184093	1	11/26/2013 12:49	KD
Surr: Tetrachloro-m-xylene	72.5	30.5-120		%REC	184093	1	11/26/2013 12:49	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE1-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:15:00 PM
Lab ID:	1311I88-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	9320	53.4		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Antimony	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Arsenic	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Barium	16.0	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Beryllium	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Cadmium	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Calcium	7970	53.4		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Chromium	13.8	2.67		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Cobalt	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Copper	47.6	2.67		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Iron	11700	534		mg/Kg-dry	184100	10	11/26/2013 20:50	JL
Lead	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Magnesium	137	53.4		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Manganese	17.8	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Molybdenum	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Nickel	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Potassium	170	107		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Selenium	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Silver	BRL	2.67		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Sodium	BRL	107		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Thallium	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Tin	BRL	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Titanium	56.8	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Vanadium	40.2	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
Zinc	25.2	5.34		mg/Kg-dry	184100	1	11/25/2013 15:30	JL
PERCENT MOISTURE D2216								
Percent Moisture	14.0	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE 2-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:30:00 PM
Lab ID:	1311I88-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.116		mg/Kg-dry	184180	1	11/26/2013 12:42	CG
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**			
1,1,1-Trichloroethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,1,2,2-Tetrachloroethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,1,2-Trichloroethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,1-Dichloroethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,1-Dichloroethene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,2,4-Trichlorobenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,2-Dibromo-3-chloropropane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,2-Dibromoethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,2-Dichlorobenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,2-Dichloroethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,2-Dichloropropane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,3-Dichlorobenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
1,4-Dichlorobenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
2-Butanone	BRL	0.029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
2-Hexanone	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
4-Methyl-2-pentanone	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Acetone	0.085	0.058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Benzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Bromodichloromethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Bromoform	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Bromomethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Carbon disulfide	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Carbon tetrachloride	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Chlorobenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Chloroethane	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Chloroform	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Chloromethane	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
cis-1,2-Dichloroethene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
cis-1,3-Dichloropropene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Cyclohexane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Dibromochloromethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Dichlorodifluoromethane	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Ethylbenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Freon-113	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Isopropylbenzene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
m,p-Xylene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Methyl acetate	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Methyl tert-butyl ether	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE 2-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:30:00 PM
Lab ID:	1311I88-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Methylene chloride	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
o-Xylene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Styrene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Tetrachloroethene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Toluene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
trans-1,2-Dichloroethene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
trans-1,3-Dichloropropene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Trichloroethene	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Trichlorofluoromethane	BRL	0.0029		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Vinyl chloride	BRL	0.0058		mg/Kg-dry	184105	1	11/25/2013 15:14	MD
Surr: 4-Bromofluorobenzene	95.5	70-128		%REC	184105	1	11/25/2013 15:14	MD
Surr: Dibromofluoromethane	113	78.2-128		%REC	184105	1	11/25/2013 15:14	MD
Surr: Toluene-d8	87	76.5-116		%REC	184105	1	11/25/2013 15:14	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
4,4´-DDE	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
4,4´-DDT	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Aldrin	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Chlordane	BRL	39		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
delta-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Endrin	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Endrin ketone	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Methoxychlor	BRL	20		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Toxaphene	BRL	200		ug/Kg-dry	184093	1	11/26/2013 13:00	KD
Surr: Decachlorobiphenyl	86.9	25.2-120		%REC	184093	1	11/26/2013 13:00	KD
Surr: Tetrachloro-m-xylene	69.8	30.5-120		%REC	184093	1	11/26/2013 13:00	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE 2-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:30:00 PM
Lab ID:	1311I88-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4740	58.5		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Antimony	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Arsenic	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Barium	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Beryllium	BRL	2.93		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Cadmium	BRL	2.93		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Calcium	1150	58.5		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Chromium	8.08	2.93		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Cobalt	BRL	2.93		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Copper	8.48	2.93		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Iron	8700	585		mg/Kg-dry	184100	10	11/26/2013 20:54	JL
Lead	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Magnesium	BRL	58.5		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Manganese	6.54	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Molybdenum	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Nickel	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Potassium	BRL	117		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Selenium	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Silver	BRL	2.93		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Sodium	BRL	117		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Thallium	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Tin	BRL	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Titanium	50.7	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Vanadium	39.4	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
Zinc	11.0	5.85		mg/Kg-dry	184100	1	11/25/2013 15:34	JL
PERCENT MOISTURE D2216								
Percent Moisture	15.3	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE3-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:45:00 PM
Lab ID:	1311I88-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B					**(SW7471B)**			
Mercury	BRL	0.115		mg/Kg-dry	184180	1	11/26/2013 12:44	CG
TCL VOLATILE ORGANICS SW8260B					**(SW5035)**			
1,1,1-Trichloroethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,1,2,2-Tetrachloroethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,1,2-Trichloroethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,1-Dichloroethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,1-Dichloroethene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,2,4-Trichlorobenzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,2-Dibromo-3-chloropropane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,2-Dibromoethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,2-Dichlorobenzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,2-Dichloroethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,2-Dichloropropane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,3-Dichlorobenzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
1,4-Dichlorobenzene	0.0093	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
2-Butanone	0.043	0.027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
2-Hexanone	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
4-Methyl-2-pentanone	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Acetone	0.23	0.054	E	mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Benzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Bromodichloromethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Bromoform	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Bromomethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Carbon disulfide	0.0061	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Carbon tetrachloride	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Chlorobenzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Chloroethane	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Chloroform	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Chloromethane	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
cis-1,2-Dichloroethene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
cis-1,3-Dichloropropene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Cyclohexane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Dibromochloromethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Dichlorodifluoromethane	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Ethylbenzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Freon-113	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Isopropylbenzene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
m,p-Xylene	0.0045	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Methyl acetate	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Methyl tert-butyl ether	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE3-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:45:00 PM
Lab ID:	1311I88-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Methylene chloride	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
o-Xylene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Styrene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Tetrachloroethene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Toluene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
trans-1,2-Dichloroethene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
trans-1,3-Dichloropropene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Trichloroethene	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Trichlorofluoromethane	BRL	0.0027		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Vinyl chloride	BRL	0.0054		mg/Kg-dry	184105	1	11/25/2013 15:45	MD
Surr: 4-Bromofluorobenzene	103	70-128		%REC	184105	1	11/25/2013 15:45	MD
Surr: Dibromofluoromethane	110	78.2-128		%REC	184105	1	11/25/2013 15:45	MD
Surr: Toluene-d8	86.4	76.5-116		%REC	184105	1	11/25/2013 15:45	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	27	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
4,4´-DDE	17	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
4,4´-DDT	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Aldrin	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Chlordane	BRL	39		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
delta-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Endrin	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Endrin ketone	BRL	3.9		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Methoxychlor	BRL	20		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Toxaphene	BRL	200		ug/Kg-dry	184093	1	11/26/2013 13:11	KD
Surr: Decachlorobiphenyl	84.2	25.2-120		%REC	184093	1	11/26/2013 13:11	KD
Surr: Tetrachloro-m-xylene	60.1	30.5-120		%REC	184093	1	11/26/2013 13:11	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13326-SI20-PIPE3-3
Project Name:	Drexel	**Collection Date:**	11/22/2013 1:45:00 PM
Lab ID:	1311I88-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	5700	57.2		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Antimony	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Arsenic	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Barium	16.9	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Beryllium	BRL	2.86		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Cadmium	BRL	2.86		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Calcium	1840	57.2		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Chromium	10.7	2.86		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Cobalt	BRL	2.86		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Copper	185	2.86		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Iron	12600	572		mg/Kg-dry	184100	10	11/26/2013 20:57	JL
Lead	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Magnesium	94.1	57.2		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Manganese	8.83	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Molybdenum	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Nickel	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Potassium	114	114		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Selenium	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Silver	BRL	2.86		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Sodium	BRL	114		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Thallium	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Tin	BRL	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Titanium	58.2	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Vanadium	52.5	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
Zinc	45.6	5.72		mg/Kg-dry	184100	1	11/25/2013 15:37	JL
PERCENT MOISTURE D2216								
Percent Moisture	14.7	0		wt%	R256550	1	11/25/2013 11:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1311I88

Checklist completed by Jam B 11/23/13
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2° Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184093

Sample ID: **MB-184093** Client ID: Units: **ug/Kg** Prep Date: **11/25/2013** Run No: **256551**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/25/2013** Seq No: **5388626**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	13.83	0	16.67		82.9	25.2	120				
Surr: Tetrachloro-m-xylene	12.33	0	16.67		74.0	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184093

Sample ID: **LCS-184093** Client ID: Units: **ug/Kg** Prep Date: **11/25/2013** Run No: **256551**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/25/2013** Seq No: **5388630**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	30.77	3.3	33.33		92.3	44.7	136				
Aldrin	26.35	1.7	33.33		79.1	41.5	118				
Dieldrin	31.74	3.3	33.33		95.2	44.3	133				
Endrin	31.91	3.3	33.33		95.7	43.2	137				
gamma-BHC	26.60	1.7	33.33		79.8	40.3	126				
Heptachlor	27.62	1.7	33.33		82.9	40.1	126				
Surr: Decachlorobiphenyl	14.28	0	16.67		85.7	25.2	120				
Surr: Tetrachloro-m-xylene	10.12	0	16.67		60.7	30.5	120				

Sample ID: **1311I58-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **11/25/2013** Run No: **256624**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/26/2013** Seq No: **5391552**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	4328	400	39.56	9880	-14000	33.6	126				S
Aldrin	BRL	200	39.56		153	32.6	120				S
Dieldrin	922.8	400	39.56		2330	35.1	124				S
Endrin	1204	400	39.56		3040	39.7	129				S
gamma-BHC	BRL	200	39.56		102	35.2	120				
Heptachlor	515.1	200	39.56		1300	34.9	119				S
Surr: Decachlorobiphenyl	0	0	19.79		0	25.2	120				S
Surr: Tetrachloro-m-xylene	0	0	19.79		0	30.5	120				S

Sample ID: **1311I58-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/25/2013** Run No: **256624**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/26/2013** Seq No: **5391555**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	6728	400	39.64	9880	-7950	33.6	126	4328	43.4	28.1	SR
Aldrin	BRL	200	39.64		227	32.6	120	60.50	0	29.9	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184093

Sample ID: **1311I58-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **11/25/2013** Run No: **256624**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184093** Analysis Date: **11/26/2013** Seq No: **5391555**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	977.4	400	39.64		2470	35.1	124	922.8	5.74	26.6	S
Endrin	1301	400	39.64		3280	39.7	129	1204	7.74	27.6	S
gamma-BHC	BRL	200	39.64		112	35.2	120	40.48	0	28.6	
Heptachlor	365.1	200	39.64		921	34.9	119	515.1	34.1	27.7	SR
Surr: Decachlorobiphenyl	0	0	19.83		0	25.2	120	0	0	30	S
Surr: Tetrachloro-m-xylene	0	0	19.83		0	30.5	120	0	0	30	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **MB-184100** Client ID: Units: **mg/Kg** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388298**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Potassium	BRL	100									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **LCS-184100** Client ID: Units: **mg/Kg** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388296**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	460.6	50.0	500.0	0.5860	92.0	80	120				
Antimony	48.78	5.00	50.00		97.6	80	120				
Arsenic	49.24	5.00	50.00		98.5	80	120				
Barium	48.89	5.00	50.00		97.8	80	120				
Beryllium	48.21	2.50	50.00		96.4	80	120				
Cadmium	48.03	2.50	50.00		96.1	80	120				
Calcium	470.2	50.0	500.0	8.820	92.3	80	120				
Chromium	50.31	2.50	50.00	0.1339	100	80	120				
Cobalt	49.29	2.50	50.00		98.6	80	120				
Copper	48.80	2.50	50.00		97.6	80	120				
Iron	477.5	50.0	500.0	1.972	95.1	80	120				
Lead	48.73	5.00	50.00		97.5	80	120				
Magnesium	470.0	50.0	500.0	0.6722	93.9	80	120				
Manganese	50.63	5.00	50.00	0.04257	101	80	120				
Molybdenum	49.32	5.00	50.00		98.6	80	120				
Nickel	48.57	5.00	50.00		97.1	80	120				
Potassium	437.2	100	500.0	0.9417	87.2	80	120				
Selenium	49.38	5.00	50.00		98.8	80	120				
Silver	4.773	2.50	5.000		95.5	80	120				
Sodium	453.0	100	500.0	3.155	90.0	80	120				
Thallium	46.96	5.00	50.00		93.9	80	120				
Tin	49.91	5.00	50.00	1.128	97.6	80	120				
Titanium	49.67	5.00	50.00	0.05451	99.2	80	120				
Vanadium	49.23	5.00	50.00		98.5	80	120				
Zinc	46.84	5.00	50.00	0.1540	93.4	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **1311I58-003AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388304**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	12530	53.4	534.4	10050	465	75	125				S
Antimony	34.33	5.34	53.44	0.2853	63.7	75	125				S
Arsenic	53.95	5.34	53.44	5.375	90.9	75	125				
Barium	66.47	5.34	53.44	17.06	92.5	75	125				
Beryllium	50.11	2.67	53.44	0.2102	93.4	75	125				
Cadmium	50.01	2.67	53.44	0.1242	93.4	75	125				
Calcium	3243	53.4	534.4	2327	171	75	125				S
Chromium	71.41	2.67	53.44	19.74	96.7	75	125				
Cobalt	51.07	2.67	53.44	1.216	93.3	75	125				
Copper	141.0	2.67	53.44	99.33	77.9	75	125				
Lead	51.51	5.34	53.44	4.098	88.7	75	125				
Magnesium	700.4	53.4	534.4	226.1	88.8	75	125				
Manganese	64.88	5.34	53.44	15.97	91.5	75	125				
Molybdenum	47.91	5.34	53.44	0.9886	87.8	75	125				
Nickel	49.94	5.34	53.44	2.201	89.3	75	125				
Potassium	804.5	107	534.4	177.6	117	75	125				
Selenium	45.35	5.34	53.44		84.9	75	125				
Silver	5.029	2.67	5.344	0.05472	93.1	75	125				
Sodium	566.5	107	534.4	42.38	98.1	75	125				
Thallium	45.72	5.34	53.44		85.6	75	125				
Tin	49.61	5.34	53.44	1.655	89.7	75	125				
Titanium	120.0	5.34	53.44	73.66	86.7	75	125				
Vanadium	138.6	5.34	53.44	65.50	137	75	125				S
Zinc	191.6	5.34	53.44	92.55	185	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **1311I58-003AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/26/2013** Seq No: **5391856**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	29060	534	534.4	25060	747	75	125				S

Sample ID: **1311I58-003AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388307**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	12080	53.5	535.0	10050	380	75	125	12530	3.67	20	S
Antimony	32.69	5.35	53.50	0.2853	60.6	75	125	34.33	4.89	20	S
Arsenic	57.82	5.35	53.50	5.375	98.0	75	125	53.95	6.92	20	
Barium	62.41	5.35	53.50	17.06	84.8	75	125	66.47	6.31	20	
Beryllium	51.57	2.67	53.50	0.2102	96.0	75	125	50.11	2.87	20	
Cadmium	50.55	2.67	53.50	0.1242	94.3	75	125	50.01	1.06	20	
Calcium	3823	53.5	535.0	2327	280	75	125	3243	16.4	20	S
Chromium	87.81	2.67	53.50	19.74	127	75	125	71.41	20.6	20	SR
Cobalt	50.46	2.67	53.50	1.216	92.0	75	125	51.07	1.21	20	
Copper	142.0	2.67	53.50	99.33	79.8	75	125	141.0	0.732	20	
Lead	53.04	5.35	53.50	4.098	91.5	75	125	51.51	2.91	20	
Magnesium	661.9	53.5	535.0	226.1	81.5	75	125	700.4	5.65	20	
Manganese	64.64	5.35	53.50	15.97	91.0	75	125	64.88	0.356	20	
Molybdenum	48.33	5.35	53.50	0.9886	88.5	75	125	47.91	0.861	20	
Nickel	49.61	5.35	53.50	2.201	88.6	75	125	49.94	0.659	20	
Potassium	775.9	107	535.0	177.6	112	75	125	804.5	3.62	20	
Selenium	44.51	5.35	53.50		83.2	75	125	45.35	1.89	20	
Silver	5.184	2.67	5.350	0.05472	95.9	75	125	5.029	3.03	20	
Sodium	569.3	107	535.0	42.38	98.5	75	125	566.5	0.488	20	
Thallium	46.48	5.35	53.50		86.9	75	125	45.72	1.65	20	
Tin	49.76	5.35	53.50	1.655	89.9	75	125	49.61	0.301	20	
Titanium	135.2	5.35	53.50	73.66	115	75	125	120.0	11.9	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184100

Sample ID: **1311I58-003AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184100** Analysis Date: **11/25/2013** Seq No: **5388307**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Vanadium	172.2	5.35	53.50	65.50	200	75	125	138.6	21.7	20	SR
Zinc	86.22	5.35	53.50	92.55	-11.8	75	125	191.6	75.8	20	SR

Sample ID: **1311I58-003AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/25/2013** Run No: **256533**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184100** Analysis Date: **11/26/2013** Seq No: **5391858**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	40030	535	535.0	25060	2800	75	125	29060	31.8	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184105

Sample ID: **MB-184105** Client ID: Units: **mg/Kg** Prep Date: **11/23/2013** Run No: **256450**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184105** Analysis Date: **11/23/2013** Seq No: **5386963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dibromo-3-chloropropane	BRL	0.0050									
1,2-Dibromoethane	BRL	0.0050									
1,2-Dichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,3-Dichlorobenzene	BRL	0.0050									
1,4-Dichlorobenzene	BRL	0.0050									
2-Butanone	BRL	0.050									
2-Hexanone	BRL	0.010									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.10									
Benzene	BRL	0.0050									
Bromodichloromethane	BRL	0.0050									
Bromoform	BRL	0.0050									
Bromomethane	BRL	0.0050									
Carbon disulfide	BRL	0.010									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184105

Sample ID: **MB-184105** Client ID: Units: **mg/Kg** Prep Date: **11/23/2013** Run No: **256450**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184105** Analysis Date: **11/23/2013** Seq No: **5386963**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	0.0050									
cis-1,3-Dichloropropene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Dibromochloromethane	BRL	0.0050									
Dichlorodifluoromethane	BRL	0.010									
Ethylbenzene	BRL	0.0050									
Freon-113	BRL	0.010									
Isopropylbenzene	BRL	0.0050									
m,p-Xylene	BRL	0.0050									
Methyl acetate	BRL	0.0050									
Methyl tert-butyl ether	BRL	0.0050									
Methylcyclohexane	BRL	0.0050									
Methylene chloride	BRL	0.020									
o-Xylene	BRL	0.0050									
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
trans-1,3-Dichloropropene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.010									
Surr: 4-Bromofluorobenzene	0.04487	0	0.0500		89.7	70	128				
Surr: Dibromofluoromethane	0.05376	0	0.0500		108	78.2	128				
Surr: Toluene-d8	0.04510	0	0.0500		90.2	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184105

Sample ID: **LCS-184105** Client ID: Units: **mg/Kg** Prep Date: **11/23/2013** Run No: **256450**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184105** Analysis Date: **11/23/2013** Seq No: **5386959**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05065	0.0050	0.0500		101	69.9	145				
Benzene	0.05055	0.0050	0.0500		101	72.3	130				
Chlorobenzene	0.05419	0.0050	0.0500		108	69	130				
Toluene	0.04807	0.0050	0.0500		96.1	71.1	130				
Trichloroethene	0.04646	0.0050	0.0500		92.9	71.7	136				
Surr: 4-Bromofluorobenzene	0.05170	0	0.0500		103	70	128				
Surr: Dibromofluoromethane	0.05214	0	0.0500		104	78.2	128				
Surr: Toluene-d8	0.04682	0	0.0500		93.6	76.5	116				

Sample ID: **1311G87-007AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/23/2013** Run No: **256450**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184105** Analysis Date: **11/23/2013** Seq No: **5387029**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.06252	0.0060	0.0605		103	56.6	151				
Benzene	0.06371	0.0060	0.0605		105	70.4	130				
Chlorobenzene	0.06324	0.0060	0.0605		105	67.5	132				
Toluene	0.05821	0.0060	0.0605		96.3	70.4	130				
Trichloroethene	0.05695	0.0060	0.0605		94.2	70.1	137				
Surr: 4-Bromofluorobenzene	0.06861	0	0.0605		113	70	128				
Surr: Dibromofluoromethane	0.06914	0	0.0605		114	78.2	128				
Surr: Toluene-d8	0.06027	0	0.0605		99.7	76.5	116				

Sample ID: **1311G87-007AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/23/2013** Run No: **256450**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184105** Analysis Date: **11/23/2013** Seq No: **5387037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05938	0.0060	0.0605		98.2	56.6	151	0.06252	5.14	20.4	
Benzene	0.05948	0.0060	0.0605		98.4	70.4	130	0.06371	6.87	16.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184105

Sample ID: **1311G87-007AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/23/2013** Run No: **256450**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184105** Analysis Date: **11/23/2013** Seq No: **5387037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	0.06030	0.0060	0.0605		99.7	67.5	132	0.06324	4.76	14.6	
Toluene	0.05534	0.0060	0.0605		91.5	70.4	130	0.05821	5.05	16.6	
Trichloroethene	0.05279	0.0060	0.0605		87.3	70.1	137	0.05695	7.58	17	
Surr: 4-Bromofluorobenzene	0.06631	0	0.0605		110	70	128	0.06861	0	0	
Surr: Dibromofluoromethane	0.06718	0	0.0605		111	78.2	128	0.06914	0	0	
Surr: Toluene-d8	0.05694	0	0.0605		94.2	76.5	116	0.06027	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 29-Nov-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1311I88

ANALYTICAL QC SUMMARY REPORT

BatchID: 184180

Sample ID: **MB-184180** Client ID: Units: **mg/Kg** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389788**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184180** Client ID: Units: **mg/Kg** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389791**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3714	0.100	0.4000		92.9	80	120				

Sample ID: **1311I58-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389797**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4765	0.118	0.4732		101	70	130				

Sample ID: **1311I58-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **11/26/2013** Run No: **256576**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184180** Analysis Date: **11/26/2013** Seq No: **5389800**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4742	0.118	0.4713		101	70	130	0.4765	0.489	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

December 13, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1312033

Analytical Environmental Services, Inc. received 5 samples on 12/3/2013 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1312035

Date: 12/2/13 Page 1 of 1

COMPANY: EPS, Inc.

ADDRESS: 1050 Crown Pointe Pkwy Ste. 550 Atlanta, GA 30338

PHONE: (404) 315-9113

FAX:

SAMPLED BY: Jeff Dennis

SIGNATURE:

ANALYSIS REQUESTED: VOCs (soil), Metals (soil), Pesticides (soil), VOCs (water), Metals (water), Pesticides (water)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	PRESERVATION (See codes) S/M+I	I	I	H+I	N	I	REMARKS	No # of Containers
1	13336-SI15-Pipe 1R-8	12/2/13	1400	X		SO	X	X	X					6
2	13336-SI15-Pipe 1 Content R	12/2/13	1405	X		SO	X	X	X					6
3	13336-SI15-CSIR-5	12/2/13	1410	X		SO		X	X					2
4	13336-water-1	12/2/13	1455	X		SW				X	X	X		5
5	Trip Blank	12/2/13				W				X				2
6														
7														
8														
9														
10														
11														
12														
13														
14														

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Jeff Dennis	12/2/13 1545	1:	12/3/13 7:30
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordele, GA
SEND REPORT TO: tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers 21

Turnaround Time Request
- Standard 5 Business Days
- 2 Business Day Rush
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other

STATE PROGRAM (if any):
E-mail? Y / N Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project: Drexel Chemical Company
Lab ID: 1312033

Case Narrative

Metals Analysis by Method 6010C:

Due to sample matrix, sample 1312033-002C and 003B required dilution during preparation and/or analysis resulting in elevated reporting limits.

Pesticide Analysis by Method 8081B:

Due to sample matrix, samples 1312033-002D and -004B required dilution during analysis resulting in elevated reporting limits.

Matrix spike and matrix spike duplicate analyses were not performed with Batch 184393 due to insufficient sample volume.

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-PIPE1R-8
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:00:00 PM
Lab ID:	1312033-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.112		mg/Kg-dry	184324	1	12/03/2013 11:39	CG
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,1,2,2-Tetrachloroethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,1,2-Trichloroethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,1-Dichloroethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,1-Dichloroethene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,2,4-Trichlorobenzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,2-Dibromo-3-chloropropane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,2-Dibromoethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,2-Dichlorobenzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,2-Dichloroethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,2-Dichloropropane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,3-Dichlorobenzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
1,4-Dichlorobenzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
2-Butanone	BRL	0.045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
2-Hexanone	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
4-Methyl-2-pentanone	0.011	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Acetone	BRL	0.091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Benzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Bromodichloromethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Bromoform	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Bromomethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Carbon disulfide	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Carbon tetrachloride	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Chlorobenzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Chloroethane	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Chloroform	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Chloromethane	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
cis-1,2-Dichloroethene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
cis-1,3-Dichloropropene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Cyclohexane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Dibromochloromethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Dichlorodifluoromethane	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Ethylbenzene	0.011	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Freon-113	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Isopropylbenzene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
m,p-Xylene	0.016	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Methyl acetate	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Methyl tert-butyl ether	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-PIPE1R-8
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:00:00 PM
Lab ID:	1312033-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Methylene chloride	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
o-Xylene	0.010	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Styrene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Tetrachloroethene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Toluene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
trans-1,2-Dichloroethene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
trans-1,3-Dichloropropene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Trichloroethene	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Trichlorofluoromethane	BRL	0.0045		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Vinyl chloride	BRL	0.0091		mg/Kg-dry	184420	1	12/03/2013 17:25	MD
Surr: 4-Bromofluorobenzene	102	70-128		%REC	184420	1	12/03/2013 17:25	MD
Surr: Dibromofluoromethane	111	78.2-128		%REC	184420	1	12/03/2013 17:25	MD
Surr: Toluene-d8	106	76.5-116		%REC	184420	1	12/03/2013 17:25	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
4,4´-DDE	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
4,4´-DDT	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Aldrin	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
beta-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Chlordane	BRL	38		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
delta-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Dieldrin	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Endosulfan II	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Endosulfan sulfate	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Endrin	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Endrin aldehyde	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Endrin ketone	BRL	3.8		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Heptachlor	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Methoxychlor	BRL	19		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Toxaphene	BRL	190		ug/Kg-dry	184394	1	12/03/2013 12:37	KD
Surr: Decachlorobiphenyl	76.9	25.2-120		%REC	184394	1	12/03/2013 12:37	KD
Surr: Tetrachloro-m-xylene	67.1	30.5-120		%REC	184394	1	12/03/2013 12:37	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-PIPE1R-8
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:00:00 PM
Lab ID:	1312033-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	5450	52.0		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Antimony	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Arsenic	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Barium	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Beryllium	BRL	2.60		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Cadmium	BRL	2.60		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Calcium	579	52.0		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Chromium	8.29	2.60		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Cobalt	BRL	2.60		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Copper	16.4	2.60		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Iron	13100	520		mg/Kg-dry	184335	10	12/03/2013 14:50	TA
Lead	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Magnesium	135	52.0		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Manganese	19.9	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Molybdenum	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Nickel	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Selenium	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Silver	BRL	2.60		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Sodium	BRL	104		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Thallium	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Tin	BRL	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Titanium	51.3	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Vanadium	34.7	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
Zinc	45.0	5.20		mg/Kg-dry	184335	1	12/03/2013 14:34	TA
PERCENT MOISTURE D2216								
Percent Moisture	12.2	0		wt%	R256974	1	12/03/2013 10:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-PIPE1 CONTENT R
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:05:00 PM
Lab ID:	1312033-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.123		mg/Kg-dry	184324	1	12/03/2013 11:41	CG
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
1,1,1-Trichloroethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,1,2,2-Tetrachloroethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,1,2-Trichloroethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,1-Dichloroethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,1-Dichloroethene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,2,4-Trichlorobenzene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,2-Dibromo-3-chloropropane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,2-Dibromoethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,2-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,2-Dichloroethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,2-Dichloropropane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,3-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
1,4-Dichlorobenzene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
2-Butanone	BRL	0.032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
2-Hexanone	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
4-Methyl-2-pentanone	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Acetone	0.11	0.065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Benzene	0.0040	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Bromodichloromethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Bromoform	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Bromomethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Carbon disulfide	0.018	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Carbon tetrachloride	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Chlorobenzene	0.0080	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Chloroethane	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Chloroform	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Chloromethane	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
cis-1,2-Dichloroethene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
cis-1,3-Dichloropropene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Cyclohexane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Dibromochloromethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Dichlorodifluoromethane	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Ethylbenzene	0.12	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Freon-113	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Isopropylbenzene	0.0047	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
m,p-Xylene	0.22	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Methyl acetate	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Methyl tert-butyl ether	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-PIPE1 CONTENT R
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:05:00 PM
Lab ID:	1312033-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5035)**				
Methylcyclohexane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Methylene chloride	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
o-Xylene	0.077	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Styrene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Tetrachloroethene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Toluene	0.0077	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
trans-1,2-Dichloroethene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
trans-1,3-Dichloropropene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Trichloroethene	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Trichlorofluoromethane	BRL	0.0032		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Vinyl chloride	BRL	0.0065		mg/Kg-dry	184420	1	12/03/2013 17:55	MD
Surr: 4-Bromofluorobenzene	94.6	70-128		%REC	184420	1	12/03/2013 17:55	MD
Surr: Dibromofluoromethane	107	78.2-128		%REC	184420	1	12/03/2013 17:55	MD
Surr: Toluene-d8	104	76.5-116		%REC	184420	1	12/03/2013 17:55	MD
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	2200	420		ug/Kg-dry	184394	100	12/03/2013 14:10	KD
4,4´-DDE	240	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
4,4´-DDT	4000	420		ug/Kg-dry	184394	100	12/03/2013 14:10	KD
Aldrin	17	2.1		ug/Kg-dry	184394	1	12/03/2013 12:48	KD
alpha-BHC	BRL	2.1		ug/Kg-dry	184394	1	12/03/2013 12:48	KD
alpha-Chlordane	BRL	21		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
beta-BHC	BRL	2.1		ug/Kg-dry	184394	1	12/03/2013 12:48	KD
Chlordane	2000	420		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
delta-BHC	46	2.1		ug/Kg-dry	184394	1	12/03/2013 12:48	KD
Dieldrin	BRL	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Endosulfan I	240	21		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Endosulfan II	BRL	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Endosulfan sulfate	BRL	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Endrin	BRL	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Endrin aldehyde	BRL	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Endrin ketone	BRL	42		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
gamma-BHC	14	2.1		ug/Kg-dry	184394	1	12/03/2013 12:48	KD
gamma-Chlordane	BRL	21		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Heptachlor	BRL	2.1		ug/Kg-dry	184394	1	12/03/2013 12:48	KD
Heptachlor epoxide	BRL	21		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Methoxychlor	BRL	210		ug/Kg-dry	184394	10	12/03/2013 14:23	KD
Toxaphene	28000	21000		ug/Kg-dry	184394	100	12/03/2013 14:10	KD
Surr: Decachlorobiphenyl	96.9	25.2-120		%REC	184394	1	12/03/2013 12:48	KD
Surr: Tetrachloro-m-xylene	54.4	30.5-120		%REC	184394	1	12/03/2013 12:48	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-PIPE1 CONTENT R
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:05:00 PM
Lab ID:	1312033-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	26100	57.1		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Antimony	BRL	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Arsenic	104	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Barium	58.8	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Beryllium	BRL	2.86		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Cadmium	37.5	2.86		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Calcium	58500	286		mg/Kg-dry	184335	5	12/03/2013 14:54	TA
Chromium	61.4	2.86		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Cobalt	BRL	2.86		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Copper	6880	14.3		mg/Kg-dry	184335	5	12/03/2013 14:54	TA
Iron	18500	286		mg/Kg-dry	184335	5	12/03/2013 14:54	TA
Lead	10.4	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Magnesium	340	57.1		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Manganese	112	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Molybdenum	BRL	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Nickel	11.2	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Selenium	BRL	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Silver	3.40	2.86		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Sodium	366	114		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Thallium	BRL	13.7		mg/Kg-dry	184335	5	12/03/2013 14:54	TA
Tin	BRL	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Titanium	198	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Vanadium	95.3	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
Zinc	4350	5.71		mg/Kg-dry	184335	1	12/03/2013 14:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	20.1	0		wt%	R256974	1	12/03/2013 10:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-CSIR-5
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:10:00 PM
Lab ID:	1312033-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.116		mg/Kg-dry	184324	1	12/03/2013 11:44	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
4,4´-DDE	10	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
4,4´-DDT	22	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Aldrin	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
beta-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Chlordane	58	39		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
delta-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Endrin	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Endrin ketone	BRL	3.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Heptachlor	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Methoxychlor	BRL	19		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Toxaphene	480	190		ug/Kg-dry	184394	1	12/03/2013 12:59	KD
Surr: Decachlorobiphenyl	70.8	25.2-120		%REC	184394	1	12/03/2013 12:59	KD
Surr: Tetrachloro-m-xylene	61.8	30.5-120		%REC	184394	1	12/03/2013 12:59	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7000	56.6		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Antimony	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Arsenic	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Barium	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Beryllium	BRL	2.83		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Cadmium	BRL	2.83		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Calcium	452	56.6		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Chromium	19.0	2.83		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Cobalt	BRL	2.83		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Copper	38.5	2.83		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Iron	27600	283		mg/Kg-dry	184335	5	12/03/2013 15:33	TA
Lead	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-SI15-CSIR-5
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:10:00 PM
Lab ID:	1312033-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	58.8	56.6		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Manganese	5.74	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Molybdenum	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Nickel	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Selenium	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Silver	BRL	2.83		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Sodium	BRL	113		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Thallium	BRL	12.7		mg/Kg-dry	184335	5	12/03/2013 15:33	TA
Tin	BRL	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Titanium	68.7	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Vanadium	88.8	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
Zinc	19.7	5.66		mg/Kg-dry	184335	1	12/03/2013 14:41	TA
PERCENT MOISTURE D2216								
Percent Moisture	13.9	0		wt%	R256974	1	12/03/2013 10:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-WATER-1
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:55:00 PM
Lab ID:	1312033-004	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,1-Dichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,1-Dichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,2-Dibromoethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,2-Dichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,2-Dichloropropane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
2-Butanone	BRL	50		ug/L	184410	1	12/03/2013 11:42	AK
2-Hexanone	BRL	10		ug/L	184410	1	12/03/2013 11:42	AK
4-Methyl-2-pentanone	BRL	10		ug/L	184410	1	12/03/2013 11:42	AK
Acetone	BRL	50		ug/L	184410	1	12/03/2013 11:42	AK
Benzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Bromodichloromethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Bromoform	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Bromomethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Carbon disulfide	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Carbon tetrachloride	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Chlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Chloroethane	BRL	10		ug/L	184410	1	12/03/2013 11:42	AK
Chloroform	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Chloromethane	BRL	10		ug/L	184410	1	12/03/2013 11:42	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Cyclohexane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Dibromochloromethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Dichlorodifluoromethane	BRL	10		ug/L	184410	1	12/03/2013 11:42	AK
Ethylbenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Freon-113	BRL	10		ug/L	184410	1	12/03/2013 11:42	AK
Isopropylbenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
m,p-Xylene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Methyl acetate	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Methylcyclohexane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Methylene chloride	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
o-Xylene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-WATER-1
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:55:00 PM
Lab ID:	1312033-004	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Tetrachloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Toluene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Trichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Trichlorofluoromethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:42	AK
Vinyl chloride	BRL	2.0		ug/L	184410	1	12/03/2013 11:42	AK
Surr: 4-Bromofluorobenzene	88.6	66.2-120		%REC	184410	1	12/03/2013 11:42	AK
Surr: Dibromofluoromethane	104	79.5-121		%REC	184410	1	12/03/2013 11:42	AK
Surr: Toluene-d8	101	77-117		%REC	184410	1	12/03/2013 11:42	AK
Mercury, Total SW7470A				**(SW7470A)**				
Mercury	BRL	0.00020		mg/L	184266	1	12/03/2013 12:54	CG
CHLORINATED PESTICIDES, TCL SW8081B				**(SW3510C)**				
4,4´-DDD	14	1.0		ug/L	184393	10	12/03/2013 14:56	KD
4,4´-DDE	2.8	1.0		ug/L	184393	10	12/03/2013 14:56	KD
4,4´-DDT	25	1.0		ug/L	184393	10	12/03/2013 14:56	KD
Aldrin	BRL	0.50		ug/L	184393	10	12/03/2013 14:56	KD
alpha-BHC	25	5.0		ug/L	184393	100	12/03/2013 15:09	KD
alpha-Chlordane	BRL	0.50		ug/L	184393	10	12/03/2013 14:56	KD
beta-BHC	4.5	0.50		ug/L	184393	10	12/03/2013 14:56	KD
Chlordane	60	5.0		ug/L	184393	10	12/03/2013 14:56	KD
delta-BHC	5.1	0.50		ug/L	184393	10	12/03/2013 14:56	KD
Dieldrin	BRL	1.0		ug/L	184393	10	12/03/2013 14:56	KD
Endosulfan I	7.0	0.50		ug/L	184393	10	12/03/2013 14:56	KD
Endosulfan II	BRL	1.0		ug/L	184393	10	12/03/2013 14:56	KD
Endosulfan sulfate	BRL	1.0		ug/L	184393	10	12/03/2013 14:56	KD
Endrin	1.9	1.0		ug/L	184393	10	12/03/2013 14:56	KD
Endrin aldehyde	BRL	1.0		ug/L	184393	10	12/03/2013 14:56	KD
Endrin ketone	7.6	1.0		ug/L	184393	10	12/03/2013 14:56	KD
gamma-BHC	13	0.50		ug/L	184393	10	12/03/2013 14:56	KD
gamma-Chlordane	BRL	0.50		ug/L	184393	10	12/03/2013 14:56	KD
Heptachlor	BRL	0.50		ug/L	184393	10	12/03/2013 14:56	KD
Heptachlor epoxide	BRL	0.50		ug/L	184393	10	12/03/2013 14:56	KD
Methoxychlor	BRL	5.0		ug/L	184393	10	12/03/2013 14:56	KD
Toxaphene	BRL	500		ug/L	184393	100	12/03/2013 15:09	KD
Surr: Decachlorobiphenyl	61.8	15-115		%REC	184393	10	12/03/2013 14:56	KD
Surr: Tetrachloro-m-xylene	49.6	15.1-115		%REC	184393	10	12/03/2013 14:56	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-WATER-1
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013 2:55:00 PM
Lab ID:	1312033-004	**Matrix:**	Surface Water

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3010A)**				
Aluminum	8.29	0.200		mg/L	184345	1	12/03/2013 18:17	TA
Antimony	BRL	0.0200		mg/L	184345	1	12/03/2013 18:17	TA
Arsenic	BRL	0.0500		mg/L	184345	1	12/03/2013 18:17	TA
Barium	0.0249	0.0200		mg/L	184345	1	12/03/2013 18:17	TA
Beryllium	BRL	0.0100		mg/L	184345	1	12/03/2013 18:17	TA
Cadmium	BRL	0.0050		mg/L	184345	1	12/03/2013 18:17	TA
Calcium	42.0	0.100		mg/L	184345	1	12/03/2013 18:17	TA
Chromium	BRL	0.0100		mg/L	184345	1	12/03/2013 18:17	TA
Cobalt	BRL	0.0200		mg/L	184345	1	12/03/2013 18:17	TA
Copper	0.127	0.0100		mg/L	184345	1	12/03/2013 18:17	TA
Iron	7.63	0.100		mg/L	184345	1	12/03/2013 18:17	TA
Lead	BRL	0.0100		mg/L	184345	1	12/03/2013 18:17	TA
Magnesium	3.69	0.100		mg/L	184345	1	12/03/2013 18:17	TA
Manganese	0.0913	0.0150		mg/L	184345	1	12/03/2013 18:17	TA
Molybdenum	BRL	0.0500		mg/L	184345	1	12/03/2013 18:17	TA
Nickel	BRL	0.0200		mg/L	184345	1	12/03/2013 18:17	TA
Potassium	5.74	0.500		mg/L	184345	1	12/03/2013 18:17	TA
Selenium	BRL	0.0200		mg/L	184345	1	12/03/2013 18:17	TA
Silver	BRL	0.0100		mg/L	184345	1	12/03/2013 18:17	TA
Sodium	8.31	1.00		mg/L	184345	1	12/03/2013 18:17	TA
Thallium	BRL	0.0200		mg/L	184345	1	12/03/2013 18:17	TA
Tin	BRL	0.0500		mg/L	184345	1	12/03/2013 18:17	TA
Titanium	0.0789	0.0500		mg/L	184345	1	12/03/2013 18:17	TA
Vanadium	0.0285	0.0100		mg/L	184345	1	12/03/2013 18:17	TA
Zinc	0.0953	0.0200		mg/L	184345	1	12/03/2013 18:17	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013
Lab ID:	1312033-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
1,1,1-Trichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,1,2,2-Tetrachloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,1,2-Trichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,1-Dichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,1-Dichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,2,4-Trichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,2-Dibromo-3-chloropropane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,2-Dibromoethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,2-Dichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,2-Dichloroethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,2-Dichloropropane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,3-Dichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
1,4-Dichlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
2-Butanone	BRL	50		ug/L	184410	1	12/03/2013 11:14	AK
2-Hexanone	BRL	10		ug/L	184410	1	12/03/2013 11:14	AK
4-Methyl-2-pentanone	BRL	10		ug/L	184410	1	12/03/2013 11:14	AK
Acetone	BRL	50		ug/L	184410	1	12/03/2013 11:14	AK
Benzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Bromodichloromethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Bromoform	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Bromomethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Carbon disulfide	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Carbon tetrachloride	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Chlorobenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Chloroethane	BRL	10		ug/L	184410	1	12/03/2013 11:14	AK
Chloroform	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Chloromethane	BRL	10		ug/L	184410	1	12/03/2013 11:14	AK
cis-1,2-Dichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
cis-1,3-Dichloropropene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Cyclohexane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Dibromochloromethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Dichlorodifluoromethane	BRL	10		ug/L	184410	1	12/03/2013 11:14	AK
Ethylbenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Freon-113	BRL	10		ug/L	184410	1	12/03/2013 11:14	AK
Isopropylbenzene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
m,p-Xylene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Methyl acetate	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Methyl tert-butyl ether	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Methylcyclohexane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Methylene chloride	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
o-Xylene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	TRIP BLANK
Project Name:	Drexel Chemical Company	**Collection Date:**	12/2/2013
Lab ID:	1312033-005	**Matrix:**	Aqueous

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TCL VOLATILE ORGANICS SW8260B				**(SW5030B)**				
Styrene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Tetrachloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Toluene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
trans-1,2-Dichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
trans-1,3-Dichloropropene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Trichloroethene	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Trichlorofluoromethane	BRL	5.0		ug/L	184410	1	12/03/2013 11:14	AK
Vinyl chloride	BRL	2.0		ug/L	184410	1	12/03/2013 11:14	AK
Surr: 4-Bromofluorobenzene	89.8	66.2-120		%REC	184410	1	12/03/2013 11:14	AK
Surr: Dibromofluoromethane	103	79.5-121		%REC	184410	1	12/03/2013 11:14	AK
Surr: Toluene-d8	104	77-117		%REC	184410	1	12/03/2013 11:14	AK

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1312033

Checklist completed by [signature] 12/3/13
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PT

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184266

Sample ID: **MB-184266** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256945**
SampleType: **MBLK** TestCode: **Mercury, Total SW7470A** BatchID: **184266** Analysis Date: **12/02/2013** Seq No: **5397772**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00020									

Sample ID: **LCS-184266** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256945**
SampleType: **LCS** TestCode: **Mercury, Total SW7470A** BatchID: **184266** Analysis Date: **12/02/2013** Seq No: **5397777**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.004956	0.00020	0.0050		99.1	85	115				

Sample ID: **1311L48-003AMS** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256945**
SampleType: **MS** TestCode: **Mercury, Total SW7470A** BatchID: **184266** Analysis Date: **12/02/2013** Seq No: **5397787**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005020	0.00020	0.0050		100	70	130				

Sample ID: **1311L48-003AMSD** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256945**
SampleType: **MSD** TestCode: **Mercury, Total SW7470A** BatchID: **184266** Analysis Date: **12/02/2013** Seq No: **5397799**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.005028	0.00020	0.0050		101	70	130	0.005020	0.170	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184324

Sample ID: **MB-184324** Client ID: Units: **mg/Kg** Prep Date: **12/02/2013** Run No: **256841**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184324** Analysis Date: **12/02/2013** Seq No: **5395560**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184324** Client ID: Units: **mg/Kg** Prep Date: **12/02/2013** Run No: **256841**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184324** Analysis Date: **12/02/2013** Seq No: **5395561**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3796	0.100	0.4000		94.9	80	120				

Sample ID: **1311L71-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256841**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184324** Analysis Date: **12/02/2013** Seq No: **5395563**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4876	0.124	0.4947		98.6	70	130				

Sample ID: **1311L71-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256841**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184324** Analysis Date: **12/02/2013** Seq No: **5395564**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4760	0.123	0.4918		96.8	70	130	0.4876	2.40	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184335

Sample ID: **MB-184335** Client ID: Units: **mg/Kg** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5398480**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184335

Sample ID: **LCS-184335** Client ID: Units: **mg/Kg** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5398478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	461.2	50.0	500.0		92.2	80	120				
Antimony	45.85	5.00	50.00		91.7	80	120				
Arsenic	47.35	5.00	50.00		94.7	80	120				
Barium	46.92	5.00	50.00		93.8	80	120				
Beryllium	46.43	2.50	50.00		92.9	80	120				
Cadmium	44.42	2.50	50.00		88.8	80	120				
Calcium	470.9	50.0	500.0	11.86	91.8	80	120				
Chromium	46.36	2.50	50.00	0.1015	92.5	80	120				
Cobalt	45.32	2.50	50.00		90.6	80	120				
Copper	46.00	2.50	50.00	0.1530	91.7	80	120				
Iron	447.7	50.0	500.0	7.921	88.0	80	120				
Lead	46.53	5.00	50.00		93.1	80	120				
Magnesium	450.0	50.0	500.0	0.9975	89.8	80	120				
Manganese	47.36	5.00	50.00	0.2467	94.2	80	120				
Molybdenum	47.74	5.00	50.00		95.5	80	120				
Nickel	45.03	5.00	50.00		90.1	80	120				
Selenium	43.69	5.00	50.00		87.4	80	120				
Silver	4.533	2.50	5.000		90.7	80	120				
Sodium	456.8	100	500.0	2.757	90.8	80	120				
Thallium	46.17	5.00	50.00		92.3	80	120				
Tin	49.43	5.00	50.00	1.336	96.2	80	120				
Titanium	47.10	5.00	50.00		94.2	80	120				
Vanadium	46.38	5.00	50.00		92.8	80	120				
Zinc	43.56	5.00	50.00	0.1642	86.8	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184335

Sample ID: **1311N69-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5398486**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	15790	53.8	537.5	10970	896	75	125				S
Antimony	34.61	5.38	53.75		64.4	75	125				S
Arsenic	51.80	5.38	53.75	2.284	92.1	75	125				
Barium	222.7	5.38	53.75	111.5	207	75	125				S
Beryllium	52.04	2.69	53.75	0.2328	96.4	75	125				
Cadmium	49.65	2.69	53.75		92.4	75	125				
Calcium	1254	53.8	537.5	780.6	88.0	75	125				
Chromium	67.42	2.69	53.75	14.31	98.8	75	125				
Cobalt	92.80	2.69	53.75	13.25	148	75	125				S
Copper	67.44	2.69	53.75	11.90	103	75	125				
Lead	128.3	5.38	53.75	66.24	115	75	125				
Magnesium	858.2	53.8	537.5	287.2	106	75	125				
Molybdenum	45.86	5.38	53.75	0.3919	84.6	75	125				
Nickel	55.04	5.38	53.75	4.604	93.8	75	125				
Selenium	48.21	5.38	53.75	1.843	86.3	75	125				
Silver	5.126	2.69	5.375		95.4	75	125				
Sodium	536.5	108	537.5	37.09	92.9	75	125				
Thallium	34.84	5.38	53.75		64.8	75	125				S
Tin	51.97	5.38	53.75	6.246	85.1	75	125				
Titanium	235.1	5.38	53.75	190.3	83.4	75	125				
Vanadium	89.74	5.38	53.75	31.37	109	75	125				
Zinc	124.4	5.38	53.75	72.00	97.5	75	125				

Sample ID: **1311N69-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5399241**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	20850	538	537.5	19010	343	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184335

Sample ID: **1311N69-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5399241**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Manganese	3488	53.8	53.75	904.9	4810	75	125				S

Sample ID: **1311N69-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5398488**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	16940	53.6	535.5	10970	1120	75	125	15790	7.06	20	S
Antimony	34.79	5.36	53.55		65.0	75	125	34.61	0.529	20	S
Arsenic	52.69	5.36	53.55	2.284	94.1	75	125	51.80	1.69	20	
Barium	280.6	5.36	53.55	111.5	316	75	125	222.7	23.0	20	SR
Beryllium	52.34	2.68	53.55	0.2328	97.3	75	125	52.04	0.576	20	
Cadmium	49.35	2.68	53.55		92.2	75	125	49.65	0.598	20	
Calcium	1264	53.6	535.5	780.6	90.2	75	125	1254	0.791	20	
Chromium	68.95	2.68	53.55	14.31	102	75	125	67.42	2.25	20	
Cobalt	124.5	2.68	53.55	13.25	208	75	125	92.80	29.2	20	SR
Copper	68.19	2.68	53.55	11.90	105	75	125	67.44	1.10	20	
Lead	128.3	5.36	53.55	66.24	116	75	125	128.3	0.032	20	
Magnesium	842.4	53.6	535.5	287.2	104	75	125	858.2	1.85	20	
Molybdenum	46.46	5.36	53.55	0.3919	86.0	75	125	45.86	1.31	20	
Nickel	54.58	5.36	53.55	4.604	93.3	75	125	55.04	0.849	20	
Selenium	49.77	5.36	53.55	1.843	89.5	75	125	48.21	3.19	20	
Silver	5.191	2.68	5.355		96.9	75	125	5.126	1.26	20	
Sodium	552.9	107	535.5	37.09	96.3	75	125	536.5	3.02	20	
Thallium	30.69	5.36	53.55		57.3	75	125	34.84	12.7	20	S
Tin	51.70	5.36	53.55	6.246	84.9	75	125	51.97	0.519	20	
Titanium	238.0	5.36	53.55	190.3	89.1	75	125	235.1	1.20	20	
Vanadium	93.89	5.36	53.55	31.37	117	75	125	89.74	4.51	20	
Zinc	113.6	5.36	53.55	72.00	77.7	75	125	124.4	9.06	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184335

Sample ID: **1311N69-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/02/2013** Run No: **256908**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184335** Analysis Date: **12/03/2013** Seq No: **5399242**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	22110	536	535.5	19010	579	75	125	20850	5.87	20	S
Manganese	5330	53.6	53.55	904.9	8260	75	125	3488	41.8	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184345

Sample ID: **MB-184345** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256948**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184345** Analysis Date: **12/03/2013** Seq No: **5399131**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	0.200									
Antimony	BRL	0.0200									
Arsenic	BRL	0.0500									
Barium	BRL	0.0200									
Beryllium	BRL	0.0100									
Cadmium	BRL	0.0050									
Calcium	BRL	0.100									
Chromium	BRL	0.0100									
Cobalt	BRL	0.0200									
Copper	BRL	0.0100									
Iron	BRL	0.100									
Lead	BRL	0.0100									
Magnesium	BRL	0.100									
Manganese	BRL	0.0150									
Molybdenum	BRL	0.0500									
Nickel	BRL	0.0200									
Potassium	BRL	0.500									
Selenium	BRL	0.0200									
Silver	BRL	0.0100									
Sodium	BRL	1.00									
Thallium	BRL	0.0200									
Tin	BRL	0.0500									
Titanium	BRL	0.0500									
Vanadium	BRL	0.0100									
Zinc	BRL	0.0200									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184345

Sample ID: **LCS-184345** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256948**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184345** Analysis Date: **12/03/2013** Seq No: **5399130**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	9.422	0.200	10.00		94.2	80	120				
Antimony	0.9966	0.0200	1.000		99.7	80	120				
Arsenic	1.018	0.0500	1.000		102	80	120				
Barium	0.9616	0.0200	1.000		96.2	80	120				
Beryllium	0.9616	0.0100	1.000		96.2	80	120				
Cadmium	0.9810	0.0050	1.000		98.1	80	120				
Calcium	9.139	0.100	10.00	0.09027	90.5	80	120				
Chromium	0.9725	0.0100	1.000		97.2	80	120				
Cobalt	0.9832	0.0200	1.000		98.3	80	120				
Copper	0.9700	0.0100	1.000	0.006639	96.3	80	120				
Iron	9.217	0.100	10.00		92.2	80	120				
Lead	1.002	0.0100	1.000		100	80	120				
Magnesium	9.277	0.100	10.00		92.8	80	120				
Manganese	0.9732	0.0150	1.000		97.3	80	120				
Molybdenum	0.9880	0.0500	1.000		98.8	80	120				
Nickel	0.9900	0.0200	1.000		99.0	80	120				
Potassium	9.451	0.500	10.00		94.5	80	120				
Selenium	0.9754	0.0200	1.000		97.5	80	120				
Silver	0.09849	0.0100	0.1000		98.5	80	120				
Sodium	9.317	1.00	10.00	0.1093	92.1	80	120				
Thallium	1.006	0.0200	1.000		101	80	120				
Tin	1.008	0.0500	1.000		101	80	120				
Titanium	0.9613	0.0500	1.000		96.1	80	120				
Vanadium	0.9807	0.0100	1.000		98.1	80	120				
Zinc	0.9742	0.0200	1.000		97.4	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184345

Sample ID: **1311L21-005AMS** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256948**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184345** Analysis Date: **12/03/2013** Seq No: **5399133**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	9.605	0.200	10.00	0.3519	92.5	75	125				
Antimony	0.9814	0.0200	1.000		98.1	75	125				
Arsenic	1.017	0.0500	1.000		102	75	125				
Barium	1.010	0.0200	1.000	0.03844	97.2	75	125				
Beryllium	0.9761	0.0100	1.000		97.6	75	125				
Cadmium	0.9922	0.0050	1.000		99.2	75	125				
Calcium	11.24	0.100	10.00	2.430	88.1	75	125				
Chromium	0.9910	0.0100	1.000		99.1	75	125				
Cobalt	0.9961	0.0200	1.000		99.6	75	125				
Copper	0.9961	0.0100	1.000	0.006314	99.0	75	125				
Iron	9.270	0.100	10.00	0.3633	89.1	75	125				
Lead	0.9862	0.0100	1.000		98.6	75	125				
Magnesium	10.26	0.100	10.00	1.199	90.7	75	125				
Manganese	1.005	0.0150	1.000	0.02149	98.3	75	125				
Molybdenum	0.9936	0.0500	1.000		99.4	75	125				
Nickel	1.003	0.0200	1.000		100	75	125				
Potassium	11.50	0.500	10.00	2.321	91.8	75	125				
Selenium	0.9699	0.0200	1.000		97.0	75	125				
Silver	0.09985	0.0100	0.1000		99.9	75	125				
Sodium	14.28	1.00	10.00	5.608	86.7	75	125				
Thallium	0.9843	0.0200	1.000		98.4	75	125				
Tin	1.020	0.0500	1.000		102	75	125				
Titanium	0.9813	0.0500	1.000	0.01724	96.4	75	125				
Vanadium	0.9909	0.0100	1.000	0.002052	98.9	75	125				
Zinc	0.9944	0.0200	1.000		99.4	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: **184345**

Sample ID: **1311L21-005AMSD** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256948**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184345** Analysis Date: **12/03/2013** Seq No: **5399134**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	9.966	0.200	10.00	0.3519	96.1	75	125	9.605	3.68	20	
Antimony	0.9844	0.0200	1.000		98.4	75	125	0.9814	0.307	20	
Arsenic	1.022	0.0500	1.000		102	75	125	1.017	0.496	20	
Barium	1.015	0.0200	1.000	0.03844	97.7	75	125	1.010	0.476	20	
Beryllium	0.9788	0.0100	1.000		97.9	75	125	0.9761	0.278	20	
Cadmium	1.005	0.0050	1.000		100	75	125	0.9922	1.25	20	
Calcium	11.75	0.100	10.00	2.430	93.2	75	125	11.24	4.45	20	
Chromium	1.005	0.0100	1.000		101	75	125	0.9910	1.41	20	
Cobalt	1.007	0.0200	1.000		101	75	125	0.9961	1.07	20	
Copper	1.005	0.0100	1.000	0.006314	99.9	75	125	0.9961	0.934	20	
Iron	9.777	0.100	10.00	0.3633	94.1	75	125	9.270	5.32	20	
Lead	0.9861	0.0100	1.000		98.6	75	125	0.9862	0.011	20	
Magnesium	10.73	0.100	10.00	1.199	95.3	75	125	10.26	4.46	20	
Manganese	1.007	0.0150	1.000	0.02149	98.5	75	125	1.005	0.191	20	
Molybdenum	1.014	0.0500	1.000		101	75	125	0.9936	2.04	20	
Nickel	1.014	0.0200	1.000		101	75	125	1.003	1.08	20	
Potassium	11.87	0.500	10.00	2.321	95.5	75	125	11.50	3.11	20	
Selenium	0.9687	0.0200	1.000		96.9	75	125	0.9699	0.127	20	
Silver	0.1007	0.0100	0.1000		101	75	125	0.09985	0.809	20	
Sodium	14.50	1.00	10.00	5.608	88.9	75	125	14.28	1.50	20	
Thallium	0.9899	0.0200	1.000		99.0	75	125	0.9843	0.566	20	
Tin	1.016	0.0500	1.000		102	75	125	1.020	0.409	20	
Titanium	0.9790	0.0500	1.000	0.01724	96.2	75	125	0.9813	0.239	20	
Vanadium	1.001	0.0100	1.000	0.002052	99.9	75	125	0.9909	1.00	20	
Zinc	1.005	0.0200	1.000		101	75	125	0.9944	1.07	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184393

Sample ID: **MB-184393** Client ID: Units: **ug/L** Prep Date: **12/03/2013** Run No: **256973**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **184393** Analysis Date: **12/03/2013** Seq No: **5398630**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	0.10									
4,4´-DDE	BRL	0.10									
4,4´-DDT	BRL	0.10									
Aldrin	BRL	0.050									
alpha-BHC	BRL	0.050									
alpha-Chlordane	BRL	0.050									
beta-BHC	BRL	0.050									
Chlordane	BRL	0.50									
delta-BHC	BRL	0.050									
Dieldrin	BRL	0.10									
Endosulfan I	BRL	0.050									
Endosulfan II	BRL	0.10									
Endosulfan sulfate	BRL	0.10									
Endrin	BRL	0.10									
Endrin aldehyde	BRL	0.10									
Endrin ketone	BRL	0.10									
gamma-BHC	BRL	0.050									
gamma-Chlordane	BRL	0.050									
Heptachlor	BRL	0.050									
Heptachlor epoxide	BRL	0.050									
Methoxychlor	BRL	0.50									
Toxaphene	BRL	5.0									
Surr: Decachlorobiphenyl	0.2205	0	0.5000		44.1	15	115				
Surr: Tetrachloro-m-xylene	0.2585	0	0.5000		51.7	15.1	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184393

Sample ID: **LCS-184393** Client ID: Units: **ug/L** Prep Date: **12/03/2013** Run No: **256973**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **184393** Analysis Date: **12/03/2013** Seq No: **5398638**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	1.076	0.10	1.000		108	55.4	137				
Aldrin	0.8906	0.050	1.000		89.1	42.7	120				
Dieldrin	1.066	0.10	1.000		107	53.5	133				
Endrin	1.013	0.10	1.000		101	56.8	138				
gamma-BHC	0.9950	0.050	1.000		99.5	50.7	127				
Heptachlor	1.007	0.050	1.000		101	46.5	129				
Surr: Decachlorobiphenyl	0.2004	0	0.5000		40.1	15	115				
Surr: Tetrachloro-m-xylene	0.3601	0	0.5000		72.0	15.1	115				

Sample ID: **LCSD-184393** Client ID: Units: **ug/L** Prep Date: **12/03/2013** Run No: **257213**
SampleType: **LCSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **184393** Analysis Date: **12/06/2013** Seq No: **5403869**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	0.9551	0.10	1.000		95.5	55.4	137	1.076	11.9	22	
Aldrin	0.8248	0.050	1.000		82.5	42.7	120	0.8906	7.68	22	
Dieldrin	1.035	0.10	1.000		103	53.5	133	1.066	2.99	19	
Endrin	0.9706	0.10	1.000		97.1	56.8	138	1.013	4.25	27	
gamma-BHC	0.9393	0.050	1.000		93.9	50.7	127	0.9950	5.76	22	
Heptachlor	0.8913	0.050	1.000		89.1	46.5	129	1.007	12.2	25	
Surr: Decachlorobiphenyl	0.2736	0	0.5000		54.7	15	115	0.2004	0	0	
Surr: Tetrachloro-m-xylene	0.3461	0	0.5000		69.2	15.1	115	0.3601	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **MB-184394** Client ID: Units: **ug/Kg** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5398309**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	13.19	0	16.67		79.1	25.2	120				
Surr: Tetrachloro-m-xylene	12.09	0	16.67		72.5	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **LCS-184394** Client ID: Units: **ug/Kg** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5398318**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	29.32	3.3	33.33		88.0	44.7	136				
Aldrin	28.52	1.7	33.33		85.6	41.5	118				
Dieldrin	29.86	3.3	33.33		89.6	44.3	133				
Endrin	29.34	3.3	33.33		88.0	43.2	137				
gamma-BHC	28.81	1.7	33.33		86.4	40.3	126				
Heptachlor	29.86	1.7	33.33		89.6	40.1	126				
Surr: Decachlorobiphenyl	12.48	0	16.67		74.9	25.2	120				
Surr: Tetrachloro-m-xylene	11.88	0	16.67		71.3	30.5	120				

Sample ID: **1312033-001DMS** Client ID: **13336-SI15-PIPE1R-8** Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	40.88	3.8	37.88		108	33.6	126				
Aldrin	34.85	1.9	37.88		92.0	32.6	120				
Dieldrin	38.54	3.8	37.88		102	35.1	124				
Endrin	38.74	3.8	37.88		102	39.7	129				
gamma-BHC	37.64	1.9	37.88	0.3160	98.5	35.2	120				
Heptachlor	40.74	1.9	37.88		108	34.9	119				
Surr: Decachlorobiphenyl	17.71	0	18.94		93.5	25.2	120				
Surr: Tetrachloro-m-xylene	15.35	0	18.94		81.0	30.5	120				

Sample ID: **1312033-001DMSD** Client ID: **13336-SI15-PIPE1R-8** Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	36.36	3.8	37.89		96.0	33.6	126	40.88	11.7	28.1	
Aldrin	30.36	1.9	37.89		80.1	32.6	120	34.85	13.8	29.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **1312033-001DMSD** Client ID: **13336-SI15-PIPE1R-8** Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	34.86	3.8	37.89		92.0	35.1	124	38.54	10.0	26.6	
Endrin	33.76	3.8	37.89		89.1	39.7	129	38.74	13.7	27.6	
gamma-BHC	33.04	1.9	37.89	0.3160	86.4	35.2	120	37.64	13.0	28.6	
Heptachlor	35.97	1.9	37.89		94.9	34.9	119	40.74	12.4	27.7	
Surr: Decachlorobiphenyl	15.76	0	18.95		83.2	25.2	120	17.71	0	30	
Surr: Tetrachloro-m-xylene	13.33	0	18.95		70.3	30.5	120	15.35	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184410

Sample ID: **MB-184410** Client ID: Units: **ug/L** Prep Date: **12/03/2013** Run No: **256927**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184410** Analysis Date: **12/03/2013** Seq No: **5398037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	5.0									
1,1,2,2-Tetrachloroethane	BRL	5.0									
1,1,2-Trichloroethane	BRL	5.0									
1,1-Dichloroethane	BRL	5.0									
1,1-Dichloroethene	BRL	5.0									
1,2,4-Trichlorobenzene	BRL	5.0									
1,2-Dibromo-3-chloropropane	BRL	5.0									
1,2-Dibromoethane	BRL	5.0									
1,2-Dichlorobenzene	BRL	5.0									
1,2-Dichloroethane	BRL	5.0									
1,2-Dichloropropane	BRL	5.0									
1,3-Dichlorobenzene	BRL	5.0									
1,4-Dichlorobenzene	BRL	5.0									
2-Butanone	BRL	50									
2-Hexanone	BRL	10									
4-Methyl-2-pentanone	BRL	10									
Acetone	BRL	50									
Benzene	BRL	5.0									
Bromodichloromethane	BRL	5.0									
Bromoform	BRL	5.0									
Bromomethane	BRL	5.0									
Carbon disulfide	BRL	5.0									
Carbon tetrachloride	BRL	5.0									
Chlorobenzene	BRL	5.0									
Chloroethane	BRL	10									
Chloroform	BRL	5.0									
Chloromethane	BRL	10									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184410

Sample ID: **MB-184410** Client ID: Units: **ug/L** Prep Date: **12/03/2013** Run No: **256927**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184410** Analysis Date: **12/03/2013** Seq No: **5398037**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	5.0									
cis-1,3-Dichloropropene	BRL	5.0									
Cyclohexane	BRL	5.0									
Dibromochloromethane	BRL	5.0									
Dichlorodifluoromethane	BRL	10									
Ethylbenzene	BRL	5.0									
Freon-113	BRL	10									
Isopropylbenzene	BRL	5.0									
m,p-Xylene	BRL	5.0									
Methyl acetate	BRL	5.0									
Methyl tert-butyl ether	BRL	5.0									
Methylcyclohexane	BRL	5.0									
Methylene chloride	BRL	5.0									
o-Xylene	BRL	5.0									
Styrene	BRL	5.0									
Tetrachloroethene	BRL	5.0									
Toluene	BRL	5.0									
trans-1,2-Dichloroethene	BRL	5.0									
trans-1,3-Dichloropropene	BRL	5.0									
Trichloroethene	BRL	5.0									
Trichlorofluoromethane	BRL	5.0									
Vinyl chloride	BRL	2.0									
Surr: 4-Bromofluorobenzene	45.26	0	50.00		90.5	66.2	120				
Surr: Dibromofluoromethane	51.43	0	50.00		103	79.5	121				
Surr: Toluene-d8	50.05	0	50.00		100	77	117				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184410

Sample ID: **LCS-184410** Client ID: Units: **ug/L** Prep Date: **12/03/2013** Run No: **256927**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184410** Analysis Date: **12/03/2013** Seq No: **5398042**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	58.04	5.0	50.00		116	63.1	140				
Benzene	52.70	5.0	50.00		105	74.2	129				
Chlorobenzene	56.14	5.0	50.00		112	70	129				
Toluene	51.44	5.0	50.00		103	74.2	129				
Trichloroethene	55.94	5.0	50.00		112	71.2	135				
Surr: 4-Bromofluorobenzene	52.26	0	50.00		105	66.2	120				
Surr: Dibromofluoromethane	54.58	0	50.00		109	79.5	121				
Surr: Toluene-d8	49.55	0	50.00		99.1	77	117				

Sample ID: **1312033-004AMS** Client ID: **13336-WATER-1** Units: **ug/L** Prep Date: **12/03/2013** Run No: **256927**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184410** Analysis Date: **12/03/2013** Seq No: **5399169**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	66.05	5.0	50.00		132	60.2	159				
Benzene	58.30	5.0	50.00		117	70.2	138				
Chlorobenzene	60.07	5.0	50.00		120	70.1	133				
Toluene	57.13	5.0	50.00		114	70	139				
Trichloroethene	60.57	5.0	50.00		121	70.1	144				
Surr: 4-Bromofluorobenzene	53.59	0	50.00		107	66.2	120				
Surr: Dibromofluoromethane	56.86	0	50.00		114	79.5	121				
Surr: Toluene-d8	50.94	0	50.00		102	77	117				

Sample ID: **1312033-004AMSD** Client ID: **13336-WATER-1** Units: **ug/L** Prep Date: **12/03/2013** Run No: **256927**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184410** Analysis Date: **12/03/2013** Seq No: **5399170**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	64.86	5.0	50.00		130	60.2	159	66.05	1.82	19.2	
Benzene	57.82	5.0	50.00		116	70.2	138	58.30	0.827	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184410

Sample ID: **1312033-004AMSD** Client ID: **13336-WATER-1** Units: **ug/L** Prep Date: **12/03/2013** Run No: **256927**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184410** Analysis Date: **12/03/2013** Seq No: **5399170**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	57.74	5.0	50.00		115	70.1	133	60.07	3.96	20	
Toluene	57.87	5.0	50.00		116	70	139	57.13	1.29	20	
Trichloroethene	59.15	5.0	50.00		118	70.1	144	60.57	2.37	20	
Surr: 4-Bromofluorobenzene	53.14	0	50.00		106	66.2	120	53.59	0	0	
Surr: Dibromofluoromethane	60.04	0	50.00		120	79.5	121	56.86	0	0	
Surr: Toluene-d8	53.24	0	50.00		106	77	117	50.94	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184420

Sample ID: **MB-184420** Client ID: Units: **mg/Kg** Prep Date: **12/03/2013** Run No: **256984**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184420** Analysis Date: **12/03/2013** Seq No: **5398855**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	BRL	0.0050									
1,1,2,2-Tetrachloroethane	BRL	0.0050									
1,1,2-Trichloroethane	BRL	0.0050									
1,1-Dichloroethane	BRL	0.0050									
1,1-Dichloroethene	BRL	0.0050									
1,2,4-Trichlorobenzene	BRL	0.0050									
1,2-Dibromo-3-chloropropane	BRL	0.0050									
1,2-Dibromoethane	BRL	0.0050									
1,2-Dichlorobenzene	BRL	0.0050									
1,2-Dichloroethane	BRL	0.0050									
1,2-Dichloropropane	BRL	0.0050									
1,3-Dichlorobenzene	BRL	0.0050									
1,4-Dichlorobenzene	BRL	0.0050									
2-Butanone	BRL	0.050									
2-Hexanone	BRL	0.010									
4-Methyl-2-pentanone	BRL	0.010									
Acetone	BRL	0.10									
Benzene	BRL	0.0050									
Bromodichloromethane	BRL	0.0050									
Bromoform	BRL	0.0050									
Bromomethane	BRL	0.0050									
Carbon disulfide	BRL	0.010									
Carbon tetrachloride	BRL	0.0050									
Chlorobenzene	BRL	0.0050									
Chloroethane	BRL	0.010									
Chloroform	BRL	0.0050									
Chloromethane	BRL	0.010									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184420

Sample ID: **MB-184420** Client ID: Units: **mg/Kg** Prep Date: **12/03/2013** Run No: **256984**
SampleType: **MBLK** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184420** Analysis Date: **12/03/2013** Seq No: **5398855**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	BRL	0.0050									
cis-1,3-Dichloropropene	BRL	0.0050									
Cyclohexane	BRL	0.0050									
Dibromochloromethane	BRL	0.0050									
Dichlorodifluoromethane	BRL	0.010									
Ethylbenzene	BRL	0.0050									
Freon-113	BRL	0.010									
Isopropylbenzene	BRL	0.0050									
m,p-Xylene	BRL	0.0050									
Methyl acetate	BRL	0.0050									
Methyl tert-butyl ether	BRL	0.0050									
Methylcyclohexane	BRL	0.0050									
Methylene chloride	BRL	0.020									
o-Xylene	BRL	0.0050									
Styrene	BRL	0.0050									
Tetrachloroethene	BRL	0.0050									
Toluene	BRL	0.0050									
trans-1,2-Dichloroethene	BRL	0.0050									
trans-1,3-Dichloropropene	BRL	0.0050									
Trichloroethene	BRL	0.0050									
Trichlorofluoromethane	BRL	0.0050									
Vinyl chloride	BRL	0.010									
Surr: 4-Bromofluorobenzene	0.04237	0	0.0500		84.7	70	128				
Surr: Dibromofluoromethane	0.05544	0	0.0500		111	78.2	128				
Surr: Toluene-d8	0.04535	0	0.0500		90.7	76.5	116				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184420

Sample ID: **LCS-184420** Client ID: Units: **mg/Kg** Prep Date: **12/03/2013** Run No: **256984**
SampleType: **LCS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184420** Analysis Date: **12/03/2013** Seq No: **5398857**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.03530	0.0050	0.0500		70.6	69.9	145				
Benzene	0.04272	0.0050	0.0500		85.4	72.3	130				
Chlorobenzene	0.04383	0.0050	0.0500		87.7	69	130				
Toluene	0.04200	0.0050	0.0500		84.0	71.1	130				
Trichloroethene	0.03957	0.0050	0.0500		79.1	71.7	136				
Surr: 4-Bromofluorobenzene	0.05161	0	0.0500		103	70	128				
Surr: Dibromofluoromethane	0.05369	0	0.0500		107	78.2	128				
Surr: Toluene-d8	0.05112	0	0.0500		102	76.5	116				

Sample ID: **1312033-001AMS** Client ID: **13336-SI15-PIPE1R-8** Units: **mg/Kg-dry** Prep Date: **12/03/2013** Run No: **257163**
SampleType: **MS** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184420** Analysis Date: **12/05/2013** Seq No: **5403812**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05944	0.0057	0.0569		104	56.6	151				
Benzene	0.05552	0.0057	0.0569		97.5	70.4	130				
Chlorobenzene	0.05652	0.0057	0.0569		99.3	67.5	132				
Toluene	0.05159	0.0057	0.0569	0.001625	87.8	70.4	130				
Trichloroethene	0.04965	0.0057	0.0569		87.2	70.1	137				
Surr: 4-Bromofluorobenzene	0.06216	0	0.0569		109	70	128				
Surr: Dibromofluoromethane	0.06202	0	0.0569		109	78.2	128				
Surr: Toluene-d8	0.05527	0	0.0569		97.1	76.5	116				

Sample ID: **1312033-001AMSD** Client ID: **13336-SI15-PIPE1R-8** Units: **mg/Kg-dry** Prep Date: **12/03/2013** Run No: **257163**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184420** Analysis Date: **12/05/2013** Seq No: **5403816**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.05496	0.0057	0.0569		96.6	56.6	151	0.05944	7.84	20.4	
Benzene	0.05317	0.0057	0.0569		93.4	70.4	130	0.05552	4.32	16.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312033

ANALYTICAL QC SUMMARY REPORT

BatchID: 184420

Sample ID: **1312033-001AMSD** Client ID: **13336-SI15-PIPE1R-8** Units: **mg/Kg-dry** Prep Date: **12/03/2013** Run No: **257163**
SampleType: **MSD** TestCode: **TCL VOLATILE ORGANICS SW8260B** BatchID: **184420** Analysis Date: **12/05/2013** Seq No: **5403816**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlorobenzene	0.05464	0.0057	0.0569		96.0	67.5	132	0.05652	3.38	14.6	
Toluene	0.05079	0.0057	0.0569	0.001625	86.4	70.4	130	0.05159	1.56	16.6	
Trichloroethene	0.04646	0.0057	0.0569		81.6	70.1	137	0.04965	6.66	17	
Surr: 4-Bromofluorobenzene	0.05927	0	0.0569		104	70	128	0.06216	0	0	
Surr: Dibromofluoromethane	0.06163	0	0.0569		108	78.2	128	0.06202	0	0	
Surr: Toluene-d8	0.05410	0	0.0569		95.1	76.5	116	0.05527	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

December 13, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1312112

Analytical Environmental Services, Inc. received 4 samples on 12/4/2013 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1312112

Date: 12/3/13 Page 1 of 1

COMPANY: EPS

ADDRESS: 1050 Crown Pointe Pkwy Ste. 550 Atlanta, GA 30338

PHONE: (404) 315-9113

FAX:

SAMPLED BY: Jeff Dennis

SIGNATURE:

ANALYSIS REQUESTED: Metals, Pesticides, TCLP VOC, TCLP SVOC, TCLP Metals, TCLP Pesticides

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals	Pesticides	TCLP VOC	TCLP SVOC	TCLP Metals	TCLP Pesticides	REMARKS	No # of Containers
							PRESERVATION (See codes)							
							I	I	I	I	I	I		
1	13337-SI20-CS4-8	12/3/13	1010	X		SO	X	X						2
2	13337-SI20-CS5-8	12/3/13	1015	X		SO	X	X						2
3	13337-SI20-CS6-8	12/3/13	1020	X		SO	X	X						2
4	13337-Stockpile-20	12/3/13	1030		X	SO		X	X	X	X	X		2
5														~~2~~ 10
6														
7														
8														
9														
10														
11														
12														
13														
14														

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	12/3/13 1115	1:	12/4/13
2:		2:	7:30
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER _____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordelle, GA
SEND REPORT TO: tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 8

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ● Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project: Drexel Chemical Company
Lab ID: 1312112

Case Narrative

Metals Analysis by Method 6010C:

Due to sample matrix, samples 1312112-001A, -002A, and -003A required dilution during preparation and/or analysis resulting in elevated reporting limits for Thallium.

Sample ID "13337-SI20-CS4-8" was changed to "13337-SI20-CS7-11", "13337-SI20-CS5-8" was changed to "13337-SI20-CS8-11", and "13337-SI20-CS6-8" was changed to "13337-SI20-CS9-11" per Timmerly Bullman on 12/5/13 via email.

Pesticide Analysis by Method 8081B:

Due to sample matrix, samples 1312112-001B and -004A required dilution during analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS7-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:10:00 AM
Lab ID:	1312112-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.118		mg/Kg-dry	184425	1	12/04/2013 10:38	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
4,4´-DDE	530	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
4,4´-DDT	29000	3900		ug/Kg-dry	184394	1000	12/04/2013 14:43	KD
Aldrin	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
alpha-BHC	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
alpha-Chlordane	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
beta-BHC	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Chlordane	48000	39000		ug/Kg-dry	184394	1000	12/04/2013 14:43	KD
delta-BHC	260	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Dieldrin	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endosulfan I	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endosulfan II	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endosulfan sulfate	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endrin	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endrin aldehyde	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endrin ketone	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
gamma-BHC	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
gamma-Chlordane	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Heptachlor	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Heptachlor epoxide	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Methoxychlor	BRL	2000		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Toxaphene	630000	200000		ug/Kg-dry	184394	1000	12/04/2013 14:43	KD
Surr: Decachlorobiphenyl	92.2	25.2-120		%REC	184394	1	12/04/2013 13:32	KD
Surr: Tetrachloro-m-xylene	65.8	30.5-120		%REC	184394	1	12/04/2013 13:32	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8360	55.2		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Antimony	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Arsenic	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Barium	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Beryllium	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Cadmium	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Calcium	242	55.2		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Chromium	9.03	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Cobalt	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Copper	4.91	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Iron	18300	552		mg/Kg-dry	184426	10	12/04/2013 14:38	TA
Lead	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS7-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:10:00 AM
Lab ID:	1312112-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	122	55.2		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Manganese	6.05	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Molybdenum	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Nickel	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Selenium	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Silver	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Sodium	BRL	110		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Thallium	BRL	11.0		mg/Kg-dry	184426	10	12/04/2013 14:38	TA
Tin	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Titanium	68.2	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Vanadium	51.2	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Zinc	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	15.6	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS8-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:15:00 AM
Lab ID:	1312112-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.118		mg/Kg-dry	184425	1	12/04/2013 10:47	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	1200	39		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
4,4´-DDE	25	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
4,4´-DDT	1100	39		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
Aldrin	14	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Chlordane	1200	390		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
delta-BHC	19	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endrin	65	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endrin ketone	40	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
gamma-BHC	6.5	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Methoxychlor	BRL	20		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Toxaphene	10000	2000		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
Surr: Decachlorobiphenyl	83.8	25.2-120		%REC	184394	1	12/04/2013 13:43	KD
Surr: Tetrachloro-m-xylene	60.9	30.5-120		%REC	184394	1	12/04/2013 13:43	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	9750	57.6		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Antimony	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Arsenic	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Barium	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Beryllium	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Cadmium	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Calcium	502	57.6		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Chromium	14.7	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Cobalt	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Copper	5.74	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Iron	18800	576		mg/Kg-dry	184426	10	12/04/2013 14:50	TA
Lead	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS8-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:15:00 AM
Lab ID:	1312112-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	175	57.6		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Manganese	5.90	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Molybdenum	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Nickel	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Selenium	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Silver	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Sodium	BRL	115		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Thallium	BRL	11.5		mg/Kg-dry	184426	10	12/04/2013 14:50	TA
Tin	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Titanium	70.2	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Vanadium	53.9	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Zinc	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
PERCENT MOISTURE D2216								
Percent Moisture	15.2	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS9-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:20:00 AM
Lab ID:	1312112-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.116		mg/Kg-dry	184425	1	12/04/2013 10:49	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	29	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
4,4´-DDE	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
4,4´-DDT	4.0	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Aldrin	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Chlordane	67	39		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
delta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endrin	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endrin ketone	4.2	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Methoxychlor	BRL	20		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Toxaphene	BRL	200		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Surr: Decachlorobiphenyl	81.9	25.2-120		%REC	184394	1	12/04/2013 13:54	KD
Surr: Tetrachloro-m-xylene	79	30.5-120		%REC	184394	1	12/04/2013 13:54	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8930	54.2		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Antimony	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Arsenic	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Barium	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Beryllium	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Cadmium	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Calcium	418	54.2		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Chromium	9.96	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Cobalt	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Copper	5.47	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Iron	16900	542		mg/Kg-dry	184426	10	12/04/2013 14:54	TA
Lead	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS9-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:20:00 AM
Lab ID:	1312112-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	150	54.2		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Manganese	5.86	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Molybdenum	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Nickel	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Selenium	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Silver	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Sodium	BRL	108		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Thallium	BRL	10.8		mg/Kg-dry	184426	10	12/04/2013 14:54	TA
Tin	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Titanium	92.5	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Vanadium	51.4	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Zinc	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
PERCENT MOISTURE D2216								
Percent Moisture	14.7	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-STOCKPILE-20
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:30:00 AM
Lab ID:	1312112-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
1,2-Dichloroethane	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
2-Butanone	BRL	0.20		mg/L	184519	20	12/05/2013 13:36	GK
Benzene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Carbon tetrachloride	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Chlorobenzene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Chloroform	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Tetrachloroethene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Trichloroethene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Vinyl chloride	BRL	0.040		mg/L	184519	20	12/05/2013 13:36	GK
Surr: 4-Bromofluorobenzene	96	67.9-128		%REC	184519	20	12/05/2013 13:36	GK
Surr: Dibromofluoromethane	95.5	77.2-124		%REC	184519	20	12/05/2013 13:36	GK
Surr: Toluene-d8	97.7	71.6-127		%REC	184519	20	12/05/2013 13:36	GK
SEMIVOLATILES ORGANICS, TCLP SW1311/8270D				**(SW3510C)**				
1,4-Dichlorobenzene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
2,4,5-Trichlorophenol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
2,4,6-Trichlorophenol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
2,4-Dinitrotoluene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Hexachlorobenzene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Hexachlorobutadiene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Hexachloroethane	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
m,p-Cresol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Nitrobenzene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
o-Cresol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Pentachlorophenol	BRL	0.50		mg/L	184149	1	12/05/2013 14:56	YH
Pyridine	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Cresols, Total	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Surr: 2,4,6-Tribromophenol	84.7	50.3-131		%REC	184149	1	12/05/2013 14:56	YH
Surr: 2-Fluorobiphenyl	90.9	55.4-125		%REC	184149	1	12/05/2013 14:56	YH
Surr: 2-Fluorophenol	83.1	45-126		%REC	184149	1	12/05/2013 14:56	YH
Surr: 4-Terphenyl-d14	105	57.6-138		%REC	184149	1	12/05/2013 14:56	YH
Surr: Nitrobenzene-d5	77.6	50-126		%REC	184149	1	12/05/2013 14:56	YH
Surr: Phenol-d5	75.8	40.4-119		%REC	184149	1	12/05/2013 14:56	YH
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Chlordane	BRL	0.050		mg/L	184360	10	12/05/2013 16:55	KD
Endrin	BRL	0.0010		mg/L	184360	1	12/05/2013 14:23	KD
gamma-BHC	BRL	0.00050		mg/L	184360	1	12/05/2013 14:23	KD
Heptachlor	BRL	0.00050		mg/L	184360	1	12/05/2013 14:23	KD
Heptachlor epoxide	BRL	0.00050		mg/L	184360	1	12/05/2013 14:23	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-STOCKPILE-20
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:30:00 AM
Lab ID:	1312112-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Methoxychlor	BRL	0.0050		mg/L	184360	1	12/05/2013 14:23	KD
Toxaphene	0.20	0.050		mg/L	184360	1	12/05/2013 14:23	KD
Surr: Decachlorobiphenyl	62.6	30.7-121		%REC	184360	1	12/05/2013 14:23	KD
Surr: Tetrachloro-m-xylene	58.2	36.6-115		%REC	184360	1	12/05/2013 14:23	KD
MERCURY, TCLP SW1311/7470A				**(SW7470A)**				
Mercury	BRL	0.00400		mg/L	184414	1	12/05/2013 12:44	CG
ICP METALS, TCLP SW1311/6010C				**(SW3010A)**				
Arsenic	BRL	0.250		mg/L	184443	1	12/05/2013 14:44	JL
Barium	BRL	0.500		mg/L	184443	1	12/05/2013 14:44	JL
Cadmium	BRL	0.0250		mg/L	184443	1	12/05/2013 14:44	JL
Chromium	BRL	0.0500		mg/L	184443	1	12/05/2013 14:44	JL
Lead	BRL	0.0500		mg/L	184443	1	12/05/2013 14:44	JL
Selenium	BRL	0.100		mg/L	184443	1	12/05/2013 14:44	JL
Silver	BRL	0.0250		mg/L	184443	1	12/05/2013 14:44	JL
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	2600	390		ug/Kg-dry	184394	100	12/04/2013 15:38	KD
4,4´-DDE	420	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
4,4´-DDT	250	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Aldrin	59	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
alpha-Chlordane	BRL	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Chlordane	5200	3900		ug/Kg-dry	184394	100	12/04/2013 15:38	KD
delta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Dieldrin	BRL	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Endosulfan I	200	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Endrin	BRL	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Endrin ketone	540	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
gamma-Chlordane	BRL	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Methoxychlor	BRL	20		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Toxaphene	BRL	20000		ug/Kg-dry	184394	100	12/04/2013 15:38	KD
Surr: Decachlorobiphenyl	78.6	25.2-120		%REC	184394	1	12/04/2013 14:05	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-STOCKPILE-20
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:30:00 AM
Lab ID:	1312112-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CHLORINATED PESTICIDES SW8081B					**(SW3550C)**			
Surr: Tetrachloro-m-xylene	53.8	30.5-120		%REC	184394	1	12/04/2013 14:05	KD
PERCENT MOISTURE D2216								
Percent Moisture	15.2	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1312112

Checklist completed by PM 12/4/13
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.0 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184149

Sample ID: **MB-184149** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5402574**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.8585	0	1.000		85.8	50.3	131				
Surr: 2-Fluorobiphenyl	0.4764	0	0.5000		95.3	55.4	125				
Surr: 2-Fluorophenol	0.8716	0	1.000		87.2	45	126				
Surr: 4-Terphenyl-d14	0.5316	0	0.5000		106	57.6	138				
Surr: Nitrobenzene-d5	0.4291	0	0.5000		85.8	50	126				
Surr: Phenol-d5	0.8098	0	1.000		81.0	40.4	119				

Sample ID: **LCS-184149** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5402576**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.6464	0.10	1.000		64.6	64.6	120				
2,4,5-Trichlorophenol	0.8935	0.10	1.000		89.4	71.3	130				
2,4,6-Trichlorophenol	0.8590	0.10	1.000		85.9	77	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184149

Sample ID: **LCS-184149** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5402576**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	0.8053	0.10	1.000		80.5	70.6	120				
Cresols, Total	2.345	0.10	3.000		78.2	63.7	138				
Hexachlorobenzene	0.7952	0.10	1.000		79.5	72.4	120				
Hexachlorobutadiene	0.6846	0.10	1.000		68.5	65.3	120				
Hexachloroethane	0.6958	0.10	1.000		69.6	56.3	126				
m,p-Cresol	1.573	0.10	2.000		78.7	62.1	140				
Nitrobenzene	0.7910	0.10	1.000		79.1	66.8	135				
o-Cresol	0.7717	0.10	1.000		77.2	65.6	137				
Pentachlorophenol	0.7287	0.50	1.000		72.9	55.9	145				
Pyridine	0.5150	0.10	1.000		51.5	10	120				
Surr: 2,4,6-Tribromophenol	0.7750	0	1.000		77.5	50.3	131				
Surr: 2-Fluorobiphenyl	0.4309	0	0.5000		86.2	55.4	125				
Surr: 2-Fluorophenol	0.7127	0	1.000		71.3	45	126				
Surr: 4-Terphenyl-d14	0.4593	0	0.5000		91.9	57.6	138				
Surr: Nitrobenzene-d5	0.4080	0	0.5000		81.6	50	126				
Surr: Phenol-d5	0.6512	0	1.000		65.1	40.4	119				

Sample ID: **1312112-004CMS** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5403494**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.7567	0.10	1.000		75.7	61.5	120				
2,4,5-Trichlorophenol	1.064	0.10	1.000		106	59.9	130				
2,4,6-Trichlorophenol	0.9889	0.10	1.000		98.9	65.2	125				
2,4-Dinitrotoluene	0.9265	0.10	1.000		92.6	57.9	120				
Cresols, Total	2.721	0.10	3.000		90.7	55.3	136				
Hexachlorobenzene	0.9019	0.10	1.000		90.2	59.6	120				
Hexachlorobutadiene	0.7742	0.10	1.000		77.4	52.2	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184149

Sample ID: **1312112-004CMS** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5403494**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	0.8619	0.10	1.000		86.2	51.4	120				
m,p-Cresol	1.806	0.10	2.000		90.3	51.2	139				
Nitrobenzene	0.8804	0.10	1.000		88.0	53.1	131				
o-Cresol	0.9149	0.10	1.000		91.5	56.8	133				
Pentachlorophenol	0.8945	0.50	1.000		89.4	44.8	148				
Pyridine	0.2152	0.10	1.000		21.5	10	120				
Surr: 2,4,6-Tribromophenol	0.9312	0	1.000		93.1	50.3	131				
Surr: 2-Fluorobiphenyl	0.5027	0	0.5000		101	55.4	125				
Surr: 2-Fluorophenol	0.8600	0	1.000		86.0	45	126				
Surr: 4-Terphenyl-d14	0.5333	0	0.5000		107	57.6	138				
Surr: Nitrobenzene-d5	0.4393	0	0.5000		87.9	50	126				
Surr: Phenol-d5	0.8054	0	1.000		80.5	40.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184360

Sample ID: **MB-184360** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402641**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.004089	0	0.0050		81.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.002971	0	0.0050		59.4	36.6	115				

Sample ID: **LCS-184360-1** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402647**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.006968	0.0010	0.0080		87.1	50.5	139				
gamma-BHC	0.006004	0.00050	0.0080		75.1	52.6	121				
Heptachlor	0.005901	0.00050	0.0080		73.8	53.1	125				
Heptachlor epoxide	0.006273	0.00050	0.0080		78.4	51.9	125				
Methoxychlor	0.02477	0.0050	0.0300		82.6	50.2	133				
Surr: Decachlorobiphenyl	0.004275	0	0.0050		85.5	30.7	121				
Surr: Tetrachloro-m-xylene	0.003065	0	0.0050		61.3	36.6	115				

Sample ID: **LCS-184360-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.03878	0.0050	0.0400		97.0	55.2	136				
Toxaphene	0.08850	0.050	0.0800		111	52.8	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184360

Sample ID: **LCS-184360-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.004088	0	0.0050		81.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.003076	0	0.0050		61.5	36.6	115				

Sample ID: **1312112-004CMS-1** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402668**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.007249	0.0010	0.0080		90.6	48	138				
gamma-BHC	0.005788	0.00050	0.0080		72.4	46.5	123				
Heptachlor	0.006313	0.00050	0.0080		78.9	47.8	124				
Heptachlor epoxide	0.006492	0.00050	0.0080		81.2	51.1	120				
Methoxychlor	0.02528	0.0050	0.0300		84.3	47.6	138				
Surr: Decachlorobiphenyl	0.003521	0	0.0050		70.4	30.7	121				
Surr: Tetrachloro-m-xylene	0.003093	0	0.0050		61.9	36.6	115				

Sample ID: **1312112-004CMS-2** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402671**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.1095	0.0050	0.0400	0.06792	104	50.3	139				E
Toxaphene	0.2884	0.050	0.0800	0.1994	111	50	132				
Surr: Decachlorobiphenyl	0.003125	0	0.0050		62.5	30.7	121				
Surr: Tetrachloro-m-xylene	0.003094	0	0.0050		61.9	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **MB-184394** Client ID: Units: **ug/Kg** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5398309**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	13.19	0	16.67		79.1	25.2	120				
Surr: Tetrachloro-m-xylene	12.09	0	16.67		72.5	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **LCS-184394** Client ID: Units: **ug/Kg** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5398318**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	29.32	3.3	33.33		88.0	44.7	136				
Aldrin	28.52	1.7	33.33		85.6	41.5	118				
Dieldrin	29.86	3.3	33.33		89.6	44.3	133				
Endrin	29.34	3.3	33.33		88.0	43.2	137				
gamma-BHC	28.81	1.7	33.33		86.4	40.3	126				
Heptachlor	29.86	1.7	33.33		89.6	40.1	126				
Surr: Decachlorobiphenyl	12.48	0	16.67		74.9	25.2	120				
Surr: Tetrachloro-m-xylene	11.88	0	16.67		71.3	30.5	120				

Sample ID: **1312033-001DMS** Client ID: Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	40.88	3.8	37.88		108	33.6	126				
Aldrin	34.85	1.9	37.88		92.0	32.6	120				
Dieldrin	38.54	3.8	37.88		102	35.1	124				
Endrin	38.74	3.8	37.88		102	39.7	129				
gamma-BHC	37.64	1.9	37.88	0.3160	98.5	35.2	120				
Heptachlor	40.74	1.9	37.88		108	34.9	119				
Surr: Decachlorobiphenyl	17.71	0	18.94		93.5	25.2	120				
Surr: Tetrachloro-m-xylene	15.35	0	18.94		81.0	30.5	120				

Sample ID: **1312033-001DMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	36.36	3.8	37.89		96.0	33.6	126	40.88	11.7	28.1	
Aldrin	30.36	1.9	37.89		80.1	32.6	120	34.85	13.8	29.9	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **1312033-001DMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	34.86	3.8	37.89		92.0	35.1	124	38.54	10.0	26.6	
Endrin	33.76	3.8	37.89		89.1	39.7	129	38.74	13.7	27.6	
gamma-BHC	33.04	1.9	37.89	0.3160	86.4	35.2	120	37.64	13.0	28.6	
Heptachlor	35.97	1.9	37.89		94.9	34.9	119	40.74	12.4	27.7	
Surr: Decachlorobiphenyl	15.76	0	18.95		83.2	25.2	120	17.71	0	30	
Surr: Tetrachloro-m-xylene	13.33	0	18.95		70.3	30.5	120	15.35	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184414

Sample ID: **MB-184414** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **MBLK** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399856**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00400									

Sample ID: **LCS-184414** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **LCS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399858**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03887	0.00400	0.0400		97.2	85	115				

Sample ID: **1311N26-002BMS** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **MS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399862**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03857	0.00400	0.0400		96.4	80	120				

Sample ID: **1311N26-002BMSD** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **MSD** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399865**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03792	0.00400	0.0400		94.8	80	120	0.03857	1.70	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184425

Sample ID: **MB-184425** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399425**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184425** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399426**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3976	0.100	0.4000		99.4	80	120				

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399428**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4672	0.118	0.4709		99.2	70	130				

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399429**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4586	0.118	0.4728		97.0	70	130	0.4672	1.85	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **MB-184426** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400263**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **LCS-184426** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400261**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	462.7	50.0	500.0		92.5	80	120				
Antimony	45.11	5.00	50.00		90.2	80	120				
Arsenic	44.70	5.00	50.00		89.4	80	120				
Barium	47.98	5.00	50.00		96.0	80	120				
Beryllium	47.40	2.50	50.00		94.8	80	120				
Cadmium	43.96	2.50	50.00		87.9	80	120				
Calcium	467.5	50.0	500.0	7.867	91.9	80	120				
Chromium	45.81	2.50	50.00	0.1359	91.3	80	120				
Cobalt	44.81	2.50	50.00		89.6	80	120				
Copper	46.03	2.50	50.00		92.1	80	120				
Iron	469.9	50.0	500.0	11.58	91.7	80	120				
Lead	44.94	5.00	50.00		89.9	80	120				
Magnesium	463.5	50.0	500.0	0.7018	92.6	80	120				
Manganese	48.05	5.00	50.00	0.2607	95.6	80	120				
Molybdenum	46.93	5.00	50.00		93.9	80	120				
Nickel	44.61	5.00	50.00		89.2	80	120				
Selenium	43.96	5.00	50.00	0.1462	87.6	80	120				
Silver	4.492	2.50	5.000		89.8	80	120				
Sodium	458.6	100	500.0	0.4894	91.6	80	120				
Thallium	44.50	5.00	50.00		89.0	80	120				
Tin	47.81	5.00	50.00	1.358	92.9	80	120				
Titanium	47.88	5.00	50.00		95.8	80	120				
Vanadium	45.61	5.00	50.00		91.2	80	120				
Zinc	43.88	5.00	50.00		87.8	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400266**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	13940	54.8	547.6	8359	1020	75	125				S
Antimony	35.57	5.48	54.76	0.4488	64.1	75	125				S
Arsenic	49.55	5.48	54.76	2.712	85.5	75	125				
Barium	53.32	5.48	54.76	1.420	94.8	75	125				
Beryllium	51.69	2.74	54.76		94.4	75	125				
Cadmium	48.37	2.74	54.76		88.3	75	125				
Calcium	743.0	54.8	547.6	242.0	91.5	75	125				
Chromium	67.41	2.74	54.76	9.034	107	75	125				
Cobalt	47.15	2.74	54.76		86.1	75	125				
Copper	60.22	2.74	54.76	4.907	101	75	125				
Lead	51.03	5.48	54.76	2.901	87.9	75	125				
Magnesium	669.6	54.8	547.6	122.0	100.0	75	125				
Manganese	56.33	5.48	54.76	6.052	91.8	75	125				
Molybdenum	44.66	5.48	54.76	0.2121	81.2	75	125				
Nickel	48.12	5.48	54.76	0.3991	87.1	75	125				
Selenium	50.23	5.48	54.76	2.522	87.1	75	125				
Silver	5.332	2.74	5.476	0.1273	95.0	75	125				
Sodium	550.3	110	547.6	25.80	95.8	75	125				
Thallium	38.05	5.48	54.76		69.5	75	125				S
Tin	48.76	5.48	54.76	0.8036	87.6	75	125				
Titanium	105.8	5.48	54.76	68.21	68.7	75	125				S
Vanadium	109.3	5.48	54.76	51.24	106	75	125				
Zinc	53.00	5.48	54.76	3.692	90.0	75	125				

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5401165**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5401165**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	22500	548	547.6	18260	774	75	125				S

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	12810	55.0	550.2	8359	808	75	125	13940	8.46	20	S
Antimony	37.36	5.50	55.02	0.4488	67.1	75	125	35.57	4.91	20	S
Arsenic	50.26	5.50	55.02	2.712	86.4	75	125	49.55	1.42	20	
Barium	53.30	5.50	55.02	1.420	94.3	75	125	53.32	0.033	20	
Beryllium	52.07	2.75	55.02		94.6	75	125	51.69	0.738	20	
Cadmium	49.71	2.75	55.02		90.3	75	125	48.37	2.74	20	
Calcium	735.0	55.0	550.2	242.0	89.6	75	125	743.0	1.09	20	
Chromium	62.44	2.75	55.02	9.034	97.1	75	125	67.41	7.65	20	
Cobalt	48.18	2.75	55.02		87.6	75	125	47.15	2.17	20	
Copper	60.82	2.75	55.02	4.907	102	75	125	60.22	0.992	20	
Lead	51.54	5.50	55.02	2.901	88.4	75	125	51.03	1.01	20	
Magnesium	664.1	55.0	550.2	122.0	98.5	75	125	669.6	0.818	20	
Manganese	56.86	5.50	55.02	6.052	92.3	75	125	56.33	0.937	20	
Molybdenum	45.98	5.50	55.02	0.2121	83.2	75	125	44.66	2.91	20	
Nickel	49.31	5.50	55.02	0.3991	88.9	75	125	48.12	2.44	20	
Selenium	49.27	5.50	55.02	2.522	85.0	75	125	50.23	1.93	20	
Silver	5.349	2.75	5.502	0.1273	94.9	75	125	5.332	0.319	20	
Sodium	533.9	110	550.2	25.80	92.3	75	125	550.3	3.02	20	
Thallium	40.95	5.50	55.02		74.4	75	125	38.05	7.34	20	S
Tin	49.96	5.50	55.02	0.8036	89.3	75	125	48.76	2.42	20	
Titanium	101.0	5.50	55.02	68.21	59.7	75	125	105.8	4.64	20	S
Vanadium	101.7	5.50	55.02	51.24	91.6	75	125	109.3	7.24	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	54.30	5.50	55.02	3.692	92.0	75	125	53.00	2.43	20	

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5401166**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	19200	550	550.2	18260	170	75	125	22500	15.8	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184443

Sample ID: **MB-184443** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402256**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **MB-184443-2** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402257**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **LCS-184443** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402255**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.946	0.250	5.000		98.9	85	115				
Barium	4.645	0.500	5.000	0.01460	92.6	80	120				
Cadmium	4.768	0.0250	5.000		95.4	85	115				
Chromium	4.772	0.0500	5.000		95.4	85	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184443

Sample ID: **LCS-184443** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402255**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	4.616	0.0500	5.000		92.3	85	115				
Selenium	4.986	0.100	5.000		99.7	85	115				
Silver	0.4725	0.0250	0.5000		94.5	85	115				

Sample ID: **1311N26-002BMS** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402262**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.909	0.250	5.000		98.2	50	150				
Barium	4.967	0.500	5.000	0.5019	89.3	50	150				
Cadmium	4.689	0.0250	5.000	0.008445	93.6	50	150				
Chromium	4.704	0.0500	5.000		94.1	50	150				
Lead	4.512	0.0500	5.000		90.2	50	150				
Selenium	4.946	0.100	5.000		98.9	50	150				
Silver	0.4687	0.0250	0.5000		93.7	50	150				

Sample ID: **1311N26-002BMSD** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MSD** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402264**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.925	0.250	5.000		98.5	50	150	4.909	0.325	30	
Barium	5.023	0.500	5.000	0.5019	90.4	50	150	4.967	1.13	30	
Cadmium	4.724	0.0250	5.000	0.008445	94.3	50	150	4.689	0.739	30	
Chromium	4.708	0.0500	5.000		94.2	50	150	4.704	0.091	30	
Lead	4.519	0.0500	5.000		90.4	50	150	4.512	0.172	30	
Selenium	4.956	0.100	5.000		99.1	50	150	4.946	0.203	30	
Silver	0.4687	0.0250	0.5000		93.7	50	150	0.4687	0.012	30	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184519

Sample ID: **MB-184519** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402174**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.9346	0	1.000		93.5	67.9	128				
Surr: Dibromofluoromethane	0.9794	0	1.000		97.9	77.2	124				
Surr: Toluene-d8	0.9716	0	1.000		97.2	71.6	127				

Sample ID: **LCS-184519** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8798	0.10	1.000		88.0	62.3	141				
1,2-Dichloroethane	1.064	0.10	1.000		106	74.1	127				
2-Butanone	2.090	0.20	2.000		105	45.5	137				
Benzene	1.028	0.10	1.000		103	73.5	125				
Carbon tetrachloride	1.069	0.10	1.000		107	55.1	144				
Chlorobenzene	1.083	0.10	1.000		108	75.4	122				
Chloroform	0.9770	0.10	1.000		97.7	68.2	127				
Tetrachloroethene	1.127	0.10	1.000		113	70.3	132				
Trichloroethene	1.087	0.10	1.000		109	70.5	128				
Vinyl chloride	0.9018	0.040	1.000		90.2	54.9	143				

Qualifiers:
> Greater than Result value
BRL Below reporting limit
J Estimated value detected below Reporting Limit
Rpt Lim Reporting Limit
< Less than Result value
E Estimated (value above quantitation range)
N Analyte not NELAC certified
S Spike Recovery outside limits due to matrix
B Analyte detected in the associated method blank
H Holding times for preparation or analysis exceeded
R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184519

Sample ID: **LCS-184519** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	0.9706	0	1.000		97.1	67.9	128				
Surr: Dibromofluoromethane	0.9876	0	1.000		98.8	77.2	124				
Surr: Toluene-d8	0.9796	0	1.000		98.0	71.6	127				

Sample ID: **1312112-004BMS** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402570**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.9332	0.10	1.000		93.3	62.3	154				
1,2-Dichloroethane	0.9684	0.10	1.000		96.8	65.8	132				
2-Butanone	2.017	0.20	2.000		101	44.2	148				
Benzene	0.9934	0.10	1.000		99.3	72.6	133				
Carbon tetrachloride	1.025	0.10	1.000		103	53.7	151				
Chlorobenzene	1.038	0.10	1.000		104	72	130				
Chloroform	0.9264	0.10	1.000		92.6	63.2	137				
Tetrachloroethene	1.100	0.10	1.000		110	71.9	140				
Trichloroethene	1.061	0.10	1.000		106	68.3	146				
Vinyl chloride	0.8148	0.040	1.000		81.5	54.5	151				
Surr: 4-Bromofluorobenzene	0.9588	0	1.000		95.9	67.9	128				
Surr: Dibromofluoromethane	0.9824	0	1.000		98.2	77.2	124				
Surr: Toluene-d8	0.9696	0	1.000		97.0	71.6	127				

Sample ID: **1312112-004BDUP** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402454**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184519

Sample ID: **1312112-004BDUP** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402454**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	BRL	0.10						0	0	30	
Chloroform	BRL	0.10						0	0	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	0.9508	0	1.000		95.1	67.9	128	0.9600	0	0	
Surr: Dibromofluoromethane	0.9570	0	1.000		95.7	77.2	124	0.9550	0	0	
Surr: Toluene-d8	0.9620	0	1.000		96.2	71.6	127	0.9772	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

December 11, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1312440

Analytical Environmental Services, Inc. received 2 samples on 12/6/2013 11:09:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

3785 PRESIDENTIAL PARKWAY • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770)457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1312440

Date: 12/6/13 Page 1 of 1

COMPANY: EPS, Inc

ADDRESS: 1050 Crown Pointe Parkway Suite 550 Atlanta, GA 30338

PHONE: (404) 315-9113

FAX:

SAMPLED BY: William Crowe

SIGNATURE: [signature]

ANALYSIS REQUESTED: Metals; Pesticides (8081)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals (PRESERVATION: I)	Pesticides (8081) (PRESERVATION: I)	REMARKS	No # of Containers
1	13340-SI15-Pipe1ContentR2	12/6/2013	1109	X		SO	X	X		2
2	13340-SI20-CS10-13	12/6/2013	0747	X		SO	X	X		2
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [signature]	12/6/13 1445	1: [signature]	12/6/13 2:45
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordele, GA
SEND REPORT TO: tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 4

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ● Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 11-Dec-13

Client: Environmental Planning Specialists, Inc.
Project: Drexel Chemical Company
Lab ID: 1312440

Case Narrative

Pesticide Analysis by Method 8081B:

Due to sample matrix, samples 1312440-001 and -002 required dilution during analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 11-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13340-SI15-Pipe Content R2
Project Name:	Drexel Chemical Company	**Collection Date:**	12/6/2013 11:09:00 AM
Lab ID:	1312440-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	0.246	0.176		mg/Kg-dry	184615	1	12/09/2013 11:57	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	1300	120		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
4,4´-DDE	56	6.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
4,4´-DDT	2300	120		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
Aldrin	BRL	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
alpha-BHC	67	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
alpha-Chlordane	BRL	60		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
beta-BHC	33	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Chlordane	BRL	1200		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
delta-BHC	17	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Dieldrin	BRL	6.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Endosulfan I	14	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Endosulfan II	93	6.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Endosulfan sulfate	BRL	120		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
Endrin	BRL	120		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
Endrin aldehyde	47	6.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Endrin ketone	25	6.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
gamma-BHC	9.5	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
gamma-Chlordane	BRL	60		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
Heptachlor	BRL	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Heptachlor epoxide	BRL	3.0		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Methoxychlor	BRL	30		ug/Kg-dry	184572	1	12/09/2013 13:49	RS
Toxaphene	7600	6000		ug/Kg-dry	184572	20	12/09/2013 15:59	RS
Surr: Decachlorobiphenyl	73.7	25.2-120		%REC	184572	1	12/09/2013 13:49	RS
Surr: Tetrachloro-m-xylene	53.1	30.5-120		%REC	184572	1	12/09/2013 13:49	RS
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	28400	86.9		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Antimony	BRL	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Arsenic	132	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Barium	74.2	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Beryllium	BRL	4.35		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Cadmium	96.0	4.35		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Calcium	42200	86.9		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Chromium	94.6	4.35		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Cobalt	BRL	4.35		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Copper	14400	43.5		mg/Kg-dry	184545	10	12/09/2013 16:41	JL
Iron	23000	869		mg/Kg-dry	184545	10	12/09/2013 16:41	JL
Lead	BRL	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 11-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13340-SI15-Pipe Content R2
Project Name:	Drexel Chemical Company	**Collection Date:**	12/6/2013 11:09:00 AM
Lab ID:	1312440-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	364	86.9		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Manganese	169	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Molybdenum	BRL	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Nickel	14.4	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Selenium	BRL	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Silver	BRL	4.35		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Sodium	400	174		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Thallium	BRL	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Tin	BRL	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Titanium	368	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Vanadium	118	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
Zinc	6720	8.69		mg/Kg-dry	184545	1	12/09/2013 13:48	JL
PERCENT MOISTURE D2216								
Percent Moisture	44.2	0		wt%	R257328	1	12/09/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 11-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13340-SI20-CS10-13
Project Name:	Drexel Chemical Company	**Collection Date:**	12/6/2013 7:47:00 AM
Lab ID:	1312440-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.116		mg/Kg-dry	184615	1	12/09/2013 11:26	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	980	390		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
4,4´-DDE	BRL	3900		ug/Kg-dry	184572	1000	12/09/2013 16:10	RS
4,4´-DDT	29000	3900		ug/Kg-dry	184572	1000	12/09/2013 16:10	RS
Aldrin	BRL	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
alpha-BHC	BRL	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
alpha-Chlordane	2500	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
beta-BHC	BRL	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Chlordane	45000	39000		ug/Kg-dry	184572	1000	12/09/2013 16:10	RS
delta-BHC	BRL	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Dieldrin	BRL	390		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Endosulfan I	400	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Endosulfan II	1300	390		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Endosulfan sulfate	BRL	3900		ug/Kg-dry	184572	1000	12/09/2013 16:10	RS
Endrin	7100	390		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Endrin aldehyde	5400	390		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Endrin ketone	BRL	3900		ug/Kg-dry	184572	1000	12/09/2013 16:10	RS
gamma-BHC	BRL	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
gamma-Chlordane	2700	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Heptachlor	1100	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Heptachlor epoxide	BRL	190		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Methoxychlor	BRL	1900		ug/Kg-dry	184572	100	12/09/2013 16:22	RS
Toxaphene	470000	190000		ug/Kg-dry	184572	1000	12/09/2013 16:10	RS
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	184572	100	12/09/2013 16:22	RS
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	184572	100	12/09/2013 16:22	RS
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	11500	53.9		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Antimony	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Arsenic	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Barium	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Beryllium	BRL	2.69		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Cadmium	BRL	2.69		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Calcium	841	53.9		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Chromium	11.6	2.69		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Cobalt	BRL	2.69		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Copper	5.01	2.69		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Iron	13600	539		mg/Kg-dry	184545	10	12/09/2013 16:45	JL
Lead	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 11-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13340-SI20-CS10-13
Project Name:	Drexel Chemical Company	**Collection Date:**	12/6/2013 7:47:00 AM
Lab ID:	1312440-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	67.1	53.9		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Manganese	9.29	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Molybdenum	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Nickel	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Selenium	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Silver	BRL	2.69		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Sodium	BRL	108		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Thallium	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Tin	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Titanium	104	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Vanadium	45.7	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
Zinc	BRL	5.39		mg/Kg-dry	184545	1	12/09/2013 13:53	JL
PERCENT MOISTURE D2216								
Percent Moisture	13.9	0		wt%	R257328	1	12/09/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1312440

Checklist completed by [signature] 12/6/13
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ ~~US~~ Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes ✓ No __ Not Present __

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 4.4 ✓ Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184545

Sample ID: **MB-184545** Client ID: Units: **mg/Kg** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5405904**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184545

Sample ID: **LCS-184545** Client ID: Units: **mg/Kg** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5405902**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	472.5	50.0	500.0	0.4966	94.4	80	120				
Antimony	49.06	5.00	50.00		98.1	80	120				
Arsenic	48.26	5.00	50.00		96.5	80	120				
Barium	49.17	5.00	50.00		98.3	80	120				
Beryllium	48.57	2.50	50.00		97.1	80	120				
Cadmium	48.64	2.50	50.00		97.3	80	120				
Calcium	492.3	50.0	500.0	3.355	97.8	80	120				
Chromium	49.87	2.50	50.00	0.08982	99.6	80	120				
Cobalt	48.70	2.50	50.00		97.4	80	120				
Copper	49.12	2.50	50.00		98.2	80	120				
Iron	479.4	50.0	500.0	1.816	95.5	80	120				
Lead	47.80	5.00	50.00		95.6	80	120				
Magnesium	473.1	50.0	500.0		94.6	80	120				
Manganese	49.19	5.00	50.00		98.4	80	120				
Molybdenum	49.12	5.00	50.00		98.2	80	120				
Nickel	48.25	5.00	50.00		96.5	80	120				
Selenium	47.79	5.00	50.00	0.2169	95.2	80	120				
Silver	4.780	2.50	5.000		95.6	80	120				
Sodium	465.9	100	500.0	5.636	92.1	80	120				
Thallium	47.53	5.00	50.00		95.1	80	120				
Tin	49.66	5.00	50.00	1.346	96.6	80	120				
Titanium	49.63	5.00	50.00		99.3	80	120				
Vanadium	49.65	5.00	50.00		99.3	80	120				
Zinc	47.15	5.00	50.00		94.3	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184545

Sample ID: **1312220-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5405906**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	20760	57.1	571.2	15790	869	75	125				S
Antimony	25.33	5.71	57.12	0.6840	43.1	75	125				S
Arsenic	55.46	5.71	57.12	6.512	85.7	75	125				
Barium	148.6	5.71	57.12	107.7	71.6	75	125				S
Beryllium	52.95	2.86	57.12	0.5246	91.8	75	125				
Cadmium	53.09	2.86	57.12	0.1332	92.7	75	125				
Calcium	3627	57.1	571.2	3547	14.0	75	125				S
Chromium	74.17	2.86	57.12	36.87	65.3	75	125				S
Cobalt	60.49	2.86	57.12	10.94	86.7	75	125				
Copper	72.52	2.86	57.12	23.09	86.5	75	125				
Lead	146.6	5.71	57.12	117.9	50.3	75	125				S
Magnesium	1269	57.1	571.2	629.1	112	75	125				
Manganese	447.1	5.71	57.12	428.8	32.2	75	125				S
Molybdenum	48.71	5.71	57.12	2.093	81.6	75	125				
Nickel	57.53	5.71	57.12	9.004	85.0	75	125				
Selenium	47.78	5.71	57.12		83.7	75	125				
Silver	5.247	2.86	5.712	0.06315	90.8	75	125				
Sodium	756.5	114	571.2	77.59	119	75	125				
Thallium	50.44	5.71	57.12		88.3	75	125				
Tin	51.80	5.71	57.12	9.540	74.0	75	125				S
Titanium	201.9	5.71	57.12	166.5	62.1	75	125				S
Vanadium	92.30	5.71	57.12	41.80	88.4	75	125				
Zinc	188.8	5.71	57.12	154.7	59.8	75	125				S

Sample ID: **1312220-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5406689**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184545

Sample ID: **1312220-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5406689**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	24340	571	571.2	27870	-616	75	125				S

Sample ID: **1312220-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5405907**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	22060	57.2	571.9	15790	1090	75	125	20760	6.05	20	S
Antimony	27.23	5.72	57.19	0.6840	46.4	75	125	25.33	7.25	20	S
Arsenic	54.76	5.72	57.19	6.512	84.4	75	125	55.46	1.27	20	
Barium	149.1	5.72	57.19	107.7	72.5	75	125	148.6	0.365	20	S
Beryllium	53.29	2.86	57.19	0.5246	92.3	75	125	52.95	0.653	20	
Cadmium	53.64	2.86	57.19	0.1332	93.6	75	125	53.09	1.04	20	
Calcium	3780	57.2	571.9	3547	40.7	75	125	3627	4.12	20	S
Chromium	76.35	2.86	57.19	36.87	69.0	75	125	74.17	2.89	20	S
Cobalt	60.47	2.86	57.19	10.94	86.6	75	125	60.49	0.031	20	
Copper	72.84	2.86	57.19	23.09	87.0	75	125	72.52	0.449	20	
Lead	122.8	5.72	57.19	117.9	8.61	75	125	146.6	17.7	20	S
Magnesium	1347	57.2	571.9	629.1	126	75	125	1269	5.95	20	S
Manganese	419.5	5.72	57.19	428.8	-16.3	75	125	447.1	6.39	20	S
Molybdenum	49.28	5.72	57.19	2.093	82.5	75	125	48.71	1.16	20	
Nickel	58.45	5.72	57.19	9.004	86.4	75	125	57.53	1.58	20	
Selenium	48.07	5.72	57.19		84.0	75	125	47.78	0.596	20	
Silver	5.336	2.86	5.719	0.06315	92.2	75	125	5.247	1.68	20	
Sodium	764.9	114	571.9	77.59	120	75	125	756.5	1.10	20	
Thallium	51.11	5.72	57.19		89.4	75	125	50.44	1.31	20	
Tin	51.81	5.72	57.19	9.540	73.9	75	125	51.80	0.014	20	S
Titanium	201.5	5.72	57.19	166.5	61.3	75	125	201.9	0.213	20	S
Vanadium	95.20	5.72	57.19	41.80	93.4	75	125	92.30	3.09	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: **184545**

Sample ID: **1312220-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5405907**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	176.0	5.72	57.19	154.7	37.3	75	125	188.8	7.05	20	S

Sample ID: **1312220-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/06/2013** Run No: **257317**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184545** Analysis Date: **12/09/2013** Seq No: **5406690**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	24760	572	571.9	27870	-544	75	125	24340	1.68	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184572

Sample ID: **MB-184572** Client ID: Units: **ug/Kg** Prep Date: **12/06/2013** Run No: **257343**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184572** Analysis Date: **12/09/2013** Seq No: **5406723**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	11.27	0	16.67		67.6	25.2	120				
Surr: Tetrachloro-m-xylene	8.803	0	16.67		52.8	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184572

Sample ID: **LCS-184572** Client ID: Units: **ug/Kg** Prep Date: **12/06/2013** Run No: **257343**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184572** Analysis Date: **12/09/2013** Seq No: **5406724**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	23.29	3.3	41.67		55.9	44.7	136				
Aldrin	24.82	1.7	16.67		149	41.5	118				S
Dieldrin	27.40	3.3	41.67		65.7	44.3	133				
Endrin	25.42	3.3	41.67		61.0	43.2	137				
gamma-BHC	24.77	1.7	16.67		149	40.3	126				S
Heptachlor	25.24	1.7	16.67		151	40.1	126				S
Surr: Decachlorobiphenyl	12.74	0	16.67		76.4	25.2	120				
Surr: Tetrachloro-m-xylene	10.16	0	16.67		60.9	30.5	120				

Sample ID: **1312356-004CMS** Client ID: Units: **ug/Kg-dry** Prep Date: **12/06/2013** Run No: **257343**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184572** Analysis Date: **12/09/2013** Seq No: **5407115**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	31.73	4.7	47.08		67.4	33.6	126				
Aldrin	34.40	2.4	47.08		73.1	32.6	120				
Dieldrin	36.23	4.7	47.08		76.9	35.1	124				
Endrin	35.72	4.7	47.08		75.9	39.7	129				
gamma-BHC	34.48	2.4	47.08		73.2	35.2	120				
Heptachlor	35.62	2.4	47.08		75.6	34.9	119				
Surr: Decachlorobiphenyl	16.54	0	23.55		70.2	25.2	120				
Surr: Tetrachloro-m-xylene	14.44	0	23.55		61.3	30.5	120				

Sample ID: **1312356-004CMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **12/06/2013** Run No: **257343**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184572** Analysis Date: **12/09/2013** Seq No: **5407117**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	28.85	4.7	47.05		61.3	33.6	126	31.73	9.48	28.1	
Aldrin	25.88	2.4	47.05		55.0	32.6	120	34.40	28.3	29.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184572

Sample ID: **1312356-004CMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **12/06/2013** Run No: **257343**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184572** Analysis Date: **12/09/2013** Seq No: **5407117**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	29.36	4.7	47.05		62.4	35.1	124	36.23	21.0	26.6	
Endrin	32.44	4.7	47.05		68.9	39.7	129	35.72	9.61	27.6	
gamma-BHC	29.16	2.4	47.05		62.0	35.2	120	34.48	16.7	28.6	
Heptachlor	30.55	2.4	47.05		64.9	34.9	119	35.62	15.3	27.7	
Surr: Decachlorobiphenyl	14.66	0	23.53		62.3	25.2	120	16.54	0	30	
Surr: Tetrachloro-m-xylene	10.93	0	23.53		46.4	30.5	120	14.44	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312440

ANALYTICAL QC SUMMARY REPORT

BatchID: 184615

Sample ID: **MB-184615** Client ID: Units: **mg/Kg** Prep Date: **12/09/2013** Run No: **257295**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184615** Analysis Date: **12/09/2013** Seq No: **5405468**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184615** Client ID: Units: **mg/Kg** Prep Date: **12/09/2013** Run No: **257295**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184615** Analysis Date: **12/09/2013** Seq No: **5405469**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3974	0.100	0.4000		99.3	80	120				

Sample ID: **1312440-002AMS** Client ID: **13340-SI20-CS10-13** Units: **mg/Kg-dry** Prep Date: **12/09/2013** Run No: **257295**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184615** Analysis Date: **12/09/2013** Seq No: **5405471**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4396	0.116	0.4626		95.0	70	130				

Sample ID: **1312440-002AMSD** Client ID: **13340-SI20-CS10-13** Units: **mg/Kg-dry** Prep Date: **12/09/2013** Run No: **257295**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184615** Analysis Date: **12/09/2013** Seq No: **5405472**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4405	0.116	0.4626		95.2	70	130	0.4396	0.227	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

December 13, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1312814

Analytical Environmental Services, Inc. received 1 samples on 12/10/2013 3:15:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1312814

Date: 12/10/13 Page 1 of 1

COMPANY: EPS, Inc.

ADDRESS: 1050 Crown Pointe Parkway suite 550 Atlanta, GA 30338

PHONE: (404) 315-9113

FAX:

SAMPLED BY: William Crowe

SIGNATURE:

ANALYSIS REQUESTED: Metals; Pesticides (8081)

PRESERVATION (See codes): I; I

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals	Pesticides (8081)	No # of Containers	REMARKS
1	~~13344-SI20-CS10-15~~	~~1144~~	(38)							
2	13344-SI20-CS10-15	12/10/13	1144	X		SO	X	X	2	
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	12/10/13 1515	1:	12/10/13 3:15PM
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: Tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 2

Turnaround Time Request
- Standard 5 Business Days
- 2 Business Day Rush
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13344-SI20-CS10-15
Project Name:	Drexel Chemical Company	**Collection Date:**	12/10/2013 11:44:00 AM
Lab ID:	1312814-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.123		mg/Kg-dry	184725	1	12/11/2013 12:23	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	26	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
4,4´-DDE	BRL	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
4,4´-DDT	110	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Aldrin	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
alpha-BHC	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
alpha-Chlordane	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
beta-BHC	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Chlordane	220	41		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
delta-BHC	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Dieldrin	BRL	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Endosulfan I	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Endosulfan II	BRL	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Endosulfan sulfate	BRL	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Endrin	22	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Endrin aldehyde	BRL	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Endrin ketone	6.1	4.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
gamma-BHC	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
gamma-Chlordane	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Heptachlor	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Heptachlor epoxide	BRL	2.1		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Methoxychlor	BRL	21		ug/Kg-dry	184718	1	12/11/2013 15:31	KD
Toxaphene	BRL	2100		ug/Kg-dry	184718	10	12/11/2013 14:31	KD
Surr: Decachlorobiphenyl	78.1	25.2-120		%REC	184718	1	12/11/2013 15:31	KD
Surr: Tetrachloro-m-xylene	52.3	30.5-120		%REC	184718	1	12/11/2013 15:31	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4820	58.6		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Antimony	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Arsenic	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Barium	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Beryllium	BRL	2.93		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Cadmium	BRL	2.93		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Calcium	467	58.6		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Chromium	4.54	2.93		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Cobalt	BRL	2.93		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Copper	BRL	2.93		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Iron	7370	586		mg/Kg-dry	184552	10	12/11/2013 18:09	JL
Lead	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13344-SI20-CS10-15
Project Name:	Drexel Chemical Company	**Collection Date:**	12/10/2013 11:44:00 AM
Lab ID:	1312814-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	BRL	58.6		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Manganese	12.0	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Molybdenum	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Nickel	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Selenium	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Silver	BRL	2.93		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Sodium	BRL	117		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Thallium	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Tin	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Titanium	70.2	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Vanadium	28.0	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
Zinc	BRL	5.86		mg/Kg-dry	184552	1	12/11/2013 14:26	JL
PERCENT MOISTURE D2216								
Percent Moisture	19.2	0		wt%	R257532	1	12/11/2013 10:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1312814

Checklist completed by [signature] 12/10/13
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.0 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 19-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184552

Sample ID: **MB-184552** Client ID: Units: **mg/Kg** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410498**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 19-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184552

Sample ID: **LCS-184552** Client ID: Units: **mg/Kg** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410494**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	464.7	50.0	500.0		92.9	80	120				
Antimony	48.70	5.00	50.00		97.4	80	120				
Arsenic	48.26	5.00	50.00		96.5	80	120				
Barium	49.82	5.00	50.00		99.6	80	120				
Beryllium	48.95	2.50	50.00		97.9	80	120				
Cadmium	48.12	2.50	50.00		96.2	80	120				
Calcium	494.9	50.0	500.0	3.493	98.3	80	120				
Chromium	50.74	2.50	50.00	0.09943	101	80	120				
Cobalt	49.28	2.50	50.00		98.6	80	120				
Copper	49.33	2.50	50.00		98.7	80	120				
Iron	475.6	50.0	500.0	1.169	94.9	80	120				
Lead	48.37	5.00	50.00		96.7	80	120				
Magnesium	464.8	50.0	500.0		93.0	80	120				
Manganese	49.68	5.00	50.00		99.4	80	120				
Molybdenum	49.99	5.00	50.00		100.0	80	120				
Nickel	48.73	5.00	50.00		97.5	80	120				
Selenium	48.32	5.00	50.00		96.6	80	120				
Silver	4.814	2.50	5.000		96.3	80	120				
Sodium	439.3	100	500.0		87.9	80	120				
Thallium	47.75	5.00	50.00	0.2270	95.0	80	120				
Tin	49.85	5.00	50.00	1.217	97.3	80	120				
Titanium	50.96	5.00	50.00		102	80	120				
Vanadium	50.50	5.00	50.00		101	80	120				
Zinc	47.74	5.00	50.00		95.5	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184552

Sample ID: **1312128-006BMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410506**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	18490	58.6	586.1	16710	303	75	125				S
Antimony	32.44	5.86	58.61	1.507	52.8	75	125				S
Arsenic	63.04	5.86	58.61	11.21	88.4	75	125				
Barium	239.9	5.86	58.61	200.0	68.1	75	125				S
Beryllium	52.68	2.93	58.61	1.549	87.2	75	125				
Cadmium	53.47	2.93	58.61	0.9336	89.6	75	125				
Chromium	67.99	2.93	58.61	20.46	81.1	75	125				
Cobalt	56.71	2.93	58.61	10.84	78.3	75	125				
Copper	129.7	2.93	58.61	79.82	85.1	75	125				
Lead	232.0	5.86	58.61	207.8	41.3	75	125				S
Magnesium	3533	58.6	586.1	2463	183	75	125				S
Manganese	835.6	5.86	58.61	889.9	-92.5	75	125				S
Molybdenum	49.14	5.86	58.61	2.476	79.6	75	125				
Nickel	62.28	5.86	58.61	16.62	77.9	75	125				
Selenium	50.41	5.86	58.61	0.5341	85.1	75	125				
Silver	5.264	2.93	5.861	0.1247	87.7	75	125				
Sodium	845.4	117	586.1	187.4	112	75	125				
Thallium	45.64	5.86	58.61		77.9	75	125				
Tin	79.75	5.86	58.61	13.68	113	75	125				
Titanium	267.2	5.86	58.61	243.3	40.9	75	125				S
Vanadium	86.18	5.86	58.61	38.00	82.2	75	125				
Zinc	257.6	5.86	58.61	224.6	56.4	75	125				S

Sample ID: **1312128-006BMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410976**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Calcium	69530	1170	586.1	44490	4270	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184552

Sample ID: **1312128-006BMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410976**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	32200	1170	586.1	29940	386	75	125				S

Sample ID: **1312128-006BMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410510**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	18990	58.3	583.3	16710	391	75	125	18490	2.67	20	S
Antimony	32.59	5.83	58.33	1.507	53.3	75	125	32.44	0.466	20	S
Arsenic	62.41	5.83	58.33	11.21	87.8	75	125	63.04	1.01	20	
Barium	259.5	5.83	58.33	200.0	102	75	125	239.9	7.83	20	
Beryllium	54.29	2.92	58.33	1.549	90.4	75	125	52.68	3.02	20	
Cadmium	54.31	2.92	58.33	0.9336	91.5	75	125	53.47	1.56	20	
Chromium	70.11	2.92	58.33	20.46	85.1	75	125	67.99	3.07	20	
Cobalt	59.00	2.92	58.33	10.84	82.6	75	125	56.71	3.96	20	
Copper	137.5	2.92	58.33	79.82	98.9	75	125	129.7	5.82	20	
Lead	262.7	5.83	58.33	207.8	94.2	75	125	232.0	12.4	20	
Magnesium	3004	58.3	583.3	2463	92.8	75	125	3533	16.2	20	
Manganese	815.7	5.83	58.33	889.9	-127	75	125	835.6	2.42	20	S
Molybdenum	50.25	5.83	58.33	2.476	81.9	75	125	49.14	2.24	20	
Nickel	65.06	5.83	58.33	16.62	83.1	75	125	62.28	4.37	20	
Selenium	50.33	5.83	58.33	0.5341	85.4	75	125	50.41	0.160	20	
Silver	5.331	2.92	5.833	0.1247	89.3	75	125	5.264	1.26	20	
Sodium	780.7	117	583.3	187.4	102	75	125	845.4	7.95	20	
Thallium	43.60	5.83	58.33		74.7	75	125	45.64	4.57	20	S
Tin	63.21	5.83	58.33	13.68	84.9	75	125	79.75	23.1	20	R
Titanium	266.7	5.83	58.33	243.3	40.1	75	125	267.2	0.203	20	S
Vanadium	89.36	5.83	58.33	38.00	88.0	75	125	86.18	3.62	20	
Zinc	278.0	5.83	58.33	224.6	91.5	75	125	257.6	7.59	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 19-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184552

Sample ID: **1312128-006BMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/10/2013** Run No: **257528**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184552** Analysis Date: **12/11/2013** Seq No: **5410978**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Calcium	35370	1170	583.3	44490	-1560	75	125	69530	65.1	20	SR
Iron	28750	1170	583.3	29940	-202	75	125	32200	11.3	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 19-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184718

Sample ID: **MB-184718** Client ID: Units: **ug/Kg** Prep Date: **12/11/2013** Run No: **257495**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184718** Analysis Date: **12/11/2013** Seq No: **5409944**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	12.71	0	16.67		76.3	25.2	120				
Surr: Tetrachloro-m-xylene	9.937	0	16.67		59.6	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184718

Sample ID: **LCS-184718** Client ID: Units: **ug/Kg** Prep Date: **12/11/2013** Run No: **257495**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184718** Analysis Date: **12/11/2013** Seq No: **5409948**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	23.15	3.3	41.67		55.6	44.7	136				
Aldrin	22.24	1.7	16.67		133	41.5	118				S
Dieldrin	24.45	3.3	41.67		58.7	44.3	133				
Endrin	23.13	3.3	41.67		55.5	43.2	137				
gamma-BHC	21.94	1.7	16.67		132	40.3	126				S
Heptachlor	22.64	1.7	16.67		136	40.1	126				S
Surr: Decachlorobiphenyl	11.65	0	16.67		69.9	25.2	120				
Surr: Tetrachloro-m-xylene	8.835	0	16.67		53.0	30.5	120				

Sample ID: **1312814-001AMS** Client ID: **13344-SI20-CS10-15** Units: **ug/Kg-dry** Prep Date: **12/11/2013** Run No: **257495**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184718** Analysis Date: **12/11/2013** Seq No: **5413782**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	485.7	4.1	41.12	105.3	925	33.6	126				SE
Aldrin	33.89	2.1	41.12		82.4	32.6	120				
Dieldrin	71.20	4.1	41.12		173	35.1	124				S
Endrin	157.6	4.1	41.12	21.54	331	39.7	129				SE
gamma-BHC	26.83	2.1	41.12		65.3	35.2	120				
Heptachlor	44.12	2.1	41.12		107	34.9	119				
Surr: Decachlorobiphenyl	15.25	0	20.57		74.2	25.2	120				
Surr: Tetrachloro-m-xylene	9.655	0	20.57		46.9	30.5	120				

Sample ID: **1312814-001AMSD** Client ID: **13344-SI20-CS10-15** Units: **ug/Kg-dry** Prep Date: **12/11/2013** Run No: **257495**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184718** Analysis Date: **12/11/2013** Seq No: **5413786**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	806.0	4.1	41.13	105.3	1700	33.6	126	485.7	49.6	28.1	SRE
Aldrin	56.53	2.1	41.13		137	32.6	120	33.89	50.1	29.9	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184718

Sample ID: **1312814-001AMSD** Client ID: **13344-SI20-CS10-15** Units: **ug/Kg-dry** Prep Date: **12/11/2013** Run No: **257495**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184718** Analysis Date: **12/11/2013** Seq No: **5413786**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	153.9	4.1	41.13		374	35.1	124	71.20	73.5	26.6	SRE
Endrin	428.6	4.1	41.13	21.54	990	39.7	129	157.6	92.5	27.6	SRE
gamma-BHC	40.42	2.1	41.13		98.3	35.2	120	26.83	40.4	28.6	R
Heptachlor	83.88	2.1	41.13		204	34.9	119	44.12	62.1	27.7	SRE
Surr: Decachlorobiphenyl	31.30	0	20.57		152	25.2	120	15.25	0	30	S
Surr: Tetrachloro-m-xylene	11.71	0	20.57		56.9	30.5	120	9.655	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 19-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312814

ANALYTICAL QC SUMMARY REPORT

BatchID: 184725

Sample ID: **MB-184725** Client ID: Units: **mg/Kg** Prep Date: **12/11/2013** Run No: **257455**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184725** Analysis Date: **12/11/2013** Seq No: **5409260**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184725** Client ID: Units: **mg/Kg** Prep Date: **12/11/2013** Run No: **257455**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184725** Analysis Date: **12/11/2013** Seq No: **5409262**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4783	0.100	0.4000		120	80	120				

Sample ID: **1312570-001BMS** Client ID: Units: **mg/Kg-dry** Prep Date: **12/11/2013** Run No: **257455**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184725** Analysis Date: **12/11/2013** Seq No: **5409270**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4508	0.118	0.4739		95.1	70	130				

Sample ID: **1312570-001BMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **12/11/2013** Run No: **257455**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184725** Analysis Date: **12/11/2013** Seq No: **5409275**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.5287	0.119	0.4767		111	70	130	0.4508	15.9	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 18, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel

Dear Timmerly Bullman: Order No: 1401117

Analytical Environmental Services, Inc. received 6 samples on 1/3/2014 2:15:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

Revision 2/18/2014

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401117

Date: 1-3-14 Page 1 of 1

COMPANY: EPS Inc.
ADDRESS: 1050 Crown Pointe Pkwy Suite 550 Atlanta, GA 30338
PHONE: 404-315-9113
FAX:
SAMPLED BY: G. Henry
SIGNATURE:

ANALYSIS REQUESTED: Metals; Pesticides

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals (PRESERVATION: I)	Pesticides (PRESERVATION: I)	REMARKS	No # of Containers
1	14003-SIS-CS1-7	1-3-14	0825	X		SO	X	X		2
2	14003-SIS-CS2-7	1-3-14	0830	X		SO	X	X		2
3	14003-SIS-CS3-7	1-3-14	0835	X		SO	X	X		2
4	14003-SIS-CS4-15	1-3-14	0840	X		SO	X	X		2
5	14003-SIS-CS5-15	1-3-14	0845	X		SO	X	X		2
6	14003-SIS-CS6-15	1-3-14	0850	X		SO	X	X		2
7										
8										
9										
10										
11										
12										
13										
14										

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	1-3-14 1442	1:	1/3/14
2:		2:	2-15
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordele, GA
SEND REPORT TO: Tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 12

Turnaround Time Request
- Standard 5 Business Days
- 2 Business Day Rush
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS1-7
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:25:00 AM
Lab ID:	1401117-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.110		mg/Kg-dry	185611	1	01/06/2014 10:46	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	12	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
4,4´-DDE	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
4,4´-DDT	5.8	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Aldrin	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
beta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Chlordane	BRL	37		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
delta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Dieldrin	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Endosulfan II	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Endosulfan sulfate	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Endrin	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Endrin aldehyde	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Endrin ketone	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
gamma-Chlordane	3.2	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Heptachlor	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Methoxychlor	BRL	19		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Toxaphene	BRL	190		ug/Kg-dry	185587	1	01/04/2014 15:06	KD
Surr: Decachlorobiphenyl	91.4	25.2-120		%REC	185587	1	01/04/2014 15:06	KD
Surr: Tetrachloro-m-xylene	61	30.5-120		%REC	185587	1	01/04/2014 15:06	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4440	51.2		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Antimony	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Arsenic	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Barium	9.09	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Beryllium	BRL	2.56		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Cadmium	BRL	2.56		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Calcium	278	51.2		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Chromium	6.62	2.56		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Cobalt	BRL	2.56		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Copper	12.0	2.56		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Iron	4640	51.2		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Lead	6.44	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS1-7
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:25:00 AM
Lab ID:	1401117-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	78.5	51.2		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Manganese	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Molybdenum	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Nickel	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Potassium	BRL	102		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Selenium	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Silver	BRL	2.56		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Sodium	BRL	102		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Thallium	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Tin	BRL	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Titanium	43.8	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Vanadium	18.7	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
Zinc	8.10	5.12		mg/Kg-dry	185516	1	01/06/2014 15:17	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.1	0		wt%	R259087	1	01/06/2014 10:00	KB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS2-7
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:30:00 AM
Lab ID:	1401117-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.110		mg/Kg-dry	185611	1	01/06/2014 10:55	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
4,4´-DDE	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
4,4´-DDT	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Aldrin	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
beta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Chlordane	240	37		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
delta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Dieldrin	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Endosulfan II	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Endosulfan sulfate	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Endrin	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Endrin aldehyde	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Endrin ketone	BRL	3.7		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Heptachlor	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Methoxychlor	BRL	19		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Toxaphene	BRL	190		ug/Kg-dry	185587	1	01/04/2014 13:05	KD
Surr: Decachlorobiphenyl	88.5	25.2-120		%REC	185587	1	01/04/2014 13:05	KD
Surr: Tetrachloro-m-xylene	67.2	30.5-120		%REC	185587	1	01/04/2014 13:05	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4280	55.0		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Antimony	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Arsenic	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Barium	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Beryllium	BRL	2.75		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Cadmium	BRL	2.75		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Calcium	202	55.0		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Chromium	6.31	2.75		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Cobalt	BRL	2.75		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Copper	BRL	2.75		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Iron	9370	55.0		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Lead	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS2-7
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:30:00 AM
Lab ID:	1401117-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	BRL	55.0		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Manganese	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Molybdenum	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Nickel	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Potassium	BRL	110		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Selenium	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Silver	BRL	2.75		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Sodium	BRL	110		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Thallium	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Tin	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Titanium	51.0	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Vanadium	26.5	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
Zinc	BRL	5.50		mg/Kg-dry	185516	1	01/06/2014 15:21	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.1	0		wt%	R259087	1	01/06/2014 10:00	KB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS3-7
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:35:00 AM
Lab ID:	1401117-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.113		mg/Kg-dry	185611	1	01/06/2014 10:57	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
4,4´-DDE	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
4,4´-DDT	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Aldrin	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
beta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Chlordane	BRL	38		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
delta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Dieldrin	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Endosulfan II	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Endosulfan sulfate	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Endrin	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Endrin aldehyde	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Endrin ketone	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Heptachlor	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Methoxychlor	BRL	19		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Toxaphene	BRL	190		ug/Kg-dry	185587	1	01/04/2014 13:16	KD
Surr: Decachlorobiphenyl	89.2	25.2-120		%REC	185587	1	01/04/2014 13:16	KD
Surr: Tetrachloro-m-xylene	65.9	30.5-120		%REC	185587	1	01/04/2014 13:16	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	6640	52.3		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Antimony	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Arsenic	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Barium	7.09	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Beryllium	BRL	2.62		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Cadmium	BRL	2.62		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Calcium	147	52.3		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Chromium	5.13	2.62		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Cobalt	BRL	2.62		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Copper	4.28	2.62		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Iron	9170	52.3		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Lead	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS3-7
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:35:00 AM
Lab ID:	1401117-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	89.1	52.3		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Manganese	19.5	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Molybdenum	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Nickel	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Potassium	BRL	105		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Selenium	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Silver	BRL	2.62		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Sodium	BRL	105		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Thallium	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Tin	BRL	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Titanium	64.1	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Vanadium	24.8	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
Zinc	11.5	5.23		mg/Kg-dry	185516	1	01/06/2014 15:25	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.8	0		wt%	R259087	1	01/06/2014 10:00	KB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS4-15
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:40:00 AM
Lab ID:	1401117-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.114		mg/Kg-dry	185611	1	01/06/2014 10:59	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
4,4´-DDE	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
4,4´-DDT	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Aldrin	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
beta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Chlordane	38	38		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
delta-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Dieldrin	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Endosulfan II	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Endosulfan sulfate	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Endrin	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Endrin aldehyde	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Endrin ketone	BRL	3.8		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Heptachlor	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Methoxychlor	BRL	19		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Toxaphene	BRL	190		ug/Kg-dry	185587	1	01/04/2014 13:27	KD
Surr: Decachlorobiphenyl	87.6	25.2-120		%REC	185587	1	01/04/2014 13:27	KD
Surr: Tetrachloro-m-xylene	60.8	30.5-120		%REC	185587	1	01/04/2014 13:27	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	6690	54.8		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Antimony	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Arsenic	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Barium	8.93	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Beryllium	BRL	2.74		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Cadmium	BRL	2.74		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Calcium	116	54.8		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Chromium	4.92	2.74		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Cobalt	BRL	2.74		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Copper	3.60	2.74		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Iron	9380	54.8		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Lead	6.22	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS4-15
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:40:00 AM
Lab ID:	1401117-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	98.5	54.8		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Manganese	11.2	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Molybdenum	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Nickel	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Potassium	BRL	110		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Selenium	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Silver	BRL	2.74		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Sodium	BRL	110		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Thallium	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Tin	BRL	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Titanium	62.5	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Vanadium	33.7	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
Zinc	5.93	5.48		mg/Kg-dry	185516	1	01/06/2014 15:29	TA
PERCENT MOISTURE D2216								
Percent Moisture	11.9	0		wt%	R259087	1	01/06/2014 10:00	KB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS5-15
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:45:00 AM
Lab ID:	1401117-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.125		mg/Kg-dry	185611	1	01/06/2014 11:06	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
4,4´-DDE	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
4,4´-DDT	17	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Aldrin	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
alpha-BHC	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
alpha-Chlordane	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
beta-BHC	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Chlordane	2800	420		ug/Kg-dry	185587	10	01/04/2014 15:58	KD
delta-BHC	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Dieldrin	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Endosulfan I	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Endosulfan II	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Endosulfan sulfate	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Endrin	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Endrin aldehyde	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Endrin ketone	BRL	4.2		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
gamma-BHC	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
gamma-Chlordane	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Heptachlor	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Heptachlor epoxide	BRL	2.1		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Methoxychlor	BRL	21		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Toxaphene	BRL	210		ug/Kg-dry	185587	1	01/04/2014 13:38	KD
Surr: Decachlorobiphenyl	103	25.2-120		%REC	185587	1	01/04/2014 13:38	KD
Surr: Tetrachloro-m-xylene	67.6	30.5-120		%REC	185587	1	01/04/2014 13:38	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8740	61.6		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Antimony	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Arsenic	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Barium	6.90	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Beryllium	BRL	3.08		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Cadmium	BRL	3.08		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Calcium	202	61.6		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Chromium	10.1	3.08		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Cobalt	BRL	3.08		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Copper	4.71	3.08		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Iron	24300	616		mg/Kg-dry	185516	10	02/10/2014 19:08	TA
Lead	9.21	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS5-15
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:45:00 AM
Lab ID:	1401117-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	99.0	61.6		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Manganese	34.3	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Molybdenum	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Nickel	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Potassium	BRL	123		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Selenium	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Silver	BRL	3.08		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Sodium	BRL	123		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Thallium	BRL	6.16		mg/Kg-dry	185516	2	02/10/2014 19:17	TA
Tin	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Titanium	80.4	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Vanadium	87.3	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
Zinc	BRL	6.16		mg/Kg-dry	185516	1	01/06/2014 15:33	TA
PERCENT MOISTURE D2216								
Percent Moisture	20.0	0		wt%	R259087	1	01/06/2014 10:00	KB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS6-15
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:50:00 AM
Lab ID:	1401117-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.118		mg/Kg-dry	185611	1	01/06/2014 11:08	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
4,4´-DDE	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
4,4´-DDT	25	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Aldrin	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
beta-BHC	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Chlordane	11000	2000		ug/Kg-dry	185587	50	01/04/2014 16:42	KD
delta-BHC	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Dieldrin	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Endosulfan II	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Endosulfan sulfate	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Endrin	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Endrin aldehyde	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Endrin ketone	BRL	4.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Heptachlor	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Methoxychlor	BRL	20		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Toxaphene	BRL	200		ug/Kg-dry	185587	1	01/04/2014 13:49	KD
Surr: Decachlorobiphenyl	112	25.2-120		%REC	185587	1	01/04/2014 13:49	KD
Surr: Tetrachloro-m-xylene	71.7	30.5-120		%REC	185587	1	01/04/2014 13:49	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7220	58.3		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Antimony	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Arsenic	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Barium	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Beryllium	BRL	2.91		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Cadmium	BRL	2.91		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Calcium	187	58.3		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Chromium	10.3	2.91		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Cobalt	BRL	2.91		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Copper	3.89	2.91		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Iron	20700	583		mg/Kg-dry	185516	10	02/10/2014 19:13	TA
Lead	6.84	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14003-SI5-CS6-15
Project Name:	Drexel	**Collection Date:**	1/3/2014 8:50:00 AM
Lab ID:	1401117-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	91.3	58.3		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Manganese	26.4	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Molybdenum	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Nickel	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Potassium	BRL	117		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Selenium	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Silver	BRL	2.91		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Sodium	BRL	117		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Thallium	BRL	5.83		mg/Kg-dry	185516	2	02/10/2014 19:30	TA
Tin	BRL	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Titanium	76.2	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Vanadium	79.0	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
Zinc	6.19	5.83		mg/Kg-dry	185516	1	01/06/2014 15:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	16.7	0		wt%	R259087	1	01/06/2014 10:00	KB

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EAS Work Order Number 1401117

Checklist completed by NJ 1/3/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185516

Sample ID: **MB-185516** Client ID: Units: **mg/Kg** Prep Date: **01/03/2014** Run No: **259020**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **185516** Analysis Date: **01/03/2014** Seq No: **5444509**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Potassium	BRL	100									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185516

Sample ID: **LCS-185516** Client ID: Units: **mg/Kg** Prep Date: **01/03/2014** Run No: **259020**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **185516** Analysis Date: **01/03/2014** Seq No: **5444507**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	469.5	50.0	500.0		93.9	80	120				
Antimony	49.30	5.00	50.00		98.6	80	120				
Arsenic	49.31	5.00	50.00		98.6	80	120				
Barium	49.82	5.00	50.00		99.6	80	120				
Beryllium	49.66	2.50	50.00		99.3	80	120				
Cadmium	49.07	2.50	50.00		98.1	80	120				
Calcium	503.1	50.0	500.0	1.980	100	80	120				
Chromium	50.70	2.50	50.00	0.1415	101	80	120				
Cobalt	49.99	2.50	50.00		100.0	80	120				
Copper	49.78	2.50	50.00		99.6	80	120				
Iron	499.3	50.0	500.0	1.787	99.5	80	120				
Lead	49.72	5.00	50.00		99.4	80	120				
Magnesium	495.5	50.0	500.0		99.1	80	120				
Manganese	50.16	5.00	50.00		100	80	120				
Molybdenum	49.23	5.00	50.00		98.5	80	120				
Nickel	49.76	5.00	50.00		99.5	80	120				
Potassium	480.2	100	500.0	0.4880	95.9	80	120				
Selenium	49.29	5.00	50.00	0.2612	98.1	80	120				
Silver	4.927	2.50	5.000		98.5	80	120				
Sodium	506.8	100	500.0	0.8984	101	80	120				
Thallium	48.02	5.00	50.00	0.4529	95.1	80	120				
Tin	50.94	5.00	50.00	1.054	99.8	80	120				
Titanium	50.58	5.00	50.00		101	80	120				
Vanadium	50.05	5.00	50.00		100	80	120				
Zinc	49.56	5.00	50.00	0.06470	99.0	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185516

Sample ID: **1312N71-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/03/2014** Run No: **259020**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **185516** Analysis Date: **01/03/2014** Seq No: **5444513**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	13780	235	2350	11660	89.9	75	125				
Antimony	196.3	23.5	235.0		83.5	75	125				
Arsenic	231.4	23.5	235.0	0.7295	98.1	75	125				
Barium	412.3	23.5	235.0	219.9	81.8	75	125				
Beryllium	235.0	11.8	235.0	0.3245	99.8	75	125				
Cadmium	229.9	11.8	235.0	1.292	97.3	75	125				
Calcium	21580	235	2350	26570	-212	75	125				S
Chromium	258.1	11.8	235.0	31.92	96.2	75	125				
Cobalt	233.1	11.8	235.0	6.567	96.4	75	125				
Copper	268.2	11.8	235.0	45.97	94.6	75	125				
Iron	19880	235	2350	20730	-36.4	75	125				S
Lead	224.2	23.5	235.0	9.582	91.3	75	125				
Magnesium	4748	235	2350	2472	96.8	75	125				
Manganese	755.8	23.5	235.0	638.0	50.1	75	125				S
Molybdenum	224.2	23.5	235.0	2.890	94.2	75	125				
Nickel	239.9	23.5	235.0	13.71	96.2	75	125				
Potassium	4290	470	2350	1650	112	75	125				
Selenium	236.1	23.5	235.0		100	75	125				
Silver	23.34	11.8	23.50	0.3835	97.7	75	125				
Sodium	4488	470	2350	2372	90.0	75	125				
Thallium	217.5	23.5	235.0		92.5	75	125				
Tin	224.8	23.5	235.0	6.012	93.1	75	125				
Titanium	324.4	23.5	235.0	133.7	81.1	75	125				
Vanadium	269.1	23.5	235.0	49.44	93.4	75	125				
Zinc	533.7	23.5	235.0	411.3	52.1	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185516

Sample ID: **1312N71-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/03/2014** Run No: **259020**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **185516** Analysis Date: **01/03/2014** Seq No: **5444518**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	15550	237	2367	11660	164	75	125	13780	12.1	20	S
Antimony	185.0	23.7	236.7		78.2	75	125	196.3	5.93	20	
Arsenic	234.0	23.7	236.7	0.7295	98.5	75	125	231.4	1.12	20	
Barium	460.4	23.7	236.7	219.9	102	75	125	412.3	11.0	20	
Beryllium	236.7	11.8	236.7	0.3245	99.8	75	125	235.0	0.693	20	
Cadmium	231.7	11.8	236.7	1.292	97.3	75	125	229.9	0.786	20	
Calcium	28470	237	2367	26570	80.4	75	125	21580	27.6	20	R
Chromium	265.1	11.8	236.7	31.92	98.5	75	125	258.1	2.65	20	
Cobalt	235.5	11.8	236.7	6.567	96.7	75	125	233.1	1.02	20	
Copper	275.7	11.8	236.7	45.97	97.1	75	125	268.2	2.76	20	
Iron	21340	237	2367	20730	25.9	75	125	19880	7.12	20	S
Lead	227.9	23.7	236.7	9.582	92.2	75	125	224.2	1.61	20	
Magnesium	4679	237	2367	2472	93.2	75	125	4748	1.45	20	
Manganese	850.8	23.7	236.7	638.0	89.9	75	125	755.8	11.8	20	
Molybdenum	227.6	23.7	236.7	2.890	94.9	75	125	224.2	1.49	20	
Nickel	242.1	23.7	236.7	13.71	96.5	75	125	239.9	0.908	20	
Potassium	4538	473	2367	1650	122	75	125	4290	5.63	20	
Selenium	238.4	23.7	236.7		101	75	125	236.1	0.961	20	
Silver	23.52	11.8	23.67	0.3835	97.7	75	125	23.34	0.766	20	
Sodium	4590	473	2367	2372	93.7	75	125	4488	2.25	20	
Thallium	219.0	23.7	236.7		92.5	75	125	217.5	0.674	20	
Tin	224.8	23.7	236.7	6.012	92.4	75	125	224.8	0.010	20	
Titanium	353.0	23.7	236.7	133.7	92.6	75	125	324.4	8.45	20	
Vanadium	277.9	23.7	236.7	49.44	96.5	75	125	269.1	3.24	20	
Zinc	465.3	23.7	236.7	411.3	22.8	75	125	533.7	13.7	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185587

Sample ID: **MB-185587** Client ID: Units: **ug/Kg** Prep Date: **01/03/2014** Run No: **258963**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **185587** Analysis Date: **01/04/2014** Seq No: **5444475**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	14.74	0	16.67		88.4	25.2	120				
Surr: Tetrachloro-m-xylene	11.73	0	16.67		70.3	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185587

Sample ID: **LCS-185587** Client ID: Units: **ug/Kg** Prep Date: **01/03/2014** Run No: **258963**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **185587** Analysis Date: **01/04/2014** Seq No: **5444478**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	30.91	3.3	33.33		92.7	44.7	136				
Aldrin	30.26	1.7	33.33		90.8	41.5	118				
Dieldrin	31.32	3.3	33.33		94.0	44.3	133				
Endrin	29.33	3.3	33.33		88.0	43.2	137				
gamma-BHC	29.45	1.7	33.33		88.4	40.3	126				
Heptachlor	30.66	1.7	33.33		92.0	40.1	126				
Surr: Decachlorobiphenyl	15.18	0	16.67		91.0	25.2	120				
Surr: Tetrachloro-m-xylene	12.75	0	16.67		76.5	30.5	120				

Sample ID: **1401117-005AMS** Client ID: **14003-SI5-CS5-15** Units: **ug/Kg-dry** Prep Date: **01/03/2014** Run No: **258963**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **185587** Analysis Date: **01/04/2014** Seq No: **5444504**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	91.70	42	41.59	27.32	155	33.6	126				S
Aldrin	40.25	21	41.59		96.8	32.6	120				
Dieldrin	63.56	42	41.59		153	35.1	124				S
Endrin	172.8	42	41.59		416	39.7	129				S
gamma-BHC	44.45	21	41.59		107	35.2	120				
Heptachlor	154.1	21	41.59		370	34.9	119				S
Surr: Decachlorobiphenyl	21.99	0	20.80		106	25.2	120				
Surr: Tetrachloro-m-xylene	12.42	0	20.80		59.7	30.5	120				

Sample ID: **1401117-005AMSD** Client ID: **14003-SI5-CS5-15** Units: **ug/Kg-dry** Prep Date: **01/03/2014** Run No: **258963**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **185587** Analysis Date: **01/04/2014** Seq No: **5444510**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	80.80	42	41.60	27.32	129	33.6	126	91.70	12.6	28.1	S
Aldrin	54.96	21	41.60		132	32.6	120	40.25	30.9	29.9	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185587

Sample ID: **1401117-005AMSD** Client ID: **14003-SI5-CS5-15** Units: **ug/Kg-dry** Prep Date: **01/03/2014** Run No: **258963**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **185587** Analysis Date: **01/04/2014** Seq No: **5444510**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	55.20	42	41.60		133	35.1	124	63.56	14.1	26.6	S
Endrin	115.3	42	41.60		277	39.7	129	172.8	39.9	27.6	SR
gamma-BHC	44.20	21	41.60		106	35.2	120	44.45	0.577	28.6	
Heptachlor	102.9	21	41.60		247	34.9	119	154.1	39.9	27.7	SR
Surr: Decachlorobiphenyl	22.43	0	20.81		108	25.2	120	21.99	0	30	
Surr: Tetrachloro-m-xylene	15.21	0	20.81		73.1	30.5	120	12.42	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401117

ANALYTICAL QC SUMMARY REPORT

BatchID: 185611

Sample ID: **MB-185611** Client ID: Units: **mg/Kg** Prep Date: **01/06/2014** Run No: **259025**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **185611** Analysis Date: **01/06/2014** Seq No: **5444620**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-185611** Client ID: Units: **mg/Kg** Prep Date: **01/06/2014** Run No: **259025**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **185611** Analysis Date: **01/06/2014** Seq No: **5444621**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3953	0.100	0.4000		98.8	80	120				

Sample ID: **1401117-001BMS** Client ID: **14003-SI5-CS1-7** Units: **mg/Kg-dry** Prep Date: **01/06/2014** Run No: **259025**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **185611** Analysis Date: **01/06/2014** Seq No: **5444625**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4532	0.111	0.4426		102	70	130				

Sample ID: **1401117-001BMSD** Client ID: **14003-SI5-CS1-7** Units: **mg/Kg-dry** Prep Date: **01/06/2014** Run No: **259025**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **185611** Analysis Date: **01/06/2014** Seq No: **5444628**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4449	0.110	0.4418		101	70	130	0.4532	1.85	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 18, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1401B68

Analytical Environmental Services, Inc. received 6 samples on 1/17/2014 2:10:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

Revision 2/18/2014

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

1401B68

Work Order: _____

Date: 01/17/2014 Page 1 of 1

COMPANY: EPS, Inc.

ADDRESS: 1050 Crown Pointe Parkway Suite 550 Atlanta, GA 30338

PHONE:

FAX:

SAMPLED BY: William Crowe

SIGNATURE:

ANALYSIS REQUESTED: Metals; Pesticides 8081

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals (PRESERVATION: I)	Pesticides 8081 (PRESERVATION: I)	REMARKS	No # of Containers
1	14017-SIG-CS1-6	01/17/14	1106	X			X	X		2
2	14017-SIG-CS2-6		1104	X			X	X		2
3	14017-SIG-CS3-6		1102	X			X	X		2
4	14017-SIG-CS4-10		1058	X			X	X		2
5	14017-SIG-CS5-10		1056	X			X	X		2
6	14017-SIG-CS6-10		1100	X			X	X		2
7										
8										
9										
10										
11										
12										
13										
14										

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	01/17/14 1410	1:	1/17/14 1410
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: rbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers 12

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ● Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS1-6
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:06:00 AM
Lab ID:	1401B68-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.107		mg/Kg-dry	186099	1	01/20/2014 17:20	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
4,4´-DDE	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
4,4´-DDT	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Aldrin	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
alpha-BHC	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
alpha-Chlordane	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
beta-BHC	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Chlordane	180000	72000		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
delta-BHC	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Dieldrin	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Endosulfan I	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Endosulfan II	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Endosulfan sulfate	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Endrin	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Endrin aldehyde	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Endrin ketone	BRL	7200		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
gamma-BHC	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
gamma-Chlordane	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Heptachlor	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Heptachlor epoxide	BRL	3600		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Methoxychlor	BRL	36000		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Toxaphene	2100000	360000		ug/Kg-dry	186202	1000	01/27/2014 16:00	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186080	1000	01/20/2014 12:49	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186202	1000	01/27/2014 16:00	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186080	1000	01/20/2014 12:49	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186202	1000	01/27/2014 16:00	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	11400	54.0		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Antimony	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Arsenic	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Barium	10.5	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Beryllium	BRL	2.70		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Cadmium	BRL	2.70		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Calcium	1070	54.0		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Chromium	9.88	2.70		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Cobalt	BRL	2.70		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Copper	17.2	2.70		mg/Kg-dry	186089	1	01/20/2014 15:19	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS1-6
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:06:00 AM
Lab ID:	1401B68-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Iron	7720	540		mg/Kg-dry	186089	10	01/20/2014 16:16	JL
Lead	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Magnesium	116	54.0		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Manganese	9.70	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Molybdenum	5.73	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Nickel	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Potassium	535	108		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Selenium	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Silver	BRL	2.70		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Sodium	BRL	108		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Thallium	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Tin	BRL	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Titanium	45.2	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Vanadium	28.2	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
Zinc	9.56	5.40		mg/Kg-dry	186089	1	01/20/2014 15:19	JL
PERCENT MOISTURE D2216								
Percent Moisture	7.93	0		wt%	R259839	1	01/20/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS2-6
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:04:00 AM
Lab ID:	1401B68-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.107		mg/Kg-dry	186099	1	01/20/2014 17:09	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
4,4´-DDE	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
4,4´-DDT	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Aldrin	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
alpha-BHC	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
alpha-Chlordane	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
beta-BHC	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Chlordane	61000	7100		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
delta-BHC	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Dieldrin	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Endosulfan I	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Endosulfan II	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Endosulfan sulfate	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Endrin	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Endrin aldehyde	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Endrin ketone	BRL	710		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
gamma-BHC	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
gamma-Chlordane	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Heptachlor	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Heptachlor epoxide	BRL	360		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Methoxychlor	BRL	3600		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Toxaphene	39000	36000		ug/Kg-dry	186202	100	01/27/2014 16:46	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186202	100	01/27/2014 16:46	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186202	100	01/27/2014 16:46	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	6490	49.6		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Antimony	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Arsenic	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Barium	14.9	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Beryllium	BRL	2.48		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Cadmium	BRL	2.48		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Calcium	758	49.6		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Chromium	8.62	2.48		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Cobalt	BRL	2.48		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Copper	11.9	2.48		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Iron	8570	496		mg/Kg-dry	186089	10	01/20/2014 16:05	JL
Lead	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS2-6
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:04:00 AM
Lab ID:	1401B68-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	82.0	49.6		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Manganese	13.3	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Molybdenum	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Nickel	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Potassium	234	99.3		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Selenium	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Silver	BRL	2.48		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Sodium	BRL	99.3		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Thallium	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Tin	BRL	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Titanium	56.2	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Vanadium	37.0	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
Zinc	9.74	4.96		mg/Kg-dry	186089	1	01/20/2014 14:57	JL
PERCENT MOISTURE D2216								
Percent Moisture	6.14	0		wt%	R259839	1	01/20/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS3-6
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:02:00 AM
Lab ID:	1401B68-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.116		mg/Kg-dry	186099	1	01/20/2014 17:22	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
4,4´-DDE	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
4,4´-DDT	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Aldrin	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
alpha-BHC	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
alpha-Chlordane	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
beta-BHC	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Chlordane	18000	7700		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
delta-BHC	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Dieldrin	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Endosulfan I	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Endosulfan II	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Endosulfan sulfate	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Endrin	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Endrin aldehyde	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Endrin ketone	BRL	770		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
gamma-BHC	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
gamma-Chlordane	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Heptachlor	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Heptachlor epoxide	BRL	390		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Methoxychlor	BRL	3900		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Toxaphene	83000	39000		ug/Kg-dry	186202	100	01/27/2014 16:57	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186080	100	01/20/2014 13:22	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186202	100	01/27/2014 16:57	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186080	100	01/20/2014 13:22	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186202	100	01/27/2014 16:57	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8320	52.9		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Antimony	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Arsenic	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Barium	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Beryllium	BRL	2.65		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Cadmium	BRL	2.65		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Calcium	1600	52.9		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Chromium	19.8	2.65		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Cobalt	BRL	2.65		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Copper	22.1	2.65		mg/Kg-dry	186089	1	01/20/2014 15:30	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS3-6
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:02:00 AM
Lab ID:	1401B68-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Iron	32700	529		mg/Kg-dry	186089	10	01/20/2014 16:26	JL
Lead	5.93	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Magnesium	138	52.9		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Manganese	7.84	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Molybdenum	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Nickel	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Potassium	146	106		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Selenium	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Silver	BRL	2.65		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Sodium	BRL	106		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Thallium	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Tin	BRL	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Titanium	72.4	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Vanadium	84.7	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
Zinc	7.61	5.29		mg/Kg-dry	186089	1	01/20/2014 15:30	JL
PERCENT MOISTURE D2216								
Percent Moisture	14.0	0		wt%	R259839	1	01/20/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS4-10
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 10:58:00 AM
Lab ID:	1401B68-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.123		mg/Kg-dry	186099	1	01/20/2014 17:29	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
4,4´-DDE	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
4,4´-DDT	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Aldrin	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
alpha-BHC	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
alpha-Chlordane	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
beta-BHC	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Chlordane	BRL	8300		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
delta-BHC	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Dieldrin	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Endosulfan I	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Endosulfan II	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Endosulfan sulfate	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Endrin	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Endrin aldehyde	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Endrin ketone	BRL	830		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
gamma-BHC	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
gamma-Chlordane	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Heptachlor	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Heptachlor epoxide	BRL	410		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Methoxychlor	BRL	4100		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Toxaphene	BRL	41000		ug/Kg-dry	186202	100	01/27/2014 17:19	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186080	100	01/20/2014 13:44	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186202	100	01/27/2014 17:19	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186080	100	01/20/2014 13:44	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186202	100	01/27/2014 17:19	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	15400	61.2		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Antimony	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Arsenic	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Barium	8.74	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Beryllium	BRL	3.06		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Cadmium	BRL	3.06		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Calcium	2410	61.2		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Chromium	23.2	3.06		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Cobalt	BRL	3.06		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Copper	14.6	3.06		mg/Kg-dry	186089	1	01/20/2014 15:34	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS4-10
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 10:58:00 AM
Lab ID:	1401B68-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Iron	41000	612		mg/Kg-dry	186089	10	01/20/2014 16:30	JL
Lead	9.94	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Magnesium	443	61.2		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Manganese	23.9	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Molybdenum	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Nickel	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Potassium	555	122		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Selenium	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Silver	BRL	3.06		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Sodium	BRL	122		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Thallium	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Tin	BRL	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Titanium	56.5	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Vanadium	70.8	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
Zinc	19.6	6.12		mg/Kg-dry	186089	1	01/20/2014 15:34	JL
PERCENT MOISTURE D2216								
Percent Moisture	19.5	0		wt%	R259839	1	01/20/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS5-10
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 10:56:00 AM
Lab ID:	1401B68-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.107		mg/Kg-dry	186099	1	01/20/2014 17:31	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
4,4´-DDE	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
4,4´-DDT	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Aldrin	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
alpha-BHC	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
alpha-Chlordane	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
beta-BHC	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Chlordane	6000	710		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
delta-BHC	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Dieldrin	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Endosulfan I	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Endosulfan II	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Endosulfan sulfate	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Endrin	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Endrin aldehyde	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Endrin ketone	BRL	71		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
gamma-BHC	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
gamma-Chlordane	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Heptachlor	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Heptachlor epoxide	BRL	36		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Methoxychlor	BRL	360		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Toxaphene	BRL	3600		ug/Kg-dry	186202	10	01/27/2014 17:42	KD
Surr: Decachlorobiphenyl	47.2	25.2-120		%REC	186202	10	01/27/2014 17:42	KD
Surr: Tetrachloro-m-xylene	46.6	30.5-120		%REC	186202	10	01/27/2014 17:42	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4480	51.3		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Antimony	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Arsenic	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Barium	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Beryllium	BRL	2.56		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Cadmium	BRL	2.56		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Calcium	463	51.3		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Chromium	5.31	2.56		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Cobalt	BRL	2.56		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Copper	20.2	2.56		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Iron	6360	513		mg/Kg-dry	186089	10	01/20/2014 16:34	JL
Lead	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS5-10
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 10:56:00 AM
Lab ID:	1401B68-005	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	62.2	51.3		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Manganese	6.34	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Molybdenum	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Nickel	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Potassium	BRL	103		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Selenium	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Silver	BRL	2.56		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Sodium	BRL	103		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Thallium	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Tin	BRL	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Titanium	45.7	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Vanadium	26.1	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
Zinc	11.9	5.13		mg/Kg-dry	186089	1	01/20/2014 15:37	JL
PERCENT MOISTURE D2216								
Percent Moisture	6.55	0		wt%	R259839	1	01/20/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS6-10
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:00:00 AM
Lab ID:	1401B68-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.112		mg/Kg-dry	186099	1	01/20/2014 17:33	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
4,4´-DDE	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
4,4´-DDT	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Aldrin	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
alpha-BHC	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
alpha-Chlordane	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
beta-BHC	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Chlordane	120000	76000		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
delta-BHC	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Dieldrin	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Endosulfan I	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Endosulfan II	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Endosulfan sulfate	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Endrin	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Endrin aldehyde	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Endrin ketone	BRL	7600		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
gamma-BHC	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
gamma-Chlordane	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Heptachlor	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Heptachlor epoxide	BRL	3800		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Methoxychlor	BRL	38000		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Toxaphene	430000	380000		ug/Kg-dry	186202	1000	01/27/2014 18:04	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186080	1000	01/20/2014 14:17	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186202	1000	01/27/2014 18:04	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186080	1000	01/20/2014 14:17	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186202	1000	01/27/2014 18:04	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8780	53.7		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Antimony	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Arsenic	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Barium	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Beryllium	BRL	2.69		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Cadmium	BRL	2.69		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Calcium	1670	53.7		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Chromium	60.6	2.69		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Cobalt	BRL	2.69		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Copper	5.96	2.69		mg/Kg-dry	186089	1	01/20/2014 15:41	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14017SI9-CS6-10
Project Name:	Drexel Chemical Company	**Collection Date:**	1/17/2014 11:00:00 AM
Lab ID:	1401B68-006	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Iron	31300	537		mg/Kg-dry	186089	10	01/20/2014 16:37	JL
Lead	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Magnesium	86.1	53.7		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Manganese	8.52	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Molybdenum	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Nickel	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Potassium	159	107		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Selenium	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Silver	BRL	2.69		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Sodium	BRL	107		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Thallium	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Tin	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Titanium	50.4	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Vanadium	74.6	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
Zinc	BRL	5.37		mg/Kg-dry	186089	1	01/20/2014 15:41	JL
PERCENT MOISTURE D2216								
Percent Moisture	12.2	0		wt%	R259839	1	01/20/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1401B68

Checklist completed by [signature] 1.17.14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186080

Sample ID: **MB-186080** Client ID: Units: **ug/Kg** Prep Date: **01/17/2014** Run No: **259790**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **186080** Analysis Date: **01/20/2014** Seq No: **5460809**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	14.36	0	16.67		86.1	25.2	120				
Surr: Tetrachloro-m-xylene	9.959	0	16.67		59.7	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186080

Sample ID: **MB-186080** Client ID: Units: **ug/Kg** Prep Date: **01/17/2014** Run No: **259790**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186080** Analysis Date: **01/20/2014** Seq No: **5465913**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	14.36	0	16.67		86.1	25.2	120				
Surr: Tetrachloro-m-xylene	9.959	0	16.67		59.7	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186080

Sample ID: **LCS-186080** Client ID: Units: **ug/Kg** Prep Date: **01/17/2014** Run No: **259790**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **186080** Analysis Date: **01/20/2014** Seq No: **5460818**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	27.45	3.3	33.33		82.4	44.7	136				
Aldrin	24.10	1.7	33.33		72.3	41.5	118				
Dieldrin	28.56	3.3	33.33		85.7	44.3	133				
Endrin	25.08	3.3	33.33		75.2	43.2	137				
gamma-BHC	24.18	1.7	33.33		72.5	40.3	126				
Heptachlor	24.01	1.7	33.33		72.0	40.1	126				
Surr: Decachlorobiphenyl	13.04	0	16.67		78.2	25.2	120				
Surr: Tetrachloro-m-xylene	9.533	0	16.67		57.2	30.5	120				

Sample ID: **LCS-186080** Client ID: Units: **ug/Kg** Prep Date: **01/17/2014** Run No: **259790**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186080** Analysis Date: **01/20/2014** Seq No: **5465923**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	27.45	3.3	33.33		82.4	44.7	136				
Aldrin	24.10	1.7	33.33		72.3	41.5	118				
Dieldrin	28.56	3.3	33.33		85.7	44.3	133				
Endrin	25.08	3.3	33.33		75.2	43.2	137				
gamma-BHC	24.18	1.7	33.33		72.5	40.3	126				
Heptachlor	24.01	1.7	33.33		72.0	40.1	126				
Surr: Decachlorobiphenyl	13.04	0	16.67		78.2	25.2	120				
Surr: Tetrachloro-m-xylene	9.533	0	16.67		57.2	30.5	120				

Sample ID: **1401B68-001AMS** Client ID: **14017SI9-CS1-6** Units: **ug/Kg-dry** Prep Date: **01/17/2014** Run No: **259996**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186080** Analysis Date: **01/22/2014** Seq No: **5466442**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	43000	3600	36.15		119000	33.6	126				S
Aldrin	2742	1800	36.15		7580	32.6	120				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186080

Sample ID: **1401B68-001AMS** Client ID: **14017SI9-CS1-6** Units: **ug/Kg-dry** Prep Date: **01/17/2014** Run No: **259996**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186080** Analysis Date: **01/22/2014** Seq No: **5466442**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	27160	3600	36.15		75100	35.1	124				S
Endrin	49040	3600	36.15		136000	39.7	129				S
gamma-BHC	BRL	1800	36.15		2790	35.2	120				S
Heptachlor	5873	1800	36.15	2460	9440	34.9	119				S
Surr: Decachlorobiphenyl	0	0	18.08		0	25.2	120				S
Surr: Tetrachloro-m-xylene	0	0	18.08		0	30.5	120				S

Sample ID: **1401B68-001AMS** Client ID: **14017SI9-CS1-6** Units: **ug/Kg-dry** Prep Date: **01/17/2014** Run No: **259996**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **186080** Analysis Date: **01/22/2014** Seq No: **5466457**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	43000	3600	36.15		119000	33.6	126				S
Aldrin	2742	1800	36.15		7580	32.6	120				S
Dieldrin	27160	3600	36.15		75100	35.1	124				S
Endrin	49040	3600	36.15		136000	39.7	129				S
gamma-BHC	BRL	1800	36.15		2790	35.2	120				S
Heptachlor	5873	1800	36.15	2460	9440	34.9	119				S
Surr: Decachlorobiphenyl	0	0	18.08		0	25.2	120				S
Surr: Tetrachloro-m-xylene	0	0	18.08		0	30.5	120				S

Sample ID: **1401B68-001AMSD** Client ID: **14017SI9-CS1-6** Units: **ug/Kg-dry** Prep Date: **01/17/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186080** Analysis Date: **01/22/2014** Seq No: **5466448**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	33120	3600	36.17		91600	33.6	126	43000	26.0	28.1	S
Aldrin	BRL	1800	36.17		4870	32.6	120	2742	0	29.9	S
Dieldrin	20250	3600	36.17		56000	35.1	124	27160	29.1	26.6	SR
Endrin	37280	3600	36.17		103000	39.7	129	49040	27.2	27.6	S

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186080

Sample ID: **1401B68-001AMSD** Client ID: **14017SI9-CS1-6** Units: **ug/Kg-dry** Prep Date: **01/17/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186080** Analysis Date: **01/22/2014** Seq No: **5466448**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
gamma-BHC	BRL	1800	36.17		1140	35.2	120	1008	0	28.6	S
Heptachlor	4115	1800	36.17	2460	4580	34.9	119	5873	35.2	27.7	SR
Surr: Decachlorobiphenyl	0	0	18.09		0	25.2	120	0	0	30	S
Surr: Tetrachloro-m-xylene	0	0	18.09		0	30.5	120	0	0	30	S

Sample ID: **1401B68-001AMSD** Client ID: **14017SI9-CS1-6** Units: **ug/Kg-dry** Prep Date: **01/17/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES, TCL SW8081B** BatchID: **186080** Analysis Date: **01/22/2014** Seq No: **5466472**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	33120	3600	36.17		91600	33.6	126	43000	26.0	28.1	S
Aldrin	BRL	1800	36.17		4870	32.6	120	2742	0	29.9	S
Dieldrin	20250	3600	36.17		56000	35.1	124	27160	29.1	26.6	SR
Endrin	37280	3600	36.17		103000	39.7	129	49040	27.2	27.6	S
gamma-BHC	BRL	1800	36.17		1140	35.2	120	1008	0	28.6	S
Heptachlor	4115	1800	36.17	2460	4580	34.9	119	5873	35.2	27.7	SR
Surr: Decachlorobiphenyl	0	0	18.09		0	25.2	120	0	0	0	S
Surr: Tetrachloro-m-xylene	0	0	18.09		0	30.5	120	0	0	0	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186089

Sample ID: **MB-186089** Client ID: Units: **mg/Kg** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461585**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Potassium	BRL	100									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186089

Sample ID: **LCS-186089** Client ID: Units: **mg/Kg** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461584**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	459.4	50.0	500.0		91.9	80	120				
Antimony	48.52	5.00	50.00		97.0	80	120				
Arsenic	47.75	5.00	50.00		95.5	80	120				
Barium	49.14	5.00	50.00		98.3	80	120				
Beryllium	48.01	2.50	50.00		96.0	80	120				
Cadmium	47.71	2.50	50.00		95.4	80	120				
Calcium	481.0	50.0	500.0	15.47	93.1	80	120				
Chromium	48.97	2.50	50.00	0.09369	97.8	80	120				
Cobalt	48.60	2.50	50.00		97.2	80	120				
Copper	47.26	2.50	50.00		94.5	80	120				
Iron	484.8	50.0	500.0		97.0	80	120				
Lead	48.29	5.00	50.00		96.6	80	120				
Magnesium	462.8	50.0	500.0	0.5118	92.5	80	120				
Manganese	48.95	5.00	50.00		97.9	80	120				
Molybdenum	50.09	5.00	50.00	0.2485	99.7	80	120				
Nickel	48.60	5.00	50.00		97.2	80	120				
Potassium	468.9	100	500.0	0.5396	93.7	80	120				
Selenium	47.78	5.00	50.00		95.6	80	120				
Silver	4.754	2.50	5.000		95.1	80	120				
Sodium	467.0	100	500.0		93.4	80	120				
Thallium	47.02	5.00	50.00		94.0	80	120				
Tin	49.68	5.00	50.00	1.059	97.2	80	120				
Titanium	49.13	5.00	50.00		98.3	80	120				
Vanadium	48.55	5.00	50.00		97.1	80	120				
Zinc	47.60	5.00	50.00	0.1189	95.0	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186089

Sample ID: **1401B68-002BMS** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461589**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	8828	49.4	494.3	6488	473	75	125				S
Antimony	34.65	4.94	49.43	0.7256	68.6	75	125				S
Arsenic	46.21	4.94	49.43	1.241	91.0	75	125				
Barium	61.66	4.94	49.43	14.93	94.5	75	125				
Beryllium	48.10	2.47	49.43	0.1294	97.1	75	125				
Cadmium	47.56	2.47	49.43		96.2	75	125				
Calcium	1254	49.4	494.3	758.5	100	75	125				
Chromium	58.88	2.47	49.43	8.624	102	75	125				
Cobalt	48.80	2.47	49.43	0.9768	96.8	75	125				
Copper	57.65	2.47	49.43	11.88	92.6	75	125				
Lead	50.31	4.94	49.43	4.236	93.2	75	125				
Magnesium	539.8	49.4	494.3	81.96	92.6	75	125				
Manganese	58.94	4.94	49.43	13.27	92.4	75	125				
Molybdenum	47.52	4.94	49.43	2.946	90.2	75	125				
Nickel	47.37	4.94	49.43	0.6919	94.4	75	125				
Potassium	786.6	98.9	494.3	234.4	112	75	125				
Selenium	45.24	4.94	49.43		91.5	75	125				
Silver	4.791	2.47	4.943	0.03369	96.2	75	125				
Sodium	534.7	98.9	494.3	14.61	105	75	125				
Thallium	45.21	4.94	49.43		91.5	75	125				
Tin	48.27	4.94	49.43	1.458	94.7	75	125				
Titanium	94.61	4.94	49.43	56.18	77.7	75	125				
Vanadium	97.06	4.94	49.43	37.04	121	75	125				
Zinc	58.95	4.94	49.43	9.735	99.6	75	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186089

Sample ID: **1401B68-002BMS** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461644**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	10750	494	494.3	8568	442	75	125				S

Sample ID: **1401B68-002BMSD** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	7680	49.5	494.9	6488	241	75	125	8828	13.9	20	S
Antimony	36.49	4.95	49.49	0.7256	72.3	75	125	34.65	5.19	20	S
Arsenic	46.55	4.95	49.49	1.241	91.5	75	125	46.21	0.726	20	
Barium	67.69	4.95	49.49	14.93	107	75	125	61.66	9.32	20	
Beryllium	48.51	2.47	49.49	0.1294	97.8	75	125	48.10	0.835	20	
Cadmium	47.96	2.47	49.49		96.9	75	125	47.56	0.819	20	
Calcium	1252	49.5	494.9	758.5	99.7	75	125	1254	0.213	20	
Chromium	56.83	2.47	49.49	8.624	97.4	75	125	58.88	3.53	20	
Cobalt	49.07	2.47	49.49	0.9768	97.2	75	125	48.80	0.539	20	
Copper	58.07	2.47	49.49	11.88	93.3	75	125	57.65	0.728	20	
Lead	49.44	4.95	49.49	4.236	91.3	75	125	50.31	1.75	20	
Magnesium	553.5	49.5	494.9	81.96	95.3	75	125	539.8	2.50	20	
Manganese	59.68	4.95	49.49	13.27	93.8	75	125	58.94	1.24	20	
Molybdenum	50.44	4.95	49.49	2.946	96.0	75	125	47.52	5.96	20	
Nickel	47.97	4.95	49.49	0.6919	95.5	75	125	47.37	1.27	20	
Potassium	837.7	99.0	494.9	234.4	122	75	125	786.6	6.30	20	
Selenium	46.00	4.95	49.49		92.9	75	125	45.24	1.66	20	
Silver	4.808	2.47	4.949	0.03369	96.5	75	125	4.791	0.359	20	
Sodium	534.8	99.0	494.9	14.61	105	75	125	534.7	0.025	20	
Thallium	45.32	4.95	49.49		91.6	75	125	45.21	0.232	20	
Tin	48.32	4.95	49.49	1.458	94.7	75	125	48.27	0.114	20	
Titanium	87.95	4.95	49.49	56.18	64.2	75	125	94.61	7.29	20	S

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186089

Sample ID: **1401B68-002BMSD** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461592**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Vanadium	83.03	4.95	49.49	37.04	92.9	75	125	97.06	15.6	20	
Zinc	60.34	4.95	49.49	9.735	102	75	125	58.95	2.33	20	

Sample ID: **1401B68-002BMSD** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259850**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186089** Analysis Date: **01/20/2014** Seq No: **5461645**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	9353	495	494.9	8568	159	75	125	10750	13.9	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186099

Sample ID: **MB-186099** Client ID: Units: **mg/Kg** Prep Date: **01/20/2014** Run No: **259801**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186099** Analysis Date: **01/20/2014** Seq No: **5461801**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-186099** Client ID: Units: **mg/Kg** Prep Date: **01/20/2014** Run No: **259801**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186099** Analysis Date: **01/20/2014** Seq No: **5461803**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4166	0.100	0.4000		104	80	120				

Sample ID: **1401B68-002BMS** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259801**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186099** Analysis Date: **01/20/2014** Seq No: **5461806**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4563	0.107	0.4261	0.004755	106	70	130				

Sample ID: **1401B68-002BMSD** Client ID: **14017SI9-CS2-6** Units: **mg/Kg-dry** Prep Date: **01/20/2014** Run No: **259801**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186099** Analysis Date: **01/20/2014** Seq No: **5461807**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4657	0.106	0.4253	0.004755	108	70	130	0.4563	2.04	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186202

Sample ID: **MB-186202** Client ID: Units: **ug/Kg** Prep Date: **01/21/2014** Run No: **259996**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465328**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	14.84	0	16.67		89.0	25.2	120				
Surr: Tetrachloro-m-xylene	10.15	0	16.67		60.9	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186202

Sample ID: **LCS-186202** Client ID: Units: **ug/Kg** Prep Date: **01/21/2014** Run No: **259996**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465329**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	21.80	3.3	33.33		65.4	44.7	136				
Aldrin	31.55	1.7	33.33		94.7	41.5	118				
Dieldrin	30.65	3.3	33.33		91.9	44.3	133				
Endrin	29.01	3.3	33.33		87.0	43.2	137				
gamma-BHC	24.29	1.7	33.33		72.9	40.3	126				
Heptachlor	24.94	1.7	33.33		74.8	40.1	126				
Surr: Decachlorobiphenyl	13.89	0	16.67		83.3	25.2	120				
Surr: Tetrachloro-m-xylene	10.42	0	16.67		62.5	30.5	120				

Sample ID: **1401E35-002AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **01/22/2014** Run No: **259996**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465718**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	48.31	3.7	36.74	15.67	88.9	33.6	126				
Aldrin	39.06	1.8	36.74		106	32.6	120				
Dieldrin	42.04	3.7	36.74		114	35.1	124				
Endrin	47.54	3.7	36.74		129	39.7	129				S
gamma-BHC	29.30	1.8	36.74		79.7	35.2	120				
Heptachlor	31.59	1.8	36.74		86.0	34.9	119				
Surr: Decachlorobiphenyl	18.37	0	18.38		100.0	25.2	120				
Surr: Tetrachloro-m-xylene	11.96	0	18.38		65.1	30.5	120				

Sample ID: **1401E35-002AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **01/22/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465725**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	54.53	3.7	36.72	15.67	106	33.6	126	48.31	12.1	28.1	
Aldrin	33.88	1.8	36.72		92.3	32.6	120	39.06	14.2	29.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401B68

ANALYTICAL QC SUMMARY REPORT

BatchID: 186202

Sample ID: **1401E35-002AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **01/22/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465725**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	36.19	3.7	36.72		98.6	35.1	124	42.04	15.0	26.6	
Endrin	42.24	3.7	36.72		115	39.7	129	47.54	11.8	27.6	
gamma-BHC	25.41	1.8	36.72		69.2	35.2	120	29.30	14.2	28.6	
Heptachlor	27.03	1.8	36.72		73.6	34.9	119	31.59	15.6	27.7	
Surr: Decachlorobiphenyl	17.19	0	18.36		93.6	25.2	120	18.37	0	30	
Surr: Tetrachloro-m-xylene	9.356	0	18.36		50.9	30.5	120	11.96	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 18, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1401E35

Analytical Environmental Services, Inc. received 3 samples on 1/22/2014 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

Revision 2/18/2014

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 170

Date: _____ Page _____ of _____

COMPANY: EPS

ADDRESS: 1050 Crown Pointe Pkwy Ste 550, Atlanta GA 30338

PHONE: 404-315-9113

FAX: 404-315-8509

SAMPLED BY: Steve Bilbak

SIGNATURE: [signature]

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See Codes)	Metals	Pesticides	Containers	REMARKS
1	14021-SI9-CS7-7	1-21-14	1420	X			X	X		
2	14021-SI9-CS8-7	1-21-14	1425	X			X	X		
3	14021-SI9-CS9-7	1-21-14	1430	X			X	X		
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [signature]	1-22-14 1100	1: [signature]	1/22/14
2:		2:	7:30
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: Tbullman@enviplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ⊗ Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project: Drexel Chemical Company
Lab ID: 1401E35

Case Narrative

Pesticide Analysis by Method 8081:

Due to sample matrix, sample 1401E35-003A required dilution during analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14021-SI9-CS7-7
Project Name:	Drexel Chemical Company	**Collection Date:**	1/21/2014 2:20:00 PM
Lab ID:	1401E35-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.109		mg/Kg-dry	186177	1	01/22/2014 11:34	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
4,4´-DDE	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
4,4´-DDT	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Aldrin	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
alpha-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
alpha-Chlordane	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
beta-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Chlordane	BRL	37		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
delta-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Dieldrin	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Endosulfan I	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Endosulfan II	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Endosulfan sulfate	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Endrin	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Endrin aldehyde	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Endrin ketone	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
gamma-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
gamma-Chlordane	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Heptachlor	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Heptachlor epoxide	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Methoxychlor	BRL	18		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Toxaphene	BRL	180		ug/Kg-dry	186202	1	01/22/2014 17:03	KD
Surr: Decachlorobiphenyl	93.1	25.2-120		%REC	186202	1	01/22/2014 17:03	KD
Surr: Tetrachloro-m-xylene	65.1	30.5-120		%REC	186202	1	01/22/2014 17:03	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4320	51.4		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Antimony	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Arsenic	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Barium	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Beryllium	BRL	2.57		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Cadmium	BRL	2.57		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Calcium	511	51.4		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Chromium	4.65	2.57		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Cobalt	BRL	2.57		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Copper	BRL	2.57		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Iron	9750	514		mg/Kg-dry	186206	10	02/10/2014 19:47	TA
Lead	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14021-SI9-CS7-7
Project Name:	Drexel Chemical Company	**Collection Date:**	1/21/2014 2:20:00 PM
Lab ID:	1401E35-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	BRL	51.4		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Manganese	5.17	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Molybdenum	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Nickel	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Potassium	BRL	103		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Selenium	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Silver	BRL	2.57		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Sodium	BRL	103		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Thallium	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Tin	BRL	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Titanium	50.3	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Vanadium	25.1	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
Zinc	16.1	5.14		mg/Kg-dry	186206	1	01/22/2014 14:11	JL
PERCENT MOISTURE D2216								
Percent Moisture	9.17	0		wt%	R260022	1	01/22/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14021-SI9-CS8-7
Project Name:	Drexel Chemical Company	**Collection Date:**	1/21/2014 2:25:00 PM
Lab ID:	1401E35-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.108		mg/Kg-dry	186177	1	01/22/2014 11:36	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	9.9	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
4,4´-DDE	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
4,4´-DDT	16	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Aldrin	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
alpha-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
alpha-Chlordane	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
beta-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Chlordane	150	37		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
delta-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Dieldrin	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Endosulfan I	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Endosulfan II	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Endosulfan sulfate	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Endrin	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Endrin aldehyde	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Endrin ketone	BRL	3.7		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
gamma-BHC	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
gamma-Chlordane	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Heptachlor	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Heptachlor epoxide	BRL	1.8		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Methoxychlor	BRL	18		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Toxaphene	310	180		ug/Kg-dry	186202	1	01/22/2014 17:14	KD
Surr: Decachlorobiphenyl	89.4	25.2-120		%REC	186202	1	01/22/2014 17:14	KD
Surr: Tetrachloro-m-xylene	73.1	30.5-120		%REC	186202	1	01/22/2014 17:14	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	4580	51.2		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Antimony	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Arsenic	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Barium	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Beryllium	BRL	2.56		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Cadmium	BRL	2.56		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Calcium	633	51.2		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Chromium	5.65	2.56		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Cobalt	BRL	2.56		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Copper	2.75	2.56		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Iron	12000	512		mg/Kg-dry	186206	10	02/10/2014 19:52	TA
Lead	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14021-SI9-CS8-7
Project Name:	Drexel Chemical Company	**Collection Date:**	1/21/2014 2:25:00 PM
Lab ID:	1401E35-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	56.9	51.2		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Manganese	7.55	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Molybdenum	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Nickel	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Potassium	BRL	102		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Selenium	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Silver	BRL	2.56		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Sodium	BRL	102		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Thallium	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Tin	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Titanium	58.4	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Vanadium	30.1	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
Zinc	BRL	5.12		mg/Kg-dry	186206	1	01/22/2014 14:22	JL
PERCENT MOISTURE D2216								
Percent Moisture	9.28	0		wt%	R260022	1	01/22/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14021-SI9-CS9-7
Project Name:	Drexel Chemical Company	**Collection Date:**	1/21/2014 2:30:00 PM
Lab ID:	1401E35-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.110		mg/Kg-dry	186177	1	01/22/2014 11:38	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	200	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
4,4´-DDE	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
4,4´-DDT	760	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Aldrin	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
alpha-BHC	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
alpha-Chlordane	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
beta-BHC	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Chlordane	15000	3700		ug/Kg-dry	186202	100	01/22/2014 18:13	KD
delta-BHC	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Dieldrin	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Endosulfan I	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Endosulfan II	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Endosulfan sulfate	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Endrin	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Endrin aldehyde	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Endrin ketone	BRL	37		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
gamma-BHC	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
gamma-Chlordane	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Heptachlor	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Heptachlor epoxide	BRL	18		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Methoxychlor	BRL	180		ug/Kg-dry	186202	10	01/22/2014 18:01	KD
Toxaphene	36000	18000		ug/Kg-dry	186202	100	01/22/2014 18:13	KD
Surr: Decachlorobiphenyl	100	25.2-120		%REC	186202	1	01/22/2014 17:26	KD
Surr: Decachlorobiphenyl	124	25.2-120	S	%REC	186202	10	01/22/2014 18:01	KD
Surr: Tetrachloro-m-xylene	38	30.5-120		%REC	186202	10	01/22/2014 18:01	KD
Surr: Tetrachloro-m-xylene	39.7	30.5-120		%REC	186202	1	01/22/2014 17:26	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	5780	50.5		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Antimony	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Arsenic	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Barium	6.80	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Beryllium	BRL	2.53		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Cadmium	BRL	2.53		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Calcium	903	50.5		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Chromium	8.40	2.53		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Cobalt	BRL	2.53		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Copper	7.73	2.53		mg/Kg-dry	186206	1	01/22/2014 14:25	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14021-SI9-CS9-7
Project Name:	Drexel Chemical Company	**Collection Date:**	1/21/2014 2:30:00 PM
Lab ID:	1401E35-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Iron	14500	505		mg/Kg-dry	186206	10	02/10/2014 19:57	TA
Lead	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Magnesium	80.4	50.5		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Manganese	13.5	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Molybdenum	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Nickel	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Potassium	BRL	101		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Selenium	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Silver	BRL	2.53		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Sodium	BRL	101		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Thallium	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Tin	BRL	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Titanium	68.3	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Vanadium	37.9	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
Zinc	5.39	5.05		mg/Kg-dry	186206	1	01/22/2014 14:25	JL
PERCENT MOISTURE D2216								
Percent Moisture	9.66	0		wt%	R260022	1	01/22/2014 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1401E35

Checklist completed by [signature] 1/22/14
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186177

Sample ID: **MB-186177** Client ID: Units: **mg/Kg** Prep Date: **01/22/2014** Run No: **259964**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186177** Analysis Date: **01/22/2014** Seq No: **5464058**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-186177** Client ID: Units: **mg/Kg** Prep Date: **01/22/2014** Run No: **259964**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186177** Analysis Date: **01/22/2014** Seq No: **5464061**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4327	0.100	0.4000		108	80	120				

Sample ID: **1401C19-001BMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **259964**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186177** Analysis Date: **01/22/2014** Seq No: **5464070**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.5183	0.123	0.4915	0.03108	99.1	70	130				

Sample ID: **1401C19-001BMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **259964**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186177** Analysis Date: **01/22/2014** Seq No: **5464074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.5104	0.123	0.4915	0.03108	97.5	70	130	0.5183	1.54	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186202

Sample ID: **MB-186202** Client ID: Units: **ug/Kg** Prep Date: **01/21/2014** Run No: **259996**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465328**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	14.84	0	16.67		89.0	25.2	120				
Surr: Tetrachloro-m-xylene	10.15	0	16.67		60.9	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186202

Sample ID: **LCS-186202** Client ID: Units: **ug/Kg** Prep Date: **01/21/2014** Run No: **259996**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465329**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	21.80	3.3	33.33		65.4	44.7	136				
Aldrin	31.55	1.7	33.33		94.7	41.5	118				
Dieldrin	30.65	3.3	33.33		91.9	44.3	133				
Endrin	29.01	3.3	33.33		87.0	43.2	137				
gamma-BHC	24.29	1.7	33.33		72.9	40.3	126				
Heptachlor	24.94	1.7	33.33		74.8	40.1	126				
Surr: Decachlorobiphenyl	13.89	0	16.67		83.3	25.2	120				
Surr: Tetrachloro-m-xylene	10.42	0	16.67		62.5	30.5	120				

Sample ID: **1401E35-002AMS** Client ID: **14021-SI9-CS8-7** Units: **ug/Kg-dry** Prep Date: **01/22/2014** Run No: **259996**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465718**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	48.31	3.7	36.74	15.67	88.9	33.6	126				
Aldrin	39.06	1.8	36.74		106	32.6	120				
Dieldrin	42.04	3.7	36.74		114	35.1	124				
Endrin	47.54	3.7	36.74		129	39.7	129				S
gamma-BHC	29.30	1.8	36.74		79.7	35.2	120				
Heptachlor	31.59	1.8	36.74		86.0	34.9	119				
Surr: Decachlorobiphenyl	18.37	0	18.38		100.0	25.2	120				
Surr: Tetrachloro-m-xylene	11.96	0	18.38		65.1	30.5	120				

Sample ID: **1401E35-002AMSD** Client ID: **14021-SI9-CS8-7** Units: **ug/Kg-dry** Prep Date: **01/22/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465725**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	54.53	3.7	36.72	15.67	106	33.6	126	48.31	12.1	28.1	
Aldrin	33.88	1.8	36.72		92.3	32.6	120	39.06	14.2	29.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186202

Sample ID: **1401E35-002AMSD** Client ID: **14021-SI9-CS8-7** Units: **ug/Kg-dry** Prep Date: **01/22/2014** Run No: **259996**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186202** Analysis Date: **01/22/2014** Seq No: **5465725**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	36.19	3.7	36.72		98.6	35.1	124	42.04	15.0	26.6	
Endrin	42.24	3.7	36.72		115	39.7	129	47.54	11.8	27.6	
gamma-BHC	25.41	1.8	36.72		69.2	35.2	120	29.30	14.2	28.6	
Heptachlor	27.03	1.8	36.72		73.6	34.9	119	31.59	15.6	27.7	
Surr: Decachlorobiphenyl	17.19	0	18.36		93.6	25.2	120	18.37	0	30	
Surr: Tetrachloro-m-xylene	9.356	0	18.36		50.9	30.5	120	11.96	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186206

Sample ID: **MB-186206** Client ID: Units: **mg/Kg** Prep Date: **01/22/2014** Run No: **260010**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **186206** Analysis Date: **01/22/2014** Seq No: **5464916**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Potassium	BRL	100									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186206

Sample ID: **LCS-186206** Client ID: Units: **mg/Kg** Prep Date: **01/22/2014** Run No: **260010**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186206** Analysis Date: **01/22/2014** Seq No: **5464915**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	443.1	50.0	500.0		88.6	80	120				
Antimony	45.54	5.00	50.00		91.1	80	120				
Arsenic	46.78	5.00	50.00		93.6	80	120				
Barium	47.01	5.00	50.00		94.0	80	120				
Beryllium	46.31	2.50	50.00		92.6	80	120				
Cadmium	45.62	2.50	50.00		91.2	80	120				
Calcium	455.7	50.0	500.0	6.571	89.8	80	120				
Chromium	47.50	2.50	50.00		95.0	80	120				
Cobalt	46.67	2.50	50.00		93.3	80	120				
Copper	46.68	2.50	50.00		93.4	80	120				
Iron	454.1	50.0	500.0		90.8	80	120				
Lead	46.23	5.00	50.00		92.5	80	120				
Magnesium	450.1	50.0	500.0	0.3348	89.9	80	120				
Manganese	46.97	5.00	50.00		93.9	80	120				
Molybdenum	47.12	5.00	50.00	0.09918	94.0	80	120				
Nickel	46.32	5.00	50.00		92.6	80	120				
Potassium	431.1	100	500.0	7.243	84.8	80	120				
Selenium	46.13	5.00	50.00		92.3	80	120				
Silver	4.552	2.50	5.000		91.0	80	120				
Sodium	437.8	100	500.0	5.706	86.4	80	120				
Thallium	46.06	5.00	50.00		92.1	80	120				
Tin	47.36	5.00	50.00	1.113	92.5	80	120				
Titanium	47.33	5.00	50.00		94.7	80	120				
Vanadium	47.59	5.00	50.00		95.2	80	120				
Zinc	45.13	5.00	50.00	0.06883	90.1	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186206

Sample ID: **1401E16-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **260010**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186206** Analysis Date: **01/22/2014** Seq No: **5464919**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	15260	56.0	560.3	13540	307	75	125				S
Antimony	72.55	5.60	56.03	3.978	122	75	125				
Arsenic	88.59	5.60	56.03	6.398	147	75	125				S
Barium	309.4	5.60	56.03	514.1	-365	75	125				S
Beryllium	47.17	2.80	56.03	0.5268	83.2	75	125				
Cadmium	48.79	2.80	56.03	0.8616	85.5	75	125				
Calcium	20750	56.0	560.3	20940	-32.9	75	125				S
Chromium	70.52	2.80	56.03	22.53	85.7	75	125				
Cobalt	56.82	2.80	56.03	10.31	83.0	75	125				
Copper	288.4	2.80	56.03	265.3	41.3	75	125				S
Lead	1187	5.60	56.03	1137	90.7	75	125				
Magnesium	4722	56.0	560.3	4893	-30.5	75	125				S
Manganese	419.6	5.60	56.03	269.7	267	75	125				S
Molybdenum	47.08	5.60	56.03	0.9278	82.4	75	125				
Nickel	61.56	5.60	56.03	14.80	83.4	75	125				
Potassium	4316	112	560.3	3754	100	75	125				
Selenium	41.15	5.60	56.03		73.4	75	125				S
Silver	10.01	2.80	5.603	0.8504	164	75	125				S
Sodium	993.0	112	560.3	186.8	144	75	125				S
Thallium	47.53	5.60	56.03	1.997	81.3	75	125				
Tin	321.2	5.60	56.03	69.74	449	75	125				S
Titanium	940.5	5.60	56.03	973.1	-58.1	75	125				S
Vanadium	84.25	5.60	56.03	37.95	82.6	75	125				
Zinc	519.6	5.60	56.03	485.0	61.7	75	125				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186206

Sample ID: **1401E16-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **260917**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186206** Analysis Date: **02/10/2014** Seq No: **5487370**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	82280	560	560.3	26760	9910	75	125				S

Sample ID: **1401E16-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **260010**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **186206** Analysis Date: **01/22/2014** Seq No: **5464921**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	15410	56.1	560.7	13540	333	75	125	15260	0.986	20	S
Antimony	26.46	5.61	56.07	3.978	40.1	75	125	72.55	93.1	20	SR
Arsenic	55.00	5.61	56.07	6.398	86.7	75	125	88.59	46.8	20	R
Barium	320.8	5.61	56.07	514.1	-345	75	125	309.4	3.60	20	S
Beryllium	48.95	2.80	56.07	0.5268	86.4	75	125	47.17	3.71	20	
Cadmium	48.88	2.80	56.07	0.8616	85.6	75	125	48.79	0.199	20	
Calcium	21330	56.1	560.7	20940	70.5	75	125	20750	2.75	20	S
Chromium	66.12	2.80	56.07	22.53	77.7	75	125	70.52	6.45	20	
Cobalt	55.54	2.80	56.07	10.31	80.7	75	125	56.82	2.27	20	
Copper	335.1	2.80	56.07	265.3	124	75	125	288.4	15.0	20	
Lead	1306	5.61	56.07	1137	303	75	125	1187	9.55	20	S
Magnesium	5286	56.1	560.7	4893	70.1	75	125	4722	11.3	20	S
Manganese	308.9	5.61	56.07	269.7	69.9	75	125	419.6	30.4	20	SR
Molybdenum	45.50	5.61	56.07	0.9278	79.5	75	125	47.08	3.42	20	
Nickel	59.87	5.61	56.07	14.80	80.4	75	125	61.56	2.78	20	
Potassium	4335	112	560.7	3754	104	75	125	4316	0.444	20	
Selenium	45.44	5.61	56.07		81.0	75	125	41.15	9.91	20	
Silver	5.757	2.80	5.607	0.8504	87.5	75	125	10.01	54.0	20	R
Sodium	704.1	112	560.7	186.8	92.3	75	125	993.0	34.0	20	R
Thallium	51.11	5.61	56.07	1.997	87.6	75	125	47.53	7.27	20	
Tin	95.77	5.61	56.07	69.74	46.4	75	125	321.2	108	20	SR
Titanium	969.2	5.61	56.07	973.1	-7.01	75	125	940.5	3.00	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401E35

ANALYTICAL QC SUMMARY REPORT

BatchID: 186206

Sample ID: **1401E16-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **260010**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186206** Analysis Date: **01/22/2014** Seq No: **5464921**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Vanadium	82.22	5.61	56.07	37.95	79.0	75	125	84.25	2.43	20	
Zinc	470.5	5.61	56.07	485.0	-25.9	75	125	519.6	9.92	20	S

Sample ID: **1401E16-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/22/2014** Run No: **260917**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186206** Analysis Date: **02/10/2014** Seq No: **5487371**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	23500	561	560.7	26760	-581	75	125	82280	111	20	SR

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 18, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1401G77

Analytical Environmental Services, Inc. received 3 samples on 1/24/2014 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

Revision 2/18/2014

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 140167

Date: 1-22-14 Page ____ of ____

COMPANY: EPS

ADDRESS: 1050 Crown Pointe Pkwy Ste 550 Atlanta 30338

PHONE: 4-315-9113

FAX: 4-315-3509

SAMPLED BY: Stacey

SIGNATURE: [signature]

ANALYSIS REQUESTED: Metals, Pesticides

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals (PRESERVATION: I-1)	Pesticides (PRESERVATION: I-1)	REMARKS	No # of Containers
1	14022_SI9_CS6-15	1/22/14	1120	X		SO	X	X		2
2	14022_SI9_CS10-15	1/22/14	1115	X		SO	X			1
3	14022_SI9_CS11-15	1/22/14	1115	X		SO	X			1
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: [signature]	1-23-14 1600	1: [signature]	1/24/14
2:		2:	7:30
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS

SHIPMENT METHOD
OUT / / VIA
IN / / VIA
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER ____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS:
SEND REPORT TO: thallmen@cnvplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE # ____ PO# ____

RECEIPT
Total # of Containers: 4

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ⊗ Same Day Rush (auth req.)
- ○ Other ____

STATE PROGRAM (if any) ____
E-mail? Y / N, Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+1 = Hydrochloric acid + ice I = Ice only N = Nitric acid S+1 = Sulfuric acid + ice S/M+1 = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14022-SI9-C56-15
Project Name:	Drexel Chemical Company	**Collection Date:**	1/22/2014 11:20:00 AM
Lab ID:	1401G77-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.114		mg/Kg-dry	186318	1	01/24/2014 11:30	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
4,4´-DDE	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
4,4´-DDT	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Aldrin	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
alpha-BHC	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
alpha-Chlordane	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
beta-BHC	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Chlordane	BRL	38		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
delta-BHC	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Dieldrin	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Endosulfan I	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Endosulfan II	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Endosulfan sulfate	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Endrin	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Endrin aldehyde	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Endrin ketone	BRL	3.8		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
gamma-BHC	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
gamma-Chlordane	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Heptachlor	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Heptachlor epoxide	BRL	1.9		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Methoxychlor	BRL	19		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Toxaphene	BRL	190		ug/Kg-dry	186319	1	01/27/2014 11:40	KD
Surr: Decachlorobiphenyl	83.9	25.2-120		%REC	186319	1	01/27/2014 11:40	KD
Surr: Tetrachloro-m-xylene	59.7	30.5-120		%REC	186319	1	01/27/2014 11:40	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	7210	55.3		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Antimony	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Arsenic	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Barium	7.34	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Beryllium	BRL	2.77		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Cadmium	BRL	2.77		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Calcium	1350	55.3		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Chromium	16.7	2.77		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Cobalt	BRL	2.77		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Copper	5.45	2.77		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Iron	24700	553		mg/Kg-dry	186247	10	02/10/2014 20:40	TA
Lead	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14022-SI9-C56-15
Project Name:	Drexel Chemical Company	**Collection Date:**	1/22/2014 11:20:00 AM
Lab ID:	1401G77-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	99.2	55.3		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Manganese	6.59	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Molybdenum	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Nickel	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Potassium	BRL	111		mg/Kg-dry	186247	1	02/10/2014 20:44	TA
Selenium	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Silver	BRL	2.77		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Sodium	BRL	111		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Thallium	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Tin	BRL	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Titanium	67.8	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Vanadium	67.9	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
Zinc	7.83	5.53		mg/Kg-dry	186247	1	01/24/2014 14:46	JL
PERCENT MOISTURE D2216								
Percent Moisture	12.8	0		wt%	R260172	1	01/24/2014 08:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14022-SI9-CS10-15
Project Name:	Drexel Chemical Company	**Collection Date:**	1/22/2014 11:15:00 AM
Lab ID:	1401G77-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.111		mg/Kg-dry	186318	1	01/24/2014 11:32	CG
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	3240	53.8		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Antimony	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Arsenic	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Barium	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Beryllium	BRL	2.69		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Cadmium	BRL	2.69		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Calcium	341	53.8		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Chromium	3.46	2.69		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Cobalt	BRL	2.69		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Copper	BRL	2.69		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Iron	4600	53.8		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Lead	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Magnesium	BRL	53.8		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Manganese	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Molybdenum	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Nickel	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Potassium	BRL	108		mg/Kg-dry	186247	1	02/10/2014 20:49	TA
Selenium	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Silver	BRL	2.69		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Sodium	BRL	108		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Thallium	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Tin	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Titanium	46.7	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Vanadium	18.1	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
Zinc	BRL	5.38		mg/Kg-dry	186247	1	01/24/2014 14:50	JL
PERCENT MOISTURE D2216								
Percent Moisture	9.98	0		wt%	R260172	1	01/24/2014 08:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14022-SI9-CS11-15
Project Name:	Drexel Chemical Company	**Collection Date:**	1/22/2014 11:15:00 AM
Lab ID:	1401G77-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.109		mg/Kg-dry	186318	1	01/24/2014 11:39	CG
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	2890	54.6		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Antimony	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Arsenic	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Barium	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Beryllium	BRL	2.73		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Cadmium	BRL	2.73		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Calcium	387	54.6		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Chromium	4.14	2.73		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Cobalt	BRL	2.73		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Copper	BRL	2.73		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Iron	5110	54.6		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Lead	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Magnesium	BRL	54.6		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Manganese	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Molybdenum	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Nickel	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Potassium	BRL	109		mg/Kg-dry	186247	1	02/10/2014 20:54	TA
Selenium	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Silver	BRL	2.73		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Sodium	BRL	109		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Thallium	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Tin	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Titanium	46.9	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Vanadium	20.0	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
Zinc	BRL	5.46		mg/Kg-dry	186247	1	01/24/2014 14:54	JL
PERCENT MOISTURE D2216								
Percent Moisture	8.58	0		wt%	R260172	1	01/24/2014 08:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1401G72

Checklist completed by Jasn B 1/24/14
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186247

Sample ID: **MB-186247** Client ID: Units: **mg/Kg** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467475**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186247

Sample ID: **MB-186247** Client ID: Units: **mg/Kg** Prep Date: **01/23/2014** Run No: **260983**
SampleType: **MBLK** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **02/10/2014** Seq No: **5487473**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Potassium	BRL	100									

Sample ID: **LCS-186247** Client ID: Units: **mg/Kg** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467470**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	449.2	50.0	500.0		89.8	80	120				
Antimony	46.38	5.00	50.00		92.8	80	120				
Arsenic	45.81	5.00	50.00		91.6	80	120				
Barium	47.40	5.00	50.00		94.8	80	120				
Beryllium	47.12	2.50	50.00		94.2	80	120				
Cadmium	45.45	2.50	50.00		90.9	80	120				
Calcium	454.6	50.0	500.0	3.024	90.3	80	120				
Chromium	47.56	2.50	50.00		95.1	80	120				
Cobalt	46.69	2.50	50.00		93.4	80	120				
Copper	48.17	2.50	50.00		96.3	80	120				
Iron	460.6	50.0	500.0		92.1	80	120				
Lead	46.65	5.00	50.00		93.3	80	120				
Magnesium	444.6	50.0	500.0		88.9	80	120				
Manganese	47.15	5.00	50.00		94.3	80	120				
Molybdenum	46.00	5.00	50.00		92.0	80	120				
Nickel	46.03	5.00	50.00		92.1	80	120				
Selenium	45.43	5.00	50.00		90.9	80	120				
Silver	4.676	2.50	5.000		93.5	80	120				
Sodium	462.8	100	500.0		92.6	80	120				
Thallium	45.59	5.00	50.00	0.5648	90.1	80	120				
Tin	47.10	5.00	50.00	1.069	92.1	80	120				
Titanium	47.43	5.00	50.00		94.9	80	120				

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186247

Sample ID: **LCS-186247** Client ID: Units: **mg/Kg** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467470**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Vanadium	47.79	5.00	50.00		95.6	80	120				
Zinc	43.89	5.00	50.00		87.8	80	120				

Sample ID: **LCS-186247** Client ID: Units: **mg/Kg** Prep Date: **01/23/2014** Run No: **260983**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **02/10/2014** Seq No: **5487472**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Potassium	497.0	100	500.0	0.4843	99.3	80	120				

Sample ID: **1401E15-001CMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467481**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	34570	296	2964	31810	93.1	75	125				
Antimony	245.1	29.6	296.4		82.7	75	125				
Arsenic	271.3	29.6	296.4	2.139	90.8	75	125				
Barium	460.9	29.6	296.4	192.0	90.7	75	125				
Beryllium	283.9	14.8	296.4	0.4587	95.6	75	125				
Cadmium	267.2	14.8	296.4		90.2	75	125				
Calcium	13730	296	2964	11330	81.0	75	125				
Chromium	313.5	14.8	296.4	36.54	93.4	75	125				
Cobalt	276.3	14.8	296.4	5.545	91.3	75	125				
Copper	594.2	14.8	296.4	318.8	92.9	75	125				
Iron	26040	296	2964	25400	21.5	75	125				S
Lead	269.8	29.6	296.4	11.61	87.1	75	125				
Magnesium	8207	296	2964	5747	83.0	75	125				
Manganese	3182	29.6	296.4	3009	58.3	75	125				S
Molybdenum	289.6	29.6	296.4	22.82	90.0	75	125				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186247

Sample ID: **1401E15-001CMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467481**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Nickel	292.3	29.6	296.4	24.32	90.4	75	125				
Selenium	275.1	29.6	296.4		92.8	75	125				
Silver	32.08	14.8	29.64	4.827	92.0	75	125				
Sodium	3982	593	2964	954.8	102	75	125				
Thallium	258.6	29.6	296.4		87.2	75	125				
Tin	276.3	29.6	296.4	19.43	86.7	75	125				
Titanium	384.2	29.6	296.4	142.9	81.4	75	125				
Vanadium	300.4	29.6	296.4	20.72	94.3	75	125				
Zinc	652.9	29.6	296.4	397.7	86.1	75	125				

Sample ID: **1401E15-001CMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/23/2014** Run No: **260983**
SampleType: **MS** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186247** Analysis Date: **02/10/2014** Seq No: **5487479**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Potassium	5733	593	2964	2654	104	75	125				

Sample ID: **1401E15-001CMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **MSD** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467485**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	33640	298	2975	31810	61.6	75	125	34570	2.72	20	S
Antimony	246.2	29.8	297.5		82.8	75	125	245.1	0.444	20	
Arsenic	271.2	29.8	297.5	2.139	90.4	75	125	271.3	0.048	20	
Barium	456.7	29.8	297.5	192.0	88.9	75	125	460.9	0.927	20	
Beryllium	284.9	14.9	297.5	0.4587	95.6	75	125	283.9	0.341	20	
Cadmium	267.3	14.9	297.5		89.9	75	125	267.2	0.028	20	
Calcium	13210	298	2975	11330	63.1	75	125	13730	3.89	20	S
Chromium	312.4	14.9	297.5	36.54	92.7	75	125	313.5	0.367	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186247

Sample ID: **1401E15-001CMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/23/2014** Run No: **260108**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **01/23/2014** Seq No: **5467485**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cobalt	275.8	14.9	297.5	5.545	90.8	75	125	276.3	0.182	20	
Copper	595.1	14.9	297.5	318.8	92.9	75	125	594.2	0.149	20	
Iron	25780	298	2975	25400	12.7	75	125	26040	1.00	20	S
Lead	268.8	29.8	297.5	11.61	86.5	75	125	269.8	0.363	20	
Magnesium	8054	298	2975	5747	77.5	75	125	8207	1.89	20	
Manganese	3104	29.8	297.5	3009	32.0	75	125	3182	2.47	20	S
Molybdenum	289.3	29.8	297.5	22.82	89.6	75	125	289.6	0.098	20	
Nickel	290.0	29.8	297.5	24.32	89.3	75	125	292.3	0.779	20	
Selenium	275.0	29.8	297.5		92.4	75	125	275.1	0.031	20	
Silver	32.05	14.9	29.75	4.827	91.5	75	125	32.08	0.092	20	
Sodium	3944	595	2975	954.8	100	75	125	3982	0.949	20	
Thallium	260.4	29.8	297.5		87.5	75	125	258.6	0.690	20	
Tin	274.9	29.8	297.5	19.43	85.9	75	125	276.3	0.524	20	
Titanium	383.5	29.8	297.5	142.9	80.9	75	125	384.2	0.173	20	
Vanadium	300.2	29.8	297.5	20.72	93.9	75	125	300.4	0.048	20	
Zinc	625.3	29.8	297.5	397.7	76.5	75	125	652.9	4.31	20	

Sample ID: **1401E15-001CMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/23/2014** Run No: **260983**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **186247** Analysis Date: **02/10/2014** Seq No: **5487481**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Potassium	5709	595	2975	2654	103	75	125	5733	0.421	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186318

Sample ID: **MB-186318** Client ID: Units: **mg/Kg** Prep Date: **01/24/2014** Run No: **260121**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186318** Analysis Date: **01/24/2014** Seq No: **5468214**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-186318** Client ID: Units: **mg/Kg** Prep Date: **01/24/2014** Run No: **260121**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186318** Analysis Date: **01/24/2014** Seq No: **5468216**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3989	0.100	0.4000		99.7	80	120				

Sample ID: **1401E30-001AMS** Client ID: Units: **mg/Kg-dry** Prep Date: **01/24/2014** Run No: **260121**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186318** Analysis Date: **01/24/2014** Seq No: **5468222**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4528	0.109	0.4369	0.02140	98.8	70	130				

Sample ID: **1401E30-001AMSD** Client ID: Units: **mg/Kg-dry** Prep Date: **01/24/2014** Run No: **260121**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **186318** Analysis Date: **01/24/2014** Seq No: **5468225**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4541	0.109	0.4369	0.02140	99.0	70	130	0.4528	0.278	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186319

Sample ID: **MB-186319** Client ID: Units: **ug/Kg** Prep Date: **01/24/2014** Run No: **260239**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186319** Analysis Date: **01/27/2014** Seq No: **5470248**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	16.83	0	16.67		101	25.2	120				
Surr: Tetrachloro-m-xylene	13.53	0	16.67		81.1	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186319

Sample ID: **LCS-186319** Client ID: Units: **ug/Kg** Prep Date: **01/24/2014** Run No: **260239**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186319** Analysis Date: **01/27/2014** Seq No: **5470255**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	30.71	3.3	33.33		92.1	44.7	136				
Aldrin	29.32	1.7	33.33		88.0	41.5	118				
Dieldrin	31.54	3.3	33.33		94.6	44.3	133				
Endrin	30.80	3.3	33.33		92.4	43.2	137				
gamma-BHC	30.53	1.7	33.33		91.6	40.3	126				
Heptachlor	28.63	1.7	33.33		85.9	40.1	126				
Surr: Decachlorobiphenyl	16.66	0	16.67		100.0	25.2	120				
Surr: Tetrachloro-m-xylene	13.23	0	16.67		79.4	30.5	120				

Sample ID: **1401G77-001AMS** Client ID: **14022-SI9-C56-15** Units: **ug/Kg-dry** Prep Date: **01/24/2014** Run No: **260239**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186319** Analysis Date: **01/27/2014** Seq No: **5470261**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	35.12	3.8	38.12		92.1	33.6	126				
Aldrin	29.54	1.9	38.12		77.5	32.6	120				
Dieldrin	32.57	3.8	38.12		85.4	35.1	124				
Endrin	32.19	3.8	38.12		84.4	39.7	129				
gamma-BHC	30.70	1.9	38.12		80.5	35.2	120				
Heptachlor	28.72	1.9	38.12		75.3	34.9	119				
Surr: Decachlorobiphenyl	17.14	0	19.07		89.9	25.2	120				
Surr: Tetrachloro-m-xylene	13.90	0	19.07		72.9	30.5	120				

Sample ID: **1401G77-001AMSD** Client ID: **14022-SI9-C56-15** Units: **ug/Kg-dry** Prep Date: **01/24/2014** Run No: **260239**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186319** Analysis Date: **01/27/2014** Seq No: **5470268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	43.97	3.8	38.11		115	33.6	126	35.12	22.4	28.1	
Aldrin	27.30	1.9	38.11		71.6	32.6	120	29.54	7.87	29.9	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 18-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401G77

ANALYTICAL QC SUMMARY REPORT

BatchID: 186319

Sample ID: **1401G77-001AMSD** Client ID: **14022-SI9-C56-15** Units: **ug/Kg-dry** Prep Date: **01/24/2014** Run No: **260239**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186319** Analysis Date: **01/27/2014** Seq No: **5470268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	34.26	3.8	38.11		89.9	35.1	124	32.57	5.06	26.6	
Endrin	39.64	3.8	38.11		104	39.7	129	32.19	20.7	27.6	
gamma-BHC	28.06	1.9	38.11		73.6	35.2	120	30.70	8.98	28.6	
Heptachlor	27.85	1.9	38.11		73.1	34.9	119	28.72	3.10	27.7	
Surr: Decachlorobiphenyl	15.43	0	19.06		80.9	25.2	120	17.14	0	30	
Surr: Tetrachloro-m-xylene	12.42	0	19.06		65.1	30.5	120	13.90	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

December 05, 2013

Dale Carpenter
A&D Environmental Services, LLC
4943 Austin Park Ave
Buford GA 30518

TEL: (678) 714-8420
FAX: (678) 714-8425

RE: Drexel

Dear Dale Carpenter: Order No: 1311L31

Analytical Environmental Services, Inc. received 1 samples on 11/27/2013 8:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1311L31

Date: _____ Page _____ of _____

COMPANY: A&D Environmental

ADDRESS: 4943 Austin Park Ave, Buford Ga 30518

PHONE: 678-714-8420

FAX: 678-714-8425

SAMPLED BY: Stanley w/A&D

SIGNATURE:

ANALYSIS REQUESTED

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	TCLP VOC	TCLP SVOC	TCLP Metals	TCLP Pesticides	REMARKS	No # of Containers
1	S115-Stockpile	11.22.13	1400	X		SO	X	X	X	X		1
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

PRESERVATION (See codes)

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Stanley w/ A&D	11.22.13/1400	1: [illegible]	11.22.13/1400
2: G. Lunney	11.27.13/0827	2: [illegible]	11/27/13 8:30
3:		3:	

PROJECT INFORMATION

PROJECT NAME: Drexel

PROJECT #:

SITE ADDRESS: Candler, Ga

SEND REPORT TO: slcarpenter@adenvin.com

INVOICE TO: (IF DIFFERENT FROM ABOVE)

QUOTE #: _____ PO#: _____

RECEIPT

Total # of Containers: 1

Turnaround Time Request
- Standard 5 Business Days
- 3 Day Rush
- 2 Business Day Rush
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other _____

STATE PROGRAM (if any): _____

E-mail? Y / N; Fax? Y / N

DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD

OUT / / VIA:

IN / / VIA:

CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER_____

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 5-Dec-13

Client: A&D Environmental Services, LLC
Project: Drexel
Lab ID: 1311L31

Case Narrative

Sample Receiving Nonconformance:

The samples were received at ambient temperature, outside required temperature range of 0-6°C. No ice or melted ice was present. We proceeded with the analysis per client history.

Analytical Environmental Services, Inc

Date: 5-Dec-13

Client:	A&D Environmental Services, LLC	**Client Sample ID:**	SI 15-STOCKPILE
Project Name:	Drexel	**Collection Date:**	11/22/2013 2:00:00 PM
Lab ID:	1311L31-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
1,2-Dichloroethane	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
2-Butanone	BRL	0.20		mg/L	184339	20	12/03/2013 12:01	GK
Benzene	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
Carbon tetrachloride	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
Chlorobenzene	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
Chloroform	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
Tetrachloroethene	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
Trichloroethene	BRL	0.10		mg/L	184339	20	12/03/2013 12:01	GK
Vinyl chloride	BRL	0.040		mg/L	184339	20	12/03/2013 12:01	GK
Surr: 4-Bromofluorobenzene	93.6	67.9-128		%REC	184339	20	12/03/2013 12:01	GK
Surr: Dibromofluoromethane	94.1	77.2-124		%REC	184339	20	12/03/2013 12:01	GK
Surr: Toluene-d8	95.8	71.6-127		%REC	184339	20	12/03/2013 12:01	GK
SEMIVOLATILES ORGANICS, TCLP SW1311/8270D				**(SW3510C)**				
1,4-Dichlorobenzene	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
2,4,5-Trichlorophenol	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
2,4,6-Trichlorophenol	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
2,4-Dinitrotoluene	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Hexachlorobenzene	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Hexachlorobutadiene	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Hexachloroethane	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
m,p-Cresol	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Nitrobenzene	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
o-Cresol	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Pentachlorophenol	BRL	0.50		mg/L	184357	1	12/03/2013 15:57	YH
Pyridine	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Cresols, Total	BRL	0.10		mg/L	184357	1	12/03/2013 15:57	YH
Surr: 2,4,6-Tribromophenol	109	50.3-131		%REC	184357	1	12/03/2013 15:57	YH
Surr: 2-Fluorobiphenyl	96.9	55.4-125		%REC	184357	1	12/03/2013 15:57	YH
Surr: 2-Fluorophenol	91.8	45-126		%REC	184357	1	12/03/2013 15:57	YH
Surr: 4-Terphenyl-d14	116	57.6-138		%REC	184357	1	12/03/2013 15:57	YH
Surr: Nitrobenzene-d5	88.9	50-126		%REC	184357	1	12/03/2013 15:57	YH
Surr: Phenol-d5	86.4	40.4-119		%REC	184357	1	12/03/2013 15:57	YH
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Chlordane	BRL	0.050		mg/L	184359	10	12/03/2013 17:17	KD
Endrin	BRL	0.010		mg/L	184359	10	12/03/2013 17:17	KD
gamma-BHC	0.063	0.0050		mg/L	184359	10	12/03/2013 17:17	KD
Heptachlor	BRL	0.0050		mg/L	184359	10	12/03/2013 17:17	KD
Heptachlor epoxide	BRL	0.0050		mg/L	184359	10	12/03/2013 17:17	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 5-Dec-13

Client:	A&D Environmental Services, LLC	**Client Sample ID:**	SI 15-STOCKPILE
Project Name:	Drexel	**Collection Date:**	11/22/2013 2:00:00 PM
Lab ID:	1311L31-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B					**(SW3510C)**			
Methoxychlor	BRL	0.050		mg/L	184359	10	12/03/2013 17:17	KD
Toxaphene	BRL	0.50		mg/L	184359	10	12/03/2013 17:17	KD
Surr: Decachlorobiphenyl	81.6	30.7-121		%REC	184359	10	12/03/2013 17:17	KD
Surr: Tetrachloro-m-xylene	90.3	36.6-115		%REC	184359	10	12/03/2013 17:17	KD
MERCURY, TCLP SW1311/7470A					**(SW7470A)**			
Mercury	BRL	0.00400		mg/L	184265	1	12/03/2013 12:24	CG
ICP METALS, TCLP SW1311/6010C					**(SW3010A)**			
Arsenic	BRL	0.250		mg/L	184337	1	12/02/2013 12:38	TA
Barium	BRL	0.500		mg/L	184337	1	12/02/2013 12:38	TA
Cadmium	BRL	0.0250		mg/L	184337	1	12/02/2013 12:38	TA
Chromium	BRL	0.0500		mg/L	184337	1	12/02/2013 12:38	TA
Lead	BRL	0.0500		mg/L	184337	1	12/02/2013 12:38	TA
Selenium	BRL	0.100		mg/L	184337	1	12/02/2013 12:38	TA
Silver	BRL	0.0250		mg/L	184337	1	12/02/2013 12:38	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client A+O Work Order Number 1311L31

Checklist completed by [signature] 11/27/13
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes __ No __ Not Present ✓

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes __ No ✓

Cooler #1 Amber Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184265

Sample ID: **MB-184265** Client ID: Units: **mg/L** Prep Date: **11/29/2013** Run No: **256839**
SampleType: **MBLK** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184265** Analysis Date: **12/02/2013** Seq No: **5395810**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00400									

Sample ID: **LCS-184265** Client ID: Units: **mg/L** Prep Date: **11/29/2013** Run No: **256839**
SampleType: **LCS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184265** Analysis Date: **12/02/2013** Seq No: **5395812**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03868	0.00400	0.0400		96.7	85	115				

Sample ID: **1311J75-001BMS** Client ID: Units: **mg/L** Prep Date: **11/29/2013** Run No: **256839**
SampleType: **MS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184265** Analysis Date: **12/02/2013** Seq No: **5395815**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03830	0.00400	0.0400		95.8	80	120				

Sample ID: **1311J75-001BMSD** Client ID: Units: **mg/L** Prep Date: **11/29/2013** Run No: **256839**
SampleType: **MSD** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184265** Analysis Date: **12/02/2013** Seq No: **5395817**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03886	0.00400	0.0400		97.2	80	120	0.03830	1.45	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184337

Sample ID: **MB-184337** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256868**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184337** Analysis Date: **12/02/2013** Seq No: **5396003**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **LCS-184337** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256868**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184337** Analysis Date: **12/02/2013** Seq No: **5396002**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.054	0.250	5.000		101	85	115				
Barium	4.788	0.500	5.000	0.02366	95.3	80	120				
Cadmium	4.906	0.0250	5.000		98.1	85	115				
Chromium	4.914	0.0500	5.000		98.3	85	115				
Lead	4.803	0.0500	5.000		96.1	85	115				
Selenium	5.184	0.100	5.000		104	85	115				
Silver	0.4906	0.0250	0.5000		98.1	85	115				

Sample ID: **1311L31-001BMS** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/02/2013** Run No: **256868**
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184337** Analysis Date: **12/02/2013** Seq No: **5396008**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.146	0.250	5.000		103	50	150				
Barium	4.730	0.500	5.000	0.06157	93.4	50	150				
Cadmium	4.715	0.0250	5.000		94.3	50	150				
Chromium	4.753	0.0500	5.000		95.1	50	150				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184337

Sample ID: **1311L31-001BMS** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/02/2013** Run No: **256868**
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184337** Analysis Date: **12/02/2013** Seq No: **5396008**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	4.612	0.0500	5.000		92.2	50	150				
Selenium	5.036	0.100	5.000		101	50	150				
Silver	0.4852	0.0250	0.5000		97.0	50	150				

Sample ID: **1311L31-001BMSD** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/02/2013** Run No: **256868**
SampleType: **MSD** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184337** Analysis Date: **12/02/2013** Seq No: **5396009**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.268	0.250	5.000		105	50	150	5.146	2.34	30	
Barium	4.828	0.500	5.000	0.06157	95.3	50	150	4.730	2.05	30	
Cadmium	4.944	0.0250	5.000		98.9	50	150	4.715	4.74	30	
Chromium	5.007	0.0500	5.000		100	50	150	4.753	5.22	30	
Lead	4.717	0.0500	5.000		94.3	50	150	4.612	2.25	30	
Selenium	5.176	0.100	5.000		104	50	150	5.036	2.74	30	
Silver	0.5019	0.0250	0.5000		100	50	150	0.4852	3.37	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184339

Sample ID: **MB-184339** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256875**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184339** Analysis Date: **12/02/2013** Seq No: **5396040**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.7452	0	1.000		74.5	67.9	128				
Surr: Dibromofluoromethane	1.153	0	1.000		115	77.2	124				
Surr: Toluene-d8	0.9362	0	1.000		93.6	71.6	127				

Sample ID: **LCS-184339** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256875**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184339** Analysis Date: **12/02/2013** Seq No: **5396042**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8792	0.10	1.000		87.9	62.3	141				
1,2-Dichloroethane	1.047	0.10	1.000		105	74.1	127				
2-Butanone	2.153	0.20	2.000		108	45.5	137				
Benzene	1.067	0.10	1.000		107	73.5	125				
Carbon tetrachloride	1.234	0.10	1.000		123	55.1	144				
Chlorobenzene	0.9992	0.10	1.000		99.9	75.4	122				
Chloroform	1.008	0.10	1.000		101	68.2	127				
Tetrachloroethene	1.033	0.10	1.000		103	70.3	132				
Trichloroethene	0.9978	0.10	1.000		99.8	70.5	128				
Vinyl chloride	0.9336	0.040	1.000		93.4	54.9	143				

Qualifiers:
> Greater than Result value
BRL Below reporting limit
J Estimated value detected below Reporting Limit
Rpt Lim Reporting Limit
< Less than Result value
E Estimated (value above quantitation range)
N Analyte not NELAC certified
S Spike Recovery outside limits due to matrix
B Analyte detected in the associated method blank
H Holding times for preparation or analysis exceeded
R RPD outside limits due to matrix

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184339

Sample ID: **LCS-184339** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256875**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184339** Analysis Date: **12/02/2013** Seq No: **5396042**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	1.006	0	1.000		101	67.9	128				
Surr: Dibromofluoromethane	1.159	0	1.000		116	77.2	124				
Surr: Toluene-d8	1.144	0	1.000		114	71.6	127				

Sample ID: **1311K89-002AMS** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256875**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184339** Analysis Date: **12/02/2013** Seq No: **5396415**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.7256	0.10	1.000		72.6	62.3	154				
1,2-Dichloroethane	0.9370	0.10	1.000		93.7	65.8	132				
2-Butanone	1.722	0.20	2.000		86.1	44.2	148				
Benzene	0.9410	0.10	1.000		94.1	72.6	133				
Carbon tetrachloride	1.074	0.10	1.000		107	53.7	151				
Chlorobenzene	0.9446	0.10	1.000		94.5	72	130				
Chloroform	0.7832	0.10	1.000		78.3	63.2	137				
Tetrachloroethene	0.9606	0.10	1.000		96.1	71.9	140				
Trichloroethene	1.073	0.10	1.000		107	68.3	146				
Vinyl chloride	0.7560	0.040	1.000		75.6	54.5	151				
Surr: 4-Bromofluorobenzene	1.033	0	1.000		103	67.9	128				
Surr: Dibromofluoromethane	1.113	0	1.000		111	77.2	124				
Surr: Toluene-d8	1.126	0	1.000		113	71.6	127				

Sample ID: **1311K89-002ADUP** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256875**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184339** Analysis Date: **12/02/2013** Seq No: **5396343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184339

Sample ID: **1311K89-002ADUP** Client ID: Units: **mg/L** Prep Date: **12/02/2013** Run No: **256875**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184339** Analysis Date: **12/02/2013** Seq No: **5396343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	BRL	0.10						0	0	30	
Chloroform	BRL	0.10						0	0	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	0.7482	0	1.000		74.8	67.9	128	0.7572	0	0	
Surr: Dibromofluoromethane	1.189	0	1.000		119	77.2	124	1.179	0	0	
Surr: Toluene-d8	0.9784	0	1.000		97.8	71.6	127	0.9706	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184357

Sample ID: **MB-184357** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256961**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184357** Analysis Date: **12/03/2013** Seq No: **5398338**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	1.123	0	1.000		112	50.3	131				
Surr: 2-Fluorobiphenyl	0.4901	0	0.5000		98.0	55.4	125				
Surr: 2-Fluorophenol	0.9226	0	1.000		92.3	45	126				
Surr: 4-Terphenyl-d14	0.5883	0	0.5000		118	57.6	138				
Surr: Nitrobenzene-d5	0.4517	0	0.5000		90.3	50	126				
Surr: Phenol-d5	0.8841	0	1.000		88.4	40.4	119				

Sample ID: **LCS-184357** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256961**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184357** Analysis Date: **12/03/2013** Seq No: **5398339**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.8153	0.10	1.000		81.5	64.6	120				
2,4,5-Trichlorophenol	1.125	0.10	1.000		112	71.3	130				
2,4,6-Trichlorophenol	1.119	0.10	1.000		112	77	125				
2,4-Dinitrotoluene	0.9747	0.10	1.000		97.5	70.6	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184357

Sample ID: **LCS-184357** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256961**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184357** Analysis Date: **12/03/2013** Seq No: **5398339**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cresols, Total	2.770	0.10	3.000		92.3	63.7	138				
Hexachlorobenzene	1.167	0.10	1.000		117	72.4	120				
Hexachlorobutadiene	0.9806	0.10	1.000		98.1	65.3	120				
Hexachloroethane	0.7857	0.10	1.000		78.6	56.3	126				
m,p-Cresol	1.918	0.10	2.000		95.9	62.1	140				
Nitrobenzene	1.066	0.10	1.000		107	66.8	135				
o-Cresol	0.8520	0.10	1.000		85.2	65.6	137				
Pentachlorophenol	1.135	0.50	1.000		114	55.9	145				
Pyridine	0.7929	0.10	1.000		79.3	10	120				
Surr: 2,4,6-Tribromophenol	1.218	0	1.000		122	50.3	131				
Surr: 2-Fluorobiphenyl	0.5374	0	0.5000		107	55.4	125				
Surr: 2-Fluorophenol	0.9798	0	1.000		98.0	45	126				
Surr: 4-Terphenyl-d14	0.6627	0	0.5000		133	57.6	138				
Surr: Nitrobenzene-d5	0.5016	0	0.5000		100	50	126				
Surr: Phenol-d5	0.9427	0	1.000		94.3	40.4	119				

Sample ID: **1311L31-001BMS** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/03/2013** Run No: **256961**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184357** Analysis Date: **12/03/2013** Seq No: **5398681**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.7644	0.10	1.000		76.4	61.5	120				
2,4,5-Trichlorophenol	1.060	0.10	1.000		106	59.9	130				
2,4,6-Trichlorophenol	1.044	0.10	1.000		104	65.2	125				
2,4-Dinitrotoluene	0.9344	0.10	1.000		93.4	57.9	120				
Cresols, Total	2.525	0.10	3.000		84.2	55.3	136				
Hexachlorobenzene	1.051	0.10	1.000		105	59.6	120				
Hexachlorobutadiene	0.8941	0.10	1.000		89.4	52.2	120				
Hexachloroethane	0.7072	0.10	1.000		70.7	51.4	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184357

Sample ID: **1311L31-001BMS** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/03/2013** Run No: **256961**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184357** Analysis Date: **12/03/2013** Seq No: **5398681**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Cresol	1.749	0.10	2.000		87.5	51.2	139				
Nitrobenzene	0.9551	0.10	1.000		95.5	53.1	131				
o-Cresol	0.7760	0.10	1.000		77.6	56.8	133				
Pentachlorophenol	1.090	0.50	1.000		109	44.8	148				
Pyridine	0.4535	0.10	1.000		45.4	10	120				
Surr: 2,4,6-Tribromophenol	1.105	0	1.000		111	50.3	131				
Surr: 2-Fluorobiphenyl	0.4854	0	0.5000		97.1	55.4	125				
Surr: 2-Fluorophenol	0.8688	0	1.000		86.9	45	126				
Surr: 4-Terphenyl-d14	0.5675	0	0.5000		114	57.6	138				
Surr: Nitrobenzene-d5	0.4458	0	0.5000		89.2	50	126				
Surr: Phenol-d5	0.8533	0	1.000		85.3	40.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184359

Sample ID: **MB-184359** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256990**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184359** Analysis Date: **12/03/2013** Seq No: **5398954**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.004440	0	0.0050		88.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.002764	0	0.0050		55.3	36.6	115				

Sample ID: **LCS-184359-1** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256990**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184359** Analysis Date: **12/03/2013** Seq No: **5398956**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.007314	0.0010	0.0080		91.4	50.5	139				
gamma-BHC	0.006505	0.00050	0.0080		81.3	52.6	121				
Heptachlor	0.006522	0.00050	0.0080		81.5	53.1	125				
Heptachlor epoxide	0.006706	0.00050	0.0080		83.8	51.9	125				
Methoxychlor	0.02707	0.0050	0.0300		90.2	50.2	133				
Surr: Decachlorobiphenyl	0.004487	0	0.0050		89.7	30.7	121				
Surr: Tetrachloro-m-xylene	0.003039	0	0.0050		60.8	36.6	115				

Sample ID: **LCS-184359-2** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256990**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184359** Analysis Date: **12/03/2013** Seq No: **5398958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.03554	0.0050	0.0400		88.8	55.2	136				
Toxaphene	0.09979	0.050	0.0800		125	52.8	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1311L31

ANALYTICAL QC SUMMARY REPORT

BatchID: 184359

Sample ID: **LCS-184359-2** Client ID: Units: **mg/L** Prep Date: **12/03/2013** Run No: **256990**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184359** Analysis Date: **12/03/2013** Seq No: **5398958**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.004402	0	0.0050		88.0	30.7	121				
Surr: Tetrachloro-m-xylene	0.002199	0	0.0050		44.0	36.6	115				

Sample ID: **1311L31-001BMS-1** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/03/2013** Run No: **257106**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184359** Analysis Date: **12/04/2013** Seq No: **5401630**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	BRL	0.010	0.0080		77.3	48	138				
gamma-BHC	0.06825	0.0050	0.0080	0.06332	61.6	46.5	123				
Heptachlor	0.05791	0.0050	0.0080		724	47.8	124				S
Heptachlor epoxide	0.01392	0.0050	0.0080		174	51.1	120				S
Methoxychlor	BRL	0.050	0.0300		90.6	47.6	138				
Surr: Decachlorobiphenyl	0.004229	0	0.0050		84.6	30.7	121				
Surr: Tetrachloro-m-xylene	0.004175	0	0.0050		83.5	36.6	115				

Sample ID: **1311L31-001BMS-2** Client ID: **SI 15-STOCKPILE** Units: **mg/L** Prep Date: **12/03/2013** Run No: **257106**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184359** Analysis Date: **12/04/2013** Seq No: **5401634**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.4416	0.050	0.0400		1100	50.3	139				S
Toxaphene	1.159	0.50	0.0800		1450	50	132				S
Surr: Decachlorobiphenyl	0.004199	0	0.0050		84.0	30.7	121				
Surr: Tetrachloro-m-xylene	0.004205	0	0.0050		84.1	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

December 06, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexler Chemical Company

Dear Timmerly Bullman: Order No: 1312246

Analytical Environmental Services, Inc. received 1 samples on 12/3/2013 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

3785 PRESIDENTIAL PARKWAY • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770)457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1312295 / 1312296

Date: 12/2/13 Page 1 of 1

COMPANY: EPS, Inc.
ADDRESS: 1050 Crown Pointe Pkwy Ste. 550, Atlanta, GA 30338
PHONE: (404) 315-9113
FAX:
SAMPLED BY: Jeff Dennis
SIGNATURE:

ANALYSIS REQUESTED: VOCs (soil), Metals (soil), Pesticides (soil), VOCs (water), Metals (water), Pesticides (water)

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	VOCs (soil)	Metals (soil)	Pesticides (soil)	VOCs (water)	Metals (water)	Pesticides (water)	REMARKS	No # of Containers
	PRESERVATION (See codes)						S/M+I	I	I	H+I	N	I		
1	13336-SI15-Pipe IR-8	12/2/13	1400	X		SO	X	X	X					6
2	13336-SI15-Pipe Content R.	12/2/13	1405	X		SO	X	X	X					6
3	13336-SI15-CSIR-5	12/2/13	1410	X		SO		X	X					2
4	13336-water-1	12/2/13	1455	X		SW				X	X	X		5
5	Trip Blank	12/2/13				W				X				2
6														
7														
8														
9														
10														
11														
12														
13														
14														

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1: Jeff Dennis	12/2/13 1545	1:	12/3/13 7:20
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordele, GA
SEND REPORT TO: tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers: 21

Turnaround Time Request
- Standard 5 Business Days
- 2 Business Day Rush
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other

STATE PROGRAM (if any):
E-mail? Y / N. Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES.
SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 6-Dec-13

Client: Environmental Planning Specialists, Inc.
Project: Drexler Chemical Company
Lab ID: 1312246

Case Narrative

Per Tim Vellenowith on 12/5/2013 via telephone, sample "13336-WATER-1" was analyzed for TCLP Pesticides (Chlordane only) at next day turnaround time.

Analytical Environmental Services, Inc **Date:** 6-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13336-WATER-1
Project Name:	Drexler Chemical Company	**Collection Date:**	12/2/2013 2:55:00 PM
Lab ID:	1312246-001	**Matrix:**	Surface Water

Analyses	Result	Qual	MDL	Reporting Limit	Units	BatchID	DF	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B					**(SW3510C)**				
Chlordane	BRL		0.012	0.050	mg/L	184360	10	12/06/2013 12:59	KD
Surr: Decachlorobiphenyl	83.7		0	30.7-121	%REC	184360	1	12/06/2013 11:33	KD
Surr: Decachlorobiphenyl	90.7		0	30.7-121	%REC	184360	10	12/06/2013 12:59	KD
Surr: Tetrachloro-m-xylene	60		0	36.6-115	%REC	184360	10	12/06/2013 12:59	KD
Surr: Tetrachloro-m-xylene	67.9		0	36.6-115	%REC	184360	1	12/06/2013 11:33	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated value above quantitation range
BRL	Not detected at MDL	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	J	Estimated value detected below Reporting Limit
N	Analyte not NELAC certified	>	Greater than Result value
B	Analyte detected in the associated method blank	<	Less than Result value
NC	Not confirmed	Narr	See case narrative

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

1312246

Client EPS

Work Order Number ~~1312037~~ 1312246

Checklist completed by [signature] 12/3/13
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.4 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted __ Yes ✓ No __

Water - pH acceptable upon receipt? Yes ✓ No __ Not Applicable __

Adjusted? _____ Checked by PT

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexler Chemical Company
Workorder: 1312246

ANALYTICAL QC SUMMARY REPORT

BatchID: 184360

Sample ID: **MB-184360** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402641**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.004089	0	0.0050		81.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.002971	0	0.0050		59.4	36.6	115				

Sample ID: **LCS-184360-1** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402647**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.006968	0.0010	0.0080		87.1	50.5	139				
gamma-BHC	0.006004	0.00050	0.0080		75.1	52.6	121				
Heptachlor	0.005901	0.00050	0.0080		73.8	53.1	125				
Heptachlor epoxide	0.006273	0.00050	0.0080		78.4	51.9	125				
Methoxychlor	0.02477	0.0050	0.0300		82.6	50.2	133				
Surr: Decachlorobiphenyl	0.004275	0	0.0050		85.5	30.7	121				
Surr: Tetrachloro-m-xylene	0.003065	0	0.0050		61.3	36.6	115				

Sample ID: **LCS-184360-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.03878	0.0050	0.0400		97.0	55.2	136				
Toxaphene	0.08850	0.050	0.0800		111	52.8	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexler Chemical Company
Workorder: 1312246

ANALYTICAL QC SUMMARY REPORT

BatchID: 184360

Sample ID: **LCS-184360-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.004088	0	0.0050		81.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.003076	0	0.0050		61.5	36.6	115				

Sample ID: **1312112-004CMS-1** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402668**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.007249	0.0010	0.0080		90.6	48	138				
gamma-BHC	0.005788	0.00050	0.0080		72.4	46.5	123				
Heptachlor	0.006313	0.00050	0.0080		78.9	47.8	124				
Heptachlor epoxide	0.006492	0.00050	0.0080		81.2	51.1	120				
Methoxychlor	0.02528	0.0050	0.0300		84.3	47.6	138				
Surr: Decachlorobiphenyl	0.003521	0	0.0050		70.4	30.7	121				
Surr: Tetrachloro-m-xylene	0.003093	0	0.0050		61.9	36.6	115				

Sample ID: **1312112-004CMS-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402671**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.1095	0.0050	0.0400	0.06792	104	50.3	139				E
Toxaphene	0.2884	0.050	0.0800	0.1994	111	50	132				
Surr: Decachlorobiphenyl	0.003125	0	0.0050		62.5	30.7	121				
Surr: Tetrachloro-m-xylene	0.003094	0	0.0050		61.9	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

December 13, 2013

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1312112

Analytical Environmental Services, Inc. received 4 samples on 12/4/2013 7:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1312112

Date: 12/3/13 Page 1 of 1

COMPANY: EPS

ADDRESS: 1050 Crown Pointe Pkwy Ste. 550 Atlanta, GA 30338

PHONE: (404) 315-9113

FAX:

SAMPLED BY: Jeff Dennis

SIGNATURE:

ANALYSIS REQUESTED: Metals, Pesticides, TCLP VOC, TCLP SVOC, TCLP Metals, TCLP Pesticides

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Metals	Pesticides	TCLP VOC	TCLP SVOC	TCLP Metals	TCLP Pesticides	REMARKS	No # of Containers
							PRESERVATION (See codes)							
							I	I	I	I	I	I		
1	13337-SI20-CS4-8	12/3/13	1010	X		SO	X	X						2
2	13337-SI20-CS5-8	12/3/13	1015	X		SO	X	X						2
3	13337-SI20-CS6-8	12/3/13	1020	X		SO	X	X						2
4	13337-Stockpile-20	12/3/13	1030		X	SO		X	X	X	X	X		2
5														~~2~~ 10
6														
7														
8														
9														
10														
11														
12														
13														
14														

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	12/3/13 1115	1:	12/4/13
2:		2:	7:30
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER _____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordelle, GA
SEND REPORT TO: tbullman@envplanning.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: _____ PO#: _____

RECEIPT
Total # of Containers: 8

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ○ Next Business Day Rush
- ● Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project: Drexel Chemical Company
Lab ID: 1312112

Case Narrative

Metals Analysis by Method 6010C:

Due to sample matrix, samples 1312112-001A, -002A, and -003A required dilution during preparation and/or analysis resulting in elevated reporting limits for Thallium.

Sample ID "13337-SI20-CS4-8" was changed to "13337-SI20-CS7-11", "13337-SI20-CS5-8" was changed to "13337-SI20-CS8-11", and "13337-SI20-CS6-8" was changed to "13337-SI20-CS9-11" per Timmerly Bullman on 12/5/13 via email.

Pesticide Analysis by Method 8081B:

Due to sample matrix, samples 1312112-001B and -004A required dilution during analysis resulting in elevated reporting limits.

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS7-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:10:00 AM
Lab ID:	1312112-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.118		mg/Kg-dry	184425	1	12/04/2013 10:38	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
4,4´-DDE	530	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
4,4´-DDT	29000	3900		ug/Kg-dry	184394	1000	12/04/2013 14:43	KD
Aldrin	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
alpha-BHC	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
alpha-Chlordane	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
beta-BHC	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Chlordane	48000	39000		ug/Kg-dry	184394	1000	12/04/2013 14:43	KD
delta-BHC	260	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Dieldrin	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endosulfan I	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endosulfan II	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endosulfan sulfate	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endrin	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endrin aldehyde	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Endrin ketone	BRL	390		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
gamma-BHC	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
gamma-Chlordane	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Heptachlor	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Heptachlor epoxide	BRL	200		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Methoxychlor	BRL	2000		ug/Kg-dry	184394	100	12/04/2013 14:32	KD
Toxaphene	630000	200000		ug/Kg-dry	184394	1000	12/04/2013 14:43	KD
Surr: Decachlorobiphenyl	92.2	25.2-120		%REC	184394	1	12/04/2013 13:32	KD
Surr: Tetrachloro-m-xylene	65.8	30.5-120		%REC	184394	1	12/04/2013 13:32	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8360	55.2		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Antimony	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Arsenic	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Barium	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Beryllium	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Cadmium	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Calcium	242	55.2		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Chromium	9.03	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Cobalt	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Copper	4.91	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Iron	18300	552		mg/Kg-dry	184426	10	12/04/2013 14:38	TA
Lead	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS7-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:10:00 AM
Lab ID:	1312112-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	122	55.2		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Manganese	6.05	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Molybdenum	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Nickel	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Selenium	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Silver	BRL	2.76		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Sodium	BRL	110		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Thallium	BRL	11.0		mg/Kg-dry	184426	10	12/04/2013 14:38	TA
Tin	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Titanium	68.2	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Vanadium	51.2	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
Zinc	BRL	5.52		mg/Kg-dry	184426	1	12/04/2013 13:37	TA
PERCENT MOISTURE D2216								
Percent Moisture	15.6	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS8-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:15:00 AM
Lab ID:	1312112-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.118		mg/Kg-dry	184425	1	12/04/2013 10:47	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	1200	39		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
4,4´-DDE	25	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
4,4´-DDT	1100	39		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
Aldrin	14	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Chlordane	1200	390		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
delta-BHC	19	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endrin	65	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Endrin ketone	40	3.9		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
gamma-BHC	6.5	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Methoxychlor	BRL	20		ug/Kg-dry	184394	1	12/04/2013 13:43	KD
Toxaphene	10000	2000		ug/Kg-dry	184394	10	12/04/2013 14:54	KD
Surr: Decachlorobiphenyl	83.8	25.2-120		%REC	184394	1	12/04/2013 13:43	KD
Surr: Tetrachloro-m-xylene	60.9	30.5-120		%REC	184394	1	12/04/2013 13:43	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	9750	57.6		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Antimony	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Arsenic	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Barium	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Beryllium	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Cadmium	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Calcium	502	57.6		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Chromium	14.7	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Cobalt	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Copper	5.74	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Iron	18800	576		mg/Kg-dry	184426	10	12/04/2013 14:50	TA
Lead	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS8-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:15:00 AM
Lab ID:	1312112-002	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	175	57.6		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Manganese	5.90	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Molybdenum	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Nickel	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Selenium	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Silver	BRL	2.88		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Sodium	BRL	115		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Thallium	BRL	11.5		mg/Kg-dry	184426	10	12/04/2013 14:50	TA
Tin	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Titanium	70.2	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Vanadium	53.9	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
Zinc	BRL	5.76		mg/Kg-dry	184426	1	12/04/2013 13:53	TA
PERCENT MOISTURE D2216								
Percent Moisture	15.2	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS9-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:20:00 AM
Lab ID:	1312112-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
TOTAL MERCURY SW7471B				**(SW7471B)**				
Mercury	BRL	0.116		mg/Kg-dry	184425	1	12/04/2013 10:49	CG
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	29	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
4,4´-DDE	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
4,4´-DDT	4.0	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Aldrin	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
alpha-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Chlordane	67	39		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
delta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Dieldrin	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endosulfan I	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endrin	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Endrin ketone	4.2	3.9		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
gamma-Chlordane	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Methoxychlor	BRL	20		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Toxaphene	BRL	200		ug/Kg-dry	184394	1	12/04/2013 13:54	KD
Surr: Decachlorobiphenyl	81.9	25.2-120		%REC	184394	1	12/04/2013 13:54	KD
Surr: Tetrachloro-m-xylene	79	30.5-120		%REC	184394	1	12/04/2013 13:54	KD
METALS, TOTAL SW6010C				**(SW3050B)**				
Aluminum	8930	54.2		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Antimony	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Arsenic	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Barium	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Beryllium	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Cadmium	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Calcium	418	54.2		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Chromium	9.96	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Cobalt	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Copper	5.47	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Iron	16900	542		mg/Kg-dry	184426	10	12/04/2013 14:54	TA
Lead	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-SI20-CS9-11
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:20:00 AM
Lab ID:	1312112-003	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
METALS, TOTAL SW6010C				**(SW3050B)**				
Magnesium	150	54.2		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Manganese	5.86	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Molybdenum	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Nickel	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Selenium	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Silver	BRL	2.71		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Sodium	BRL	108		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Thallium	BRL	10.8		mg/Kg-dry	184426	10	12/04/2013 14:54	TA
Tin	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Titanium	92.5	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Vanadium	51.4	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
Zinc	BRL	5.42		mg/Kg-dry	184426	1	12/04/2013 13:57	TA
PERCENT MOISTURE D2216								
Percent Moisture	14.7	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-STOCKPILE-20
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:30:00 AM
Lab ID:	1312112-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
1,2-Dichloroethane	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
2-Butanone	BRL	0.20		mg/L	184519	20	12/05/2013 13:36	GK
Benzene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Carbon tetrachloride	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Chlorobenzene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Chloroform	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Tetrachloroethene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Trichloroethene	BRL	0.10		mg/L	184519	20	12/05/2013 13:36	GK
Vinyl chloride	BRL	0.040		mg/L	184519	20	12/05/2013 13:36	GK
Surr: 4-Bromofluorobenzene	96	67.9-128		%REC	184519	20	12/05/2013 13:36	GK
Surr: Dibromofluoromethane	95.5	77.2-124		%REC	184519	20	12/05/2013 13:36	GK
Surr: Toluene-d8	97.7	71.6-127		%REC	184519	20	12/05/2013 13:36	GK
SEMIVOLATILES ORGANICS, TCLP SW1311/8270D				**(SW3510C)**				
1,4-Dichlorobenzene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
2,4,5-Trichlorophenol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
2,4,6-Trichlorophenol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
2,4-Dinitrotoluene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Hexachlorobenzene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Hexachlorobutadiene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Hexachloroethane	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
m,p-Cresol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Nitrobenzene	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
o-Cresol	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Pentachlorophenol	BRL	0.50		mg/L	184149	1	12/05/2013 14:56	YH
Pyridine	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Cresols, Total	BRL	0.10		mg/L	184149	1	12/05/2013 14:56	YH
Surr: 2,4,6-Tribromophenol	84.7	50.3-131		%REC	184149	1	12/05/2013 14:56	YH
Surr: 2-Fluorobiphenyl	90.9	55.4-125		%REC	184149	1	12/05/2013 14:56	YH
Surr: 2-Fluorophenol	83.1	45-126		%REC	184149	1	12/05/2013 14:56	YH
Surr: 4-Terphenyl-d14	105	57.6-138		%REC	184149	1	12/05/2013 14:56	YH
Surr: Nitrobenzene-d5	77.6	50-126		%REC	184149	1	12/05/2013 14:56	YH
Surr: Phenol-d5	75.8	40.4-119		%REC	184149	1	12/05/2013 14:56	YH
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Chlordane	BRL	0.050		mg/L	184360	10	12/05/2013 16:55	KD
Endrin	BRL	0.0010		mg/L	184360	1	12/05/2013 14:23	KD
gamma-BHC	BRL	0.00050		mg/L	184360	1	12/05/2013 14:23	KD
Heptachlor	BRL	0.00050		mg/L	184360	1	12/05/2013 14:23	KD
Heptachlor epoxide	BRL	0.00050		mg/L	184360	1	12/05/2013 14:23	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-STOCKPILE-20
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:30:00 AM
Lab ID:	1312112-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Methoxychlor	BRL	0.0050		mg/L	184360	1	12/05/2013 14:23	KD
Toxaphene	0.20	0.050		mg/L	184360	1	12/05/2013 14:23	KD
Surr: Decachlorobiphenyl	62.6	30.7-121		%REC	184360	1	12/05/2013 14:23	KD
Surr: Tetrachloro-m-xylene	58.2	36.6-115		%REC	184360	1	12/05/2013 14:23	KD
MERCURY, TCLP SW1311/7470A				**(SW7470A)**				
Mercury	BRL	0.00400		mg/L	184414	1	12/05/2013 12:44	CG
ICP METALS, TCLP SW1311/6010C				**(SW3010A)**				
Arsenic	BRL	0.250		mg/L	184443	1	12/05/2013 14:44	JL
Barium	BRL	0.500		mg/L	184443	1	12/05/2013 14:44	JL
Cadmium	BRL	0.0250		mg/L	184443	1	12/05/2013 14:44	JL
Chromium	BRL	0.0500		mg/L	184443	1	12/05/2013 14:44	JL
Lead	BRL	0.0500		mg/L	184443	1	12/05/2013 14:44	JL
Selenium	BRL	0.100		mg/L	184443	1	12/05/2013 14:44	JL
Silver	BRL	0.0250		mg/L	184443	1	12/05/2013 14:44	JL
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
4,4´-DDD	2600	390		ug/Kg-dry	184394	100	12/04/2013 15:38	KD
4,4´-DDE	420	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
4,4´-DDT	250	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Aldrin	59	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
alpha-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
alpha-Chlordane	BRL	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
beta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Chlordane	5200	3900		ug/Kg-dry	184394	100	12/04/2013 15:38	KD
delta-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Dieldrin	BRL	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Endosulfan I	200	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Endosulfan II	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Endosulfan sulfate	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Endrin	BRL	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Endrin aldehyde	BRL	3.9		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Endrin ketone	540	39		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
gamma-BHC	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
gamma-Chlordane	BRL	20		ug/Kg-dry	184394	10	12/04/2013 15:27	KD
Heptachlor	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Heptachlor epoxide	BRL	2.0		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Methoxychlor	BRL	20		ug/Kg-dry	184394	1	12/04/2013 14:05	KD
Toxaphene	BRL	20000		ug/Kg-dry	184394	100	12/04/2013 15:38	KD
Surr: Decachlorobiphenyl	78.6	25.2-120		%REC	184394	1	12/04/2013 14:05	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 13-Dec-13

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	13337-STOCKPILE-20
Project Name:	Drexel Chemical Company	**Collection Date:**	12/3/2013 10:30:00 AM
Lab ID:	1312112-004	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CHLORINATED PESTICIDES SW8081B					**(SW3550C)**			
Surr: Tetrachloro-m-xylene	53.8	30.5-120		%REC	184394	1	12/04/2013 14:05	KD
PERCENT MOISTURE D2216								
Percent Moisture	15.2	0		wt%	R257099	1	12/04/2013 09:00	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1312112

Checklist completed by PM 12/4/13
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes ✓ No __ Not Present __

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.0 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184149

Sample ID: **MB-184149** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5402574**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.8585	0	1.000		85.8	50.3	131				
Surr: 2-Fluorobiphenyl	0.4764	0	0.5000		95.3	55.4	125				
Surr: 2-Fluorophenol	0.8716	0	1.000		87.2	45	126				
Surr: 4-Terphenyl-d14	0.5316	0	0.5000		106	57.6	138				
Surr: Nitrobenzene-d5	0.4291	0	0.5000		85.8	50	126				
Surr: Phenol-d5	0.8098	0	1.000		81.0	40.4	119				

Sample ID: **LCS-184149** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5402576**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.6464	0.10	1.000		64.6	64.6	120				
2,4,5-Trichlorophenol	0.8935	0.10	1.000		89.4	71.3	130				
2,4,6-Trichlorophenol	0.8590	0.10	1.000		85.9	77	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184149

Sample ID: **LCS-184149** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5402576**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	0.8053	0.10	1.000		80.5	70.6	120				
Cresols, Total	2.345	0.10	3.000		78.2	63.7	138				
Hexachlorobenzene	0.7952	0.10	1.000		79.5	72.4	120				
Hexachlorobutadiene	0.6846	0.10	1.000		68.5	65.3	120				
Hexachloroethane	0.6958	0.10	1.000		69.6	56.3	126				
m,p-Cresol	1.573	0.10	2.000		78.7	62.1	140				
Nitrobenzene	0.7910	0.10	1.000		79.1	66.8	135				
o-Cresol	0.7717	0.10	1.000		77.2	65.6	137				
Pentachlorophenol	0.7287	0.50	1.000		72.9	55.9	145				
Pyridine	0.5150	0.10	1.000		51.5	10	120				
Surr: 2,4,6-Tribromophenol	0.7750	0	1.000		77.5	50.3	131				
Surr: 2-Fluorobiphenyl	0.4309	0	0.5000		86.2	55.4	125				
Surr: 2-Fluorophenol	0.7127	0	1.000		71.3	45	126				
Surr: 4-Terphenyl-d14	0.4593	0	0.5000		91.9	57.6	138				
Surr: Nitrobenzene-d5	0.4080	0	0.5000		81.6	50	126				
Surr: Phenol-d5	0.6512	0	1.000		65.1	40.4	119				

Sample ID: **1312112-004CMS** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5403494**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.7567	0.10	1.000		75.7	61.5	120				
2,4,5-Trichlorophenol	1.064	0.10	1.000		106	59.9	130				
2,4,6-Trichlorophenol	0.9889	0.10	1.000		98.9	65.2	125				
2,4-Dinitrotoluene	0.9265	0.10	1.000		92.6	57.9	120				
Cresols, Total	2.721	0.10	3.000		90.7	55.3	136				
Hexachlorobenzene	0.9019	0.10	1.000		90.2	59.6	120				
Hexachlorobutadiene	0.7742	0.10	1.000		77.4	52.2	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184149

Sample ID: **1312112-004CMS** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257154**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **184149** Analysis Date: **12/05/2013** Seq No: **5403494**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	0.8619	0.10	1.000		86.2	51.4	120				
m,p-Cresol	1.806	0.10	2.000		90.3	51.2	139				
Nitrobenzene	0.8804	0.10	1.000		88.0	53.1	131				
o-Cresol	0.9149	0.10	1.000		91.5	56.8	133				
Pentachlorophenol	0.8945	0.50	1.000		89.4	44.8	148				
Pyridine	0.2152	0.10	1.000		21.5	10	120				
Surr: 2,4,6-Tribromophenol	0.9312	0	1.000		93.1	50.3	131				
Surr: 2-Fluorobiphenyl	0.5027	0	0.5000		101	55.4	125				
Surr: 2-Fluorophenol	0.8600	0	1.000		86.0	45	126				
Surr: 4-Terphenyl-d14	0.5333	0	0.5000		107	57.6	138				
Surr: Nitrobenzene-d5	0.4393	0	0.5000		87.9	50	126				
Surr: Phenol-d5	0.8054	0	1.000		80.5	40.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184360

Sample ID: **MB-184360** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402641**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.004089	0	0.0050		81.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.002971	0	0.0050		59.4	36.6	115				

Sample ID: **LCS-184360-1** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402647**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.006968	0.0010	0.0080		87.1	50.5	139				
gamma-BHC	0.006004	0.00050	0.0080		75.1	52.6	121				
Heptachlor	0.005901	0.00050	0.0080		73.8	53.1	125				
Heptachlor epoxide	0.006273	0.00050	0.0080		78.4	51.9	125				
Methoxychlor	0.02477	0.0050	0.0300		82.6	50.2	133				
Surr: Decachlorobiphenyl	0.004275	0	0.0050		85.5	30.7	121				
Surr: Tetrachloro-m-xylene	0.003065	0	0.0050		61.3	36.6	115				

Sample ID: **LCS-184360-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.03878	0.0050	0.0400		97.0	55.2	136				
Toxaphene	0.08850	0.050	0.0800		111	52.8	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184360

Sample ID: **LCS-184360-2** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402655**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.004088	0	0.0050		81.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.003076	0	0.0050		61.5	36.6	115				

Sample ID: **1312112-004CMS-1** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402668**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.007249	0.0010	0.0080		90.6	48	138				
gamma-BHC	0.005788	0.00050	0.0080		72.4	46.5	123				
Heptachlor	0.006313	0.00050	0.0080		78.9	47.8	124				
Heptachlor epoxide	0.006492	0.00050	0.0080		81.2	51.1	120				
Methoxychlor	0.02528	0.0050	0.0300		84.3	47.6	138				
Surr: Decachlorobiphenyl	0.003521	0	0.0050		70.4	30.7	121				
Surr: Tetrachloro-m-xylene	0.003093	0	0.0050		61.9	36.6	115				

Sample ID: **1312112-004CMS-2** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257160**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **184360** Analysis Date: **12/05/2013** Seq No: **5402671**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.1095	0.0050	0.0400	0.06792	104	50.3	139				E
Toxaphene	0.2884	0.050	0.0800	0.1994	111	50	132				
Surr: Decachlorobiphenyl	0.003125	0	0.0050		62.5	30.7	121				
Surr: Tetrachloro-m-xylene	0.003094	0	0.0050		61.9	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **MB-184394** Client ID: Units: **ug/Kg** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5398309**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Methoxychlor	BRL	17									
Toxaphene	BRL	170									
Surr: Decachlorobiphenyl	13.19	0	16.67		79.1	25.2	120				
Surr: Tetrachloro-m-xylene	12.09	0	16.67		72.5	30.5	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **LCS-184394** Client ID: Units: **ug/Kg** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5398318**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	29.32	3.3	33.33		88.0	44.7	136				
Aldrin	28.52	1.7	33.33		85.6	41.5	118				
Dieldrin	29.86	3.3	33.33		89.6	44.3	133				
Endrin	29.34	3.3	33.33		88.0	43.2	137				
gamma-BHC	28.81	1.7	33.33		86.4	40.3	126				
Heptachlor	29.86	1.7	33.33		89.6	40.1	126				
Surr: Decachlorobiphenyl	12.48	0	16.67		74.9	25.2	120				
Surr: Tetrachloro-m-xylene	11.88	0	16.67		71.3	30.5	120				

Sample ID: **1312033-001DMS** Client ID: Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399407**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	40.88	3.8	37.88		108	33.6	126				
Aldrin	34.85	1.9	37.88		92.0	32.6	120				
Dieldrin	38.54	3.8	37.88		102	35.1	124				
Endrin	38.74	3.8	37.88		102	39.7	129				
gamma-BHC	37.64	1.9	37.88	0.3160	98.5	35.2	120				
Heptachlor	40.74	1.9	37.88		108	34.9	119				
Surr: Decachlorobiphenyl	17.71	0	18.94		93.5	25.2	120				
Surr: Tetrachloro-m-xylene	15.35	0	18.94		81.0	30.5	120				

Sample ID: **1312033-001DMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	36.36	3.8	37.89		96.0	33.6	126	40.88	11.7	28.1	
Aldrin	30.36	1.9	37.89		80.1	32.6	120	34.85	13.8	29.9	

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184394

Sample ID: **1312033-001DMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **12/03/2013** Run No: **256958**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **184394** Analysis Date: **12/03/2013** Seq No: **5399409**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	34.86	3.8	37.89		92.0	35.1	124	38.54	10.0	26.6	
Endrin	33.76	3.8	37.89		89.1	39.7	129	38.74	13.7	27.6	
gamma-BHC	33.04	1.9	37.89	0.3160	86.4	35.2	120	37.64	13.0	28.6	
Heptachlor	35.97	1.9	37.89		94.9	34.9	119	40.74	12.4	27.7	
Surr: Decachlorobiphenyl	15.76	0	18.95		83.2	25.2	120	17.71	0	30	
Surr: Tetrachloro-m-xylene	13.33	0	18.95		70.3	30.5	120	15.35	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184414

Sample ID: **MB-184414** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **MBLK** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399856**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00400									

Sample ID: **LCS-184414** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **LCS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399858**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03887	0.00400	0.0400		97.2	85	115				

Sample ID: **1311N26-002BMS** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **MS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399862**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03857	0.00400	0.0400		96.4	80	120				

Sample ID: **1311N26-002BMSD** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257001**
SampleType: **MSD** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **184414** Analysis Date: **12/04/2013** Seq No: **5399865**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03792	0.00400	0.0400		94.8	80	120	0.03857	1.70	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184425

Sample ID: **MB-184425** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **MBLK** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399425**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.100									

Sample ID: **LCS-184425** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **LCS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399426**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.3976	0.100	0.4000		99.4	80	120				

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **MS** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399428**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4672	0.118	0.4709		99.2	70	130				

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257003**
SampleType: **MSD** TestCode: **TOTAL MERCURY SW7471B** BatchID: **184425** Analysis Date: **12/04/2013** Seq No: **5399429**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.4586	0.118	0.4728		97.0	70	130	0.4672	1.85	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **MB-184426** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MBLK** TestCode: **METALS, TOTAL** **SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400263**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	BRL	50.0									
Antimony	BRL	5.00									
Arsenic	BRL	5.00									
Barium	BRL	5.00									
Beryllium	BRL	2.50									
Cadmium	BRL	2.50									
Calcium	BRL	50.0									
Chromium	BRL	2.50									
Cobalt	BRL	2.50									
Copper	BRL	2.50									
Iron	BRL	50.0									
Lead	BRL	5.00									
Magnesium	BRL	50.0									
Manganese	BRL	5.00									
Molybdenum	BRL	5.00									
Nickel	BRL	5.00									
Selenium	BRL	5.00									
Silver	BRL	2.50									
Sodium	BRL	100									
Thallium	BRL	5.00									
Tin	BRL	5.00									
Titanium	BRL	5.00									
Vanadium	BRL	5.00									
Zinc	BRL	5.00									

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 13-Dec-13

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **LCS-184426** Client ID: Units: **mg/Kg** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **LCS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400261**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	462.7	50.0	500.0		92.5	80	120				
Antimony	45.11	5.00	50.00		90.2	80	120				
Arsenic	44.70	5.00	50.00		89.4	80	120				
Barium	47.98	5.00	50.00		96.0	80	120				
Beryllium	47.40	2.50	50.00		94.8	80	120				
Cadmium	43.96	2.50	50.00		87.9	80	120				
Calcium	467.5	50.0	500.0	7.867	91.9	80	120				
Chromium	45.81	2.50	50.00	0.1359	91.3	80	120				
Cobalt	44.81	2.50	50.00		89.6	80	120				
Copper	46.03	2.50	50.00		92.1	80	120				
Iron	469.9	50.0	500.0	11.58	91.7	80	120				
Lead	44.94	5.00	50.00		89.9	80	120				
Magnesium	463.5	50.0	500.0	0.7018	92.6	80	120				
Manganese	48.05	5.00	50.00	0.2607	95.6	80	120				
Molybdenum	46.93	5.00	50.00		93.9	80	120				
Nickel	44.61	5.00	50.00		89.2	80	120				
Selenium	43.96	5.00	50.00	0.1462	87.6	80	120				
Silver	4.492	2.50	5.000		89.8	80	120				
Sodium	458.6	100	500.0	0.4894	91.6	80	120				
Thallium	44.50	5.00	50.00		89.0	80	120				
Tin	47.81	5.00	50.00	1.358	92.9	80	120				
Titanium	47.88	5.00	50.00		95.8	80	120				
Vanadium	45.61	5.00	50.00		91.2	80	120				
Zinc	43.88	5.00	50.00		87.8	80	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400266**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	13940	54.8	547.6	8359	1020	75	125				S
Antimony	35.57	5.48	54.76	0.4488	64.1	75	125				S
Arsenic	49.55	5.48	54.76	2.712	85.5	75	125				
Barium	53.32	5.48	54.76	1.420	94.8	75	125				
Beryllium	51.69	2.74	54.76		94.4	75	125				
Cadmium	48.37	2.74	54.76		88.3	75	125				
Calcium	743.0	54.8	547.6	242.0	91.5	75	125				
Chromium	67.41	2.74	54.76	9.034	107	75	125				
Cobalt	47.15	2.74	54.76		86.1	75	125				
Copper	60.22	2.74	54.76	4.907	101	75	125				
Lead	51.03	5.48	54.76	2.901	87.9	75	125				
Magnesium	669.6	54.8	547.6	122.0	100.0	75	125				
Manganese	56.33	5.48	54.76	6.052	91.8	75	125				
Molybdenum	44.66	5.48	54.76	0.2121	81.2	75	125				
Nickel	48.12	5.48	54.76	0.3991	87.1	75	125				
Selenium	50.23	5.48	54.76	2.522	87.1	75	125				
Silver	5.332	2.74	5.476	0.1273	95.0	75	125				
Sodium	550.3	110	547.6	25.80	95.8	75	125				
Thallium	38.05	5.48	54.76		69.5	75	125				S
Tin	48.76	5.48	54.76	0.8036	87.6	75	125				
Titanium	105.8	5.48	54.76	68.21	68.7	75	125				S
Vanadium	109.3	5.48	54.76	51.24	106	75	125				
Zinc	53.00	5.48	54.76	3.692	90.0	75	125				

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5401165**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **1312112-001AMS** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MS** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5401165**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	22500	548	547.6	18260	774	75	125				S

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Aluminum	12810	55.0	550.2	8359	808	75	125	13940	8.46	20	S
Antimony	37.36	5.50	55.02	0.4488	67.1	75	125	35.57	4.91	20	S
Arsenic	50.26	5.50	55.02	2.712	86.4	75	125	49.55	1.42	20	
Barium	53.30	5.50	55.02	1.420	94.3	75	125	53.32	0.033	20	
Beryllium	52.07	2.75	55.02		94.6	75	125	51.69	0.738	20	
Cadmium	49.71	2.75	55.02		90.3	75	125	48.37	2.74	20	
Calcium	735.0	55.0	550.2	242.0	89.6	75	125	743.0	1.09	20	
Chromium	62.44	2.75	55.02	9.034	97.1	75	125	67.41	7.65	20	
Cobalt	48.18	2.75	55.02		87.6	75	125	47.15	2.17	20	
Copper	60.82	2.75	55.02	4.907	102	75	125	60.22	0.992	20	
Lead	51.54	5.50	55.02	2.901	88.4	75	125	51.03	1.01	20	
Magnesium	664.1	55.0	550.2	122.0	98.5	75	125	669.6	0.818	20	
Manganese	56.86	5.50	55.02	6.052	92.3	75	125	56.33	0.937	20	
Molybdenum	45.98	5.50	55.02	0.2121	83.2	75	125	44.66	2.91	20	
Nickel	49.31	5.50	55.02	0.3991	88.9	75	125	48.12	2.44	20	
Selenium	49.27	5.50	55.02	2.522	85.0	75	125	50.23	1.93	20	
Silver	5.349	2.75	5.502	0.1273	94.9	75	125	5.332	0.319	20	
Sodium	533.9	110	550.2	25.80	92.3	75	125	550.3	3.02	20	
Thallium	40.95	5.50	55.02		74.4	75	125	38.05	7.34	20	S
Tin	49.96	5.50	55.02	0.8036	89.3	75	125	48.76	2.42	20	
Titanium	101.0	5.50	55.02	68.21	59.7	75	125	105.8	4.64	20	S
Vanadium	101.7	5.50	55.02	51.24	91.6	75	125	109.3	7.24	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184426

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5400268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Zinc	54.30	5.50	55.02	3.692	92.0	75	125	53.00	2.43	20	

Sample ID: **1312112-001AMSD** Client ID: **13337-SI20-CS7-11** Units: **mg/Kg-dry** Prep Date: **12/04/2013** Run No: **257033**
SampleType: **MSD** TestCode: **METALS, TOTAL SW6010C** BatchID: **184426** Analysis Date: **12/04/2013** Seq No: **5401166**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Iron	19200	550	550.2	18260	170	75	125	22500	15.8	20	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184443

Sample ID: **MB-184443** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402256**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **MB-184443-2** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402257**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **LCS-184443** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402255**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.946	0.250	5.000		98.9	85	115				
Barium	4.645	0.500	5.000	0.01460	92.6	80	120				
Cadmium	4.768	0.0250	5.000		95.4	85	115				
Chromium	4.772	0.0500	5.000		95.4	85	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184443

Sample ID: **LCS-184443** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402255**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	4.616	0.0500	5.000		92.3	85	115				
Selenium	4.986	0.100	5.000		99.7	85	115				
Silver	0.4725	0.0250	0.5000		94.5	85	115				

Sample ID: **1311N26-002BMS** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402262**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.909	0.250	5.000		98.2	50	150				
Barium	4.967	0.500	5.000	0.5019	89.3	50	150				
Cadmium	4.689	0.0250	5.000	0.008445	93.6	50	150				
Chromium	4.704	0.0500	5.000		94.1	50	150				
Lead	4.512	0.0500	5.000		90.2	50	150				
Selenium	4.946	0.100	5.000		98.9	50	150				
Silver	0.4687	0.0250	0.5000		93.7	50	150				

Sample ID: **1311N26-002BMSD** Client ID: Units: **mg/L** Prep Date: **12/04/2013** Run No: **257130**
SampleType: **MSD** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **184443** Analysis Date: **12/04/2013** Seq No: **5402264**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.925	0.250	5.000		98.5	50	150	4.909	0.325	30	
Barium	5.023	0.500	5.000	0.5019	90.4	50	150	4.967	1.13	30	
Cadmium	4.724	0.0250	5.000	0.008445	94.3	50	150	4.689	0.739	30	
Chromium	4.708	0.0500	5.000		94.2	50	150	4.704	0.091	30	
Lead	4.519	0.0500	5.000		90.4	50	150	4.512	0.172	30	
Selenium	4.956	0.100	5.000		99.1	50	150	4.946	0.203	30	
Silver	0.4687	0.0250	0.5000		93.7	50	150	0.4687	0.012	30	

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184519

Sample ID: **MB-184519** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402174**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.9346	0	1.000		93.5	67.9	128				
Surr: Dibromofluoromethane	0.9794	0	1.000		97.9	77.2	124				
Surr: Toluene-d8	0.9716	0	1.000		97.2	71.6	127				

Sample ID: **LCS-184519** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8798	0.10	1.000		88.0	62.3	141				
1,2-Dichloroethane	1.064	0.10	1.000		106	74.1	127				
2-Butanone	2.090	0.20	2.000		105	45.5	137				
Benzene	1.028	0.10	1.000		103	73.5	125				
Carbon tetrachloride	1.069	0.10	1.000		107	55.1	144				
Chlorobenzene	1.083	0.10	1.000		108	75.4	122				
Chloroform	0.9770	0.10	1.000		97.7	68.2	127				
Tetrachloroethene	1.127	0.10	1.000		113	70.3	132				
Trichloroethene	1.087	0.10	1.000		109	70.5	128				
Vinyl chloride	0.9018	0.040	1.000		90.2	54.9	143				

Qualifiers:
> Greater than Result value
BRL Below reporting limit
J Estimated value detected below Reporting Limit
Rpt Lim Reporting Limit
< Less than Result value
E Estimated (value above quantitation range)
N Analyte not NELAC certified
S Spike Recovery outside limits due to matrix
B Analyte detected in the associated method blank
H Holding times for preparation or analysis exceeded
R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184519

Sample ID: **LCS-184519** Client ID: Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402074**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	0.9706	0	1.000		97.1	67.9	128				
Surr: Dibromofluoromethane	0.9876	0	1.000		98.8	77.2	124				
Surr: Toluene-d8	0.9796	0	1.000		98.0	71.6	127				

Sample ID: **1312112-004BMS** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402570**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.9332	0.10	1.000		93.3	62.3	154				
1,2-Dichloroethane	0.9684	0.10	1.000		96.8	65.8	132				
2-Butanone	2.017	0.20	2.000		101	44.2	148				
Benzene	0.9934	0.10	1.000		99.3	72.6	133				
Carbon tetrachloride	1.025	0.10	1.000		103	53.7	151				
Chlorobenzene	1.038	0.10	1.000		104	72	130				
Chloroform	0.9264	0.10	1.000		92.6	63.2	137				
Tetrachloroethene	1.100	0.10	1.000		110	71.9	140				
Trichloroethene	1.061	0.10	1.000		106	68.3	146				
Vinyl chloride	0.8148	0.040	1.000		81.5	54.5	151				
Surr: 4-Bromofluorobenzene	0.9588	0	1.000		95.9	67.9	128				
Surr: Dibromofluoromethane	0.9824	0	1.000		98.2	77.2	124				
Surr: Toluene-d8	0.9696	0	1.000		97.0	71.6	127				

Sample ID: **1312112-004BDUP** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402454**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1312112

ANALYTICAL QC SUMMARY REPORT

BatchID: 184519

Sample ID: **1312112-004BDUP** Client ID: **13337-STOCKPILE-20** Units: **mg/L** Prep Date: **12/05/2013** Run No: **257113**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **184519** Analysis Date: **12/05/2013** Seq No: **5402454**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	BRL	0.10						0	0	30	
Chloroform	BRL	0.10						0	0	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	0.9508	0	1.000		95.1	67.9	128	0.9600	0	0	
Surr: Dibromofluoromethane	0.9570	0	1.000		95.7	77.2	124	0.9550	0	0	
Surr: Toluene-d8	0.9620	0	1.000		96.2	71.6	127	0.9772	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

January 07, 2014

Dale Carpenter
A&D Environmental Services, LLC
4943 Austin Park Ave
Buford GA 30518

TEL: (678) 714-8420
FAX: (678) 714-8425

RE: Drexel

Dear Dale Carpenter: Order No: 1401118

Analytical Environmental Services, Inc. received 1 samples on January 3, 2014 2:15 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401118

Date: 1-3-14 Page 1 of 1

COMPANY: A&D

ADDRESS: 4943 Austin Park Ave. Buford, GA 30518

PHONE: 678-714-8420

FAX:

SAMPLED BY: Gregg Henry for A&D

SIGNATURE:

ANALYSIS REQUESTED: TCLP-VOC; TCLP-SVOC; TCLP-Pesticides; TCLP-Herbicides

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	TCLP-VOC	TCLP-SVOC	TCLP-Pesticides	TCLP-Herbicides	REMARKS	No # of Containers
1	STOCKPILE-S15	1-3-14	0930	X		SO	X	X	X	X		2
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

PRESERVATION (See codes)

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	1-3-14 1412	1:	1/3/13
2:		2:	2:15
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Conyers, GA
SEND REPORT TO: Dale Carpenter
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers 2

Turnaround Time Request
- ○ Standard 5 Business Days
- ○ 2 Business Day Rush
- ● Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR ON SATURDAY ARE CONSIDERED RECEIVED THE NEXT BUSINESS DAY. IF TURNAROUND TIME IS NOT INDICATED, AES WILL PROCEED WITH STANDARD TAT OF SAMPLES. SAMPLES ARE DISPOSED 30 DAYS AFTER REPORT COMPLETION UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water

PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 7-Jan-14

Client: A&D Environmental Services, LLC
Project: Drexel
Lab ID: 1401118

Case Narrative

Pesticide Analysis by Method 1311/8081:

gamma-BHC and Chlordane values for the QC samples 1401118-001BMS-1 and MS-2 are "E" qualified indicating estimated values over linear calibration range due to the level of Chlordane present in the unspiked sample.

Analytical Environmental Services, Inc **Date:** 7-Jan-14

Client:	A&D Environmental Services, LLC	**Client Sample ID:**	STOCKPILE-SIS
Project Name:	Drexel	**Collection Date:**	1/3/2014 9:30:00 AM
Lab ID:	1401118-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
1,2-Dichloroethane	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
2-Butanone	BRL	0.20		mg/L	185634	20	01/04/2014 12:50	NP
Benzene	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
Carbon tetrachloride	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
Chlorobenzene	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
Chloroform	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
Tetrachloroethene	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
Trichloroethene	BRL	0.10		mg/L	185634	20	01/04/2014 12:50	NP
Vinyl chloride	BRL	0.040		mg/L	185634	20	01/04/2014 12:50	NP
Surr: 4-Bromofluorobenzene	92.9	67.9-128		%REC	185634	20	01/04/2014 12:50	NP
Surr: Dibromofluoromethane	105	77.2-124		%REC	185634	20	01/04/2014 12:50	NP
Surr: Toluene-d8	91.9	71.6-127		%REC	185634	20	01/04/2014 12:50	NP
SEMIVOLATILES ORGANICS, TCLP SW1311/8270D				**(SW3510C)**				
1,4-Dichlorobenzene	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
2,4,5-Trichlorophenol	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
2,4,6-Trichlorophenol	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
2,4-Dinitrotoluene	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Hexachlorobenzene	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Hexachlorobutadiene	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Hexachloroethane	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
m,p-Cresol	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Nitrobenzene	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
o-Cresol	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Pentachlorophenol	BRL	0.50		mg/L	185613	1	01/06/2014 13:37	YH
Pyridine	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Cresols, Total	BRL	0.10		mg/L	185613	1	01/06/2014 13:37	YH
Surr: 2,4,6-Tribromophenol	83.5	50.3-131		%REC	185613	1	01/06/2014 13:37	YH
Surr: 2-Fluorobiphenyl	86.2	55.4-125		%REC	185613	1	01/06/2014 13:37	YH
Surr: 2-Fluorophenol	87.9	45-126		%REC	185613	1	01/06/2014 13:37	YH
Surr: 4-Terphenyl-d14	111	57.6-138		%REC	185613	1	01/06/2014 13:37	YH
Surr: Nitrobenzene-d5	74.1	50-126		%REC	185613	1	01/06/2014 13:37	YH
Surr: Phenol-d5	78.2	40.4-119		%REC	185613	1	01/06/2014 13:37	YH
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Chlordane	0.12	0.010	*	mg/L	185610	2	01/06/2014 13:32	KD
Endrin	BRL	0.0010		mg/L	185610	1	01/06/2014 12:59	KD
gamma-BHC	BRL	0.00050		mg/L	185610	1	01/06/2014 12:59	KD
Heptachlor	BRL	0.00050		mg/L	185610	1	01/06/2014 12:59	KD
Heptachlor epoxide	BRL	0.00050		mg/L	185610	1	01/06/2014 12:59	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 7-Jan-14

Client:	A&D Environmental Services, LLC	**Client Sample ID:**	STOCKPILE-SIS
Project Name:	Drexel	**Collection Date:**	1/3/2014 9:30:00 AM
Lab ID:	1401118-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Methoxychlor	BRL	0.0050		mg/L	185610	1	01/06/2014 12:59	KD
Toxaphene	BRL	0.050		mg/L	185610	1	01/06/2014 12:59	KD
Surr: Decachlorobiphenyl	80.9	30.7-121		%REC	185610	1	01/06/2014 12:59	KD
Surr: Tetrachloro-m-xylene	81.4	36.6-115		%REC	185610	1	01/06/2014 12:59	KD
HERBICIDES, TCLP SW1311/8151A				**(SW3510C)**				
2,4,5-TP (Silvex)	BRL	0.20		mg/L	185614	1	01/06/2014 19:04	RF
2,4-D	BRL	0.20		mg/L	185614	1	01/06/2014 19:04	RF
Surr: DCAA	106	40.3-135		%REC	185614	1	01/06/2014 19:04	RF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client A+D Work Order Number 1401118

Checklist completed by NJ 1/3/14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.1 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185610

Sample ID: **MB-185610** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259057**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **185610** Analysis Date: **01/06/2014** Seq No: **5445028**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.004835	0	0.0050		96.7	30.7	121				
Surr: Tetrachloro-m-xylene	0.003590	0	0.0050		71.8	36.6	115				

Sample ID: **LCS-185610-1** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259057**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **185610** Analysis Date: **01/06/2014** Seq No: **5445031**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.007829	0.0010	0.0080		97.9	50.5	139				
gamma-BHC	0.006980	0.00050	0.0080		87.3	52.6	121				
Heptachlor	0.006922	0.00050	0.0080		86.5	53.1	125				
Heptachlor epoxide	0.007228	0.00050	0.0080		90.4	51.9	125				
Methoxychlor	0.02637	0.0050	0.0300		87.9	50.2	133				
Surr: Decachlorobiphenyl	0.004890	0	0.0050		97.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.003699	0	0.0050		74.0	36.6	115				

Sample ID: **LCS-185610-2** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259057**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **185610** Analysis Date: **01/06/2014** Seq No: **5445163**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.04395	0.0050	0.0400		110	55.2	136				
Toxaphene	0.1012	0.050	0.0800		126	52.8	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185610

Sample ID: **LCS-185610-2** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259057**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **185610** Analysis Date: **01/06/2014** Seq No: **5445163**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.004705	0	0.0050		94.1	30.7	121				
Surr: Tetrachloro-m-xylene	0.003648	0	0.0050		73.0	36.6	115				

Sample ID: **1401118-001BMS-1** Client ID: **STOCKPILE-SIS** Units: **mg/L** Prep Date: **01/04/2014** Run No: **259057**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **185610** Analysis Date: **01/06/2014** Seq No: **5445167**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.008205	0.0010	0.0080		103	48	138				
gamma-BHC	0.03110	0.00050	0.0080		389	46.5	123				SE
Heptachlor	0.01400	0.00050	0.0080		175	47.8	124				S
Heptachlor epoxide	0.01439	0.00050	0.0080		180	51.1	120				S
Methoxychlor	0.02783	0.0050	0.0300		92.8	47.6	138				
Surr: Decachlorobiphenyl	0.004192	0	0.0050		83.8	30.7	121				
Surr: Tetrachloro-m-xylene	0.004498	0	0.0050		90.0	36.6	115				

Sample ID: **1401118-001BMS-2** Client ID: **STOCKPILE-SIS** Units: **mg/L** Prep Date: **01/04/2014** Run No: **259057**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **185610** Analysis Date: **01/06/2014** Seq No: **5445170**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.1512	0.0050	0.0400	0.1229	70.8	50.3	139				E
Toxaphene	0.1787	0.050	0.0800		223	50	132				S
Surr: Decachlorobiphenyl	0.003517	0	0.0050		70.3	30.7	121				
Surr: Tetrachloro-m-xylene	0.004995	0	0.0050		99.9	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185613

Sample ID: **MB-185613** Client ID: Units: **mg/L** Prep Date: **01/06/2014** Run No: **259053**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **185613** Analysis Date: **01/06/2014** Seq No: **5444988**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.8128	0	1.000		81.3	50.3	131				
Surr: 2-Fluorobiphenyl	0.4163	0	0.5000		83.3	55.4	125				
Surr: 2-Fluorophenol	0.8887	0	1.000		88.9	45	126				
Surr: 4-Terphenyl-d14	0.5416	0	0.5000		108	57.6	138				
Surr: Nitrobenzene-d5	0.3707	0	0.5000		74.1	50	126				
Surr: Phenol-d5	0.7960	0	1.000		79.6	40.4	119				

Sample ID: **LCS-185613** Client ID: Units: **mg/L** Prep Date: **01/06/2014** Run No: **259053**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **185613** Analysis Date: **01/06/2014** Seq No: **5445722**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.8482	0.10	1.000		84.8	64.6	120				
2,4,5-Trichlorophenol	0.8180	0.10	1.000		81.8	71.3	130				
2,4,6-Trichlorophenol	0.9405	0.10	1.000		94.0	77	125				
2,4-Dinitrotoluene	0.9193	0.10	1.000		91.9	70.6	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185613

Sample ID: **LCS-185613** Client ID: Units: **mg/L** Prep Date: **01/06/2014** Run No: **259053**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **185613** Analysis Date: **01/06/2014** Seq No: **5445722**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cresols, Total	2.725	0.10	3.000		90.8	63.7	138				
Hexachlorobenzene	0.9665	0.10	1.000		96.6	72.4	120				
Hexachlorobutadiene	0.7803	0.10	1.000		78.0	65.3	120				
Hexachloroethane	0.8521	0.10	1.000		85.2	56.3	126				
m,p-Cresol	1.892	0.10	2.000		94.6	62.1	140				
Nitrobenzene	0.9794	0.10	1.000		97.9	66.8	135				
o-Cresol	0.8325	0.10	1.000		83.2	65.6	137				
Pentachlorophenol	0.7585	0.50	1.000		75.8	55.9	145				
Pyridine	0.7632	0.10	1.000		76.3	10	120				
Surr: 2,4,6-Tribromophenol	0.9129	0	1.000		91.3	50.3	131				
Surr: 2-Fluorobiphenyl	0.5204	0	0.5000		104	55.4	125				
Surr: 2-Fluorophenol	0.9454	0	1.000		94.5	45	126				
Surr: 4-Terphenyl-d14	0.6438	0	0.5000		129	57.6	138				
Surr: Nitrobenzene-d5	0.4487	0	0.5000		89.7	50	126				
Surr: Phenol-d5	0.8864	0	1.000		88.6	40.4	119				

Sample ID: **1401118-001BMS** Client ID: **STOCKPILE-SIS** Units: **mg/L** Prep Date: **01/06/2014** Run No: **259053**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **185613** Analysis Date: **01/06/2014** Seq No: **5445816**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.6222	0.10	1.000		62.2	61.5	120				
2,4,5-Trichlorophenol	0.7334	0.10	1.000		73.3	59.9	130				
2,4,6-Trichlorophenol	0.7935	0.10	1.000		79.4	65.2	125				
2,4-Dinitrotoluene	0.8141	0.10	1.000		81.4	57.9	120				
Cresols, Total	2.206	0.10	3.000		73.5	55.3	136				
Hexachlorobenzene	0.8352	0.10	1.000		83.5	59.6	120				
Hexachlorobutadiene	0.5539	0.10	1.000		55.4	52.2	120				
Hexachloroethane	0.6037	0.10	1.000		60.4	51.4	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185613

Sample ID: **1401118-001BMS** Client ID: **STOCKPILE-SIS** Units: **mg/L** Prep Date: **01/06/2014** Run No: **259053**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP** **SW1311/8270D** BatchID: **185613** Analysis Date: **01/06/2014** Seq No: **5445816**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Cresol	1.529	0.10	2.000		76.4	51.2	139				
Nitrobenzene	0.7650	0.10	1.000		76.5	53.1	131				
o-Cresol	0.6766	0.10	1.000		67.7	56.8	133				
Pentachlorophenol	0.6872	0.50	1.000		68.7	44.8	148				
Pyridine	0.5507	0.10	1.000		55.1	10	120				
Surr: 2,4,6-Tribromophenol	0.8353	0	1.000		83.5	50.3	131				
Surr: 2-Fluorobiphenyl	0.4031	0	0.5000		80.6	55.4	125				
Surr: 2-Fluorophenol	0.7509	0	1.000		75.1	45	126				
Surr: 4-Terphenyl-d14	0.5453	0	0.5000		109	57.6	138				
Surr: Nitrobenzene-d5	0.3398	0	0.5000		68.0	50	126				
Surr: Phenol-d5	0.7262	0	1.000		72.6	40.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185614

Sample ID: **MB-185614** Client ID: Units: **mg/L** Prep Date: **01/06/2014** Run No: **259101**
SampleType: **MBLK** TestCode: **HERBICIDES, TCLP SW1311/8151A** BatchID: **185614** Analysis Date: **01/06/2014** Seq No: **5445993**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	BRL	0.20									
2,4-D	BRL	0.20									
Surr: DCAA	0.4202	0	0.5000		84.0	40.3	135				

Sample ID: **LCS-185614** Client ID: Units: **mg/L** Prep Date: **01/06/2014** Run No: **259101**
SampleType: **LCS** TestCode: **HERBICIDES, TCLP SW1311/8151A** BatchID: **185614** Analysis Date: **01/06/2014** Seq No: **5445994**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	0.4127	0.20	0.5000		82.5	55.2	125				
2,4-D	0.3024	0.20	0.5000		60.5	49.8	128				
Surr: DCAA	0.4766	0	0.5000		95.3	40.3	135				

Sample ID: **1401118-001BMS** Client ID: **STOCKPILE-SIS** Units: **mg/L** Prep Date: **01/06/2014** Run No: **259101**
SampleType: **MS** TestCode: **HERBICIDES, TCLP SW1311/8151A** BatchID: **185614** Analysis Date: **01/06/2014** Seq No: **5445996**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	0.4088	0.20	0.5000		81.8	54	143				
2,4-D	0.3243	0.20	0.5000		64.9	45	142				
Surr: DCAA	0.4002	0	0.5000		80.0	40.3	135				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185634

Sample ID: **MB-185634** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259014**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185634** Analysis Date: **01/04/2014** Seq No: **5444943**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.8902	0	1.000		89.0	67.9	128				
Surr: Dibromofluoromethane	1.063	0	1.000		106	77.2	124				
Surr: Toluene-d8	0.8918	0	1.000		89.2	71.6	127				

Sample ID: **LCS-185634** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259014**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185634** Analysis Date: **01/04/2014** Seq No: **5444940**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8270	0.10	1.000		82.7	62.3	141				
1,2-Dichloroethane	1.168	0.10	1.000		117	74.1	127				
2-Butanone	1.519	0.20	2.000		75.9	45.5	137				
Benzene	0.7836	0.10	1.000		78.4	73.5	125				
Carbon tetrachloride	1.165	0.10	1.000		116	55.1	144				
Chlorobenzene	0.9122	0.10	1.000		91.2	75.4	122				
Chloroform	0.8372	0.10	1.000		83.7	68.2	127				
Tetrachloroethene	1.012	0.10	1.000		101	70.3	132				
Trichloroethene	0.9496	0.10	1.000		95.0	70.5	128				
Vinyl chloride	0.8228	0.040	1.000		82.3	54.9	143				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185634

Sample ID: **LCS-185634** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259014**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185634** Analysis Date: **01/04/2014** Seq No: **5444940**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	0.9982	0	1.000		99.8	67.9	128				
Surr: Dibromofluoromethane	1.064	0	1.000		106	77.2	124				
Surr: Toluene-d8	0.9144	0	1.000		91.4	71.6	127				

Sample ID: **1401120-006AMS** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259014**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185634** Analysis Date: **01/04/2014** Seq No: **5444947**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8586	0.10	1.000		85.9	62.3	154				
1,2-Dichloroethane	1.167	0.10	1.000		117	65.8	132				
2-Butanone	1.542	0.20	2.000		77.1	44.2	148				
Benzene	0.7894	0.10	1.000		78.9	72.6	133				
Carbon tetrachloride	1.169	0.10	1.000		117	53.7	151				
Chlorobenzene	1.740	0.10	1.000	0.8616	87.8	72	130				
Chloroform	0.8618	0.10	1.000		86.2	63.2	137				
Tetrachloroethene	1.012	0.10	1.000		101	71.9	140				
Trichloroethene	0.9834	0.10	1.000		98.3	68.3	146				
Vinyl chloride	0.9304	0.040	1.000		93.0	54.5	151				
Surr: 4-Bromofluorobenzene	0.9726	0	1.000		97.3	67.9	128				
Surr: Dibromofluoromethane	1.053	0	1.000		105	77.2	124				
Surr: Toluene-d8	0.9430	0	1.000		94.3	71.6	127				

Sample ID: **1401120-006ADUP** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259014**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185634** Analysis Date: **01/04/2014** Seq No: **5444946**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401118

ANALYTICAL QC SUMMARY REPORT

BatchID: 185634

Sample ID: **1401120-006ADUP** Client ID: Units: **mg/L** Prep Date: **01/04/2014** Run No: **259014**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185634** Analysis Date: **01/04/2014** Seq No: **5444946**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	0.9810	0.10						0.8616	13.0	30	
Chloroform	BRL	0.10						0	0	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	1.012	0	1.000		101	67.9	128	0.9804	0	0	
Surr: Dibromofluoromethane	1.058	0	1.000		106	77.2	124	1.065	0	0	
Surr: Toluene-d8	0.9214	0	1.000		92.1	71.6	127	0.9256	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

January 22, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel

Dear Timmerly Bullman: Order No: 1401777

Analytical Environmental Services, Inc. received 1 samples on 1/11/2014 11:30:00 AM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401777

Date: 1/10/14 Page 1 of 1

COMPANY: ESP

ADDRESS: 1050 Crown Point Pkwy Ste 550 Atlanta 30338

PHONE:

FAX:

SAMPLED BY: Stacey Bullock

SIGNATURE: [signature]

ANALYSIS REQUESTED: TCLP VOC; TCLP SVOC; TCLP metals; TCLP Pesticides

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	TCLP VOC (PRESERVATION: I)	TCLP SVOC (I)	TCLP metals (I)	TCLP Pesticides (I)	REMARKS	No # of Containers
1	14010 Stockpile - 5	1/10/14	10:40		X	SO	X	X	X	X		
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:		1: [signature]	1/11/14 11:30
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #:
SITE ADDRESS: Cordele GA
SEND REPORT TO:
INVOICE TO:
(IF DIFFERENT FROM ABOVE)
Tbullman@envplanning.com
QUOTE #: PO#:

RECEIPT
Total # of Containers

Turnaround Time Request
- [x] Standard 5 Business Days
- [ ] 2 Business Day Rush
- [ ] Next Business Day Rush
- [ ] Same Day Rush (auth req.)
- [ ] Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc

Date: 22-Jan-14

Client: Environmental Planning Specialists, Inc.
Project: Drexel
Lab ID: 1401777

Case Narrative

Samples labeled as "104101" were received but were not listed on the COC. The samples were placed on hold per Timmerly Bullman on 1/15/14.

Analytical Environmental Services, Inc **Date:** 22-Jan-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14010 STOCKPILE-S
Project Name:	Drexel	**Collection Date:**	1/10/2014 10:40:00 AM
Lab ID:	1401777-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
1,2-Dichloroethane	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
2-Butanone	BRL	0.20		mg/L	185979	20	01/15/2014 16:57	NP
Benzene	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
Carbon tetrachloride	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
Chlorobenzene	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
Chloroform	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
Tetrachloroethene	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
Trichloroethene	BRL	0.10		mg/L	185979	20	01/15/2014 16:57	NP
Vinyl chloride	BRL	0.040		mg/L	185979	20	01/15/2014 16:57	NP
Surr: 4-Bromofluorobenzene	91.8	67.9-128		%REC	185979	20	01/15/2014 16:57	NP
Surr: Dibromofluoromethane	90.4	77.2-124		%REC	185979	20	01/15/2014 16:57	NP
Surr: Toluene-d8	89.4	71.6-127		%REC	185979	20	01/15/2014 16:57	NP
SEMIVOLATILES ORGANICS, TCLP SW1311/8270D				**(SW3510C)**				
1,4-Dichlorobenzene	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
2,4,5-Trichlorophenol	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
2,4,6-Trichlorophenol	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
2,4-Dinitrotoluene	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Hexachlorobenzene	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Hexachlorobutadiene	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Hexachloroethane	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
m,p-Cresol	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Nitrobenzene	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
o-Cresol	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Pentachlorophenol	BRL	0.50		mg/L	186074	1	01/20/2014 12:29	YH
Pyridine	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Cresols, Total	BRL	0.10		mg/L	186074	1	01/20/2014 12:29	YH
Surr: 2,4,6-Tribromophenol	88.7	50.3-131		%REC	186074	1	01/20/2014 12:29	YH
Surr: 2-Fluorobiphenyl	88.1	55.4-125		%REC	186074	1	01/20/2014 12:29	YH
Surr: 2-Fluorophenol	80.6	45-126		%REC	186074	1	01/20/2014 12:29	YH
Surr: 4-Terphenyl-d14	91.1	57.6-138		%REC	186074	1	01/20/2014 12:29	YH
Surr: Nitrobenzene-d5	84.7	50-126		%REC	186074	1	01/20/2014 12:29	YH
Surr: Phenol-d5	81.9	40.4-119		%REC	186074	1	01/20/2014 12:29	YH
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Chlordane	0.18	0.050	*	mg/L	186076	10	01/20/2014 18:39	KD
Endrin	BRL	0.0010		mg/L	186076	1	01/20/2014 18:28	KD
gamma-BHC	BRL	0.00050		mg/L	186076	1	01/20/2014 18:28	KD
Heptachlor	BRL	0.00050		mg/L	186076	1	01/20/2014 18:28	KD
Heptachlor epoxide	BRL	0.00050		mg/L	186076	1	01/20/2014 18:28	KD

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc

Date: 22-Jan-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	14010 STOCKPILE-S
Project Name:	Drexel	**Collection Date:**	1/10/2014 10:40:00 AM
Lab ID:	1401777-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B					**(SW3510C)**			
Methoxychlor	BRL	0.0050		mg/L	186076	1	01/20/2014 18:28	KD
Toxaphene	BRL	0.050		mg/L	186076	1	01/20/2014 18:28	KD
Surr: Decachlorobiphenyl	117	30.7-121		%REC	186076	1	01/20/2014 18:28	KD
Surr: Tetrachloro-m-xylene	78.3	36.6-115		%REC	186076	1	01/20/2014 18:28	KD
MERCURY, TCLP SW1311/7470A					**(SW7470A)**			
Mercury	BRL	0.00400		mg/L	185955	1	01/16/2014 13:05	CG
ICP METALS, TCLP SW1311/6010C					**(SW3010A)**			
Arsenic	BRL	0.250		mg/L	185818	1	01/15/2014 16:59	JL
Barium	BRL	0.500		mg/L	185818	1	01/15/2014 16:59	JL
Cadmium	BRL	0.0250		mg/L	185818	1	01/15/2014 16:59	JL
Chromium	BRL	0.0500		mg/L	185818	1	01/15/2014 16:59	JL
Lead	BRL	0.0500		mg/L	185818	1	01/15/2014 16:59	JL
Selenium	BRL	0.100		mg/L	185818	1	01/15/2014 16:59	JL
Silver	BRL	0.0250		mg/L	185818	1	01/15/2014 16:59	JL

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client EPS Work Order Number 1401777

Checklist completed by Jason B. 1/13/14
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes __ No ✓

Chain of custody agrees with sample labels? Yes __ No ✓

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 185818

Sample ID: **MB-185818** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259614**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **185818** Analysis Date: **01/15/2014** Seq No: **5457254**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **MB-185818-2** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259614**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **185818** Analysis Date: **01/15/2014** Seq No: **5457260**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **LCS-185818** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259614**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **185818** Analysis Date: **01/15/2014** Seq No: **5457248**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.931	0.250	5.000		98.6	85	115				
Barium	4.720	0.500	5.000	0.03843	93.6	80	120				
Cadmium	4.786	0.0250	5.000		95.7	85	115				
Chromium	4.769	0.0500	5.000		95.4	85	115				

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 185818

Sample ID: **LCS-185818** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259614**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **185818** Analysis Date: **01/15/2014** Seq No: **5457248**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	4.618	0.0500	5.000		92.4	85	115				
Selenium	4.960	0.100	5.000		99.2	85	115				
Silver	0.4723	0.0250	0.5000		94.5	85	115				

Sample ID: **1401777-001BMS** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/15/2014** Run No: **259614**
SampleType: **MS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **185818** Analysis Date: **01/15/2014** Seq No: **5457266**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	5.008	0.250	5.000		100	50	150				
Barium	4.840	0.500	5.000	0.1665	93.5	50	150				
Cadmium	4.799	0.0250	5.000		96.0	50	150				
Chromium	4.765	0.0500	5.000		95.3	50	150				
Lead	4.624	0.0500	5.000		92.5	50	150				
Selenium	5.044	0.100	5.000		101	50	150				
Silver	0.4733	0.0250	0.5000		94.7	50	150				

Sample ID: **1401777-001BMSD** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/15/2014** Run No: **259614**
SampleType: **MSD** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **185818** Analysis Date: **01/15/2014** Seq No: **5457268**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.937	0.250	5.000		98.7	50	150	5.008	1.44	30	
Barium	4.814	0.500	5.000	0.1665	93.0	50	150	4.840	0.540	30	
Cadmium	4.772	0.0250	5.000		95.4	50	150	4.799	0.564	30	
Chromium	4.750	0.0500	5.000		95.0	50	150	4.765	0.323	30	
Lead	4.593	0.0500	5.000		91.9	50	150	4.624	0.679	30	
Selenium	4.961	0.100	5.000		99.2	50	150	5.044	1.64	30	
Silver	0.4706	0.0250	0.5000		94.1	50	150	0.4733	0.561	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 185955

Sample ID: **MB-185955** Client ID: Units: **mg/L** Prep Date: **01/16/2014** Run No: **259603**
SampleType: **MBLK** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **185955** Analysis Date: **01/16/2014** Seq No: **5457522**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00400									

Sample ID: **LCS-185955** Client ID: Units: **mg/L** Prep Date: **01/16/2014** Run No: **259603**
SampleType: **LCS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **185955** Analysis Date: **01/16/2014** Seq No: **5457525**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04140	0.00400	0.0400		103	85	115				

Sample ID: **1401693-007AMS** Client ID: Units: **mg/L** Prep Date: **01/16/2014** Run No: **259603**
SampleType: **MS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **185955** Analysis Date: **01/16/2014** Seq No: **5457532**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04274	0.00400	0.0400		107	80	120				

Sample ID: **1401693-007AMSD** Client ID: Units: **mg/L** Prep Date: **01/16/2014** Run No: **259603**
SampleType: **MSD** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **185955** Analysis Date: **01/16/2014** Seq No: **5457535**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04253	0.00400	0.0400		106	80	120	0.04274	0.486	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 185979

Sample ID: **MB-185979** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259571**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185979** Analysis Date: **01/15/2014** Seq No: **5456305**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.8882	0	1.000		88.8	67.9	128				
Surr: Dibromofluoromethane	1.033	0	1.000		103	77.2	124				
Surr: Toluene-d8	0.9034	0	1.000		90.3	71.6	127				

Sample ID: **LCS-185979** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259571**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185979** Analysis Date: **01/15/2014** Seq No: **5456304**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	1.238	0.10	1.000		124	62.3	141				
1,2-Dichloroethane	1.054	0.10	1.000		105	74.1	127				
2-Butanone	2.139	0.20	2.000		107	45.5	137				
Benzene	1.068	0.10	1.000		107	73.5	125				
Carbon tetrachloride	1.424	0.10	1.000		142	55.1	144				
Chlorobenzene	1.168	0.10	1.000		117	75.4	122				
Chloroform	0.9912	0.10	1.000		99.1	68.2	127				
Tetrachloroethene	1.241	0.10	1.000		124	70.3	132				
Trichloroethene	1.112	0.10	1.000		111	70.5	128				
Vinyl chloride	1.341	0.040	1.000		134	54.9	143				

Qualifiers:
> Greater than Result value
BRL Below reporting limit
J Estimated value detected below Reporting Limit
Rpt Lim Reporting Limit
< Less than Result value
E Estimated (value above quantitation range)
N Analyte not NELAC certified
S Spike Recovery outside limits due to matrix
B Analyte detected in the associated method blank
H Holding times for preparation or analysis exceeded
R RPD outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 185979

Sample ID: **LCS-185979** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259571**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185979** Analysis Date: **01/15/2014** Seq No: **5456304**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	0.9944	0	1.000		99.4	67.9	128				
Surr: Dibromofluoromethane	1.048	0	1.000		105	77.2	124				
Surr: Toluene-d8	0.9608	0	1.000		96.1	71.6	127				

Sample ID: **1401732-001AMS** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259571**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185979** Analysis Date: **01/15/2014** Seq No: **5457029**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	0.8504	0.10	1.000		85.0	62.3	154				
1,2-Dichloroethane	0.9116	0.10	1.000		91.2	65.8	132				
2-Butanone	2.109	0.20	2.000		105	44.2	148				
Benzene	0.9110	0.10	1.000		91.1	72.6	133				
Carbon tetrachloride	1.076	0.10	1.000		108	53.7	151				
Chlorobenzene	0.9852	0.10	1.000		98.5	72	130				
Chloroform	1.035	0.10	1.000	0.2630	77.2	63.2	137				
Tetrachloroethene	1.107	0.10	1.000		111	71.9	140				
Trichloroethene	1.770	0.10	1.000		177	68.3	146				S
Vinyl chloride	0.8774	0.040	1.000		87.7	54.5	151				
Surr: 4-Bromofluorobenzene	0.9872	0	1.000		98.7	67.9	128				
Surr: Dibromofluoromethane	0.9068	0	1.000		90.7	77.2	124				
Surr: Toluene-d8	0.9420	0	1.000		94.2	71.6	127				

Sample ID: **1401732-001ADUP** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259571**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185979** Analysis Date: **01/15/2014** Seq No: **5456705**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 185979

Sample ID: **1401732-001ADUP** Client ID: Units: **mg/L** Prep Date: **01/15/2014** Run No: **259571**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **185979** Analysis Date: **01/15/2014** Seq No: **5456705**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	BRL	0.10						0	0	30	
Chloroform	0.2088	0.10						0.2630	23.0	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	1.001	0	1.000		100	67.9	128	1.131	0	0	
Surr: Dibromofluoromethane	0.8612	0	1.000		86.1	77.2	124	0.8812	0	0	
Surr: Toluene-d8	0.8630	0	1.000		86.3	71.6	127	0.8584	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 186074

Sample ID: **MB-186074** Client ID: Units: **mg/L** Prep Date: **01/17/2014** Run No: **259832**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186074** Analysis Date: **01/20/2014** Seq No: **5461235**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	0.9445	0	1.000		94.4	50.3	131				
Surr: 2-Fluorobiphenyl	0.4716	0	0.5000		94.3	55.4	125				
Surr: 2-Fluorophenol	0.8584	0	1.000		85.8	45	126				
Surr: 4-Terphenyl-d14	0.4972	0	0.5000		99.4	57.6	138				
Surr: Nitrobenzene-d5	0.4516	0	0.5000		90.3	50	126				
Surr: Phenol-d5	0.8720	0	1.000		87.2	40.4	119				

Sample ID: **LCS-186074** Client ID: Units: **mg/L** Prep Date: **01/17/2014** Run No: **259832**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186074** Analysis Date: **01/20/2014** Seq No: **5461236**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.8447	0.10	1.000		84.5	64.6	120				
2,4,5-Trichlorophenol	0.9553	0.10	1.000		95.5	71.3	130				
2,4,6-Trichlorophenol	0.9691	0.10	1.000		96.9	77	125				
2,4-Dinitrotoluene	0.9229	0.10	1.000		92.3	70.6	120				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 186074

Sample ID: **LCS-186074** Client ID: Units: **mg/L** Prep Date: **01/17/2014** Run No: **259832**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186074** Analysis Date: **01/20/2014** Seq No: **5461236**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Cresols, Total	2.813	0.10	3.000		93.8	63.7	138				
Hexachlorobenzene	0.9373	0.10	1.000		93.7	72.4	120				
Hexachlorobutadiene	0.8413	0.10	1.000		84.1	65.3	120				
Hexachloroethane	0.7883	0.10	1.000		78.8	56.3	126				
m,p-Cresol	1.899	0.10	2.000		95.0	62.1	140				
Nitrobenzene	0.9135	0.10	1.000		91.4	66.8	135				
o-Cresol	0.9135	0.10	1.000		91.4	65.6	137				
Pentachlorophenol	0.9228	0.50	1.000		92.3	55.9	145				
Pyridine	0.2658	0.10	1.000		26.6	10	120				
Surr: 2,4,6-Tribromophenol	1.116	0	1.000		112	50.3	131				
Surr: 2-Fluorobiphenyl	0.5442	0	0.5000		109	55.4	125				
Surr: 2-Fluorophenol	0.9761	0	1.000		97.6	45	126				
Surr: 4-Terphenyl-d14	0.5758	0	0.5000		115	57.6	138				
Surr: Nitrobenzene-d5	0.5117	0	0.5000		102	50	126				
Surr: Phenol-d5	0.9951	0	1.000		99.5	40.4	119				

Sample ID: **1401777-001BMS** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/17/2014** Run No: **259832**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186074** Analysis Date: **01/20/2014** Seq No: **5461247**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.7571	0.10	1.000		75.7	61.5	120				
2,4,5-Trichlorophenol	0.8865	0.10	1.000		88.6	59.9	130				
2,4,6-Trichlorophenol	0.8949	0.10	1.000		89.5	65.2	125				
2,4-Dinitrotoluene	0.9091	0.10	1.000		90.9	57.9	120				
Cresols, Total	2.657	0.10	3.000		88.6	55.3	136				
Hexachlorobenzene	0.8723	0.10	1.000		87.2	59.6	120				
Hexachlorobutadiene	0.6984	0.10	1.000		69.8	52.2	120				
Hexachloroethane	0.6811	0.10	1.000		68.1	51.4	120				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 186074

Sample ID: **1401777-001BMS** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/17/2014** Run No: **259832**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186074** Analysis Date: **01/20/2014** Seq No: **5461247**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
m,p-Cresol	1.784	0.10	2.000		89.2	51.2	139				
Nitrobenzene	0.8669	0.10	1.000		86.7	53.1	131				
o-Cresol	0.8723	0.10	1.000		87.2	56.8	133				
Pentachlorophenol	0.9324	0.50	1.000		93.2	44.8	148				
Pyridine	0.1953	0.10	1.000		19.5	10	120				
Surr: 2,4,6-Tribromophenol	1.034	0	1.000		103	50.3	131				
Surr: 2-Fluorobiphenyl	0.4869	0	0.5000		97.4	55.4	125				
Surr: 2-Fluorophenol	0.8854	0	1.000		88.5	45	126				
Surr: 4-Terphenyl-d14	0.5153	0	0.5000		103	57.6	138				
Surr: Nitrobenzene-d5	0.4758	0	0.5000		95.2	50	126				
Surr: Phenol-d5	0.9215	0	1.000		92.2	40.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 186076

Sample ID: **MB-186076** Client ID: Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462120**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.005750	0	0.0050		115	30.7	121				
Surr: Tetrachloro-m-xylene	0.003916	0	0.0050		78.3	36.6	115				

Sample ID: **LCS-1-186076** Client ID: Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462121**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.008222	0.0010	0.0080		103	50.5	139				
gamma-BHC	0.007853	0.00050	0.0080		98.2	52.6	121				
Heptachlor	0.007208	0.00050	0.0080		90.1	53.1	125				
Heptachlor epoxide	0.008154	0.00050	0.0080		102	51.9	125				
Methoxychlor	0.03034	0.0050	0.0300		101	50.2	133				
Surr: Decachlorobiphenyl	0.005744	0	0.0050		115	30.7	121				
Surr: Tetrachloro-m-xylene	0.003956	0	0.0050		79.1	36.6	115				

Sample ID: **LCS-2-186076** Client ID: Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462122**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.04453	0.0050	0.0400		111	55.2	136				
Toxaphene	0.1095	0.050	0.0800		137	52.8	137				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 186076

Sample ID: **LCS-2-186076** Client ID: Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462122**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.005634	0	0.0050		113	30.7	121				
Surr: Tetrachloro-m-xylene	0.003731	0	0.0050		74.6	36.6	115				

Sample ID: **1401777-001BMS-1** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462125**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.050		0.1811	0	50.3	139				
Endrin	BRL	0.010	0.0080		102	48	138				
gamma-BHC	0.06182	0.0050	0.0080		773	46.5	123				S
Heptachlor	0.01478	0.0050	0.0080		185	47.8	124				S
Heptachlor epoxide	0.01555	0.0050	0.0080		194	51.1	120				S
Methoxychlor	BRL	0.050	0.0300		87.7	47.6	138				
Toxaphene	BRL	0.50			0	50	132				
Surr: Decachlorobiphenyl	0.005830	0	0.0050		117	30.7	121				
Surr: Tetrachloro-m-xylene	0.004573	0	0.0050		91.5	36.6	115				

Sample ID: **1401777-001BMS-2** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462134**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.2534	0.050	0.0400	0.1811	181	50.3	139				S
Endrin	BRL	0.010			0	48	138				
gamma-BHC	BRL	0.0050			0	46.5	123				
Heptachlor	BRL	0.0050			0	47.8	124				
Heptachlor epoxide	BRL	0.0050			0	51.1	120				
Methoxychlor	BRL	0.050			0	47.6	138				
Toxaphene	BRL	0.50	0.0800		493	50	132				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel
Workorder: 1401777

ANALYTICAL QC SUMMARY REPORT

BatchID: 186076

Sample ID: **1401777-001BMS-2** Client ID: **14010 STOCKPILE-S** Units: **mg/L** Prep Date: **01/18/2014** Run No: **259887**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186076** Analysis Date: **01/20/2014** Seq No: **5462134**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.005689	0	0.0050		114	30.7	121				
Surr: Tetrachloro-m-xylene	0.005189	0	0.0050		104	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

January 27, 2014

Dale Carpenter
A&D Environmental Services, LLC
4943 Austin Park Ave
Buford GA 30518

TEL: (678) 714-8420
FAX: (678) 714-8425

RE: Drexel

Dear Dale Carpenter: Order No: 1401B65

Analytical Environmental Services, Inc. received 1 samples on January 17, 2014 2:00 pm for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

Chantelle Kanhai
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401B65

Date: 1-17-14 Page 1 of 1

COMPANY: A+D Environmental

ADDRESS: 4943 Austin Park Ave Buford GA 30518

PHONE: 678-714-8426

FAX: 678-714-8425

SAMPLED BY: Stacey Bullock

SIGNATURE: Bullock

ANALYSIS REQUESTED: TLCP

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	TLCP	REMARKS	No # of Containers
1	Stock Pile SI9	1-17-14	1100		X		X		2
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

PRESERVATION (See codes)

RELINQUISHED BY (DATE/TIME)
1: Bullock 1600 1-17-14
2:
3:

RECEIVED BY (DATE/TIME)
1: 1/17/14
2: 14:00
3:

PROJECT INFORMATION
PROJECT NAME: Drexel
PROJECT #: 13-0995
SITE ADDRESS: Cordele
SEND REPORT TO: OCarpenter@adenviro.com
INVOICE TO: (IF DIFFERENT FROM ABOVE)
QUOTE #: PO#:

RECEIPT
Total # of Containers

Turnaround Time Request
- ○ Standard 5 Business Days
- ⊗ 2 Business Day Rush
- ○ Next Business Day Rush
- ○ Same Day Rush (auth req.)
- ○ Other

STATE PROGRAM (if any):
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) DW = Drinking Water (Blanks) O = Other (specify) WW = Waste Water
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 27-Jan-14

Client:	A&D Environmental Services, LLC	**Client Sample ID:**	STOCKPILE-SI9
Project Name:	Drexel	**Collection Date:**	1/17/2014 11:00:00 AM
Lab ID:	1401B65-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
VOLATILES, TCLP SW1311/8260B				**(SW1311)**				
1,1-Dichloroethene	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
1,2-Dichloroethane	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
2-Butanone	BRL	0.20		mg/L	186124	20	01/20/2014 12:14	NP
Benzene	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
Carbon tetrachloride	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
Chlorobenzene	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
Chloroform	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
Tetrachloroethene	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
Trichloroethene	BRL	0.10		mg/L	186124	20	01/20/2014 12:14	NP
Vinyl chloride	BRL	0.040		mg/L	186124	20	01/20/2014 12:14	NP
Surr: 4-Bromofluorobenzene	77	67.9-128		%REC	186124	20	01/20/2014 12:14	NP
Surr: Dibromofluoromethane	101	77.2-124		%REC	186124	20	01/20/2014 12:14	NP
Surr: Toluene-d8	88.8	71.6-127		%REC	186124	20	01/20/2014 12:14	NP
SEMIVOLATILES ORGANICS, TCLP SW1311/8270D				**(SW3510C)**				
1,4-Dichlorobenzene	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
2,4,5-Trichlorophenol	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
2,4,6-Trichlorophenol	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
2,4-Dinitrotoluene	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Hexachlorobenzene	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Hexachlorobutadiene	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Hexachloroethane	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
m,p-Cresol	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Nitrobenzene	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
o-Cresol	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Pentachlorophenol	BRL	0.50		mg/L	186118	1	01/21/2014 15:00	YH
Pyridine	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Cresols, Total	BRL	0.10		mg/L	186118	1	01/21/2014 15:00	YH
Surr: 2,4,6-Tribromophenol	102	50.3-131		%REC	186118	1	01/21/2014 15:00	YH
Surr: 2-Fluorobiphenyl	101	55.4-125		%REC	186118	1	01/21/2014 15:00	YH
Surr: 2-Fluorophenol	89.2	45-126		%REC	186118	1	01/21/2014 15:00	YH
Surr: 4-Terphenyl-d14	104	57.6-138		%REC	186118	1	01/21/2014 15:00	YH
Surr: Nitrobenzene-d5	95.9	50-126		%REC	186118	1	01/21/2014 15:00	YH
Surr: Phenol-d5	88.2	40.4-119		%REC	186118	1	01/21/2014 15:00	YH
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Chlordane	BRL	0.0050		mg/L	186164	1	01/21/2014 13:25	SN
Endrin	BRL	0.0010		mg/L	186164	1	01/21/2014 13:25	SN
gamma-BHC	BRL	0.00050		mg/L	186164	1	01/21/2014 13:25	SN
Heptachlor	BRL	0.00050		mg/L	186164	1	01/21/2014 13:25	SN
Heptachlor epoxide	BRL	0.00050		mg/L	186164	1	01/21/2014 13:25	SN

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc **Date:** 27-Jan-14

Client:	A&D Environmental Services, LLC	**Client Sample ID:**	STOCKPILE-SI9
Project Name:	Drexel	**Collection Date:**	1/17/2014 11:00:00 AM
Lab ID:	1401B65-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
PESTICIDES, TCLP SW1311/8081B				**(SW3510C)**				
Methoxychlor	BRL	0.0050		mg/L	186164	1	01/21/2014 13:25	SN
Toxaphene	0.15	0.050		mg/L	186164	1	01/21/2014 13:25	SN
Surr: Decachlorobiphenyl	109	30.7-121		%REC	186164	1	01/21/2014 13:25	SN
Surr: Tetrachloro-m-xylene	82.2	36.6-115		%REC	186164	1	01/21/2014 13:25	SN
MERCURY, TCLP SW1311/7470A				**(SW7470A)**				
Mercury	BRL	0.00400		mg/L	186259	1	01/23/2014 14:14	CG
ICP METALS, TCLP SW1311/6010C				**(SW3010A)**				
Arsenic	BRL	0.250		mg/L	186277	1	01/23/2014 17:29	JL
Barium	BRL	0.500		mg/L	186277	1	01/23/2014 17:29	JL
Cadmium	BRL	0.0250		mg/L	186277	1	01/23/2014 17:29	JL
Chromium	BRL	0.0500		mg/L	186277	1	01/23/2014 17:29	JL
Lead	BRL	0.0500		mg/L	186277	1	01/23/2014 17:29	JL
Selenium	BRL	0.100		mg/L	186277	1	01/23/2014 17:29	JL
Silver	BRL	0.0250		mg/L	186277	1	01/23/2014 17:29	JL
HERBICIDES, TCLP SW1311/8151A				**(SW3510C)**				
2,4,5-TP (Silvex)	BRL	0.20		mg/L	186120	1	01/22/2014 15:01	RF
2,4-D	BRL	0.20		mg/L	186120	1	01/22/2014 15:01	RF
Surr: DCAA	107	40.3-135		%REC	186120	1	01/22/2014 15:01	RF

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client APD Environmental

Work Order Number 1401B65

Checklist completed by [signature] 1.17.14
Signature Date

Carrier name: FedEx __ UPS __ Courier __ Client ✓ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186118

Sample ID: **MB-186118** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259912**
SampleType: **MBLK** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186118** Analysis Date: **01/21/2014** Seq No: **5462805**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	BRL	0.10									
2,4,5-Trichlorophenol	BRL	0.10									
2,4,6-Trichlorophenol	BRL	0.10									
2,4-Dinitrotoluene	BRL	0.10									
Cresols, Total	BRL	0.10									
Hexachlorobenzene	BRL	0.10									
Hexachlorobutadiene	BRL	0.10									
Hexachloroethane	BRL	0.10									
m,p-Cresol	BRL	0.10									
Nitrobenzene	BRL	0.10									
o-Cresol	BRL	0.10									
Pentachlorophenol	BRL	0.50									
Pyridine	BRL	0.10									
Surr: 2,4,6-Tribromophenol	1.017	0	1.000		102	50.3	131				
Surr: 2-Fluorobiphenyl	0.4910	0	0.5000		98.2	55.4	125				
Surr: 2-Fluorophenol	0.8525	0	1.000		85.2	45	126				
Surr: 4-Terphenyl-d14	0.5076	0	0.5000		102	57.6	138				
Surr: Nitrobenzene-d5	0.4763	0	0.5000		95.3	50	126				
Surr: Phenol-d5	0.8546	0	1.000		85.5	40.4	119				

Sample ID: **LCS-186118** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259912**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186118** Analysis Date: **01/21/2014** Seq No: **5462806**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.9495	0.10	1.000		95.0	64.6	120				
2,4,5-Trichlorophenol	1.055	0.10	1.000		105	71.3	130				
2,4,6-Trichlorophenol	1.053	0.10	1.000		105	77	125				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186118

Sample ID: **LCS-186118** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259912**
SampleType: **LCS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186118** Analysis Date: **01/21/2014** Seq No: **5462806**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-Dinitrotoluene	1.007	0.10	1.000		101	70.6	120				
Cresols, Total	3.015	0.10	3.000		101	63.7	138				
Hexachlorobenzene	1.028	0.10	1.000		103	72.4	120				
Hexachlorobutadiene	0.9868	0.10	1.000		98.7	65.3	120				
Hexachloroethane	0.9091	0.10	1.000		90.9	56.3	126				
m,p-Cresol	2.028	0.10	2.000		101	62.1	140				
Nitrobenzene	0.9999	0.10	1.000		100.0	66.8	135				
o-Cresol	0.9872	0.10	1.000		98.7	65.6	137				
Pentachlorophenol	1.145	0.50	1.000		114	55.9	145				
Pyridine	0.5241	0.10	1.000		52.4	10	120				
Surr: 2,4,6-Tribromophenol	1.172	0	1.000		117	50.3	131				
Surr: 2-Fluorobiphenyl	0.5653	0	0.5000		113	55.4	125				
Surr: 2-Fluorophenol	1.000	0	1.000		100	45	126				
Surr: 4-Terphenyl-d14	0.5889	0	0.5000		118	57.6	138				
Surr: Nitrobenzene-d5	0.5406	0	0.5000		108	50	126				
Surr: Phenol-d5	0.9876	0	1.000		98.8	40.4	119				

Sample ID: **1401964-001BMS** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259912**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186118** Analysis Date: **01/21/2014** Seq No: **5463343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,4-Dichlorobenzene	0.7903	0.10	1.000		79.0	61.5	120				
2,4,5-Trichlorophenol	0.8766	0.10	1.000		87.7	59.9	130				
2,4,6-Trichlorophenol	0.8775	0.10	1.000		87.8	65.2	125				
2,4-Dinitrotoluene	0.8263	0.10	1.000		82.6	57.9	120				
Cresols, Total	2.549	0.10	3.000		85.0	55.3	136				
Hexachlorobenzene	0.8431	0.10	1.000		84.3	59.6	120				
Hexachlorobutadiene	0.7918	0.10	1.000		79.2	52.2	120				

Qualifiers:
- > Greater than Result value
- BRL Below reporting limit
- J Estimated value detected below Reporting Limit
- Rpt Lim Reporting Limit
- < Less than Result value
- E Estimated (value above quantitation range)
- N Analyte not NELAC certified
- S Spike Recovery outside limits due to matrix
- B Analyte detected in the associated method blank
- H Holding times for preparation or analysis exceeded
- R RPD outside limits due to matrix

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186118

Sample ID: **1401964-001BMS** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259912**
SampleType: **MS** TestCode: **SEMIVOLATILES ORGANICS, TCLP SW1311/8270D** BatchID: **186118** Analysis Date: **01/21/2014** Seq No: **5463343**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Hexachloroethane	0.7553	0.10	1.000		75.5	51.4	120				
m,p-Cresol	1.712	0.10	2.000		85.6	51.2	139				
Nitrobenzene	0.8431	0.10	1.000		84.3	53.1	131				
o-Cresol	0.8378	0.10	1.000		83.8	56.8	133				
Pentachlorophenol	0.9703	0.50	1.000		97.0	44.8	148				
Pyridine	BRL	0.10	1.000		4.11	10	120				S
Surr: 2,4,6-Tribromophenol	0.9674	0	1.000		96.7	50.3	131				
Surr: 2-Fluorobiphenyl	0.4647	0	0.5000		92.9	55.4	125				
Surr: 2-Fluorophenol	0.8350	0	1.000		83.5	45	126				
Surr: 4-Terphenyl-d14	0.4527	0	0.5000		90.5	57.6	138				
Surr: Nitrobenzene-d5	0.4519	0	0.5000		90.4	50	126				
Surr: Phenol-d5	0.8428	0	1.000		84.3	40.4	119				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186120

Sample ID: **MB-186120** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **260026**
SampleType: **MBLK** TestCode: **HERBICIDES, TCLP SW1311/8151A** BatchID: **186120** Analysis Date: **01/22/2014** Seq No: **5465234**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	BRL	0.20									
2,4-D	BRL	0.20									
Surr: DCAA	0.5373	0	0.5000		107	40.3	135				

Sample ID: **LCS-186120** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **260026**
SampleType: **LCS** TestCode: **HERBICIDES, TCLP SW1311/8151A** BatchID: **186120** Analysis Date: **01/22/2014** Seq No: **5465235**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	0.4079	0.20	0.5000		81.6	55.2	125				
2,4-D	0.2492	0.20	0.5000		49.8	49.8	128				
Surr: DCAA	0.4953	0	0.5000		99.1	40.3	135				

Sample ID: **1401B65-001BMS** Client ID: **STOCKPILE-SI9** Units: **mg/L** Prep Date: **01/21/2014** Run No: **260026**
SampleType: **MS** TestCode: **HERBICIDES, TCLP SW1311/8151A** BatchID: **186120** Analysis Date: **01/22/2014** Seq No: **5465237**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4,5-TP (Silvex)	0.4149	0.20	0.5000		83.0	54	143				
2,4-D	0.2529	0.20	0.5000		50.6	45	142				
Surr: DCAA	0.4638	0	0.5000		92.8	40.3	135				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186124

Sample ID: **MB-186124** Client ID: Units: **mg/L** Prep Date: **01/20/2014** Run No: **259783**
SampleType: **MBLK** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **186124** Analysis Date: **01/20/2014** Seq No: **5460684**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10									
1,2-Dichloroethane	BRL	0.10									
2-Butanone	BRL	0.20									
Benzene	BRL	0.10									
Carbon tetrachloride	BRL	0.10									
Chlorobenzene	BRL	0.10									
Chloroform	BRL	0.10									
Tetrachloroethene	BRL	0.10									
Trichloroethene	BRL	0.10									
Vinyl chloride	BRL	0.040									
Surr: 4-Bromofluorobenzene	0.7684	0	1.000		76.8	67.9	128				
Surr: Dibromofluoromethane	1.015	0	1.000		101	77.2	124				
Surr: Toluene-d8	0.9012	0	1.000		90.1	71.6	127				

Sample ID: **LCS-186124** Client ID: Units: **mg/L** Prep Date: **01/20/2014** Run No: **259783**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **186124** Analysis Date: **01/20/2014** Seq No: **5460682**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	1.027	0.10	1.000		103	62.3	141				
1,2-Dichloroethane	0.9612	0.10	1.000		96.1	74.1	127				
2-Butanone	2.131	0.20	2.000		107	45.5	137				
Benzene	0.9680	0.10	1.000		96.8	73.5	125				
Carbon tetrachloride	1.263	0.10	1.000		126	55.1	144				
Chlorobenzene	1.042	0.10	1.000		104	75.4	122				
Chloroform	0.8774	0.10	1.000		87.7	68.2	127				
Tetrachloroethene	1.151	0.10	1.000		115	70.3	132				
Trichloroethene	0.9752	0.10	1.000		97.5	70.5	128				
Vinyl chloride	0.9052	0.040	1.000		90.5	54.9	143				

Qualifiers:
> Greater than Result value
BRL Below reporting limit
J Estimated value detected below Reporting Limit
Rpt Lim Reporting Limit
< Less than Result value
E Estimated (value above quantitation range)
N Analyte not NELAC certified
S Spike Recovery outside limits due to matrix
B Analyte detected in the associated method blank
H Holding times for preparation or analysis exceeded
R RPD outside limits due to matrix

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186124

Sample ID: **LCS-186124** Client ID: Units: **mg/L** Prep Date: **01/20/2014** Run No: **259783**
SampleType: **LCS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **186124** Analysis Date: **01/20/2014** Seq No: **5460682**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: 4-Bromofluorobenzene	0.9836	0	1.000		98.4	67.9	128				
Surr: Dibromofluoromethane	1.025	0	1.000		102	77.2	124				
Surr: Toluene-d8	1.005	0	1.000		100	71.6	127				

Sample ID: **1401B69-001AMS** Client ID: Units: **mg/L** Prep Date: **01/20/2014** Run No: **259783**
SampleType: **MS** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **186124** Analysis Date: **01/20/2014** Seq No: **5462163**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	1.040	0.10	1.000		104	62.3	154				
1,2-Dichloroethane	0.9310	0.10	1.000		93.1	65.8	132				
2-Butanone	2.541	0.20	2.000		127	44.2	148				
Benzene	0.9292	0.10	1.000		92.9	72.6	133				
Carbon tetrachloride	1.093	0.10	1.000		109	53.7	151				
Chlorobenzene	0.9626	0.10	1.000		96.3	72	130				
Chloroform	1.028	0.10	1.000	0.1642	86.4	63.2	137				
Tetrachloroethene	1.025	0.10	1.000		103	71.9	140				
Trichloroethene	1.784	0.10	1.000		178	68.3	146				S
Vinyl chloride	1.034	0.040	1.000		103	54.5	151				
Surr: 4-Bromofluorobenzene	0.9958	0	1.000		99.6	67.9	128				
Surr: Dibromofluoromethane	0.9588	0	1.000		95.9	77.2	124				
Surr: Toluene-d8	0.9760	0	1.000		97.6	71.6	127				

Sample ID: **1401B69-001ADUP** Client ID: Units: **mg/L** Prep Date: **01/20/2014** Run No: **259783**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **186124** Analysis Date: **01/20/2014** Seq No: **5462167**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
1,1-Dichloroethene	BRL	0.10						0	0	30	
1,2-Dichloroethane	BRL	0.10						0	0	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186124

Sample ID: **1401B69-001ADUP** Client ID: Units: **mg/L** Prep Date: **01/20/2014** Run No: **259783**
SampleType: **DUP** TestCode: **VOLATILES, TCLP SW1311/8260B** BatchID: **186124** Analysis Date: **01/20/2014** Seq No: **5462167**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2-Butanone	BRL	0.20						0	0	30	
Benzene	BRL	0.10						0	0	30	
Carbon tetrachloride	BRL	0.10						0	0	30	
Chlorobenzene	BRL	0.10						0	0	30	
Chloroform	0.1452	0.10						0.1642	12.3	30	
Tetrachloroethene	BRL	0.10						0	0	30	
Trichloroethene	BRL	0.10						0	0	30	
Vinyl chloride	BRL	0.040						0	0	30	
Surr: 4-Bromofluorobenzene	1.025	0	1.000		103	67.9	128	1.117	0	0	
Surr: Dibromofluoromethane	0.9396	0	1.000		94.0	77.2	124	0.9590	0	0	
Surr: Toluene-d8	0.8996	0	1.000		90.0	71.6	127	0.8898	0	0	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186164

Sample ID: **MB-186164** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259927**
SampleType: **MBLK** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186164** Analysis Date: **01/21/2014** Seq No: **5463129**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	BRL	0.0050									
Endrin	BRL	0.0010									
gamma-BHC	BRL	0.00050									
Heptachlor	BRL	0.00050									
Heptachlor epoxide	BRL	0.00050									
Methoxychlor	BRL	0.0050									
Toxaphene	BRL	0.050									
Surr: Decachlorobiphenyl	0.005419	0	0.0050		108	30.7	121				
Surr: Tetrachloro-m-xylene	0.004388	0	0.0050		87.8	36.6	115				

Sample ID: **LCS-186164-1** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259927**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186164** Analysis Date: **01/21/2014** Seq No: **5463138**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.008154	0.0010	0.0080		102	50.5	139				
gamma-BHC	0.008191	0.00050	0.0080		102	52.6	121				
Heptachlor	0.007877	0.00050	0.0080		98.5	53.1	125				
Heptachlor epoxide	0.008149	0.00050	0.0080		102	51.9	125				
Methoxychlor	0.02522	0.0050	0.0300		84.1	50.2	133				
Surr: Decachlorobiphenyl	0.005414	0	0.0050		108	30.7	121				
Surr: Tetrachloro-m-xylene	0.004796	0	0.0050		95.9	36.6	115				

Sample ID: **LCS-186164-2** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259927**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186164** Analysis Date: **01/21/2014** Seq No: **5463148**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.05031	0.0050	0.0400		126	55.2	136				
Toxaphene	0.09640	0.050	0.0800		121	52.8	137				

Qualifiers:
> Greater than Result value
< Less than Result value
B Analyte detected in the associated method blank
BRL Below reporting limit
E Estimated (value above quantitation range)
H Holding times for preparation or analysis exceeded
J Estimated value detected below Reporting Limit
N Analyte not NELAC certified
R RPD outside limits due to matrix
Rpt Lim Reporting Limit
S Spike Recovery outside limits due to matrix

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186164

Sample ID: **LCS-186164-2** Client ID: Units: **mg/L** Prep Date: **01/21/2014** Run No: **259927**
SampleType: **LCS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186164** Analysis Date: **01/21/2014** Seq No: **5463148**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Surr: Decachlorobiphenyl	0.005399	0	0.0050		108	30.7	121				
Surr: Tetrachloro-m-xylene	0.004667	0	0.0050		93.3	36.6	115				

Sample ID: **1401B65-001BMS-1** Client ID: **STOCKPILE-SI9** Units: **mg/L** Prep Date: **01/21/2014** Run No: **259927**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186164** Analysis Date: **01/21/2014** Seq No: **5463175**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Endrin	0.007455	0.0010	0.0080		93.2	48	138				
gamma-BHC	0.007719	0.00050	0.0080		96.5	46.5	123				
Heptachlor	0.008238	0.00050	0.0080		103	47.8	124				
Heptachlor epoxide	0.01010	0.00050	0.0080		126	51.1	120				S
Methoxychlor	0.02805	0.0050	0.0300		93.5	47.6	138				
Surr: Decachlorobiphenyl	0.004902	0	0.0050		98.0	30.7	121				
Surr: Tetrachloro-m-xylene	0.004248	0	0.0050		85.0	36.6	115				

Sample ID: **1401B65-001BMS-2** Client ID: **STOCKPILE-SI9** Units: **mg/L** Prep Date: **01/21/2014** Run No: **259927**
SampleType: **MS** TestCode: **PESTICIDES, TCLP SW1311/8081B** BatchID: **186164** Analysis Date: **01/21/2014** Seq No: **5463183**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Chlordane	0.09512	0.0050	0.0400		238	50.3	139				S
Toxaphene	0.2179	0.050	0.0800	0.1479	87.5	50	132				
Surr: Decachlorobiphenyl	0.004878	0	0.0050		97.6	30.7	121				
Surr: Tetrachloro-m-xylene	0.004474	0	0.0050		89.5	36.6	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186259

Sample ID: **MB-186259** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260041**
SampleType: **MBLK** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **186259** Analysis Date: **01/23/2014** Seq No: **5466925**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	BRL	0.00400									

Sample ID: **LCS-186259** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260041**
SampleType: **LCS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **186259** Analysis Date: **01/23/2014** Seq No: **5466926**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.03913	0.00400	0.0400		97.8	85	115				

Sample ID: **1401F15-001AMS** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260041**
SampleType: **MS** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **186259** Analysis Date: **01/23/2014** Seq No: **5466928**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04611	0.00400	0.0400	0.007615	96.2	80	120				

Sample ID: **1401F15-001AMSD** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260041**
SampleType: **MSD** TestCode: **MERCURY, TCLP SW1311/7470A** BatchID: **186259** Analysis Date: **01/23/2014** Seq No: **5466929**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Mercury	0.04783	0.00400	0.0400	0.007615	101	80	120	0.04611	3.67	20	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186277

Sample ID: **MB-186277** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260106**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **186277** Analysis Date: **01/23/2014** Seq No: **5467388**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **MB-186277-2** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260106**
SampleType: **MBLK** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **186277** Analysis Date: **01/23/2014** Seq No: **5467390**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	BRL	0.250									
Barium	BRL	0.500									
Cadmium	BRL	0.0250									
Chromium	BRL	0.0500									
Lead	BRL	0.0500									
Selenium	BRL	0.100									
Silver	BRL	0.0250									

Sample ID: **LCS-186277** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260106**
SampleType: **LCS** TestCode: **ICP METALS, TCLP SW1311/6010C** BatchID: **186277** Analysis Date: **01/23/2014** Seq No: **5467382**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.657	0.250	5.000		93.1	85	115				
Barium	4.574	0.500	5.000	0.05270	90.4	80	120				
Cadmium	4.484	0.0250	5.000		89.7	85	115				
Chromium	4.557	0.0500	5.000		91.1	85	115				

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: A&D Environmental Services, LLC
Project Name: Drexel
Workorder: 1401B65

ANALYTICAL QC SUMMARY REPORT

BatchID: 186277

Sample ID: **LCS-186277** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260106**
SampleType: **LCS** TestCode: **ICP METALS, TCLP** **SW1311/6010C** BatchID: **186277** Analysis Date: **01/23/2014** Seq No: **5467382**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	4.480	0.0500	5.000		89.6	85	115				
Selenium	4.671	0.100	5.000		93.4	85	115				
Silver	0.4588	0.0250	0.5000		91.8	85	115				

Sample ID: **1401D51-001BMS** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260106**
SampleType: **MS** TestCode: **ICP METALS, TCLP** **SW1311/6010C** BatchID: **186277** Analysis Date: **01/23/2014** Seq No: **5467394**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.713	0.250	5.000		94.3	50	150				
Barium	4.864	0.500	5.000	0.2341	92.6	50	150				
Cadmium	4.566	0.0250	5.000		91.3	50	150				
Chromium	4.638	0.0500	5.000		92.8	50	150				
Lead	4.550	0.0500	5.000	0.005618	90.9	50	150				
Selenium	4.693	0.100	5.000		93.9	50	150				
Silver	0.4669	0.0250	0.5000		93.4	50	150				

Sample ID: **1401D51-001BMSD** Client ID: Units: **mg/L** Prep Date: **01/23/2014** Run No: **260106**
SampleType: **MSD** TestCode: **ICP METALS, TCLP** **SW1311/6010C** BatchID: **186277** Analysis Date: **01/23/2014** Seq No: **5467396**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Arsenic	4.701	0.250	5.000		94.0	50	150	4.713	0.264	30	
Barium	4.857	0.500	5.000	0.2341	92.5	50	150	4.864	0.139	30	
Cadmium	4.558	0.0250	5.000		91.2	50	150	4.566	0.169	30	
Chromium	4.627	0.0500	5.000		92.5	50	150	4.638	0.251	30	
Lead	4.535	0.0500	5.000	0.005618	90.6	50	150	4.550	0.328	30	
Selenium	4.698	0.100	5.000		94.0	50	150	4.693	0.097	30	
Silver	0.4665	0.0250	0.5000		93.3	50	150	0.4669	0.101	30	

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 08, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1401L53

Analytical Environmental Services, Inc. received 1 samples on 1/31/2014 1:00:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

3785 PRESIDENTIAL PARKWAY • ATLANTA, GEORGIA 30340 • TEL: (770) 457-8177 • FAX: (770)457-8188

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401L53

Date: 1/28/14 Page 1 of 7

COMPANY: ENV. PLAN. SPEC.

ADDRESS: 1030 CROWN PTE. ATLANTA, GA 30338

PHONE:

FAX:

SAMPLED BY: STACEY BULLOCK

SIGNATURE:

ANALYSIS REQUESTED: Chlordane Total

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Chlordane Total	REMARKS	No # of Containers
1	STOCKPILE SI5-02	1-28-14	1125		X		X		1
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

PRESERVATION (See codes)

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	1/28/14 1000	1:	1-31-14 1000
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER

PROJECT INFORMATION
PROJECT NAME: DREXEL PROJECT
PROJECT #: 13-0995
SITE ADDRESS: CORDELE, GA.
SEND REPORT TO: A+P. ENV. T. HELLENWETH
INVOICE TO: EPS
(IF DIFFERENT FROM ABOVE)
1050 Crown Point Parkway
Suite 550 Atlanta GA 30338
QUOTE #: PO#:

RECEIPT
Total # of Containers

Turnaround Time Request
- Standard 5 Business Days
- ~~2 Business Day Rush~~
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other

STATE PROGRAM (if any):
E-mail? Y / N: Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 8-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	STOCKPILE SI5-02
Project Name:	Drexel Chemical Company	**Collection Date:**	1/28/2014 11:25:00 AM
Lab ID:	1401L53-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
alpha-Chlordane	9100	1900		ug/Kg-dry	186579	1000	02/03/2014 16:11	KD
Chlordane	95000	37000		ug/Kg-dry	186579	1000	02/03/2014 16:11	KD
gamma-Chlordane	15000	1900		ug/Kg-dry	186579	1000	02/03/2014 16:11	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186579	100	02/03/2014 16:25	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186579	1000	02/03/2014 16:11	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186579	100	02/03/2014 16:25	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186579	1000	02/03/2014 16:11	KD
PERCENT MOISTURE D2216								
Percent Moisture	10.3	0		wt%	R260513	1	02/01/2014 09:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Env. Planning Spec Work Order Number 1401L53

Checklist completed by [signature] 1/31/14
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 8-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401L53

ANALYTICAL QC SUMMARY REPORT

BatchID: 186579

Sample ID: **MB-186579** Client ID: Units: **ug/Kg** Prep Date: **02/03/2014** Run No: **260595**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/03/2014** Seq No: **5477455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-DDD	BRL	3.3									N
2,4-DDE	BRL	3.3									N
2,4-DDT	BRL	3.3									N
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
Chlorpyrifos	BRL	3.3									N
cis-Chlordane	BRL	1.7									
cis-Nonachlor	BRL	1.7									N
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Hexachlorobenzene	BRL	1.7									N

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401L53

ANALYTICAL QC SUMMARY REPORT

BatchID: 186579

Sample ID: **MB-186579** Client ID: Units: **ug/Kg** Prep Date: **02/03/2014** Run No: **260595**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/03/2014** Seq No: **5477455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methoxychlor	BRL	17									
Mirex	BRL	1.7									N
Oxychlordane	BRL	1.7									N
Toxaphene	BRL	170									
trans-Chlordane	BRL	1.7									
trans-Nonachlor	BRL	1.7									N
Surr: Decachlorobiphenyl	12.45	0	16.67		74.7	25.2	120				
Surr: Tetrachloro-m-xylene	10.15	0	16.67		60.9	30.5	120				

Sample ID: **LCS-186579** Client ID: Units: **ug/Kg** Prep Date: **02/03/2014** Run No: **260595**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/03/2014** Seq No: **5477461**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	18.06	3.3	33.33		54.2	44.7	136				
Aldrin	26.84	1.7	33.33		80.5	41.5	118				
Dieldrin	15.57	3.3	33.33		46.7	44.3	133				
Endrin	16.61	3.3	33.33		49.8	43.2	137				
gamma-BHC	29.74	1.7	33.33		89.2	40.3	126				
Heptachlor	31.10	1.7	33.33		93.3	40.1	126				
Surr: Decachlorobiphenyl	13.52	0	16.67		81.1	25.2	120				
Surr: Tetrachloro-m-xylene	11.95	0	16.67		71.7	30.5	120				

Sample ID: **1401L53-001AMS** Client ID: **STOCKPILE SI5-02** Units: **ug/Kg-dry** Prep Date: **02/03/2014** Run No: **260690**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/04/2014** Seq No: **5479587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	BRL	370	37.04	878.3	-2370	33.6	126				S
Aldrin	BRL	190	37.04		0	32.6	120				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Analytical Environmental Services, Inc

Date: 8-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401L53

ANALYTICAL QC SUMMARY REPORT

BatchID: 186579

Sample ID: **1401L53-001AMS** Client ID: **STOCKPILE SI5-02** Units: **ug/Kg-dry** Prep Date: **02/03/2014** Run No: **260690**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/04/2014** Seq No: **5479587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	BRL	370	37.04		0	35.1	124				S
Endrin	BRL	370	37.04	2958	-7990	39.7	129				S
gamma-BHC	BRL	190	37.04		0	35.2	120				S
Heptachlor	566.9	190	37.04		1530	34.9	119				S
Surr: Decachlorobiphenyl	0	0	18.53		0	25.2	120				S
Surr: Tetrachloro-m-xylene	0	0	18.53		0	30.5	120				S

Sample ID: **1401L53-001AMSD** Client ID: **STOCKPILE SI5-02** Units: **ug/Kg-dry** Prep Date: **02/03/2014** Run No: **260690**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/04/2014** Seq No: **5479588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	BRL	370	37.10	878.3	-2370	33.6	126	0	0	28.1	S
Aldrin	BRL	190	37.10		0	32.6	120	0	0	29.9	S
Dieldrin	BRL	370	37.10		0	35.1	124	0	0	26.6	S
Endrin	BRL	370	37.10	2958	-7970	39.7	129	0	0	27.6	S
gamma-BHC	BRL	190	37.10		0	35.2	120	0	0	28.6	S
Heptachlor	430.2	190	37.10		1160	34.9	119	566.9	27.4	27.7	S
Surr: Decachlorobiphenyl	0	0	18.56		0	25.2	120	0	0	30	S
Surr: Tetrachloro-m-xylene	0	0	18.56		0	30.5	120	0	0	30	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 08, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1401L54

Analytical Environmental Services, Inc. received 1 samples on 1/31/2014 1:00:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401L54

Date: 1/28/14 Page 1 of 1

COMPANY: ENV. PLAN. SPEC.
ADDRESS: 1050 CROWN PTE. ATLANTA, GA 30338
PHONE: 678-336-8545
FAX:
SAMPLED BY: STACEY BULLOCK
SIGNATURE:

ANALYSIS REQUESTED: Chlordane Totals

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Chlordane Totals	REMARKS	No # of Containers
1	STOCKPILE SI5-01	1-28-14	1130		X		X		1
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

PRESERVATION (See codes)

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	1000 1-29-14	1:	1-31-14 1:00 p
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: DREXEL PROJECT
PROJECT #: 13-A995
SITE ADDRESS: CORDELE, GA.
SEND REPORT TO: A&D. ENV. T. VELVENKOTH
INVOICE TO: EPS
(IF DIFFERENT FROM ABOVE) Point Parkway
1050 Crown Suite 550
ATL GA 30338
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- Standard 5 Business Days
- ~~2 Business Day Rush~~
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 8-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	STOCKPILE SI5-01
Project Name:	Drexel Chemical Company	**Collection Date:**	1/28/2014 11:30:00 AM
Lab ID:	1401L54-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
alpha-Chlordane	3900	190		ug/Kg-dry	186579	100	02/03/2014 16:36	KD
Chlordane	36000	3800		ug/Kg-dry	186579	100	02/03/2014 16:36	KD
gamma-Chlordane	33	1.9		ug/Kg-dry	186579	1	02/05/2014 15:44	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186579	100	02/03/2014 16:36	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186579	100	02/03/2014 16:36	KD
PERCENT MOISTURE D2216								
Percent Moisture	11.4	0		wt%	R260513	1	02/01/2014 09:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Env Plan Spec Work Order Number 1401L54

Checklist completed by Jan B 1/31/14
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 3.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

Analytical Environmental Services, Inc

Date: 8-Feb-14

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401L54

ANALYTICAL QC SUMMARY REPORT

BatchID: 186579

Sample ID: **MB-186579** Client ID: Units: **ug/Kg** Prep Date: **02/03/2014** Run No: **260595**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/03/2014** Seq No: **5477455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
2,4-DDD	BRL	3.3									N
2,4-DDE	BRL	3.3									N
2,4-DDT	BRL	3.3									N
4,4´-DDD	BRL	3.3									
4,4´-DDE	BRL	3.3									
4,4´-DDT	BRL	3.3									
Aldrin	BRL	1.7									
alpha-BHC	BRL	1.7									
alpha-Chlordane	BRL	1.7									
beta-BHC	BRL	1.7									
Chlordane	BRL	33									
Chlorpyrifos	BRL	3.3									N
cis-Chlordane	BRL	1.7									
cis-Nonachlor	BRL	1.7									N
delta-BHC	BRL	1.7									
Dieldrin	BRL	3.3									
Endosulfan I	BRL	1.7									
Endosulfan II	BRL	3.3									
Endosulfan sulfate	BRL	3.3									
Endrin	BRL	3.3									
Endrin aldehyde	BRL	3.3									
Endrin ketone	BRL	3.3									
gamma-BHC	BRL	1.7									
gamma-Chlordane	BRL	1.7									
Heptachlor	BRL	1.7									
Heptachlor epoxide	BRL	1.7									
Hexachlorobenzene	BRL	1.7									N

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401L54

ANALYTICAL QC SUMMARY REPORT

BatchID: 186579

Sample ID: **MB-186579** Client ID: Units: **ug/Kg** Prep Date: **02/03/2014** Run No: **260595**
SampleType: **MBLK** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/03/2014** Seq No: **5477455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Methoxychlor	BRL	17									
Mirex	BRL	1.7									N
Oxychlordane	BRL	1.7									N
Toxaphene	BRL	170									
trans-Chlordane	BRL	1.7									
trans-Nonachlor	BRL	1.7									N
Surr: Decachlorobiphenyl	12.45	0	16.67		74.7	25.2	120				
Surr: Tetrachloro-m-xylene	10.15	0	16.67		60.9	30.5	120				

Sample ID: **LCS-186579** Client ID: Units: **ug/Kg** Prep Date: **02/03/2014** Run No: **260595**
SampleType: **LCS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/03/2014** Seq No: **5477461**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	18.06	3.3	33.33		54.2	44.7	136				
Aldrin	26.84	1.7	33.33		80.5	41.5	118				
Dieldrin	15.57	3.3	33.33		46.7	44.3	133				
Endrin	16.61	3.3	33.33		49.8	43.2	137				
gamma-BHC	29.74	1.7	33.33		89.2	40.3	126				
Heptachlor	31.10	1.7	33.33		93.3	40.1	126				
Surr: Decachlorobiphenyl	13.52	0	16.67		81.1	25.2	120				
Surr: Tetrachloro-m-xylene	11.95	0	16.67		71.7	30.5	120				

Sample ID: **1401L53-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **02/03/2014** Run No: **260690**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/04/2014** Seq No: **5479587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	BRL	370	37.04	878.3	-2370	33.6	126				S
Aldrin	BRL	190	37.04		0	32.6	120				S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

Client: Environmental Planning Specialists, Inc.
Project Name: Drexel Chemical Company
Workorder: 1401L54

ANALYTICAL QC SUMMARY REPORT

BatchID: 186579

Sample ID: **1401L53-001AMS** Client ID: Units: **ug/Kg-dry** Prep Date: **02/03/2014** Run No: **260690**
SampleType: **MS** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/04/2014** Seq No: **5479587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Dieldrin	BRL	370	37.04		0	35.1	124				S
Endrin	BRL	370	37.04	2958	-7990	39.7	129				S
gamma-BHC	BRL	190	37.04		0	35.2	120				S
Heptachlor	566.9	190	37.04		1530	34.9	119				S
Surr: Decachlorobiphenyl	0	0	18.53		0	25.2	120				S
Surr: Tetrachloro-m-xylene	0	0	18.53		0	30.5	120				S

Sample ID: **1401L53-001AMSD** Client ID: Units: **ug/Kg-dry** Prep Date: **02/03/2014** Run No: **260690**
SampleType: **MSD** TestCode: **CHLORINATED PESTICIDES SW8081B** BatchID: **186579** Analysis Date: **02/04/2014** Seq No: **5479588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
4,4´-DDT	BRL	370	37.10	878.3	-2370	33.6	126	0	0	28.1	S
Aldrin	BRL	190	37.10		0	32.6	120	0	0	29.9	S
Dieldrin	BRL	370	37.10		0	35.1	124	0	0	26.6	S
Endrin	BRL	370	37.10	2958	-7970	39.7	129	0	0	27.6	S
gamma-BHC	BRL	190	37.10		0	35.2	120	0	0	28.6	S
Heptachlor	430.2	190	37.10		1160	34.9	119	566.9	27.4	27.7	S
Surr: Decachlorobiphenyl	0	0	18.56		0	25.2	120	0	0	30	S
Surr: Tetrachloro-m-xylene	0	0	18.56		0	30.5	120	0	0	30	S

Qualifiers:

>	Greater than Result value	<	Less than Result value	B	Analyte detected in the associated method blank
BRL	Below reporting limit	E	Estimated (value above quantitation range)	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

AES

February 08, 2014

Timmerly Bullman
Environmental Planning Specialists, Inc.
1050 Crown Pointe Parkway, Suite 550
Atlanta GA 30338

TEL: (404) 315-9113
FAX: (404) 315-8509

RE: Drexel Chemical Company

Dear Timmerly Bullman: Order No: 1401L55

Analytical Environmental Services, Inc. received 1 samples on 1/31/2014 1:00:00 PM for the analyses presented in following report.

No problems were encountered during the analyses. Additionally, all results for the associated Quality Control samples were within EPA and/or AES established limits. Any discrepancies associated with the analyses contained herein will be noted and submitted in the form of a project Case Narrative.
AES' certifications are as follows:
-NELAC/Florida Certification number E87582 for analysis of Environmental Water, soil/hazardous waste, and Drinking Water Microbiology, effective 07/01/13-06/30/14.
-AIHA-LAP, LLC Laboratory ID: 100671 for Industrial Hygiene samples (Organics, Inorganics), Environmental Lead (Paint, Soil, Dust Wipes, Air), and Environmental Microbiology (Fungal) effective until 09/01/15.

These results relate only to the items tested. This report may only be reproduced in full.

If you have any questions regarding these test results, please feel free to call.

James Forrest
Project Manager

ANALYTICAL ENVIRONMENTAL SERVICES, INC
3785 Presidential Parkway, Atlanta GA 30340-3704
TEL.: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: 1401L55

Date: 1/28/14 Page 1 of 1

COMPANY: ENV. PLAN. SPEC.

ADDRESS: 1050 CROWN PTE. ATLANTA, GA 30338

PHONE: 678-336-8545

FAX:

SAMPLED BY: STACEY BULLOCK

SIGNATURE:

ANALYSIS REQUESTED: Chlordane Totals

Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.

#	SAMPLE ID	SAMPLED DATE	SAMPLED TIME	Grab	Composite	Matrix (See codes)	Chlordane Totals	REMARKS	No # of Containers
1	STOCKPILE SI5-03	1-28-14	1135		X		X		1
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

PRESERVATION (See codes)

RELINQUISHED BY	DATE/TIME	RECEIVED BY	DATE/TIME
1:	1-29-14 1000	1: AWL	1-31-14 1.00 C
2:		2:	
3:		3:	

SPECIAL INSTRUCTIONS/COMMENTS:

SHIPMENT METHOD
OUT / / VIA:
IN / / VIA:
CLIENT FedEx UPS MAIL COURIER
GREYHOUND OTHER_____

PROJECT INFORMATION
PROJECT NAME: DREXEL PROJECT
PROJECT #: 13-0995
SITE ADDRESS: CORDELE, GA.
SEND REPORT TO: A+D. ENV. T. VELLENKNETH
INVOICE TO: EPS
(IF DIFFERENT FROM ABOVE)
1050 Crown Point Parkway
Sit 550 Atlanta GA 30338
QUOTE #:_____ PO#:_____

RECEIPT
Total # of Containers

Turnaround Time Request
- Standard 5 Business Days
- ~~2 Business Day Rush~~
- Next Business Day Rush
- Same Day Rush (auth req.)
- Other _____

STATE PROGRAM (if any): _____
E-mail? Y / N; Fax? Y / N
DATA PACKAGE: I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO TAT IS MARKED ON COC AES WILL PROCEED AS STANDARD TAT.
SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A = Air GW = Groundwater SE = Sediment SO = Soil SW = Surface Water W = Water (Blanks) O = Other (specify)
PRESERVATIVE CODES: H+I = Hydrochloric acid + ice I = Ice only N = Nitric acid S+I = Sulfuric acid + ice S/M+I = Sodium Bisulfate/Methanol + ice O = Other (specify) NA = None

White Copy - Original; Yellow Copy - Client

Analytical Environmental Services, Inc **Date:** 8-Feb-14

Client:	Environmental Planning Specialists, Inc.	**Client Sample ID:**	STOCKPILE SI5-03
Project Name:	Drexel Chemical Company	**Collection Date:**	1/28/2014 11:35:00 AM
Lab ID:	1401L55-001	**Matrix:**	Soil

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed	Analyst
CHLORINATED PESTICIDES SW8081B				**(SW3550C)**				
alpha-Chlordane	11000	1900		ug/Kg-dry	186579	1000	02/03/2014 16:58	KD
Chlordane	100000	38000		ug/Kg-dry	186579	1000	02/03/2014 16:58	KD
gamma-Chlordane	19000	1900		ug/Kg-dry	186579	1000	02/03/2014 16:58	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186579	100	02/03/2014 16:48	KD
Surr: Decachlorobiphenyl	0	25.2-120	S	%REC	186579	1000	02/03/2014 16:58	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186579	100	02/03/2014 16:48	KD
Surr: Tetrachloro-m-xylene	0	30.5-120	S	%REC	186579	1000	02/03/2014 16:58	KD
PERCENT MOISTURE D2216								
Percent Moisture	11.8	0		wt%	R260513	1	02/01/2014 09:30	EH

Qualifiers:

*	Value exceeds maximum contaminant level	E	Estimated (value above quantitation range)
BRL	Below reporting limit	S	Spike Recovery outside limits due to matrix
H	Holding times for preparation or analysis exceeded	Narr	See case narrative
N	Analyte not NELAC certified	NC	Not confirmed
B	Analyte detected in the associated method blank	<	Less than Result value
>	Greater than Result value	J	Estimated value detected below Reporting Limit

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Env Planning Specialist Work Order Number 1401L55

Checklist completed by [signature] 1/31/14
Signature Date

Carrier name: FedEx ✓ UPS __ Courier __ Client __ US Mail __ Other _____

Shipping container/cooler in good condition? Yes ✓ No __ Not Present __

Custody seals intact on shipping container/cooler? Yes __ No __ Not Present ✓

Custody seals intact on sample bottles? Yes __ No __ Not Present ✓

Container/Temp Blank temperature in compliance? (4°C±2)* Yes ✓ No __

Cooler #1 7.2 Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler#5 _____ Cooler #6 _____

Chain of custody present? Yes ✓ No __

Chain of custody signed when relinquished and received? Yes ✓ No __

Chain of custody agrees with sample labels? Yes ✓ No __

Samples in proper container/bottle? Yes ✓ No __

Sample containers intact? Yes ✓ No __

Sufficient sample volume for indicated test? Yes ✓ No __

All samples received within holding time? Yes ✓ No __

Was TAT marked on the COC? Yes ✓ No __

Proceed with Standard TAT as per project history? Yes __ No __ Not Applicable ✓

Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes __ No __

Water - pH acceptable upon receipt? Yes __ No __ Not Applicable ✓

Adjusted? _____ Checked by _____

Sample Condition: Good ✓ Other(Explain) _____

(For diffusive samples or AIHA lead) Is a known blank included? Yes __ No ✓

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

\L\Quality Assurance\Checklists Procedures Sign-Off Templates\Checklists\Sample Receipt Checklists\Sample_Cooler_Receipt_Checklist

CLIENT: Environmental Planning Specialists, Inc.
Work Order: 1401L55
Project: Drexel Chemical Company

ANALYTICAL QC SUMMARY REPORT

TestCode: CHLORINATED PESTICIDES SW8081B

Sample ID: **MB-186579** SampType: **MBLK** Batch ID: **186579** Units: **ug/Kg** Prep Date: **2/3/2014** RunNo: **260595**
Client ID: TestCode: **CHLORINATED PESTICIDES SW8081B** Analysis Date: **2/3/2014** SeqNo: **5477455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,4-DDD	BRL	3.3	0	0	0	0	0	0	0		
2,4-DDE	BRL	3.3	0	0	0	0	0	0	0		
2,4-DDT	BRL	3.3	0	0	0	0	0	0	0		
4,4´-DDD	BRL	3.3	0	0	0	0	0	0	0		
4,4´-DDE	BRL	3.3	0	0	0	0	0	0	0		
4,4´-DDT	BRL	3.3	0	0	0	0	0	0	0		
Aldrin	BRL	1.7	0	0	0	0	0	0	0		
alpha-BHC	BRL	1.7	0	0	0	0	0	0	0		
alpha-Chlordane	BRL	1.7	0	0	0	0	0	0	0		
beta-BHC	BRL	1.7	0	0	0	0	0	0	0		
Chlordane	BRL	33	0	0	0	0	0	0	0		
Chlorpyrifos	BRL	3.3	0	0	0	0	0	0	0		
cis-Chlordane	BRL	1.7	0	0	0	0	0	0	0		
cis-Nonachlor	BRL	1.7	0	0	0	0	0	0	0		
delta-BHC	BRL	1.7	0	0	0	0	0	0	0		
Dieldrin	BRL	3.3	0	0	0	0	0	0	0		
Endosulfan I	BRL	1.7	0	0	0	0	0	0	0		
Endosulfan II	BRL	3.3	0	0	0	0	0	0	0		
Endosulfan sulfate	BRL	3.3	0	0	0	0	0	0	0		
Endrin	BRL	3.3	0	0	0	0	0	0	0		
Endrin aldehyde	BRL	3.3	0	0	0	0	0	0	0		
Endrin ketone	BRL	3.3	0	0	0	0	0	0	0		
gamma-BHC	BRL	1.7	0	0	0	0	0	0	0		
gamma-Chlordane	BRL	1.7	0	0	0	0	0	0	0		
Heptachlor	BRL	1.7	0	0	0	0	0	0	0		
Heptachlor epoxide	BRL	1.7	0	0	0	0	0	0	0		
Hexachlorobenzene	BRL	1.7	0	0	0	0	0	0	0		

Qualifiers:

<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: Environmental Planning Specialists, Inc.
Work Order: 1401L55
Project: Drexel Chemical Company

ANALYTICAL QC SUMMARY REPORT

TestCode: CHLORINATED PESTICIDES SW8081B

Sample ID: **MB-186579** SampType: **MBLK** Batch ID: **186579** Units: **ug/Kg** Prep Date: **2/3/2014** RunNo: **260595**
Client ID: TestCode: **CHLORINATED PESTICIDES SW8081B** Analysis Date: **2/3/2014** SeqNo: **5477455**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methoxychlor	BRL	17	0	0	0	0	0	0	0		
Mirex	BRL	1.7	0	0	0	0	0	0	0		
Oxychlordane	BRL	1.7	0	0	0	0	0	0	0		
Toxaphene	BRL	170	0	0	0	0	0	0	0		
trans-Chlordane	BRL	1.7	0	0	0	0	0	0	0		
trans-Nonachlor	BRL	1.7	0	0	0	0	0	0	0		
Surr: Decachlorobiphenyl	12.45	0	16.67	0	74.7	25.2	120	0	0		
Surr: Tetrachloro-m-xylene	10.15	0	16.67	0	60.9	30.5	120	0	0		

Sample ID: **LCS-186579** SampType: **LCS** Batch ID: **186579** Units: **ug/Kg** Prep Date: **2/3/2014** RunNo: **260595**
Client ID: TestCode: **CHLORINATED PESTICIDES SW8081B** Analysis Date: **2/3/2014** SeqNo: **5477461**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	18.06	3.3	33.33	0	54.2	44.7	136	0	0		
Aldrin	26.84	1.7	33.33	0	80.5	41.5	118	0	0		
Dieldrin	15.57	3.3	33.33	0	46.7	44.3	133	0	0		
Endrin	16.61	3.3	33.33	0	49.8	43.2	137	0	0		
gamma-BHC	29.74	1.7	33.33	0	89.2	40.3	126	0	0		
Heptachlor	31.1	1.7	33.33	0	93.3	40.1	126	0	0		
Surr: Decachlorobiphenyl	13.52	0	16.67	0	81.1	25.2	120	0	0		
Surr: Tetrachloro-m-xylene	11.95	0	16.67	0	71.7	30.5	120	0	0		

Sample ID: **1401L53-001AMS** SampType: **MS** Batch ID: **186579** Units: **ug/Kg-dry** Prep Date: **2/3/2014** RunNo: **260690**
Client ID: TestCode: **CHLORINATED PESTICIDES SW8081B** Analysis Date: **2/4/2014** SeqNo: **5479587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	BRL	370	37.04	878.3	-2370	33.6	126	0	0		S
Aldrin	BRL	190	37.04	0	0	32.6	120	0	0		S

Qualifiers:

<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

CLIENT: Environmental Planning Specialists, Inc.
Work Order: 1401L55
Project: Drexel Chemical Company

ANALYTICAL QC SUMMARY REPORT

TestCode: CHLORINATED PESTICIDES SW8081B

Sample ID: **1401L53-001AMS** SampType: **MS** Batch ID: **186579** Units: **ug/Kg-dry** Prep Date: **2/3/2014** RunNo: **260690**
Client ID: TestCode: **CHLORINATED PESTICIDES SW8081B** Analysis Date: **2/4/2014** SeqNo: **5479587**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dieldrin	BRL	370	37.04	0	0	35.1	124	0	0		S
Endrin	BRL	370	37.04	2958	-7990	39.7	129	0	0		S
gamma-BHC	BRL	190	37.04	0	0	35.2	120	0	0		S
Heptachlor	566.9	190	37.04	0	1530	34.9	119	0	0		S
Surr: Decachlorobiphenyl	BRL	0	18.53	0	0	25.2	120	0	0		S
Surr: Tetrachloro-m-xylene	BRL	0	18.53	0	0	30.5	120	0	0		S

Sample ID: **1401L53-001AMSD** SampType: **MSD** Batch ID: **186579** Units: **ug/Kg-dry** Prep Date: **2/3/2014** RunNo: **260690**
Client ID: TestCode: **CHLORINATED PESTICIDES SW8081B** Analysis Date: **2/4/2014** SeqNo: **5479588**

Analyte	Result	RPT Limit	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4,4´-DDT	BRL	370	37.1	878.3	-2370	33.6	126	0	0	28.1	S
Aldrin	BRL	190	37.1	0	0	32.6	120	0	0	29.9	S
Dieldrin	BRL	370	37.1	0	0	35.1	124	0	0	26.6	S
Endrin	BRL	370	37.1	2958	-7970	39.7	129	0	0	27.6	S
gamma-BHC	BRL	190	37.1	0	0	35.2	120	0	0	28.6	S
Heptachlor	430.2	190	37.1	0	1160	34.9	119	566.9	27.4	27.7	S
Surr: Decachlorobiphenyl	BRL	0	18.56	0	0	25.2	120	0	0	30	S
Surr: Tetrachloro-m-xylene	BRL	0	18.56	0	0	30.5	120	0	0	30	S

Qualifiers:

<	Less than Result value	>	Greater than Result value	B	Analyte detected in the associated Method Blank
BRL	Below Reporting Limit	E	Estimated value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Estimated value detected below Reporting Limit	N	Analyte not NELAC certified	R	RPD outside limits due to matrix
Rpt Lim	Reporting Limit	S	Spike Recovery outside limits due to matrix		

APPENDIX E

TRUCK LOGS

Date	Truck Number	Weight	Manifest Number	Stockpile #
12/12/2013	S55	15.46	13082	SI 15
12/12/2013	246	16.78	13083	SI 15
12/12/2013	323	16.53	13084	SI 15
12/12/2013	M01	14.53	13085	SI 15
12/12/2013	CJ1	16.18	13086	SI 15
12/12/2013	S55	15.72	13087	SI 15
12/12/2013	M01	15.53	13088	SI 15
12/12/2013	323	17.97	13089	SI 15
12/12/2013	CJ1	18.40	13090	SI 15
12/12/2013	246	19.20	13091	SI 15
12/12/2013	S55	16.54	13092	SI 15
12/12/2013	M01	16.28	13093	SI 15
12/12/2013	CJ1	17.15	13094	SI 15
12/12/2013	323	18.82	13095	SI 15
12/12/2013	246	17.82	13096	SI 15
12/12/2013	S55	16.86	13097	SI 15
12/12/2013	M01	16.86	13098	SI 15
12/12/2013	323	17.69	13099	SI 15
12/12/2013	CJ1	17.23	13100	SI 15
12/12/2013	246	18.30	13101	SI 15
12/12/2013	S55	16.20	13102	SI 15
12/12/2013	M01	14.54	13103	SI 15
12/12/2013	323	17.80	13104	SI 15
12/12/2013	246	16.24	13105	SI 15
12/12/2013	CJ1	17.30	13106	SI 15
12/12/2013	S55	16.41	13107	SI 15
TOTAL		**438.34**		

Date	Truck Number	Weight	Manifest Number	Stockpile #
12/12/2013	M01	17.77	13108	SI 20
12/12/2013	S55	18.53	13109	SI 20
12/12/2013	CJ1	18.77	13110	SI 20
12/12/2013	246	19.87	13111	SI 20
12/12/2013	323	20.75	13112	SI 20
12/12/2013	M01	17.26	13113	SI 20
12/12/2013	323	20.87	13114	SI 20
12/12/2013	CJ1	15.89	13115	SI 20
12/12/2013	246	20.22	13116	SI 20
TOTAL		**169.93**		

Date	Truck Number	Weight	Manifest Number	Stockpile #
12/13/2013	MO1	17.24	13117	SI 20
12/13/2013	246	18.71	13118	SI 20
12/13/2013	S55	17.79	13119	SI 20
12/13/2013	323	16.53	13120	SI 20
12/13/2013	CJ1	19.47	13121	SI 20
12/13/2013	246	19.71	13122	SI 20
12/13/2013	MO1	18.05	13123	SI 20
12/13/2013	S55	18.46	13124	SI 20
12/13/2013	323	20.22	13125	SI 20
12/13/2013	CJ1	19.21	13126	SI 20
12/13/2013	MO1	19.36	13127	SI 20
12/13/2013	246	20.94	13128	SI 20
12/13/2013	S55	18.06	13129	SI 20
12/13/2013	323	21.53	13130	SI 20
12/13/2013	CJ1	17.25	13131	SI 20
12/13/2013	MO1	18.07	13132	SI 20
12/13/2013	246	20.75	13133	SI 20
12/13/2013	323	19.69	13134	SI 20
12/13/2013	S55	18.52	13135	SI 20
12/13/2013	246	19.66	13136	SI 20
12/13/2013	MO1	14.35	13137	SI 20
12/13/2013	CJ1	17.95	13138	SI 20
12/13/2013	S55	15.33	13139	SI 20
12/13/2013	323	15.76	13140	SI 20
TOTAL		**442.61**		

Date	Truck Number	Weight	Manifest Number	Stockpile #
1/22/2014	FT 822	12.08	13159	S I9
1/22/2014	HAK 32	18.94	13153	SI 9
1/22/2014	1925	13.29	13165	SI 9
1/22/2014	822	17.31	13160	SI 9
1/22/2014	822	15.09	13151	SI 9
1/22/2014	246	16.51	13146	SI 9
1/22/2014	245	14.07	13152	SI 9
1/22/2014	CJ 1	17.92	13145	SI 9
1/22/2014	1926	17.59	13155	SI 9
1/22/2014	245	11.88	13160	SI 9
1/22/2014	HAK 32	11.79	13164	SI 9
1/22/2014	1925	18.17	13162	SI 9
1/22/2014	1925	19.03	13141	SI 9
1/22/2014	SPC 245	15.34	13144	SI 9
1/22/2014	HAK 32	15.16	13149	SI 9
1/22/2014	1925	14.01	13140	SI 9
1/23/2014	1925	14.65	13175	SI 9
1/23/2014	1925	15.90	13177	SI 9
1/23/2014	HAK 32	14.35	13163	SI 9
1/23/2014	1925	17.06	13167	SI 9
1/23/2014	1925	17.22	13181	SI 9
1/23/2014	HAK 32	13.74	13142	SI 9
1/23/2014	HAK 32	15.02	13179	SI 9
1/23/2014	CJ 1	14.94	13140	SI 9
TOTAL		**371.06**		

Date	Truck Number	Weight	Manifest Number	Stockpile #
1/23/2014	HAK 32	16.96	13180	S I9
1/23/2014	1925	17.61	13178	SI 9
1/23/2014	1925	16.91	14095	SI 9
1/23/2014	245	16.72	13154	SI 9
1/23/2014	FT 822	14.76	13166	SI 9
1/23/2014	CJ 1	16.24	13168	SI 9
1/23/2014	HAK 32	16.81	13174	SI 9
1/23/2014	1925	13.28	13171	SI 9
1/23/2014	HAK 32	16.29	13169	SI 9
				SI 9
1/24/2014	822	16.66	14091	SI 9
1/24/2014	1925	17.25	14094	SI 9
1/24/2014	HAK 32	16.91	14093	SI 9
1/24/2014	HAK 32	13.72	14092	SI 9
1/24/2014	245	17.17	14090	SI 9
1/24/2014	HAK 32	15.58	14087	SI 9
1/24/2014	822	18.12	14085	SI 9
1/24/2014	1925	19.48	14089	SI 9
1/24/2014	245	15.79	14086	SI 9
1/24/2014	CJ 1	17.85	14088	SI 9
1/24/2014	CJ 1	15.64	14063	SI 9
1/24/2014	HAK 32	15.67	13176	SI 9
1/24/2014	1925	15.99	14066	SI 9
1/24/2014	HAK 32	14.64	14065	SI 9
TOTAL		**376.05**		

Date	Truck Number	Weight	Manifest Number	Stockpile #
1/24/2014	245	15.48	14062	S I9
1/24/2014	822	15.12	14061	SI 9
1/22/2014	1	15.20	13150	SI 9
1/22/2014	75	16.81	13147	SI 9
1/22/2014	hak32	13.74	13161	SI 9
1/22/2014	SBC245	14.12	13156	SI 9
1/22/2014	822	14.25	13157	SI 9
1/23/2014	SBC245	15.21	13172	SI 9
1/23/2014	822	14.46	13173	SI 9
				SI 9
1/24/2014	822	17.68	14084	SI 9
1/24/2014	hak32	8.09	14033	SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
				SI 9
TOTAL		**160.16**		

APPENDIX F

PRO-UCL OUTPUT

UCL Statistics for Uncensored Full Data Sets

User Selected Options

Date/Time of Computation	########
From File	WorkSheet.xls
Full Precision	OFF
Confidence Coefficient	95%
Number of Bootstrap Operations	2000

As0-2

General Statistics

Total Number of Observations	582	Number of Distinct Observations	582
		Number of Missing Observations	0
Minimum	0.232	Mean	2.244
Maximum	15.86	Median	1.957
SD	1.421	Std. Error of Mean	0.0589
Coefficient of Variation	0.634	Skewness	3.151

Normal GOF Test

Shapiro Wilk Test Statistic	0.79	Shapiro Wilk GOF Test
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.149	Lilliefors GOF Test
5% Lilliefors Critical Value	0.0367	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	2.341	95% Adjusted-CLT UCL (Chen-1995)	2.349
		95% Modified-t UCL (Johnson-1978)	2.342

Gamma GOF Test

A-D Test Statistic	4.689	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.76	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.0771	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.0388	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	3.414	k star (bias corrected MLE)	3.398
Theta hat (MLE)	0.657	Theta star (bias corrected MLE)	0.66
nu hat (MLE)	3974	nu star (bias corrected)	3955
MLE Mean (bias corrected)	2.244	MLE Sd (bias corrected)	1.217
		Approximate Chi Square Value (0.05)	3810
Adjusted Level of Significance	0.0496	Adjusted Chi Square Value	3809

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	2.329	95% Adjusted Gamma UCL (use when n<50)	2.329

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.976	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0.00151	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.0587	Lilliefors Lognormal GOF Test

5% Lilliefors Critical Value	0.0367	Data Not Lognormal at 5% Significance Level	
Data Not Lognormal at 5% Significance Level			

Lognormal Statistics

Minimum of Logged Data	-1.463	Mean of logged Data	0.655
Maximum of Logged Data	2.764	SD of logged Data	0.558

Assuming Lognormal Distribution

95% H-UCL	2.345	90% Chebyshev (MVUE) UCL	2.415
95% Chebyshev (MVUE) UCL	2.491	97.5% Chebyshev (MVUE) UCL	2.596
99% Chebyshev (MVUE) UCL	2.803		

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	2.341	95% Jackknife UCL	2.341
95% Standard Bootstrap UCL	2.339	95% Bootstrap-t UCL	2.356
95% Hall's Bootstrap UCL	2.351	95% Percentile Bootstrap UCL	2.341
95% BCA Bootstrap UCL	2.35		
90% Chebyshev(Mean, Sd) UCL	2.42	95% Chebyshev(Mean, Sd) UCL	2.5
97.5% Chebyshev(Mean, Sd) UCL	2.612	99% Chebyshev(Mean, Sd) UCL	2.83

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	2.5

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Cd0-2

General Statistics

Total Number of Observations	582	Number of Distinct Observations	582
		Number of Missing Observations	0
Minimum	0.107	Mean	1.555
Maximum	33.3	Median	0.383
SD	3.318	Std. Error of Mean	0.138
Coefficient of Variation	2.133	Skewness	4.995

Normal GOF Test

Shapiro Wilk Test Statistic	0.469	Shapiro Wilk GOF Test	
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.331	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.0367	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	1.782	95% Adjusted-CLT UCL (Chen-1995)	1.812
		95% Modified-t UCL (Johnson-1978)	1.787

Gamma GOF Test

A-D Test Statistic	33.39	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.814	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.17	Kolmogrov-Smirnoff Gamma GOF Test	
5% K-S Critical Value	0.0405	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.582	k star (bias corrected MLE)	0.58
Theta hat (MLE)	2.674	Theta star (bias corrected MLE)	2.682
nu hat (MLE)	677.1	nu star (bias corrected)	674.9
MLE Mean (bias corrected)	1.555	MLE Sd (bias corrected)	2.042
		Approximate Chi Square Value (0.05)	615.6
Adjusted Level of Significance	0.0496	Adjusted Chi Square Value	615.5

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	1.705	95% Adjusted Gamma UCL (use when n<50)	1.705

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.895	Shapiro Wilk Lognormal GOF Test	
5% Shapiro Wilk P Value	0	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.12	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.0367	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-2.233	Mean of logged Data	-0.625
Maximum of Logged Data	3.506	SD of logged Data	1.355

Assuming Lognormal Distribution

95% H-UCL	1.536	90% Chebyshev (MVUE) UCL	1.646
95% Chebyshev (MVUE) UCL	1.786	97.5% Chebyshev (MVUE) UCL	1.981
99% Chebyshev (MVUE) UCL	2.363		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	1.781	95% Jackknife UCL	1.782
95% Standard Bootstrap UCL	1.777	95% Bootstrap-t UCL	1.817
95% Hall's Bootstrap UCL	1.837	95% Percentile Bootstrap UCL	1.796
95% BCA Bootstrap UCL	1.807		
90% Chebyshev(Mean, Sd) UCL	1.968	95% Chebyshev(Mean, Sd) UCL	2.155
97.5% Chebyshev(Mean, Sd) UCL	2.414	99% Chebyshev(Mean, Sd) UCL	2.924

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	2.155

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

As5-15

General Statistics

Total Number of Observations	582	Number of Distinct Observations	582
		Number of Missing Observations	0
Minimum	0.579	Mean	2.444
Maximum	20.97	Median	2.354
SD	1.339	Std. Error of Mean	0.0555
Coefficient of Variation	0.548	Skewness	6.574

Normal GOF Test

Shapiro Wilk Test Statistic	0.633	Shapiro Wilk GOF Test
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.191	Lilliefors GOF Test
5% Lilliefors Critical Value	0.0367	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	2.536	95% Adjusted-CLT UCL (Chen-1995)	2.552
		95% Modified-t UCL (Johnson-1978)	2.538

Gamma GOF Test

A-D Test Statistic	11.62	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.756	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.11	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.0386	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	5.856	k star (bias corrected MLE)	5.827
Theta hat (MLE)	0.417	Theta star (bias corrected MLE)	0.419
nu hat (MLE)	6817	nu star (bias corrected)	6783
MLE Mean (bias corrected)	2.444	MLE Sd (bias corrected)	1.013
		Approximate Chi Square Value (0.05)	6592
Adjusted Level of Significance	0.0496	Adjusted Chi Square Value	6592

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	2.515	95% Adjusted Gamma UCL (use when n<50)	2.515

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.946	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.0948	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.0367	Data Not Lognormal at 5% Significance Level

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-0.546	Mean of logged Data	0.806
Maximum of Logged Data	3.043	SD of logged Data	0.404

Assuming Lognormal Distribution

95% H-UCL	2.502	90% Chebyshev (MVUE) UCL	2.556
95% Chebyshev (MVUE) UCL	2.614	97.5% Chebyshev (MVUE) UCL	2.694

99% Chebyshev (MVUE) UCL	2.85

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	2.536	95% Jackknife UCL	2.536
95% Standard Bootstrap UCL	2.538	95% Bootstrap-t UCL	2.56
95% Hall's Bootstrap UCL	2.567	95% Percentile Bootstrap UCL	2.536
95% BCA Bootstrap UCL	2.546		
90% Chebyshev(Mean, Sd) UCL	2.611	95% Chebyshev(Mean, Sd) UCL	2.686
97.5% Chebyshev(Mean, Sd) UCL	2.791	99% Chebyshev(Mean, Sd) UCL	2.997

Suggested UCL to Use

95% Student's-t UCL	2.536	or 95% Modified-t UCL	2.538

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Chlor5-15

General Statistics

Total Number of Observations	582	Number of Distinct Observations	582
		Number of Missing Observations	0
Minimum	0.00199	Mean	0.0798
Maximum	2.684	Median	0.053
SD	0.166	Std. Error of Mean	0.00689
Coefficient of Variation	2.084	Skewness	9.489

Normal GOF Test

Shapiro Wilk Test Statistic	0.376	Shapiro Wilk GOF Test
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.32	Lilliefors GOF Test
5% Lilliefors Critical Value	0.0367	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	0.0912	95% Adjusted-CLT UCL (Chen-1995)	0.0941
		95% Modified-t UCL (Johnson-1978)	0.0916

Gamma GOF Test

A-D Test Statistic	9.647	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.794	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.133	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.04	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.809	k star (bias corrected MLE)	0.806
Theta hat (MLE)	0.0987	Theta star (bias corrected MLE)	0.099

nu hat (MLE)	941.8	nu star (bias corrected)	938.2
MLE Mean (bias corrected)	0.0798	MLE Sd (bias corrected)	0.0889
		Approximate Chi Square Value (0.05)	868.1
Adjusted Level of Significance	0.0496	Adjusted Chi Square Value	868

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	0.0863	95% Adjusted Gamma UCL (use when n<50)	0.0863

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.943	Shapiro Wilk Lognormal GOF Test
5% Shapiro Wilk P Value	0	Data Not Lognormal at 5% Significance Level
Lilliefors Test Statistic	0.113	Lilliefors Lognormal GOF Test
5% Lilliefors Critical Value	0.0367	Data Not Lognormal at 5% Significance Level
Data Not Lognormal at 5% Significance Level		

Lognormal Statistics

Minimum of Logged Data	-6.22	Mean of logged Data	-3.26
Maximum of Logged Data	0.987	SD of logged Data	1.259

Assuming Lognormal Distribution

95% H-UCL	0.0957	90% Chebyshev (MVUE) UCL	0.102
95% Chebyshev (MVUE) UCL	0.11	97.5% Chebyshev (MVUE) UCL	0.121
99% Chebyshev (MVUE) UCL	0.143		

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	0.0912	95% Jackknife UCL	0.0912
95% Standard Bootstrap UCL	0.091	95% Bootstrap-t UCL	0.096
95% Hall's Bootstrap UCL	0.1	95% Percentile Bootstrap UCL	0.0912
95% BCA Bootstrap UCL	0.0953		
90% Chebyshev(Mean, Sd) UCL	0.1	95% Chebyshev(Mean, Sd) UCL	0.11
97.5% Chebyshev(Mean, Sd) UCL	0.123	99% Chebyshev(Mean, Sd) UCL	0.148

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	0.11

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Cu5-15

General Statistics

Total Number of Observations	582	Number of Distinct Observations	582
		Number of Missing Observations	0
Minimum	0.404	Mean	10.04
Maximum	1226	Median	5.242
SD	54.33	Std. Error of Mean	2.252
Coefficient of Variation	5.413	Skewness	19.89

Normal GOF Test

Shapiro Wilk Test Statistic	0.118	Shapiro Wilk GOF Test	
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.43	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.0367	Data Not Normal at 5% Significance Level	

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	13.75	95% Adjusted-CLT UCL (Chen-1995)	15.72
		95% Modified-t UCL (Johnson-1978)	14.06

Gamma GOF Test

A-D Test Statistic	1.72E+28	Anderson-Darling Gamma GOF Test	
5% A-D Critical Value	0.791	Data Not Gamma Distributed at 5% Significance Level	
K-S Test Statistic	0.275	Kolmogrov-Smirnoff Gamma GOF Test	
5% K-S Critical Value	0.0399	Data Not Gamma Distributed at 5% Significance Level	

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	0.869	k star (bias corrected MLE)	0.865
Theta hat (MLE)	11.55	Theta star (bias corrected MLE)	11.6
nu hat (MLE)	1011	nu star (bias corrected)	1007
MLE Mean (bias corrected)	10.04	MLE Sd (bias corrected)	10.79
		Approximate Chi Square Value (0.05)	934.4
Adjusted Level of Significance	0.0496	Adjusted Chi Square Value	934.3

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	10.82	95% Adjusted Gamma UCL (use when n<50)	10.82

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.912	Shapiro Wilk Lognormal GOF Test	
5% Shapiro Wilk P Value	0	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.113	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.0367	Data Not Lognormal at 5% Significance Level	

Data Not Lognormal at 5% Significance Level

Lognormal Statistics

Minimum of Logged Data	-0.907	Mean of logged Data	1.63
Maximum of Logged Data	7.112	SD of logged Data	0.782

Assuming Lognormal Distribution

95% H-UCL	7.385	90% Chebyshev (MVUE) UCL	7.694
95% Chebyshev (MVUE) UCL	8.042	97.5% Chebyshev (MVUE) UCL	8.525
99% Chebyshev (MVUE) UCL	9.474		

Nonparametric Distribution Free UCL Statistics

Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	13.74	95% Jackknife UCL	13.75
95% Standard Bootstrap UCL	13.64	95% Bootstrap-t UCL	21.59
95% Hall's Bootstrap UCL	25.72	95% Percentile Bootstrap UCL	14.18
95% BCA Bootstrap UCL	17.05		

90% Chebyshev(Mean, Sd) UCL	16.79	95% Chebyshev(Mean, Sd) UCL	19.85
97.5% Chebyshev(Mean, Sd) UCL	24.1	99% Chebyshev(Mean, Sd) UCL	32.44

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	19.85

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Zn5-15

General Statistics

Total Number of Observations	581	Number of Distinct Observations	581
		Number of Missing Observations	1
Minimum	2.97	Mean	11.3
Maximum	568.9	Median	7.814
SD	27.78	Std. Error of Mean	1.153
Coefficient of Variation	2.458	Skewness	15.78

Normal GOF Test

Shapiro Wilk Test Statistic	0.184	Shapiro Wilk GOF Test
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level
Lilliefors Test Statistic	0.382	Lilliefors GOF Test
5% Lilliefors Critical Value	0.0368	Data Not Normal at 5% Significance Level

Data Not Normal at 5% Significance Level

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	13.2	95% Adjusted-CLT UCL (Chen-1995)	14.01
		95% Modified-t UCL (Johnson-1978)	13.33

Gamma GOF Test

A-D Test Statistic	1.72E+28	Anderson-Darling Gamma GOF Test
5% A-D Critical Value	0.769	Data Not Gamma Distributed at 5% Significance Level
K-S Test Statistic	0.178	Kolmogrov-Smirnoff Gamma GOF Test
5% K-S Critical Value	0.0391	Data Not Gamma Distributed at 5% Significance Level

Data Not Gamma Distributed at 5% Significance Level

Gamma Statistics

k hat (MLE)	1.832	k star (bias corrected MLE)	1.823
Theta hat (MLE)	6.171	Theta star (bias corrected MLE)	6.199
nu hat (MLE)	2128	nu star (bias corrected)	2119
MLE Mean (bias corrected)	11.3	MLE Sd (bias corrected)	8.37
		Approximate Chi Square Value (0.05)	2013
Adjusted Level of Significance	0.0496	Adjusted Chi Square Value	2013

Assuming Gamma Distribution

95% Approximate Gamma UCL (use when n>=50))	11.9	95% Adjusted Gamma UCL (use when n<50)	11.9

Lognormal GOF Test

Shapiro Wilk Test Statistic	0.875	Shapiro Wilk Lognormal GOF Test

5% Shapiro Wilk P Value	0	Data Not Lognormal at 5% Significance Level	
Lilliefors Test Statistic	0.0782	Lilliefors Lognormal GOF Test	
5% Lilliefors Critical Value	0.0368	Data Not Lognormal at 5% Significance Level	
Data Not Lognormal at 5% Significance Level			

Lognormal Statistics

Minimum of Logged Data	1.089	Mean of logged Data	2.128
Maximum of Logged Data	6.344	SD of logged Data	0.553

Assuming Lognormal Distribution

95% H-UCL	10.2	90% Chebyshev (MVUE) UCL	10.51
95% Chebyshev (MVUE) UCL	10.83	97.5% Chebyshev (MVUE) UCL	11.29
99% Chebyshev (MVUE) UCL	12.18		

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	13.2	95% Jackknife UCL	13.2
95% Standard Bootstrap UCL	13.17	95% Bootstrap-t UCL	15.69
95% Hall's Bootstrap UCL	19.36	95% Percentile Bootstrap UCL	13.35
95% BCA Bootstrap UCL	14.1		
90% Chebyshev(Mean, Sd) UCL	14.76	95% Chebyshev(Mean, Sd) UCL	16.33
97.5% Chebyshev(Mean, Sd) UCL	18.5	99% Chebyshev(Mean, Sd) UCL	22.77

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	16.33

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Thallium_5-15

General Statistics

Total Number of Observations	582	Number of Distinct Observations	528
		Number of Missing Observations	0
Minimum	0	Mean	2.022
Maximum	4.718	Median	2.017
SD	1.095	Std. Error of Mean	0.0454
Coefficient of Variation	0.541	Skewness	-0.127

Normal GOF Test

Shapiro Wilk Test Statistic	0.95	Shapiro Wilk GOF Test	
5% Shapiro Wilk P Value	0	Data Not Normal at 5% Significance Level	
Lilliefors Test Statistic	0.0726	Lilliefors GOF Test	
5% Lilliefors Critical Value	0.0367	Data Not Normal at 5% Significance Level	
Data Not Normal at 5% Significance Level			

Assuming Normal Distribution

95% Normal UCL		95% UCLs (Adjusted for Skewness)	
95% Student's-t UCL	2.097	95% Adjusted-CLT UCL (Chen-1995)	2.097
		95% Modified-t UCL (Johnson-1978)	2.097

Gamma Statistics Not Available
Lognormal Statistics Not Available

Nonparametric Distribution Free UCL Statistics
Data do not follow a Discernible Distribution (0.05)

Nonparametric Distribution Free UCLs

95% CLT UCL	2.097	95% Jackknife UCL	2.097
95% Standard Bootstrap UCL	2.096	95% Bootstrap-t UCL	2.094
95% Hall's Bootstrap UCL	2.097	95% Percentile Bootstrap UCL	2.095
95% BCA Bootstrap UCL	2.096		
90% Chebyshev(Mean, Sd) UCL	2.158	95% Chebyshev(Mean, Sd) UCL	2.22
97.5% Chebyshev(Mean, Sd) UCL	2.306	99% Chebyshev(Mean, Sd) UCL	2.474

Suggested UCL to Use

95% Chebyshev (Mean, Sd) UCL	2.22

Note: Suggestions regarding the selection of a 95% UCL are provided to help the user to select the most appropriate 95% UCL.
These recommendations are based upon the results of the simulation studies summarized in Singh, Singh, and Iaci (2002)
and Singh and Singh (2003). However, simulations results will not cover all Real World data sets.
For additional insight the user may want to consult a statistician.

Note: For highly negatively-skewed data, confidence limits (e.g., Chen, Johnson, Lognormal, and Gamma) may not be
reliable. Chen's and Johnson's methods provide adjustments for positvely skewed data sets.