

Quarterly report, second quarter 2018

RCRA Corrective Action Program
Boeing Renton Facility
Project # 0088880100.2018 The Boeing Company

Prepared for:

The Boeing Company Seattle, Washington

August 15, 2018



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Prepared for:

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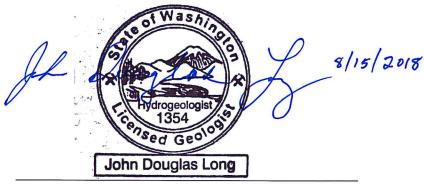
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August 15, 2018

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Expiration Date: May 23, 2019







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1.0 Introduction

This report provides progress reporting in conformance with Section VII.B.1 of Agreed Order No. 8191 (Order) and summarizes cleanup actions and monitoring conducted at the Boeing Renton Facility (the Facility) during the second quarter 2018. This work is required under the Resource Conservation and Recovery Act (RCRA) Corrective Action Program being performed at the Boeing Renton Facility in Renton, Washington. Corrective action activities are performed for those solid waste management units (SWMUs), areas of concern (AOCs), and other areas where cleanup actions are ongoing. Monitoring, cleanup activities, and reporting are being conducted as part of the final remedy implementation described in the Engineering Design Report (EDR) (AMEC, 2014). The groundwater monitoring program is detailed in the Second Addendum to the Compliance Monitoring Plan (Amec Foster Wheeler, 2017) which contains changes to the revised Compliance Monitoring Plan (Amec Foster Wheeler, 2016a) that superseded the original plan presented in Appendix D of the EDR (AMEC, 2014).

Groundwater monitoring and final cleanup action implementation are being conducted at the following areas (the ongoing remedies for each of these areas are noted in parentheses):

- SWMU-168: (monitored natural attenuation [MNA]);
- SWMU-172 and SWMU-174: (bioremediation, soil vapor extraction [SVE] and monitored attenuation [MA]);
- Building 4-78/79 SWMU/AOC Group: (bioremediation, SVE, MNA, and MA);
- Former Fuel Farm AOC Group: (MNA);
- AOC-001 and AOC-002: (bioremediation and MA);
- AOC-003: (bioremediation and MA);
- AOC-004: (bioremediation and MA);
- AOC-034 and AOC-035: (MNA);
- AOC-060: (bioremediation and MA);
- AOC-090: (bioremediation and MA);
- Building 4-70: (bioremediation and MA);
- Lot 20/Former Building 10-71 Parcel: (bioremediation and MA); and
- Apron A: (bioremediation and MA).

The background and investigation history for each affected unit or group of units is described in the Cleanup Action Plan (CAP) (AMEC, 2012) and/or EDR (AMEC, 2014). It should be noted that monitoring for the Building 10-71 area and Building 4-70 area is included in this monitoring report to maintain continuity with the monitoring program that has been conducted for these areas for several years and as approved by the Washington State Department of Ecology (Ecology); these two areas are not addressed explicitly in the Compliance Monitoring Plan but are being addressed per Ecology's December 30, 2015, email to Boeing with comments on the revised Compliance Monitoring Plan. Monitoring for Apron A is also included, as semiannual monitoring began in this area starting in the fourth quarter of 2016, as reported in the Apron A Investigation Results report (Amec Foster Wheeler, 2016b).



This quarterly report:

- Describes work completed during the reporting quarter;
- Describes any deviations from corrective action tasks required under the Order and/or CAP;
- Describes revisions to the corrective action schedule;
- Describes work projected to occur during the next quarter, including any planned deviation from the CAP;
- Discusses remediation operation and maintenance activities conducted at the Facility during the reporting period;
- Documents monitoring activities conducted during the quarter;
- Describes and discusses trends in monitoring data;
- Assesses remediation at each area; and
- Assesses attainment of cleanup levels (CULs) at the conditional points of compliance (CPOCs).

This report presents this information for the second quarter of 2018, the period from April through June 2018.

1.1 Quarterly progress reporting

In accordance with the requirements of the Order, corrective action activities were conducted at the Facility, as described in this report. As approved by Ecology in their letter dated November 18, 2015, progress reporting is conducted on a quarterly basis in conjunction with monitoring, operations, and maintenance activities conducted under the CAP.

1.1.1 Work completed in the second quarter 2018

The following work was completed during the second quarter of 2018, the period from April through June 2018:

- Groundwater monitoring for the second guarter of 2018 was completed during May 2018.
- On June 20, 2018, soil samples were collected at the Building 4-78/79 area and at SWMU-172/174 to evaluate concentrations of constituents of concern (COCs) in soil after the SVE systems were shut down on December 15, 2017.
- On behalf of Boeing, Wood submitted the First Quarter 2018 Report to Ecology on May 15, 2018.
- A third round of nitrate/sulfate injections was completed in Building 4-78/79 injection wells B78-11, B78-13, and B78-17 through B78-21 in April 2018. Groundwater samples were collected from these injection wells and from monitoring wells GW244S and GW031S in May 2018. These injection and sampling events are described in a memorandum submitted to Ecology on April 13, 2018.

1.1.2 Deviations from required tasks

No deviations from tasks required in the Order occurred during this activity period.

1.1.3 Deviations from CAP

There were no deviations from the CAP during this activity period, and there are no planned deviations from the CAP expected for the next activity period.

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1.1.4 Schedule revisions

There were no significant revisions to the schedule for this reporting period and no revisions are expected for the next activity period.

1.1.5 Work projected for the next quarter

The following work is projected for the third quarter of 2018:

- Reporting will be completed in accordance with the Order, CAP, EDR, and any changes approved by Ecology.
- Groundwater sampling and analysis for the third quarter of 2018 will be completed.
- Nitrate and sulfate injections are planned for July 2018 for the Building 4-78/79 Area as described in Section 3.0. Performance monitoring to support the benzene plume study will be conducted in August 2018.
- Bioremediation injections are planned for July 2018 for the SWMU-172/174 Area, Building 4-78/79 Area, AOC-001/002, AOC-60, and AOC-90.

2.0 Groundwater sampling methodology

Groundwater was sampled and analyzed as described in Appendix A. These procedures are in accordance with the methods specified in the soil and groundwater sampling methodology, which is described in more detail in the revised Compliance Monitoring Plan (Amec Foster Wheeler, 2016a). Table A-1 summarizes the current groundwater monitoring program and COCs specified in the CAP and revised in the Second Addendum to the Compliance Monitoring Plan (Amec Foster Wheeler, 2017) for all Facility corrective action areas. Table A-1 also includes Building 4 70, Lot 20/Former Building 10-71, and Apron A, which were not included in the CAP. Table A-2 summarizes the current groundwater monitoring program for the corrective action areas that include MNA or MA as part of the cleanup remedy specified in the CAP. Table A-2 also includes Building 4 70 and Apron A, which were not specified in the CAP. Any changes or exceptions to the sampling or analytical methods cited in Appendix A during the quarter are described in the applicable subsections in Section 3. The field data sheets, which document the groundwater sample collection and field parameter monitoring for each well sampled during this quarter, are included in Appendix B.

The analytical methods, field duplicate, lab duplicate, and matrix spike/matrix spike duplicate frequencies are specified in the Quality Assurance Project Plan (Amec Foster Wheeler, 2016c). The full analytical reports provided by the laboratory are provided separately on compact disc. The data validation memoranda are included in Appendix C.

3.0 Corrective action activities completed during quarter

This section describes the corrective action activities conducted at the Facility during the second quarter of 2018. Rebound evaluation of the SVE systems at the SWMU-172/174 area and the Building 4-78/79 SWMU/AOC Group continued during the second quarter. Quarterly compliance monitoring was also conducted in accordance with the Second Addendum to the Compliance Monitoring Plan (Amec Foster Wheeler, 2017).

3.1 SWMU-168

SWMU-168 is monitored semiannually during the first and third quarters; therefore, no monitoring was conducted for this area during the second quarter of 2018.

3.2 SWMU-172 and SWMU-174

This section describes corrective action activities conducted at these two SWMUs. The cleanup remedy for SWMU-172 and SWMU-174 is a combination of bioremediation, SVE, and MA. Figure 1 shows the layout of the groundwater monitoring wells and the remediation system for these SWMUs.

3.2.1 Cleanup action activities

3.2.1.1 Installation/construction activities

No installation/construction activities were conducted for these SWMUs during the second quarter.

3.2.1.2 Soil vapor extraction and bioremediation operations

Rebound testing of the SVE system at SWMU-172 and SWMU-174 continued during the second quarter. Details for system operations/tests are included in the SVE operations and monitoring report prepared by Calibre and included as Appendix D. Soil samples were collected on June 20, 2018, in this area to assess attainment of the soil cleanup for SWMU-172 and SWMU-174 soil COCs, including selected volatile organic compounds (VOCs) and metals (copper, thallium, and zinc), following Appendix D of the EDR (AMEC, 2014).

The soil analytical results are presented on Table 1. A total of 12 soil compliance samples were collected from six locations in the SVE target area at locations shown in Figure 1. Samples were collected using direct-push sampling methods from the vadose zone at depths of 2.0 and 8.5 feet from each sample location. The soil samples displayed non-detect to low level concentrations at most sampling locations; however, exceedances in cleanup levels for tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), copper, and zinc were observed during the confirmation sampling (Table 1). The June 2018 detections of PCE ranged from 5.9 micrograms per kilogram (μ g/kg) to 57.4 μ g/kg, with the exception of sample PP-03 at 2 feet below ground surface (bgs), which showed PCE at 1,070 μ g/kg. In comparison with historical probe locations near the June 2018 sample locations, current concentrations show PCE has been significantly reduced (or was already very low). Historical probe PP-172 (near PP-03) showed PCE at 27,000 μ g/kg at 1.5 feet bgs in April 2008; current concentrations of 1,070 μ g/kg represent a 96 percent reduction. In addition, concentrations of TCE and cis-1,2-DCE at this location are reduced by 99 and 98 percent, respectively, compared to prior historical concentrations in this area.

While current chlorinated VOC concentrations show significant reductions from historical monitoring results, the data indicate that SVE operation should continue at this location to continue removal of the chlorinated VOCs present. An operational change in the SVE process for this area is recommended to allow for altered flushing patterns in the area of PP-03, which showed the single elevated concentration of PCE (between SVE-2 and SVE-3). In order to achieve this, extraction well SVE-3 will be adjusted to operate

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as a surface vent, which will allow SVE-2 to pull ambient air towards its location, thereby creating additional flushing through the area of PP-03.

Copper and zinc were detected at concentrations above the CUL in soil samples collected from PP01, PP02, PP03, PP05, and PP06.

3.2.2 Compliance monitoring plan deviations

Dissolved arsenic was analyzed in groundwater samples collected from downgradient plume well GW173S and CPOC area wells GW232S and GW236S.

3.2.3 Water levels

Groundwater elevations for the SWMU-172 and SWMU-174 area measured during the second quarter 2018 are summarized in Table 2 and shown on Figure 1. The contoured data for May 2018 show that groundwater generally flows east from SWMU-172 and SWMU-174 toward the Cedar River Waterway, with an approximate horizontal gradient of 0.008.

3.2.4 Groundwater monitoring results

Groundwater in this area is monitored following the schedules presented in Tables A-1 and A-2 in Appendix A. Results for primary geochemical indicators are presented in Table 3; results for the SWMU-172 and SWMU-174 area COCs are presented in Table 4.

3.2.4.1 Monitored attenuation/geochemical indicators

The geochemical indicator results are presented in Table 3. TOC concentrations ranged from 0.55 milligrams per liter (mg/L) to 7.81 mg/L for all SWMU-172 and SWMU-174 monitoring wells. The other natural attenuation parameter results indicate that geochemical conditions were generally uniform and appropriate for reductive dechlorination of chlorinated VOCs. The pH in all monitoring wells were near neutral. The oxidation reduction potential (ORP) and dissolved oxygen (DO) results indicate reducing conditions were present.

3.2.4.2 COC results for source and downgradient plume areas

Table 4 lists second quarter 2018 analytical results for the SWMU-172 and SWMU-174 COCs. Figures 2 and 3 show historical trend plots for PCE, TCE, vinyl chloride (VC), and cis-1,2-DCE in source area wells GW152S and GW153S, and in downgradient plume area wells GW172S and GW173S. Flow generally moves from the vicinity of source area well GW152S to downgradient plume area well GW172S, and from source area well GW153S to downgradient plume area well GW173S. PCE and TCE are the chlorinated solvents that were used at the Facility, and cis-1,2-DCE and VC are breakdown products resulting from biodegradation processes.

As shown in Table 4, cis-1,2-DCE, TCE, PCE, and VC concentrations exceeded the CULs in the groundwater collected from both source area and downgradient plume area wells. As shown in Figure 2, the concentrations of COCs in groundwater from source area well GW152S increased slightly in the second quarter while concentrations in source area well GW153S generally remain stable. As shown in Figure 3, COC concentrations decreased in the groundwater sample collected from downgradient plume area wells GW172S and GW173S during the second quarter monitoring event.

Arsenic was detected above the CUL in all source area and downgradient plume area wells. However, all arsenic concentrations are below the revised Surface Water Human Health Criteria and Maximum Contaminant Level of $10~\mu g/L$. As shown in Figure 4, the arsenic concentrations in the groundwater from

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both source area and downgradient wells remain stable after decreasing during the fourth quarter 2017 sampling event. Copper was not detected above the CUL in the groundwater samples from source area and downgradient plume area wells, and lead was detected above the CUL in the groundwater from source area well GW152S, but was not detected at concentrations above the CUL in the groundwater detected in the downgradient plume area wells. The observed variations for metals concentrations may be influenced by the naturally occurring reducing conditions. Dissolved arsenic was analyzed in groundwater samples collected from select downgradient and CPOC area monitoring wells during the second quarter to compare total and dissolved concentrations of arsenic in groundwater with the local and/or regional naturally occurring background concentrations of arsenic in groundwater. Arsenic occurs naturally in soil and groundwater; and is known to be regionally elevated. No further evaluations of dissolved arsenic are planned.

3.2.4.3 COC results for conditional point of compliance area

Results from the CPOC area wells are presented in Table 4 and trend charts for cis-1,2-DCE, TCE, and VC for all CPOC area wells are presented in Figure 5. As shown in Table 4, cis-1,2-DCE was detected at concentrations above the CUL, ranging from 0.0297 to 0.367 µg/L in the groundwater collected from all CPOC area wells; TCE was detected above the CUL in the groundwater from monitoring well GW235I; and VC was detected above the CUL in the groundwater from monitoring well GW232S. Concentrations of VC in well GW232S are expected to decrease over time, as concentrations in the immediate upgradient well GW173S continue to decrease. One option under consideration would be to convert GW173S to an injection well to more rapidly reduce VOCs at this location. PCE was not detected in the groundwater collected from the CPOC wells and is not shown in Figure 5. As shown on Figure 5, concentrations of cis-1,2-DCE have exceeded the CUL in the CPOC wells since compliance monitoring began, but are generally stable, except for the slight increase in concentration observed in the groundwater from GW232S. TCE concentrations exceed the CUL in the groundwater from CPOC wells GW235I and GW234S, and VC concentrations exceed the CUL in the groundwater from CPOC well GW232S. The concentrations of both TCE and VC generally appear to be stable. Cleanup levels may need to be re-evaluated based on overly conservative contaminant concentration assumptions that were made prior to remedial action implementation, but that have changed over time, resulting in an over-estimation of total site risk based on current relative concentrations of individual COCs.

Arsenic was detected above the CUL in the groundwater from CPOC area wells GW232S and GW236S. Copper was not detected above the CUL in the groundwater collected from CPOC wells. Lead was detected above the CUL in the groundwater from GW236S (Table 4). Figure 6 shows arsenic, copper, and lead trends since the beginning of compliance monitoring in groundwater from CPOC wells. As shown in Figure 6, though arsenic, copper and lead concentrations appear to vary over time, there are no increasing trends in the groundwater collected from CPOC wells.

3.3 Building 4-78/79 SWMU/AOC group

This section describes corrective action activities conducted at the Building 4-78/79 SWMU/AOC Group during the second quarter of 2018. The cleanup remedy for this SMWU/AOC group is bioremediation, SVE, MNA, and MA. Figure 7 shows the location of groundwater monitoring wells, bioremediation wells, and SVE wells for this area.

3.3.1 Cleanup action activities

3.3.1.1 Installation/construction activities

No installation/construction activities were conducted for these SWMUs during the second quarter.

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3.3.1.2 Soil vapor extraction and bioremediation operations

Rebound testing of the SVE system at the Building 4-78/79 SWMU/AOC Group continued during the second quarter. Details for system operations/tests are included in the SVE operations and monitoring report prepared by Calibre and included as Appendix D. Soil samples were collected in this area on June 20, 2018, to assess attainment of the soil cleanup for Building 4-78/79 soil COCs, including selected VOCs and total petroleum hydrocarbons in the gasoline range (TPH-G), following Appendix D of the EDR (AMEC, 2014).

The soil analytical results are presented on Table 5. A total of 24 soil compliance samples were collected from 12 locations in the SVE target area at locations shown in the Compliance Monitoring Plan in the EDR (AMEC, 2014). Samples were collected using direct-push sampling methods from the vadose zone at depths of 1.0 and 3.0 feet bgs from each sample location, with the exception of two samples—sample location PP-13 was collected from 4.5 feet bgs instead of 3.0 feet bgs, as a petroleum odor was noted in the clay-rich sediment at 4.5 feet bgs. The second adjusted sample was at 1.5 feet bgs instead of 1 foot bgs at location PP-17, in order to get below the asphalt. In general, the concentrations of chlorinated VOCs and TPH-G in the soil samples collected from the Building 4-78/79 SWMU/AOC Group were either not detected or a low detections below cleanup levels, except for the sample collected at 4.5 feet bgs from sample PP-13. The TPH-G concentration detected in this sample was 147 milligrams per kilogram (mg/kg), greater than the cleanup level of 30 mg/kg. As previously noted, a petroleum odor was noted in a clay/silt layer in the depth above this sample at 3 feet bgs. The sample collected from 1 foot bgs at PPdid not have a detection of TPH-G. In comparison, historical probe point PP184 was sampled near this location in April 2008 with samples collected from 1.6, 3.4, and 5.2 feet bgs. The TPH-G results from these historical samples were 160, 24, and 850 mg/kg, respectively. Although the April 2008 and June 2018 samples in this area are not in the exact same location, they are within the area of influence for the SVE system and the reduced concentrations, at least in the area above the clay layer, are likely attributed to SVE operation and vapor removal.

TO-15 analyses have been conducted at SVE-08, the SVE vent well directly adjacent to PP-13, twice since the start of SVE operation, in September 2016 and April 2017; TPH-G was below detection in both samples. These results indicate the SVE vent wells are unlikely to achieve complete removal of the TPH-G in soil in this area (the PP-13 sample from 4.5 feet bgs with the elevated TPH-G concentration was from within a clay layer). The soil confirmation results from all other areas show attainment of the soil cleanup levels have been achieved; therefore, we recommend that SVE operation in this area be stopped.

Additional soil samples may be considered for the area around PP-13 to define the extent of soil exceeding the TPH-G cleanup level. Active utilities are present in this area; therefore, an evaluation of feasibility and access for soil excavation will be needed if further actions are required.

A third round of nitrate/sulfate injections was performed in April 2018, and groundwater samples were collected from the injection wells and monitoring wells in May 2018. The results of the performance monitoring are shown in Table 2-7 of Appendix D. Concentration of benzene in the groundwater from all injection wells related to ongoing benzene treatment in this area are shown in Figures 8 and 9. As shown in Table 1 of Appendix D, benzene concentrations in groundwater samples collected from injection and monitoring wells ranged from 0.34 μ g/L to 54.2 μ g/L. The benzene concentrations detected in May 2018 remain below the baseline concentrations in three of the five new injection wells, with current concentrations at approximately 50 percent of the baseline results at these wells, indicating biodegradation of benzene is occurring. In addition, the May 2018 sampling event showed benzene concentrations in groundwater from injection well B78-13 (historical ERD well) and monitoring wells GW244S and GW031S were below concentrations detected in groundwater in the November 2017 sampling event following the start of treatment, with reductions in concentration at 50, 50 and 85 percent,

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respectively. The concentration of benzene increased in the groundwater collected from injection well B78-20. This injection well is located near monitoring well GW031S, and benzene concentrations have decreased in the groundwater from GW031S. Concentrations of benzene have increased during each monitoring event at B78-20, indicating continued treatment with increased concentration of reagents should be considered at this well. Nitrate was detected during the May 2018 monitoring event in the groundwater collected from one injection well, B78-13. Concentrations of nitrate were below detection limits in the remaining wells during the May sampling event, while sulfate concentrations continued to accumulate in most wells, with detections ranging from 2.85 mg/L to 34.1 mg/L.

The three benzene treatment injection events completed since October 2017 were implemented utilizing low target concentrations of nitrate and sulfate applied to each of the injection wells with concentrations of 100, 200, and 400 mg/L in October 2017, January 2018, and April 2018, respectively. The results of the latest performance monitoring event show the injected nitrate amendment is rapidly consumed (e.g., non-detect to low measurable detections of nitrate). Based on these results, Boeing proposes to optimize the remedial action to provide additional reagent for the plume treatment.

The reagent concentration for the remedial optimization event is recommended at 800 mg/L for nitrate and 400 mg/L for sulfate to provide additional nitrate and sulfate to the affected area due to the rapid reaction time observed. Injections will be performed at B78-11, B78-13, B78-17, B78-18, B78-19, B78-20, and B78-21. Performance monitoring data will be collected approximately 30 days after the injection event and will include the same list of wells sampled in the previous performance monitoring events.

3.3.2 Compliance monitoring plan deviations

No deviations from the compliance monitoring plan occurred for this area during the second quarter.

3.3.3 Water levels

Table 6 presents the groundwater elevations measured during the second quarter 2018 groundwater monitoring event at the Building 4-78/79 SWMU/AOC group. As shown in Figure 7, the observed direction of groundwater flow from the source area during May 2018 is generally to the west, with a hydraulic gradient of 0.002.

3.3.4 Groundwater monitoring results

Results for primary geochemical indicators are presented in Table 7; results for the COCs for Building 4-78/79 SWMU/AOC Group are presented in Table 8. Groundwater at this area is monitored following the schedule presented in Tables A-1 and A-2 in Appendix A.

3.3.4.1 Natural attenuation/geochemical indicators

The geochemical indicator results are presented in Table 7. In general, source area, downgradient, and CPOC area wells had low levels of DO and ORP, indicating that reducing conditions are present over the area and are generally favorable for reductive dechlorination of chlorinated VOCs. The pH in all monitoring wells was above 6.0 standard units during the second quarter monitoring period. Results for the other primary geochemical indicators were fairly consistent throughout this area. TOC concentrations in source area wells ranged from 5.64 to 24.38 mg/L, indicating that additional substrates injections would be beneficial for continued enhanced bioremediation.

3.3.4.2 COC results for source and downgradient plume areas

Table 8 lists second quarter 2018 analytical results for the Building 4-78/79 SWMU/AOC Group COCs. The CULs established in the CAP are also presented on Table 8. Figures 10 and 11 are trend charts showing

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historical trends for COCs for four groundwater monitoring wells that have a history of frequent detections. Trend charts have not been prepared for groundwater monitoring wells or COCs that do not have a history of frequent detections.

As shown in Table 8, benzene, cis-1,2-DCE, TCE, and VC were detected in groundwater samples from several source area wells at concentrations above their respective CULs, except for groundwater from source area well GW039S, which had concentrations below CULs for all COCs. TPH-G was detected in the groundwater from source area well GW031S, at a concentration of 917 μ g/L (the field duplicate concentration was 830 μ g/L). TPH-G was also detected in the groundwater from source area wells GW033S and GW243I, at concentrations below the CUL.

The only COC detected in the groundwater samples collected from the downgradient monitoring wells was VC detected at a concentration of 0.21 μ g/L in the groundwater collected from downgradient plume area well GW209S. The detection of VC in the groundwater sample from GW209S is consistent with historical concentrations of VC in the groundwater from this well.

Figure 10 shows trends for selected COCs for source area wells GW031S and GW033S, and Figure 11 shows trends for selected COCs for source area well GW034S and downgradient plume area well GW209S. COC concentrations in the groundwater collected from GW031S are generally consistent with historical results and trends. Though concentrations of all of the COCs increased in the groundwater collected from source area well GW033S they are also generally consistent with historical results. Groundwater samples from GW033S historically had the highest concentrations of cis-1,2-DCE and VC prior to the Duct Bank dewatering project. COC concentrations in groundwater samples collected from source area well GW034S (Figure 11) are stable. Nitrate and sulfate injections described in Appendix D are continuing, in order to address remaining benzene present between GW210S and GW244S.

Figure 11 shows a trend chart for downgradient plume area well GW209S, which was installed in 2008 and is located west of Building 4-79. Monitoring results for benzene and VC for GW209S decreased in 2015 and have remained low through the second quarter 2018 monitoring event, with VC detected at a concentration slightly greater than the reporting limit and all other COCs below reporting limits.

3.3.4.3 COC results for conditional point of compliance area

Groundwater monitoring results from the second quarter for the CPOC area are summarized in Table 8. Trends for CPOC wells GW143S, GW237S and GW240D are shown in Figures 12 through 14. Benzene was detected above the CUL in GW237S at a concentration of 8.57 μ g/L in the groundwater sample from CPOC well GW237S; all other benzene results for the CPOC area were below detection. As shown in Figure 12, benzene has been sporadically detected in the groundwater from CPOC well GW237S and has not been detected in the groundwater samples from any other CPOC wells at concentrations above the CUL. The benzene concentrations in the groundwater from CPOC well GW237S have increased over the last three quarters. The only other COCs detected in the groundwater samples from the CPOC area during the second quarter were TPH-G at a concentration of 1,740 μ g/L in the groundwater sample from CPOC well GW237S, cis-1,2-DCE at a concentration of 0.33 μ g/L (below the CUL) in the groundwater sample from CPOC well GW240D. As shown in Figure 14, TPH-G has been detected in the groundwater sample from CPOC GW237S well at sporadic concentrations since the fourth quarter of 2015.

3.4 Former fuel farm AOC group

The Former Fuel Farm AOC group is monitored semiannually in May and November. The final remedy for the Former Fuel Farm is MNA.

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3.4.1 Cleanup action activities

No installation/construction activities were conducted for this cleanup action area during the second quarter.

3.4.2 Compliance monitoring plan deviations

No deviations from the compliance monitoring plan occurred for this area during the second quarter.

3.4.3 Water levels

Groundwater elevations for the Former Fuel Farm AOC Group measured during the second quarter 2018 are summarized in Table 9 and shown on Figure 15. Groundwater elevation contours are not shown on Figure 15 due to anomalous measurements.

3.4.4 Groundwater monitoring results

Results for primary geochemical indicators are presented in Table 10; results for COCs for the Former Fuel Farm AOC Group are presented in Table 11. Groundwater in this area is monitored following the schedule presented in Tables A-1 and A-2 in Appendix A.

3.4.4.1 Monitored natural attenuation indicators

The geochemical indicator results are presented in Table 9. Results in Table 9 indicate that geochemical conditions are generally consistent throughout the Former Fuel Farm AOC Group. The pH in CPOC area well GW212S was below 6.0 standard units; low pH may interfere with biological degradation of site COCs. The other geochemical indicators indicate that conditions are generally conducive to natural attenuation of the COCs for the Former Fuel Farm AOC Group.

3.4.4.2 COC results for source area

Table 11 lists second quarter 2018 analytical results for the Former Fuel Farm AOC Group COCs. The CULs established in the CAP are also presented on Table 11. As shown in Table 11, TPH in the diesel and Jet A ranges were not detected above the reporting limit in the groundwater from source area well GW255S.

3.4.4.3 COC results for conditional point of compliance area

CPOC area monitoring results are presented in Table 11. Figure 16 shows trend data for CPOC area wells GW211S, GW221S, and GW224S. TPH in the diesel and Jet A ranges exceeded the CUL in the groundwater collected from CPOC wells GW221S and GW224S, and were detected at concentrations below the CUL in CPOC well GW211S. Figure 16 shows that the second quarter results for these wells are consistent with the historical monitoring results since late 2013.

3.5 AOC-001 and AOC-002

This section describes corrective action activities conducted at these AOCs during the second quarter of 2018. The cleanup remedy for this corrective action area is bioremediation and MA. Bioremediation commenced for this area in late 2004, following source area excavation. Figure 17 shows the location of groundwater monitoring wells and the bioremediation injection system for AOC-001 and AOC 002, as well as the groundwater elevations measured during this monitoring event.

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3.5.1 Cleanup action activities

No installation/construction activities were conducted for this cleanup action area during the second quarter.

3.5.2 Compliance monitoring plan deviations

No deviations from the compliance monitoring plan occurred for this area during the second quarter.

3.5.3 Water levels

Table 12 presents the groundwater elevations measured during the second quarter 2018 monitoring event at AOC-001 and AOC-002. Figure 17 shows the groundwater elevations from this event. Groundwater flow directions cannot be determined from the available groundwater elevation data.

3.5.4 Groundwater monitoring results

Groundwater in this area is monitored following the schedule presented in Tables A-1 and A-2 in Appendix A. Results for primary geochemical indicators are presented in Table 13; results for the AOC-001 and AOC-002 COCs are presented in Table 14.

3.5.4.1 Monitored attenuation/geochemical indicators

The geochemical indicator results are presented in Table 13. The pH was near neutral in all CPOC wells and is conducive to microbial activity. Table 13 also suggests that geochemical conditions are appropriate for reductive dechlorination of the COCs in the AOC-001 and AOC-002 CPOC area, as indicated by the reducing conditions, low DO levels, and generally appropriate TOC concentrations.

3.5.4.2 COC results for source and downgradient plume areas

Source area and downgradient wells are monitored semiannually in May and November; therefore, no monitoring for source area or downgradient plume wells was conducted in the second quarter.

3.5.4.3 COC results for conditional point of compliance area

As shown in Table 14, 1,1-dichloroethene, benzene, and TCE concentrations in the groundwater samples collected from CPOC wells were either below detection or below the CUL. Concentrations of cis-1,2-DCE were above the CUL in the groundwater samples from all CPOC area wells except for GW194S. VC was detected at concentrations above the CUL in the groundwater samples from CPOC area wells GW185S and GW197S. VC was also detected in the groundwater from the remaining CPOC wells, except for from GW194S, at concentrations below the CUL.

As shown in Figure 18, aside from the increase in concentrations of cis-1,2-DCE and VC observed in the in the groundwater samples collected from GW185S in the second and third quarters of 2015; concentrations of cis-1,2-DCE and VC in the CPOC area monitoring wells have been generally stable since compliance monitoring began. COPC area wells GW194S and GW245S are not shown on Figure 18 because COCs are generally not detected in the groundwater samples from these wells. Similarly, the remaining COCs are generally below the CUL in the CPOC area monitoring wells and are not included on Figure 18.

As previously noted, cleanup levels may need to be re-evaluated based on overly conservative contaminant concentration assumptions that were made prior to remedial action implementation, but that have changed over time, resulting in an over-estimation of total site risk based on current relative concentrations of individual COCs.

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3.6 AOC-003

This section describes corrective action activities conducted at AOC-003 for the second quarter of 2018. The cleanup remedy for this AOC is bioremediation and MA. Figure 19 shows the location of groundwater monitoring and bioremediation wells at AOC-003, as well as the groundwater elevations measured during this monitoring event.

3.6.1 Cleanup action activities

No installation/construction activities were conducted for this cleanup action area during the second quarter.

3.6.2 Compliance monitoring plan deviations

Groundwater samples were collected from the source and downgradient area wells during the second quarter. Following the schedule presented in Table A-1, source and downgradient area wells are sampled semiannually in the first and third quarters.

3.6.3 Water levels

Table 15 presents the groundwater elevations measured during the second quarter 2018 monitoring event at AOC-003 and AOC-092. Figure 19 shows the groundwater elevations from this event. Groundwater flow directions cannot be determined from the available groundwater elevation data.

3.6.4 Groundwater monitoring results

Groundwater at AOC-003 is monitored following the schedule presented in Tables A-1 and A-2 in Appendix A. Results for geochemical indicators are presented in Table 16; results for the AOC-003 COCs are presented in Table 17.

3.6.4.1 Monitored attenuation//geochemical indicators

The geochemical indicator results are presented in Table 16. Results in Table 16 indicate that geochemical conditions are generally consistent throughout this AOC. The data indicate that conditions are generally conducive to biodegradation of the COCs for this AOC.

3.6.4.2 COC results for source and downgradient plume areas

Groundwater collected from the source and downgradient plume area wells did not have detections of PCE, TCE or cis-1,2-DCE above their respective CULs. VC was detected above the CUL in the groundwater sample collected from source area well GW249S, and from downgradient plume are well GW188S. All other COCs were either not detected or were detected at concentrations below the CUL.

3.6.4.3 COC results for conditional point of compliance area

Groundwater collected from the two CPOC monitoring wells did not have detections of PCE, TCE or cis-1,2-DCE above their respective CULs. VC was detected at concentrations above the CUL in the groundwater samples collected from CPOC wells GW247S and GW248I, at concentrations of 0.460 and 0.573 µg/L, respectively.

3.7 AOC-004

AOC-004 is monitored semiannually during the first and third quarters; therefore, no monitoring was conducted for this area during the second quarter of 2018.

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3.8 AOC-034 and AOC-035

This section describes corrective action activities conducted at AOC-034 and AOC-035 during the second quarter of 2018. The cleanup remedy for these AOCs is MNA. Figure 20 shows the locations of the groundwater monitoring wells at AOC-034 and AOC-035, as well as the groundwater elevations measured during this sampling event.

3.8.1 Cleanup action activities

No construction or operations work was conducted for this AOC during the second quarter.

3.8.2 Compliance monitoring plan deviations

No deviations from the compliance monitoring plan occurred for this area during the second quarter.

3.8.3 Water levels

Table 18 presents the groundwater elevations measured during the second quarter 2018 monitoring event at AOC-034 and AOC-035. Figure 20 shows the groundwater elevation contours based on the groundwater elevations. Based on these contours, groundwater in the vicinity of AOC-034 and AOC-035 flows to the west-northwest, toward the Cedar River Waterway/Lake Washington, with a horizontal hydraulic gradient of approximately 0.0008.

3.8.4 Groundwater monitoring results

Groundwater at this area is monitored following the schedule presented in Tables A-1 and A-2 in Appendix A. Results for geochemical indicators are presented in Table 19; results for COCs are presented in Table 20.

3.8.4.1 Monitored natural attenuation/geochemical indicators

The geochemical indicator results are presented in Table 19. In general, the results indicate uniform conditions are present across this corrective action area and that conditions are conducive to natural attenuation of chlorinated VOCs, as indicated by the pH, ORP, and DO measurements.

3.8.4.2 COC results for source and downgradient plume areas

Table 20 presents the second quarter 2018 analytical results for the AOC-034 and AOC-035 groundwater COCs. Trend charts have not been developed for this area, because the COCs are not commonly detected in the AOC-034 and AOC-035 groundwater monitoring wells. As shown in Table 20, neither cis-1,2-DCE nor VC were detected in the groundwater collected from source area well GW217S or cross-gradient plume area well GW216S.

3.8.4.3 COC results for conditional point of compliance area

Table 20 shows that COC concentrations in groundwater samples from the CPOC area wells were below reporting limits and CULs for the second quarter of 2018. This is the seventh consecutive semiannual monitoring event with COC concentrations below CULs in the CPOC area well samples.

3.9 AOC-060

AOC-060 is monitored semiannually during the first and third quarters; therefore, no monitoring was conducted for this area during the second quarter of 2018.

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3.10 AOC-090

AOC-090 is monitored semiannually during the first and third quarters; therefore, no monitoring was conducted for this area during the second quarter of 2018.

3.11 Building 4-70 area

The Building 4-70 Area is monitored semiannually during the first and third quarters; therefore, no monitoring was conducted for this area during the second quarter of 2018.

3.12 Lot 20/former building 10-71 parcel

This section describes corrective action activities conducted for this area during the second quarter 2018. Figure 21 shows the locations of the groundwater monitoring wells and the bioremediation injection system at the Lot 20/Former Building 10-71 Parcel, as well as the groundwater elevations measured during the second quarter. The Lot 20/Former Building 10-71 Parcel was not included in the EDR, but was later added to the Compliance Monitoring Plan (Amec Foster Wheeler, 2016a) and has been regularly monitored in conjunction with the Facility corrective action areas. The cleanup remedy for the Lot 20/Former Building 10-71 Parcel is bioremediation and MA. This area is monitored semiannually in the second and fourth quarters, in accordance with Table A-1 in Appendix A.

3.12.1 Cleanup action activities

No construction or operations work was conducted for the Lot 20/Former Building 10-71 Parcel during the second quarter.

3.12.2 Water levels

The groundwater elevations measured during the second quarter at the Lot 20/Former Building 10-71 Parcel are presented in Table 21 and on Figure 21. Groundwater contours are not shown on Figure 21 because the three monitoring wells measured are arranged nearly in a straight line and do not provide enough water level data to prepare contours. Based on the second quarter water level measurements, the apparent groundwater flow appears to be generally to the northwest.

3.12.3 Groundwater monitoring results

Results for primary geochemical indicators for groundwater from the Lot 20/Former Building 10-71 Parcel monitoring wells are presented in Table 22; results for COCs for the Lot 20/Former Building 10-71 Parcel monitoring wells are presented in Table 23. Groundwater in this area is monitored following the schedule presented in Tables A-1 in Appendix A.

3.12.3.1 Monitored attenuation/geochemical indicators

The geochemical indicator results are presented in Table 22. The pH in groundwater from the Lot 20/Former Building 10-71 Parcel monitoring wells was near neutral and the remaining parameters appear uniform in the groundwater samples collected from these monitoring wells.

3.12.3.2 COC results

Second quarter analytical results for the Lot 20/Former Building 10-71 Parcel COCs are presented in Table 23. The concentrations of all of the COCs—cis-1,2-DCE, toluene, TCE, and VC—in the groundwater samples collected from Lot 20/Former Building 10-71 Parcel monitoring wells were below detection, except for a detection of VC at 0.24 μ g/L (below the CUL) in the groundwater sample collected from 10-71-MW2.

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3.13 Apron A area

This section describes corrective action activities conducted at the Apron A area during the second quarter 2018. The cleanup remedy proposed for the Apron A area is bioremediation and MA. Figure 22 shows the locations of the groundwater monitoring wells in the Apron A area.

3.13.1 Cleanup action activities

No construction or operations work was conducted in the Apron A area during the second quarter.

3.13.2 Water levels

The depth to groundwater measured during the second quarter at Apron A are presented in Table 24 and on Figure 22. Groundwater elevations are not available because the top of casing elevations were never surveyed.

3.13.3 Groundwater monitoring results

Results for primary geochemical indicators for groundwater from groundwater monitoring wells GW262S and GW264S are presented in Table 25; results for COCs from these wells are presented in Table 26. Groundwater in this area is monitored following the schedule presented in Tables A-1 and A-2 in Appendix A.

3.13.3.1 Monitored attenuation/geochemical indicators

Geochemical parameters are presented in Table 25. TOC concentrations in the monitoring wells were slightly elevated during the second quarter 2018 monitoring event. The other primary geochemical indicators show that reducing conditions were present and that conditions were conducive to biological degradation of the chlorinated VOCs.

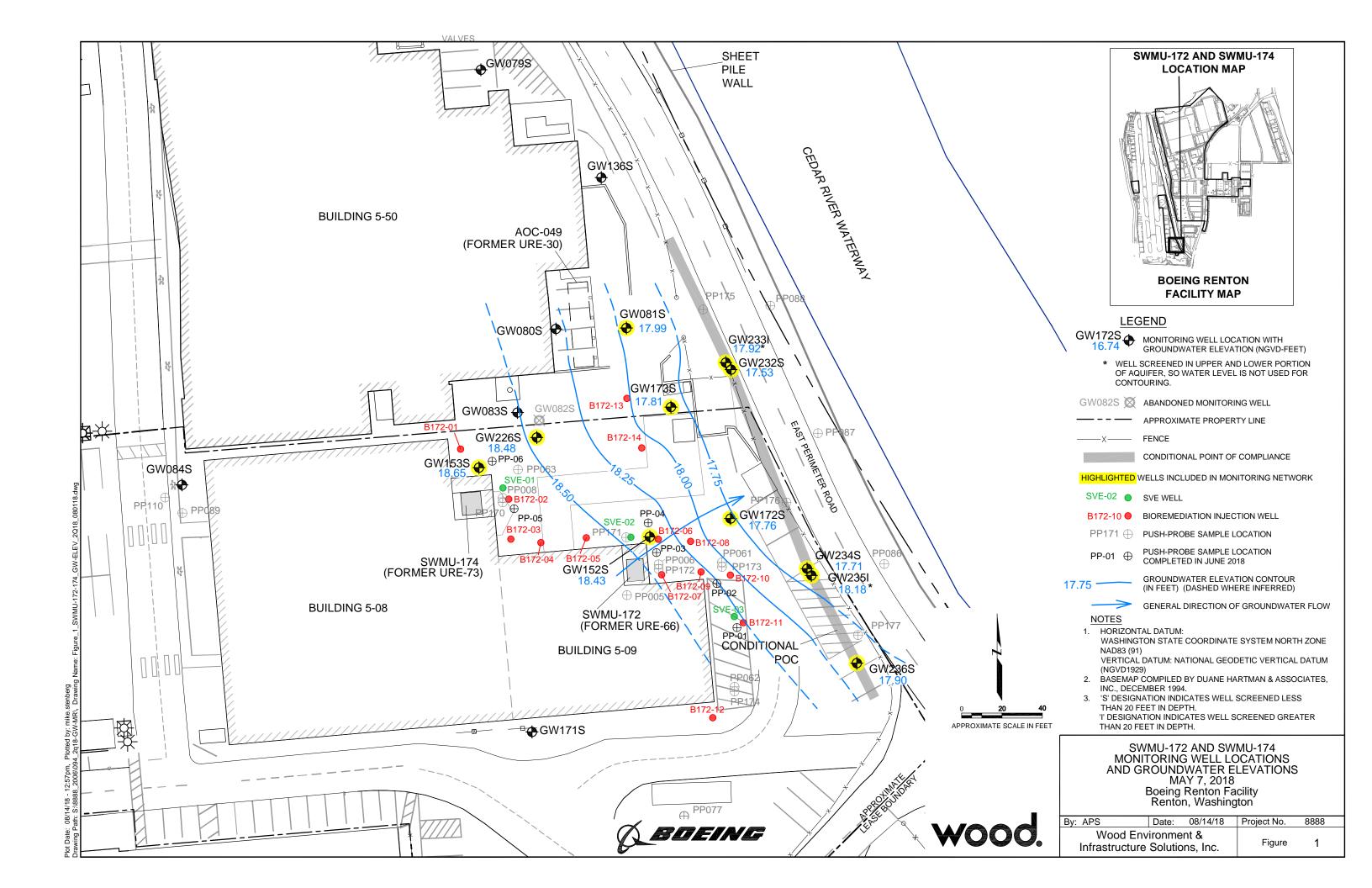
3.13.3.2 COC results

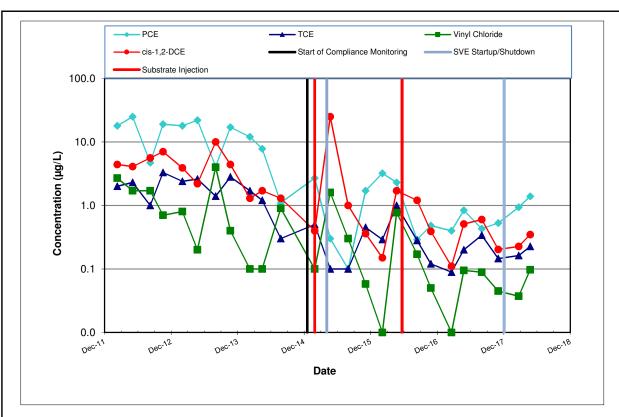
Table 26 lists second quarter analytical results for the Apron A COCs: cis-1,2-DCE and VC. Cis-1,2-DCE was not detected in the groundwater samples collected from either GW262S or GW264S. VC was detected in the groundwater samples collected from monitoring wells GW262S and GW264S at concentrations of 0.25 and 1.63 μ g/L, respectively.

4.0 References

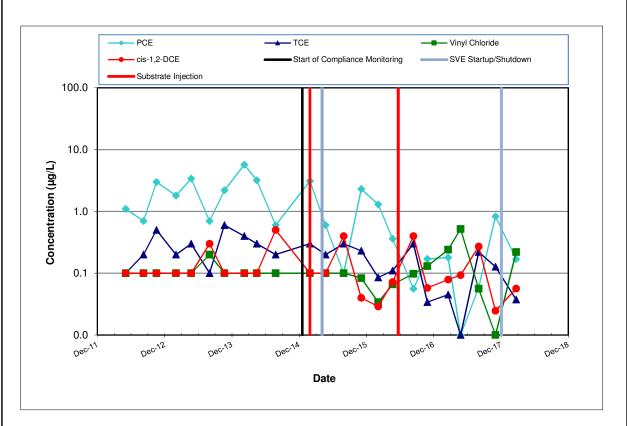
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- Amec Foster Wheeler, 2017, Second Addendum to the Compliance Monitoring Plan, Boeing Renton Facility, Renton Washington: Prepared for the Boeing Company, December.

wood.





SOURCE AREA WELL GW152S

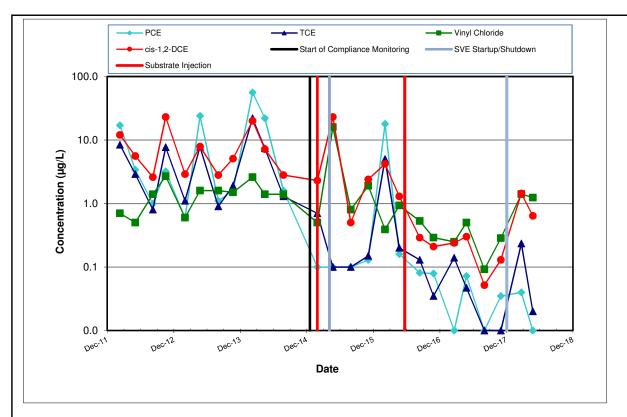


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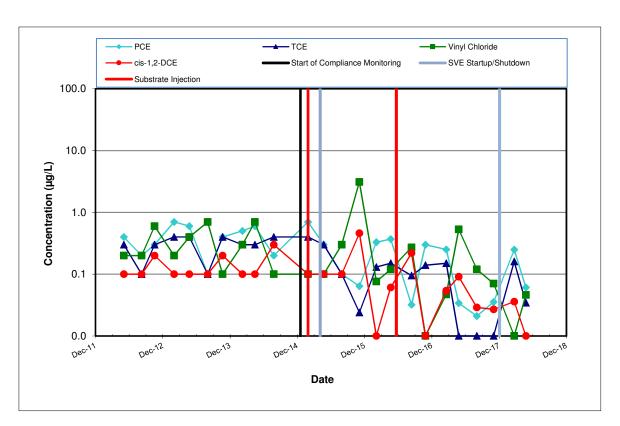
SOURCE AREA WELL GW153S



SWMU-172 AND SWMU-174 TREND PLOTS FOR SOURCE AREA WELLS GW152S AND GW153S Boeing Renton Facility Renton, Washington Project No. 8888



DOWNGRADIENT PLUME AREA WELL GW172S



Note: non-detected values shown at one-half the reporting limit

DOWNGRADIENT PLUME AREA WELL GW173S

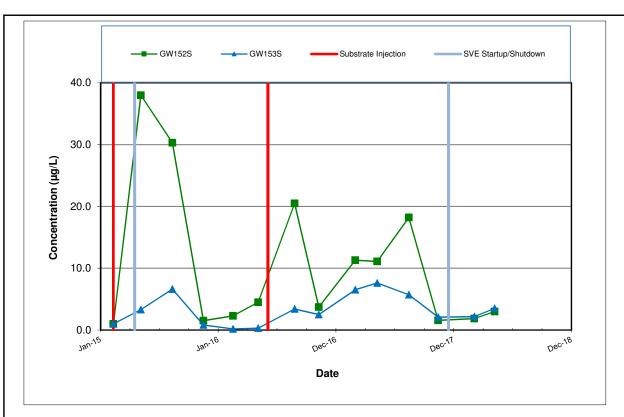


SWMU-172 AND SWMU-174 TREND PLOTS FOR DOWNGRADIENT PLUME AREA WELLS GW172S AND GW173S

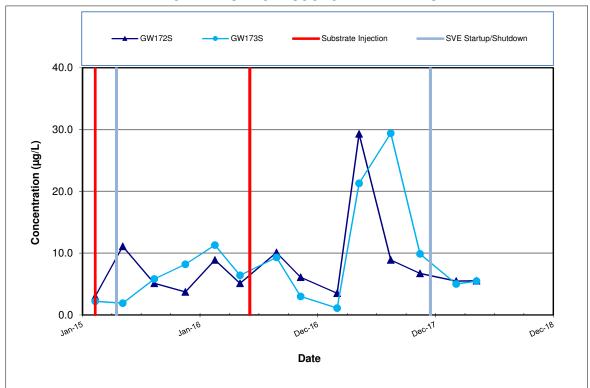
Boeing Renton Facility

Renton, Washington

Project No. 8888



TOTAL ARSENIC IN SOURCE AREA WELLS

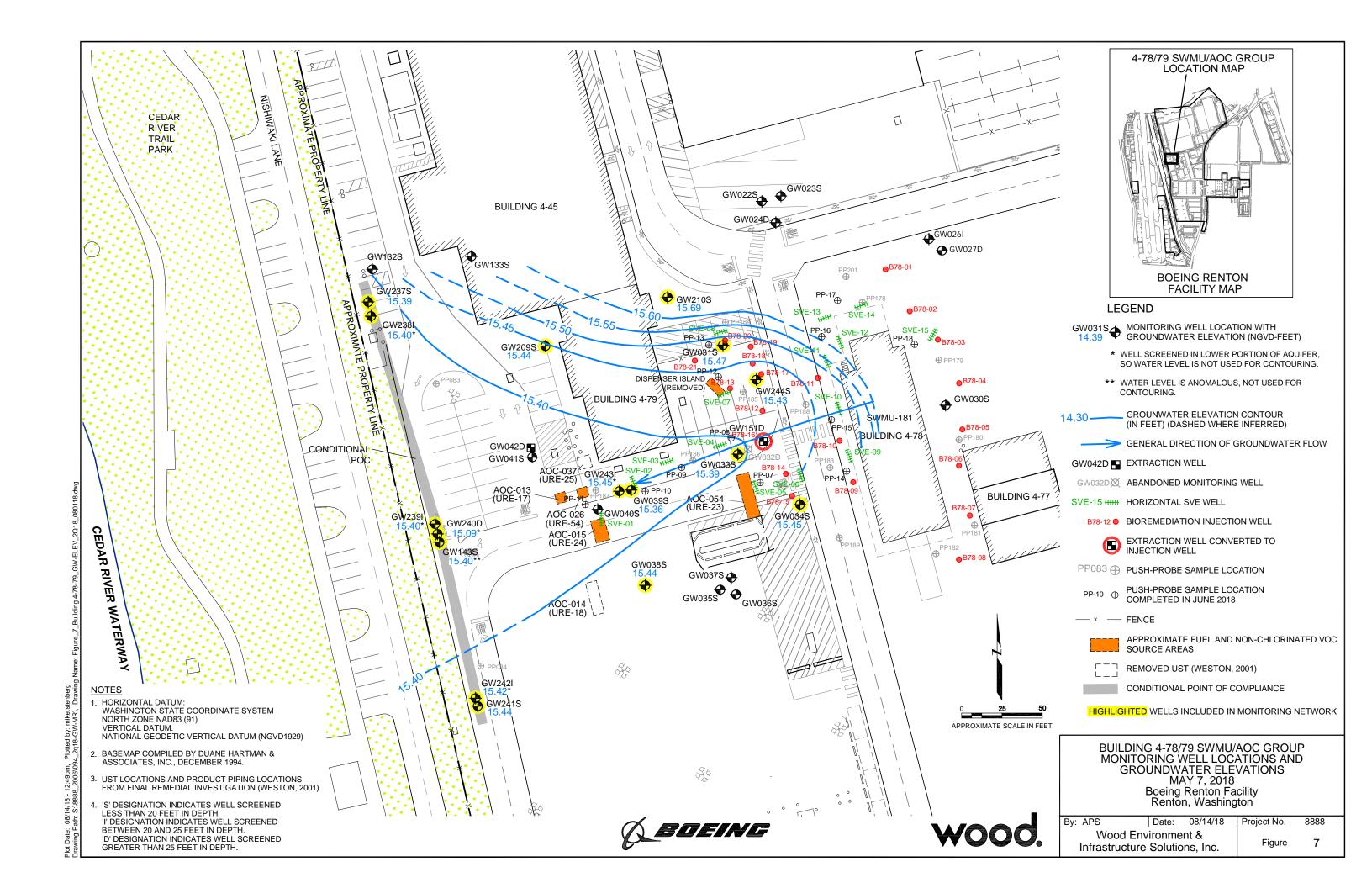


TOTAL ARSENIC IN DOWNGRADIENT PLUME AREA WELLS

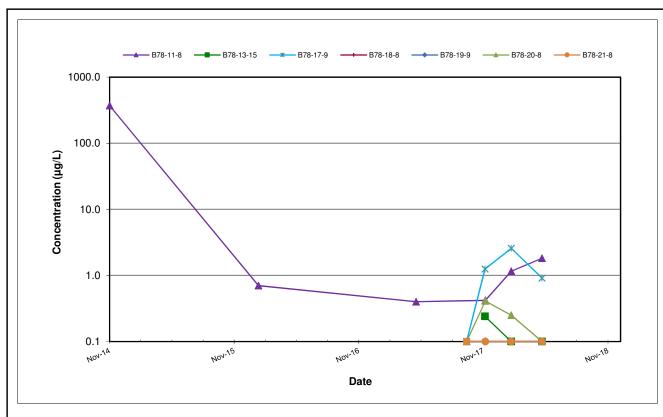
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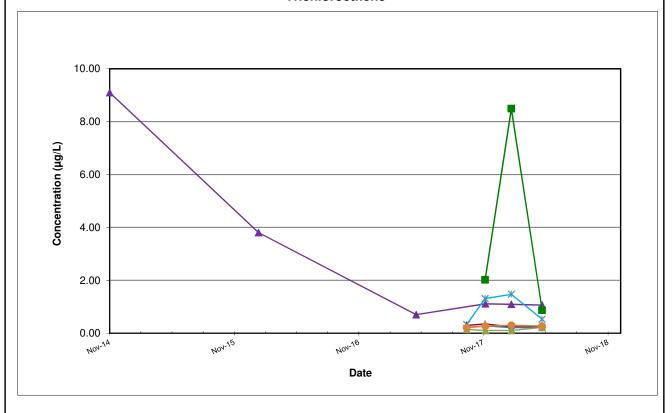
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Trichloroethene



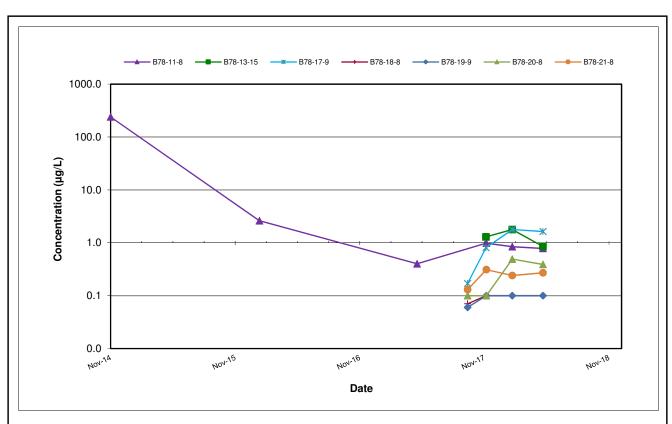
non-detected values shown at one-half the reporting limit **Vinyl Chloride**



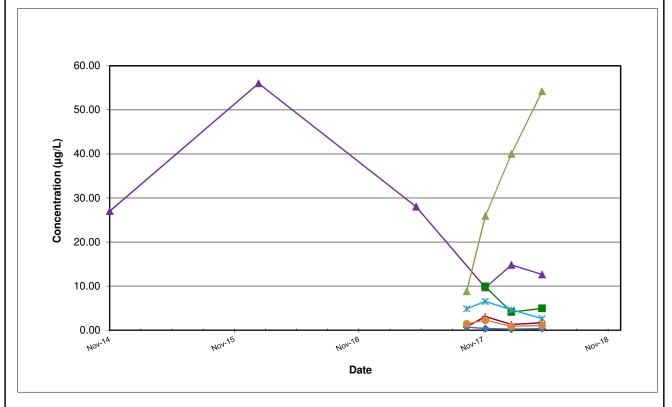
BUILDING 4-78/79 SWMU/AOC GROUP TREND PLOTS FOR TRICHLOROETHENE AND VINYL CHLORIDE IN INJECTION WELLS Boeing Renton Facility Renton, Washington

Project No. 8888





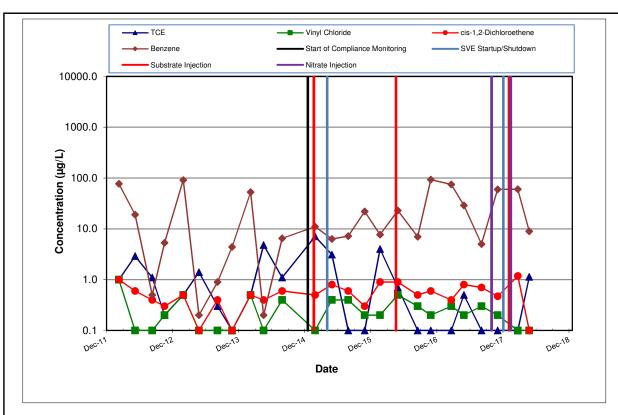
cis-1,2-Dichloroethene



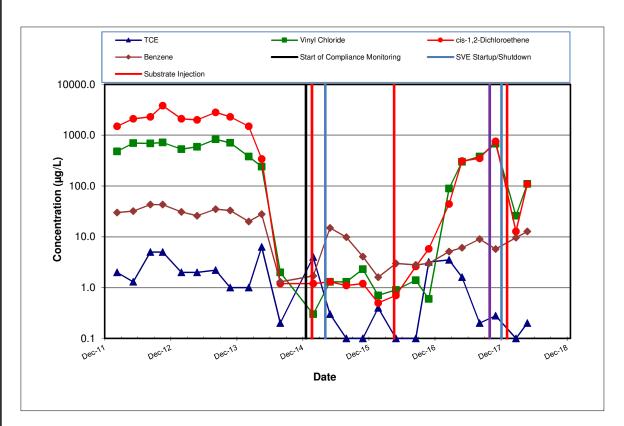
non-detected values shown at one-half the reporting limit

Benzene





SOURCE AREA WELL GW031S



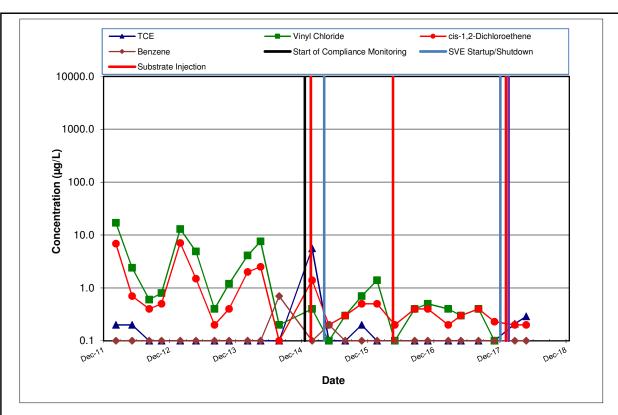
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SOURCE AREA WELL GW033S

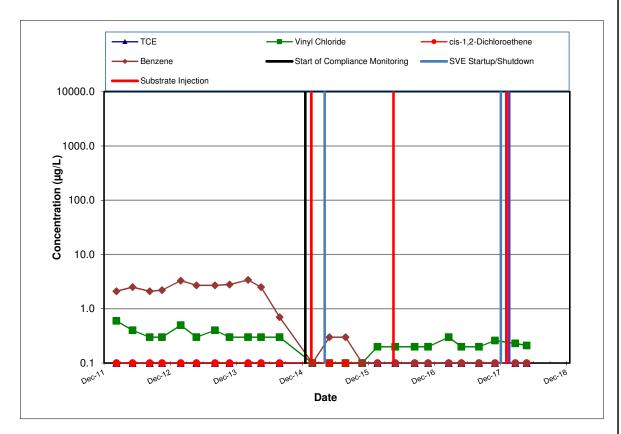


BUILDING 4-78/79 SWMU/AOC GROUP TREND PLOTS FOR SOURCE AREA WELLS GW031S AND GW033S Boeing Renton Facility Renton, Washington

Project No. 8888



SOURCE AREA WELL GW034S



Note: non-detected values shown at one-half the reporting limit

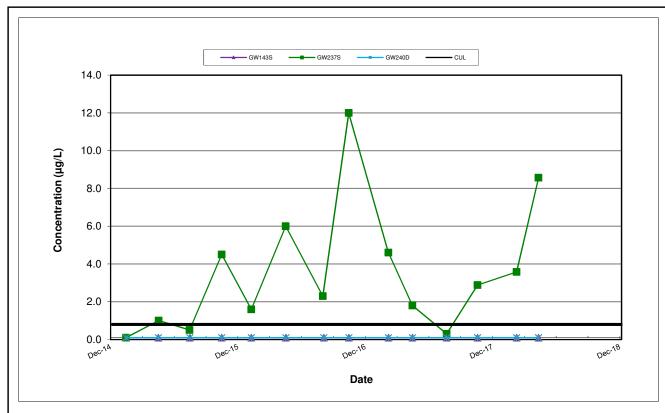
DOWNGRADIENT PLUME AREA WELL GW209S

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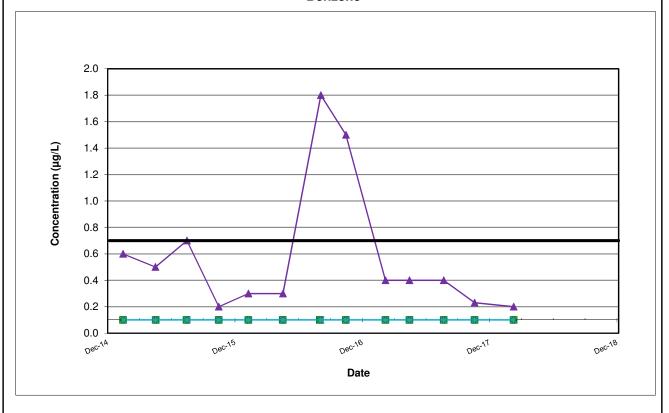
BLDG 4-78/79 SWMU/AOC GROUP TREND PLOTS FOR SOURCE AREA WELL GW034S AND DOWNGRADIENT PLUME AREA WELL GW209S Boeing Renton Facility Renton, Washington

Project No. 8888





Benzene

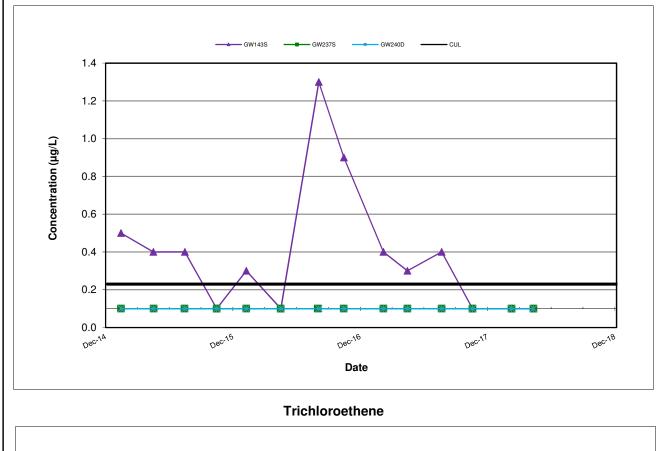


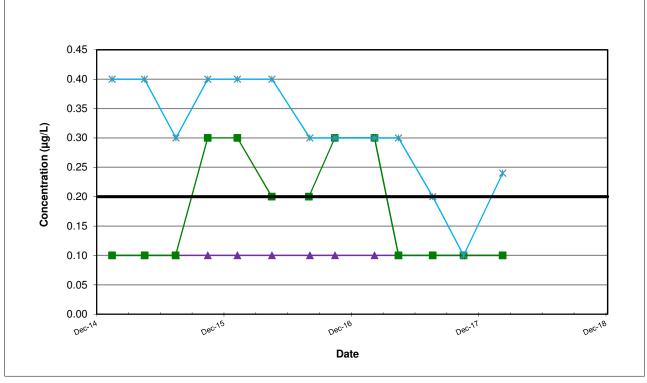
non-detected values shown at one-half the reporting limit

cis-1,2-Dichloroethene

wood.

BUILDING 4-78/79 SWMU/AOC GROUP TREND PLOTS FOR BENZENE AND cis-1,2-DICHLOROETHENE IN CPOC AREA WELLS Boeing Renton Facility Renton, Washington Project No. 8888





non-detected values shown at one-half the reporting limit **Vinyl Chloride**

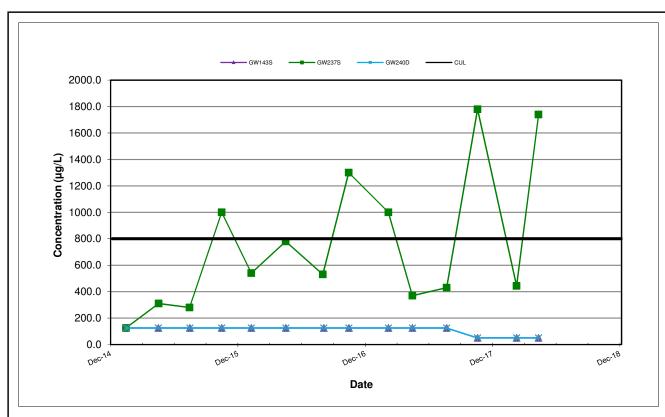
wood.

BUILDING 4-78/79 SWMU/AOC GROUP TREND PLOTS FOR TRICHLOROETHENE AND VINYL CHLORIDE IN CPOC AREA WELLS Boeing Renton Facility Renton, Washington

Project No. 8888

Figure 13

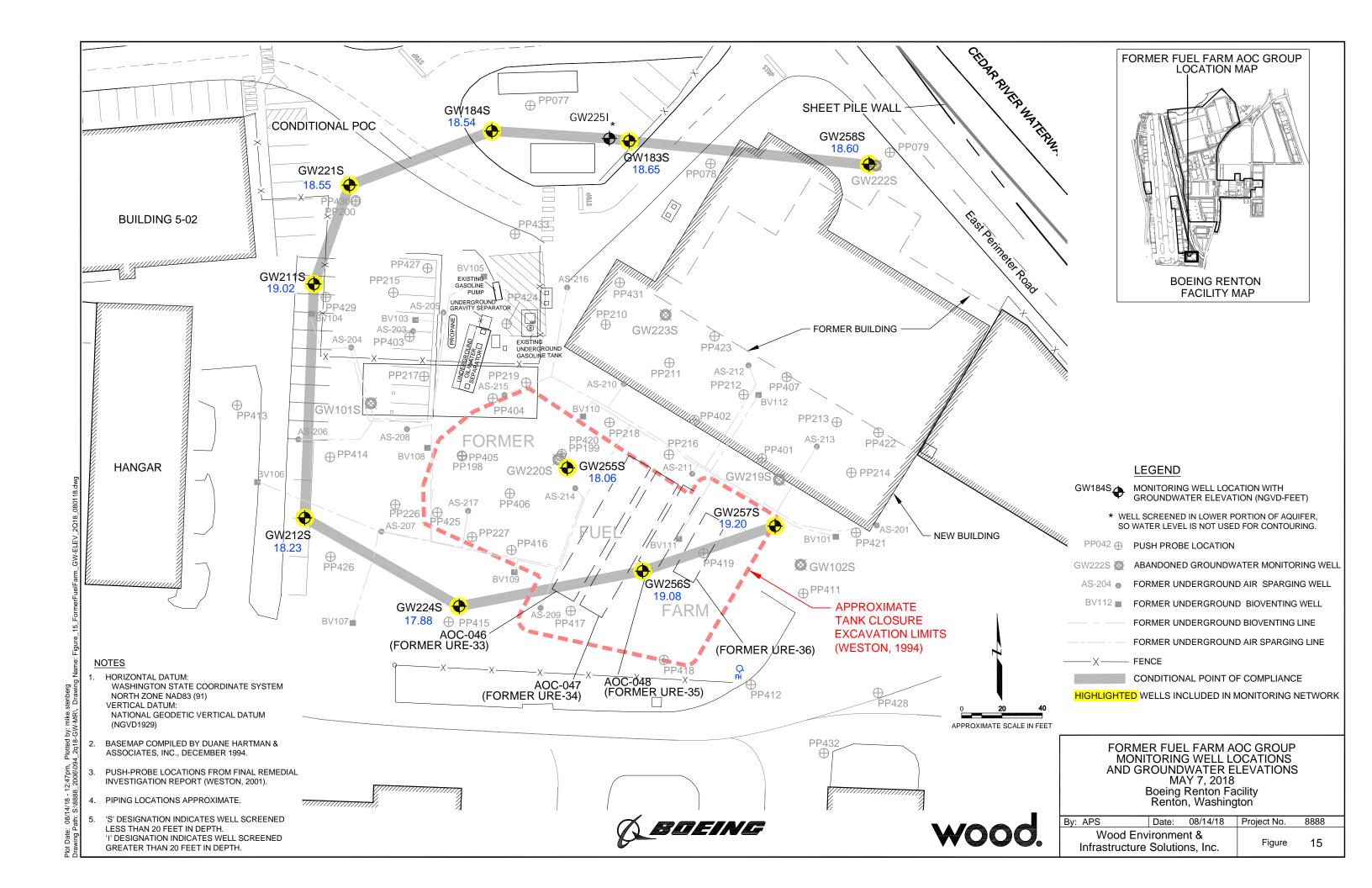


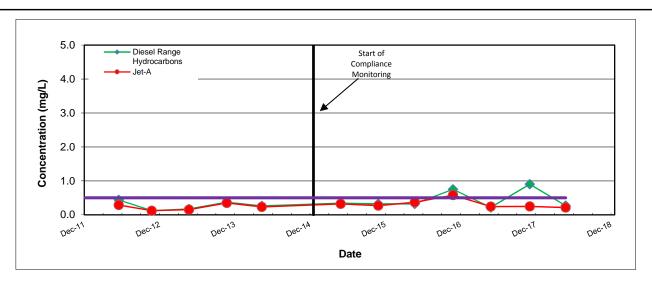


TPH as Gasoline

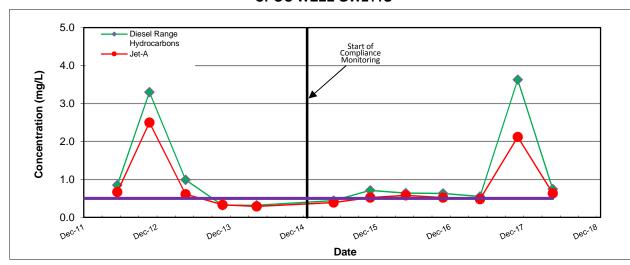
non-detected values shown at one-half the reporting limit



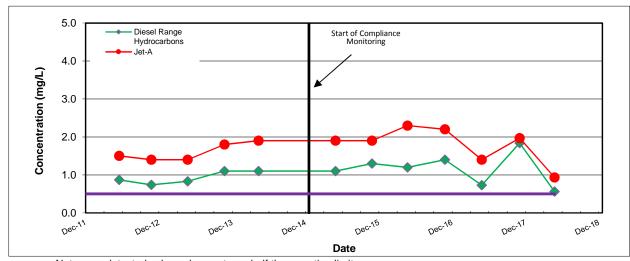




CPOC WELL GW211S



CPOC WELL GW221S



Note: non-detected values shown at one-half the reporting limit

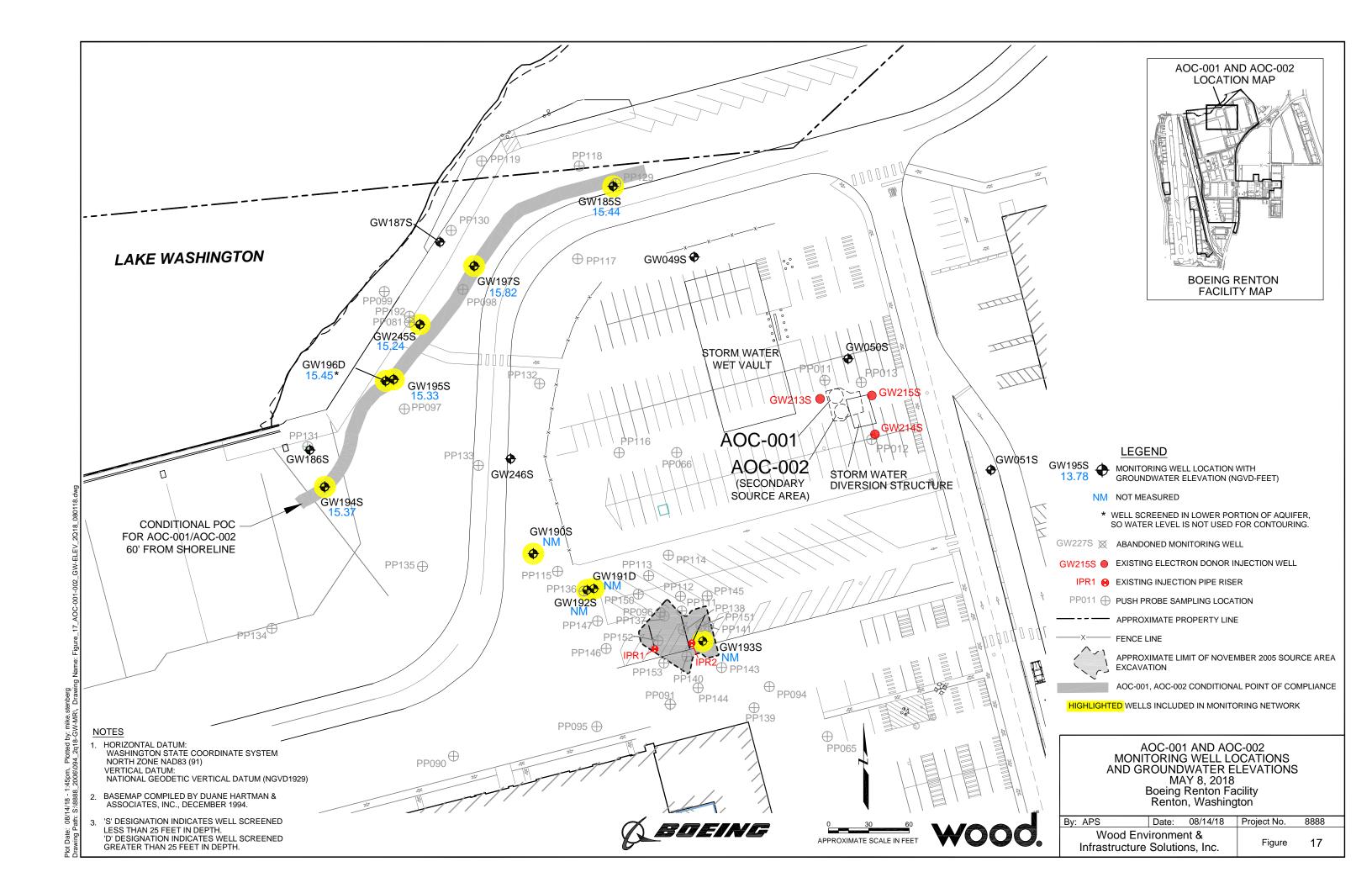
CPOC WELL GW224S



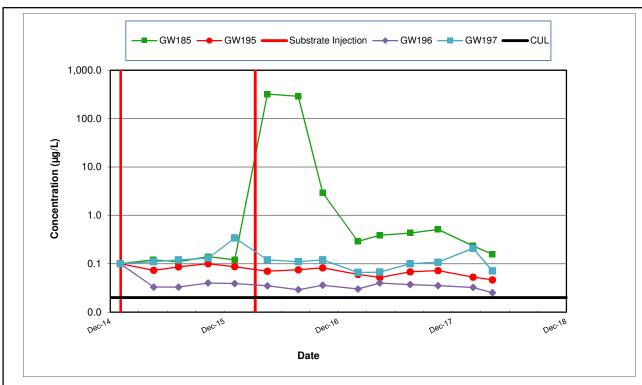
FORMER FUEL FARM AOC GROUP TREND PLOTS
FOR CPOC AREA WELLS GW211S, GW221S, AND GW224S
Boeing Renton Facility
Renton, Washington

Project No. 8888

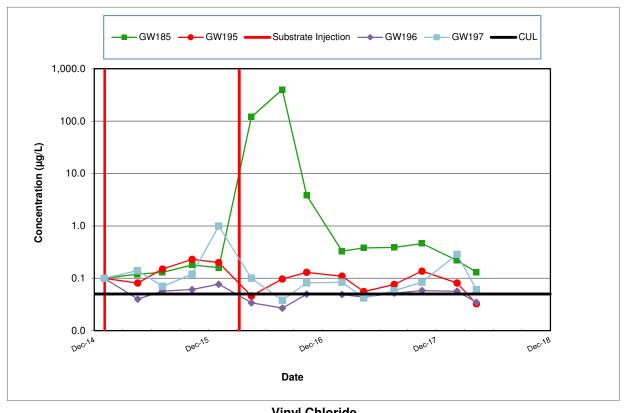
> Figure 16







cis-1,2-Dichloroethene



Vinyl Chloride

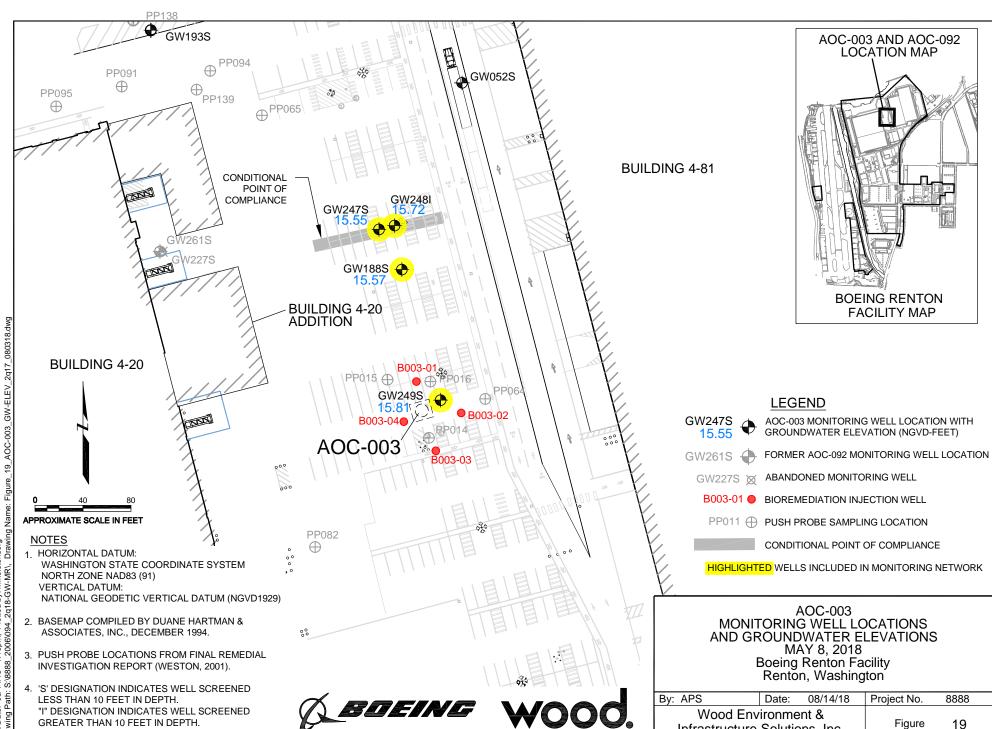
Note: non-detected values shown at one-half the reporting limit

wood.

AOC-001 AND 002 TREND PLOTS FOR cis-1,2-DICHLOROETHENE AND VINYL CHLORIDE IN CPOC AREA WELLS
Boeing Renton Facility
Renton, Washington

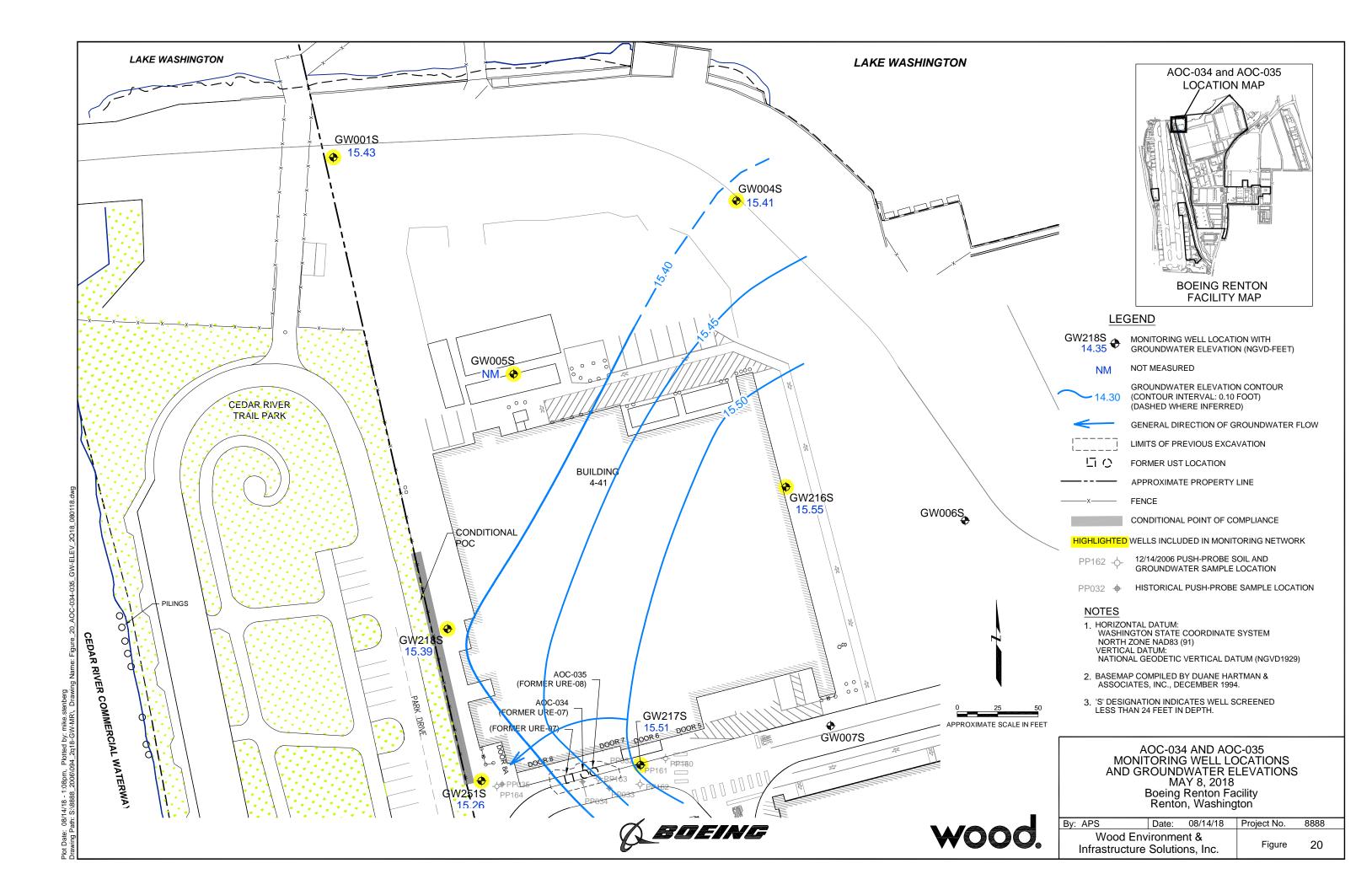
Project No. 8888

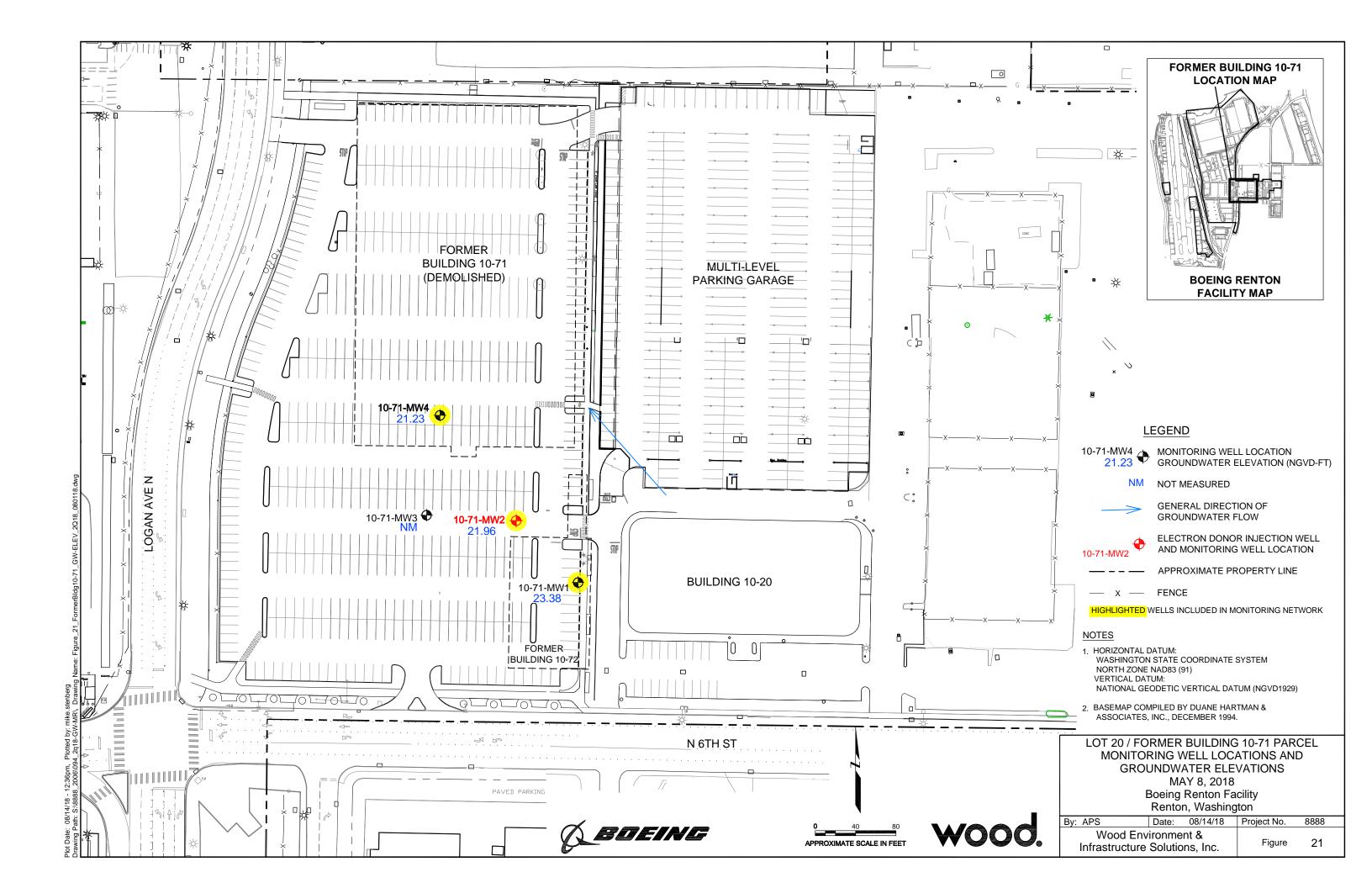
Figure 18



Infrastructure Solutions, Inc.

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wood.

Tables

TABLE 1: SWMU-172 AND SWMU-174 GROUP CONCENTRATIONS OF CONSTITUENTS OF CONCERN IN SOIL^{1, 2} JUNE 20, 2018

Boeing Renton Facility, Renton, Washington

			Push Probe ID											
			PP01		PP(PP02 PF		PP03 PP		04	PP05		PP	206
	Cleanup			Field Dup.										
	Level ³	2 feet bgs	8.5 feet bgs	8.5 feet bgs	2 feet bgs	8.5 feet bgs	2 feet bgs	8.5 feet bgs	2 feet bgs	8.5 feet bgs	2 feet bgs	8.5 feet bgs	2 feet bgs	8.5 feet bgs
Volatile Organic Compounds	(μg/kg)													
1,1-Dichloroethene	1	1.02 U	1.24 U	1.19 U	1.29 U	1.47 U	1.18 UJ	1.36 U	1.12 U	1.20 U	1.00 U	1.11 U	1.14 U	1.33 U
Benzene	9	1.02 U	1.24 U	1.19 U	1.29 U	1.47 U	1.18 U	1.36 U	1.12 U	1.20 U	1.00 U	1.11 U	1.14 U	1.33 U
cis-1,2-Dichloroethene	3	1.02 U	1.24 U	1.19 U	1.29 U	1.47 U	35.1	1.36 U	1.12 U	1.20 U	1.65	1.11 U	1.14 U	1.33 U
Methylene chloride	24	2.04 U	3.85	4.35	6.21	4.92	4.55	17.0	2.25 U	9.76	2.96	2.23 U	2.29 U	2.65 U
Tetrachloroethene	10	22.9	20.1	14.3	49.8	32.5	1,070 J	27.7	18.3	12.0	57.4	5.90	11.6	38.8
Trichloroethene	6	1.02 U	1.32	1.19 U	3.57	1.87	51.2	2.57	2.47	1.20 U	3.23	1.11 U	6.91	7.31
Vinyl Chloride	4	1.02 U	1.24 U	1.19 U	1.29 U	1.47 U	1.18 U	1.36 U	1.12 U	1.20 U	1.00 U	1.11 U	1.14 U	1.33 U
Total Metals (mg/kg)														
Copper	36	72.7	17.8	16.3	24.8	24.0	23.8	21.2	37.4	25.7	25.3	18.5	36.9	21.8
Thallium	0.34	0.23 U	0.23 U	0.22 U	0.21 U	0.23 U	0.24 U	0.21 U	0.23 U	0.20 U	0.20 U	0.04 J	0.22 U	0.23 U
Zinc	39.8	276	108	88.1	49.5	211	47.7	35.3	38.6	37.3	52.6	46.6	38.3	43.4

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
 - J = The value is an estimate.
 - UJ = The analyte was not detected at the estimated reporting limit indicated.
- 2. **Bolded** values exceed the cleanup levels.
- 3. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

μg/kg = micrograms per kilogram bgs = below ground surface field dup. = field duplicate mg/kg = milligrams per kilogram

TABLE 2: SWMU-172 and SWMU-174 GROUP GROUNDWATER ELEVATION DATA MAY 7, 2018

Boeing Renton Facility, Renton, Washington

	Screen Interval Depth	TOC Elevation	Depth to Groundwater	Groundwater Elevation
Well ID ¹	(feet bgs)	(feet) ²	(feet below TOC)	(feet) ²
GW081S	5 to 20 ³	25.91	7.92	17.99
GW152S	5 to 20 ³	26.98	8.55	18.43
GW153S	5 to 20 ³	27.47	8.82	18.65
GW172S	8 to 18 ³	26.44	8.68	17.76
GW173S	8 to 18 ³	26.51	8.70	17.81
GW226S	5 to 20 ³	26.86	8.38	18.48
GW232S	4 to 14	24.45	6.92	17.53
GW233I	15 to 25	24.35	6.43	17.92
GW234S	3 to 13	24.95	7.24	17.71
GW235I	15 to 25	24.90	6.72	18.18
GW236S	5 to 15	24.36	6.46	17.90

Notes

- 1. S = shallow well; I = intermediate well.
- 2. Elevations in feet relative to National Geodetic Vertical Datum of 1929.
- 3. Screen intervals are approximate and based on database listings of the screen interval depths for these wells.

Abbreviations

bgs = below ground surface

TABLE 3: SWMU-172 AND SWMU-174 GROUP CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ^{1, 2} MAY 7, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ³											
		Source Area		Downgradient Plume Area						CPOC Area			
		GW152S											
	GW152S	(field dup.)	GW153S	GW081S	GW172S	GW173S	GW226S	GW232S	GW233I	GW234S	GW235I	GW236S	
Specific Conductivity (µS/cm)	185	185	228	193	252	364	221	436	181	249	165	312	
Dissolved Oxygen (mg/L)	0.61	0.61	0.83	0.36	0.32	0.49	0.37	1.16	0.56	6.93	2.47	0.65	
Oxidation/Reduction Potential (mV)	38.7	38.7	40.9	59.3	14.7	45.7	28.4	110.1	61.6	232.5	220.4	24.9	
pH (standard units)	6.24	6.24	6.35	6.38	6.48	6.39	6.59	5.93	6.28	6.08	6.45	6.39	
Temperature (degrees C)	15.00	15.00	15.30	14.90	16.70	13.50	15.40	13.80	14.20	13.35	14.96	17.30	
Total Organic Carbon (mg/L)	2.04	2.23	7.81	4.65	3.38	5.21	7.00	7.81	4.32	1.03	0.55	2.43	

Notes

- 1. Primary geochemical indicators are measured in the field, with the exception of total organic carbon, which is measured in the laboratory.
- 2. Data qualifiers are as follows:
- U = The analyte was not detected at the reporting limit indicated.
- 3. S = shallow well; I = intermediate well.

Abbreviations

µS/cm = microsiemens per centimeter CPOC = conditional point of compliance degrees C = degrees Celsius field dup. = field duplicate mg/L = milligrams per liter mV = millivolts

TABLE 4: SWMU-172 AND SWMU-174 GROUP CONCENTRATIONS OF CONSTITUENTS OF CONCERN $^{1,\,2}$ MAY 7, 2018

Boeing Renton Facility, Renton, Washington

			Well ID ³										
			Source Area			Downgradier	nt Plume Are	а			CPOC Area		
	Cleanup		GW152S										
	Level⁴	GW152S	(field dup.)	GW153S	GW081S	GW172S	GW173S	GW226S	GW232S	GW233I	GW234S	GW235I	GW236S
Volatile Organic Compounds (μg/L)												
cis -1,2-Dichloroethene	0.03	0.348	0.330	0.0649	0.0311	0.641	0.020 U	0.0401	0.367	0.0598	0.0672	0.166	0.0297
Tetrachloroethene	0.02	1.390	1.380	0.020 U	0.020 U	0.020 U	0.0610	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U
Trichloroethene	0.02	0.226	0.228	0.020 U	0.020 U	0.020 U	0.0344	0.020 U	0.020 U	0.020 U	0.020 U	0.0253	0.020 U
Vinyl Chloride	0.11	0.0972	0.0892	0.313	0.020 U	1.240	0.0460	0.0260	0.419	0.020 U	0.020 U	0.020 U	0.020 U
Total Metals (µg/L)													
Arsenic	1.0	2.99 J	2.08 J	3.51	1.63	5.52	5.47	3.27	5.36	0.532	0.820	0.200 U	1.80
Copper	3.5	2.86	2.41	1.01	0.534	0.989	3.48	1.05	0.500 U	0.500 U	na	0.500 U	2.05
Lead	1.0	1.52 J	0.992 J	0.207	0.100 U	0.772	0.314	0.129	0.100 U	0.100 U	na	0.100 U	2.49
Dissolved Metals (µg/L)													
Arsenic	NA	NA	NA	NA	NA	NA	1.80	NA	5.07	NA	NA	NA	0.704

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
 - J = The value is an estimate.
- 2. **Bolded** values exceed the cleanup levels.
- 3. S = shallow well; I = intermediate well.
- 4. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

µg/L = micrograms per liter CPOC = conditional point of compliance field dup. = field duplicate NA = not analyzed

TABLE 5: BUILDING 4-78/79 SWMU/AOC GROUP CONCENTRATIONS OF CONSTITUENTS OF CONCERN IN SOIL $^{1,\,2}$ JUNE 20, 2018

Boeing Renton Facility, Renton, Washington

			Push Probe ID										
	Cleanup	PI	PP07		PP08		PP09		10	PP11		PP12	
	Level ³	1 foot bgs	3 feet bgs	1 foot bgs	3 feet bgs	1 foot bgs	3 feet bgs	1 foot bgs	3 feet bgs	1 foot bgs	3 feet bgs	1 foot bgs	3 feet bgs
Volatile Organic Compounds	(µg/kg)												
1,1-Dichloroethene	NA	0.94 U	1.21 U	1.16 U	1.21 U	1.08 U	1.31 U	1.36 U	1.22 U	1.10 U	1.42 U	1.24 U	1.28 U
Benzene	19000	0.94 U	1.21 U	1.16 U	1.21 U	1.08 U	1.31 U	1.36 U	1.22 U	2.67	1.42 U	1.24 U	1.28 U
Carbon Disulfide	11000	0.94 U	1.21 U	1.16 U	1.21 U	1.08 U	1.31 U	1.36 U	1.22 U	1.10 U	1.42 U	1.24 U	1.40
cis-1,2-Dichloroethene	200	0.94 U	1.21 U	1.16 U	1.21 U	1.08 U	1.31 U	1.36 U	1.22 U	1.10 U	1.42 U	1.24 U	1.28 U
Tetrachloroethene	160	0.94 U	1.21 U	1.16 U	1.21 U	1.08 U	1.31 U	1.36 U	1.22 U	1.10 U	1.42 U	1.24 U	1.28 U
Trichloroethene	100	0.94 U	1.21 U	1.16 U	11.9	1.08 U	1.31 U	1.36 U	1.22 U	1.10 U	1.42 U	1.24 U	2.68
Vinyl Chloride	100	0.94 U	1.21 U	1.16 U	1.21 U	1.08 U	1.31 U	1.36 U	1.22 U	1.10 U	1.42 U	1.24 U	1.28 U
Total Petroleum Hydrocarbo	ns (mg/kg)												
GRO (C7-C12)	30	5.78 U	6.84 U	7.29 U	6.88 U	5.67 U	7.58 U	8.88 U	8.12 U	6.85 U	9.18 U	6.79 U	9.10 U

			Push Probe ID										
			PP13		PF	P14	PF	15	PP	16	PF	17	PP
	Cleanup			Field Dup.									
	Level ³	1 foot bgs	4.5 feet bgs	1 foot bgs	1 foot bgs	3 feet bgs	1 foot bgs						
Volatile Organic Compounds	(µg/kg)												
1,1-Dichloroethene	NA	1.02 U	1.97 U	1.97 U	1.18 U	1.28 U	1.27 U	1.54 U	1.36 U	1.34 U	1.24 U	1.29 U	1.56 U
Benzene	19000	1.02 U	30.0	23.1	1.18 U	1.28 U	1.27 U	1.54 U	1.36 U	1.34 U	1.24 U	1.29 U	1.56 U
Carbon Disulfide	11000	1.02 U	1.97 U	1.97 U	1.18 U	1.28 U	1.27 U	1.54 U	1.36 U	1.34 U	1.24 U	1.29 U	1.56 U
cis-1,2-Dichloroethene	200	1.02 U	1.97 U	1.97 U	1.18 U	1.28 U	1.97	6.31	1.36 U	1.34 U	1.24 U	1.29 U	1.56 U
Tetrachloroethene	160	1.02 U	1.97 U	1.97 U	1.18 U	1.28 U	1.27 U	1.60	1.36 U	1.34 U	1.24 U	1.29 U	1.56 U
Trichloroethene	100	1.02 U	1.97 U	1.97 U	1.54	2.40	22.6	28.3	19.0	12.1	26.2	23.1	15.7
Vinyl Chloride	100	1.02 U	1.97 U	1.97 U	1.18 U	1.28 U	1.27 U	1.54 U	1.36 U	1.34 U	1.24 U	1.29 U	1.56 U
Total Petroleum Hydrocarbon	s (mg/kg)												
GRO (C7-C12)	30	6.21 U	147	131	7.47 U	7.49 U	6.74 U	9.33 U	6.52 U	9.48 U	6.54 U	6.89 U	9.58 U

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
 - UJ = The analyte was not detected at the estimated reporting limit indicated.
- 2. **Bolded** values exceed the cleanup levels.
- 3. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

μg/kg = micrograms per kilogram

bgs = below ground surface

GRO = gasoline range organics

mg/kg = milligrams per kilogram

NA = not applicable

TABLE 6: BUILDING 4-78/79 SWMU/AOC GROUP GROUNDWATER ELEVATION DATA MAY 7, 2018

Boeing Renton Facility, Renton, Washington

Well ID ¹	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ²	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ²
GW031S	5 to 25	19.44	3.97	15.47
GW033S	5 to 25	19.49	4.10	15.39
GW034S	5 to 25	19.65	4.20	15.45
GW038S	5 to 25	19.68	4.24	15.44
GW039S	3.5 to 13.5	19.30	3.94	15.36
GW143S	10 to 15	19.81	4.41	15.40
GW209S	3.5 to 13.3	19.37	3.93	15.44
GW210S	3.5 to 13.3	19.19	3.50	15.69
GW237S	5 to 15	18.85	3.46	15.39
GW238I	5 to 20	18.94	3.54	15.40
GW239I	15 to 20	19.69	4.29	15.40
GW240D	22 to 27	19.81	4.72	15.09
GW241S	4 to 14	20.28	4.84	15.44
GW242I	15 to 20	20.44	5.02	15.42
GW243I	5 to 20	19.49	4.04	15.45
GW244S	5 to 15	19.53	4.10	15.43

Notes

- 1. S = shallow well; I = intermediate well; D = deep well.
- 2. Elevations in feet relative to National Geodetic Vertical Datum of 1929.

Abbreviations

bgs = below ground surface

TABLE 7: BUILDING 4-78/79 SWMU/AOC GROUP CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ¹ MAY 7, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ²										
		Source Area Downgradient Plume Area										
		GW031S										
	GW031S	(field dup.)	GW033S	GW034S	GW039S	GW243I	GW244S	GW038S	GW209S	GW210S		
Specific Conductivity (µS/cm)	250	250	329	295	162	371	408	336	366	228		
Dissolved Oxygen (mg/L)	0.95	0.95	0.72	0.69	0.43	0.90	0.85	0.59	0.14	0.45		
Oxidation/Reduction Potential (mV)	-8.3	-8.3	-12.6	-23.7	34.2	3.7	6.0	141.7	36.3	5.2		
pH (standard units)	6.12	6.12	6.22	6.27	6.23	6.28	6.16	6.35	6.26	6.36		
Temperature (degrees C)	18.50	18.50	18.40	17.30	18.10	18.20	17.4	15.53	16.90	19.40		
Total Organic Carbon (mg/L)	6.54	6.43	24.38	8.84	6.41	9.74	15.09	9.13	11.47	9.98		

				Well ID ²			
				CPOC Area			
	GW143S	GW237S	GW238I	GW239I	GW240D	GW241S	GW242I
Specific Conductivity (µS/cm)	107	129	395	293	449	392	391
Dissolved Oxygen (mg/L)	1.94	10.28	0.43	0.5	2.67	0.13	1.09
Oxidation/Reduction Potential (mV)	45.1	187.8	19.5	7.3	127.1	129.8	139.8
pH (standard units)	6.24	6.61	6.31	6.31	6.38	6.17	6.23
Temperature (degrees C)	16.20	22.86	18.40	17.60	15.79	14.96	16.06
Total Organic Carbon (mg/L)	9.22	8.04	12.81	10.18	5.64	NA	NA

Notes

1. Primary geochemical indicators are measured in the field, with the exception of total organic carbon, which is measured in the laboratory.

2. S = shallow well; I = intermediate well; D = deep well.

Abbreviations

 μ S/cm = microsiemens per centimeter CPOC = conditional point of compliance

degrees C = degrees Celsius

field dup. = field duplicate

mg/L = milligrams per liter

mV = millivolts

NA = not analyzed

TABLE 8: BUILDING 4-78/79 SWMU/AOC GROUP CONCENTRATIONS OF CONSTITUENTS OF CONCERN ^{1, 2} MAY 7, 2018

Boeing Renton Facility, Renton, Washington

			Well ID ³								
						Source Area					
		Cleanup		GW031S							
		Level ⁴	GW031S	(field dup.)	GW033S	GW034S	GW039S	GW243I	GW244S		
Volatile Organic Comp	pounds (μ	g/L)									
Benzene		0.80	8.95	11.0	12.8	0.20 U	0.20 U	1.66	3.63		
cis -1,2-Dichloroether	ne	0.70	0.20 UJ	0.66 J	40.7	0.20 U	0.20 U	0.20 U	1.80		
Trichloroethene		0.23	1.13	0.99	0.40 U	0.29	0.20 U	0.20 U	0.92		
Vinyl Chloride		0.20	0.20 U	0.20 U	110	0.24	0.20 U	0.20 U	1.06		
Total Petroleum Hydr	ocarbons	(µg/L)									
GRO (C7-C12)		800	917	830	239	100 U	100 U	132	100 U		

			Well ID ³						
		Cleanup	Down	gradient Plum	e Area				
		Level⁴	GW038S	GW209S	GW210S				
Volatile Organic Com	pounds (μ	g/L)							
Benzene		0.80	0.20 U	0.20 U	0.20 U				
cis -1,2-Dichloroethe	ne	0.70	0.20 U	0.20 U	0.20 U				
Trichloroethene		0.23	0.20 U	0.20 U	0.20 U				
Vinyl Chloride		0.20	0.20 U	0.21	0.20 U				
Total Petroleum Hyd	Petroleum Hydrocarbons								
GRO (C7-C12)		800	100 U	100 U	100 U				

		al .				Well ID ³			
		Cleanup				CPOC Area			
		Level ⁴	GW143S	GW237S	GW238I	GW239I	GW240D	GW241S	GW242I
Volatile Organic Com	pounds (μg	g/L)							
Benzene		0.80	0.20 U	8.57	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
cis -1,2-Dichloroethe	ne	0.70	0.33	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Trichloroethene		0.23	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Vinyl Chloride		0.20	0.20 U	0.20 U	0.20 U	0.20 U	0.23	0.20 U	0.20 U
Total Petroleum Hydr	ocarbons ((μg/L)							
GRO (C7-C12)		800	100 U	1,740	100 U	100 U	100 U	100 U	100 U

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
 - J = The value is an estimate.
 - UJ = The analyte was not detected at the estimated reporting limit indicated.
- 2. **Bolded** values exceed the cleanup levels.
- 3. S = shallow well; I = intermediate well; D = deep well.
- 4. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

 μ g/L = micrograms per liter

CPOC = conditional point of compliance

field dup. = field duplicate

GRO = gasoline range organics

NA = not analyzed

Wood Environment & Infrastructure Solutions, Inc.

TABLE 9: FORMER FUEL FARM GROUNDWATER ELEVATION DATA MAY 7, 2018

Boeing Renton Facility, Renton, Washington

Well ID ¹	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ²	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ²
GW183S	5.5 to 15	26.58	7.93	18.65
GW184S	5.6 to 15	27.14	8.60	18.54
GW211S	4.8 to 14.7	27.77	8.75	19.02
GW212S	4.9 to 14.8	28.06	9.83	18.23
GW221S	5 to 15	27.93	9.38	18.55
GW224S	5 to 15	27.98	10.10	17.88
GW255S	6 to 16	27.49	9.43	18.06
GW256S	7 to 16	27.22	8.14	19.08
GW257S	8 to 16	27.87	8.67	19.20
GW258S	9 to 16	25.51	6.91	18.60

Notes

- 1. S = shallow well, I = intermediate well
- 2. Elevations in feet relative to National Geodetic Vertical Datum of 1929.

Abbreviations

bgs = below ground surface

TABLE 10: FORMER FUEL FARM CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ¹ MAY 7, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ²										
	Source Area		CPOC Area									
								GW224S				
	GW255S	GW183S	GW184S	GW211S	GW212S	GW221S	GW224S	(field dup.)	GW255S	GW256S	GW257S	GW258S
Specific Conductivity (µS/cm)	189	127	131	260	240	213	190	190	189	148	158	325
Dissolved Oxygen (mg/L)	0.63	0.19	0.64	0.63	1.59	1.11	1.99	1.99	0.63	0.97	2.6	0.72
Oxidation/Reduction Potential (mV)	28.0	47.4	45.8	-13.1	72.9	49.2	43.3	43.3	28.0	29.8	53.6	39.1
pH (standard units)	6.15	6.28	6.32	6.37	5.59	6.12	6.11	6.11	6.15	6.29	6.11	6.29
Temperature (degrees C)	17.00	15.20	15.90	13.90	14.30	17.60	15.40	15.40	17.00	15.80	18.00	16.10

Notes

- 1. Primary geochemical indicators are measured in the field.
- 2. S = shallow well; I = intermediate well.

Abbreviations

µS/cm = microsiemens per centimeter CPOC = conditional point of compliance degrees C = degrees Celsius field dup. = field duplicate mg/L = milligrams per liter mV = millivolts

TABLE 11: FORMER FUEL FARM CONCENTRATIONS OF CONSTITUENTS OF CONCERN^{1, 2} MAY 7, 2018

Boeing Renton Facility, Renton, Washington

			Well ID ³									
		Source Area		CPOC Area								
	Cleanup								GW224S			
	Level ⁴	GW255S	GW183S	GW184S	GW211S	GW212S	GW221S	GW224S	(field dup.)	GW256S	GW257S	GW258S
Total Petroleum Hydrocarbons (mg/L)												
DRO (C12-C24)	0.5	0.100 U	0.100 U	0.100 U	0.272	0.100 U	0.746	0.560	0.664	0.100 U	0.100 U	0.100 U
Jet A	0.5	0.100 U	0.100 U	0.100 U	0.214	0.100 U	0.635	0.933	1.17	0.100 U	0.100 U	0.100 U

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
- 2. **Bolded** values exceed the cleanup levels.
- 3. S = shallow well; I = intermediate well.
- 4. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

CPOC = conditional point of compliance DRO = diesel range organics field dup. = field duplicate mg/L = milligrams per liter

TABLE 12: AOC-001 AND AOC-002 GROUNDWATER ELEVATION DATA MAY 8, 2018

Boeing Renton Facility, Renton, Washington

Well ID ¹	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ²	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ²
GW185S	4.5 to 14.5	16.27	0.83	15.44
GW190S	3.0 to 13.0	17.30	NM	NM
GW191D	26.5 to 36.0	17.53	NM	NM
GW192S	5.0 to 9.5	17.54	NM	NM
GW193S	3.0 to 12.8	18.67	NM	NM
GW194S	7.3 to 12.0	16.79	1.42	15.37
GW195S	7.3 to 12.0	16.34	1.01	15.33
GW196D	26.8 to 36.8	16.46	1.01	15.45
GW197S	7.8 to 12.5	16.52	0.70	15.82
GW245S	3.0 to 13.0	16.08	0.84	15.24

Notes

- 1. S = shallow well; D = deep well.
- 2. Elevations in feet relative to National Geodetic Vertical Datum of 1929.

Abbreviations

bgs = below ground surface

NM = not measured

TABLE 13: AOC-001 AND AOC-002 CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS¹ MAY 8, 2018

Boeing Renton Facility, Renton, Washington

		CPOC Area								
	GW185S	GW185S (field dup.)	GW194S	GW195S	GW196D⁴	GW197S	GW245S⁵			
Specific Conductivity (µS/cm)	765	765	586	520	385	779	534			
Dissolved Oxygen (mg/L)	0.76	0.76	1.88	1.18	0.89	0.29	0.27			
Oxidation/Reduction Potential (mV)	-5.2	-5.2	-25.4	-11.7	4.5	-129.7	-70.7			
pH (standard units)	6.43	6.43	6.29	6.31	6.31	7.11	6.80			
Temperature (degrees C)	16.70	16.70	14.90	14.30	15.30	15.20	14.80			
Total Organic Carbon (mg/L)	20.15	20.29	11.06	18.49	9.16	12.77	12.18			

Notes

- 1. Primary geochemical indicators are measured in the field, with the exception of total organic carbon, which is measured in the laboratory.
- 2. S = shallow well; D = deep well.
- 3. GW191D is installed in a cluster with GW192S, and is screened below a silt layer at 26.5 to 36 feet in depth.
- 4. GW196D is installed in a cluster with GW195S, and is screened below a silt layer at 26.8 to 36.8 feet in depth.
- 5. GW245S is both the source area and CPOC well for AOC-093.

Abbreviations

 μ S/cm = microsiemens per centimeter CPOC = conditional point of compliance degrees C = degrees Celsius field dup. = field duplicate mg/L = milligrams per liter mV = millivolts

TABLE 14: AOC-001 AND AOC-002 CONCENTRATIONS OF CONSTITUENTS OF CONCERN $^{1,\,2}$ MAY 8, 2018

Boeing Renton Facility, Renton, Washington

			CPOC Area ³							
	Cleanup	CMAGE	GW185S (field	CWIAAA	CMACE	C1440CD ⁵	CIMIATO	CINIDATE		
	Level ⁴	GW185S	dup.)	GW194S	GW195S	GW196D⁵	GW197S	GW245S		
Volatile Organic Compounds	(µg/L)									
1,1-Dichloroethene	0.057	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U		
Benzene	0.8	0.21	0.20 U	0.20 U	0.20 U	0.20 U	0.29	0.20 U		
cis -1,2-Dichloroethene	0.02	0.157	0.164	0.020 U	0.0464	0.0252	0.0711	0.0517		
Trichloroethene	0.02	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U	0.020 U		
Vinyl Chloride	0.05	0.131	0.130	0.020 U	0.0326	0.0348	0.0606	0.0278		

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
- 2. **Bolded** values exceed the cleanup levels.
- 3. S = shallow well; D = deep well.
- 4. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.
- 5. GW196D is installed in a cluster with GW195S, and is screened below a silt layer at 26.8 to 36.8 feet in depth

Abbreviations

µg/L = micrograms per liter CPOC = conditional point of compliance field dup. = duplicate field

TABLE 15: AOC-003 GROUNDWATER ELEVATION DATA MAY 8, 2018

Boeing Renton Facility, Renton, Washington

Well ID ¹	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ²	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ²
GW188S ³	3.5 to 13.5	18.78	3.21	15.57
GW247S	4 to 14	18.91	3.36	15.55
GW248I	10 to 20	18.78	3.06	15.72
GW249S	4 to 14	18.85	3.04	15.81

Notes

- 1. S = shallow well; I = intermediate well.
- 2. Elevations in feet relative to National Geodetic Vertical Datum of 1929.
- 3. Depth to water measurement not collected at GW188S during the second quarter 2017.

Abbreviations

bgs = below ground surface

TABLE 16: AOC-003 CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ¹ MAY 8, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ²						
	Source Area	Downgradient						
	Source Area	Plume Area	CPOC Area					
	GW249S	GW188S	GW247S	GW248I				
Specific Conductivity (µS/cm)	463	449	377	432				
Dissolved Oxygen (mg/L)	1.16	1.28	0.67	1.53				
Oxidation/Reduction Potential (mV)	34.0	10.7	7.8	-25.1				
pH (standard units)	6.23	6.30	6.33	6.33				
Temperature (degrees C)	14.4	15.2	13.50	14.60				
Total Organic Carbon (mg/L)	16.47	10.89	10.98	14.15				

Notes

- 1. Primary geochemical indicators are measured in the field, with the exception of total organic carbon, which is measured in the laboratory.
- 2. S = shallow well; I = intermediate well.

Abbreviations

µS/cm = microsiemens per centimeter CPOC = conditional point of compliance degrees C = degrees Celsius mg/L = milligrams per liter mV = millivolts

TABLE 17: AOC-003 CONCENTRATIONS OF CONSTITUENTS OF CONCERN $^{1,\,2}$ MAY 8, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ³					
		Cleanup Source Area Downgradient Plume Area					
	Cleanup			CPOC Area			
	Level ⁴	GW249S	GW188S	GW247S	GW248I		
Volatile Organic Compounds (µg/L)							
cis -1,2-Dichloroethene	0.78	0.0757	0.0531	0.0949	0.020 U		
Tetrachloroethene	0.02	0.020 U	0.020 U	0.020 U	0.020 U		
Trichloroethene	0.16	0.0211	0.020 U	0.0257	0.020 U		
Vinyl Chloride	0.24	0.428	0.505	0.460	0.573		

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
- 2. **Bolded** values exceed the cleanup levels.
- 3. S = shallow well; I = intermediate well.
- 4. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

 μ g/L = micrograms per liter

CPOC = conditional point of compliance

TABLE 18: AOC-034 AND AOC-035 GROUNDWATER ELEVATION DATA MAY 8, 2018

Boeing Renton Facility, Renton, Washington

Well ID ¹	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ²	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ²
GW001S	2 to 12	18.28	2.85	15.43
GW004S	2 to 12	16.66	1.25	15.41
GW005S ³	2 to 12	18.20	NM	NM
GW216S	4.4 to 14.2	18.90	3.35	15.55
GW217S	3.5 to 13.4	19.20	3.69	15.51
GW218S	3.6 to 13.5	18.01	2.62	15.39
GW251S	4 to 14	17.98	2.72	15.26

Notes

- 1. S = shallow well
- 2. Elevations in feet relative to National Geodetic Vertical Datum of 1929.
- 3. Access to this well was blocked due to construction.

Abbreviations

bgs = below ground surface

NM = not measured

TABLE 19: AOC-034 AND AOC-035 CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ¹ MAY 8, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ²						
		Downgradient						
	Source Area	Plume Area	СРОС	Area				
	GW217S	GW216S	GW218S	GW251S				
Specific Conductivity (µS/cm)	250	340	133	117				
Dissolved Oxygen (mg/L)	0.13	0.04	0.14	0.25				
Oxidation/Reduction Potential (mV)	21.1	25.1	24.8	14.5				
pH (standard units)	6.47	6.61	6.87	6.93				
Temperature (degrees C)	20.20	17.50	15.80	17.70				

Notes

- 1. Primary geochemical indicators are measured in the field.
- 2. S = shallow well.

Abbreviations

µS/cm = microsiemens per centimeter CPOC = conditional point of compliance degrees C = degrees Celsius mg/L = milligrams per liter mV = millivolts

TABLE 20: AOC-034 AND AOC-035 CONCENTRATIONS OF CONSTITUENTS OF CONCERN 1 MAY 8, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ²				
		Source	Cross-Gradient			
	Cleanup	Area	Plume Area	CPO	OC Area	
	Level ³	GW217S	GW216S	GW218S	GW251S	
Volatile Organic Compounds (µg/L)						
cis -1,2-Dichloroethene	0.65	0.2 U	0.2 U	0.2 U	0.2 U	
Vinyl Chloride	0.29	0.2 U	0.2 U	0.2 U	0.2 U	

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
- 2. S = shallow well
- 3. Cleanup levels obtained from Table 2 of the Cleanup Action Plan.

Abbreviations

 μ g/L = micrograms per liter

CPOC = conditional point of compliance

TABLE 21: LOT 20/FORMER BUILDING 10-71 PARCEL GROUNDWATER ELEVATION DATA MAY 8, 2018

Boeing Renton Facility, Renton, Washington

Well ID	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ¹	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ¹
10-71-MW-1	7 to 17	30.07	6.69	23.38
10-71-MW-2	7 to 17	29.88	7.92	21.96
10-71-MW-4	6 to 16	28.97	7.74	21.23

Notes

1. Elevations in feet relative to National Geodetic Vertical Datum of 1929.

Abbreviations

bgs = below ground surface

TABLE 22: LOT 20/FORMER BUILDING 10-71 PARCEL CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ¹ MAY 8, 2018

Boeing Renton Facility, Renton, Washington

		Well ID		
	10-71-MW1	10-71-MW2	10-71-MW4	
Specific Conductivity (µS/cm)	174	184	228	
Dissolved Oxygen (mg/L)	0.58	0.63	0.80	
Oxidation/Reduction Potential (mV)	79.2	104.5	227.8	
pH (standard units)	6.09	5.87	5.98	
Temperature (degrees C)	14.00	13.90	14.00	

Notes

1. Primary geochemical indicators are measured in the field.

Abbreviations

µS/cm = microsiemens per centimeter CPOC = conditional point of compliance degrees C = degrees Celsius mg/L = milligrams per liter mV = millivolts

TABLE 23: LOT 20/FORMER BUILDING 10-71 PARCEL CONCENTRATIONS OF CONSTITUENTS OF CONCERN ^{1, 2} MAY 8, 2018

Boeing Renton Facility, Renton, Washington

	Well ID		
	10-71-MW1	10-71-MW2	10-71-MW4
Volatile Organic Compounds (µ			
cis-1,2-Dichloroethene	0.20 U	0.20 U	0.20 U
Toluene	0.20 U	0.20 U	0.20 U
Trichloroethene	0.20 U	0.20 U	0.20 U
Vinyl Chloride	0.20 U	0.24	0.20 U

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
- 2. No cleanup standards have been established for the Building 10-71 Parcel.

Abbreviations

 μ g/L = micrograms per liter

TABLE 24: APRON A GROUNDWATER ELEVATION DATA MAY 7, 2018

Boeing Renton Facility, Renton, Washington

Well ID	Screen Interval Depth (feet bgs)	TOC Elevation (feet) ¹	Depth to Groundwater (feet below TOC)	Groundwater Elevation (feet) ¹
GW262S	8 to 18	NA	4.93	NA
GW263S	8 to 18	NA	6.02	NA
GW264S	8 to 18	NA	4.90	NA

Notes

1. Elevations in feet relative to National Geodetic Vertical Datum of 1929.

Abbreviations

bgs = below ground surface

NA = not available

TABLE 25: APRON A CONCENTRATIONS OF PRIMARY GEOCHEMICAL INDICATORS ¹ MAY 7, 2018

Boeing Renton Facility, Renton, Washington

	Well ID ²		
		GW262S	
	GW262S	(field dup.)	GW264S
Specific Conductivity (µS/cm)	428	428	697
Dissolved Oxygen (mg/L)	2.66	2.66	3.49
Oxidation/Reduction Potential (mV)	-66.7	-66.7	-58.4
pH (standard units)	6.09	6.09	6.19
Temperature (degrees C)	13.70	13.70	14.30
Total Organic Carbon (mg/L)	33.87	33.07	37.38

Notes

- 1. Primary geochemical indicators are measured in the field, with the exception of total organic carbon, which is measured in the laboratory.
- 2. S = shallow well.

Abbreviations

µS/cm = microsiemens per centimeter degrees C = degrees Celsius mg/L = milligrams per liter mV = millivolts

TABLE 26: APRON A CONCENTRATIONS OF CONSTITUENTS OF CONCERN¹ MAY 7, 2018

Boeing Renton Facility, Renton, Washington

		Well ID ²	
	GW262S	GW262S (field dup.)	GW264S
Volatile Organic Compounds (μg/	/L)		
cis- 1,2-Dichloroethene	0.20 U	0.20 U	0.20 U
Vinyl Chloride	0.25	0.24	1.63

Notes

- 1. Data qualifiers are as follows:
 - U = The analyte was not detected at the reporting limit indicated.
- 2. S = shallow well.

Abbreviations

 μ g/L = micrograms per liter

wood.

Appendix A

TABLE A-1: GROUNDWATER COMPLIANCE MONITORING SCHEDULE

Boeing Renton Facility, Renton, Washington

Cleanup Action	Monitorir	ng Frequency ¹		Groundwate	er Monitoring Wells ²		Additional Water Level		
Area	Quarterly	Semiannual	Cross-Gradient Wells	Source Area Wells	Downgradient Plume Wells	CPOC Wells	Monitoring Wells ³	Constituents of Concern ⁴	Analyses ⁵
SWMU-168		X (1,3)	NA	GW228S ⁷	NA	GW229S, GW230I, and GW231S		VC	SW8260C SIM
SWMU-172/SWMU-174	Х		NA	GW152S and GW153S	GW081S, GW172S, GW173S, and	GW232S, GW233I, GW234S,		cis -1,2-DCE, PCE, TCE, VC	SW8260C SIM ⁶
					GW226S	GW235I, and GW236S		Arsenic, copper, and lead	EPA 6020A
Building 4-78/79 SWMU/AOC	×		NA	GW031S, GW033S, GW034S,	GW038S, GW209S, and GW210S	GW143S, GW237S, GW238I, GW239I, GW240D, GW241S, and		VC, TCE, cis -1,2-DCE, benzene	SW8260C ⁶
Group				GW039S, GW243I, and GW244S		GW242I		TPH-gasoline	NWTPH-Gx
Former Fuel Farm SWMU/AOC Group		X (2,4)	NA	GW255S, GW256S, and GW257S	NA	GW183S, GW184S, GW211S,GW212S, GW221S,		TPH-jet fuel, TPH-diesel	NWTPH-Dx
AOC-001/AOC-002	Х	X (1,3) (all other	NA	GW193S	GW190S, GW191D, GW192S, and	GW185S, GW194S, GW195S,		Benzene	SW8260C ⁶
AOC-001/AOC-002	(CPOC wells)	wells)	NA .	GM1322	GW246S	GW196D, GW197S, and GW245S		TCE, cis -1,2-DCE, 1,1-dichloroethene, VC	SW8260C SIM ⁶
AOC 003	X (CPOC wells)	X (1,3) (all other	NA	CMO40C	CMITOOC	CM247C CM240I		PCE, TCE	CAMODEOC CINAR
AOC-003	X (CPOC Wells)	wells)	NA	GW249S	GW188S	GW247S and GW248I		cis -1,2-DCE, VC	SW8260C SIM ⁶
AOC-004		X (1,3)	NA	GW250S	NA	GW174S		Lead	EPA 6020A
AOC-034/AOC-035		X (2,4)	GW216S	GW217S	NA	GW218S and GW251S	GW001S, GW004S, and GW005S	VC, cis -1,2-DCE	SW8260C ⁶
AOC-060		X (1,3)	GW012S and GW014S	GW009S	GW147S	GW149S, GW150S, GW252S,	GW010S and GW011D	VC	SW8260C SIM ⁶
AGC-000		X (1,3)	GW0123 and GW0143	GW0033	GW14/3	GW253I, and GW254S	GW0103 and GW011D	TCE, cis -1,2-DCE	3000200C 31101
								1,1,2-Trichloroethane, acetone, benzene, toluene, carbon tetrachloride, chloroform, <i>cis</i> -1,2-DCE,	SW8260C ⁶
AOC-090		X (1,3)	NA	GW189S	GW175I and GW176S	GW163I, GW165I, GW177I, GW178S, GW179I, GW180S, GW207S, and		1,1-Dichloroethene, 1,1,2,2-tetrachloroethane, VC, PCE, TCE	SW8260C SIM ⁶
AOC-090		X (1,3)	NA	GM1892	GW1751 and GW1765	GW1791, GW1805, GW2075, and GW208S		TPH-gasoline	NWPTH-Gx
								TPH-diesel, TPH-motor oil	NWTPH-Dx
Building 4-70 Area		X (1,3)	NA	NA	NA	GW259S and GW260S		TCE, cis -1,2-DCE, VC	SW8260C ⁶
Lot 20/Former Building 10-71		X (2,4)	NA	10-71-MW1, 10-71-MW2, and 10-71-MW4	NA	NA		Toluene, cis-1,2-DCE, TCE, VC	SW8260C ⁶
Apron A		X (2,4)	NA	GW262S and GW264S	NA	NA		cis -1,2-DCE and VC	SW8260C ⁶

Notes:

- 1. The EDR presents the groundwater monitoring frequency for each SWMU/AOC. For sites with semiannual monitoring frequency, specific quarters when monitoring will be conducted is indicated by 1 for quarter 1, 2 for quarter 2, etc.
- 2. Groundwater monitoring wells are also monitored for groundwater levels.
- 3. Additional wells are monitored for groundwater levels only.
- 4. In addition to COCs, primary geochemical indicators will be monitored during each regular monitoring event. Geochemical indicators are listed in Table A-2.
- 5. Details of analytical methods are specified in the Quality Assurance Project Plan, which is Appendix E to the Cleanup Action Plan (AMEC, 2012).
- 6. SIM methods will be used if the cleanup level is lower than the reporting limit achieved by the conventional 8021, 8260 or 8270 method. If cleanup levels become higher or if the conventional 8021, 8260 or 8270 methods are updated and able to achieve reporting limits below the cleanup levels, then the conventional method rather than the SIM method will be used.
- 7. GW228S will not be monitored on a semiannual basis only the CPOC wells will be monitored on a semiannual basis for SWMU-168.

Abbreviations:

AOC = area of concern

cis -1,2-DCE = cis -1,2 dichloroethene

COCs = constituents of concern

CPOC = conditional point of compliance

Cr = chromium

EDR = Engineering Design Report

EPA = Environmental Protection Agency

NA = not applicable

PCE = tetrachloroethene
SIM = selected ion monitoring
SWMU = solid waste management unit
TCE = trichloroethene

TPH = total petroleum hydrocarbons

trans -1,2-DCE = trans -1,2 dichloroethene
VC = vinyl chloride

VOCs = volatile organic compounds

TABLE A-2: MONITORED NATURAL ATTENUATION/MONITORED ATTENUATION SCHEDULE

Boeing Renton Facility, Renton, Washington

	Groundwa				Primary Geochemical Para	meters ²	
Cleanup Action		Groundwater	Monitoring Wells			Monitorin	ig Frequency ³
Area	Cross-Gradient Wells	Source Area Wells	Downgradient Plume Wells	CPOC Wells	Indicators	Quarterly	Semiannual
SWMU-168	NA	GW228S ⁴	NA	GW229S, GW230I, and GW231S	Dissolved oxygen, pH, ORP, temperature, specific conductance		X (1,3)
SWMU-172/SWMU-174	NA	GW152S and GW153S	GW081S, GW172S, GW173S, and GW226S	GW232S, GW233I, GW234S, GW235I, and GW236S	Dissolved oxygen, pH, ORP, temperature, specific conductance, TOC	Х	
Building 4-78/79 SWMU/AOC Group	NA	GW031S, GW033S, GW034S, GW039S, GW243I, and GW244S	GW038S, GW209S, and GW210S	GW143S, GW237S, GW238I, GW239I, GW240D, GW241S, and GW242I	Dissolved oxygen, pH, ORP, temperature, specific conductance in all wells, TOC in all wells except GW241S and GW242I	Х	
Former Fuel Farm SWMU/AOC Group	NA	GW255S, GW256S, and GW257S	NA	GW183S, GW184S, GW211S,GW212S, GW221S, GW224S, and GW258S	Dissolved oxygen, pH, ORP, temperature, specific conductance		X (2,4)
AOC-001/AOC-002	NA	GW193S	GW190S, GW191D, GW192S, and	GW185S, GW194S, GW195S,	Dissolved oxygen, pH, ORP, temperature,	X	X (1,3)
AGC 001/AGC 002	IVA	GW1333	GW246S	GW196D, GW197S, and GW245S	specific conductance, TOC	(CPOC wells)	(all other wells)
AOC-003	NA	GW249S	GW188S	GW247S and GW248I	Dissolved oxygen, pH, ORP, temperature,	X	X (1,3)
AOC-004	NA	GW250S	NA	GW174S	specific conductance, TOC Dissolved oxygen, pH, ORP, temperature, specific conductance	(CPOC wells)	(all other wells) X (1,3)
AOC-034/AOC-035	GW216S	GW217S	NA	GW218S and GW251S	Dissolved oxygen, pH, ORP, temperature, specific conductance		X (2,4)
AOC-060	GW012S and GW014S	GW009S	GW147S	GW149S, GW150S, GW252S, GW253I, and GW254S	Dissolved oxygen, pH, ORP, temperature, specific conductance, TOC		X (1,3)
AOC-090	NA	GW189S	GW175I and GW176S	GW163I, GW165I, GW177I, GW178S, GW179I, GW180S, GW207S, and GW208S	Dissolved oxygen, pH, ORP, temperature, specific conductance, TOC ⁵		X (1,3)
Building 4-70 Area	NA	NA	NA	GW259S and GW260S	Dissolved oxygen, pH, ORP, temperature, specific conductance, TOC		X (1,3)
Apron A	NA	GW262S and GW264S	NA	NA	Dissolved oxygen, pH, ORP, temperature, specific conductance, TOC		X (2,4)

Notes:

- 1. In addition to COCs listed in Table A-1, primary geochemical indicators will be monitored during each regular monitoring event.
- 2. All primary geochemical indicators except TOC are monitored in the field during sampling. TOC is analyzed in the laboratory following methods specified in the Quality Assurance Project Plan, which is Appendix E to the Cleanup Action Plan (AMEC, 2012). The primary geochemical indicators differ slightly depending on whether the site is a fuel-related site or a solvent-related site. At a fuel related site, TOC is not necessary; at a solvent-related site, TOC is a measure of how much electron donor remains present.
- 3. The EDR presents the groundwater monitoring frequency for each SWMU/AOC. For sites with semiannual monitoring frequency, specific quarters when monitoring will be conducted is indicated by 1 for quarter 1, 2 for quarter 2, etc.
- 4. Primary geochemical parameters will not be collected at GW228S only at CPOC wells that are sampled semiannually.
- 5. TOC will only be analyzed in the groundwater from the source area well (GW189S).

Abbreviations:

AOC = area of concern

COCs = constituents of concern

CPOC = conditional point of compliance

EDR = Engineering Design Report

NA = not applicable

ORP = oxidation reduction potential

SWMU = solid waste management unit

TOC = total organic carbon

wood.

Appendix B



Project Nam	e:	Boeing Rent	on		Project Number	•	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 816	5		
Sample Num	nber:	RGW081S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	resentative:	JHA							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES)	1	Damaged (N	O)	Describe:			
DTW Before		7.92	Time:	=	Flow through cel			GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	_	5/ 7 /2018 @ 815		Gallons Purged:	1
Purge water d			55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
r arge water a	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three		dings within the fol		>/= 1 flow	Observations
	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
757	14.9	179.4	1.35	6.35	75.1	LOW	7.92	< 0.25	
800	14.9	186.2	0.75	6.31	73.1			0.25	
803		189.6	0.52	6.33	69.9				
806	14.9	191.2	0.44	6.35	67.2			0.5	
809	14.8	192.1	0.40	6.36	64.9				
812	14.9	192.4	0.37	6.38	62.4				
814	14.9	192.6	0.36	6.38	59.3				
SAMPLE CO	LLECTION D	АТА							
Sample Collect			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	_	Tap Rinse	DI Water	Dedicated	—		
(By Numerica	_	Other		_		Dedicated			
	*				LORLESS NO/N	<u> </u>			
	*				LORLESS, NO/N	S			
	iption (color, t					Turbidity	DTW	Ferrous iron	Comments/
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.): _	CLEAR, CO	LORLESS, NO/N	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity			
Sample Descr Replicate 1 2	Temp (°F/°C) 14.9	Cond. (uS/cm) 192.7	D.O. (mg/L) 0.36	pH 6.38 6.38	ORP (mV) 59.1	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 14.9 14.9	Cond. (uS/cm) 192.7 192.6	D.O. (mg/L) 0.36 0.37	CLEAR, CO pH 6.38 6.38 6.39	ORP (mV) 59.1 58.7 58.4	Turbidity			
Sample Descr Replicate 1 2	Temp (°F/°C) 14.9 14.9 14.9	Cond. (uS/cm) 192.7 192.6 192.7	D.O. (mg/L) 0.36 0.37 0.37	pH 6.38 6.38 6.39 6.38	ORP (mV) 59.1 58.7 58.4 58.2	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 14.9 14.9	Cond. (uS/cm) 192.7 192.6	D.O. (mg/L) 0.36 0.37	CLEAR, CO pH 6.38 6.38 6.39	ORP (mV) 59.1 58.7 58.4	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.9 14.9 14.9 14.9	Cond. (uS/cm) 192.7 192.6 192.7 192.7	D.O. (mg/L) 0.36 0.37 0.37 0.37	CLEAR, CO pH 6.38 6.38 6.39 6.38 6.38	ORP (mV) 59.1 58.7 58.4 58.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9	Cond. (uS/cm) 192.7 192.6 192.7 192.7	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37	CLEAR, CO pH 6.38 6.38 6.39 6.38 6.38 R BOTTLE	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle app	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 14.9 (8260-SIM)	Cond. (uS/cm) 192.7 192.6 192.6 192.7 192.7 NALYSIS AL (8010) (8020	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 0.40 LOWED PER DE	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 G.38 CR BOTTLE 7	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle appleGx) (BTEX)	Turbidity (NTU) #DIV/0!	(ft) n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 (8260-SIM) (8270D) (PA	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 192.7 192.7 NALYSIS AL (8010) (8020 ht) (NWTPH	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI 0 (NWTPH-C	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 G.38 6.38 CR BOTTLE 7 G) (NWTPH	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081)	Turbidity (NTU) #DIV/0!	n-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 14.9 (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D) (NWTPH-C-D) (NWTPH-C-D) (TSS) (Beat PO4) (Total PO4) (Total PO4)	CLEAR, CO pH 6.38 6.38 6.39 6.38 6.38 G.38 G.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI	n-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC) (Total Cyanid	Cond. (uS/cm) 192.7 192.6 192.6 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyze	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PE 0 (NWTPH-C-D) (NWTP) 1 (TSS) (Be al PO4) (Totanide) (Free care)	pH 6.38 6.39 6.38 6.38 6.38 CONTILE 7 CONTINUE 10 CON	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2)	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Total ce) (WAD Cya) (As) (Sb) (I	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI 0 (NWTPH-6-D) (NWTPH-6-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 192.7 192.6 192.6 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tote) (WAD Cyc) (As) (Sb) (Ietals) (As) (Sb)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI 0 (NWTPH-6-D) (NWTPH-6-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote (b) (WAD Cya (ctivity) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Sb) (g) short list)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 192.7 192.6 192.6 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tote) (WAD Cyc) (As) (Sb) (Ietals) (As) (Sb)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote (b) (WAD Cya (ctivity) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Sb) (g) short list)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote (b) (WAD Cya (ctivity) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Sb) (g) short list)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote (b) (WAD Cya (ctivity) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Sb) (g) short list)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OC) (Boein) Methane Eth	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote (b) (WAD Cya (ctivity) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Sb) (g) short list)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OC) (Boein) Methane Eth	Cond. (uS/cm) 192.7 192.6 192.7 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote (b) (WAD Cya (ctivity) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Ietals) (AS) (Sb) (Sb) (g) short list)	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San	Temp (°F/°C) 14.9 14.9 14.9 14.9 14.9 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OC) (Boein) Methane Eth	Cond. (uS/cm) 192.7 192.6 192.6 192.7 192.7 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cya b) (As) (Sb) (I etals) (As) (Sb) g short list) ane Ethene Acc	D.O. (mg/L) 0.36 0.37 0.37 0.37 0.37 LOWED PEI) (NWTPH-C-D) (NWTPH-C-D	CLEAR, CO pH 6.38 6.39 6.38 6.38 6.38 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 59.1 58.7 58.4 58.2 58.6 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (19) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □



Project Nam	ie:	Boeing Ren	ton		Project Number	r :	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 7 /2018@ 102	26		
Sample Num	nber:	RGW152S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	resentative:	JHA							
WATER LEV	/EL/WELL/PU	RGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before	Purging (ft)	8.55	Time:	946	Flow through cel	l vol.		GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	_	5/ 7 /2018 @ 102	3	Gallons Purged:	
Purge water d	lisposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pm	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						dings within the fol	_	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1005	14.8	228.8	1.17	6.25	55.7	MED	8.55	<0.25	
1008	14.9	229.4	0.59	6.25	50.3			0.25	
1011	15.0	225.1	0.52	6.25	48.1		8.55		
1014	15.0	214.9	0.50	6.25	44.4			0.5	
1017		204.4	0.53	6.25	41.5				
								0.75	
1020		195.6	0.57	6.25	40.0			0.75	
1022	15.0	185.3	0.61	6.24	38.7				
	LLECTION D		D. 11		D	DED DI (DDED			
Sample Collec	cted With:		Bailer			DED BLADDER		— 5 2	
Made of:	빌	Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced		Alconox Was	sh 📋	Tap Rinse	DI Water	Dedicated			
(By Numerica	,	Other		ar armari r					
Sample Descr	aption (color, t	urbidity, odor,	sheen, etc.):	CLOUDY, L	IGHT GRAY CO	LOR, NO/NS			
Replicate	Temp	<u> </u>	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
		Cona.						r ci i ous ii oii	Comments
-	(°F/°C)	Cond. (uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	(Fe II)	Observations
1			(mg/L) 0.63	6.24					
1	(° F /°Ĉ)	(uS/cm) 185.7	0.63	6.24	(mV) 38.4				
1 2	(°F/°Ĉ) 15.0 15.0	(uS/cm) 185.7 184.3	0.63	6.24	(mV) 38.4 38.3				
1 2 3	(°F/°Ĉ) 15.0 15.0 15.0	(uS/cm) 185.7 184.3 182.8	0.63 0.63 0.64	6.24 6.23 6.24	(mV) 38.4 38.3 37.9				
1 2	(°F/°Ĉ) 15.0 15.0 15.0 15.0 15.0	(uS/cm) 185.7 184.3 182.8 181.2	0.63 0.63 0.64 0.65	6.24 6.23 6.24 6.24	(mV) 38.4 38.3 37.9 37.5	(NTU)			
1 2 3	(°F/°Ĉ) 15.0 15.0 15.0	(uS/cm) 185.7 184.3 182.8	0.63 0.63 0.64	6.24 6.23 6.24	(mV) 38.4 38.3 37.9				
1 2 3 4 Average:	(°F/°Ĉ) 15.0 15.0 15.0 15.0 15.0 15.0	(uS/cm) 185.7 184.3 182.8 181.2 183.5	0.63 0.63 0.64 0.65 0.64	6.24 6.23 6.24 6.24	(mV) 38.4 38.3 37.9 37.5 38.0	(NTU)	(ft)	(Fe II)	
1 2 3 4 Average:	(°F/°Ĉ) 15.0 15.0 15.0 15.0 15.0 15.0	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL	0.63 0.64 0.65 0.64 LOWED PE	6.24 6.23 6.24 6.24 6.24 R BOTTLE	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle approximation)	(NTU) #DIV/0!	(ft)	(Fe II)	
1 2 3 4 Average:	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPE	0.63 0.64 0.65 0.64 LOWED PE 0) (NWTPH-6	6.24 6.24 6.24 6.24 R BOTTLE GO (NWTPH-H-Dx) (TPH-	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle approach (BTEX)) -HCID) (8081)	#DIV/0! plicable or write no (8141) (Oil & Gre	n-standard ana	(Fe II)	Observations
1 2 3 4 Average:	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 J.H) (NWTPHotivity) (TDS)	0.63 0.64 0.65 0.64 LOWED PER ON (NWTPH-CH-D) (NWTPH-CH-	6.24 6.23 6.24 6.24 6.24 6.24 G) (NWTPHH-Dx) (TPHDD) (Turbid	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle appled) GX) (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! blicable or write no (8141) (Oil & Green (HCO3/CO3) (CI)	n-standard ana	(Fe II)	Observations OR OR
1 2 3 4 Average:	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA(pH) (Condu (COD) (TOO	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS 25310C) (Tot	0.63 0.64 0.65 0.64 LOWED PE 0) (NWTPH-0 1-D) (NWTP 6) (TSS) (Be al PO4) (Tot	6.24 6.24 6.24 6.24 6.24 R BOTTLE G) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle approach (BTEX)) -HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Green (HCO3/CO3) (CI)	n-standard ana	(Fe II)	Observations OR OR
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS 25310C) (Tot e) (WAD Cy.	0.63 0.64 0.65 0.64 LOWED PEL 0) (NWTPH-0 I-D) (NWTP S) (TSS) (Becal PO4) (Totanide) (Free	6.24 6.24 6.24 6.24 R BOTTLE GOOD (Turbid al Kiedahl Ni	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle appropriate (Circ	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2)	n-standard ana ase)) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
1 2 3 4 Average:	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC) (Total Metals)	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (5310C) (Total e) (AS) (Sb) (1	0.63 0.64 0.65 0.64 LOWED PER DISTRICT (NATT) 0 (NWTPH-CE) (NWTPH-CE) (NWTPH-CE) (TSS) (BC) (all PO4) (Total anide) (Free Pea) (Ba) (Be) (Call PO4) (Call PO4) (Total PO4) (T	6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPHH-Dx) (TPHOD) (Turbidal Kiedahl Nicoyanide) () (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 (H) (NWTPH ctivity) (TDS ctivity) (TDS ctivity) (Tot e) (WAD Cy. (As) (Sb) (Setals) (As) (Sb)	0.63 0.64 0.65 0.64 LOWED PER DISTRICT (NATT) 0 (NWTPH-CE) (NWTPH-CE) (NWTPH-CE) (TSS) (BC) (all PO4) (Total anide) (Free Pea) (Ba) (Be) (Call PO4) (Call PO4) (Total PO4) (T	6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPHH-Dx) (TPHOD) (Turbidal Kiedahl Nicoyanide) () (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cyc o) (As) (Sb) (Se g short list)	0.63 0.64 0.65 0.64 LOWED PE 0) (NWTPH-0 1-D) (NWTP 6) (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 2 (TSS) (Be 3 (TSS) (Be 3 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 5 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be) (Ca	6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPHH-Dx) (TPHOD) (Turbidal Kiedahl Nicoyanide) () (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 (H) (NWTPH ctivity) (TDS ctivity) (TDS ctivity) (Tot e) (WAD Cy. (As) (Sb) (Setals) (As) (Sb)	0.63 0.64 0.65 0.64 LOWED PE 0) (NWTPH-0 1-D) (NWTP 6) (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 2 (TSS) (Be 3 (TSS) (Be 3 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 5 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be) (Ca	6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPHH-Dx) (TPHOD) (Turbidal Kiedahl Nicoyanide) () (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cyc o) (As) (Sb) (Se g short list)	0.63 0.64 0.65 0.64 LOWED PE 0) (NWTPH-0 1-D) (NWTP 6) (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 2 (TSS) (Be 3 (TSS) (Be 3 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 5 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be) (Ca	6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPHH-Dx) (TPHOD) (Turbidal Kiedahl Nicoyanide) () (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cyc o) (As) (Sb) (Se g short list)	0.63 0.64 0.65 0.64 LOWED PE 0) (NWTPH-0 1-D) (NWTP 6) (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 1 (TSS) (Be 2 (TSS) (Be 3 (TSS) (Be 3 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 4 (TSS) (Be 5 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be 6 (TSS) (Be) (Ca	6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPHH-Dx) (TPHOD) (Turbidal Kiedahl Nicoyanide) () (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid) (Total Metals) (Dissolved Metals) VOC (Boein, Methane Eth	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPHetivity) (TDS (25310C) (Total (e) (AS) (Sb) (letals) (As) (Sb g short list) ane Ethene Ac	0.63 0.64 0.65 0.64 LOWED PER (1) (NWTPH-(2) (NWTPH-(3) (TSS) (BG (all PO4) (Total anide) (Free (Ba) (Be) (Call PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.24 6.23 6.24 6.24 6.24 R BOTTLE Government of the second	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3 1 Duplicate San	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid) (Total Metals) (Dissolved Metals) VOC (Boein, Methane Eth	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cyc o) (As) (Sb) (Se g short list)	0.63 0.64 0.65 0.64 LOWED PER (1) (NWTPH-(2) (NWTPH-(3) (TSS) (BG (all PO4) (Total anide) (Free (Ba) (Be) (Call PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.24 6.23 6.24 6.24 6.24 R BOTTLE Government of the second	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3 1 1 Duplicate San Comments:	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid) (Total Metals) (Dissolved Metals) VOC (Boein, Methane Eth	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPHetivity) (TDS (25310C) (Total (e) (AS) (Sb) (letals) (As) (Sb g short list) ane Ethene Ac	0.63 0.64 0.65 0.64 LOWED PE (I) (NWTPH-6) (NWTP (I-D)	6.24 6.23 6.24 6.24 6.24 R BOTTLE Government of the second	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (N) (Mg) (Mn) (Ni) (A	n-standard ana ase)) (SO4) (NO3 i) (Ag) (Se) (Tl) (V)	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
1 2 3 4 Average: QUANTITY 3 1 1 Duplicate San Comments: Signature:	(°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 15.0 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Methane Eth others mple No(s):	(uS/cm) 185.7 184.3 182.8 181.2 183.5 NALYSIS AL (8010) (8020 H) (NWTPHetivity) (TDS (25310C) (Total (e) (AS) (Sb) (letals) (As) (Sb g short list) anne Ethene Ac Duplicate Lo	0.63 0.64 0.65 0.64 LOWED PE (I) (NWTPH-6) (NWTP (I-D)	6.24 6.23 6.24 6.24 6.24 R BOTTLE TO (NWTPH) H-Dx) (TPH) DD) (Turbid al Kiedahl Nic (Cyanide) (Cyanide) (Cd) (Co) (a) (Cd) (Co)	(mV) 38.4 38.3 37.9 37.5 38.0 TYPE (Circle appropriate (Circle appropriate (Circle appropriate (Circle appropriate (Circle appropriate (Circle (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	(ft) n-standard ana ase) (SO4) (NO3) i) (Ag) (Se) (Tl) (V) g) (Se) (Tl) (V)	(Fe II) Ilysis below) WA	Observations OR □ OR □ OR □



Project Name	e:	Boeing Ren	ton		Project Number	••	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 956			
Sample Num	ber:	RGW153S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	esentative:	JHA			·-				
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I		8.82	Time:	_	Flow through cel	-		GW Meter No.(s	HERON 3
Begin Purge:				End Purge:		5/ 7 /2018 @ 954		Gallons Purged:	0.5
Purge water di			55-gal Drum	i i	Storage Tank	Ground	Other	SITE TREATME	
Turge water a	1		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time	Purge Goa			ters for three		lings within the foll		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
936	15.2	179.7	3.41	6.17	51.9	LOW	8.84	< 0.25	
939	15.2	182.4	3.24	6.14	53.5			<0.25	
942	15.2	208.2	1.96	6.17	54.1		8.84	<0.25	
945	15.2	218.6	1.53	6.23	51.5			0.25	
								0.23	
948	15.2	224.9	1.01	6.31	46.4	<u> </u>			
951	15.3	227.0	0.93	6.33	43.1				
953	15.3	227.9	0.83	6.35	40.9				
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER		_	
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	_	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	l Order)	I Other							
	*	Other							
	*		sheen, etc.):	CLOUDY, C	COLORLESS, NO.	/NS			
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):_		COLORLESS, NO.		DTW	Ferrous iron	Comments/
	*		_	CLOUDY, C		Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	Temp	urbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm) 227.9	D.O. (mg/L)	рН 6.36	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 15.3	Cond. (uS/cm) 227.9	D.O. (mg/L) 0.88	pH 6.36 6.36	ORP (mV) 40.4 40.1	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 15.3 15.3	Cond. (uS/cm) 227.9 228.0	D.O. (mg/L) 0.88 0.85	pH 6.36 6.36 6.37	ORP (mV) 40.4 40.1 39.7	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 15.3 15.3 15.3	Cond. (uS/cm) 227.9 228.0	D.O. (mg/L) 0.88 0.85 0.83	pH 6.36 6.36 6.37 6.37	ORP (mV) 40.4 40.1 39.7 39.7	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 15.3 15.3	Cond. (uS/cm) 227.9 228.0	D.O. (mg/L) 0.88 0.85	pH 6.36 6.36 6.37	ORP (mV) 40.4 40.1 39.7	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3	Cond. (uS/cm) 227.9 228.0 228.0	D.O. (mg/L) 0.88 0.85 0.83 0.82	pH 6.36 6.36 6.37 6.37	ORP (mV) 40.4 40.1 39.7 39.7 40.0	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3	Cond. (uS/cm) 227.9 228.0 228.0 NALYSIS AL (8010) (8020	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PER DESTRUCTION (NWTPH-COMMENT)	pH 6.36 6.36 6.37 6.37 6.37 R BOTTLE T	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA	Cond. (uS/cm) 227.9 228.0 228.0 NALYSIS AL (8010) (8020 CH) (NWTPF	D.O. (mg/L) 0.88 0.85 0.82 0.85 LOWED PE (NWTPH-C) (NWTPH-C)	6.36 6.37 6.37 6.37 6.37 G.37 R BOTTLE 1 G) (NWTPH	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081)	#DIV/0!	n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.88 0.85 0.82 0.85 LOWED PE (NWTPH-CI-D) (NWTP	6.36 6.37 6.37 6.37 6.37 G) (NWTPH H-Dx) (TPH OD) (Turbid	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) I-HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPH- ctivity) (TDS	D.O. (mg/L) 0.88 0.85 0.82 0.85 LOWED PE 0 (NWTPH-C) (NWTP 0 (TSS) (Be cal PO4) (Total	6.36 6.37 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PE 0. (NWTPH-C) (NWTPH-C) (TSS) (Beta al PO4) (Totanide) (Free carried)	6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)	ORP (mV) 40.4 40.1 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 4-HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) (NO3/NO2)	n-standard ana	Ilysis below) WA WA NO (NO2) (F)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHotivity) (TDS (25310C) (Total conditions) (SD) (Conditions) (Conditio	D.O. (mg/L) 0.88 0.85 0.82 0.85 LOWED PE 0. (NWTPH-C) (NWTP 0. (TSS) (Be al PO4) (Total anide) (Free Ba) (Be) (Ca	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020) AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cy c) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.88 0.85 0.82 0.85 LOWED PE 0. (NWTPH-C) (NWTP 0. (TSS) (Be al PO4) (Total anide) (Free Ba) (Be) (Ca	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity) trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020) AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cy c) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS C5310C) (Tot e) (WAD Cy) (As) (Sb) (Setals) (As) (Sb) g short list)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS C5310C) (Tot e) (WAD Cy) (As) (Sb) (Setals) (As) (Sb) g short list)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS C5310C) (Tot e) (WAD Cy) (As) (Sb) (Setals) (As) (Sb) g short list)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS C5310C) (Tot e) (WAD Cy) (As) (Sb) (Setals) (As) (Sb) g short list)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate Sam	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS C5310C) (Tot e) (WAD Cy) (As) (Sb) (Setals) (As) (Sb) g short list)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 227.9 228.0 228.0 228.0 NALYSIS AL (8010) (8020 AH) (NWTPHetivity) (TDS C5310C) (Tot e) (WAD Cy) (As) (Sb) (Setals) (As) (Sb) g short list)	D.O. (mg/L) 0.88 0.85 0.83 0.82 0.85 LOWED PEI 0 (NWTPH- 1-D) (NWTPH- 2 (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.36 6.36 6.37 6.37 6.37 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 40.4 40.1 39.7 39.7 40.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (HCID) (NH3) (Cr) (Cu) (Fe) (Cr) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e:	Boeing Ren	ton		Project Number	:: (0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 112	1		
Sample Num	ber:	RGW172S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	esentative:	JHA			•				
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I		8.68	Time:	_	Flow through cel	_		GW Meter No.(s	HERON 3
Begin Purge:				End Purge:	=	5/ 7 /2018 @ 1117		Gallons Purged:	0.5
Purge water di			55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	
	1		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time	Purge Goa			ters for three		lings within the follo		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1059	17.3	257.4	0.23	6.12	54.8	LOW	8.72	< 0.25	
1102	17.1	276.8	0.19	6.18	50.9		8.72	<0.25	
1105	16.8	272.9	0.18	6.38	36.3			<0.25	
1108	16.7	265.9	0.22	6.44	28.5		8.72		
							0.72	0.23	
1111	16.7	261.8	0.25	6.46	24.8				
1114	16.6	254.5	0.31	6.47	17.6				
1116	16.7	252.3	0.32	6.48	14.7				
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER		_	
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	l Order)	Other							
	,								
Sample Descri	*		sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
	iption (color, t	urbidity, odor,	_				DTW	Ferrous iron	Comments/
Sample Descri	*		sheen, etc.): _ D.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm) 252.3	D.O. (mg/L)	рН 6.48	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 16.7	Cond. (uS/cm) 252.3	D.O. (mg/L) 0.32 0.33	pH 6.48 6.48	ORP (mV) 14.4	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 16.7 16.7	Cond. (uS/cm) 252.3 251.9 251.8	D.O. (mg/L) 0.32 0.33	pH 6.48 6.48 6.48	ORP (mV) 14.4 14.1 13.8	Turbidity			
Replicate 1 2	Temp (°F/°C) 16.7	Cond. (uS/cm) 252.3	D.O. (mg/L) 0.32 0.33	pH 6.48 6.48	ORP (mV) 14.4	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 16.7 16.7	Cond. (uS/cm) 252.3 251.9 251.8	D.O. (mg/L) 0.32 0.33	pH 6.48 6.48 6.48	ORP (mV) 14.4 14.1 13.8	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7	Cond. (uS/cm) 252.3 251.9 251.6 251.9	D.O. (mg/L) 0.32 0.33 0.33 0.33	pH 6.48 6.48 6.48 6.48 6.48	ORP (mV) 14.4 14.1 13.8 13.5 14.0	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PE	pH 6.48 6.48 6.48 6.48 6.48	ORP (mV) 14.4 14.1 13.8 13.5 14.0	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 TYPICAL A	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020)	D.O. (mg/L) 0.32 0.33 0.33 0.33 LOWED PER D) (NWTPH-6	pH 6.48 6.48 6.48 6.48 6.48 G.48 C.48 C.48	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple-Gx) (BTEX)	Turbidity (NTU) #DIV/0!	-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 18.7 18.7 19.7 19.7 19.7 19.7 19.7 19.7 19.7 19	Cond. (uS/cm) 252.3 251.9 251.6 251.9 NALYSIS AL (8010) (8020 CH) (NWTPE	D.O. (mg/L) 0.32 0.33 0.33 0.33 LOWED PE (NWTPH-CI-D) (NWTP	6.48 6.48 6.48 6.48 6.48 G.48 G.48 G.48 R BOTTLE T	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle ap) 1-Gx) (BTEX) 1-HCID) (8081)	Turbidity (NTU) #DIV/0!	-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 252.3 251.9 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.32 0.33 0.33 0.33 LOWED PE 0) (NWTPH-6 1-D) (NWTP 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot	6.48 6.48 6.48 6.48 6.48 G.48 R BOTTLE TO (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle ap) 1-Gx) (BTEX) 1-HCID) (8081)	#DIV/0! #Dicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl)	-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOO (Total Cyanid	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.32 0.33 0.33 0.33 LOWED PE 0. (NWTPH-C) (NWTP 0. (TSS) (Because of the property of the pr	6.48 6.48 6.48 6.48 6.48 CHARLE OF THE OD (Turbid al Kiedahl Ni Cyanide)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write non (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2)	-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA(DH) (Conduction (COD) (Todal Cyanida (Total Metals)	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS (25310C) (Total ce) (WAD Cys.) (As) (Sb) (1000)	D.O. (mg/L) 0.32 0.33 0.33 0.33 LOWED PELO (NWTPH-CO) (NWTPH-CO) (NWTPH-CO) (NWTPH-CO) (NWTPH-CO) (TSS) (Beloanide) (Free Ba) (Be) (Called (Calle	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyt c) (As) (Sb) (Betals) (As) (Sb)	D.O. (mg/L) 0.32 0.33 0.33 0.33 LOWED PELO (NWTPH-CO) (NWTPH-CO) (NWTPH-CO) (NWTPH-CO) (NWTPH-CO) (TSS) (Beloanide) (Free Ba) (Be) (Called (Calle	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write non (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyz) (1) (As) (Sb) (1) etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyt c) (As) (Sb) (Betals) (As) (Sb)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyz) (1) (As) (Sb) (1) etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyz) (1) (As) (Sb) (1) etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyz) (1) (As) (Sb) (1) etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3 1 1 Duplicate Sam	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyz) (1) (As) (Sb) (1) etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 252.3 251.9 251.8 251.6 251.9 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS) (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) (g short list)	D.O. (mg/L) 0.32 0.33 0.33 0.33 0.33 LOWED PEI 0) (NWTPH- 1-D) (NWTP 2) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.48 6.48 6.48 6.48 6.48 6.48 6.18 6.48 6.48 C) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 14.4 14.1 13.8 13.5 14.0 TYPE (Circle apple Grace (BTEX)) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write non (8141) (Oil & Grea (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni)	-standard ana se) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK



Project Nam	e:	Boeing Ren	ton		Project Number	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 7 /2018@ 846	<u> </u>		
Sample Num	ber:	RGW173S-	•		Weather:	50'S, CLOUDY			
Landau Repr	resentative:	JHA			•				
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before	Purging (ft)	8.7	Time:	759	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 7 /2018 @	2 823	End Purge:	Date/Time:	5/ 7 /2018 @ 844		Gallons Purged:	0.5
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	tous fou thus	(mV)	(NTU) dings within the foll	(ft)	Volume (gal) >/= 1 flow	Observations
	+/- 3%	us: Stablizauc +/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
826	13.5	287.3	1.32	6.03	77.6	LOW-MED	8.73	<0.25	
829	13.5	323.6	0.84	6.11	72.0			<0.25	
832	13.5	339.7	0.71	6.18	66.9		8.73		
835	13.5	355.0	0.61	6.25	62.3				
838	13.5	358.6	0.54	6.32	54.5				
841	13.5	361.4	0.50	6.36	49.8			0.5	
843	13.5	364.1	0.49	6.39	45.7				
SAMPLE CO	LLECTION D	ATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	,	Other				_			
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	SLIGHTLY	TURBID, LIGHT	BROWN/ORANGE	COLOR, NO/I	NS	
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	13.5	364.3	0.48	6.39	45.2	, ,	, ,	, ,	
2	13.5	365.6	0.50	6.39	44.6				
3	13.5	365.8	0.51	6.40	43.9				
4	13.5	366.2	0.52	6.42	40.5				
Average:	13.5	365.5	0.50	6.40	43.6	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	FYPE (Circle an	plicable or write no	n-standard ana	alvsis below)	
3		(8010) (8020						WA □	OR 🗆
						(8141) (Oil & Grea	ase)	wa □	OR □
	(pH) (Condu	ctivity) (TDS	(S) (TSS) (B0	OD) (Turbid	ity) (Alkalinity)	(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
1					trogen) (NH3)	(NO3/NO2)			
		e) (WAD Cy			(C) (C) (E) (DI A A A A A A A T) (A) (C) (F		(II) (NI)
1						Pb) (Mg) (Mn) (Ni			a) (Hardness) (Silica)
1	VOC (Boein		, (Du) (DC) (C	m) (Cu) (CU)	(C1) (Cu) (1°C) (FL	// (1418) (1411) (141) (A	. <u>6) (50) (11) (</u> V)	(LAI) (118) (IX) (IX)	u, (Hardicəs) (Silica)
		ane Ethene Ac	etylene						
	others								
Duplicate San	nple No(s):								
Comments:	MSMSD Lo	cation							
Signature:			JHA			Date:	5/7/2018		



Project Nam	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 7 /2018@ 931			
Sample Nun	nber:	RGW226S-	•		Weather:	50'S, CLOUDY			
Landau Rep	resentative:	JHA			•				
WATER LEV	/EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES)	Damaged (N	(O)	Describe:			
DTW Before	Purging (ft)	8.38	Time:	=	Flow through ce	ll vol.		GW Meter No.(s	HERON 3
		5/ 7 /2018 0	@ 907	End Purge:	_	5/ 7 /2018 @ 928		Gallons Purged:	
Purge water of	lisposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa	als: Stablizatio +/- 3%	on of Parame +/- 10%	ters for three +/- 0.1 units		dings within the foll +/- 10%	lowing limits < 0.3 ft	>/= 1 flow through cell	
910		262.3	0.50	6.42		LOW		<0.25	
913		249.7	0.37	6.51	42.5			<0.25	
916		242.8	0.35	6.51	39.2		8.38	0.25	
919	15.3	232.2	0.37	6.51	34.7				
922	15.3	226.9	0.36	6.50	32.6				
925	15.3	223.7	0.36	6.50	30.5			0.5	
927	15.4	220.6	0.37	6.59	28.4				
SAMPLE CO	LLECTION D	OATA							
Sample Colle	cted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procee	lure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	ıl Order)	Other				_			
Sample Descr	ription (color,	turbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	IS			
Replicate	Temp (°F/°C)	Cond.	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	15.4	220.7	0.37	6.49	28.1	, ,	. ,	` ,	
2	15.4	220.1	0.37	6.49	27.8				
3	15.4	219.4	0.38	6.49	27.4				
4	15.4	218.9	0.38	6.49	27.3				
				6.49		#DIV/01			
Average:	15.4	219.8	0.38		27.7	#DIV/0!			
QUANTITY						plicable or write no	n-standard ana		
3		(8010) (8020				(0141) (01.6 C	\	WA 🗆	OR 🗆
						(8141) (Oil & Great (HCO3/CO3) (Cl)		WA []	OR L
1					itrogen) (NH3)		(504) (1103	(1 102) (1)	
		le) (WAD Cy				<u> </u>			
1	(Total Metals) (As) (Sb) (Ba) (Be) (Ca	(Cd) (Co)	(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (T	Tl) (V) (Zn) (Hg)	(K) (Na)
	(Dissolved M	etals) (As) (Sb) (Ba) (Be) (C	Ca) (Cd) (Co)	(Cr) (Cu) (Fe) (Pt	o) (Mg) (Mn) (Ni) (A	g) (Se) (Tl) (V)	(Zn)(Hg)(K)(Na)	a) (Hardness) (Silica)
	VOC (Boein								
	Methane Eth	ane Ethene Ac	etylene						
	others								
	Carero								
Duplicate Sar	nple No(s):								
Comments:									
Signature:			JHA			Date:	5/7/2018		



Project Name	e:	Boeing Ren	ton		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 7 /2018@ 706	·)		
Sample Num	ber:	RGW232S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I		6.92	Time:	=	Flow through cel	-		GW Meter No.(s	HERON 3
Begin Purge:				End Purge:	_	5/ 7 /2018 @ 701		Gallons Purged:	0.25
Purge water di			55-gal Drum	Ť	Storage Tank	Ground	Other	SITE TREATM	
range water as	1		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
				ters for three		lings within the foll		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
643	14.2	380.1	0.51	6.01	105.6	LOW	7.01	<0.25	TURN CPM DOWN
646	14.0	386.1	0.64	5.90	138.0		7.15	<0.25	AT LOWEST SETTING
649	14.0	410.2	0.63	5.86	133.9		7.35		TURN OFF
652	14.0	422.1	0.77	5.88	126.8		7.35		TURN ON
655	13.9	428.4	0.97	5.91	119.1				
658	13.9	431.6	1.06	5.92	113.9		7.41		
700	13.8	435.5	1.16	5.93	110.1				
SAMPLE COL	LLECTION D	ATA							
Sample Collec	eted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
	_		. 📻	m n:					
Decon Procedo	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
Decon Procedo (By Numerical)	_	Alconox Was	_	Tap Rinse		Dedicated			
(By Numerical	l Order)	Other							
(By Numerical Sample Descri	l Order) iption (color, t	Other urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	s			
(By Numerical	l Order) iption (color, t	Other urbidity, odor,	sheen, etc.):_		LORLESS, NO/N	S Turbidity	DTW	Ferrous iron	Comments/
(By Numerical Sample Descri	l Order) iption (color, t Temp (°F/°C)	Other urbidity, odor, Cond. (uS/cm)	sheen, etc.):	CLEAR, CO	LORLESS, NO/N ORP (mV)	s	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
(By Numerical Sample Descri	l Order) iption (color, t	Other urbidity, odor,	sheen, etc.):_	CLEAR, CO pH 5.93	ORP (mV)	S Turbidity			
(By Numerical Sample Descri	l Order) iption (color, t Temp (°F/°C)	Other urbidity, odor, Cond. (uS/cm)	sheen, etc.):	CLEAR, CO	LORLESS, NO/N ORP (mV)	S Turbidity			
(By Numerical Sample Described Replicate	l Order) iption (color, t Temp (°F/°C) 13.8	Other urbidity, odor, Cond. (uS/cm) 435.8	D.O. (mg/L)	CLEAR, CO pH 5.93	ORP (mV)	S Turbidity			
(By Numerical Sample Described Replicate	Order	Cond. (uS/cm) 435.8 435.9	sheen, etc.):	CLEAR, CO pH 5.93 5.93	ORP (mV) 109.3	S Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 13.8 13.8 13.8	Other urbidity, odor, Cond. (uS/cm) 435.8 435.9 436.8 437.1	sheen, etc.):	CLEAR, CO pH 5.93 5.93 5.94	ORP (mV) 109.3 108.4 107.3 106.6	S Turbidity	(ft)		
Replicate 1 2 3 4 Average:	Order	Other urbidity, odor, Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4	sheen, etc.):	CLEAR, CO pH 5.93 5.93 5.94 5.94 5.94	ORP (mV) 109.3 108.4 107.3 106.6 107.9	Turbidity (NTU) #DIV/0!	(ft) 8.17	(Fe II)	
Replicate 1 2 3 4 Average:	Order Temp (°F/°C)	Other urbidity, odor, Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL	sheen, etc.):	CLEAR, CO pH 5.93 5.94 5.94 5.94 R BOTTLE 1	ORP (mV) 109.3 108.4 107.3 106.6 107.9	Turbidity (NTU)	(ft) 8.17	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Order Temp (°F/°C)	Other urbidity, odor, Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020)	sheen, etc.):	CLEAR, CO pH 5.93 5.94 5.94 5.94 6.94 R BOTTLE 7 G) (NWTPH	ORP (mV) 109.3 108.4 107.3 106.6 107.9 TYPE (Circle apple-Gx) (BTEX)	Turbidity (NTU) #DIV/0!	(ft) 8.17 n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020 H) (NWTPH	D.O. (mg/L) 1.16 1.20 1.23 1.19 LOWED PER D) (NWTPH-CI-D) (NWTP	5.93 5.94 5.94 5.94 6) (NWTPH	ORP (mV) 109.3 108.4 107.3 106.6 107.9 TYPE (Circle approximately continuous of the continuous o	Turbidity (NTU) #DIV/0! blicable or write not (8141) (Oil & Great	(ft) 8.17 n-standard ana	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average:	Order Temp (°F/°C)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) th) (NWTPHetivity) (TDS)	sheen, etc.):	CLEAR, CO pH 5.93 5.94 5.94 5.94 6) (NWTPH H-Dx) (TPH DD) (Turbid	ORP (mV) 109.3 108.4 107.3 106.6 107.9 TYPE (Circle appGx) (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0!	(ft) 8.17 n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA(pH) (Condu (COD) (TOO	Other urbidity, odor, Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020 H) (NWTPH- ctivity) (TDS	D.O. (mg/L) 1.16 1.20 1.23 1.19 LOWED PEI 1. (NWTPH-CI-D) (NWTP 1. (NWTP)	5.93 5.94 5.94 5.94 63) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni	ORP (mV) 109.3 108.4 107.3 106.6 107.9 TYPE (Circle approximately continuous of the continuous o	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0!	(ft) 8.17 n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Other urbidity, odor, Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020 AH) (NWTPH- ctivity) (TDS 25310C) (Tot e) (WAD Cy.	D.O. (mg/L) 1.16 1.16 1.20 1.23 1.19 LOWED PEI 1. (NWTPH-C) (NWTPH-C) I-D) (NWTPH-C) I-D) (TSS) (Because of the property of the prope	CLEAR, CO pH 5.93 5.94 5.94 5.94 6) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 TYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2)	8.17 n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS (25310C) (Total column) (SDS (25310C)) (As) (Sb) (Sb) (Sb) (Sb)	D.O. (mg/L) 1.16 1.16 1.20 1.23 1.19 LOWED PEI 1.10 (NWTPI-C) (NWTPI-	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) CH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyto) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 1.16 1.16 1.20 1.23 1.19 LOWED PEI 1.10 (NWTPI-C) (NWTPI-	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) CH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cyto) (As) (Sb) (Setals) (As) (Sb) (Sb)	Sheen, etc.):	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) AH) (NWTPHotivity) (TDS) ctivity) (TDS) ctivity) (Tos) (As) (Sb) (Setals) (As) (As) (Setals) (As) (As) (Setals) (As) (Setals) (As) (Setals) (As) (Setals) (As) (A	Sheen, etc.):	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) AH) (NWTPHotivity) (TDS) ctivity) (TDS) ctivity) (Tos) (As) (Sb) (Setals) (As) (As) (Setals) (As) (As) (Setals) (As) (Setals) (As) (Setals) (As) (Setals) (As) (A	Sheen, etc.):	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) AH) (NWTPHotivity) (TDS) ctivity) (TDS) ctivity) (Tos) (As) (Sb) (Setals) (As) (As) (Setals) (As) (As) (Setals) (As) (Setals) (As) (Setals) (As) (Setals) (As) (A	Sheen, etc.):	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL (8010) (8020) AH) (NWTPHotivity) (TDS) ctivity) (TDS) ctivity) (Tos) (As) (Sb) (Setals) (As) (As) (Setals) (As) (As) (Setals) (As) (Setals) (As) (Setals) (As) (Setals) (As) (A	Sheen, etc.):	pH 5.93 5.94 5.94 5.94 6 (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 1 Duplicate Sam	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL. (8010) (8020 CH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cye) (As) (Sb) (Betals) (As) (Sb g short list) ane Ethene Acceptable (As) (Sb g short list)	D.O. (mg/L)	5.93 5.94 5.94 5.94 5.94 6) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co) a) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 TYPE (Circle apposite of the content	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 1 Duplicate Sam	Temp (°F/°C) 13.8 13.8 13.8 13.8 13.8 13.8 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others	Cond. (uS/cm) 435.8 435.9 436.8 437.1 436.4 NALYSIS AL. (8010) (8020 CH) (NWTPHotivity) (TDS (25310C) (Tot e) (WAD Cye) (As) (Sb) (Detals) (As) (Sb g short list) ane Ethene Acceptable (As) (Sb g short list) ane Ethene Acceptable (As) (Sb g short list)	D.O. (mg/L)	5.93 5.94 5.94 5.94 5.94 6) (NWTPH H-Dx) (TPH DD) (Turbid al Kiedahl Ni Cyanide) (Cd) (Co) a) (Cd) (Co)	ORP (mV) 109.3 108.4 107.3 106.6 107.9 FYPE (Circle appropriate appropri	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) NO3/NO2) Pb) (Mg) (Mn) (Ni	8.17 n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □ OR □ OR □



Project Name	e:	Boeing Ren	ton		Project Number	••	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 736)		
Sample Num	ıber:	RGW233I-	180507		Weather:	50'S, CLOUDY			
Landau Repr	resentative:	JHA			_				
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	6.43	Time:	_	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:				End Purge:	=	5/ 7 /2018 @ 734		Gallons Purged:	0.5
Purge water di			55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	
C					_	_			
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge Goa	ls: Stablizatio	on of Parame		consecutive read	lings within the foll	owing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
716	14.1	179.0	1.00	6.36	68.5	LOW	6.43	< 0.25	
719	14.1	178.7	0.87	6.32	68.4			< 0.25	
722	14.1	179.1	0.80	6.29	67.2		6.43	0.25	
725	14.2	179.8	0.75	6.28	65.7				
728	14.2	180.5	0.67	6.27	64.8				
731	14.2	181.1	0.58	6.28	62.3			0.5	
733	14.2	181.4	0.56	6.28	61.6				
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER		_	
Made of:	빌	Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	_	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	1 Order	Ctla an							
	*	Other							
	*		sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Sample Descri	iption (color, t	urbidity, odor,	_				DTW	Ferrous iron	Comments/
	*		sheen, etc.):	CLEAR, CO	ORP (mV)	S Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	iption (color, t	urbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.28	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 14.2	Cond. (uS/cm) 181.5	D.O. (mg/L) 0.55	pH 6.28 6.28	ORP (mV) 61.3	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 14.2 14.2	Cond. (uS/cm) 181.5 181.4 181.4	D.O. (mg/L) 0.55 0.54	pH 6.28 6.28 6.28	ORP (mV) 61.3 61.1 60.9	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 14.2 14.2 14.2	Cond. (uS/cm) 181.5 181.4 181.4 181.7	D.O. (mg/L) 0.55 0.54 0.54	pH 6.28 6.28 6.28 6.28	ORP (mV) 61.3 61.1 60.9	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 14.2 14.2	Cond. (uS/cm) 181.5 181.4 181.4	D.O. (mg/L) 0.55 0.54	pH 6.28 6.28 6.28	ORP (mV) 61.3 61.1 60.9	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.2 14.2 14.2 14.2	Cond. (uS/cm) 181.5 181.4 181.7 181.5	D.O. (mg/L) 0.55 0.54 0.54 0.55	6.28 6.28 6.28 6.28 6.28	ORP (mV) 61.3 61.1 60.9 60.6 61.0	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL A	Cond. (uS/cm) 181.5 181.4 181.7 181.5	D.O. (mg/L) 0.55 0.54 0.54 0.55 0.55	pH 6.28 6.28 6.28 6.28 6.28 R BOTTLE	ORP (mV) 61.3 61.1 60.9 60.6 61.0	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 14.2 (8260-SIM) (8270D) (PA	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 ht) (NWTPE)	D.O. (mg/L) 0.55 0.54 0.55 0.55 0.55 LOWED PE (NWTPH-(I-D) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 G.28 G.28 R BOTTLE T	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle app -Gx) (BTEX) -HCID) (8081)	#DIV/0!	n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 14.9 14.2 14.9	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020) AH) (NWTPH octivity) (TDS)	D.O. (mg/L) 0.55 0.54 0.55 0.55 0.55 LOWED PE (NWTPH-C) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 G.28 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apple-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 181.5 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS (25310C) (Tot	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-C) (NWTP 0. (TSS) (Becal PO4) (Total	6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle app -Gx) (BTEX) -HCID) (8081)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (Cl)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 14.9 14.2 14.0	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cy.	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0.WTPH-0 1-D) (NWTP 1-D) (NWTP 2) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Free	6.28 6.28 6.28 6.28 6.28 6.28 G.28 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle app-Gx) (BTEX) -HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) (NO3/NO2)	n-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS C5310C) (Total e) (WAD Cyz () (As) (Sb) (1)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE. (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (TSS) (Bell an ide) (Free Ba) (Be) (Call an ide) (Call an i	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyt c) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE. (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (TSS) (Bell an ide) (Free Ba) (Be) (Call an ide) (Call an i	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Mo	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Mo	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyt c) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Mo	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Mo	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth others	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle) (8081) (1908) (1	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate Sam	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth others	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle apples (BTEX)) -HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.2 14.2 14.2 14.2 14.2 14.2 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth others	Cond. (uS/cm) 181.5 181.4 181.4 181.7 181.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tot e) (WAD Cy: c) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.55 0.54 0.55 0.55 LOWED PE 0. (NWTPH-CO) (NWTP	6.28 6.28 6.28 6.28 6.28 6.28 6.28 G. (NWTPH H-Dx) (TPH OD) (Turbid ral Kiedahl Ni Cyanide) (Cd) (Co)	ORP (mV) 61.3 61.1 60.9 60.6 61.0 TYPE (Circle apples (Circle apples (BTEX)) -HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! blicable or write nor (8141) (Oil & Great (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK



Project Nam	e:	Boeing Ren	ton		Project Number	•	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 07/2018@	1243		
Sample Num	nber:	RGW234S	180507		Weather:	cloudy 65F			
Landau Repr	resentative:	GJN							
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL CAP, P	URGED STORM	WATER
DTW Before	Purging (ft)	7.24	Time:	=	Flow through cel			GW Meter No.(s	
	Date/Time:			End Purge:	=	5/ 07/2018 @12	34	Gallons Purged:	2.1
Purge water d			55-gal Drum	i i	Storage Tank	Ground		SITE TREATMI	
r argo water a	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
				ters for three		lings within the fo		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	CLEAR/COLORLESS/
1216	13.44	266	1.62	6.29	224.3		7.28	0.3	NO/NS
1219	13.50	252	9.32	6.20	229.3		7.24	0.6	SAME
1222		251	9.85	5.63	268.7		7.26		SAME
1225		249	9.83	5.75	255.3		7.26		SAME
1228	13.61	250	8.13	5.90	244.4		7.26	1.5	SAME
1231	13.52	249	6.11	6.04	236.6		7.25	1.8	SAME
1234	13.35	249	6.93	6.08	232.5		7.26	2.1	SAME
SAMPLE CO	LLECTION D	ATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type	BLADDER PUMI	P		
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 🗖	Tap Rinse	DI Water	Dedicated		^	
(By Numerica	ıl Order)	Other				*			
Sample Descr	intion (solor t		.1	GT F . P /GOT					
bumple Deser	ipuon (color, t	urbiaity, oaor,	sneen, etc.):	CLEAR/COI	LORLESS/NO/NS				
Sumple Beser	iption (color, t	urbiaity, odor,	sneen, etc.):	CLEAR/COI	LORLESS/NO/NS				
Replicate	Temp	Cond.	D.O.	pH	ORP	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		(ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp	Cond.	D.O.		ORP	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity	(ft)		
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.11	ORP (mV)	Turbidity	(ft) 7.27		
Replicate 1 2	Temp (°F/°C) 13.37 13.38	Cond. (uS/cm) 248 249	D.O. (mg/L) 7.73 7.39	pH 6.11 6.11	ORP (mV) 230.3 229.9	Turbidity	7.27 7.27		
Replicate 1 2 3 4	Temp (°F/°C) 13.37 13.38 13.37 13.37	Cond. (uS/cm) 248 249 249 248	D.O. (mg/L) 7.73 7.39 6.90	pH 6.11 6.11 6.12 6.12	ORP (mV) 230.3 229.9 229.3 228.5	Turbidity (NTU)	7.27 7.27 7.27 7.27 7.27		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.37 13.38 13.37 13.37	Cond. (uS/cm) 248 249 249 248 249	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18	6.11 6.11 6.12 6.12 6.12	ORP (mV) 230.3 229.9 229.3 228.5 229.5	Turbidity (NTU) #DIV/0!	7.27 7.27 7.27 7.27 7.27 7.27	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL A	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18	pH 6.11 6.12 6.12 6.12 6.12 R BOTTLE 1	ORP (mV) 230.3 229.9 229.3 228.5 229.5	Turbidity (NTU)	7.27 7.27 7.27 7.27 7.27 7.27	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE	6.11 6.11 6.12 6.12 6.12 6.12 G.19 R BOTTLE 7	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle apple-Gx) (BTEX)	Turbidity (NTU) #DIV/0!	7.27 7.27 7.27 7.27 7.27 7.27 7.27 on-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 H) (NWTPH	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE) (NWTPH-0	6.11 6.11 6.12 6.12 6.12 6.12 G.19 G.10 G.10 G.10 G.10 G.10 G.10 G.10 G.10	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle applement) 1-GX) (BTEX) 1-HCID) (8081)	#DIV/0!	7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PEL (NWTPH-C) (NWTPH-C) (S) (TSS) (Be	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity)	#DIV/0! #Dicable or write not (8141) (Oil & Gr (HCO3/CO3) (C	7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 MH) (NWTPH ctivity) (TDS 25310C) (Tot	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE) (NWTPH-6 I-D) (NWTP d) (TSS) (Be al PO4) (Tot	6.11 6.12 6.12 6.12 6.12 G.12 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle applement) 1-GX) (BTEX) 1-HCID) (8081)	#DIV/0! #Dicable or write not (8141) (Oil & Gr (HCO3/CO3) (C	7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS 25310C) (Tot e) (WAD Cy.	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE 1. (NWTPH-C) (NWTPH-C) 1. (TSS) (Because of the property	6.11 6.12 6.12 6.12 6.12 6.19 6.10 6.10 6.11 6.11 6.11 6.12 6.12 6.12 6.12 6.12	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle application (BTEX) 1-HCID) (8081) ity) (Alkalinity) (trogen) (NH3) (see the context of the conte	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grooth (HCO3/CO3) (Cincol(NO3/NO2))	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard anaeease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cya o) (As) (Sb) (1	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PEI (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (TSS) (Bell al PO4) (Totanide) (Free Ba) (Be) (Ca	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cys (25310C) (As) (Sb) (19 (2531s) (As) (Sb) (Sb)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PEI (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (TSS) (Bell al PO4) (Totanide) (Free Ba) (Be) (Ca	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cys (25310C) (As) (Sb) (19 (2531s) (As) (Sb) (Sb)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (1 etals) (As) (Sb g short list)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (1 etals) (As) (Sb g short list)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (1 etals) (As) (Sb g short list)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.37 13.38 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein, Methane Eth	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (1 etals) (As) (Sb g short list)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate Sam	Temp (°F/°C) 13.37 13.38 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein, Methane Eth	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 NH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (1 etals) (As) (Sb g short list)	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) 1) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments:	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others mple No(s):	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (I etals) (As) (Sb g short list) ane Ethene Ac	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (NWTPH-6) (NWTPH-6) (TSS) (Botal PO4) (Total PO4) (Total PO4) (Total PO4) (Total PO4) (Ba) (Ba) (Be) (Call PO4) (Be) (Call PO4	6.11 6.12 6.12 6.12 6.12 6.12 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle appled (Circle appled (Circle) (BTEX) (BTEX) (HCID) (8081) (Alkalinity) (MH3) (Cr) (Cu) (Fe) (Cu) (Fe) (Cu)	#DIV/0! #DIV/0! plicable or write now (8141) (Oil & Grown (HCO3/CO3) (Common (Mos)	(ft) 7.27 7.27 7.27 7.27 7.27 7.27 on-standard analease) l) (SO4) (NO3 Ni) (Ag) (Se) (Tl) (V)	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments: Signature:	Temp (°F/°C) 13.37 13.38 13.37 13.37 13.37 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others GREG NOS	Cond. (uS/cm) 248 249 249 248 249 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya o) (As) (Sb) (I etals) (As) (Sb g short list) ane Ethene Ac	D.O. (mg/L) 7.73 7.39 6.90 6.71 7.18 LOWED PE (I-D) (NWTPH-C) (I-D	6.11 6.12 6.12 6.12 6.12 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) 230.3 229.9 229.3 228.5 229.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity) itrogen) (NH3) (Cr) (Cu) (Fe) (Qu) (Fe) (Pb)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Grown (HCO3/CO3) (Company) (Company) (MO3/NO2) Pb) (Mg) (Mn) (Note (Most)	(ft) 7.27 7.27 7.27 7.27 7.27 7.27 7.27 0n-standard ana ease) I) (SO4) (NO3 Ni) (Ag) (Se) (Tl) (V) Ag) (Se) (Tl) (V)	(Fe II) Alysis below) WA WA (NO2) (F) Cl) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR □ OR □ OR □



Project Nam	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 07 /2018@	1143		
Sample Num	ıber:	RGW235I-	180507		Weather:	overcast // 65 F			
Landau Repr	resentative:	GJN							
WATER LEV	'EL/WELL/PU	RGE DATA							
Well Condition		Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	Well cap		
DTW Before	Purging (ft)	6.72	Time:	1102	Flow through ce	ll vol.	•	GW Meter No.(s	2
Begin Purge:	Date/Time:	5/ 07/2018	11:16	End Purge:	Date/Time:	5/ 07 /2018 @	1137	Gallons Purged:	2.1
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa	ıls: Stablizatio +/- 3%		ters for three +/- 0.1 units		dings within the fo +/- 10%	ollowing limits < 0.3 ft	>/= 1 flow through cell	
1117	14.44	176	2.93	6.50	209.0	17- 10 /6	6.78		CLEAR/SOME ORGANICS
1122		169	2.27	6.27	228.9		6.78	0.6	OKGANICS
	14.58								
1125		167	1.35	6.10	236.3		6.79	0.9	
1128		166	1.27	6.31	225.6		6.8	1.2	
1131	14.76	165	1.56	6.41	222.6		6.8	1.5	
1134	14.82	165	2.32	6.43	221.9		6.8	1.8	
1137	14.96	165	2.47	6.45	220.4		6.79	2.1	
	LLECTION D								
Sample Collec	cted With:		Bailer			Dedicated bladder			
Made of:	빌	Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	_	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	,	Other					•		
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	IS			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	14.97	164	2.45	6.47	216.1	(1110)	6.8	(FC II)	Observations
2	14.97	164	2.51	6.47	215.8		6.8		
3	114.90	164	2.55	6.47	215.6		6.8		
4	14.88	164	2.57	6.47	215.5		6.8		
Average:	39.93	164	2.52	6.47	215.8	#DIV/0!	6.80		
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	TYPE (Circle ap	plicable or write n	on-standard ana	llysis below)	
3					I-Gx) (BTEX)			WA 🗆	OR 🗆
						(8141) (Oil & Gr		WA 🗆	OR 🗆
1						(HCO3/CO3) (C	l) (SO4) (NO3) (NO2) (F)	
1		e) (WAD Cy			trogen) (NH3)	(NO3/NO2)			
1					(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (N	Ni) (Ag) (Se) (T	(1) (V) (Zn) (Hg)	(K) (Na)
									a) (Hardness) (Silica)
	VOC (Boein								
	Methane Eth	ane Ethene Ac	etylene						
	.1								
	others								
Duplicate San	nple No(s):								
Comments:	PH didn't sta	bilize so purge	ed for 20 mins						
Signature:	Greg Nostrai					Date:	5/7/2018		

 $P: 18888 - Boeing \ Renton \\ 102 \ Data \ Management \\ 12018 \\ 1202018 \\ Field \ Data \\ 18CFs - Landau \ Originals \\ 18WMU-172&174_5.7.18_GJN.x \\ 18x \\ 18$

Landau Associates



Project Name	e:	Boeing Rent	on		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 115	56		
Sample Num	nber:	RGW236S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	resentative:	JHA							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES)	1	Damaged (N	O)	Describe:			
DTW Before		6.46	Time:	=	Flow through cel	•		GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	=	5/ 7 /2018 @ 1154	1	Gallons Purged:	0.5
Purge water d			55-gal Drum		Storage Tank	Ground		SITE TREATMI	
r argo water a	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
				ters for three		dings within the foll		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1136	16.2	299.1	2.11	6.22	50.3	MED	6.51	< 0.25	
1139	16.7	306.2	1.31	6.26	45.7		6.51	<0.25	
1142	16.9	310.2	0.96	6.25	41.7			0.25	
1145		312.1	0.72	6.35			0.31	<0.50	
1148	17.2	312.3	0.67	6.37	31.6				
1151	17.2	312.1	0.65	6.40	27.4				
1153	17.3	312.3	0.65	6.39	24.9				
							_		
SAMPLE CO	LLECTION D	ATA							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	ı 🗖	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated		_	
(By Numerica	l Order)	Other	_	1	—				
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	SLIGHTLY '		GE/BROWN COLO	R, NO./NS		
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	SLIGHTLY '		GE/BROWN COLO	R, NO./NS		
Sample Descr Replicate	Temp	Cond.	D.O.	SLIGHTLY DH	TURBID, ORANG	Turbidity	DTW	Ferrous iron	Comments/
		-	_		TURBID, ORANG			Ferrous iron (Fe II)	Comments/ Observations
	Temp	Cond.	D.O.		TURBID, ORANG	Turbidity	DTW		
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity	DTW		
Replicate 1	Temp (°F/°C)	Cond. (uS/cm) 312.4	D.O. (mg/L) 0.64	рН 6.39	ORP (mV)	Turbidity	DTW		
Replicate 1 2 3	Temp (°F/°C) 17.3 17.3	Cond. (uS/cm) 312.4 312.6 312.5	D.O. (mg/L) 0.64 0.64	pH 6.39 6.40 6.40	ORP (mV) 24.0 23.5 23.3	Turbidity	DTW		
Replicate 1 2 3 4	Temp (°F/°C) 17.3 17.3 17.3	Cond. (uS/cm) 312.4 312.6 312.5 312.5	D.O. (mg/L) 0.64 0.64 0.64	pH 6.39 6.40 6.40 6.41	ORP (mV) 24.0 23.5 23.3	Turbidity (NTU)	DTW		
Replicate 1 2 3	Temp (°F/°C) 17.3 17.3	Cond. (uS/cm) 312.4 312.6 312.5	D.O. (mg/L) 0.64 0.64	pH 6.39 6.40 6.40	ORP (mV) 24.0 23.5 23.3	Turbidity	DTW		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5	D.O. (mg/L) 0.64 0.64 0.64 0.64	6.39 6.40 6.41 6.40	ORP (mV) 24.0 23.5 23.3 23.0 23.5	Turbidity (NTU)	DTW (ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL A	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI	pH 6.39 6.40 6.41 6.40 R BOTTLE 1	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle app	Turbidity (NTU) #DIV/0!	DTW (ft)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 17.3 17.3 18260-SIM) (8260-SIM)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 MH) (NWTPH	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI (NWTPH-C) (NWTP	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH	ORP (mV) 24.0 23.5 23.0 23.5 TYPE (Circle applement) 1-GX) (BTEX) 1-HCID) (8081)	#DIV/0!	DTW (ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI 0.0 (NWTPH-C-D) (NWTPI 0.0 (N	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle appled) GRP (mV) 24.0 23.5 23.1 23.0 23.5 23.1 24.1 24.1 24.1 24.1 25.1 26.1	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	DTW (ft)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 MH) (NWTPH ctivity) (TDS C5310C) (Tot	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI (NWTPH-C) (NWTP (NWTPH-C) (NWTP)	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni	ORP (mV) 24.0 23.5 23.0 23.5 TYPE (Circle applement) 1-GX) (BTEX) 1-HCID) (8081)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	DTW (ft)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot. e) (WAD Cyz.	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI 0.0 (NWTPH-C -D) (NWTP) 1. (TSS) (BC all PO4) (Totanide) (Free C	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Great (HCO3/CO3) (CI) (NO3/NO2)	DTW (ft) n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS) (25310C) (Tot. e) (WAD Cya) () (As) (Sb) (I	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (TSS) (BC) (Ba) (PO4) (Totanide) (Free Casa) (Be) (Casa)	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyz c) (As) (Sb) (Ietals) (As) (Sb) (Sb)	D.O. (mg/L) 0.64 0.64 0.64 0.64 LOWED PEI (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (NWTPH-C) (TSS) (BC) (Ba) (PO4) (Totanide) (Free Casa) (Be) (Casa)	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 NH) (NWTPH (ctivity) (TDS (25310C) (Total) (e) (WAD Cyal) (As) (Sb) (I (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS C5310C) (Tot e) (WAD Cyz c) (As) (Sb) (Ietals) (As) (Sb) (Sb)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 NH) (NWTPH (ctivity) (TDS (25310C) (Total) (e) (WAD Cyal) (As) (Sb) (I (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 NH) (NWTPH (ctivity) (TDS (25310C) (Total) (e) (WAD Cyal) (As) (Sb) (I (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 17.3 TYPICAL AI (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 NH) (NWTPH (ctivity) (TDS (25310C) (Total) (e) (WAD Cyal) (As) (Sb) (I (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 NH) (NWTPH (ctivity) (TDS (25310C) (Total) (e) (WAD Cyal) (As) (Sb) (I (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 1	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 NH) (NWTPH (ctivity) (TDS (25310C) (Total) (e) (WAD Cyal) (As) (Sb) (I (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 1 1 Duplicate San	Temp (°F/°C) 17.3 17.3 17.3 17.3 17.3 TYPICAL Al (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 312.4 312.6 312.5 312.5 312.5 NALYSIS AL (8010) (8020 AH) (NWTPH (ctivity) (TDS (25310C) (Tote) (WAD Cya (2) (As) (Sb) (Hetals) (As) (Sb) (g short list) ane Ethene Acc	D.O. (mg/L) 0.64 0.64 0.64 0.64 1.0WED PEI 0.10WTPH-0 0.10W	6.39 6.40 6.41 6.40 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 24.0 23.5 23.3 23.0 23.5 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) (Alkalinity) (trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #Dicable or write not (8141) (Oil & Green (HCO3/CO3) (Cl) (NO3/NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □



Project Name	e:	Boeing Rent	ton		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 7 /2018@ 700)		
Sample Num	nber:	RGWDUP1	180507		Weather:	50'S, CLOUDY			
Landau Repr	resentative:	JHA							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	, ,	Time:	_	Flow through cel	ll vol.		GW Meter No.(s	HERON 3
		5/ 7 /2018 @		End Purge:		5/ 7 /2018 @		Gallons Purged:	
Purge water d			55-gal Drum	ĕ	Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
C			· ·		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
				ters for three		dings within the fol		>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
		DIII				111 500	-		
		DUI	PLICA	ATE I	O RGV	N 152S			
SAMPLE CO	LLECTION D	ATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
		—	sheen, etc.):	CLOUDY, L	IGHT GRAY CO	LOR, NO/NS			
Sample Descri	iption (color, t	urbidity, odor,	_				DTW	Ferrous iron	Comments/
		—	sheen, etc.): _ D.O. (mg/L)	CLOUDY, L	IGHT GRAY CO ORP (mV)	LOR, NO/NS Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.23	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 15.0	Cond. (uS/cm) 184.5	D.O. (mg/L) 0.62	pH 6.23 6.23	ORP (mV) 38.5 38.2	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 15.0 15.0	Cond. (uS/cm) 184.5 184.3	D.O. (mg/L) 0.62 0.62	pH 6.23 6.23 6.24	ORP (mV) 38.5 38.2 37.8	Turbidity			
Replicate 1 2	Temp (°F/°C) 15.0	Cond. (uS/cm) 184.5	D.O. (mg/L) 0.62	pH 6.23 6.23	ORP (mV) 38.5 38.2	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 15.0 15.0	Cond. (uS/cm) 184.5 184.3	D.O. (mg/L) 0.62 0.62	pH 6.23 6.23 6.24	ORP (mV) 38.5 38.2 37.8	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.0 15.0 15.0 15.0	Cond. (uS/cm) 184.5 184.3 182.9 180.0	D.O. (mg/L) 0.62 0.62 0.63 0.65	6.23 6.23 6.24 6.24 6.24	ORP (mV) 38.5 38.2 37.8 37.7 38.1	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0	Cond. (uS/cm) 184.5 184.3 182.9 180.0	D.O. (mg/L) 0.62 0.63 0.65 0.63	6.23 6.23 6.24 6.24 6.24 R BOTTLE	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle ap)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020	D.O. (mg/L) 0.62 0.62 0.63 0.65 0.63 LOWED PER D) (NWTPH-C	6.23 6.23 6.24 6.24 6.24 6.24 G.24 R BOTTLE 7	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle appleGx) (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 CH) (NWTPH	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PEI (NWTPH-C	6.23 6.23 6.24 6.24 6.24 6.24 G) (NWTPH	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle ap) 1-Gx) (BTEX) 1-HCID) (8081)	Turbidity (NTU) #DIV/0! plicable or write no	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PAC) (pH) (Conduction) (TOC)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-C 1-D) (NWTP 6) (TSS) (BC al PO4) (Tot	6.23 6.24 6.24 6.24 6.24 R BOTTLE GO (NWTPHH-Dx) (TPHOD) (Turbid al Kiedahl Ni	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle ap) 1-Gx) (BTEX) 1-HCID) (8081)	#DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-C 1-D) (NWTP 3) (TSS) (BC al PO4) (Totanide) (Free	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle apple-Gx) (BTEX) 1-HCID) (8081) ity) (Alkalinity) trogen) (NH3)	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2)	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WA NOTE: WA	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA(DH) (Conduction (COD) (Todal Cyanid (Total Metals)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 UH) (NWTPH ctivity) (TDS (25310C) (Total column) (S020 (C) (S	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PER DISTRICT (MYTPHONE) (NWTPHONE) (NWTPHONE) (NWTPHONE) (TSS) (Beat all PO4) (Total anide) (Free Ba) (Be) (Call PO4) (Call PO4) (Total PO4) (T	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 CH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cycle) (As) (Sb) (Ietals) (As) (Sb)	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PER DISTRICT (MYTPHONE) (NWTPHONE) (NWTPHONE) (NWTPHONE) (TSS) (Beat all PO4) (Total anide) (Free Ba) (Be) (Call PO4) (Call PO4) (Total PO4) (T	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS ctivity) (TDS ctivity) (Tot e) (WAD Cya o) (As) (Sb) (I etals) (As) (Sb) g short list)	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-6 I-D) (NWTP I-D) (NWTP I-D) (NWTP I-D) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 CH) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cycle) (As) (Sb) (Ietals) (As) (Sb)	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-6 I-D) (NWTP I-D) (NWTP I-D) (NWTP I-D) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS ctivity) (TDS ctivity) (Tot e) (WAD Cya o) (As) (Sb) (I etals) (As) (Sb) g short list)	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-6 I-D) (NWTP I-D) (NWTP I-D) (NWTP I-D) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS ctivity) (TDS ctivity) (Tot e) (WAD Cya o) (As) (Sb) (I etals) (As) (Sb) g short list)	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-6 I-D) (NWTP I-D) (NWTP I-D) (NWTP I-D) (TSS) (Be al PO4) (Tot anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya) (As) (Sb) (I etals) (As) (Sb g short list) ane Ethene Ac	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-0 1-D) (NWTP 3) (TSS) (Be al PO4) (Tot anide) (Free el Ba) (Be) (Ca 0) (Ba) (Be) (Ca etylene	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 AH) (NWTPH ctivity) (TDS ctivity) (TDS ctivity) (Tot e) (WAD Cya o) (As) (Sb) (I etals) (As) (Sb) g short list)	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-0 1-D) (NWTP 3) (TSS) (Be al PO4) (Tot anide) (Free el Ba) (Be) (Ca 0) (Ba) (Be) (Ca etylene	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle applecance) (BTEX) 1-HCID) (8081) (HCID) (Alkalinity) (Trogen) (NH3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.0 15.0 15.0 15.0 15.0 15.0 (8260-SIM) (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 184.5 184.3 182.9 180.0 182.9 NALYSIS AL (8010) (8020 H) (NWTPH ctivity) (TDS (25310C) (Tot e) (WAD Cya) (As) (Sb) (I etals) (As) (Sb g short list) ane Ethene Ac	D.O. (mg/L) 0.62 0.63 0.65 0.63 LOWED PE 0) (NWTPH-0 1-D) (NWTP 3) (TSS) (Be al PO4) (Tot anide) (Free el Ba) (Be) (Ca 0) (Ba) (Be) (Ca etylene	6.23 6.24 6.24 6.24 6.24 R BOTTLE 7 G) (NWTPH H-Dx) (TPH OD) (Turbid al Kiedahl Ni Cyanide)) (Cd) (Co)	ORP (mV) 38.5 38.2 37.8 37.7 38.1 TYPE (Circle appleCax) (BTEX) 1-HCID) (8081) (HCID) (1908)	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (CI) (NO3/NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/7 /2018@	1530		
Sample Num	ber:	RGW031S-	180507		Weather:	70S SUNNY			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Conditio	n:	Secure (YES))	Damaged (N	(O)	Describe:			
DTW Before I	Purging (ft)	3.97	Time:	1455	Flow through cel	l vol.		GW Meter No.(s	s HERON1
Begin Purge:	Date/Time:	5/ /2018 @	1500	End Purge:	Date/Time:	5/ 7 /2018 @	1520	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge Goa	ls: Stablizatio +/- 3%		ters for three +/- 0.1 units		dings within the fo +/- 10%	llowing limits < 0.3 ft	>/= 1 flow	
1500								through cell	
1503	19.6	276.4	0.68	6.12		LOW	3.97		
1506	19.2	267.1	0.96	6.12	6.6		3.97		
1509	19.3	266.3	0.9	6.1	6		3.97		
1512	18.5	253.3	0.88	6.12	-2.5				
1515	18.5	251	0.89	6.12	-5.2				
1518	18.5	249.7	0.95	6.12	-8.3				
SAMPLE CO	LLECTION D)ATA							
Sample Collect			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🗖	Tap Rinse	DI Water	Dedicated	_	_	
(By Numerical	l Order)	Other							
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	18.5	249.3	0.98	6.12	-9.4				
2	18.4	248.3	0.98	6.12	-9.7				
3	18.5	247.6	1	6.13	-10.3				
4	18.4	247.5	1	6.12	-10.5				
Average:	18.5	248.2	0.99	6.12	-10.0	#DIV/0!			
QUANTITY	TVPICALA	NALVSIS AL	I OWED PE	R ROTTLE	TVPF (Circle or	plicable or write 1	non-standard ar	nalysis helow)	
5	(8260) (8010		WTPH-G) (pheable of write i	ion standard at	WA □	OR 🗆
	· · · ·							XX/A	OR 🗆
	(8270) (PAF	I) (NWTPH-	D) (NWTPH	I-DX) (TPH-	HCID) (8081)	(8141) (Oil & Gre	ase)	WA □	
						(8141) (Oil & Great (HCO3/CO3) (C	•		OK L
1	(pH) (Condu (COD) (TO	ctivity) (TDS	S) (TSS) (B 4) (Total Kie	OD) (Turbio dahl Nitroger		(HCO3/CO3) (C	•		OK L
	(pH) (Condu (COD) (TOO (Total Cyanid	ctivity) (TDSC) (Total PO4le) (WAD Cy	(TSS) (B) (Total Kie anide) (Free	OD) (Turbio dahl Nitroger Cyanide)	dity) (Alkalinity) n) (NH3) (NO3/	(HCO3/CO3) (CNO2)	Cl) (SO4) (NO	3) (NO2) (F)	
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals	C) (Total PO4le) (As) (Sb) (I	S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	OD) (Turbio dahl Nitroger Cyanide) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M	ctivity) (TDSC) (Total PO- le) (WAD Cy) (As) (Sb) (I etals) (As) (Sb)	S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	OD) (Turbio dahl Nitroger Cyanide) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	ctivity) (TDS C) (Total PO- le) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb g short list)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca d) (Ba) (Be) (Ca	OD) (Turbio dahl Nitroger Cyanide) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	ctivity) (TDSC) (Total PO- le) (WAD Cy) (As) (Sb) (I etals) (As) (Sb)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca d) (Ba) (Be) (Ca	OD) (Turbio dahl Nitroger Cyanide) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	ctivity) (TDS C) (Total PO- le) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb g short list)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca d) (Ba) (Be) (Ca	OD) (Turbio dahl Nitroger Cyanide) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	ctivity) (TDS C) (Total PO- le) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb g short list)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca d) (Ba) (Be) (Ca	OD) (Turbio dahl Nitroger Cyanide) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	citivity) (TDSC) (Total PO- le) (WAD Cy) (As) (Sb) (letals) (As) (Sb) g short list)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca etylene	OD) (Turbio dahl Nitroger Cyanide)) (Cd) (Co) Ca) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
Duplicate Sam	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	ctivity) (TDS C) (Total PO- le) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb g short list)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca etylene	OD) (Turbio dahl Nitroger Cyanide)) (Cd) (Co) Ca) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)
	(pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	citivity) (TDSC) (Total PO- le) (WAD Cy) (As) (Sb) (letals) (As) (Sb) g short list)	S) (TSS) (B d) (Total Kie anide) (Free Ba) (Be) (Ca etylene	OD) (Turbio dahl Nitroger Cyanide)) (Cd) (Co) Ca) (Cd) (Co)	dity) (Alkalinity) h) (NH3) (NO3/	(HCO3/CO3) (CNO2) Pb) (Mg) (Mn) (1	Cl) (SO4) (NO Ni) (Ag) (Se) (3) (NO2) (F) Tl) (V) (Zn) (Hg	g) (K) (Na)



Project Name	e <u>:</u>	Boeing Ren	LOH		Project Number	л.	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/7 /2018@	1630		
Sample Num	ber:	RGW033S-	180507		Weather:	70S SUNNY			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Condition	n:	Secure (YES)		Damaged (N	(O)	Describe:			
DTW Before I	Purging (ft)	4.1	Time:	1559	Flow through ce	ll vol.	_	GW Meter No.(s	HREON1
Begin Purge:	Date/Time:	5/ /2018 @	1600	End Purge:	Date/Time:	5/ 7 /2018 @	1610	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
						dings within the fo	ollowing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1603	18.3	327	0.67	6.21		LOW	4.1		
1606	18.3	328.1	0.7	6.22	-9.9	LOW	4.1		
1609	18.4	329	0.72	6.22	-12.6		4.1		
						-			
								· 	-
SAMPLE CO	LLECTION E					DED DI LODED			
C1- C-11			D - 11						
Sample Collec			Bailer			DED BLADDER		Dadicated	
Made of:	ted With:	Stainless Stee	1 🔲	PVC	Teflon	Polyethylene		Dedicated	
Made of: Decon Procedu	eted With:	Stainless Stee Alconox Was	1 🔲					Dedicated	
Made of: Decon Procedo (By Numerical)	ted With: ure:	Stainless Stee Alconox Was	l 🗍	PVC Tap Rinse	Teflon DI Water	Polyethylene Dedicated		Dedicated	
Made of: Decon Procedo (By Numerical)	ted With: ure:	Stainless Stee Alconox Was	l 🗍	PVC Tap Rinse	Teflon	Polyethylene Dedicated		Dedicated	
Made of: Decon Procedo (By Numerical)	ted With: ure:	Stainless Stee Alconox Was	l 🗍	PVC Tap Rinse	Teflon DI Water	Polyethylene Dedicated		Dedicated Ferrous iron (Fe II)	Comments/ Observations
Made of: Decon Procedo (By Numerical Sample Descri	ted With: ure: Order) ption (color, t	Stainless Stee Alconox Was Other urbidity, odor,	sheen, etc.):	PVC Tap Rinse CLEAR CO	Teflon DI Water LORLESS NO/N	Polyethylene Dedicated S Turbidity (NTU)	Other DTW	Ferrous iron	
Made of: Decon Procedo (By Numerical Sample Descri Replicate	ted With: Corder Price Color, tell	Stainless Stee Alconox Was Other urbidity, odor, Cond. (uS/cm)	sheen, etc.):_ D.O. (mg/L)	PVC Tap Rinse CLEAR CO	Teflon DI Water LORLESS NO/NO ORP (mV)	Polyethylene Dedicated S Turbidity (NTU)	Other DTW	Ferrous iron	
Made of: Decon Procedo (By Numerical Sample Descri Replicate	ted With: Corder Property Corder Temp (°F/°C) 18.5 18.5	Stainless Stee Alconox Was Other urbidity, odor, Cond. (uS/cm) 329.9 330.7	sheen, etc.):	PVC Tap Rinse CLEAR CO pH 6.22 6.22	Teflon DI Water LORLESS NO/N: ORP (mV) -15.2 -17.8	Polyethylene Dedicated S Turbidity (NTU)	Other DTW	Ferrous iron	
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3	ted With: Corder Price	Stainless Stee Alconox Was Other urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.73	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22	Teflon DI Water LORLESS NO/NO ORP (mV) -15.2 -17.8 -18.6	Polyethylene Dedicated S Turbidity (NTU)	Other DTW	Ferrous iron	
Made of: Decon Procedo (By Numerical) Sample Descri Replicate 1 2 3 4	ted With: Corder Color, tell Temp (°F/°C) 18.5 18.6 18.7	Stainless Stee Alconox Was Dother urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.73 0.74	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22	Teflon DI Water LORLESS NO/N: ORP (mV) -15.2 -17.8 -18.6	Polyethylene Dedicated S Turbidity (NTU)	Other DTW	Ferrous iron	
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3	ted With: Corder Price	Stainless Stee Alconox Was Other urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.73	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22	Teflon DI Water LORLESS NO/NO ORP (mV) -15.2 -17.8 -18.6	Polyethylene Dedicated S Turbidity (NTU)	Other DTW	Ferrous iron	
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average:	Temp (°F/°C) 18.5 18.6 18.6 TYPICAL A	Stainless Stee Alconox Was Dother urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 6.22 6.22	Teflon DI Water LORLESS NO/N ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle a)	Polyethylene Dedicated S Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Observations
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average:	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010)	Stainless Stee Alconox Was Dother urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.73 0.74 0.73 LOWED PE	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 R BOTTLE NWTPH-GX	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aport) (BTEX)	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write	DTW (ft)	Ferrous iron (Fe II) nalysis below) WA	Observations OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010) (8270) (PAF	Stainless Stee Alconox Was	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-	Teflon DI Water CORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aport) (BTEX) HCID) (8081)	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Green)	DTW (ft)	Ferrous iron (Fe II) malysis below) WA WA WA	Observations
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010) (8270) (PAH (pH) (Condu	Stainless Stee Alconox Was Dother urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS	D.O. (mg/L) 0.73 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-Gx) (-Dx) (TPH-OD) (Turbic	Teflon DI Water LORLESS NO/N ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle approximately (8081)) HCID) (8081) dity) (Alkalinity)	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Green) (HCO3/CO3) (Material Properties of the content	DTW (ft)	Ferrous iron (Fe II) malysis below) WA WA WA	Observations OR
Made of: Decon Procedu (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010) (8270) (PAF(pH) (Conduction)	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH- Ctivity) (TDS C) (Total PO4	D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH-G) (CD) (NWTPH-G) (CD) (TSS) (B) (Total Kie	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-Gx I-Dx) (TPH-OD) (Turbic dahl Nitroger	Teflon DI Water CORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aport) (BTEX) HCID) (8081)	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Green) (HCO3/CO3) (Material Properties of the content	DTW (ft)	Ferrous iron (Fe II) malysis below) WA WA WA	Observations OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010) (8270) (PAH (PH) (Conduction) (COD) (Total Cyanid	Stainless Stee Alconox Was Dother urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total PO-Ze) (WAD Cy	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH C) (TSS) (Be) (Total Kielanide) (Free	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-DX) (TPH-OD) (Turbid dahl Nitroger Cyanide)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aport) (BTEX) HCID) (8081) dity) (Alkalinity) (i) (NH3) (NO3)	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Green) (HCO3/CO3) (MO2)	DTW (ft) non-standard and ease) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WA O WA O WA O WA O WA O WA WA WA WA WA WA WA WA WA	Observations OR □ OR □
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals)	Stainless Stee Alconox Was Dother urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI () (8020) (N () (NWTPH- ctivity) (TDS () (Total PO- e) (WAD Cy () (As) (Sb) ()	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH D) (TSS) (B D) (TSS) (B D) (Total Kiells anide) (Freel Ba) (Be) (Cal	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR □ OR □
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals)	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total PO-Ictivity) (TDS C) (As) (Sb) (Ictals) (As) (Sb) (Setals) (As) (Sb)	sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH D) (TSS) (B D) (TSS) (B D) (Total Kiells anide) (Freel Ba) (Be) (Cal	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total PO-Ictivity) (TDS C) (As) (Sb) (Ictals) (As) (Sb) (Setals) (As) (Sb)	Sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B G) (Total Kiellanide) (Freel Ba) (Be) (Callanide) (Callan	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total POde) (WAD Cy) D) (As) (Sb) (Detals) (As) (Sb) g short list)	Sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B G) (Total Kiellanide) (Freel Ba) (Be) (Callanide) (Callan	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total POde) (WAD Cy) D) (As) (Sb) (Detals) (As) (Sb) g short list)	Sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B G) (Total Kiellanide) (Freel Ba) (Be) (Callanide) (Callan	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.5 18.6 18.7 18.6 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total POde) (WAD Cy) D) (As) (Sb) (Detals) (As) (Sb) g short list)	Sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B G) (Total Kiellanide) (Freel Ba) (Be) (Callanide) (Callan	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	ted With: Corder Prion (color, to the text of t	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total POde) (WAD Cy) D) (As) (Sb) (Detals) (As) (Sb) g short list)	Sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B G) (Total Kiellanide) (Freel Ba) (Be) (Callanide) (Callan	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR
Made of: Decon Procedo (By Numerical Sample Descri Replicate 1 2 3 4 Average: QUANTITY 5	ted With: Corder Prion (color, to the text of t	Stainless Stee Alconox Was Dother Urbidity, odor, Cond. (uS/cm) 329.9 330.7 331.1 331.6 330.8 NALYSIS AI D) (8020) (N D) (NWTPH-Ictivity) (TDS C) (Total POde) (WAD Cy) D) (As) (Sb) (Detals) (As) (Sb) g short list)	Sheen, etc.):_ D.O. (mg/L) 0.73 0.73 0.74 0.73 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B G) (Total Kiellanide) (Freel Ba) (Be) (Callanide) (Callan	PVC Tap Rinse CLEAR CO pH 6.22 6.22 6.22 6.22 6.22 CR BOTTLE NWTPH-GX I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	Teflon DI Water ORP (mV) -15.2 -17.8 -18.6 -19 -17.7 TYPE (Circle aportion (Circle a	Polyethylene Dedicated S Turbidity (NTU) #DIV/0! pplicable or write (8141) (Oil & Gree) (HCO3/CO3) (Oil (NO2) (Pb) (Mg) (Mn) (Oil (No))	DTW (ft) non-standard and stase) CI) (SO4) (NO	Ferrous iron (Fe II) malysis below) WA WA WA WO	Observations OR OR OR OR OR OR OR OR OR OR



Project Nam	e <u>:</u>	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/7 /2018@	1700		
Sample Num	ıber:	RGW034S-	180507		Weather:	70S SUNNY			
Landau Repr	resentative:	SRB			•				
WATER LEV	EL/WELL/PI	IRGE DATA							
Well Conditio		Secure (YES)	Damaged (N	(O)	Describe:			
DTW Before		4.2	Time:	_	Flow through cel			GW Meter No.(s	HREON1
Begin Purge:					=	5/ 7 /2018 @	1640	Gallons Purged:	
Purge water d			55-gal Drum	i i	Storage Tank	Ground		SITE TREATM	
Turge water a	_				_	_	<u>—</u>		
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time	Purge Goa	ls: Stablizatio		ters for three		dings within the fo	ollowing limits	>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1633	17.7	298.7	0.67	6.25	-13.3	LOW	4.2		
1636	17.5	297.6	0.69	6.26	-16.6		4.2		
1639	17.3	295	0.69	6.27	-23.7		4.2		
								· 	
							-		
SAMPLE CO									
Sample Collec	cted With:		Bailer			DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	10.1								
, ,	,	Other							
, ,	,		sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
Sample Descr	iption (color, t	urbidity, odor,	_				DTW	Ferrous iron	Comments/
, ,	,		sheen, etc.):_ D.O. (mg/L)	CLEAR CO	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm) 294.6	D.O. (mg/L)	рН 6.26	ORP (mV)	Turbidity			
Sample Descr Replicate 1 2	Temp (°F/°C) 17.2	Cond. (uS/cm) 294.6	D.O. (mg/L) 0.71	pH 6.26 6.26	ORP (mV) -24.6	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 17.2 17.3	Cond. (uS/cm) 294.6 294.5 293.9	D.O. (mg/L) 0.71 0.72	pH 6.26 6.26 6.26	ORP (mV) -24.6 -25.9 -26.9	Turbidity			
Sample Descr Replicate 1 2	Temp (°F/°C) 17.2	Cond. (uS/cm) 294.6	D.O. (mg/L) 0.71	pH 6.26 6.26	ORP (mV) -24.6	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 17.2 17.3	Cond. (uS/cm) 294.6 294.5 293.9	D.O. (mg/L) 0.71 0.72	pH 6.26 6.26 6.26	ORP (mV) -24.6 -25.9 -26.9	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.2 17.2 17.3 17.4	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3	D.O. (mg/L) 0.71 0.72 0.74 0.7	pH 6.26 6.26 6.26 6.26 6.26	ORP (mV) -24.6 -25.9 -26.9 -28 -26.4	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.2 17.2 17.3 17.4	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3	D.O. (mg/L) 0.71 0.72 0.74 0.7	pH 6.26 6.26 6.26 6.26 6.26 6.26	ORP (mV) -24.6 -25.9 -26.9 -28 -26.4 TYPE (Circle ap	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N	D.O. (mg/L) 0.71 0.72 0.74 0.7 0.72 LOWED PE	pH 6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx	ORP (mV) -24.6 -25.9 -26.9 -28 -26.4 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010) (8270) (PAF	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N	D.O. (mg/L) 0.71 0.72 0.74 0.72 LOWED PE	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aport (BTEX)) HCID) (8081)	Turbidity (NTU) #DIV/0!	non-standard an	(Fe II) malysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO-	D.O. (mg/L) 0.71 0.72 0.74 0.72 0.72 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx [-Dx) (TPH-OD) (Turbic dahl Nitroger	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aport (BTEX)) HCID) (8081)	#DIV/0! #DIV/0! pplicable or write in the interest of the in	non-standard an	(Fe II) malysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ictivity) (TDS C) (Total PO- ic) (WAD Cy	D.O. (mg/L) 0.71 0.72 0.74 0.72 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)	ORP (mV) -24.6 -25.9 -26.9 -28 -26.4 TYPE (Circle ap (BTEX)) HCID) (8081) (dity) (Alkalinity) a) (NH3) (NO3/2)	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard anase)	malysis below) WA WA WA ONE OF THE METERS	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals)	Cond. (uS/cm) 294.6 294.5 293.9 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO- le) (WAD Cy o) (As) (Sb) (D.O. (mg/L) 0.71 0.72 0.74 0.72 LOWED PE WTPH-G) (D) (NWTPH-S) (TSS) (B4) (Total Kie anide) (Free Ba) (Be) (Ca	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) nalysis below) WA WA WA ON (NO2) (F) TI) (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved M	Cond. (uS/cm) 294.6 294.5 293.9 294.3 NALYSIS AI ()) (8020) (NI () (NWTPH- () (Total PO- () (WAD Cy () (As) (Sb) (etals) (As) (Sb) (D.O. (mg/L) 0.71 0.72 0.74 0.72 LOWED PE WTPH-G) (D) (NWTPH-S) (TSS) (B4) (Total Kie anide) (Free Ba) (Be) (Ca	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) nalysis below) WA WA WA ON (NO2) (F) TI) (V) (Zn) (Hg	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) nalysis below) WA WA WA ON (NO2) (F) TI) (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 294.6 294.5 293.9 294.3 NALYSIS AI ()) (8020) (NI () (NWTPH- () (Total PO- () (WAD Cy () (As) (Sb) (etals) (As) (Sb) (D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) nalysis below) WA WA WA ON (NO2) (F) TI) (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) nalysis below) WA WA WA ON (NO2) (F) TI) (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) nalysis below) WA WA WA ON (NO2) (F) TI) (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.2 17.2 17.3 17.4 17.3 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Cond. (uS/cm) 294.6 294.5 293.9 294 294.3 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.72 0.74 0.72 1.72 1.10	6.26 6.26 6.26 6.26 6.26 CR BOTTLE NWTPH-Gx 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) -24.6 -25.9 -26.9 -26.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (i) (NH3) (NO3) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! pplicable or write in (8141) (Oil & Gree (HCO3/CO3) (Oil (MO2)) (Pb) (Mg) (Mn) (1	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR



Project Name:	•	Boeing Rent	on		Project Number:		0025217.099.09	9	_
Event:		Quarterly Ma	ay 2018		Date/Time:	5/ 07/2018@	1733		
Sample Numb	er:	RGW038S-	180507		Weather:	SUNNY 70F			
Landau Repre	esentative:	GJN			- -				
WATER LEVE	I /WFI I /PIIR	GE DATA							
Well Condition		Secure (YES	or NO)	Damaged (YF	ES or NO)	Describe:	WELL CAP W/I	OCK	
DTW Before Pr		4.24	Time:	_	Flow through cell			GW Meter No.(s)	2
Begin Purge:		5/ 07 /2018 0		End Purge:	_	5/ 07/2018 @	1726	Gallons Purged:	1.5
Purge water dis			55-gal Drum		Storage Tank	Ground		SITE TREATMEN	
i dige water dis		_	_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time					. ,	ings within the follo	. ,	>/= 1 flow	Obscivations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell vol.	
1714	14.58	317	0.75	6.34	169.7		4.3	0.3	
1717	14.00	316	0.21	6.30	161.9		4.29	0.6	
1720	15.56	327	0.70	6.34	148.1		4.20	0.9	
1723	15.55	330	0.70	6.34	146.6		4.28	1.2	
1726	15.53	336	0.59	6.35	141.7		4.28	1.5	
SAMPLE COL	LECTION DA								
Sample Collecte	ed With:		Bailer		Pump/Pump Type	BLADDER			
Made of:		Stainless Steel		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedu	re:	Alconox Wash	ı 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	O I \	<u> </u>							
(By Itumerical	Oraer)	Other							
Sample Descrip			een, etc.):	CLEAR/COL	ORLESS/NO/NS				
Sample Descrip	otion (color, tur	bidity, odor, sh				Turbidity	DTW	Ferrous iron	Comments/
•			D.O. (mg/L)	CLEAR/COL	ORLESS/NO/NS ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descrip	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН	ORP (mV)		(ft)		
Sample Descrip Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.35	ORP (mV)		(ft) 4.28		
Replicate 1 2	Temp (°F/°C) 15.55 15.53	Cond. (uS/cm) 336	D.O. (mg/L) 0.58	pH 6.35 6.35	ORP (mV) 140.1 139.5		(ft) 4.28 4.28		
Replicate 1 2 3	Temp (°F/°C) 15.55 15.53 15.52	Cond. (uS/cm) 336 336	D.O. (mg/L) 0.58 0.56	pH 6.35 6.35 6.35	ORP (mV) 140.1 139.5 138.8		(ft) 4.28 4.28 4.28		
Replicate 1 2	Temp (°F/°C) 15.55 15.53	Cond. (uS/cm) 336 336 336	D.O. (mg/L) 0.58 0.56 0.55	6.35 6.35 6.35 6.35	ORP (mV) 140.1 139.5 138.8 137.7	(NTU)	(ft) 4.28 4.28 4.28 4.28		
Replicate 1 2 3	Temp (°F/°C) 15.55 15.53 15.52	Cond. (uS/cm) 336 336	D.O. (mg/L) 0.58 0.56	pH 6.35 6.35 6.35	ORP (mV) 140.1 139.5 138.8		(ft) 4.28 4.28 4.28		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53	Cond. (uS/cm) 336 336 336 336 336	D.O. (mg/L) 0.58 0.56 0.55 0.53	6.35 6.35 6.35 6.35 6.35	ORP (mV) 140.1 139.5 138.8 137.7 139.0	(NTU)	(ft) 4.28 4.28 4.28 4.28 4.28	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53	Cond. (uS/cm) 336 336 336 336 336	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER	6.35 6.35 6.35 6.35 6.35	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applica)	(NTU) #DIV/0!	(ft) 4.28 4.28 4.28 4.28 4.28 4.28	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010)	Cond. (uS/cm) 336 336 336 336 336 336 336 336 336 3	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER	6.35 6.35 6.35 6.35 6.35 80TTLE TY	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applica)	#DIV/0!	(ft) 4.28 4.28 4.28 4.28 4.28 4.28	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduction)	Cond. (uS/cm) 336 336 336 336 336 336 336 (AALYSIS ALL) (8020) (NW) (NWTPH-D)	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER 3 (TPH-G) (NV (NWTPH-D (TSS) (BOI	6.35 6.35 6.35 6.35 6.35 BOTTLE TYI VTPH-GX) (I x) (TPH-HCI D) (Turbidity)	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC	#DIV/0! ble or write non-sta (Oil & Grease) (203/CO3) (Cl) (SO	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 ndard analysis b	elow) WA WA WA	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC)	Cond. (uS/cm) 336 336 336 336 336 336 336 336 336 3	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedah	6.35 6.35 6.35 6.35 6.35 VTPH-Gx) (I (x) (TPH-HCI (x) (TPH-HCI (x) (TPH-HCI (x) (Turbidity) (x) (Nitrogen) (1)	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141)	#DIV/0! ble or write non-sta (Oil & Grease) (203/CO3) (Cl) (SO	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 ndard analysis b	elow) WA WA WA	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide	Cond. (uS/cm) 336 336 336 336 336 336 336 336 310 (8020) (NW (NWTPH-D) (tivity) (TDS) (Total PO4) (WAD Cyan	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (NWTPH-G) (NV (NWTPH-D) (TSS) (BOI (Total Kiedal) (Free Cy	6.35 6.35 6.35 6.35 6.35 BOTTLE TY VTPH-Gx) (I x) (TPH-HCI D) (Turbidity) anide)	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applica BTEX) (D) (8081) (8141) (Alkalinity) (HC) NH3) (NO3/NO2)	#DIV/0! #DIV/0! ble or write non-sta) (Oil & Grease) CO3/CO3) (Cl) (SO	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals)	Cond. (uS/cm) 336 336 336 336 336 336 336 3	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (NWTPH-D (NWTPH-D (TSS) (BOI (Total Kiedalide) (Free Cyu) (Be) (Ca) (6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 336 336 336 336 336 336 336 336 336 3	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (NWTPH-D) (TSS) (BOI (Total Kiedalide) (Free Cy.) (Be) (Ca) (6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta) (Oil & Grease) CO3/CO3) (Cl) (SO	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 336 336 336 336 336 336 336 336 336 3	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 336 336 336 336 336 336 336 (uS/cm) 336 337 338 (uS/cm) 338 339 339 (uS/cm) 339 (uS/cm) 339 330 330 (uS/cm) 330 330 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) (uS/c	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 336 336 336 336 336 336 336 (uS/cm) 336 337 338 (uS/cm) 338 339 339 (uS/cm) 339 (uS/cm) 339 330 330 (uS/cm) 330 330 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) (uS/c	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 336 336 336 336 336 336 336 (uS/cm) 336 337 338 (uS/cm) 338 339 339 (uS/cm) 339 (uS/cm) 339 330 330 (uS/cm) 330 330 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) (uS/c	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduct (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met VOC (Boeing Methane Ethan others	Cond. (uS/cm) 336 336 336 336 336 336 336 (uS/cm) 336 337 338 (uS/cm) 338 339 339 (uS/cm) 339 (uS/cm) 339 330 330 (uS/cm) 330 330 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) (uS/c	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate Samp	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduct (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met VOC (Boeing Methane Ethan others	Cond. (uS/cm) 336 336 336 336 336 336 336 (uS/cm) 336 337 338 (uS/cm) 338 339 339 (uS/cm) 339 (uS/cm) 339 330 330 (uS/cm) 330 330 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) 330 (uS/cm) 330 330 (uS/cm) (uS/c	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.55 15.53 15.52 15.51 15.53 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduct (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met VOC (Boeing Methane Ethan others	Cond. (uS/cm) 336 336 336 336 336 336 336 336 336 3	D.O. (mg/L) 0.58 0.56 0.55 0.53 0.56 OWED PER (TPH-G) (NV (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.35 6.35 6.35 6.35 6.35 BOTTLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE TYLE	ORP (mV) 140.1 139.5 138.8 137.7 139.0 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC) (NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! #DIV/0! ble or write non-sta (Oil & Grease) CO3/CO3) (Cl) (SC	(ft) 4.28 4.28 4.28 4.28 4.28 4.28 04) (NO3) (NO	(Fe II) elow) WA WA 2) (F) (Zn) (Hg) (K) (Na	Observations OR □ OR □ a)



Project Name	e <u>:</u>	Boeing Ren	ton		Project Number	:: 0	025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 1626	5		
Sample Num	ber:	RGW039S-	180507		Weather:	60'S, PARTLY SU	NNY		
Landau Repr	resentative:	JHA			·				
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	3.94	Time:	_	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:		5/ 7 /2018 @		End Purge:	=	5/7 /2018 @ 1622		Gallons Purged:	0.5
Purge water di			55-gal Drum	i i	Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	рп	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						lings within the follo	_	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1606	17.9	165.6	0.63	6.31	36.3	LOW	3.94	<0.25	
1609	17.9	161.7	0.57	6.29	35.9				
1612	18.1	161.7	0.51	6.25	35.1		3.94	0.25	
1615	18.0	161.8	0.44	6.23	34.6		_		
1618	18.1	161.8	0.45	6.23	34.4				
1621	18.1	162.1	0.43	6.23	34.2			·	
SAMPLE COI			D '1		D /D III	DED DI ADDED			
Sample Collec	eted With:		Bailer			DED BLADDER		— • • • • •	
Made of:		Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedo		Alconox Was	sh 📙	Tap Rinse	DI Water	Dedicated			
(By Numerical	*	Other							
Nample Descri					LODIEGG MOAI	C			
Sumple Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Replicate	Temp	Cond. (uS/cm)	D.O.	pH	ORP (mV)	Turbidity	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)				
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.23	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 18.1	Cond. (uS/cm) 162.1	D.O. (mg/L) 0.43	pH 6.23 6.23	ORP (mV) 34.2 34.2	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 18.1 18.1	Cond. (uS/cm) 162.1 162.1	D.O. (mg/L) 0.43 0.43	pH 6.23 6.23 6.23	ORP (mV) 34.2 34.2	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 18.1 18.1 18.1	Cond. (uS/cm) 162.1 162.1 162.1	D.O. (mg/L) 0.43 0.43 0.43	pH 6.23 6.23 6.23 6.23	ORP (mV) 34.2 34.2 34.2 34.2	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 18.1 18.1	Cond. (uS/cm) 162.1 162.1	D.O. (mg/L) 0.43 0.43	pH 6.23 6.23 6.23	ORP (mV) 34.2 34.2	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 18.1 18.1 18.1 18.1	Cond. (uS/cm) 162.1 162.1 162.1 162.1	D.O. (mg/L) 0.43 0.43 0.43 0.43	6.23 6.23 6.23 6.23 6.23	ORP (mV) 34.2 34.2 34.2 34.2 34.2 34.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 18.1 18.1 18.1 18.1	Cond. (uS/cm) 162.1 162.1 162.1 162.1 NALYSIS AL	D.O. (mg/L) 0.43 0.43 0.43 0.43	6.23 6.23 6.23 6.23 6.23 R BOTTLE	ORP (mV) 34.2 34.2 34.2 34.2 34.2 34.2 TYPE (Circle ap)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 NALYSIS AL (NWTPH-I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 LOWED PE WTPH-G) (D) (NWTPH	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX) -DX) (TPH-I	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle approximately (BTEX) HCID) (8081) (9081)	#DIV/0! blicable or write non-	-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 18.1 (8260) (8010 (8270) (PAF(pH) (Condu	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 162.1 NALYSIS AL () (8020) (N H) (NWTPH-Inctivity) (TDS	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 LOWED PE WTPH-G) (CO) (NWTPH (S) (TSS) (Be	6.23 6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (sity) (Alkalinity)	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl)	-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 NALYSIS AL (I) (8020) (N (I) (NWTPH-I (I) (TDS) (C) (Total PO4	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kie	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX) -DX) (TPH-IOD) (Turbid dahl Nitrogen	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle approximately (BTEX) HCID) (8081) (9081)	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl)	-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 NALYSIS AL (I) (8020) (NH) (NWTPH-lectivity) (TDSC) (Total PO4e) (WAD Cym)	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 LOWED PE WTPH-G) (CO) (NWTPH-GO) (TSS) (Becomide) (Free	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX -DX) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (319) (Alkalinity) (NH3) (NO3/1)	#DIV/0! #DIV/0! plicable or write non- (HCO3/CO3) (Cl) NO2)	-standard ana) (SO4) (NO3	(Fe II) Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals)	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 NALYSIS AL (D) (8020) (N (I) (NWTPH-Inctivity) (TDS (IC) (Total PO4 (IC) (AS) (Sb) (IC)	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 LOWED PE WTPH-G) (CO) (NWTPH CO) (TSS) (Becompton) (Total Kieder) (Free Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (Superior) (NWTPH-Lictivity) (TDS) (Total PO4) (Total PO4) (WAD Cy. (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 LOWED PE WTPH-G) (CO) (NWTPH CO) (TSS) (Becompton) (Total Kieder) (Free Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- (HCO3/CO3) (Cl) NO2)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (I) (8020) (N. (I) (NWTPH-Inctivity) (TDS) (I) (Total PO4) (E) (WAD Cyt. (I) (As) (Sb) (I) (I) (Sb) (I) (Sb) (I) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (Superior) (NWTPH-Lictivity) (TDS) (Total PO4) (Total PO4) (WAD Cy. (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (I) (8020) (N. (I) (NWTPH-Inctivity) (TDS) (I) (Total PO4) (E) (WAD Cyt. (I) (As) (Sb) (I) (I) (Sb) (I) (Sb) (I) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (I) (8020) (N. (I) (NWTPH-Inctivity) (TDS) (I) (Total PO4) (E) (WAD Cyt. (I) (As) (Sb) (I) (I) (Sb) (I) (Sb) (I) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Methane Eth others	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (I) (8020) (N. (I) (NWTPH-Inctivity) (TDS) (I) (Total PO4) (E) (WAD Cyt. (I) (As) (Sb) (I) (I) (Sb) (I) (Sb) (I) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Methane Eth others	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (I) (8020) (N. (I) (NWTPH-Inctivity) (TDS) (I) (Total PO4) (E) (WAD Cyt. (I) (As) (Sb) (I) (I) (Sb) (I) (Sb) (I) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 18.1 18.1 18.1 18.1 18.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Methane Eth others	Cond. (uS/cm) 162.1 162.1 162.1 162.1 162.1 162.1 162.1 (NALYSIS AL. (I) (8020) (N. (I) (NWTPH-Inctivity) (TDS) (I) (Total PO4) (E) (WAD Cyt. (I) (As) (Sb) (I) (I) (Sb) (I) (Sb) (I) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 0.43 0.43 0.43 0.43 0.43 CONTRACTOR (NWTPH G) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.23 6.23 6.23 6.23 6.23 R BOTTLE (NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 34.2 34.2 34.2 34.2 34.2 TYPE (Circle app (BTEX) HCID) (8081) (ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK



Project Name	e:	Boeing Ren	nton		Project Number	·: (0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 7 /2018@ 1520	6		
Sample Num	ıber:	RGW143S-	180507		Weather:	60'S, PARTLY SU	JNNY		
Landau Repr	resentative:	JHA			_				
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES	5)	Damaged (N	O)	Describe:			
DTW Before	Purging (ft)	4.41	Time:	1432	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 7 /2018	@ 1503	End Purge:	Date/Time:	5/7 /2018 @ 1513		Gallons Purged:	0.25
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa +/- 3%	ıls: Stablizati +/- 3%	on of Parame +/- 10%	ters for three +/- 0.1 units	e consecutive read +/- 10 mV	lings within the follo +/- 10%	owing limits < 0.3 ft	>/= 1 flow through cell	
1506		106.3	1.95	6.25		MED		<0.25	
						WILD	7,71		
1509	·	106.8	1.93	6.22	43.0			<0.25	
1512	16.2	107.2	1.94	6.24	45.1				_
	· 								
	· ·								
SAMPLE CO	LLECTION D	ATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Ste	el	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Wa	sh	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
Sample Descr	ription (color, t	urbidity, odor	, sheen, etc.):	CLOUDY, C	GRAY, NO/NS				
D 11 :		G 1	D.O.		OPP	T. 1111	DOWN	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	(Fe II)	Observations
1	16.4	107.3	1.94	6.24	46.8				
2	16.4	107.5	1.95	6.24	46.4				
3	16.4	107.3	1.95	6.24	47.4				
4	16.4	107.4	1.95	6.24	46.9				
Average:	16.4	107.4	1.95	6.24	46.9	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AI	LLOWED PE	R BOTTLE	TYPE (Circle app	olicable or write non	-standard ana	alysis below)	
5			NWTPH-G) (wa □	OR 🗆
						8141) (Oil & Grease		WA □	OR 🗆
-						(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
1) (NH3) (NO3/I	NO2)			
			(Ra) (Re) (Ca		(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni)	(Ag) (Se) (T	(V) (Zn) (Hg)	(K) (Na)
) (Mg) (Mn) (Ni) (Ag			
	VOC (Boein					7 (8) () () (8	37 (***) () (*)	7 8 7 7	
		ane Ethene A	cetylene						
	others								
Duplicate San	nple No(s):								
Comments:	-	WORKING.	TROUBLESH	OOTED ~25	MIN TO GET SA	MPLE.			
Signature:			JHA			Date:	5/7/2018		

Landau Associates



Project Name	e <u>:</u>	Boeing Ren	ton		Project Number	:: 0	025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 1556	5		
Sample Num	ber:	RGW209S-	180507		Weather:	60'S, PARTLY SU	NNY		
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	3.93	Time:	1532	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 7 /2018 @	® 1534	End Purge:	Date/Time:	5/7 /2018 @ 1544		Gallons Purged:	0.25
Purge water di	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pm	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						lings within the follo	~	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1537	16.9	364.7	0.12	6.24	46.5	LOW	3.93	<0.25	
1540	16.9	365.4	0.14	6.26	41.2			< 0.25	
1543	16.9	365.5	0.14	6.26	36.3				
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER		_	
Made of:	<u> </u>	Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedo	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	l Order)	Other							
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Replicate									
repriente	Temn	Cond.	D.O.	nН	ORP	Turbidity	DTW	Ferrous iron	Comments/
-	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1				•					
1	(° F /° C)	(uS/cm) 365.3	(mg/L)	6.26	(mV)				
1 2	(°F/°C) 16.9	(uS/cm) 365.3 365.4	(mg/L) 0.14 0.14	6.26	(mV) 35.6 35.2				
1 2 3	(°F/°Ĉ) 16.9 16.9 16.9	(uS/cm) 365.3 365.4	0.14 0.14 0.15	6.26 6.27 6.27	(mV) 35.6 35.2 34.5				
1 2	(°F/°C) 16.9	(uS/cm) 365.3 365.4	(mg/L) 0.14 0.14	6.26	(mV) 35.6 35.2				
1 2 3	(°F/°Ĉ) 16.9 16.9 16.9	(uS/cm) 365.3 365.4	0.14 0.14 0.15	6.26 6.27 6.27	(mV) 35.6 35.2 34.5				
1 2 3 4 Average:	(°F/°Ĉ) 16.9 16.9 16.9 16.9 16.9	(uS/cm) 365.3 365.4 365.4 365.6 365.4	0.14 0.14 0.15 0.15 0.15	6.26 6.27 6.27 6.27 6.27	(mV) 35.6 35.2 34.5 34.0 34.8	(NTU)	(ft)	(Fe II)	
1 2 3 4 Average:	(°F/°Ĉ) 16.9 16.9 16.9 16.9 16.9	(uS/cm) 365.3 365.4 365.4 365.6 365.4	0.14 0.14 0.15 0.15 0.15	6.26 6.27 6.27 6.27 6.27	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle apple)	(NTU) #DIV/0!	(ft)	(Fe II)	
1 2 3 4 Average:	(°F/°Ĉ) 16.9 16.9 16.9 16.9 16.9 16.9 18.9	(uS/cm) 365.3 365.4 365.4 365.6 365.4 NALYSIS AL (1) (8020) (N	0.14 0.15 0.15 0.15 UOWED PE	6.26 6.27 6.27 6.27 6.27 R BOTTLE 7	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximate) (BTEX)	(NTU) #DIV/0!	(ft)	(Fe II)	Observations
1 2 3 4 Average:	(°F/°Ĉ) 16.9 16.9 16.9 16.9 16.9 16.9 (8260) (8010 (8270) (PAH	(uS/cm) 365.3 365.4 365.4 365.6 365.4 NALYSIS AL (NOUTPH- 1) (NWTPH-	(mg/L) 0.14 0.15 0.15 0.15 UWTPH-G) (0) (NWTPH	6.26 6.27 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3000)	#DIV/0!	-standard ana	(Fe II)	Observations OR
1 2 3 4 Average: QUANTITY 5 1	(°F/°Ĉ) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu	(uS/cm) 365.3 365.4 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH-G) (TSS) (Be) (Total Kiew	6.26 6.27 6.27 6.27 6.27 R BOTTLE NWTPH-Gx) -Dx) (TPH-IOD) (Turbid dahl Nitrogen	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3000)	#DIV/0! blicable or write non- (NTU) #DIV/0! Collaboration of the col	-standard ana	(Fe II)	Observations OR
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOO (Total Cyanid	(uS/cm) 365.3 365.4 365.4 365.6 365.4 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 (e) (WAD Cy	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (Be c) (Total Kiecanide) (Free	6.26 6.27 6.27 6.27 6.27 R BOTTLE TOWTPH-GX) -Dx) (TPH-IOD) (Turbid dahl Nitrogen Cyanide)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8081) (8091) (1990) (NH3) (NO3/10)	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2)	-standard ana) (SO4) (NO3	(Fe II) Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid)	(uS/cm) 365.3 365.4 365.4 365.4 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cy (AS) (Sb) (S)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 (e) (WAD Cy (As) (Sb) (Cetals) (As) (Sb)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4 e) (WAD Cy o) (As) (Sb) (cetals) (As) (Sb) (g short list)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 (e) (WAD Cy (As) (Sb) (Cetals) (As) (Sb)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4 e) (WAD Cy o) (As) (Sb) (cetals) (As) (Sb) (g short list)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4 e) (WAD Cy o) (As) (Sb) (cetals) (As) (Sb) (g short list)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5 1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4 e) (WAD Cy o) (As) (Sb) (cetals) (As) (Sb) (g short list)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1 2 3 4 Average: QUANTITY 5	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Tod (Total Cyanid (Total Metals) (Dissolved Methane Eth	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4 e) (WAD Cy o) (As) (Sb) (cetals) (As) (Sb) (g short list)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
1	(°F/°C) 16.9 16.9 16.9 16.9 16.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Tod (Total Cyanid (Total Metals) (Dissolved Methane Eth	(uS/cm) 365.3 365.4 365.6 365.6 365.4 NALYSIS AL (I) (8020) (N I) (NWTPH-ctivity) (TDS (C) (Total PO4 e) (WAD Cy o) (As) (Sb) (cetals) (As) (Sb) (g short list)	(mg/L) 0.14 0.15 0.15 0.15 LOWED PE WTPH-G) (CO) (NWTPH G) (TSS) (Be G) (Total Kiedanide) (Free Ba) (Be) (Ca	6.26 6.27 6.27 6.27 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) 35.6 35.2 34.5 34.0 34.8 TYPE (Circle approximately (BTEX) HCID) (8081) (3484) (1494) (1	#DIV/0! #DIV/0! plicable or write non- 8141) (Oil & Grease (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni)	-standard ana) (SO4) (NO3	(Fe II)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK



Project Name	e <u>:</u>	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M	Iay 2018		Date/Time:	5/7 /2018@	1500		
Sample Num	ber:	RGW210S-	180507		Weather:	70S SUNNY			
Landau Repr	resentative:	SRB			•				
WATER LEV	EL/WELL/PI	IRGE DATA							
Well Conditio		Secure (YES)	Damaged (N	O)	Describe:			
DTW Before I		3.5		_	Flow through cel			GW Meter No.(s	HREON1
Begin Purge:					_	5/ 7 /2018 @	1444	Gallons Purged:	
Purge water di		<u> </u>	55-gal Drum		Storage Tank	Ground		SITE TREATMI	
Turge water a			_		_	_			
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time		ls: Stablizatio		ters for three	consecutive rea	dings within the fo	llowing limits	>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1433	20.3	276.3	0.5	6.25	37.7	HIGH	3.6		
1436	21.7	272.1	0.44	6.39	14.1		3.65		
1439	19.2	230.4	0.45	6.34	9.3		3.65		
					5.2		3.65		
1442	19.4	227.8	0.45	6.36	3.2		3.03		
							-		
SAMPLE CO	LLECTION D	OATA							
Sample Collec	eted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Ste	el 📙	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	10 1								
(=)	i Oraer)	Other							
, ,	*		sheen, etc.):	BROWN SL	IGHTLY TURBI	D NO/NS			
Sample Descri	iption (color, t	urbidity, odor	_				DTW	Ferrous iron	Comments/
, ,	*		D.O. (mg/L)	BROWN SL	ORP (mV)	D NO/NS Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.37	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 19.4	Cond. (uS/cm) 224	D.O. (mg/L) 0.48	pH 6.37 6.37	ORP (mV) 3.7 2.9	Turbidity			
Sample Descri	Temp (°F/°C) 19.4 19.1	Cond. (uS/cm) 224 222.7 222.2	D.O. (mg/L) 0.48 0.48	pH 6.37 6.37 6.35	ORP (mV) 3.7 2.9	Turbidity			
Replicate 1 2	Temp (°F/°C) 19.4	Cond. (uS/cm) 224	D.O. (mg/L) 0.48	pH 6.37 6.37	ORP (mV) 3.7 2.9	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 19.4 19.1	Cond. (uS/cm) 224 222.7 222.2	D.O. (mg/L) 0.48 0.48	pH 6.37 6.37 6.35	ORP (mV) 3.7 2.9	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 19.4 19.1 18.8 19.1	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0	D.O. (mg/L) 0.48 0.48 0.5 0.49	pH 6.37 6.37 6.35 6.36 6.36	ORP (mV) 3.7 2.9 3 2.1 2.9	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 19.4 19.1 18.8 19.1	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0	D.O. (mg/L) 0.48 0.48 0.5 0.49	pH 6.37 6.35 6.36 6.36 CR BOTTLE	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LOWED PE	pH 6.37 6.37 6.35 6.36 6.36 CR BOTTLE NWTPH-Gx)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II) malysis below) WA	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 19.4 19.1 18.8 19.1 TYPICAL A (8260) (8010) (8270) (PAF	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (NI H) (NWTPH-	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LOWED PE	6.37 6.37 6.35 6.36 6.36 CR BOTTLE NWTPH-Gx) (-Dx) (TPH-	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081)	Turbidity (NTU) #DIV/0!	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO-	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie	6.37 6.37 6.35 6.36 6.36 CR BOTTLE NWTPH-Gx) [-Dx) (TPH-OD) (Turbio dahl Nitrogen	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081)	#DIV/0! #DIV/0! pplicable or write in the second	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ictivity) (TDS C) (Total PO-	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (8081) (100 (100 (100 (100 (100 (100 (100 (1	#DIV/0! #DIV/0! pplicable or write in the interest of the in	non-standard anase)	(Fe II) malysis below) WA WA WA (NO2) (F)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals)	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO- le) (WAD Cy) (As) (Sb) (D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH-S) (TSS) (B 4) (Total Kie- ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI () (8020) (NI () (NWTPH- () (Total PO- () (WAD Cy () (As) (Sb) (etals) (As) (Sb) (sc)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH-S) (TSS) (B 4) (Total Kie- ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 18.8 19.1 TYPICAL A (8260) (8010) (8270) (PAH (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 18.8 19.1 TYPICAL A (8260) (8010) (8270) (PAH (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI () (8020) (NI () (NWTPH- () (Total PO- () (WAD Cy () (As) (Sb) (etals) (As) (Sb) (sc)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 18.8 19.1 TYPICAL A (8260) (8010) (8270) (PAH (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 18.8 19.1 TYPICAL A (8260) (8010) (8270) (PAH (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAE (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate Sam	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAE (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 19.4 19.1 19.1 18.8 19.1 TYPICAL A (8260) (8010 (8270) (PAE (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 224 222.7 222.2 214.9 221.0 NALYSIS AI 0) (8020) (N I) (NWTPH- ctivity) (TDS C) (Total PO- de) (WAD Cy de) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.48 0.48 0.5 0.49 0.49 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	6.37 6.37 6.35 6.36 6.36 6.36 CR BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitrogen Cyanide) () (Cd) (Co)	ORP (mV) 3.7 2.9 3 2.1 2.9 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	:	Boeing Rent	on		Project Number:		0025217.099.09	9	
Event:		Quarterly M	•		Date/Time:	5/ 07/2018@	1417		
Sample Numb	-	RGW237S-	180507		Weather:	PARTLY SUNNY	7 65 F		
Landau Repre	esentative:	GJN							
WATER LEVI	EL/WELL/PUR	GE DATA							
Well Condition	n:	Secure (YES	or NO)	Damaged (YI	ES or NO)	Describe:			
DTW Before P	rurging (ft)	3.46	Time:	1350	Flow through cell	0.3		GW Meter No.(s)	2
Begin Purge:	Date/Time:	5/ 07 /2018	@ 1353	End Purge:	Date/Time:	5/ 07 /2018 @	1414	Gallons Purged:	2.4
Purge water dis	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	NT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	4 C 41	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	+/- 3%	-oais: Stabiiza +/- 3%	tion of Param +/- 10%	+/- 0.1 units	e consecutive readi +/- 10 mV	ngs within the follow +/- 10%	< 0.3 ft	>/= 1 flow through cell vol.	
1353	16.05	130	13.11	6.50	192.5		3.47	0.3	
1356	16.50	130	12.65	6.51	197.6		3.47	0.6	
1359	17.62	129	122.60	6.53	201.7		3.49	0.9	
1402	19.19	128	116.70	10.75	198.1		3.5	1.2	
1405	20.73	129	10.50	6.57	194.3		3.48	1.5	
1411	21.95	129	10.40	6.59	189.5		3.49	2.1	
1414	22.86	129	10.28	6.61	187.8		3.49	2.4	
SAMPLE COL	LECTION DA								
Sample Collect	ed With:		Bailer	\Box	Pump/Pump Type	BLADDER		. <u> </u>	
Made of:		Stainless Steel	ı 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedu	ire:	Alconox Wash	h 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerical	Order)	Other							
Sample Descrip	ption (color, tur	bidity, odor, sh	een, etc.):	LIGHT BRO	WN/ LOW/NO/NS				
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
· r	(°F/°C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	(Fe II)	Observations
1	22.99	129	10.24	6.25	187.0		3.49		
2	23.12	129	10.26	6.61	186.1		3.49		
3	23.19	129	10.25	6.61	185.0		3.49		
4	23.31	129	10.18	6.61	183.7		3.49		
Average:	23.15	129	10.23	6.52	185.5	#DIV/0!	3.49		
QUANTITY	TYPICAL AN	ALYSIS ALL	OWED PER	BOTTLE TY	PE (Circle applica	ble or write non-sta	ndard analysis b	elow)	
5	(8260-SIM) (8010) (8020)	(NWTPH-G)	(NWTPH-G	(BTEX)			WA □	OR 🗆
	(8270D) (PA	H) (NWTPH-	D) (NWTPH-	-Dx) (TPH-H	CID) (8081) (814	1) (Oil & Grease)		WA □	OR □
						CO3/CO3) (Cl) (SO	04) (NO3) (NO	(F)	
1					gen) (NH3) (NO3	/NO2)			
	•) (WAD Cyan							
						Mg) (Mn) (Ni) (Ag			
			(Ba) (Be) (Ca)	(Ca) (Co) (Cr)	(Cu) (Fe) (Pb) (Mg	g) (Mn) (Ni) (Ag) (Se	e) (11) (V) (Zn) (F	ig) (K) (Na) (Hardi	ness) (Silica)
	VOC (Boeing	ne Ethene Acet	tylene						
	Michane Ella	ine Eulene Acel	Jiciic						
	others								
- 4									
Duplicate Samp	ple No(s):								
Comments:									
Signature:	GREG NOST	RAND				Date:	5/7/2018		



Project Name	e:	Boeing Ren	ton		Project Number	r: 0	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 7 /2018@ 1411	1		
Sample Num	ber:	RGW238I-	180507		Weather:	60'S, PARTLY SU	INNY		
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Conditio		Secure (YES)	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	3.54	Time:	1345	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 7 /2018 0	@ 1348	End Purge:	Date/Time:	5/7 /2018 @ 1409		Gallons Purged:	0.75
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	+/- 3%	als: Stablizatio +/- 3%		ters for three +/- 0.1 units	e consecutive read +/- 10 mV	dings within the follo +/- 10%	owing limits < 0.3 ft	>/= 1 flow through cell	
1351	16.5	389.0	0.09	6.25		LOW		<0.25	
1354	16.3	384.1	0.13	6.26	67.2		2.54		
1357	16.2	382.2	0.19	6.26	61.1		3.31	0.23	
1400	17.2	386.9	0.22	6.29	39.6		3.54	0.5	
1403	17.6	389.0	0.26	6.30	34.4				
1406	18.0		0.33	6.30	26.5				
1408	18.4	394.7	0.43	6.31	19.5				
SAMPLE CO	LLECTION D	ATA							
Sample Collec	eted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	*	Other							
Sample Descri	iption (color, t	turbidity, odor,	sheen, etc.):	CLEAR, SL	GHT YELLOW	TINT, NO/NS			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	18.4	394.9	0.45	6.31	18.9				
2	18.5	395.1	0.46	6.31	18.4				
3	18.5	395.1	0.46	6.31	17.9				
4	18.6	395.6	0.47	6.32	17.0				
Average:	18.5	395.2	0.46	6.31	18.1	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	ГҮРЕ (Circle ap	plicable or write non	-standard ana	alysis below)	
5	(8260) (8010	0) (8020) (N	IWTPH-G) (NWTPH-Gx)	(BTEX)			WA □	OR □
						8141) (Oil & Grease		wa □	OR 🗆
						(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
1) (NH3) (NO3/	NO2)			
		le) (WAD Cy			(Cr) (Cu) (Fa) (Pb) (Mg) (Mn) (Ni)	(Ag) (Sg) (T)	T) (V) (7 n) (Ha	(K) (Na)
) (Mg) (Mn) (Ni) (Ag			
	VOC (Boein) (= =) (= =) (=	, (==) (==)	(==) (===) (===)) (<u>8</u>) () ()	,, (==, (=, ,	() (8) () (., ()
		ane Ethene Ac	etylene						
	others								
Duplicate San	nple No(s):								
Comments:	· · · · ·								
Signature:			JHA			Date:	5/7/2018		

Landau Associates



Project Name	e:	Boeing Rent	on		Project Number	: (0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 144	6		
Sample Num	ber:	RGW239I-	180507		Weather:	60'S, PARTLY SU	JNNY		
Landau Repro	esentative:	JHA							
WATER LEVI	EL/WELL/PU	RGE DATA							
Well Condition		Secure (YES)		Damaged (N	O)	Describe:			
DTW Before F	Purging (ft)	4.29	Time:	=	Flow through cell	-		GW Meter No.(s	HERON 3
Begin Purge:	0 0 . ,			End Purge:	_	5/ 7 /2018 @ 1445	;	Gallons Purged:	1
Purge water di			55-gal Drum	i i	Storage Tank	Ground		SITE TREATMI	
r urge water ur	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three	consecutive read	lings within the foll		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1427	17.8	293.9	0.26	6.31	19.8	LOW	4.29	< 0.25	
1430	17.8	293.7	0.30	6.30	17.6			0.25	
1433	17.7	293.7	0.31	6.31					
1436	17.6	293.4	0.37	6.31					
1439	17.6	293.0	0.42	6.31	11.1				
1442	17.6	292.9	0.45	6.31	9.4			0.75	
1444	17.6	293.0	0.50	6.31	7.3				
SAMPLE COI	LECTION D	ATA							
Sample Collec	ted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	1 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedu	ıre:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated			
(By Numerical	101)	□ 0.1			—				
(by Numericai	(Order)	Other							
			sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Sample Descri	ption (color, t	urbidity, odor,	_						
	ption (color, t	urbidity, odor,	D.O.	CLEAR, CO	ORP	Turbidity	DTW	Ferrous iron	Comments/
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	ption (color, t	urbidity, odor,	D.O.	рН 6.31	ORP	Turbidity	(ft)		
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	(ft)		
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm) 292.9	D.O. (mg/L)	рН 6.31	ORP (mV) 5.7	Turbidity (NTU)	(ft)		
Sample Descri Replicate 1 2	Temp (°F/°C) 17.6	Cond. (uS/cm) 292.9	D.O. (mg/L) 0.53 0.54	pH 6.31 6.31	ORP (mV) 5.7 5.3	Turbidity (NTU)	(ft)		
Replicate 1 2 3 4	Temp (°F/°C) 17.6 17.6 17.6	Cond. (uS/cm) 292.9 293.0 292.9	D.O. (mg/L) 0.53 0.54 0.55	6.31 6.31 6.31 6.31	ORP (mV) 5.7 5.3 5.1 4.7	Turbidity (NTU)	(ft)		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.6 17.6 17.6 17.6	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9	D.O. (mg/L) 0.53 0.54 0.55 0.55	6.31 6.31 6.31 6.31 6.31	ORP (mV) 5.7 5.3 5.1 4.7 5.2	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7	ORP (mV) 5.7 5.3 5.1 4.7 5.2 TYPE (Circle approximation)	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PERMATTION (March 1988)	6.31 6.31 6.31 6.31 6.31 R BOTTLE TOWTPH-GX	ORP (mV) 5.7 5.3 5.1 4.7 5.2 TYPE (Circle approximate)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH)	292.9 293.0 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N	D.O. (mg/L) 0.53 0.54 0.55 0.54 LOWED PEI WTPH-G) (100) (NWTPH	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I	ORP (mV) 5.7 5.3 5.1 4.7 5.2 TYPE (Circle approximate) (BTEX) HCID) (8081) (8081)	#DIV/0!	n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH) (pH) (Condu	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (NWTPH-I ctivity) (TDS	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PERWIPH-G) (100) (NWTPH-G) (NWT	6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWTPH-GX) -DX) (TPH-HOD) (Turbid	ORP (mV) 5.7 5.3 5.1 4.7 5.2 TYPE (Circle app (BTEX) HCID) (8081) (8 ity) (Alkalinity)	#DIV/0! slicable or write nor (HCO3/CO3) (CI)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010 (8270) (PAH (pH) (Condu	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiec	6.31 6.31 6.31 6.31 6.31 R BOTTLE TOWTPH-GX DD) (TPH-HOD) (Turbid dahl Nitrogen	ORP (mV) 5.7 5.3 5.1 4.7 5.2 TYPE (Circle approximate) (BTEX) HCID) (8081) (8081)	#DIV/0! slicable or write nor (HCO3/CO3) (CI)	n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH) (pH) (Condu) (COD) (TOC) (Total Cyanid	Cond. (uS/cm) 292.9 293.0 292.9 292.9 292.9 292.9 (NALYSIS ALE) () (8020) (NI) (NWTPH-Ictivity) (TDS C) (Total PO4 e) (WAD Cyze	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (0) (NWTPH) (TSS) (Be) (Total Kiecunide) (Free	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen) Cyanide)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 TYPE (Circle approximately (BTEX) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! slicable or write nor (HCO3/CO3) (CI)	n-standard ana e) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals)	Cond. (uS/cm) 292.9 293.0 292.9 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 e) (WAD Cya	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PEI WTPH-G) (10 0) (NWTPH 0) (TSS) (Be) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals)	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-I ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (Betals) (As) (Sb)	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PEI WTPH-G) (10 0) (NWTPH 0) (TSS) (Be) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH) (PH) (Condu) (COD) (TOC) (Total Cyanid) (Total Metals) (Dissolved Metals) (OD) (Boein)	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-I ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (Betals) (As) (Sb)	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH) (PH) (Condu) (COD) (TOC) (Total Cyanid) (Total Metals) (Dissolved Metals) (OD) (Boein)	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Methane Eth	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH) (PH) (Condu) (COD) (TOC) (Total Cyanid) (Total Metals) (Dissolved Metals) (OD) (Boein)	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG) (Total Cyanid (Total Metals)	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG) (Total Cyanid (Total Metals)	Cond. (uS/cm) 292.9 293.0 292.9 292.9 292.9 NALYSIS AL D) (8020) (N T) (NWTPH-I ctivity) (TDS C) (Total PO4 e) (WAD Cya o) (As) (Sb) (Betals) (As) (Sb) g short list) ane Ethene Acc	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate Sam	Temp (°F/°C) 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 17.6 (8260) (8010) (8270) (PAH) (pH) (Condu) (COD) (TOC) (Total Cyanid) (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 292.9 292.9 293.0 292.9 292.9 292.9 NALYSIS AL () (8020) (N () (NWTPH-Ictivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (Betals) (As) (Sb) g short list) ane Ethene Acceptation	D.O. (mg/L) 0.53 0.54 0.55 0.55 0.54 LOWED PE WTPH-G) (i D) (NWTPH) (TSS) (BG) (Total Kiecunide) (Free Ba) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) -Dx) (TPH-I OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 5.7 5.3 5.1 4.7 5.2 IYPE (Circle approximately (BTEX)) HCID) (8081) (8 ity) (Alkalinity) (NH3) (NO3/N) (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #Idicable or write nor #Idicable or	n-standard ana e) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □



Project Name		Boeing Rent	on		Project Number		0025217.099.09	0	
Event:	•	Quarterly Ma			Date/Time:			2	
Sample Numb		RGW240D-	-		Weather:	SUNNY 70 F	11		
Landau Repre	-	GJN	180307		weather.	SUNNI /UF			
WATER LEVE		GE DATA							
Well Condition		Secure (YES	or NO)	Damaged (YI	ES or NO)	Describe:	WELL CAP W/	LOCK	
DTW Before P	urging (ft)	4.72	Time:	_	Flow through cell	vol.		GW Meter No.(s)	2
Begin Purge:	0 0 . ,	5/ 07/2018		End Purge:	C .	5/ 07 /2018 @ 1508		Gallons Purged:	2.5
Purge water dis	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	þii	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	0					ings within the follow	0	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell vol.	
1448	17.50	448	8.62	7.28	118.4		4.72	0.3	
1451	17.49	457	10.40	7.18	120.5		4.61	0.6	
1454	17.00	452	11.45	6.87	123.5	LOW	4.58	0.9	
1457	16.67	449	11.35	6.49	123.3		5.42	1.2	AIR BUBBLE
1500	16.16	447	4.80	6.40	136.6		5.64	1.5	
1503	15.93	450	2.65	6.40	135.9		5.71	1.8	
1508	15.79	449	2.67	6.38	127.1		5.79	2.4	
1306	13.79	449	2.07	0.38	127.1		3.19	2.4	
SAMPLE COL	LECTION DA	TA							
Sample Collect	ed With:		Bailer		Pump/Pump Type	BLADDER			
Made of:		Stainless Steel		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedu	re:	Alconox Wash	ı 🗖	Tap Rinse	DI Water	Dedicated		^	
(By Numerical	Order)	Other	<u>—</u>			-x			
Sample Descrip	otion (color, tur	bidity, odor, sh	een, etc.):	CLEAR,LOW	V,NO,NS				
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	15.77	449	2.88	6.37	126.7		6.89		
2	15.77	449	2.90	6.36	126.5		0.00		
						-			
3	15.78	449	29.00	6.35	126.4				
4	15.76	449	30.00	6.34	126.1	-			
Average:	15.77	449	16.20	6.36	126.4	#DIV/0!			
QUANTITY	TYPICAL AN	ALYSIS ALL	OWED PER	BOTTLE TY	PE (Circle applica	ble or write non-stan	dard analysis b	elow)	
5	(<mark>8260</mark>) (8010)	(8020) (NW	TPH-G) (NV	VTPH-Gx) (1	BTEX)			WA □	OR 🗆
	(8270) (PAH)	(NWTPH-D)	(NWTPH-D	x) (TPH-HCl	D) (8081) (8141) (Oil & Grease)		WA □	OR 🗆
						CO3/CO3) (Cl) (SO4	4) (NO3) (NO	2) (F)	
1					NH3) (NO3/NO2))			
	` '	(As) (Sb) (Ba			(Cu) (Ea) (Dh)	(Mg) (Mn) (Ni) (Ag)	(Se) (TI) (V)	(7n) (Ha) (V) (N	(a)
						g) (Mn) (Ni) (Ag) (Se)			
	VOC (Boeing		(Du) (Du) (Ca)	(24) (20) (21)	(24) (12) (10) (14)	5, (2111) (111) (11 <u>5)</u> (30)	(1) (1) (EII) (I	-5/ (11/ (11a) (11a)	(omea)
		ne Ethene Acet	ylene						
						-	_		-
	others								
Duplicate Samp	ale No(s)·								
Comments:	210 110(s).								
Comments.									



Project Name:	:	Boeing Rent	on		Project Number:		0025217.099.09	9	
Event:		Quarterly Ma	ay 2018		Date/Time:	5/ 07/2018@1643	3		
Sample Numb	er:	RGW-241S-	180507		Weather:	SUNNY 70F			
Landau Repre	sentative:	GJN							
WATER LEVE	EL/WELL/PUR	GE DATA							
Well Condition:		Secure (YES	or NO)	Damaged (YI	ES or NO)	Describe:			
DTW Before Pu	urging (ft)	4.84	Time:	1629	Flow through cell	vol.		GW Meter No.(s)	2
Begin Purge:	Date/Time:	5/ 07/2018 @	1628	End Purge:	Date/Time:	5/ 07/2018 @1640		Gallons Purged:	1.5
Purge water dis	posed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	NT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge G	oals: Stabliza	tion of Param		e consecutive readi	ngs within the follow	ing limits	>/= 1 flow	O DOSCI (III VIO III S
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell vol.	
1628	14.91	391	0.21	6.20	158.8		4.89	0.3	
1631	14.94	391	0.19	6.10	157.4		4.9	0.6	
1634	15.02	392	0.16	6.10	153.1		4.89	0.9	
1637	14.97	392	0.13	6.16	139.0		4.89	1.2	
1640	14.96	392	0.13	6.17	129.8		4.89	1.5	
1040	14.50	3)2	0.13	0.17	127.0		4.07	1.5	
						·			
CANDIE COL	LECTION DA								
Sample Collecte		IA	Bailer		Pump/Pump Type	BLADDER			
Made of:	ca with.	Stainless Steel		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedur	H	Alconox Wash		Tap Rinse	DI Water	Dedicated	ш ошс	Dedicated	
(By Numerical			. س	rap Kilise	DI Water	Dedicated			
		II II ()Iner							
	· · · · · · · · · · · · · · · · · · ·	Other	een etc.):	CLEAR/COL	ORLESS/NO/NS				
Sample Descrip	· · · · · · · · · · · · · · · · · · ·	_	een, etc.):	CLEAR/COL	ORLESS/NO/NS				
, ,	· · · · · · · · · · · · · · · · · · ·	_	D.O. (mg/L)	CLEAR/COL	ORLESS/NO/NS ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descrip	Temp	bidity, odor, she	D.O.		ORP	•			
Sample Descrip Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН	ORP (mV)	•	(ft)		
Sample Descrip Replicate	Temp (°F/°C) 14.99	Cond. (uS/cm) 392	D.O. (mg/L) 0.12	pH 6.17	ORP (mV) 127.4 126.2	•	(ft) 4.9 4.9		
Sample Descrip Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L) 0.12 0.12	pH 6.17	ORP (mV) 127.4 126.2 124.1	•	(ft) 4.9 4.9		
Replicate 1 2 3 4	Temp (°F/°C) 14.99 14.95 14.94	Cond. (uS/cm) 392 392 392 392	D.O. (mg/L) 0.12 0.12 0.14	pH 6.17 6.17 6.17 6.17	ORP (mV) 127.4 126.2 124.1 121.6	(NTU)	(ft) 4.9 4.9		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97	Cond. (uS/cm) 392 392 392 392 392	D.O. (mg/L) 0.12 0.12 0.14 0.14	6.17 6.17 6.17 6.17 6.17	ORP (mV) 127.4 126.2 124.1 121.6 124.8	(NTU) #DIV/0!	(ft) 4.9 4.9 4.9 4.9	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97	Cond. (uS/cm) 392 392 392 392 392 392	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER	pH 6.17 6.17 6.17 6.17 6.17 6.17	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applica	(NTU)	(ft) 4.9 4.9 4.9 4.9	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010)	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER	pH 6.17 6.17 6.17 6.17 6.17 80TTLE TY	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX)	#DIV/0!	(ft) 4.9 4.9 4.9 4.9	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH)	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW	D.O. (mg/L) 0.12 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV	6.17 6.17 6.17 6.17 6.17 80TTLE TYI VTPH-Gx) (I	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applica BTEX) (D) (8081) (8141)	#DIV/0! ble or write non-stan (Oil & Grease)	(ft) 4.9 4.9 4.9 4.9 4.9 dard analysis b	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduction)	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS)	D.O. (mg/L) 0.12 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI	6.17 6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI O) (Turbidity)	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC	#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO	(ft) 4.9 4.9 4.9 4.9 4.9 dard analysis b	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduction)	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS)	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal	pH 6.17 6.17 6.17 6.17 6.17 6.18 BOTTLE TY VTPH-Gx) (I x) (TPH-HCI D) (Turbidity) al Nitrogen) (i	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applica BTEX) (D) (8081) (8141)	#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO	(ft) 4.9 4.9 4.9 4.9 4.9 dard analysis b	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduct (COD) (TOC) (Total Cyanide	Cond. (uS/cm) 392 392 392 392 392 392 (ALYSIS ALL (8020) (NW (NWTPH-D) (tivity) (TDS) (Total PO4) (WAD Cyan	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal	pH 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-Gx) (I x) (TPH-HCl D) (Turbidity) al Nitrogen) (I anide)	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applica BTEX) (D) (8081) (8141) (Alkalinity) (HC) NH3) (NO3/NO2)	#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO	(ft) 4.9 4.9 4.9 4.9 dard analysis b	(Fe II)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals)	Cond. (uS/cm) 392 392 392 392 392 392 (ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (C1) (SO-	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals)	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (Ba	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (Ba	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (short list)	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met VOC (Boeing Methane Etha	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (short list)	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (short list)	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met VOC (Boeing Methane Etha	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (short list)	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.99 14.95 14.94 14.97 TYPICAL AN (8260) (8010) (8270) (PAH) (pH) (Conduc (COD) (TOC) (Total Cyanide (Total Metals) (Dissolved Met VOC (Boeing Methane Etha	Cond. (uS/cm) 392 392 392 392 392 392 4ALYSIS ALL (8020) (NW (NWTPH-D) tivity) (TDS) (Total PO4) (WAD Cyan (As) (Sb) (Ba als) (As) (Sb) (short list)	D.O. (mg/L) 0.12 0.14 0.14 0.13 OWED PER /TPH-G) (NV) (NWTPH-D (TSS) (BOI (Total Kiedal ide) (Free Cy) (Be) (Ca) (Ba) (Be) (Ca)	6.17 6.17 6.17 6.17 6.17 6.17 BOTTLE TY VTPH-GX) (I x) (TPH-HCI D) (Turbidity) anide) Cd) (Co) (Cr	ORP (mV) 127.4 126.2 124.1 121.6 124.8 PE (Circle applical BTEX) (D) (8081) (8141) (Alkalinity) (HC NH3) (NO3/NO2) () (Cu) (Fe) (Pb) (#DIV/0! ble or write non-stan (Oil & Grease) (O3/CO3) (Cl) (SO4) Mg) (Mn) (Ni) (Ag)	(ft) 4.9 4.9 4.9 4.9 4.9 4.9 4.9 (NO3) (NO	(Fe II)	Observations OR □ OR □ a)



Duningt Name		Boeing Rent	-0.00		Ducinat Number		0025217 000 00	0	
Project Name	•				Project Number: Date/Time:	5/ 07/2018@ 16	0025217.099.09	9	
Event: Sample Numb		Quarterly M RGW-242I-	<u> </u>		Weather:	SUNNY 70F	507		
Landau Repre	-	GJN	100307		weather.	SUNN1 /UF			
WATER LEVE									
Well Condition	:	Secure (YES	or NO)	Damaged (YI	ES or NO)	Describe:	WELL CAP W/	LOCK	
DTW Before P	urging (ft)	5.02	Time:	1544	Flow through cell			GW Meter No.(s)	2
Begin Purge:	Date/Time:	5/ 07/2018		End Purge:		5/ 07/2018@	1605	Gallons Purged:	2.5
Purge water dis	posed to:	Ш	55-gal Drum	Ц	Storage Tank	Ground	Other	SITE TREATME	NT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	. 6 1	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	+/- 3%	roais: Stabiiza +/- 3%	tion of Param +/- 10%	+/- 0.1 units	+/- 10 mV	ings within the follo +/- 10%	< 0.3 ft	>/= 1 flow through cell vol.	
1545	14.88	383	1.42	6.19		LOW	5.02	0.3	
1548	15.08	388	0.94	6.21		LOW	5.02	0.6	
1551	15.94	389	0.76	6.10		LOW	5.02	0.9	
1554	16.50	391	0.51	6.18	165.4	LOW	5.02	1.2	
1600	16.51	392	1.21	6.23	147.8	LOW	5.03	1.8	
1603	16.20	391	1.08	6.23	143.7	LOW	5.02	2.1	
1605	16.06	391	1.09	6.23	139.8	LOW	5.02	2.4	
							-		
SAMPLE COL	LECTION DA	TA							
Sample Collect			Bailer	V	Pump/Pump Type	BLADDER			
Made of:		Stainless Steel		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedu	re:	Alconox Wash	h 🗖	Tap Rinse	DI Water	Dedicated	<u>—</u>	-7X	
(By Numerical	Order)	Other				-7X			
Sample Descrip	otion (color, tur	bidity, odor, sh	een, etc.):	CLEAR/COL	ORLESS/NO/NS				
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	16.06	391	0.97	6.23	135.3		5.02		
2	16.07	391	1.00	6.23	134.5		5.02		
3	16.08	391	1.01	6.23	133.6		5.02		
4	16.10	391	1.02	6.23	132.8		5.02		
Average:	16.08	391	1.00	6.23	134.1	#DIV/0!	-		
							-		
						ble or write non-sta	ındard analysis b		
5	` ' ` '	(8020) (NW				(O'1 0 G		WA □ WA □	OR OR
					(Alkalinity) (HG	CO3/CO3) (Cl) (SO	24) (NO2) (NO		OK 🗆
					NH3) (NO3/NO2)		5-7) (1 10 5) (1 10	(1)	
) (WAD Cyan			(1103/1102)				
	•	•) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag	g) (Se) (Tl) (V)	(Zn) (Hg) (K) (N	a)
						g) (Mn) (Ni) (Ag) (So			
	VOC (Boeing	short list)							
	Methane Etha	ne Ethene Acet	tylene						
	others								
Duplicate Samp	ole No(s):								
Comments:	• • • • •								
Signature:	GREG NOST	RAND				Date:	05/0718		



Project Name	e:	Boeing Ren	ton		Project Number	r: 0	025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 7 /2018@ 1651			
Sample Num	ber:	RGW-243I-	180507		Weather:	60'S, PARTLY SU	NNY		
Landau Repr	esentative:	JHA			_				
WATER LEV	EL/WELL/PI	JRGE DATA							
Well Conditio		Secure (YES)	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	4.04	Time:	_	Flow through cel	_		GW Meter No.(s	HERON 3
Begin Purge:				End Purge:		5/7 /2018 @ 1648		Gallons Purged:	
Purge water di	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pm	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						dings within the follo	~	>/= 1 flow	
1.620	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1630	18.3	369.1	0.49	6.28		LOW	4.04		
1633	18.2	369.2	0.53	6.28	17.8			<0.25	
1636	18.1	369.2	0.60	6.28	15.5		4.04	0.25	
1639	18.2	369.6	0.72	6.28	10.6				
1642	18.2	370.0	0.78	6.28	8.2				
1645	18.2	370.6	0.86	6.28	5.4				
1647	18.2	370.5	0.90	6.28	3.7				
SAMPLE CO	LLECTION D	OATA				<u></u>			<u> </u>
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated		_	
(By Numerical	l Order)	Other							
Sample Descri	iption (color, t	turbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
			D.O.		OPP	T. 1111	TO TOTAL	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	(Fe II)	Observations
1	18.2	370.4	0.91	6.29	3.4				
2	18.2	370.3	0.92	6.29	3.1				
				6.29					
3	18.2		0.93		2.9				
4	18.1	370.1	0.93	6.28	2.7				
Average:	18.2	370.2	0.92	6.29	3.0	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	ГҮРЕ (Circle арј	olicable or write non	-standard ana	alysis below)	
5		0) (8020) (N						WA 🗆	OR 🗆
						8141) (Oil & Grease		WA 🗆	OR 🗆
1					ity) (Alkalinity)) (NH3) (NO3/I	(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
1		le) (WAD Cy) (NH3) (NO3/I	NO2)			
					(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni)	(Ag) (Se) (T	(I) (V) (Zn) (Hg) (K) (Na)
) (Mg) (Mn) (Ni) (Ag			
	VOC (Boein	g short list)							
	Methane Eth	ane Ethene Ac	etylene						
	atla av -								
	others								
Duplicate San	nple No(s):								
Comments:									
Signature:			JHA			Date:	5/7/2018		

Landau Associates



Event: Quarterly May 2018 Date/Time: 5/ 7 /2018@ 1600 Sample Number: RGW-244S 180507 Weather: 70S SUNNY	
I I D CDD	
Landau Representative: SRB	
WATER LEVEL/WELL/PURGE DATA	
Well Condition: Secure (YES) Damaged (NO) Describe:	
DTW Before Purging (ft) 4.1 Time: 1529 Flow through cell vol. GW M	W Meter No.(s HREON1
Begin Purge: Date/Time: 5/ /2018 @ 1530 End Purge: Date/Time: 5/ 7 /2018 @ 1542 Gallons	lons Purged: 0.25
Purge water disposed to:	TE TREATMENT SYSTEM
1 1	ternal Purge Comments/ olume (gal) Observations
	-/= 1 flow
	rough cell
1533 16.7 403.7 0.83 6.16 10.6 LOW 4.1	
<u>1536</u> <u>16.8</u> <u>404.1</u> <u>0.83</u> <u>6.16</u> <u>8.2</u> <u>4.1</u>	
<u>1539</u> <u>17.4</u> <u>407.7</u> <u>0.85</u> <u>6.16</u> <u>6</u> <u>4.1</u>	
·	
CAMPA D COLLECTION DATE.	
Sample Collected With: Pump/Pump Type DED BLADDER	
<u> </u>	Dedicated
Made of: Stainless Steel PVC Teflon Polyethylene Other D	Dedicated
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash DI Water Dedicated	Dedicated
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Other	Dedicated
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash DI Water Dedicated	Dedicated
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp Cond. D.O. pH ORP Turbidity DTW Ferro	Dedicated errous iron Comments/ (Fe II) Observations
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp Cond. D.O. pH ORP Turbidity DTW Ferror	errous iron Comments/
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated Water Dedicated Other Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) (uS/cm) Turbidity (mV) Turbidity (nTU) Ferro (ft) Ferro	errous iron Comments/
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated Other Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) (uS/cm) (mg/L) Teflon Polyethylene Dedicated Dedicated Other Turbidity (nTU) Ferro (ref) (ref) Turbidity (nTU) (ft) Ferro (ref) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 3.3	errous iron Comments/
Made of: Stainless Steel PVC Teflon Polyethylene Other Description Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Other Other Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (mg/L) pH (mV) Turbidity (NTU) DTW (ft) Ferro (Formally) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 3.3 3 18 414 0.86 6.17 2	errous iron Comments/
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated By Numerical Order Other Other Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (uS/cm) D.O. (mg/L) pH ORP (mV) Turbidity (NTU) ORT Ferror 1 17.4 409.4 0.85 6.17 4.5 <td>errous iron Comments/</td>	errous iron Comments/
Made of: Stainless Steel PVC Teflon Polyethylene Other Description Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Other Other Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (mg/L) pH (mV) Turbidity (NTU) DTW (ft) Ferro (Formally) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 3.3 3 18 414 0.86 6.17 2	errous iron Comments/
Made of: □ Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated Bample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) (uS/cm) (mg/L) D.O. pH ORP (mV) (NTU) Turbidity (ft) Ferror (Ferror Turbidity) 1 17.4 409.4 0.85 6.17 4.5	errous iron Comments/ (Fe II) Observations
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Other Other Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (mg/L) PH ORP (mV) Turbidity (NTU) OTW (ft) Ferror (Formally) 1 17.4 409.4 0.85 6.17 4.5 4.	errous iron Comments/ (Fe II) Observations sis below) A OR OR
Made of: □ Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated (By Numerical Order) □ Other □ Other □ Other □ DI Water □ Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS ■ DI Water □ DI Wa	errous iron (Fe II) Observations sis below) A OR OR OR
Made of: Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated (By Numerical Order) □ Other □ Other □ DI Water □ Dedicated Sample Description (color, turbidity, odor, sheen, etc.): □ CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (uS/cm) D.O. pH ORP Turbidity (NTU) ORT Ferror (ft) ORT	errous iron (Fe II) Observations sis below) A OR OR OR
Made of: Stainless Steel PVC Teflon Polyethylene Other Decomed to the polyethylene Other Decomed to the polyethylene Other DI Water Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (us/cm) D.O. pH ORP (mV) Turbidity (NTU) DTW (For Charles) 1 17.4 409.4 0.85 6.17 4.5	errous iron (Fe II) Observations sis below) A OR OR OR
Made of: Stainless Steel PVC Teflon Polyethylene Other Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Other Other DI Water Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (uS/cm) pH ORP (mV) Turbidity (NTU) DTW (Fero (Forothylam)) 1 17.4 409.4 0.85 6.17 4.5	errous iron (Fe II) Observations sis below) A OR OR OR OR OR OR OR
Made of: Stainless Steel PVC Teflon Polyethylene Other Decomed to the polyethylene Other Decomed to the polyethylene Other DI Water Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (us/cm) D.O. pH ORP (mV) Turbidity (NTU) DTW (For Charles) 1 17.4 409.4 0.85 6.17 4.5	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: Stainless Steel PVC Teflon Polyethylene Other Decomed to the polyethylene Other Decomed to the polyethylene Other Decomed to the polyethylene Other Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (uS/cm) D.O. pH ORP (mV) Turbidity (NTU) DTW (ft) Ferror (Fore) 1 17.4 409.4 0.85 6.17 4.5 4.2 4.2 4.2 0.86 6.17 2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: Stainless Steel PVC Teflon Polyethylene Other D Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated (By Numerical Order) Other Dother Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F/°C) Cond. (us/cm) D.O. pH ORP (mV) Turbidity DTW (ft) Ferro (Fo) 1 17.4 409.4 0.85 6.17 4.5 4.2 4.2 4.2 4.2 8.6 6.17 2 4.2 4.4 1.8 412.8 0.86 6.17 2.7 #DIV/0! #DIV/0! 4.5 4.5 4.5 4.5 4.5 <td< td=""><td>errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)</td></td<>	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated Comprocedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F°C) Cond. (us/cm) pH ORP Turbidity (NTU) DTW (Ft) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 3.3 3 18 414 0.86 6.17 2 4 18 415.7 0.86 6.17 1 Average: 17.8 412.8 0.86 6.17 2.7 #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis to the process of the proc	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: ☐ Stainless Steel ☐ PVC ☐ Teffon ☐ Polyethylene ☐ Other ☐ Decon Procedure: ☐ Alconox Wash ☐ Tap Rinse ☐ DI Water ☐ Dedicated (By Numerical Order) ☐ Other ☐ Other ☐ DI Water ☐ Dedicated Sample Description (color, turbidity, odor, sheen, etc.): ☐ CLEAR COLORLESS NO/NS Replicate Temp (°F)°C) Cond. (mg/L) D.O. pH (mV) Turbidity (NTU) DTW (Ft) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 2 4 18 415.7 0.86 6.17 1 Average: 17.8 412.8 0.86 6.17 1 QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis between the standard analysis between the standard of	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated Comprocedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated Sample Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp (°F°C) Cond. (us/cm) pH ORP Turbidity (NTU) DTW (Ft) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 3.3 3 18 414 0.86 6.17 2 4 18 415.7 0.86 6.17 1 Average: 17.8 412.8 0.86 6.17 2.7 #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis to the process of the proc	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: □ Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated Bomple Description (color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS Replicate Temp Cond. (uS/cm) D.O. pH ORP (mV) Turbidity (NTU) DTW (ft) Ferro (F) 1 17.4 409.4 0.85 6.17 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.5 4.2 4.2 4.2 18 412.1 0.85 6.17 2 4.5 4.4 4.8 4.8 6.17 2 4.4 4.8 4.2.8 0.86 6.17 1 Average: 17.8 412.8 0.86 6.17 2.7 #DIV/0! #DIV/0! *DIV/0! *DIV/	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)
Made of: ☐ Stainless Steel ☐ PVC ☐ Teffon ☐ Polyethylene ☐ Other ☐ Decon Procedure: ☐ Alconox Wash ☐ Tap Rinse ☐ DI Water ☐ Dedicated (By Numerical Order) ☐ Other ☐ Other ☐ DI Water ☐ Dedicated Sample Description (color, turbidity, odor, sheen, etc.): ☐ CLEAR COLORLESS NO/NS Replicate Temp (°F)°C) Cond. (mg/L) D.O. pH (mV) Turbidity (NTU) DTW (Ft) 1 17.4 409.4 0.85 6.17 4.5 2 17.9 412.1 0.85 6.17 2 4 18 415.7 0.86 6.17 1 Average: 17.8 412.8 0.86 6.17 1 QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis between the standard analysis between the standard of	errous iron Comments/ (Fe II) Observations sis below) A OR OR (NO2) (F) (V) (Zn) (Hg) (K) (Na)



Project Nam	e:	Boeing Rent	on		Project Number	er <u>:</u>	0025217.099.0	99	
Event:		Quarterly Ma	ay 2018		Date/Time:	5/7 /2018@			
Sample Nun	nber:	RGWDUP2	180507		Weather:	70S SUNNY			
Landau Repr	resentative:	SRB							
WATER LEV	/EL/WELL/PI	URGE DATA							
Well Condition	on:	Secure (YES)]	Damaged (N	IO)	Describe:			
DTW Before	Purging (ft)		Time:		Flow through ce	ll vol.		GW Meter No.(s	HREON1
		5/ /2018 @	_	End Purge:	Date/Time:	5/ 7 /2018 @		Gallons Purged:	0.25
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ers for three		dings within the fo		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	-/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
							,		
		DIII	NT TO A			T T O O 1 O			
		DUF	'LICA	TE I	TO RGV	W031S	1		
					-	•	1		
					-		1		
	· 								
	LLECTION I								
Sample Collec	cted With:		Bailer		Pump/Pump Type	e DED BLADDER			
Made of:		Stainless Stee	1 🛄 1	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	h 🔲 🧵	Гар Rinse	DI Water	Dedicated			
(By Numerica		Other							
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
Replicate	(°F/°C)	(uS/cm)	(mg/L)	рш	(mV)	(NTU)	(ft)	(Fe II)	Observations
1	18.5	249.1	0.98	6.12	-9.6				
2	18.4	248	0.99	6.12	-9.9				
3	18.4	247.6	1	6.12	-10.3	· 			
4	18.4	247.3	1	6.12	-10.7		-		
Average:	18.4	248.0	0.99	6.12	-10.1	#DIV/0!	1		
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PEI	R BOTTLE	TYPE (Circle a	pplicable or write 1	non-standard a	nalysis below)	
5		0) (8020) (N							OR 🗆
	(8270) (PAH	H) (NWTPH-I	O) (NWTPH-	Dx) (TPH-	-HCID) (8081)	(8141) (Oil & Gre	ase)	WA □	OR □
	(pH) (Condu) (HCO3/CO3) (C	Cl) (SO4) (NO	3) (NO2) (F)	
1	(COD) (TO				n) (NH3) (NO3	/NO2)			
		le) (WAD Cya			(0) (0) (7)	(DI) (A.E.) (A.E.) (A.E.)		TI) (I) (Z) (Z)) (II) (AL.)
						(Pb) (Mg) (Mn) (1			
			(Ba) (Be) (Ca	a) (Ca) (Co)	(Cr) (Cu) (Fe) (P	b) (Mg) (Mn) (N1) (Ag) (Se) (11) (V) (Zn) (Hg) (K) (N	(Silica (Hardness))
	VOC (Boein	ane Ethene Ac	etylene						
	iviculant Ell	and Eulene AC	cry iciic						
	-41								
•	others								
	•								
Duplicate San	•	Duplicate to F	RGW031S						
Duplicate San Comments:	•	Duplicate to F	RGW031S						



Project Name	e:	Boeing Rent	con		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@ 125	6		
Sample Num	ber:	RGW183S-	180507		Weather:	50'S, CLOUDY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Conditio	n:	Secure (YES)		Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	7.93	Time:	1227	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 7 /2018 @		End Purge:	Date/Time:	5/ 7 /2018 @ 1247	7	Gallons Purged:	0.5
Purge water di	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge Goa	ls: Stablizatio	n of Parame		consecutive read	lings within the foll	owing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1234	15.5	134.3	0.42	6.44	51.6	LOW	7.96	<0.25	
1237	15.4	130.6	0.22	6.23	55.7			<0.25	
1240	15.3	128.5	0.20	6.27	51.1		7.96	0.25	
1243	15.2	127.1	0.18	6.28	48.7				
1246		126.7	0.19	6.28	47.4	·		-	
1240	15.2	120.7	0.19	0.28	47.4			. ———	
									
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER	——————————————————————————————————————		
Made of:	븰	Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	_	Alconox Was	h 📋	Tap Rinse	DI Water	Dedicated			
(By Numerical		Other	1	CLEAD CO	LODI EGG NOAL	<u> </u>			
			sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
			sheen, etc.):	CLEAR, CO	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	Temp	urbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.28	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 15.2	Cond. (uS/cm) 126.5	D.O. (mg/L) 0.18	pH 6.28 6.28	ORP (mV) 47.0 46.9	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 15.2 15.2	Cond. (uS/cm) 126.5 126.4	D.O. (mg/L) 0.18 0.18	pH 6.28 6.28 6.29	ORP (mV) 47.0 46.9 46.7	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 15.2 15.2 15.2	Cond. (uS/cm) 126.5 126.4	D.O. (mg/L) 0.18 0.18 0.18	pH 6.28 6.28 6.29 6.28	ORP (mV) 47.0 46.9 46.7 46.5	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 15.2 15.2	Cond. (uS/cm) 126.5 126.4	D.O. (mg/L) 0.18 0.18	pH 6.28 6.28 6.29	ORP (mV) 47.0 46.9 46.7	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2	Cond. (uS/cm) 126.5 126.4 126.4 126.5	D.O. (mg/L) 0.18 0.18 0.17 0.18	6.28 6.28 6.29 6.28 6.28	ORP (mV) 47.0 46.9 46.7 46.5 46.8	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2	Cond. (uS/cm) 126.5 126.4 126.4 126.5 NALYSIS AL	D.O. (mg/L) 0.18 0.18 0.17 0.18	6.28 6.28 6.29 6.28 6.28	ORP (mV) 47.0 46.9 46.7 46.5 46.8	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 (8260) (8010 (8270) (PAF	Cond. (uS/cm) 126.5 126.5 126.4 126.5 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (D) (NWTPH	6.28 6.28 6.29 6.28 6.28 R BOTTLE T	ORP (mV) 47.0 46.9 46.5 46.8 TYPE (Circle appr (BTEX) HCID) (8081) (8	#DIV/0! #IDIV/0! #IDIO Oil & Grease	(ft) n-standard ana	alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 (8260) (8010) (8270) (PAH (pH) (Condu	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL 0) (8020) (N I) (NWTPH-I ctivity) (TDS	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (O) (NWTPH) (TSS) (B	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-HOD) (Turbid	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle app (BTEX) HCID) (8081) (8ity) (Alkalinity)	#DIV/0! slicable or write not (HCO3/CO3) (CI)	(ft) n-standard ana	alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL 0) (8020) (N I) (NWTPH-I ctivity) (TDS C) (Total PO4	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH) (TSS) (Be) (Total Kier	6.28 6.29 6.28 6.28 6.28 R BOTTLE TOWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen)	ORP (mV) 47.0 46.9 46.5 46.8 TYPE (Circle appr (BTEX) HCID) (8081) (8	#DIV/0! slicable or write not (HCO3/CO3) (CI)	(ft) n-standard ana	alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 126.5 126.4 126.5 NALYSIS AL 0) (8020) (N I) (NWTPH-I ctivity) (TDS C) (Total PO4 e) (WAD Cyze	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH O) (TSS) (Be) (Total Kiecanide) (Free	6.28 6.29 6.28 6.28 6.28 R BOTTLE TOWTPH-GX) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide)	ORP (mV) 47.0 46.9 46.5 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8081) (809) (NH3) (NO3/N	#DIV/0! #DIV/0! Dicable or write not (HCO3/CO3) (CI)	n-standard ana e) (SO4) (NO3	(Fe II) alysis below) WA WA Si (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 (8260) (8010 (8270) (PAF (pH) (Condu (COD) (Total Cyanid (Total Metals)	Cond. (uS/cm) 126.5 126.5 126.4 126.5 NALYSIS AL 0) (8020) (N I) (NWTPH-I ctivity) (TDS C) (Total PO4 e) (WAD Cya o) (As) (Sb) (I	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (D) (NWTPH) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 126.5 126.5 126.4 126.5 NALYSIS AL 1) (8020) (N 1) (NWTPH-I ctivity) (TDS C) (Total PO4 e) (WAD Cya) (As) (Sb) (I ctals) (As) (Sb)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (D) (NWTPH) (TSS) (Be) (Total Kiedanide) (Free Ba) (Be) (Ca	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL Al (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 126.5 126.5 126.4 126.5 NALYSIS AL 1) (8020) (N 1) (NWTPH-I ctivity) (TDS C) (Total PO4 e) (WAD Cya) (As) (Sb) (I ctals) (As) (Sb)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL Al (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cya e) (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL Al (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cya e) (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL Al (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cya e) (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL AI (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cya e) (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 2 Duplicate Sam	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL AI (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 126.5 126.5 126.4 126.4 126.5 NALYSIS AL (NWTPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cya e) (As) (Sb) (Ictals) (As) (Sb) (g short list)	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.2 15.2 15.2 15.2 15.2 15.2 TYPICAL AI (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 126.5 126.5 126.4 126.5 NALYSIS AL (WYPH-Ictivity) (TDS (C) (Total PO4 e) (WAD Cya (As) (Sb) (Iletals) (As) (Sb) g short list) ane Ethene Acc	D.O. (mg/L) 0.18 0.18 0.17 0.18 LOWED PE WTPH-G) (CO) (NWTPH 0) (TSS) (Bo) (Total Kiedanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.28 6.29 6.28 6.28 6.28 R BOTTLE TONWTPH-Gx) -Dx) (TPH-FOD) (Turbid dahl Nitrogen) Cyanide) () (Cd) (Co)	ORP (mV) 47.0 46.9 46.7 46.5 46.8 TYPE (Circle approximately (BTEX) HCID) (8081) (8 (a) (A) (NO3/N) (NO3/N) (Cr) (Cu) (Fe) (1)	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana e) (SO4) (NO3	Ilysis below) WA WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR □ OR □ OR □



Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@	1340		
Sample Num	ber:	RGW184S-	180507		Weather:	60S PC			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Condition	n:	Secure (YES)	Damaged (N	O)	Describe:			
DTW Before F	Purging (ft)	8.6	Time:	1300	Flow through cel	l vol.		GW Meter No.(s	HERON1
Begin Purge:	Date/Time:	5/7 /2018 @	1310	End Purge:	Date/Time:	5/ 7 /2018 @	1337	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
						dings within the fo		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
1313	15.6	135.7	0.92	6.27	60	LOW	8.64		
1316	16	134.4	0.79	6.37	50.4		8.64		
1319	15.9	132.9	0.7	6.38	47.8		8.64		
1322	15.9	131.8	0.62	6.33	46.1				
1335	15.9	131.4	0.64	6.32	45.8				
							-		-
SAMPLE COI	LECTION) A T A							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	-
Decon Procedu	ure:	Alconox Was		Tap Rinse	DI Water	Dedicated	_		
					ш				
(By Numerical	l Order)	Other							
(By Numerical Sample Descri		Other urbidity, odor,	sheen, etc.):	SLIGHTLY	GRAY AND TU	RBID NO/NS			
			sheen, etc.):	SLIGHTLY	GRAY AND TU	RBID NO/NS			
			D.O. (mg/L)	SLIGHTLY pH	GRAY AND TU	RBID NO/NS Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	ption (color, t	curbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.3	ORP (mV)	Turbidity			
Sample Descri Replicate 1 2	Temp (°F/°C) 15.9	Cond. (uS/cm) 131.3 131.4 131.4	D.O. (mg/L) 0.66	pH 6.3 6.31	ORP (mV) 45.9 45.4	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 15.9 16	Cond. (uS/cm) 131.3 131.4 131.4 131.4	D.O. (mg/L) 0.66 0.64 0.65	6.3 6.31 6.32 6.31	ORP (mV) 45.9 45.4 45.1 45.3	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16.0	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4	D.O. (mg/L) 0.66 0.64 0.65 0.65	6.3 6.31 6.32 6.31 6.31	ORP (mV) 45.9 45.4 45.1 45.3	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI	D.O. (mg/L) 0.66 0.64 0.65 0.65	pH 6.3 6.31 6.32 6.31 6.31 6.31	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16.0 TYPICAL A (8260) (8010	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 131.4 131.4 NALYSIS AI 0) (8020) (N	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE	6.3 6.31 6.32 6.31 6.31 6.31 CR BOTTLE	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI (NWTPH-	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (6.3 6.31 6.32 6.31 6.31 6.31 CR BOTTLE NWTPH-Gx)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle ap (BTEX)) HCID) (8081)	#DIV/0!	non-standard an	(Fe II) malysis below) WA WA WA	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAH (pH) (Condu	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI 0) (8020) (NI) (NWTPH-ictivity) (TDS)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B	6.3 6.31 6.32 6.31 6.31 6.31 6.R BOTTLE NWTPH-GX	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity)	#DIV/0! pplicable or write 1 (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF- (pH) (Conduction) (TOO	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI 0) (8020) (NI) (NWTPH-ictivity) (TDS)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B	6.3 6.31 6.32 6.31 6.31 6.31 CR BOTTLE NWTPH-Gx I-Dx) (TPH-OD) (Turbio dahl Nitroger	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle ap (BTEX)) HCID) (8081)	#DIV/0! pplicable or write 1 (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF (pH) (Conduction) (TOO) (TOtal Cyanid	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- ictivity) (TDS C) (Total PO- ict) (WAD Cy	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free	pH 6.3 6.31 6.32 6.31 6.31 6.31 CR BOTTLE NWTPH-Gx) (-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle ap (BTEX)) HCID) (8081) (dity) (Alkalinity) (a) (NH3) (NO3/	#DIV/0! pplicable or write 1 (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard anase)	MA WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved M.	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (NI) (NWTPH- lectivity) (TDS C) (Total PO- e) (WAD Cy e) (As) (Sb) (letals) (As) (Sb) (D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpolation of the interpo	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF(pH) (Conduction (COD) (TOG) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO4 le) (WAD Cy o) (As) (Sb) (letals) (As) (Sb) g short list)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpolation of the interpo	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF(pH) (Conduction (COD) (TOG) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (NI) (NWTPH- lectivity) (TDS C) (Total PO- e) (WAD Cy e) (As) (Sb) (letals) (As) (Sb) (D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpolation of the interpo	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF(pH) (Conduction (COD) (TOG) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO4 le) (WAD Cy o) (As) (Sb) (letals) (As) (Sb) g short list)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO4 le) (WAD Cy o) (As) (Sb) (letals) (As) (Sb) g short list)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010) (8270) (PAF(pH) (Conduction (COD) (TOG) (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO4 le) (WAD Cy o) (As) (Sb) (letals) (As) (Sb) g short list)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO4 le) (WAD Cy o) (As) (Sb) (letals) (As) (Sb) g short list)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.9 16 16 16 16.0 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	Cond. (uS/cm) 131.3 131.4 131.4 131.4 131.4 NALYSIS AI O) (8020) (N I) (NWTPH- lectivity) (TDS C) (Total PO4 le) (WAD Cy o) (As) (Sb) (letals) (As) (Sb) g short list)	D.O. (mg/L) 0.66 0.64 0.65 0.65 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.32 6.31 6.31 6.31 6.31 6.31 CR BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 45.9 45.4 45.1 45.3 45.4 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/7 /2018@	900		
Sample Num	ber:	RGW211S-	180507		Weather:	60s PC			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Condition	n:	Secure (YES)	Damaged (N	O)	Describe:			
DTW Before F	Purging (ft)	8.75	Time:	829	Flow through cel	ll vol.		GW Meter No.(s	HERON1
Begin Purge:	Date/Time:	5/ 7 /2018 @	830	End Purge:	Date/Time:	5/ 7 /2018 @	848	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
						dings within the fo		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
833	13.8	171.1	1.76	6.45	20.1	HIGH	8.8		
836	13.6	259.7	0.96	6.17	21.7		8.85		
839	13.8	291.3	0.71	6.29	0.6	MED	8.85		
842	13.9	282.1	0.66	6.33	-3.6		8.85		
845	13.9	260.1	0.63	6.37	-13.1				
						-	-		-
SAMPLE COI	LECTION) A T A							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	-
Decon Procedu	ure:	Alconox Was		Tap Rinse	DI Water	Dedicated	_		
(By Numerical									
	(Oraer)	Other							
		Other Curbidity, odor,	sheen, etc.):	ORANGE V	ERY TURBID N	O/NS			
			sheen, etc.):	ORANGE V	ERY TURBID N	O/NS			
			D.O. (mg/L)	ORANGE V	ERY TURBID N ORP (mV)	O/NS Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	ption (color, t	curbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.37	ORP (mV)	Turbidity			
Sample Descri Replicate 1 2	Temp (°F/°C) 13.9	Cond. (uS/cm) 255.3 253.3	D.O. (mg/L) 0.71 0.69	pH 6.37 6.37	ORP (mV) -15	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 13.9 13.8 13.8	Cond. (uS/cm) 255.3 253.3 250.3 248.3	D.O. (mg/L) 0.71 0.69 0.62	pH 6.37 6.37 6.36 6.37	ORP (mV) -15 -16 -16.9 -17.7	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8	D.O. (mg/L) 0.71 0.69 0.62 0.62	pH 6.37 6.37 6.36 6.37 6.37	ORP (mV) -15 -16 -16.9 -17.7 -16.4	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 TYPICAL A	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8	D.O. (mg/L) 0.71 0.69 0.62 0.62 0.66	pH 6.37 6.36 6.37 6.37 6.37	ORP (mV) -15 -16 -16.9 -17.7 -16.4 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 13.8 13.8 (8260) (8016)	Cond. (uS/cm) 255.3 250.3 248.3 251.8 NALYSIS AI 0) (8020) (N	D.O. (mg/L) 0.71 0.69 0.62 0.62 0.66 LOWED PE	6.37 6.36 6.37 6.37 6.37 6.37 RR BOTTLE	ORP (mV) -15 -16 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 TYPICAL A (8260) (8010) (8270) (PAF	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI ()) (8020) (N	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE	6.37 6.36 6.37 6.37 6.37 6.37 KR BOTTLE NWTPH-Gx) (-Dx) (TPH-	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081)	#DIV/0! pplicable or write in the second control of the second co	non-standard ar	(Fe II) malysis below) WA WA WA	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010) (8270) (PAH)	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI 0) (8020) (NI) (NWTPH- uctivity) (TDS	D.O. (mg/L) 0.71 0.69 0.62 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B	6.37 6.36 6.37 6.37 6.37 6.37 6.37 CR BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbic	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081)	#DIV/0! pplicable or write in (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard ar	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 14.8 15.8 15.8 15.8 15.8 15.8 15.8 16.8 17 PICAL A (8260) (8010) (8270) (PAH) (PH) (Conduction) (COD) (TOO)	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI 0) (8020) (NI) (NWTPH- uctivity) (TDS	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B 4) (Total Kie	6.37 6.36 6.37 6.37 6.37 6.37 6.37 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbio dahl Nitrogen	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) lity) (Alkalinity)	#DIV/0! pplicable or write in (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard ar	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI (D) (8020) (N H) (NWTPH- (activity) (TDS) (C) (Total PO- (de) (WAD Cy	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (8081) (19) (19) (19) (19) (19) (19) (19) (1	#DIV/0! pplicable or write in (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard arase)	MA WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved M.	Cond. (uS/cm) 255.3 253.3 250.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- () (Total PO- () (WAD Cy () (As) (Sb) ((etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE (WTPH-G) (D) (NWTPH-G) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010) (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved M VOC (Boein	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- ictivity) (TDS C) (Total PO4 le) (WAD Cy) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010) (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved M VOC (Boein	Cond. (uS/cm) 255.3 253.3 250.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- () (Total PO- () (WAD Cy () (As) (Sb) ((etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010) (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved M VOC (Boein	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- ictivity) (TDS C) (Total PO4 le) (WAD Cy) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- ictivity) (TDS C) (Total PO4 le) (WAD Cy) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010) (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved M VOC (Boein	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- ictivity) (TDS C) (Total PO4 le) (WAD Cy) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- ictivity) (TDS C) (Total PO4 le) (WAD Cy) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 13.9 13.8 13.8 13.8 13.8 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	Cond. (uS/cm) 255.3 253.3 250.3 248.3 251.8 NALYSIS AI () (8020) (N H) (NWTPH- ictivity) (TDS C) (Total PO4 le) (WAD Cy) (As) (Sb) (etals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.69 0.62 0.66 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	6.37 6.36 6.37 6.37 6.37 6.37 6.37 6.37	ORP (mV) -15 -16.9 -17.7 -16.4 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/7 /2018@	945		
Sample Num	ber:	RGW212S-	180507		Weather:	60s PC			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	URGE DATA							
Well Condition	n:	Secure (YES)	Damaged (N	(O)	Describe:			
DTW Before F	Purging (ft)	9.83	Time:	912	Flow through cel	ll vol.		GW Meter No.(s	HERON1
Begin Purge:	Date/Time:	5/ 7 /2018 @	915	End Purge:	Date/Time:	5/ 7 /2018 @	938	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (° F /° C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge Goa +/- 3%	ls: Stablization +/- 3%		ters for three +/- 0.1 units		dings within the fo +/- 10%	ollowing limits < 0.3 ft	>/= 1 flow through cell	
010								tiii ougii cen	
918	13.5	222	1.09	5.61		MED	9.95		
921	13.7	230.4	0.99	5.59	68.8		9.95		
924	13.9	234.6	1.1	5.59	69.5		9.95		
927	14	237.2	1.19	5.6	69.9				
930	14.1	238.6	1.41	5.6	71.6				
933	14.2	238.9	1.5	5.59	72.3				
936	14.3	239.5	1.59	5.59	72.9				
750	14.5	237.3	1.57	3.37	72.7				
SAMPLE COI	LECTION F)ATA							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedu	ıre:	Alconox Was	sh 🗖	Tap Rinse	DI Water	Dedicated	_	_	
(By Numerical	Order)	Other							
Sample Descri	ption (color, t	urbidity, odor,	sheen, etc.):	ORANGE T	URBID NO/NS				
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	14.4	239.7	1.63	5.59	73.1				
2	14.3	220.0	1 (1	5.50					
3		239.8	1.64	5.59	73.2				
	14.4	239.8	1.64	5.59	73.2				
4	14.4 14.4								
4 Average:		239.9	1.71	5.59	73.3	#DIV/0!			
Average:	14.4 14.4	239.9 240.1 239.9	1.71 1.71 1.67	5.59 5.59 5.59	73.3 73.4 73.3		non-standard a	nalysis helow)	
Average:	14.4 14.4	239.9 240.1 239.9 NALYSIS AI	1.71 1.71 1.67 LOWED PE	5.59 5.59 5.59 ER BOTTLE	73.3 73.4 73.3 TYPE (Circle ap	#DIV/0!	non-standard ar	nalysis below) WA	OR 🗆
Average: QUANTITY	14.4 14.4 TYPICAL A (8260) (8010	239.9 240.1 239.9 NALYSIS AI 0) (8020) (N	1.71 1.71 1.67 LOWED PE	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX)				OR 🗆
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF	239.9 240.1 239.9 NALYSIS AI 0) (8020) (N	1.71 1.71 1.67 LOWED PE WTPH-G) (5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081)	oplicable or write i	ase)	WA □ WA □	
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (1) (TDS) (2) (Total PO-	1.71 1.67 LLOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie	5.59 5.59 5.59 CR BOTTLE NWTPH-Gx) I-Dx) (TPH-GOD) (Turbio dahl Nitrogen	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081)	(8141) (Oil & Gre (HCO3/CO3) (O	ase)	WA □ WA □	
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (1) (Total PO- (1) (WAD Cy	1.71 1.67 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitrogen Cyanide)	73.3 73.4 73.3 TYPE (Circle application of the circle application of	(8141) (Oil & Gre (HCO3/CO3) (O	ase) Cl) (SO4) (NO	WA □ WA □ 3) (NO2) (F)	OR
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	239.9 240.1 239.9 NALYSIS AI 0) (8020) (N H) (NWTPH- activity) (TDS C) (Total PO- le) (WAD Cy 0) (As) (Sb) (1.71 1.67 LOWED PE [WTPH-G] (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2	14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TO0 (Total Cyanid (Total Metals (Dissolved M	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((etals) (As) (Sb)	1.71 1.67 LOWED PE [WTPH-G] (D) (NWTPH S) (TSS) (B 4) (Total Kie ranide) (Free Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((1) (etals) (As) (Sb) ((2) (short list)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((etals) (As) (Sb)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((1) (etals) (As) (Sb) ((2) (short list)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((1) (etals) (As) (Sb) ((2) (short list)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TO0 (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((1) (etals) (As) (Sb) ((2) (short list)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2 Duplicate Sam	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TO0 (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((1) (etals) (As) (Sb) ((2) (short list)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)
Average: QUANTITY 2	14.4 14.4 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TO0 (Total Cyanid (Total Metals (Dissolved M. VOC (Boein Methane Eth	239.9 240.1 239.9 NALYSIS AI (1) (8020) (N (1) (NWTPH- (1) (Total PO- (1) (WAD Cy (1) (As) (Sb) ((1) (etals) (As) (Sb) ((2) (short list)	1.71 1.67 LLOWED PE IWTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca b) (Ba) (Be) (Ca	5.59 5.59 5.59 ER BOTTLE NWTPH-Gx) I-Dx) (TPH-GD) (Turbic dahl Nitroger Cyanide) u) (Cd) (Co)	73.3 73.4 73.3 TYPE (Circle ap) (BTEX) HCID) (8081) (dity) (Alkalinity) n) (NH3) (NO3/	(8141) (Oil & Gre (HCO3/CO3) (O/NO2)	ase) Cl) (SO4) (NO Ni) (Ag) (Se) (WA □ WA □ 3) (NO2) (F) □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	OR □ g) (K) (Na)



Project Nam	e:	Boeing Rer	nton		Project Number	er:	0025217.099.0	99	
Event:		Quarterly M	1ay 2018		Date/Time:	5/ 7 /2018@	1410		
Sample Num	nber:	RGW221S-	- 180507		Weather:	60S PC			
Landau Repr	resentative:	SRB							
WATER LEV	EL/WELL/PI	URGE DATA							
Well Condition		Secure (YES		Damaged (N	(O)	Describe:			
DTW Before	Purging (ft)	9.38	Time:	1330	Flow through ce	ll vol.		GW Meter No.(s	HERON1
Begin Purge:		5/7 /2018	1340	End Purge:	=	5/ 7 /2018 @	1340	Gallons Purged:	0.25
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	-	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa +/- 3%	ıls: Stablizatio +/- 3%		ters for three +/- 0.1 units		dings within the fo	ollowing limits < 0.3 ft	>/= 1 flow through cell	
1343	16.6	209	1.18	6.08		LOW	9.38	tiii ougii ceii	
						LOW			
1346		210.8	1.18	6.1			9.38		
1349	17.6	213.2	1.11	6.12	49.2		9.38		
						-			
	·								
SAMPLE CO	LLECTION I	DATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type	e DED BLADDER			
Made of:		Stainless Ste	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Wa	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
Sample Descr	iption (color, t	turbidity, odor	, sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
rtophouto	(°F/°C)	(uS/cm)	(mg/L)	P	(mV)	(NTU)	(ft)	(Fe II)	Observations
1	17.7	213.9	1.06	6.12	47.7				
2	17.6	214.6	1.06	6.12	47				
3	17.8	215	1.07	6.12	46.2				
4	17.8		1.08	6.12	45.4				
		215.3				"DB 1/01			
Average:	17.7	214.7	1.07	6.12	46.6	#DIV/0!			
QUANTITY						pplicable or write	non-standard ar		
		0) (8020) (N				(01.11) (011.0.0		WA L	OR 🗆
2						(8141) (Oil & Gre		WA □	OR 🗆
					n) (NH3) (NO3) (HCO3/CO3) (0 /NO2)	_1) (SO4) (NO	3) (NO2) (F)	
		le) (WAD Cy			1) (1113) (1103)	11(02)			
					(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (I	Ni) (Ag) (Se) (Γl) (V) (Zn) (Hg	g) (K) (Na)
									Va) (Hardness) (Silica
	VOC (Boein								
	Methane Eth	nane Ethene A	cetylene						
	othors								
	others								
Duplicate San	nple No(s):								
Comments:									
Signature:	SRB					Date:	5/7/2018		



Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/7 /2018@	1020		
Sample Num	ber:	RGW224S-	180507		Weather:	60s PC			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Conditio	n:	Secure (YES)	Damaged (N	(O)	Describe:			
DTW Before I	Purging (ft)	10.1	Time:	930	Flow through cel	l vol.		GW Meter No.(s	s HERON1
Begin Purge:	Date/Time:	5/ 7 /2018 @	950	End Purge:	Date/Time:	5/ 7 /2018 @	1005	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	_					dings within the fo		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
953	15.5	199.4	2.8	6.07	58.3	MED	10.1		
956	15.2	192.1	2.24	6.09	51.1		10.1		
959	15.3	191	2.14	6.1	47.6		10.1		
1002	15.4	190.3	1.99	6.11	43.3				
							1		
							-		
SAMPLE CO	LIECTION) A T A							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was		Tap Rinse	DI Water	Dedicated	_		
(By Numerical		Other		- ··F	<u> </u>	таптап			
			sheen, etc.):	SLIGHTLY	ORANGE AND	ΓURBID NO/NS			
		• • •							
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	15.5	189.5	2	6.11	42.4				
2	15.5	189.1	1.92	6.11	41.8				
3	15.5	188.8	1.9	6.11	41.3				
4	15.5	188	1.9	6.12	40.7				
Average:	15.5	188.9	1.93	6.11	41.6	#DIV/0!			
QUANTITY						plicable or write 1	ıon-standard aı		OR 🗆
2	(8260) (8010 (8270) (PAH		WTPH-G) ((8141) (Oil & Gre	ase)	WA □	OR 🗆
						(HCO3/CO3) (C	•		OK =
) () (-				(201)	-) (-:)	
		C) (Total PO	(Total Kie	dahl Nitroger	1) (NH3) (NU3/	NO2)			
	(COD) (TOO				i) (NH3) (NO3/	NO2)			
	(COD) (TOO (Total Cyanid	C) (Total PO- e) (WAD Cy	anide) (Free	Cyanide)		(Pb) (Mg) (Mn) (N	Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg	g) (K) (Na)
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M	C) (Total PO- le) (WAD Cy) (As) (Sb) (etals) (As) (Sb	anide) (Free Ba) (Be) (Ca	Cyanide) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			g) (K) (Na) Na) (Hardness) (Silica
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	C) (Total PO4 e) (WAD Cy) (As) (Sb) (etals) (As) (Sb g short list)	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	C) (Total PO- le) (WAD Cy) (As) (Sb) (etals) (As) (Sb	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	C) (Total PO4 e) (WAD Cy) (As) (Sb) (etals) (As) (Sb g short list)	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	C) (Total PO4 e) (WAD Cy) (As) (Sb) (etals) (As) (Sb g short list)	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein	C) (Total PO4 e) (WAD Cy) (As) (Sb) (etals) (As) (Sb g short list)	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			
Duplicate Sam	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	C) (Total PO4 e) (WAD Cy) (As) (Sb) (etals) (As) (Sb g short list)	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide)) (Cd) (Co) Ca) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			
	(COD) (TOO (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	C) (Total PO- e) (WAD Cy) (As) (Sb) (etals) (As) (Sb g short list) ane Ethene Ac	anide) (Free Ba) (Be) (Ca) (Ba) (Be) (C	Cyanide)) (Cd) (Co) Ca) (Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (1			



Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 7 /2018@	1130		
Sample Num	ber:	RGW255S-	180507		Weather:	60S PC			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Condition	n:	Secure (YES)	Damaged (N	O)	Describe:			
DTW Before F	Purging (ft)	9.43	Time:	1055	Flow through cel	ll vol.		GW Meter No.(s	HERON1
Begin Purge:	Date/Time:	5/7 /2018 @	1100	End Purge:	Date/Time:	5/ 7 /2018 @	1114	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
						dings within the fo		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
1103	16.5	187.6	0.65	6.01		LOW	9.43		
1106	16.7	187.9	0.61	6.07	39.1		9.43		
1109	16.9	188.7	0.63	6.14	30.9		9.43		
1112	17	188.7	0.63	6.15	28				
1115									
SAMPLE COI	LECTIONE) A T A							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	-
Decon Procedu	ure:	Alconox Was	_	Tap Rinse	DI Water	Dedicated	_		
					ш				
(By Numerical	l Order)	Other							
(By Numerical Sample Descri		Other urbidity, odor,	sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
			sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
			D.O. (mg/L)	CLEAR CO	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	ption (color, t	Cond.	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm) 188.7	D.O. (mg/L)	pH 6.16	ORP (mV)	Turbidity			
Sample Descri Replicate 1 2	Temp (°F/°C) 17.1 17.1	Cond. (uS/cm) 188.7 188.8 188.7	D.O. (mg/L) 0.67 0.74	pH 6.16 6.16	ORP (mV) 26.6	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 17 17.1 17.1	Cond. (uS/cm) 188.7 188.8 188.7	D.O. (mg/L) 0.67 0.74 0.67	pH 6.16 6.16 6.16 6.16	ORP (mV) 26.6 26 25.6 25.4	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1	Cond. (uS/cm) 188.7 188.8 188.7 188.7	D.O. (mg/L) 0.67 0.74 0.67 0.72	pH 6.16 6.16 6.16 6.16 6.16	ORP (mV) 26.6 26 25.6 25.4 25.9	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1	Cond. (uS/cm) 188.7 188.8 188.7 188.7	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70	pH 6.16 6.16 6.16 6.16 6.16 6.18 CR BOTTLE	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 188.7 0) (8020) (N	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE	pH 6.16 6.16 6.16 6.16 6.16 ER BOTTLE NWTPH-Gx)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aport)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 TYPICAL A (8260) (8010) (8270) (PAF	Cond. (uS/cm) 188.7 188.8 188.7 188.7 NALYSIS AI ()) (8020) (NI H) (NWTPH-	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE	pH 6.16 6.16 6.16 6.16 6.16 KR BOTTLE NWTPH-Gx	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX)) HCID) (8081)	#DIV/0! pplicable or write in the second control of the second co	non-standard an	(Fe II) malysis below) WA WA WA	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010) (8270) (PAH)	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI O) (8020) (NI) (NWTPH- uctivity) (TDS)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B	6.16 6.16 6.16 6.16 6.16 6.17 CR BOTTLE NWTPH-GX 1-DX) (TPH-OD) (Turbic	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle ap (BTEX)) HCID) (8081) (dity) (Alkalinity)	#DIV/0! pplicable or write in (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI O) (8020) (NI) (NWTPH- uctivity) (TDS)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PER (WTPH-G) (D) (NWTPH-G) (B) (TSS) (B) (TSS) (B) (TOTAL Kie	6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-Gx [-Dx) (TPH-OD) (Turbio dahl Nitroger	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX)) HCID) (8081)	#DIV/0! pplicable or write in (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid	Cond. (uS/cm) 188.7 188.7 188.7 188.7 188.7 188.7 NALYSIS AI O) (8020) (N I) (NWTPH- ictivity) (TDS C) (Total PO- ict) (WAD Cy	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-Gx (-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide)	ORP (mV) 26.6 26.6 25.6 25.4 25.9 TYPE (Circle ap (BTEX)) HCID) (8081) (dity) (Alkalinity) (Alkalinity) (NO3/1)	#DIV/0! pplicable or write in (8141) (Oil & Green (HCO3/CO3) (Control of the control of the con	non-standard anase)	MA WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- ictivity) (TDS (C) (Total PO- e) (WAD Cy d) (As) (Sb) (etals) (As) (Sb) (D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals) (OC) (Boein	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (e) (As) (Sb) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals) (OC) (Boein	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (fotals) (As) (Sb) (etals) (As) (Sb) (D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals) (OC) (Boein	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (e) (As) (Sb) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 17 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (e) (As) (Sb) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals) (OC) (Boein	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (e) (As) (Sb) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (e) (As) (Sb) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 17 17.1 17.1 17.1 17.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 188.7 188.8 188.7 188.7 188.7 NALYSIS AI (NWTPH- (ctivity) (TDS) (C) (Total PO- (e) (WAD Cy (e) (As) (Sb) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.67 0.74 0.67 0.72 0.70 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca	pH 6.16 6.16 6.16 6.16 6.16 CR BOTTLE NWTPH-GX) I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 26.6 26 25.6 25.4 25.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/7 /2018@	1045		
Sample Num	ber:	RGW256S-	180507		Weather:	60s PC			
Landau Repr	esentative:	SRB							
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Condition	n:	Secure (YES)	Damaged (N	(O)	Describe:			
DTW Before F	Purging (ft)	8.14	Time:	1009	Flow through cel	l vol.		GW Meter No.(s	HERON1
Begin Purge:	Date/Time:	5/ 7 /2018 @	1015	End Purge:	Date/Time:	5/ 7 /2018 @	1039	Gallons Purged:	0.25
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
						dings within the fo		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
1018	16.1	150.7	3.17	6.29	40	LOW	8.16		
1021	15.8	154.4	2.22	6.23	41.1		8.16		
1024	15.6	154	1.34	6.24	38.2		8.16		
1027	15.6	153.3	1.29	6.25	35				
1030	15.6	150.8	1.07	6.28	32.6				
1033	15.7	150.5	1.03	6.29	32				
1036	15.8	148	0.97	6.29	29.8				
1030	13.0	140	0.97	0.29	29.8				
SAMPLE COI	LECTIONE	\ A T A							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	-
Decon Procedu	ure:	Alconox Was		Tap Rinse	DI Water	Dedicated	_		
(By Numerical		Other		- np		ш - т			
		_							
Dumpic Desert	puon (color, t	urbidity, odor,	sheen, etc.):						
Sample Descri	ption (color, t	urbidity, odor,	sheen, etc.):	CLEAR CO	LORLESS NONS				
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR CO	LORLESS NONS ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp	Cond.	D.O.		ORP	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.3	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 15.8 15.8	Cond. (uS/cm) 148.3 148.4 147.7	D.O. (mg/L) 0.98 0.94	pH 6.3 6.29 6.3	ORP (mV) 29.2 29.2 28.8	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 15.8 15.8 15.9	Cond. (uS/cm) 148.3 148.4 147.7 147.8	D.O. (mg/L) 0.98 0.94 0.96	6.3 6.29 6.3 6.3	ORP (mV) 29.2 29.2 28.8 28.5	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.8 15.9 15.9	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1	D.O. (mg/L) 0.98 0.94 0.96 0.94	6.3 6.29 6.3 6.3	ORP (mV) 29.2 29.2 28.8 28.5 28.9	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1	D.O. (mg/L) 0.98 0.94 0.96 0.94 0.96	6.3 6.29 6.3 6.3 6.30 6.8 6.8 6.8	ORP (mV) 29.2 29.2 28.8 28.5 28.9	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.98 0.94 0.96 0.94 0.96 LOWED PE	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-Gx)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aport)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010) (8270) (PAE)	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI (N) (8020) (N) (N) (NWTPH-I	D.O. (mg/L) 0.98 0.94 0.96 0.96 LOWED PE WTPH-G) (6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-Gx	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle ap (BTEX)) HCID) (8081)	#DIV/0! pplicable or write in the second se	non-standard an	(Fe II) malysis below) WA WA WA	Observations
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAE) (pH) (Condu	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AL 0) (8020) (N I) (NWTPH-I	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-Gx) 1-Dx) (TPH-OD) (Turbic	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle ap (BTEX)) HCID) (8081) (dity) (Alkalinity)	#DIV/0! #DIV/0! pplicable or write in the second	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AL 0) (8020) (N I) (NWTPH-I	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 LOWED PE WTPH-G) (D) (NWTPH-G) (B) (TSS) (B	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-Gx) (-Dx) (TPH-OD) (Turbio dahl Nitroger	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle ap (BTEX)) HCID) (8081)	#DIV/0! #DIV/0! pplicable or write in the second	non-standard an	(Fe II) malysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Conduction (COD) (TOO) (Total Cyanid	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI (D) (8020) (N (I) (NWTPH-lectivity) (TDS) (C) (Total PO4) (e) (WAD Cy.	D.O. (mg/L) 0.98 0.94 0.96 0.96 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (Be) (Total Kie anide) (Free	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-Gx) (I-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle ap (BTEX)) HCID) (8081) (dity) (Alkalinity) (ii) (NH3) (NO3/	#DIV/0! #DIV/0! pplicable or write in the second	non-standard arase)	MA WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N I) (NWTPH-Inctivity) (TDS (C) (Total PO4 (e) (WAD Cy. (f) (As) (Sb) (Inctals) (As) (Sb) (Sb)	D.O. (mg/L) 0.98 0.94 0.96 0.96 LOWED PE WTPH-G) (NWTPH-G) (NWTPH-G) (TSS) (Be) (Total Kielanide) (Free Ba) (Be) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.9 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N H) (NWTPH-I () (Total PO4) (e) (WAD Cy.) () (As) (Sb) (I () etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.9 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N I) (NWTPH-Inctivity) (TDS (C) (Total PO4 (e) (WAD Cy. (f) (As) (Sb) (Inctals) (As) (Sb) (Sb)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.9 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N H) (NWTPH-I () (Total PO4) (e) (WAD Cy.) () (As) (Sb) (I () etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N H) (NWTPH-I () (Total PO4) (e) (WAD Cy.) () (As) (Sb) (I () etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved Methane Eth	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N H) (NWTPH-I () (Total PO4) (e) (WAD Cy.) () (As) (Sb) (I () etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 2 Duplicate Sam	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved Methane Eth	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N H) (NWTPH-I () (Total PO4) (e) (WAD Cy.) () (As) (Sb) (I () etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 15.8 15.8 15.9 15.9 15.9 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals (Dissolved Methane Eth	Cond. (uS/cm) 148.3 148.4 147.7 147.8 148.1 NALYSIS AI () (8020) (N H) (NWTPH-I () (Total PO4) (e) (WAD Cy.) () (As) (Sb) (I () etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.98 0.94 0.96 0.96 0.96 D.O. (MWTPH-G) (D) (NWTPH-G) (TSS) (Ba) (TSS) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.3 6.29 6.3 6.30 6.30 6.R BOTTLE NWTPH-GX 1-Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide) () (Cd) (Co)	ORP (mV) 29.2 29.2 28.8 28.5 28.9 TYPE (Circle aportion (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/4) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cu) (Fe) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr) (Cr	#DIV/0! #DIV/0! pplicable or write in the interpretation of the	non-standard and ase) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR



Sample Number: Landau Representative: RGW257S- 180507 Weather: 60S PC WATER LEVEL/WELL/PURGE DATA Weather: SRB Damaged (NO) Describe: DTW Before Purging (ft) 8.67 Time: 1120 Flow through cell vol. GW Meter No.(s HERON1 Begin Purge: Date/Time: 5/7 /2018 € 1130 End Purge: Date/Time: 5/7 /2018 @ 1153 Gallons Purged: 0.25 Purge water disposed to: Temp (*FPC) (us/cm) (mg/L) D.O. (mg/L) pH ORP (mV) Turbidity (mV) DTW (ft) Internal Purge Volume (gal) > 1 = 1 flow through cell Comments/Observations Observations >= 1 flow through cell Comments/Observations Observations Describe: 1 flow through cell Comments/Observations Observations Describe: 1 flow through cell Comments/Observations Observations Describe: 2 flow through cell Comments/Observations Observations Describe: 2 flow through cell Comments/Ob	Project Name	e:	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Andian Representative: SRR	Event:		Quarterly M	ay 2018		Date/Time:	5/ 7 /2018@	1200		
Walf Configure Source (YES)	Sample Num	ber:	RGW257S-	180507		Weather:	60S PC			
West Condition: Secure (VFS) Danaged (NO) Describe:	Landau Repr	esentative:	SRB							
DTW Before Purging (ft)	WATER LEV	EL/WELL/PU	JRGE DATA							
Begin Page: Date/Time: \$\frac{57}{200} \text{Sequence toleration: \$\frac{1}{2}\text{ 55-gal Drum}	Well Condition	n:	Secure (YES))	Damaged (N	O)	Describe:			
Purple water disposed to:	DTW Before I	Purging (ft)	8.67	Time:	1120	Flow through cel	ll vol.		GW Meter No.(s	HERON1
Temp	Begin Purge:	Date/Time:	5/7 /2018 @	1130	End Purge:	Date/Time:	5/ 7 /2018 @	1153	Gallons Purged:	0.25
Time	Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
1133	Time	(° F /° C)	(uS/cm)	(mg/L)		(mV)	(NTU)	(ft)	Volume (gal)	
1133										
1136	1122								through cen	
1139							LOW			
1142	1136	17	161	3.61		49.6		8.67		
1145	1139	17.3	159.9	3.33	6.12	51.2		8.67		
1148	1142	17.5	159.4	2.97	6.11	52				
SAMPLE COLLECTION DATA	1145	17.6	159.3	2.84	6.12	52.4				
SAMPLE COLLECTION DATA	1148	17.9	158.4	2.67	6.11	53.3				
Sample Collected With: Bailer Pump/Pump Type DED BLADDER	1151			2.6		53.6				
Sample Collected With:					0.11	23.0				-
Sample Collected With:	SAMPLE CO	LLECTION D	OATA				<u> </u>			<u> </u>
Decon Procedure: Alconox Wash Tap Rinse DI Water Dedicated				Bailer		Pump/Pump Type	DED BLADDER			
Condition Comments Condition Condition Condition Condition Comments Comm	Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Replicate Temp (Color, turbidity, odor, sheen, etc.): CLEAR COLORLESS NO/NS	Decon Procedo	ıre:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated			
Replicate Temp	(By Numerical	Order)	Other							
CFPC CUS/cm CFPC CUS/cm Computer CFPC CUS/cm Computer CFPC CUS/cm	Sample Descri	ption (color, t	urbidity, odor,	sheen, etc.):	CLEAR CO	LORLESS NO/N	S			
CFPC CUS/cm CFPC CUS/cm Computer CFPC CUS/cm Computer CFPC CUS/cm				D.O.	**	ODD	m 1111	DOWN	Earnana inon	Commental
2 18.1 157.8 2.48 6.11 53.9 4 18.1 157.8 2.42 6.11 54.1 Average: 18.1 157.9 2.47 6.11 53.9 #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8020) (NWTPH-G) (NWTPH-Gx) (BTEX) WA □ OR □ 2 (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA □ OR □ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Keidahl Nitrogen) (NH3) (NO3/NO2) (Total Metals) (AS) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (AS) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silice VOC (Boeing short list) Methane Ethane Ethene Acetylene Duplicate Sample No(s): Comments:	-	(° F /° C)	(uS/cm)	(mg/L)	•	(mV)				
18.1 157.8 2.48 6.11 53.9	1	18								
4 18.1 157.8 2.42 6.11 54.1 Average: 18.1 157.9 2.47 6.11 53.9 #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8020) (NWTPH-G) (NWTPH-GX) (BTEX) WA ☐ OR ☐ 2 (8270) (PAH) (NWTPH-DX) (TPH-DX) (TPH-HCID) (8081) (8141) (0il & Grease) WA ☐ OR ☐ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2) (Total Cyanide) (WAD Cyanide) (Free Cyanide) (Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (TI) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (TI) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica VOC (Boeing short list) Methane Ethane Ethene Acetylene Duplicate Sample No(s): Comments:	2	18.1	158	2.44	6.11	53.8				
Average: 18.1 157.9 2.47 6.11 53.9 #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8020) (NWTPH-G) (NWTPH-Gx) (BTEX) WA □ OR □ 2 (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA □ OR □ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2) (Total Cyanide) (WAD Cyanide) (Free Cyanide) (Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silical VOC (Boeing short list) Methane Ethene Acetylene Duplicate Sample No(s): Comments:	3	18.1	157.8	2.48	6.11	53.9				
QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8020) (NWTPH-G) (NWTPH-Gx) (BTEX) 2 (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA OR	4	18.1	157.8	2.42	6.11	54.1				
(8260) (8010) (8020) (NWTPH-G) (NWTPH-GX) (BTEX)	Average:	18.1	157.9	2.47	6.11	53.9	#DIV/0!			
(8260) (8010) (8020) (NWTPH-G) (NWTPH-GX) (BTEX)	OUANTITY	TYPICAL A	NALYSIS AI	LOWED PE	R BOTTLE	TYPE (Circle ar	onlicable or write i	non-standard ar	nalysis helow)	
2 (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA OR OR (PH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2) (Total Cyanide) (WAD Cyanide) (Free Cyanide) (Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silical VOC (Boeing short list) (Methane Ethane Ethane Acetylene (Silical Cyanide) (QUILIVIII						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			OR 🗆
(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2) (Total Cyanide) (WAD Cyanide) (Free Cyanide) (Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silical VOC (Boeing short list) Methane Ethane Ethane Ethene Acetylene others Duplicate Sample No(s): Comments:	2						(8141) (Oil & Gre	ase)	WA □	OR □
(Total Cyanide) (WAD Cyanide) (Free Cyanide) (Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica VOC (Boeing short list) Methane Ethane Ethene Acetylene others Duplicate Sample No(s): Comments:		(pH) (Condu	ctivity) (TDS	S) (TSS) (B	OD) (Turbio	dity) (Alkalinity)	(HCO3/CO3) (C	Cl) (SO4) (NO	3) (NO2) (F)	
(Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica VOC (Boeing short list) Methane Ethane Ethene Acetylene others Duplicate Sample No(s): Comments:						i) (NH3) (NO3/	NO2)			
(Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness) (Silica VOC (Boeing short list) Methane Ethane Ethane Acetylene others Duplicate Sample No(s): Comments:						(C) (C) (F)	(DI) (M) (M) (A	T' (A) (C) (T1) (1) (7) (1)) (II) (N)
VOC (Boeing short list) Methane Ethane Ethene Acetylene others Duplicate Sample No(s): Comments:										
Methane Ethane Ethene Acetylene others Duplicate Sample No(s): Comments:) (Da) (De) (C	<i>a)</i> (Cu) (Co)	(CI) (Cu) (I·e) (Fi	5) (Mg) (MII) (M) (Ag) (3e) (11) (V) (Zii) (11g) (K) (1	va) (Hardiless) (Silica
others Duplicate Sample No(s): Comments:				etylene						
Duplicate Sample No(s): Comments:										
Duplicate Sample No(s): Comments:										
Comments:										
Comments:		others								
	Duplicate Sam									
	=									



Project Name	e <u>:</u>	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 7 /2018@	1245		
Sample Num	ber:	RGW258S-	180507		Weather:	60S PC			
Landau Repr	resentative:	SRB			•				
WATER LEV	EL/WELL/PU	JRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	6.91		_	Flow through cel	l vol.		GW Meter No.(s	HERON1
Begin Purge:				End Purge:	_	5/ 7 /2018 @	1234	Gallons Purged:	
Purge water di			55-gal Drum		Storage Tank	Ground		SITE TREATM	
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	-	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						dings within the fo	_	>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1218	17.2	227.4	2.21	6.16	78.5	LOW	6.91		
1221	17.3	246.6	1.83	6.13	77		6.91		
1224	16.6	306.1	0.88	6.23	66		6.91		
1227	16.2	317.9	0.81	6.27	58.3				
1230	16.1	324.6	0.78	6.28	41.3				
1233	16.1	324.5	0.72	6.29	39.1				
SAMPLE CO			D-11		D /D T	DED DI ADDED			
Sample Collect	ted with:	_	Bailer	PVC		DED BLADDER	Other	Dadicated	
Made of:		Stainless Stee	_		Teflon	Polyethylene	ш Other	Dedicated	
Decon Procedo (By Numerica)		Alconox Was	sh 📋	Tap Rinse	DI Water	☐ Dedicated			
, ,	*	Other	shoon ato):	CLEAD CO	ODI ESS NO/NS	2			
, ,	*	_	sheen, etc.):	CLEAR CO	LORLESS NO/NS	S			
, ,	*	_	sheen, etc.):_	CLEAR CO	LORLESS NO/NS	S Turbidity	DTW	Ferrous iron	Comments/
Sample Descri	iption (color, t	urbidity, odor,	_				DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descri	Temp	curbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 16.1	Cond. (uS/cm) 324.2 324.2	D.O. (mg/L) 0.71 0.67	pH 6.3 6.3	ORP (mV) 37.7 36.4	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 16.1 16.1	Cond. (uS/cm) 324.2 324.2 324	D.O. (mg/L) 0.71 0.67	pH 6.3 6.3 6.31	ORP (mV) 37.7 36.4 35.7	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 16.1 16.1 16.1	Cond. (uS/cm) 324.2 324.2 324.2 324.2 324.3	D.O. (mg/L) 0.71 0.67 0.67	6.3 6.3 6.31 6.3	ORP (mV) 37.7 36.4 35.7 34.5	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.1 16.1	Cond. (uS/cm) 324.2 324.2 324	D.O. (mg/L) 0.71 0.67	pH 6.3 6.3 6.31	ORP (mV) 37.7 36.4 35.7	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI	D.O. (mg/L) 0.71 0.67 0.69 0.69	6.3 6.3 6.31 6.3 6.30 R BOTTLE	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.1 16.1 16.1 TYPICAL A (8260) (8010	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (N	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010) (8270) (PAF	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI ()) (8020) (NI () (NWTPH-	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (6.3 6.31 6.30 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (#DIV/0! pplicable or write r	(ft)	(Fe II) nalysis below) WA WA WA	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010) (8270) (PAF) (pH) (Condu	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-Ictivity) (TDS	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbic	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity)	#DIV/0! #DIV/0! pplicable or write r (8141) (Oil & Great (HCO3/CO3) (Co.)	(ft)	(Fe II) nalysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-I) ctivity) (TDS C) (Total PO4	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B	6.3 6.31 6.30 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbic dahl Nitroger	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (#DIV/0! #DIV/0! pplicable or write r (8141) (Oil & Great (HCO3/CO3) (Co.)	(ft)	(Fe II) nalysis below) WA WA WA	Observations OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-Inctivity) (TDS C) (Total PO4-Inctivity) (TDS C) (WAD Cy	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B d) (Total Kie anide) (Free	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx -Dx) (TPH-OD) (Turbic dahl Nitroger Cyanide)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (8081) (10 (10 (10 (10 (10 (10 (10 (10 (10 (10	#DIV/0! #DIV/0! pplicable or write r (8141) (Oil & Great (HCO3/CO3) (CONO2)	non-standard and asse)	(Fe II) malysis below) WA WA WA Solvential (NO2) (F)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals)	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (NI) (NWTPH-lectivity) (TDS C) (Total PO4-lectivity) (AS) (Sb) (Sb) (Sb) (Sb) (Sb) (Sb) (Sc)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kielanide) (Freel	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAF (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals)	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (NI 0) (NWTPH-lectivity) (TDS C) (Total PO-lectivity) (As) (Sb) (detals) (As) (Sb) (Sb)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH G) (TSS) (B H) (Total Kielanide) (Freel	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 324.2 324.2 324.2 324.0 NALYSIS AI 0) (8020) (NI 0) (NWTPH-lectivity) (TDS C) (Total PO-lectivity) (As) (Sb) (detals) (As) (Sb) (Sb)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 324.2 324.2 324.3 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-Ictivity) (TDS C) (Total PO4 (e) (WAD Cy (o) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 2	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 324.2 324.2 324.3 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-Ictivity) (TDS C) (Total PO4 (e) (WAD Cy (o) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 2	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein	Cond. (uS/cm) 324.2 324.2 324.3 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-Ictivity) (TDS C) (Total PO4 (e) (WAD Cy (o) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA 3) (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 324.2 324.2 324.3 324.0 NALYSIS AI 0) (8020) (N I) (NWTPH-Ictivity) (TDS C) (Total PO4 (e) (WAD Cy (o) (As) (Sb) (detals) (As) (Sb) g short list)	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA Solution WA Solution WIND (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 2 Duplicate Sam	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOd (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 324.2 324.2 324.0 324.0 NALYSIS AI 0) (8020) (N B) (NWTPH-lectivity) (TDS C) (Total PO4 (e) (WAD Cy (e) (As) (Sb) (detals) (As) (Sb) (g short list) ane Ethene Ac	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA Solution WA Solution WIND (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 2 Duplicate Sam	Temp (°F/°C) 16.1 16.1 16.1 16.1 TYPICAL A (8260) (8010 (8270) (PAH (pH) (Condu (COD) (TOO (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 324.2 324.2 324.0 324.0 NALYSIS AI 0) (8020) (N B) (NWTPH-lectivity) (TDS C) (Total PO4 (e) (WAD Cy (e) (As) (Sb) (detals) (As) (Sb) (g short list) ane Ethene Ac	D.O. (mg/L) 0.71 0.67 0.69 0.69 LOWED PE WTPH-G) (D) (NWTPH S) (TSS) (B 4) (Total Kie anide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.3 6.31 6.3 6.30 R BOTTLE NWTPH-Gx) -Dx) (TPH-OD) (Turbid dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) 37.7 36.4 35.7 34.5 36.1 TYPE (Circle ap (BTEX) HCID) (8081) (dity) (Alkalinity) (NH3) (NO3/	#DIV/0! #DIV/0! **Policable or write r (8141) (Oil & Greater (HCO3/CO3) (Oil NO2) Pb) (Mg) (Mn) (Nicolater (Mn) (Mn) (Mn) (Mn)	non-standard and asse) El) (SO4) (NO	(Fe II) malysis below) WA WA WA Solution WA Solution WIND (V) (Zn) (Hg	Observations OR OR OR OR OR OR OR OR OR OR



Project Nam	ne:	Boeing Rei	nton		Project Number	er:	0025217.099.0	99	
Event:		Quarterly N			Date/Time:	5/7 /2018@	1030		
Sample Nun	nber:	DUP3-	180507		Weather:	60s PC			
Landau Rep	resentative:	SRB							
WATER LEV	VEL/WELL/PI	URGE DATA							
Well Condition	on:	Secure (YES	S)	Damaged (N	(O)	Describe:			
DTW Before	Purging (ft)		Time:		Flow through ce	ll vol.		GW Meter No.(s	HERON1
Begin Purge:	Date/Time:	5/ 7 /2018	@	End Purge:	Date/Time:	5/ 7 /2018 @		Gallons Purged:	0.25
Purge water d	lisposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa +/- 3%	ıls: Stablizati +/- 3%		ters for three +/- 0.1 units		dings within the fo +/- 10%	ollowing limits < 0.3 ft	>/= 1 flow through cell	
	47- 3 70	17- 3 /0	47- 10 /6	+/- 0.1 units	17-10 III V	47- 10 /6	₹ 0.5 1€	tiii ougii ceii	
							-		
					1				
					_				
	• •	-							
SAMPLE CO	LLECTION I	<u> </u>							
Sample Colle			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Ste		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Wa		Tap Rinse	DI Water	Dedicated	—		
(By Numerica		Other		- np	₩ · · · · · · · · ·				
Sample Descr	ription (color,			SLIGHTLY	ORANGE AND	TURBID NO/NS			
	•		_						
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O.	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
			(mg/L)	611	` ′	(1410)	(11)	(Fe II)	Observations
1	15.5	189.3	1.98	6.11	42.6				
2	15.5	189	1.92	6.11	41.9				
3	15.5	188.2	1.9	6.12	41.3				
4	15.5	188	1.87	6.12	40.3		-		
Average:	15.5	188.6	1.92	6.12	41.5	#DIV/0!	-		
OUANTITY	TYPICAL A	NALYSIS A	LLOWED PE	R BOTTLE	TYPE (Circle at	oplicable or write	non-standard aı	nalysis helow)	
QUILITIE			NWTPH-G) (spireusic of write i	ion sumum u	WA □	OR 🗆
2						(8141) (Oil & Gre	ase)	WA □	OR 🗆
						(HCO3/CO3) (C		(NO2) (F)	
					n) (NH3) (NO3	/NO2)			
			yanide) (Free						
						(Pb) (Mg) (Mn) (I			
			b) (Ba) (Be) (C	Ca) (Cd) (Co)	(Cr) (Cu) (Fe) (P	b) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (N	Na) (Hardness) (Silica
	VOC (Boein	ig short list) nane Ethene A	cetylene						
	Michalle Ell	iane Eulene A	cetylene						
	others								
	•								
Duplicate Sar	nple No(s):	Duplicate to	RGW224S						
Comments:									
Signature:	SRB					Date:	5/7/2018		



Project Nam	e:	Boeing Rent	on		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 105	51		
Sample Num	nber:	RGW185S-	180508		Weather:	60'S, SUNNY			
Landau Repr	resentative:	JHA							
WATER LEV	'EL/WELL/PU	RGE DATA							
Well Condition		Secure (YES)		Damaged (N	O)	Describe:			
DTW Before	Purging (ft)	0.83	Time:	1024	Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 8 /2018 @	0 1028	End Purge:	Date/Time:	5/ 8 /2018 @ 1049)	Gallons Purged:	
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pm	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						lings within the foll		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1031	16.1	734	0.14	6.36	57.8	LOW	0.83	<0.25	
1034	16.2	749	0.19	6.39	41.7				
1037	16.4	759	0.40	6.42	16.4		0.83	0.25	
1040	16.5	761	0.49	6.42	9.7		0.83		
1043	16.7	763	0.54	6.43	6.4				
1046		765	0.67	6.43	-0.9			0.5	
						·		0.5	-
1048	16.7	765	0.76	6.43	-5.2				
	LLECTION D		Bailer		Danier / Danier Trans	DED DI ADDED			
Sample Collect Made of:	cted with:	Stainless Stee		PVC	Teflon	DED BLADDER Relyethylene	Other	Dedicated	
			_		—	Polyethylene	LI Oulei	Dedicated	
Decon Proced (By Numerica	_	Alconox Was		Tap Rinse	DI Water	Dedicated			
(by Numerica	i Oraer)								
Sample Descr	intion (color t		sheen etc.):	CLOUDY C		/NS			
Sample Descr	iption (color, t		sheen, etc.):	CLOUDY, C	COLORLESS, NO.	/NS			
Sample Descr Replicate	Temp	urbidity, odor,	D.O.	CLOUDY, C	OLORLESS, NO.	Turbidity	DTW	Ferrous iron	Comments/
		urbidity, odor,	_		COLORLESS, NO.		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp	urbidity, odor,	D.O.		OLORLESS, NO.	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm) 765	D.O. (mg/L)	pH 6.44	ORP (mV)	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 16.7 16.7	Cond. (uS/cm) 765 765 764	D.O. (mg/L) 0.77 0.78	pH 6.44 6.44 6.44	ORP (mV) -5.7 -6.0	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 16.7 16.7 16.7	Cond. (uS/cm) 765 764 765	D.O. (mg/L) 0.77 0.78 0.79	pH 6.44 6.44 6.44 6.44	ORP (mV) -5.7 -6.0 -6.4	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7	Cond. (uS/cm) 765 764 765 765	D.O. (mg/L) 0.77 0.78 0.79 0.80	6.44 6.44 6.44 6.44	OLORLESS, NO. ORP (mV) -5.7 -6.0 -6.4 -6.8	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7	Cond. (uS/cm) 765 764 765 765 765 NALYSIS AL	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79	pH 6.44 6.44 6.44 6.44 6.44 R BOTTLE	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL AI (8260) (8010	Cond. (uS/cm) 765 765 764 765 765 NALYSIS AL () (8020) (N	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PERMOTER OF THE PERMOTER OF T	6.44 6.44 6.44 6.44 R BOTTLE T	ORP (mV) -5.7 -6.0 -6.4 -6.2 TYPE (Circle app (BTEX)	#DIV/0!	(ft)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL AI (8260) (8010 (8270D) (PA	765 765 765 765 765 NALYSIS AL ()) (8020) (N	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (iii	6.44 6.44 6.44 6.44 R BOTTLE T	OLORLESS, NO. ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately continuous contin	#DIV/0! blicable or write not (8141) (Oil & Great	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010) (8270D) (PA) (pH) (Condu	765 765 765 765 765 NALYSIS AL () (8020) (N H) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PERWIPH-G) (10-D) (NWTP) (TSS) (Bernall Parts)	6.44 6.44 6.44 6.44 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	OLORLESS, NO. ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 IYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.9 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 765 765 765 765 NALYSIS AL 0) (8020) (N CH) (NWTPH ctivity) (TDS C) (Total PO4	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (19 -D) (NWTP) (TSS) (Be)) (Total Kier	6.44 6.44 6.44 6.44 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	OLORLESS, NO. ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately continuous contin	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 765 765 765 765 NALYSIS AL (0) (8020) (N (N) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cyz	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (1-D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free conide)	6.44 6.44 6.44 6.44 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/1)	#DIV/0! #DIV/0! blicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL ()) (8020) (N (H) (NWTPH (ctivity) (TDS (C) (Total PO4 e) (WAD Cya () (As) (Sb) (B	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (16-D) (NWTP (16-D) (NWTP (16-D)) (TSS) (Bello (16-D)) (Total Kiecanide) (Free (16-D)) (Recognide) (Free (16-D)) (F	pH 6.44 6.44 6.44 6.44 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (I () (tetals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	pH 6.44 6.44 6.44 6.44 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL (b) (8020) (N (c) (N) (N) (TDS (c) (Total PO4 (e) (WAD Cya (c) (As) (Sb) (I (etals) (As) (Sb)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	pH 6.44 6.44 6.44 6.44 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (I () (tetals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	pH 6.44 6.44 6.44 6.44 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (I () (tetals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	pH 6.44 6.44 6.44 6.44 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (I () (tetals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	pH 6.44 6.44 6.44 6.44 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS () (Total PO4 (e) (WAD Cya () (As) (Sb) (I () (tetals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Coetylene	pH 6.44 6.44 6.44 6.44 R BOTTLE To NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (Ca) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (b) (8020) (N (c) (NOTPHICTIVITY) (TDS (c) (Total PO4 (e) (WAD Cya (c) (As) (Sb) (I (etals) (As) (Sb) (g short list) ane Ethene Ac	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Coetylene	pH 6.44 6.44 6.44 6.44 R BOTTLE To NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (Ca) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (uS/cm) 765 (uS/cm) (uS/c	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Coetylene	pH 6.44 6.44 6.44 6.44 R BOTTLE To NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (Ca) (Cd) (Co)	ORP (mV) -5.7 -6.0 -6.4 -6.8 -6.2 TYPE (Circle approximately (BTEX)) F-HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (NH3) (NO3/I	#DIV/0! #DIV/0! #IDIV/0! Dicable or write not (8141) (Oil & Greating (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □



Project Name	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 8 /2018@ 100	00		
Sample Num	iber:	RGWDUP4	180508		Weather:	60'S, SUNNY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before l	Purging (ft)		Time:		Flow through ce	ll vol.		GW Meter No.(s	HERON 3
Begin Purge:		5/ 8 /2018 @		End Purge:	Date/Time:	5/ 8 /2018 @		Gallons Purged:	
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pII	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	~					dings within the fol	~	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
		DIII		т тт		V11050			
		<u> </u>		$\frac{1}{1}$	O RGV	W 1000			
0 + 1 (D) = 00°	L F COTTON D								
Sample Collect			Bailer		Dump/Dump Type	DED DI ADDED			
Made of:	ieu wiiii.	Stainless Stee		PVC	Teflon	DED BLADDER Polyethylene	Other	Dedicated	
			_		—		LI Other	Dedicated	
Decon Proced	ure:	Alconox Was	sn 🔲	Tap Rinse	DI Water	Dedicated			
(Ry Numarica	1 Ordar)	Other							
(By Numerica		Other	cheen etc.):	CLOUDY C	OI ODI ESS NO	MNS			
			sheen, etc.):	CLOUDY, C	COLORLESS, NO)/NS			
	iption (color, t	curbidity, odor,	D.O.	CLOUDY, C	ORP	Turbidity	DTW	Ferrous iron	Comments/
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descr	iption (color, t	curbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm) 765	D.O. (mg/L)	pH 6.44	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 16.7	Cond. (uS/cm) 765	D.O. (mg/L) 0.77	pH 6.44 6.44	ORP (mV) -5.7 -6.1	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 16.7	Cond. (uS/cm) 765 765 764	D.O. (mg/L) 0.77 0.78	pH 6.44 6.44 6.44	ORP (mV) -5.7 -6.1	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7	Cond. (uS/cm) 765 765 764 765 765	D.O. (mg/L) 0.77 0.78 0.79 0.80	6.44 6.44 6.44 6.44	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7	Cond. (uS/cm) 765 765 764 765 765 765 765	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79	pH 6.44 6.44 6.44 6.44 R BOTTLE 7	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL A	Cond. (uS/cm) 765 764 765 765 765 NALYSIS AL (0) (8020) (N	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PER	pH 6.44 6.44 6.44 6.44 R BOTTLE T	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0! plicable or write no	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (MAH) (NWTPH	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (J	6.44 6.44 6.44 6.44 R BOTTLE T	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081)	#DIV/0! plicable or write no	on-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (b) (8020) (NAH) (NWTPH activity) (TDS	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PER (MTPH-G) (MTTPH-G) (MTTPH-G	6.44 6.44 6.44 6.44 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081)	#DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (b) (8020) (NAH) (NWTPH activity) (TDS	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PER (WTPH-G) (III-D) (NWTPH-G) (III-D) (NWTPH-G) (III-D) (TSS) (BG) (Total Kieck)	6.44 6.44 6.44 6.44 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 FYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)	#DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals)	Cond. (uS/cm) 765 765 764 765 765 NALYSIS AL (0) (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cyc) () (As) (Sb) (1)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEL (WTPH-G) (II-D) (NWTPH-G) (II-D) (NWTPH-G) (II-D) (TSS) (BGH) (Total Kiercanide) (Free Ganide) (Free Ganide) (Free Ganide) (Canide) (Canide	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL (MYPH (ctivity) (TDS) (Total PO4 (e) (WAD Cyc) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEL (WTPH-G) (II-D) (NWTPH-G) (II-D) (NWTPH-G) (II-D) (TSS) (BGH) (Total Kiercanide) (Free Ganide) (Free Ganide) (Free Ganide) (Canide) (Canide	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL (MYPH (ctivity) (TDS) (Total PO4 (e) (WAD Cyc) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (II-D) (NWTPIG) (TSS) (BGA) (TSS) (BGA) (Be) (Calanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Calanide) (Ba) (Be) (Calanide)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPH-GD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 765 765 764 765 765 NALYSIS AL (uS/cm) 765 (uS/cm) 7	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (II-D) (NWTPIG) (TSS) (BGA) (TSS) (BGA) (Be) (Calanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Calanide) (Ba) (Be) (Calanide)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e <u>:</u>	Boeing Rent	on		Project Number	:	0025217.099.0	99	
Event:		Quarterly Ma	ay 2018		Date/Time:	5/ 8 /2018@ 121	.1		
Sample Num	ber:	RGW195S-	180508		Weather:	60'S, SUNNY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Conditio		Secure (YES)		Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	1.01	Time:	1117	Flow through cell	l vol.		GW Meter No.(s	HERON 3
	2 2 .	5/ 8 /2018 @		End Purge:	_	5/ 8 /2018 @ 1210)	Gallons Purged:	1
Purge water di			55-gal Drum	i i	Storage Tank	Ground		SITE TREATMI	ENT SYSTEM
C	То				ORP				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	(mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge Goa	ls: Stablizatio	n of Parame		consecutive read	lings within the foll	lowing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1152	14.4	739	0.40	6.17	37.4	LOW	1.01	< 0.25	
1155	14.4	684	0.64	6.21	19.9		1.05	0.25	
1158	14.3	609	0.86	6.28	5.3				
1201	14.3	588	0.92	6.29				0.5	
					4.2				
1204	14.3	549	1.04	6.30					
1207	14.3	533	1.11	6.30	-7.9				
1209	14.3	520	1.18	6.31	-11.7				
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER			
Made of:		Stainless Stee	l 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Wash	h 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other _							
									
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
			_				DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	(ft)		
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.31	ORP (mV)	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31	ORP (mV) -12.1 -12.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31 6.31	ORP (mV) -12.1 -12.2 -12.4	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31	ORP (mV) -12.1 -12.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31 6.31	ORP (mV) -12.1 -12.2 -12.4	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3	Cond. (uS/cm) 520 518 518 517 518	D.O. (mg/L) 1.18 1.19 1.19 1.20 1.19	6.31 6.31 6.31 6.31 6.31	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL A	Cond. (uS/cm) 520 518 518 517 518	D.O. (mg/L) 1.18 1.19 1.19 1.20 1.19	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AN (8260) (8010	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PERMATTER OF THE PERMATTER OF T	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI () (8020) (N' (H) (NWTPH- ctivity) (TDS)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PERWYPH-G) (19 -D) (NWTP) (TSS) (Be	6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! slicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI 0) (8020) (N' .H) (NWTPH- ctivity) (TDS) C) (Total PO4)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (Be 0) (Total Kier	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081)	#DIV/0! slicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AT (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (1) (8020) (NY (1) (NWTPH- (1) (Total PO4) (2) (Total PO4) (2) (WAD Cya	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP O) (TSS) (Be) (Total Kiecunide) (Free	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0!	n-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC) (Total Cyanide (Total Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (1) (8020) (N' (1) (NWTPH- (tivity) (TDS) (2) (Total PO4) (e) (WAD Cyal (As) (Sb) (E)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free Sa) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI () (8020) (N' (H) (NWTPH- ctivity) (TDS) (C) (Total PO4) (e) (WAD Cya (dAs) (Sb) (Etals) (As) (Sb) (Etals)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free Sa) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI () (8020) (N' (H) (NWTPH- ctivity) (TDS) (C) (Total PO4) (e) (WAD Cya (dAs) (Sb) (Etals) (As) (Sb) (Etals)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethic	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethic	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate San Comments:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethic	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (U) (8020) (NY (U) (NWTPH- (Civity) (TDS) (U) (Total PO4) (U) (WAD Cyallo) (As) (Sb) (Eletals) (As) (Sb) (Eletals) (As) (Sb) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 1.18 1.19 1.20 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free et al. (Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3) (Ag) (Se) (T g) (Se) (TI) (V)	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate San Comments: Signature:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Me VOC (Boeing Methane Ethal	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm)	D.O. (mg/L) 1.18 1.19 1.20 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free et Ba) (Be) (Catellium (Ba) (Be) (Be) (Catellium (Ba) (Be) (Be) (Catellium (Ba) (Be) (Be) (Be) (Be) (Be) (Be) (Be) (Be	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (If (Cr) (Cu) (Fe) (Pb)	#DIV/0! #DIV/0! #IDIV/0!	(ft) n-standard ana ase) (SO4) (NO3) (Ag) (Se) (Tl) (V) 5/8/2018	(Fe II) Alysis below) WA WA (NO2) (F) (I) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e:	Boeing Rent	on		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 113	31		
Sample Num	nber:	RGW196D-	180508		Weather:	60'S, SUNNY			
Landau Repr	resentative:	JHA							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES)	1	Damaged (N	O)	Describe:			
DTW Before	Purging (ft)	1.01	Time:	_	Flow through cel			GW Meter No.(s	HERON 3
	Date/Time:			End Purge:		5/ 8 /2018 @ 112	8	Gallons Purged:	
Purge water d			55-gal Drum		Storage Tank	Ground		SITE TREATMI	ENT SYSTEM
r argo water a	•		_		_		·		
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
				ters for three		dings within the fol		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1110	15.2	381.8	0.38	6.42	29.7	LOW	1.05	<0.25	
1113	15.2	384.9	0.46	6.34	26.7		1.05	0.25	
1116		385.7	0.51	6.33	24.2				
							1.05	0.5	
1119		386.3	0.61	6.31	19.3		1.05	0.5	
1122	15.2	386.0	0.70	6.31	14.7				
1125	15.2	385.7	0.75	6.31	12.4			75	
1127	15.3	384.6	0.89	6.31	4.5				
						·			
SAMPLE CO	LLECTION D	ATA							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	ıl 🗖	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated		_	
(By Numerica	l Order)	Other		•	—				
Sample Descr	*		sheen, etc.):		LORLESS, NO/N	S			
Sample Descr	*		sheen, etc.):_			S			
Sample Descr Replicate	iption (color, t	urbidity, odor,	D.O.		LORLESS, NO/N	Turbidity	DTW	Ferrous iron	Comments/
	iption (color, t	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	iption (color, t	urbidity, odor,	D.O.	CLEAR, CO	LORLESS, NO/N	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm) 384.8	D.O. (mg/L)	pH 6.31	ORP (mV)	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91	CLEAR, CO pH 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 15.3 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91 0.91	pH 6.31 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6 3.4	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91	CLEAR, CO pH 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91 0.91 0.92	CLEAR, CO pH 6.31 6.31 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6 3.4 3.9	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3 (8260) (8010	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 384.8 0) (8020) (N	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PERMANDER OF THE PERMANDE	6.31 6.31 6.31 6.31 R BOTTLE T	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle app (BTEX)	Turbidity (NTU) #DIV/0! plicable or write no	(ft)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N H) (NWTPH	D.O. (mg/L) 0.90 0.91 0.92 0.91 LOWED PEI WTPH-G) (MATP	CLEAR, CO pH 6.31 6.31 6.31 6.31 R BOTTLE TOWNTPH-GX) H-DX) (TPH	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximate) (BTEX) 1-HCID) (8081)	#DIV/0! blicable or write no	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N CH) (NWTPH ctivity) (TDS)	D.O. (mg/L) 0.90 0.91 0.92 0.91 LOWED PERWIPH-G) (NWTPH) (TSS) (Be	CLEAR, CO pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid	ORP (mV) 4.3 4.2 3.6 3.4 3.9 IYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! blicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 380.0 (NM) (NWTPH ctivity) (TDS (Total PO4)	D.O. (mg/L) 0.90 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (Be) (Total Kier	CLEAR, CO pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximate) (BTEX) 1-HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyx	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (if the continue) (Free continue) (Free continue)	pH 6.31 6.31 6.31 6.31 6.31 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity) ity) (NH3) (NO3/1	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana ase)) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o) (As) (Sb) (I	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PERMITTED (Market Market Marke	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N ()H) (NWTPH ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (I etals) (As) (Sb	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PERMITTED (Market Market Marke	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N ()H) (NWTPH ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (I etals) (As) (Sb	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG (Boein) Methane Eth	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG (Boein) Methane Eth	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG (Boein) Methane Eth	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate San Comments: Signature:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein, Methane Eth others mple No(s):	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (US/cm) 384.8 384.8 384.8 (US/cm) 384.8 384.8 384.8 384.8 (US/cm) (U	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (1 -D) (NWTP) (Total Kiecanide) (Free et Ba) (Be) (Ca) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE Theorem (Turbid dahl Nitrogen (Cyanide) (Cd) (Co) (Cd) (Co) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/I) (Cr) (Cu) (Fe) ((Cr) (Cu) (Fe) (Pb	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	(ft) n-standard ana ase)) (SO4) (NO3 i) (Ag) (Se) (Tl) (V) ag) (Se) (Tl) (V)	(Fe II) Alysis below) WA WA (NO2) (F) Cl) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR □ OR □ OR □



Project Nam	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 8 /2018@ 946	<u> </u>		
Sample Nun	nber:	RGW188S-	•		Weather:	60'S, SUNNY			
Landau Rep	resentative:	JHA			•				
WATERIEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before		3.21	Time:	_	Flow through cel	•		GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	_	5/ 8 /2018 @ 940		Gallons Purged:	
Purge water d	isposed to:		55-gal Drum	i i	Storage Tank	Ground	Other	SITE TREATME	
C	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	рп	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						dings within the foll	~	>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
924	15.4	452.6	0.81	6.17	36.2	LOW	3.25	<0.25	
927	15.1	451.6	1.00	6.22	29.7				
930	15.2	450.8	1.12	6.26	23.2		3.25	0.25	
933	15.0	448.6	1.22	6.28	18.3				
936	15.2	449.1	1.26	6.29					
939		449.0	1.28	6.30				0.5	
	10.2		1,20	0.00	10.7			0.0	
SAMPLE CO	LLECTION D	ΔΤΔ							
Sample Colle			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 📄	Tap Rinse	DI Water	Dedicated	_	_	
(By Numerica	ıl Order)	Other			4				
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR WIT	TH SUSPENDED	PARTICLES, COLO	ORLESS, NO/N	S	
D U	Т	C 1	D.O.		ODD	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	(NTU)	DTW (ft)	(Fe II)	Observations
1	15.1	448.8	1.29	6.30	10.4				
2	15.2	448.8	1.28	6.30	10.2				
3	15.1	448.8		6.30	9.9				
4	15.1	448.8	1.29	6.30	9.5				
Average:	15.1	448.8	1.29	6.30	10.0	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	ГҮРЕ (Circle ap	plicable or write no	n-standard ana	alysis below)	
3		0) (8020) (N			· ·			WA □	OR 🗆
						(8141) (Oil & Grea		WA 🗆	OR \square
1					lity) (Alkalinity)) (NH3) (NO3/2	(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
1		e) (WAD Cy) (NII3) (NO3/	1102)			
					(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (T	(I) (V) (Zn) (Hg)) (K) (Na)
						o) (Mg) (Mn) (Ni) (A			
	VOC (Boein	g short list)							
	Methane Eth	ane Ethene Ac	etylene						
	othors								
	others								
Duplicate Sar	nple No(s):								
Comments:									
Signature:			JHA			Date:	5/8/2018		



Project Name	e <u>:</u>	Boeing Rent	con		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 911			
Sample Num	ber:	RGW249S-	180508		Weather:	50'S, SUNNY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Conditio		Secure (YES)	1	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	3.04	Time:	=	Flow through cel	•		GW Meter No.(s	HERON 3
		5/ 8 /2018 @		End Purge:	=	5/ 8 /2018 @ 910		Gallons Purged:	0.5
Purge water di			55-gal Drum	i i	Storage Tank	Ground	Other	SITE TREATMI	
Turge water a	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three	consecutive read	lings within the foll		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
852	14.2	534.0	0.20	6.15	93.7	MED		<0.25	
855	14.2	504.0	0.44	6.22	69.3		3.07	0.25	
858	14.3	485.3	0.63	6.23	56.4				
							3.09	0.5	
901	14.3	479.6	0.76	6.23	50.0		3.09	0.5	
904	14.3	468.0	0.94	6.23	42.3				
907	14.4	463.8	1.09	6.23	36.4				
909	14.4	462.8	1.16	6.23	34.0				
SAMPLE CO	LLECTION D	ATA							
Sample Collec	ted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	ıl 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Sample Descri	Temp	Cond.	D.O.	pH	ORP	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp	Cond.	D.O.		ORP	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm) 462.8	D.O. (mg/L)	рН 6.23	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 14.4 14.4	Cond. (uS/cm) 462.8 462.4	D.O. (mg/L) 1.16 1.17	pH 6.23 6.23	ORP (mV) 33.6 33.3	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 14.4 14.4 14.4	Cond. (uS/cm) 462.8 462.4 462.8 462.2	D.O. (mg/L) 1.16 1.17 1.18 1.18	pH 6.23 6.23 6.23 6.23	ORP (mV) 33.6 33.3 32.8 32.4	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6	D.O. (mg/L) 1.16 1.17 1.18 1.18	6.23 6.23 6.23 6.23 6.23	ORP (mV) 33.6 33.3 32.8 32.4 33.0	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL A	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE	6.23 6.23 6.23 6.23 6.23 6.23	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximation of the content	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AT (8260) (8010	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PERMOTER OF THE PERMOTER OF T	6.23 6.23 6.23 6.23 6.23 R BOTTLE T	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA	Cond. (uS/cm) 462.8 462.4 462.2 462.2 462.6 NALYSIS AL (b) (8020) (N	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PEI WTPH-G) (iii)	6.23 6.23 6.23 6.23 6.23 R BOTTLE TONWTPH-GX) H-DX) (TPH	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX)) 6-HCID) (8081)	#DIV/0!	(ft) n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL 0) (8020) (N .H) (NWTPH ctivity) (TDS	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PERWIPH-G) (19 -D) (NWTP) (TSS) (Be	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	(ft) n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N .H) (NWTPH ctivity) (TDS C) (Total PO4	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (19 -D) (NWTP) (TSS) (Be)) (Total Kiece	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX)) 6-HCID) (8081)	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	(ft) n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL () (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyze	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (16-D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free canide)	6.23 6.23 6.23 6.23 6.23 R BOTTLE TONWTPH-GX) H-DX) (TPHOD) (Turbid dlahl Nitrogen) Cyanide)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0!	n-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL. ()) (8020) (N. (H) (NWTPH ctivity) (TDS) (C) (Total PO4) (e) (WAD Cyal) (As) (Sb) (B)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PEI WTPH-G) (III-IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL. (b) (8020) (N. (c) (NWTPH ctivity) (TDS C.) (Total PO4 ctivity) (TDS C.) (As) (Sb) (Etals) (As) (Sb) (Sb)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PEI WTPH-G) (III-IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL. (b) (8020) (N. (c) (NWTPH ctivity) (TDS C.) (Total PO4 ctivity) (TDS C.) (As) (Sb) (Etals) (As) (Sb) (Sb)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	(ft) n-standard ana ase) (SO4) (NO3) (Ag) (Se) (Tl) (V)	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments: Signature:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL. (D) (8020) (N. H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya c) (As) (Sb) (Betals) (As) (Sb) g short list) ane Ethene Acceleration	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiec anide) (Free e Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ba) (Be) (Ca JHA	6.23 6.23 6.23 6.23 6.23 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen) Cyanide) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (D (Cr) (Cu) (Fe) (Pb	#DIV/0! #DIV/0! #IDIV/0!	(ft) n-standard ana ase) (SO4) (NO3) (Ag) (Se) (Tl) (V) 5/8/2018	(Fe II) Alysis below) WA WA (NO2) (F) Cl) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR □ OR □ OR □



Project Name	e:	Boeing Ren	ton		Project Number	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 08 /2018@	1233		
Sample Num	ber:	RGW194S-	•		Weather:	sunny 70f			
Landau Repr	resentative:	GJN			•				
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL CAP W	/ LID	
DTW Before	Purging (ft)	1.42	Time:	_	Flow through cel			GW Meter No.(s	. 2
		5/ 08/2018	@ 1206	End Purge:	· ·	05/08/18 @	1227	Gallons Purged:	
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa +/- 3%	ıls: Stablizatio +/- 3%	on of Parame +/- 10 <i>%</i>	ters for three +/- 0.1 units	e consecutive read +/- 10 mV	dings within the fo	llowing limits < 0.3 ft	>/= 1 flow through cell	
1207	15.7	558.0	0.43	6.67	31.8	17- 10 /6	1.59	- U	CLEAR/COLORLESS/ NO/NS
1210	15.2	671.0	0.29	6.37	32.2		1.6	0.6	
1213	15.0	687.0	0.38	6.33	29.5		1.6	0.9	
1216	14.6	671.0	0.65	6.30	16.3		1.6	1.2	
1219		656.0	0.91	6.30	4.7		1.6	1.5	
1222		629.0	1.25	6.29	-7.4		1.61	1.8	
1225		600.0	1.66	6.29	-20.0		1.62	2.1	
1227		586.0	1.88	6.29	-25.4		1.63	2.4	
SAMPLE CO			1.00	0.27			1.03	2	
Sample Collec			Bailer	V	Pump/Pump Type	BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	clear/colorle	ss/no/ns				
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	14.9	583.0	1.94	6.29	-27.1				
2	14.9	578.0	1.99	6.29	-28.0				
3	14.9	578.0	2.02	6.29	-28.8				
4	14.9	577.0	2.06	6.29	-29.5				
Average:	14.9	579.0	2.00	6.29	-28.4	#DIV/0!	1.62		
QUANTITY	TVPICALA	NALVSIS AL	I OWED PE	R ROTTI F '	FVPF (Circle an	olicable or write no	on-standard and	alveis helow)	
5		(8020) (N				oneable of write he	Jii-standard and	WA \square	OR 🗆
						(8141) (Oil & Gro	ease)	wa □	OR 🗆
	(pH) (Condu	ctivity) (TDS	S) (TSS) (B	OD) (Turbid	ity) (Alkalinity)	(HCO3/CO3) (CI	l) (SO4) (NO3) (NO2) (F)	
1) (NH3) (NO3/	NO2)			
		e) (WAD Cy			(6) (6) (7)	TIV 05 V 05 V 0		T) (T) (T) (T)	(T) (AT.)
						Pb) (Mg) (Mn) (Ng) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg) (M			
	VOC (Boein) (Da) (Be) (C	a) (Cu) (C0)	(CI) (CU) (FE) (PC	,, (1 v 1g) (1 v 111) (1 v 1) (A	ng) (30) (11) (V)	(ZII) (Tg) (K) (N	a) (Hardness) (Silica)
		ane Ethene Ac	etylene						
	others								
Duplicate San	nple No(s):								
Comments:									
Signature:	GREG NOS	ΓRAND				Date:	5/8/2018		



Project Name	e <u>:</u>	Boeing Rent	on		Project Number	:	0025217.099.0	99	
Event:		Quarterly Ma	ay 2018		Date/Time:	5/ 8 /2018@ 121	.1		
Sample Num	ber:	RGW195S-	180508		Weather:	60'S, SUNNY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Conditio		Secure (YES)		Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	1.01	Time:	1117	Flow through cell	l vol.		GW Meter No.(s	HERON 3
	2 2 .	5/ 8 /2018 @		End Purge:	_	5/ 8 /2018 @ 1210)	Gallons Purged:	1
Purge water di			55-gal Drum	i i	Storage Tank	Ground		SITE TREATMI	ENT SYSTEM
C	То				ORP				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	(mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
	Purge Goa	ls: Stablizatio	n of Parame		consecutive read	lings within the foll	lowing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1152	14.4	739	0.40	6.17	37.4	LOW	1.01	< 0.25	
1155	14.4	684	0.64	6.21	19.9		1.05	0.25	
1158	14.3	609	0.86	6.28	5.3				
1201	14.3	588	0.92	6.29				0.5	
					4.2				
1204	14.3	549	1.04	6.30					
1207	14.3	533	1.11	6.30	-7.9				
1209	14.3	520	1.18	6.31	-11.7				
SAMPLE CO									
Sample Collec	eted With:		Bailer			DED BLADDER			
Made of:		Stainless Stee	l 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Wash	h 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other _							
									
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
			_				DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	(ft)		
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 6.31	ORP (mV)	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31	ORP (mV) -12.1 -12.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31 6.31	ORP (mV) -12.1 -12.2 -12.4	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31	ORP (mV) -12.1 -12.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3	Temp (°F/°C) 14.3 14.3	Cond. (uS/cm) 520 518	D.O. (mg/L) 1.18 1.19	pH 6.31 6.31 6.31	ORP (mV) -12.1 -12.2 -12.4	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3	Cond. (uS/cm) 520 518 518 517 518	D.O. (mg/L) 1.18 1.19 1.19 1.20 1.19	6.31 6.31 6.31 6.31 6.31	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL A	Cond. (uS/cm) 520 518 518 517 518	D.O. (mg/L) 1.18 1.19 1.19 1.20 1.19	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AN (8260) (8010	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PERMATTER OF THE PERMATTER OF T	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI () (8020) (N' (H) (NWTPH- ctivity) (TDS)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PERWYPH-G) (19 -D) (NWTP) (TSS) (Be	6.31 6.31 6.31 6.31 6.31 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! slicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI 0) (8020) (N' .H) (NWTPH- ctivity) (TDS) C) (Total PO4)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (Be 0) (Total Kier	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081)	#DIV/0! slicable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AT (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (1) (8020) (NY (1) (NWTPH- (1) (Total PO4) (2) (Total PO4) (2) (WAD Cya	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP O) (TSS) (Be) (Total Kiecunide) (Free	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0!	n-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC) (Total Cyanide (Total Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (1) (8020) (N' (1) (NWTPH- (tivity) (TDS) (2) (Total PO4) (e) (WAD Cyal (As) (Sb) (E)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free Sa) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI () (8020) (N' (H) (NWTPH- ctivity) (TDS) (C) (Total PO4) (e) (WAD Cya (dAs) (Sb) (Etals) (As) (Sb) (Etals)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free Sa) (Be) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI () (8020) (N' (H) (NWTPH- ctivity) (TDS) (C) (Total PO4) (e) (WAD Cya (dAs) (Sb) (Etals) (As) (Sb) (Etals)	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethic	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethic	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm) (uS/cm) (S020) (NIII) (NWTPHetivity) (TDS) (Total PO4) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (EVAD Cyalor) (As) (Sb) (EVAD Cyalor) (Sb) (Sb) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc) (Sc	D.O. (mg/L) 1.18 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP 0) (TSS) (BG) (Total Kieconide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate San Comments:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethic	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (U) (8020) (NY (U) (NWTPH- (Civity) (TDS) (U) (Total PO4) (U) (WAD Cyallo) (As) (Sb) (Eletals) (As) (Sb) (Eletals) (As) (Sb) (I) (Sb) (I) (I) (I) (I) (I) (I) (I) (I) (I) (I	D.O. (mg/L) 1.18 1.19 1.20 1.19 1.20 1.19 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free et al. (Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (1	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3) (Ag) (Se) (T g) (Se) (TI) (V)	Ilysis below) WA WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate San Comments: Signature:	Temp (°F/°C) 14.3 14.3 14.3 14.3 14.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanida (Total Metals) (Dissolved Me VOC (Boeing Methane Ethal	Cond. (uS/cm) 520 518 518 517 518 NALYSIS ALI (uS/cm)	D.O. (mg/L) 1.18 1.19 1.20 1.19 1.20 1.19 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free et Ba) (Be) (Catellium (Ba) (Be) (Be) (Catellium (Ba) (Be) (Be) (Catellium (Ba) (Be) (Be) (Be) (Be) (Be) (Be) (Be) (Be	6.31 6.31 6.31 6.31 6.31 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) -12.1 -12.2 -12.4 -12.6 -12.3 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (If (Cr) (Cu) (Fe) (Pb)	#DIV/0! #DIV/0! #IDIV/0!	(ft) n-standard ana ase) (SO4) (NO3) (Ag) (Se) (Tl) (V) 5/8/2018	(Fe II) Alysis below) WA WA (NO2) (F) (I) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e:	Boeing Rent	on		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 113	31		
Sample Num	nber:	RGW196D-	180508		Weather:	60'S, SUNNY			
Landau Repr	resentative:	JHA							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES)		Damaged (N	O)	Describe:			
DTW Before	Purging (ft)	1.01	Time:	_	Flow through cel			GW Meter No.(s	HERON 3
	Date/Time:			End Purge:		5/ 8 /2018 @ 112	8	Gallons Purged:	
Purge water d			55-gal Drum		Storage Tank	Ground		SITE TREATMI	ENT SYSTEM
r argo water a	•		_		_		·		
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
				ters for three		dings within the fol		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1110	15.2	381.8	0.38	6.42	29.7	LOW	1.05	<0.25	
1113	15.2	384.9	0.46	6.34	26.7		1.05	0.25	
1116		385.7	0.51	6.33	24.2				
							1.05	0.5	
1119		386.3	0.61	6.31	19.3		1.05	0.5	
1122	15.2	386.0	0.70	6.31	14.7				
1125	15.2	385.7	0.75	6.31	12.4			75	
1127	15.3	384.6	0.89	6.31	4.5				
						·			
SAMPLE CO	LLECTION D	ATA							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	ıl 🗖	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated		_	
(By Numerica	l Order)	Other		•	—				
Sample Descr	*		sheen, etc.):		LORLESS, NO/N	S			
Sample Descr	*		sheen, etc.):_			S			
Sample Descr Replicate	iption (color, t	urbidity, odor,	D.O.		LORLESS, NO/N	Turbidity	DTW	Ferrous iron	Comments/
	iption (color, t	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	iption (color, t	urbidity, odor,	D.O.	CLEAR, CO	LORLESS, NO/N	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm) 384.8	D.O. (mg/L)	pH 6.31	ORP (mV)	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91	CLEAR, CO pH 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 15.3 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91 0.91	pH 6.31 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6 3.4	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91	CLEAR, CO pH 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3	Cond. (uS/cm) 384.8 384.8 384.8 384.8	D.O. (mg/L) 0.90 0.91 0.91 0.92	CLEAR, CO pH 6.31 6.31 6.31 6.31 6.31	ORP (mV) 4.3 4.2 3.6 3.4 3.9	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3 (8260) (8010	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 384.8 0) (8020) (N	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PERMANDER OF THE PERMANDE	6.31 6.31 6.31 6.31 R BOTTLE T	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle app (BTEX)	Turbidity (NTU) #DIV/0! plicable or write no	(ft)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N H) (NWTPH	D.O. (mg/L) 0.90 0.91 0.92 0.91 LOWED PEI WTPH-G) (MATP	CLEAR, CO pH 6.31 6.31 6.31 6.31 R BOTTLE TOWNTPH-GX) H-DX) (TPH	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximate) (BTEX) 1-HCID) (8081)	#DIV/0! blicable or write no	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N CH) (NWTPH ctivity) (TDS)	D.O. (mg/L) 0.90 0.91 0.92 0.91 LOWED PERWIPH-G) (NWTPH) (TSS) (Be	CLEAR, CO pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid	ORP (mV) 4.3 4.2 3.6 3.4 3.9 IYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! blicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 15.3 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 380.0 (NM) (NWTPH ctivity) (TDS (Total PO4)	D.O. (mg/L) 0.90 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (Be) (Total Kier	CLEAR, CO pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximate) (BTEX) 1-HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyx	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (if the continue) (Free continue) (Free continue)	pH 6.31 6.31 6.31 6.31 6.31 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity) ity) (NH3) (NO3/1	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI)	n-standard ana ase)) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o) (As) (Sb) (I	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PERMITTED (Market Market Marke	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N ()H) (NWTPH ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (I etals) (As) (Sb	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PERMITTED (Market Market Marke	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N ()H) (NWTPH ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (I etals) (As) (Sb	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N () (NWTPH (ctivity) (TDS ()) (Total PO4 (e) (WAD Cya ()) (As) (Sb) (I () (etals) (As) (Sb () g short list)	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG (Boein) Methane Eth	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N () (NWTPH (ctivity) (TDS ()) (Total PO4 (e) (WAD Cya ()) (As) (Sb) (I () (etals) (As) (Sb () g short list)	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG (Boein) Methane Eth	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N () (NWTPH (ctivity) (TDS ()) (Total PO4 (e) (WAD Cya ()) (As) (Sb) (I () (etals) (As) (Sb () g short list)	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (OG (Boein) Methane Eth	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 NALYSIS AL ()) (8020) (N () (NWTPH (ctivity) (TDS ()) (Total PO4 (e) (WAD Cya ()) (As) (Sb) (I () (etals) (As) (Sb () g short list)	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE TOWNTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/1) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	n-standard ana ase)) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate San Comments: Signature:	Temp (°F/°C) 15.3 15.3 15.3 15.3 15.3 15.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein, Methane Eth others mple No(s):	Cond. (uS/cm) 384.8 384.8 384.8 384.8 384.8 384.8 NALYSIS AL (US/cm) 384.8 384.8 384.8 (US/cm) 384.8 384.8 384.8 384.8 (US/cm) (U	D.O. (mg/L) 0.90 0.91 0.91 0.92 0.91 LOWED PE WTPH-G) (1 -D) (NWTP) (Total Kiecanide) (Free et Ba) (Be) (Ca) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	pH 6.31 6.31 6.31 6.31 6.31 RBOTTLE Theorem (Turbid dahl Nitrogen (Cyanide) (Cd) (Co) (Cd) (Co) (Cd) (Co)	ORP (mV) 4.3 4.2 3.6 3.4 3.9 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/I) (Cr) (Cu) (Fe) ((Cr) (Cu) (Fe) (Pb	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI) NO2) Pb) (Mg) (Mn) (N	(ft) n-standard ana ase)) (SO4) (NO3 i) (Ag) (Se) (Tl) (V) ag) (Se) (Tl) (V)	(Fe II) Alysis below) WA WA (NO2) (F) Cl) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR □ OR □ OR □



Project Name	e <u>:</u>	Boeing Rent	on		Project Number	•	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 08 /2018@	1047		
Sample Num	ber:	RGW197S-	180508		Weather:	SUNNY 75F			
Landau Repr	esentative:	GJN							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Condition	n:	Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL CAP W	/LOCK	
DTW Before I	Purging (ft)	0.7	Time:	1023	Flow through cel	0.3		GW Meter No.(s	2
Begin Purge:	Date/Time:	5/ 08/2018	1025	End Purge:	Date/Time:	5/ 08/2018@	1045	Gallons Purged:	
Purge water di	sposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)		(mV)	(NTU)	(ft)	Volume (gal)	Observations
	_					lings within the fol		>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1025	14.9	781	0.16	6.82	-7.6		0.7	0.3	_
1028	14.9	790	0.12	6.96	-46.5		0.7	0.6	
1031	15.1	788	0.12	7.00	-67.9		0.72	0.9	
1034	15.0	783	0.16	7.04	-86.7		0.76	1.2	
1037	15.2	783	1.60	7.05	-96.4		0.74	1.5	
1040	15.1	778	2.40	7.10	-124.0		0.75	1.8	
1043	15.1	778	0.27	7.11	-128.4		0.75	2.1	
SAMPLE COI	15.2	779 ATA	0.29	7.11	-129.7		0.76	2.4	
Sample Collec			Bailer		Pump/Pump Type	BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Procedo	ure:	Alconox Was	_	Tap Rinse	DI Water	Dedicated	_	''	
(By Numerical	_	Other			<u> </u>				
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR/COI	LORLESS/NO/NS				
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR/COI	LORLESS/NO/NS				
Sample Descri	Temp	Cond.	D.O.	CLEAR/COI	ORP	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		(ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp (°F/°C)	Cond. (uS/cm)	D.O.		ORP	Turbidity	(ft) 0.76		
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity	(ft)		
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	рН 7.11	ORP (mV) -130.7	Turbidity	(ft) 0.76		
Replicate 1 2	Temp (°F/°C) 15.1 15.2	Cond. (uS/cm) 778	D.O. (mg/L) 0.30 0.31	pH 7.11 7.11	ORP (mV) -130.7 -131.5	Turbidity	(ft) 0.76 0.76		
Replicate 1 2 3	Temp (°F/°C) 15.1 15.2 15.2	Cond. (uS/cm) 778 778	D.O. (mg/L) 0.30 0.31	pH 7.11 7.11 7.11	ORP (mV) -130.7 -131.5 -132.2	Turbidity	(ft) 0.76 0.76 0.76		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2	Cond. (uS/cm) 778 778 778 777 778	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06	7.11 7.11 7.11 7.12 7.11	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9	Turbidity (NTU) #DIV/0!	0.76 0.76 0.76 0.76 0.76	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL A	Cond. (uS/cm) 778 778 778 777 778 NALYSIS AL	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE	7.11 7.11 7.12 7.11 R BOTTLE 2	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9	Turbidity (NTU)	0.76 0.76 0.76 0.76 0.76	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI	Cond. (uS/cm) 778 778 777 778 NALYSIS ALI 0) (8020) (N	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PERMANDER OF THE PERMANDE	7.11 7.11 7.11 7.12 7.11 R BOTTLE 7	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 TYPE (Circle app (BTEX)	Turbidity (NTU) #DIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 on-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA	Cond. (uS/cm) 778 778 777 778 NALYSIS ALI (1) (8020) (N'.H) (NWTPH	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PEI WTPH-G) (10 -D) (NWTP	7.11 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 TYPE (Circle approximately (BTEX) -14CID) (8081)	#DIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 on-standard analeses)	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALD () (8020) (N (H) (NWTPH (ctivity) (TDS)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PERWIPH-G) (10-D) (NWTP) (TSS) (Betting the content of the con	7.11 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 TYPE (Circle approximately (BTEX) -14CID) (8081)	#DIV/0! clicable or write not (8141) (Oil & Gree (HCO3/CO3) (CI	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 on-standard analeses)	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALD () (8020) (N (H) (NWTPH (ctivity) (TDS)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (BG 0) (Total Kiece	7.11 7.11 7.12 7.11 7.11 RBOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! clicable or write not (8141) (Oil & Gree (HCO3/CO3) (CI	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 on-standard analeses)	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 778 778 778 777 778 NALYSIS AL. (1) (8020) (N. (1) (NWTPH ctivity) (TDS) (2) (Total PO4) (e) (WAD Cya	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free	7.11 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 TYPE (Circle approximately (BTEX) (HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! clicable or write not (8141) (Oil & Gree (HCO3/CO3) (CI	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.78 0.76 0.79 0.79 0.79 0.79 0.79 0.79 0.79 0.79	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALD 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya e) (As) (Sb) (E etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PEI WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free Mail (Free Mail (Free Mail (Mail	7.11 7.11 7.12 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALI (1) (8020) (N (1) (NWTPH (ctivity) (TDS (2) (Total PO4 (2) (WAD Cya (3) (As) (Sb) (Betals) (As) (Sb) (g short list)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (BG 0) (Total Kied (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	7.11 7.11 7.12 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALD 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya e) (As) (Sb) (E etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (BG 0) (Total Kied (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	7.11 7.11 7.12 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALI (1) (8020) (N (1) (NWTPH (ctivity) (TDS (2) (Total PO4 (2) (WAD Cya (3) (As) (Sb) (Betals) (As) (Sb) (g short list)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (BG 0) (Total Kied (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	7.11 7.11 7.12 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein) Methane Eth	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALI (1) (8020) (N (1) (NWTPH (ctivity) (TDS (2) (Total PO4 (2) (WAD Cya (3) (As) (Sb) (Betals) (As) (Sb) (g short list)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (BG 0) (Total Kied (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	7.11 7.11 7.12 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALI (1) (8020) (N (1) (NWTPH (ctivity) (TDS (2) (Total PO4 (2) (WAD Cya (3) (As) (Sb) (Betals) (As) (Sb) (g short list)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (10 -D) (NWTP 0) (TSS) (BG 0) (Total Kied (Free Ba) (Be) (Ca) (Ba) (Be) (Ca)	7.11 7.11 7.12 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALI (US/CM) (U	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PEI WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free ela) (Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	7.11 7.11 7.12 7.11 7.12 7.11 RBOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 778 778 778 777 778 NALYSIS ALI (1) (8020) (N (1) (NWTPH (ctivity) (TDS (2) (Total PO4 (2) (WAD Cya (3) (As) (Sb) (Betals) (As) (Sb) (g short list)	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PEI WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free ela) (Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	7.11 7.11 7.12 7.11 7.12 7.11 RBOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 IYPE (Circle approximately (BTEX) (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	Ilysis below) WA WA WO (NO2) (F)	Observations OR OR OR OR OK OK OK OK OK OK OK OK OK OK
Replicate 1 2 3 4 Average: QUANTITY 5 1 Duplicate Sam Comments: Signature:	Temp (°F/°C) 15.1 15.2 15.2 15.1 15.2 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others took water le	Cond. (uS/cm) 778 778 778 777 778 NALYSIS AL. (uS/cm) 778 NALYSIS AL. (uS/cm) 778 778 778 NALYSIS AL. (uS/cm) (uS/cm	D.O. (mg/L) 0.30 0.31 0.31 3.30 1.06 LOWED PE WTPH-G) (NWTP) (TSS) (Be) (Total Kiecunide) (Free et al.) Ba) (Be) (Called (Ba) (Ba) (Be) (Called (Ba) (Ba) (Be) (Called (Ba) (Ba) (Ba) (Ba) (Ba) (Ba) (Ba) (Ba)	pH 7.11 7.11 7.12 7.11 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (a) (Cd) (Co) (b) (Cd) (Co)	ORP (mV) -130.7 -131.5 -132.2 -133.3 -131.9 TYPE (Circle approximately (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (D (Cr) (Cu) (Fe) (Pb	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) 0.76 0.76 0.76 0.76 0.76 0.76 0.76 0.76	(Fe II) WA	Observations OR



Project Name	e:	Boeing Ren	ton		Project Number	r:	0025217.099.0	99	
Event:		Quarterly M	Iay 2018		Date/Time:	5/ 08/2018@	1139		
Sample Num	ıber:	RGW245S-	180508		Weather:	SUNNY 75F			
Landau Repr	esentative:	GJN							
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio	n:	Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL CAP W	/ LOCK	
DTW Before l	Purging (ft)	0.84	Time:	1113	Flow through cel	1 0.3		GW Meter No.(s	2
Begin Purge:	Date/Time:	5/ 08 /2018	1115	End Purge:	Date/Time:	5/ 08/2018@11	1135	Gallons Purged:	2.5
Purge water di	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	tors for three	(mV)	(NTU) dings within the fo	(ft)	Volume (gal) >/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
1115	15.5	523.0	0.47	7.30	-9.4		0.84	0.3	
1118	14.9	435.7	0.14	7.05	-9.9		0.84	0.6	
1121	14.9	444.3	0.13	6.94	-19.4		0.84	0.9	
1124	14.8	474.6	0.12	6.86	-35.0		0.84	1.2	
1127	14.8	490.3	0.13	6.84	-43.5		0.84	1.5	
1130		501.0	0.20	6.83	-55.1		0.84	1.8	
1133	14.8	514.0	0.22	6.82	-65.5		0.84	2.1	
1135	14.8	534.0	0.27	6.80	-70.7		0.84	2.4	
SAMPLE CO									
Sample Collec	cted With:		Bailer	₩	Pump/Pump Type	BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	,	Other							
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR/CO	LORLESS/SLIGH	T ODOR/ NS			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	14.9	537.0	0.29	6.80	-72.4		0.84		
2	14.9	538.0	0.29	6.80	-73.5		0.84		
3	14.9	542.0	0.31	6.80	-74.6		0.84		
4	14.9	544.0	0.32	6.80	-75.7		0.84		
Average:	14.9	540.3	0.30	6.80	-74.1	#DIV/0!	0.84		
OUANTITY	TYPICAL A	NALYSIS AI	LOWED PE	R BOTTLE	TYPE (Circle an	olicable or write n	on-standard ans	alvsis below)	
5		(8020) (N				sicusic of write in	on seanan a une	wa □	OR 🗆
						(8141) (Oil & Gr	ease)	wa 🗆	OR 🗆
	(pH) (Condu	ctivity) (TDS	S) (TSS) (B	OD) (Turbid	lity) (Alkalinity)	(HCO3/CO3) (C	l) (SO4) (NO3	(NO2) (F)	
1) (NH3) (NO3/	NO2)			
		e) (WAD Cy			(C) (C) (E) (DI	T') (A) (C) (T		(II) (N.)
						Pb) (Mg) (Mn) (Ng) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg) (M			a) (Hardness) (Silica
	VOC (Boein) (Da) (Dc) (C	a) (Cu) (Co)	(C1) (Cu) (1'C) (1'C) (IVIg) (IVIII) (IVI) (I	Ag) (Sc) (11) (V)	(Zii) (Tig) (K) (Tv	i) (Hardness) (Sinea
		ane Ethene Ac	etylene						
	others								
Duplicate San	nple No(s):								
Comments:	•				· · · · · · · · · · · · · · · · · · ·		<u> </u>		
Signature:	GREG NOS	TRAND				Date:	5/8/2018		

P:\8888 - Boeing Renton\02 Data Management\2018\2Q2018\Field Data\SCFs - Landau Originals\AOC-001&002&003_5.8.18_GJN.xlsx

Landau Associates



Project Name	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M	lay 2018		Date/Time:	5/ 8 /2018@ 100	00		
Sample Num	iber:	RGWDUP4	180508		Weather:	60'S, SUNNY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before l	Purging (ft)		Time:		Flow through ce	ll vol.		GW Meter No.(s	HERON 3
Begin Purge:		5/ 8 /2018 @		End Purge:	Date/Time:	5/ 8 /2018 @		Gallons Purged:	
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pII	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	~					dings within the fol	~	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
		DIII		т тт		V11050			
		<u> </u>		$\frac{1}{1}$	O RGV	W 1000			
0 + 1 (D) = 00°	L F COTTON D								
Sample Collect			Bailer		Dump/Dump Type	DED DI ADDED			
Made of:	ieu wiiii.	Stainless Stee		PVC	Teflon	DED BLADDER Polyethylene	Other	Dedicated	
			_		—		LI Other	Dedicated	
Decon Proced	ure:	Alconox Was	sn 🔲	Tap Rinse	DI Water	Dedicated			
(Ry Numarica	1 Ordar)	Other							
(By Numerica		Other	cheen etc.):	CLOUDY C	OI ODI ESS NO	MNS			
			sheen, etc.):	CLOUDY, C	COLORLESS, NO)/NS			
	iption (color, t	curbidity, odor,	D.O.	CLOUDY, C	ORP	Turbidity	DTW	Ferrous iron	Comments/
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descr	iption (color, t	curbidity, odor,	D.O.		ORP	Turbidity			
Sample Descri Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm) 765	D.O. (mg/L)	pH 6.44	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 16.7	Cond. (uS/cm) 765	D.O. (mg/L) 0.77	pH 6.44 6.44	ORP (mV) -5.7 -6.1	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 16.7	Cond. (uS/cm) 765 765 764	D.O. (mg/L) 0.77 0.78	pH 6.44 6.44 6.44	ORP (mV) -5.7 -6.1	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7	Cond. (uS/cm) 765 765 764 765 765	D.O. (mg/L) 0.77 0.78 0.79 0.80	6.44 6.44 6.44 6.44	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7	Cond. (uS/cm) 765 765 764 765 765 765 765	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79	pH 6.44 6.44 6.44 6.44 R BOTTLE 7	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 TYPICAL A	Cond. (uS/cm) 765 764 765 765 765 NALYSIS AL (0) (8020) (N	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PER	pH 6.44 6.44 6.44 6.44 R BOTTLE T	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX)	Turbidity (NTU) #DIV/0! plicable or write no	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (MAH) (NWTPH	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (J	6.44 6.44 6.44 6.44 R BOTTLE T	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081)	#DIV/0! plicable or write no	on-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (b) (8020) (NAH) (NWTPH activity) (TDS	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PER (MTPH-G) (MTTPH-G) (MTTPH-G	6.44 6.44 6.44 6.44 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081)	#DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 765 765 765 765 765 NALYSIS AL (b) (8020) (NAH) (NWTPH activity) (TDS	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PER (WTPH-G) (III-D) (NWTPH-G) (III-D) (NWTPH-G) (III-D) (TSS) (BG) (Total Kieck)	6.44 6.44 6.44 6.44 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 FYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)	#DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals)	Cond. (uS/cm) 765 765 764 765 765 NALYSIS AL (0) (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cyc) () (As) (Sb) (1)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEL (WTPH-G) (II-D) (NWTPH-G) (II-D) (NWTPH-G) (II-D) (TSS) (BGH) (Total Kiercanide) (Free Ganide) (Free Ganide) (Free Ganide) (Canide) (Canide	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL (MYPH (ctivity) (TDS) (Total PO4 (e) (WAD Cyc) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEL (WTPH-G) (II-D) (NWTPH-G) (II-D) (NWTPH-G) (II-D) (TSS) (BGH) (Total Kiercanide) (Free Ganide) (Free Ganide) (Free Ganide) (Canide) (Canide	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL (MYPH (ctivity) (TDS) (Total PO4 (e) (WAD Cyc) (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 16.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI (WTPH-G) (III-D) (NWTPH-G) (TSS) (BGC) (Total Kieckanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Ca) (Ba) (Be) (Ca)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 765 765 765 765 NALYSIS AL () (8020) (N AH) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cy; (d) (As) (Sb) (d) (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (II-D) (NWTPIG) (TSS) (BGA) (TSS) (BGA) (Be) (Calanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Calanide) (Ba) (Be) (Calanide)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 5	Temp (°F/°C) 16.7 16.7 16.7 16.7 16.7 16.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Methane Eth	Cond. (uS/cm) 765 765 764 765 765 NALYSIS AL (uS/cm) 765 (uS/cm) 7	D.O. (mg/L) 0.77 0.78 0.79 0.80 0.79 LOWED PEI WTPH-G) (II-D) (NWTPIG) (TSS) (BGA) (TSS) (BGA) (Be) (Calanide) (Free Ganide) (Free Ganide) (Ba) (Be) (Calanide) (Ba) (Be) (Calanide)	pH 6.44 6.44 6.44 6.44 R BOTTLE Towns (TPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) -5.7 -6.1 -6.4 -7.2 -6.4 TYPE (Circle ap (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	on-standard ana ease)) (SO4) (NO3	Ilysis below) WA WA WO WO WO WO WO WO WO WO WO WO	Observations OR OR OR OR OR OR OR OR OR OR



Project Nam	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 8 /2018@ 946	<u> </u>		
Sample Nun	nber:	RGW188S-	•		Weather:	60'S, SUNNY			
Landau Repr	resentative:	JHA			•				
WATERIEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before		3.21	Time:	_	Flow through cel	•		GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	_	5/ 8 /2018 @ 940		Gallons Purged:	
Purge water d	isposed to:		55-gal Drum	i i	Storage Tank	Ground	Other	SITE TREATME	
C	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	рп	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						dings within the foll	~	>/= 1 flow	
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
924	15.4	452.6	0.81	6.17	36.2	LOW	3.25	<0.25	
927	15.1	451.6	1.00	6.22	29.7				
930	15.2	450.8	1.12	6.26	23.2		3.25	0.25	
933	15.0	448.6	1.22	6.28	18.3				
936	15.2	449.1	1.26	6.29					
939		449.0	1.28	6.30				0.5	
	10.2		1,20	0.00	10.7			0.0	
SAMPLE CO	LLECTION D	ΔΤΔ							
Sample Colle			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 📄	Tap Rinse	DI Water	Dedicated	_	_	
(By Numerica	ıl Order)	Other			4				
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR WIT	TH SUSPENDED	PARTICLES, COLO	ORLESS, NO/N	S	
D U	Т	C 1	D.O.		ODD	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	(NTU)	DTW (ft)	(Fe II)	Observations
1	15.1	448.8	1.29	6.30	10.4				
2	15.2	448.8	1.28	6.30	10.2				
3	15.1	448.8		6.30	9.9				
4	15.1	448.8	1.29	6.30	9.5				
Average:	15.1	448.8	1.29	6.30	10.0	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	ГҮРЕ (Circle ap	plicable or write no	n-standard ana	alysis below)	
3		0) (8020) (N			· ·			WA □	OR 🗆
						(8141) (Oil & Grea		WA 🗆	OR \square
1					lity) (Alkalinity)) (NH3) (NO3/2	(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
1		e) (WAD Cy) (NII3) (NO3/	1102)			
					(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (T	(I) (V) (Zn) (Hg)) (K) (Na)
						o) (Mg) (Mn) (Ni) (A			
	VOC (Boein	g short list)							
	Methane Eth	ane Ethene Ac	etylene						
	othors								
	others								
Duplicate Sar	nple No(s):								
Comments:									
Signature:			JHA			Date:	5/8/2018		



Project Nam	e:	Boeing Ren	ton		Project Number	r:	0025217.099.0	99	
Event:		Quarterly M	Iay 2018		Date/Time:	5/ 08/2018@	907		
Sample Nun	nber:	RGW247S-	180508		Weather:	CLEEAR 60F			
Landau Repr	resentative:	GJN							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Condition	n:	Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL CAP W	/ LOCK	
DTW Before	Purging (ft)	3.36	Time:	845	Flow through cel	1 0.3		GW Meter No.(s	2
Begin Purge:	Date/Time:	5/ /2018 @	845	End Purge:	Date/Time:	5/ 08/2018@	906	Gallons Purged:	2.2
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	tong fon thus	(mV)	(NTU) dings within the fo	(ft)	Volume (gal) >/= 1 flow	Observations
	+/- 3%	118: Stabilzatio +/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
847	13.3	368.4	0.29	6.23	81.5		3.62	0.3	
850	13.4	370.9	0.22	6.19	72.9		3.57	0.6	
853	13.4	374.3	0.19	6.25	53.5		3.56	0.9	
856	13.4	374.8	0.23	6.26	46.9		3.56	1.2	
900		376.0	0.42	6.30	24.3		3.55	1.6	
903	13.5	376.1	0.52	6.32	16.6		3.54	1.9	
906		376.7	0.67	6.33	7.8		3.58	2.2	
SAMPLE CO	LLECTION D	ATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type	BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated		^	
(By Numerica	l Order)	Other							
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR/CO	LORLESS/NO/NS	S			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	13.5	376.5	0.77	6.34	3.6		3.56		
2	13.5	376.9	0.80	6.34	2.4		3.56		
3	13.5	376.9	0.82	6.35	1.4				
4	13.5	376.8	0.85	6.35	0.5		3.56		
Average:	13.5	376.8	0.81	6.35	2.0	#DIV/0!	3.56		
	TVDICALA	NAI VCIC AI	I OWED DE	D RATTI E '	TVDE (Cirolo an	olicable or write n	on standard and	alveie bolow)	
3		0) (8020) (N				pheable of write in	on-stanuaru ana		OR 🗆
						(8141) (Oil & Gr	ease)		OR 🗆
						(HCO3/CO3) (C			
1) (NH3) (NO3/	NO2)			
		e) (WAD Cy							
						Pb) (Mg) (Mn) (Ng) (Mg) (Ng) (Mg)			
	VOC (Boein) (ва) (ве) (С	a) (Ca) (Co)	(Cr) (Cu) (Fe) (Pr	o) (Mg) (Mn) (N1) (A	Ag) (Se) (11) (V)	(Zn) (Hg) (K) (Na	a) (Hardness) (Silica
		ane Ethene Ac	etvlene						
	others								
Duplicate San	nple No(s):								
Comments:									
Signature:	GREG NOS	TRAND				Date:	5/8/2018		

P:\8888 - Boeing Renton\02 Data Management\2018\2Q2018\Field Data\SCFs - Landau Originals\AOC-001&002&003_5.8.18_GJN.xlsx



	e <u>:</u>	Boeing Rent	on		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 08 /2018@	953		
Sample Num	nber:	RGW248I-	180508		Weather:	SUNNY 65 F			
Landau Repr	resentative:	GJN							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Conditio		Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL CAP W	/ LOCK	
DTW Before l	Purging (ft)	3.06	Time:	_	Flow through cell			GW Meter No.(s	2
	Date/Time:			End Purge:	_	5/ 08 /2018 @ 94	7	Gallons Purged:	2.4
Purge water di			55-gal Drum		Storage Tank	Ground		SITE TREATME	
	•				_				Comments/
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Observations
	Purge Goa	ls: Stablizatio	n of Parame		consecutive read	lings within the fol	lowing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
927	14.2	413.9	0.20	6.44	21.6		3.72	0.3	
930	14.3	425.2	0.34	6.34	18.3		3.32	0.6	
933	14.4	428.6	0.53	6.34	9.7		3.29	0.9	
936		430.3	0.77	6.34	-0.3		3.27	1.2	
					-10.4				
939	14.3	429.7	1.05	6.32			3.55	1.5	
942	14.5	430.8	1.23	6.33	-16.4		3.43	1.8	
945	14.5	431.7	1.47	6.33	-23.3		3.4	2.1	
947	14.6	431.9	1.53	6.33	-25.1		3.4	2.4	
	LLECTION D								
Sample Collec	cted With:		Bailer		Pump/Pump Type	_			
Made of:	\sqsubseteq	Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	*	Other							
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR/COI	LORLESS/NO/NS				
Replicate	Temn	Cond	DO	nН	ORP	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Replicate				рН 6.33	(mV)				
1	(° F /° C)	(uS/cm) 431.9	(mg/L)	6.33	(mV) -26.2		(ft) 3.4		
1 2	(°F/°Ĉ) 14.6 14.6	(uS/cm) 431.9 432.0	(mg/L) 1.57 1.59	6.33	-26.2 -26.8		(ft) 3.4 3.4		
1 2 3	(°F/°Ĉ) 14.6 14.6 14.6	(uS/cm) 431.9 432.0 432.1	(mg/L) 1.57 1.59 1.62	6.33 6.33 6.33	(mV) -26.2 -26.8 -27.4		(ft) 3.4 3.4 3.4		
1 2	(°F/°Ĉ) 14.6 14.6	(uS/cm) 431.9 432.0 432.1 432.2	(mg/L) 1.57 1.59 1.62 1.65	6.33 6.33 6.33	-26.2 -26.8 -27.4 -28.1	(NTU)	(ft) 3.4 3.4 3.4 3.4		
1 2 3	(°F/°Ĉ) 14.6 14.6 14.6	(uS/cm) 431.9 432.0 432.1	(mg/L) 1.57 1.59 1.62	6.33 6.33 6.33	(mV) -26.2 -26.8 -27.4		(ft) 3.4 3.4 3.4		
1 2 3 4 Average:	(°F/°Ĉ) 14.6 14.6 14.6 14.6 14.6	(uS/cm) 431.9 432.0 432.1 432.2 432.1	(mg/L) 1.57 1.59 1.62 1.65 1.61	6.33 6.33 6.33 6.33	(mV) -26.2 -26.8 -27.4 -28.1 -27.1	(NTU)	(ft) 3.4 3.4 3.4 3.4 3.40	(Fe II)	
1 2 3 4 Average:	(°F/°Ĉ) 14.6 14.6 14.6 14.6 14.6 TYPICAL A	(uS/cm) 431.9 432.0 432.1 432.2 432.1	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE	6.33 6.33 6.33 6.33 R BOTTLE 7	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle approximation)	(NTU) #DIV/0!	(ft) 3.4 3.4 3.4 3.4 3.40	(Fe II)	
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 14.6 14.6 14.6 (8260) (8010)	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL 0) (8020) (N	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PERMATCH (Mark)	6.33 6.33 6.33 6.33 R BOTTLE 7	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle approximate)	(NTU) #DIV/0!	(ft) 3.4 3.4 3.4 3.40 on-standard ana	(Fe II)	Observations
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 14.6 14.6 (8260) (8010) (8270D) (PA (pH) (Condu	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS)	1.57 1.59 1.62 1.65 1.61 LOWED PER WTPH-G) (NWTP) (TSS) (Be	6.33 6.33 6.33 6.33 RBOTTLE TOWER H-Dx) (TPHOD) (Turbid	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! licable or write no (8141) (Oil & Gre (HCO3/CO3) (CI	(ft) 3.4 3.4 3.4 3.40 3.40 an-standard ana	(Fe II)	Observations OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (c) (H) (NWTPH (ctivity) (TDS (c) (Total PO4)	1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (Be) (Total Kier	6.33 6.33 6.33 6.33 R BOTTLE NWTPH-Gx) H-Dx) (TPH-OD) (Turbid dahl Nitrogen	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle approximately (BTEX) -HCID) (8081)	#DIV/0! licable or write no (8141) (Oil & Gre (HCO3/CO3) (CI	(ft) 3.4 3.4 3.4 3.40 3.40 an-standard ana	(Fe II)	Observations OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (NWTPH ctivity) (TDS (C) (Total PO4 e) (WAD Cyze	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (10 -D) (NWTP) (TSS) (Be)) (Total Kiecanide) (Free	6.33 6.33 6.33 6.33 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle approximately) (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity)	#DIV/0! licable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	(ft) 3.4 3.4 3.4 3.40 on-standard ana case)) (SO4) (NO3)	(Fe II) Ilysis below) WA WA NO2) (F)	Observations OR OR OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL () (8020) (N (H) (NWTPH ctivity) (TDS (C) (Total PO4 e) (WAD Cya (As) (Sb) (I	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PER WTPH-G) (10-D) (NWTP)) (TSS) (BG) (Total Kieck anide) (Free Caride) (Free Caride) (Sa) (Be) (Caride)	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (ctivity) (TDS (c) (Total PO4 (e) (WAD Cyz (d) (As) (Sb) (I (etals) (As) (Sb) (Sb)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PER WTPH-G) (10-D) (NWTP)) (TSS) (BG) (Total Kieck anide) (Free Caride) (Free Caride) (Sa) (Be) (Caride)	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (c) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (e) (tetals) (As) (Sb (g) short list)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (ctivity) (TDS (c) (Total PO4 (e) (WAD Cyz (d) (As) (Sb) (I (etals) (As) (Sb) (Sb)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (c) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (e) (tetals) (As) (Sb (g) short list)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (c) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (e) (tetals) (As) (Sb (g) short list)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average: QUANTITY 3 1	(°F/°C) 14.6 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (c) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (e) (tetals) (As) (Sb (g) short list)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average: QUANTITY 3 1	(°F/°C) 14.6 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (b) (8020) (N (c) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (e) (tetals) (As) (Sb (g) short list)	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 on-standard ana case)) (SO4) (NO3) ii) (Ag) (Se) (T	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (I etals) (As) (Sb g short list) ane Ethene Ac	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free estate in the control of the contro	6.33 6.33 6.33 6.33 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (Mg) (Mg) (Mn) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg) (Mg	(ft) 3.4 3.4 3.4 3.40 3.40 3.40 3.40 3.40 3.	Ilysis below) WA WA NO2) (F)	Observations OR OR OR OR OR OR OR OR OR OR
1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments: Signature:	(°F/°C) 14.6 14.6 14.6 14.6 14.6 14.6 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others GREG NOS	(uS/cm) 431.9 432.0 432.1 432.2 432.1 NALYSIS AL (D) (8020) (N (H) (NWTPH ctivity) (TDS (C) (Total PO4 e) (WAD Cya (AS) (Sb) (I etals) (As) (Sb g short list) ane Ethene Ac	(mg/L) 1.57 1.59 1.62 1.65 1.61 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kieconide) (Free ed) (Sa) (Be) (Ca) (Ba) (Be) (Co) etylene	6.33 6.33 6.33 6.33 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide) (Cyanide) (Cd) (Co) (Ca) (Cd) (Co)	(mV) -26.2 -26.8 -27.4 -28.1 -27.1 IYPE (Circle approximately) (BTEX) -HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (I (Cr) (Cu) (Fe) (Pb)	#DIV/0! #DIV/0! #Icable or write no (8141) (Oil & Gree (HCO3/CO3) (Cl. (HCO3/CO3) (Cl. (HCO3/CO3) (Mg) (Mn) (N	(ft) 3.4 3.4 3.4 3.40 3.40 3.40 3.40 3.40 3.	(Fe II)	Observations OR OR OR OR OR OR OR OR OR OR



Project Name	e <u>:</u>	Boeing Rent	con		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 911			
Sample Num	ber:	RGW249S-	180508		Weather:	50'S, SUNNY			
Landau Repr	esentative:	JHA							
WATER LEV	EL/WELL/PU	RGE DATA							
Well Conditio		Secure (YES)		Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	3.04	Time:	=	Flow through cel	•		GW Meter No.(s	HERON 3
		5/ 8 /2018 @		End Purge:	=	5/ 8 /2018 @ 910		Gallons Purged:	0.5
Purge water di			55-gal Drum	i i	Storage Tank	Ground	Other	SITE TREATMI	
Turge water a	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three	consecutive read	lings within the foll		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
852	14.2	534.0	0.20	6.15	93.7	MED		<0.25	
855	14.2	504.0	0.44	6.22	69.3		3.07	0.25	
858	14.3	485.3	0.63	6.23	56.4				
							3.09	0.5	
901	14.3	479.6	0.76	6.23	50.0		3.09	0.5	
904	14.3	468.0	0.94	6.23	42.3				
907	14.4	463.8	1.09	6.23	36.4				
909	14.4	462.8	1.16	6.23	34.0				
SAMPLE CO	LLECTION D	ATA							
Sample Collec	ted With:		Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	ıl 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Sample Descri	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Sample Descri	Temp	Cond.	D.O.	pH	ORP	Turbidity	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp	Cond.	D.O.		ORP	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm) 462.8	D.O. (mg/L)	рН 6.23	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 14.4 14.4	Cond. (uS/cm) 462.8 462.4	D.O. (mg/L) 1.16 1.17	pH 6.23 6.23	ORP (mV) 33.6 33.3	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 14.4 14.4 14.4	Cond. (uS/cm) 462.8 462.4 462.8 462.2	D.O. (mg/L) 1.16 1.17 1.18 1.18	pH 6.23 6.23 6.23 6.23	ORP (mV) 33.6 33.3 32.8 32.4	Turbidity (NTU)			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6	D.O. (mg/L) 1.16 1.17 1.18 1.18	6.23 6.23 6.23 6.23 6.23	ORP (mV) 33.6 33.3 32.8 32.4 33.0	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL A	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE	6.23 6.23 6.23 6.23 6.23 6.23	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle appression of the content of	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AT (8260) (8010	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PERMOTER OF THE PERMOTER OF T	6.23 6.23 6.23 6.23 6.23 R BOTTLE T	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA	Cond. (uS/cm) 462.8 462.4 462.2 462.2 462.6 NALYSIS AL (b) (8020) (N	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PEI WTPH-G) (iiii)	6.23 6.23 6.23 6.23 6.23 R BOTTLE TONWTPH-GX) H-DX) (TPH	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX)) 6-HCID) (8081)	#DIV/0!	(ft) n-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010) (8270D) (PA (pH) (Condu	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL 0) (8020) (N .H) (NWTPH ctivity) (TDS	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PERWIPH-G) (19 -D) (NWTP) (TSS) (Be	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	(ft) n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N .H) (NWTPH ctivity) (TDS C) (Total PO4	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (19 -D) (NWTP) (TSS) (Be)) (Total Kiece	6.23 6.23 6.23 6.23 6.23 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX)) 6-HCID) (8081)	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Great (HCO3/CO3) (CI)	(ft) n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL () (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyze	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (16-D) (NWTP) (TSS) (Be) (Total Kiecanide) (Free canide)	6.23 6.23 6.23 6.23 6.23 R BOTTLE TONWTPH-GX) H-DX) (TPHOD) (Turbid dlahl Nitrogen) Cyanide)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0! #IDIV/0!	n-standard ana	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL. ()) (8020) (N. (H) (NWTPH ctivity) (TDS) (C) (Total PO4) (e) (WAD Cyal) (As) (Sb) (B)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PEI WTPH-G) (III-IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL. (b) (8020) (N. (c) (NWTPH ctivity) (TDS C.) (Total PO4 ctivity) (TDS C.) (As) (Sb) (Etals) (As) (Sb) (Sb)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PEI WTPH-G) (III-IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL. (b) (8020) (N. (c) (NWTPH ctivity) (TDS C.) (Total PO4 ctivity) (TDS C.) (As) (Sb) (Etals) (As) (Sb) (Sb)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (VOC (Boein)	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) VOC (Boein Methane Eth	Cond. (uS/cm) 462.8 462.4 462.2 462.6 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya o (As) (Sb) (Betals) (As) (Sb) g short list)	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (1 -D) (NWTP) (TSS) (BG) (Total Kiecanide) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca	6.23 6.23 6.23 6.23 6.23 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) (NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/NO3/	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) n-standard ana ase) (SO4) (NO3) (Ag) (Se) (Tl) (V)	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 1 Duplicate San Comments: Signature:	Temp (°F/°C) 14.4 14.4 14.4 14.4 14.4 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others	Cond. (uS/cm) 462.8 462.4 462.8 462.2 462.6 NALYSIS AL. (D) (8020) (N. H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya c) (As) (Sb) (Betals) (As) (Sb) g short list) ane Ethene Acceleration	D.O. (mg/L) 1.16 1.17 1.18 1.18 1.17 LOWED PE WTPH-G) (I -D) (NWTP) (TSS) (Be) (Total Kiec anide) (Free e Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ba) (Be) (Ca JHA	6.23 6.23 6.23 6.23 6.23 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen) Cyanide) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) 33.6 33.3 32.8 32.4 33.0 TYPE (Circle approximately (BTEX) (HCID) (8081) ity) (Alkalinity)) (NH3) (NO3/N (Cr) (Cu) (Fe) (December 1) (Cr) (Cu) (Fe) (Pb	#DIV/0! #DIV/0! #IDIV/0! #IDIV/0!	(ft) n-standard ana ase) (SO4) (NO3) (Ag) (Se) (Tl) (V) 5/8/2018	(Fe II) Alysis below) WA WA (NO2) (F) Cl) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR □ OR □ OR □



Project Nam	ie:	Boeing Ren	ton		Project Number	r:	0025217.099.0	99	
Event:		Quarterly M	Iay 2018		Date/Time:	5/ 8 /2018@			
Sample Nun	nber:	RGW001S-	180508		Weather:	60'S, SUNNY			
Landau Rep	resentative:	JHA							
WATER LEV	/EL/WELL/PU	IRGE DATA							
Well Condition	on:	Secure (YES))	Damaged (N	(O)	Describe:			
DTW Before	Purging (ft)	2.85	Time:	1317	Flow through ce	ll vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 8 /2018 @	@	End Purge:	Date/Time:	5/ 8 /2018 @		Gallons Purged:	
Purge water d	lisposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	NT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa	ıls: Stablizatio +/- 3%		ters for three +/- 0.1 units		dings within the fol +/- 10%	llowing limits < 0.3 ft	>/= 1 flow through cell	
	T/- 3 70	T/- 3 70	T/- 10 /0	T/- 0.1 units	+/- 10 III V	+/- 10 %	< 0.3 It	tiii ougii ceii	
			WATE	ER LEV	VEL ONI	\mathbf{Y}			
			*****		LE OI				
	-				-				
					-				
CAMPI E CC	LLECTION D	A.T.A							
Sample Colle			Bailer		Pump/Pump Type	DED BLADDER			
Made of:	-	Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure.	Alconox Was	_	Tap Rinse	DI Water	Dedicated			
(By Numerica	_	Other	"· <u> </u>	rup remse	□ Di Water	Dedicated			
•	ription (color, t	_	sheen etc.):						
Sumpre Deser	apaon (color, c	arorany, odor,							
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
	(° F /° C)	(uS/cm)	(mg/L)		(mV)	(NTU)	(ft)	(Fe II)	Observations
1									
2									
3									
4									
	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
Average:	#DIV/0:	#DIV/0:	#D1 V/U!	#DIV/U:	#DI V/U:	#DIV/0:			
QUANTITY						plicable or write no	on-standard ana		
		0) (8021) (N							OR 🗆
						(HCO2/CO3) (CI	•		OR 🗆
	1				ity) (Alkalinity) (NH3) (NO3/	(HCO3/CO3) (CI) (SO4) (NO3) (NO2) (F)	
	1	e) (WAD Cy			i, (14113) (14O3)	1104)			
					(Cr) (Cu) (Fe) ((Pb) (Mg) (Mn) (N	(Ii) (Ag) (Se) (T	(I) (V) (Zn) (Hg)	(K) (Na)
	1								(Hardness) (Silica)
	VOC (Boein								
		ane Ethene Ac	etylene						
	others								
Dunlicate Sar	nnle No(s)								
Duplicate Sar Comments:	mple No(s):								



DTW Before Purging (ft) 1.25
Landau Representative
WATER LEVEL/WEIT/PURGE DATA
Data Condition: Secure (YES) Datasged (NO) Describe:
Note Condition Secure (YES)
DTW Before Purging (fi) 1.25
Begin Purge Date/Time 5/8 /2018 @
Purge water disposed to:
Time
Time
Purge Goals: Stabilization of Parameters for three consecutive readings within the following limits
WATER LEVEL ONLY
SAMPLE COLLECTION DATA Sample Collected With: Bailer PVC Teflon Polyethylene Other Dedicated
SAMPLE COLLECTION DATA Sample Collected With: Bailer PVC Teflon Polyethylene Other Dedicated
SAMPLE COLLECTION DATA Sample Collected With: Bailer PVC Teflon Polyethylene Other Dedicated
SAMPLE COLLECTION DATA Sample Collected With: Bailer PVC Teflon Polyethylene Other Dedicated
Sample Collected With:
Made of: □ Stainless Steel □ PVC □ Teflon □ Polyethylene □ Other □ Dedicated Decon Procedure: □ Alconox Wash □ Tap Rinse □ DI Water □ Dedicated (By Numerical Order) □ Other □ Other □ Other Sample Description (color, turbidity, odor, sheen, etc.): □ DI Water □ Dedicated Replicate Temp (°F/°C) Cond. (uS/cm) D.O. pH (mV) Turbidity (NTU) DTW Ferrous iron (Fe II) Commer Observate 1 2 3 □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □
Decon Procedure:
Condition Color Color
Replicate Temp Cond. (mg/L) DRP Turbidity DTW Ferrous iron Commer (°F/°C) (uS/cm) (mg/L) (mV) (NTU) (ft) (Fe II) Observation
Replicate Temp (°F/°C) Cond. (uS/cm) D.O. (mg/L) pH (mV) ORP (nTU) Turbidity (ft) DTW (Fe II) Commer Observation 1 2 3 4
Code Code
Code Code
1 2 3 4 Average: #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
2 3 4 Average: #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA OR
3 4 Average: #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA □ OR □ (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA □ OR □ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
4 Average: #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA □ OR □ (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA □ OR □ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
Average: #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! #DIV/0! QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA OR OR OR OR OR OR OR OR OR O
QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA OR
QUANTITY TYPICAL ANALYSIS ALLOWED PER BOTTLE TYPE (Circle applicable or write non-standard analysis below) (8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA OR
(8260) (8010) (8021) (NWTPH-G) (NWTPH-Gx) (BTEX) WA □ OR □ (8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA □ OR □ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
(8270) (PAH) (NWTPH-D) (NWTPH-Dx) (TPH-HCID) (8081) (8141) (Oil & Grease) WA □ OR □ (pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
(pH) (Conductivity) (TDS) (TSS) (BOD) (Turbidity) (Alkalinity) (HCO3/CO3) (Cl) (SO4) (NO3) (NO2) (F) (COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
(COD) (TOC) (Total PO4) (Total Kiedahl Nitrogen) (NH3) (NO3/NO2)
•
n rocalt vanide) (tw. Alli vanide) (free L. vanide)
(Total Cyanide) (WAD Cyanide) (Free Cyanide) (Total Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na)
(Dissolved Metals) (As) (Sb) (Ba) (Be) (Ca) (Cd) (Co) (Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg) (K) (Na) (Hardness)
VOC (Boeing short list)
Methane Ethane Acetylene
others
·
others Duplicate Sample No(s): Comments:



Project Nam	ne <u>:</u>	Boeing Ren	ton		Project Numbe	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	Iay 2018		Date/Time:	5/ 8 /2018@			
Sample Nun	nber:	RGW005S-	180508		Weather:	60'S, SUNNY			
Landau Rep	resentative:	JHA							
WATER LEV	/EL/WELL/PU	IRGE DATA							
Well Condition	on:	Secure (YES)	Damaged (N	(O)	Describe:			
DTW Before	Purging (ft)		Time:		Flow through cel	l vol.		GW Meter No.(s	HERON 3
Begin Purge:	Date/Time:	5/ 8 /2018	@	End Purge:	Date/Time:	5/8 /2018 @		Gallons Purged:	
Purge water of	lisposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	•	(mV)	(NTU)	(ft)	Volume (gal)	Observations
	Purge Goa	ıls: Stablizati +/- 3%	on of Parame +/- 10%	ters for thre +/- 0.1 units		dings within the fo +/- 10%	llowing limits < 0.3 ft	>/= 1 flow through cell	
	T/- 3 /0	T/- 3 /0	τ/- 10 //	T/- 0.1 units	77- 10 III V	4/- 10 /6	< 0.5 1€	tiii ougii cen	
									<u>, </u>
		***	11	-	1 1/1	4	, •	•1	
		W	ell co	verec	l with c	onstruc	tion tra	aller	
	.								
SAMPLE CO	LLECTION D	ATA							
Sample Colle			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Ste	el	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	dure:	Alconox Wa	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	ul Order)	Other							
Sample Descr	ription (color, t	urbidity, odor	, sheen, etc.):						
D1'4-	Т	C1	D.O.	TT	ODD	T1: 1!4	DTW	Ferrous iron	Comments/
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	(Fe II)	Observations
1	, ,	, ,	\ 0 /			` ,	. ,	, ,	
2									
3						-			
4									
Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AI	LOWED PE	R BOTTLE	TYPE (Circle ap	plicable or write n	on-standard ana	llysis below)	
3			WTPH-G) (WA □	OR 🗆
						(8141) (Oil & Gr		WA □	OR □
						(HCO3/CO3) (C	l) (SO4) (NO3) (NO2) (F)	
1			/) (NH3) (NO3/	NO2)			
			anide) (Free		(Cr) (Cu) (Ea) (Pb) (Mg) (Mn) (N	Ji) (Λα) (Cα) (T	"]) (V) (7n) (H~) (K) (Na)
									a) (Hardness) (Silica)
	VOC (Boein		,, (Du) (Dc) (C	<i>u)</i> (Cu) (C0)	(21) (24) (10) (11	() (1418) (1411) (141) (1	15) (50) (11) (V)	(LII) (118) (IX) (IX	a, (Hardiness) (Silica)
		ane Ethene Ac	cetylene						
	others								
Duplicate Sar	mple No(s)								
Comments:	-	trailer still ov	er well.						
			тил			Data	5/8/2018		

P:\8888 - Boeing Renton\02 Data Management\2018\2Q2018\Field Data\SCFs - Landau Originals\AOC-034&035_5.8.18_JHA.xlsx

Landau Associates



Project Name	e <u>:</u>	Boeing Ren	ton		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 135	51		
Sample Num	ıber:	RGW216S-	180508		Weather:	60'S, SUNNY			
Landau Repr	resentative:	JHA			-				
WATERIEV	'EL/WELL/PU	RGF DATA							
Well Conditio		Secure (YES))	Damaged (N	(1)	Describe:			
DTW Before		3.35	Time:	=	Flow through cel	•		GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	=	5/ 8 /2018 @ 1343	3	Gallons Purged:	0.5
Purge water d		5/ 0 /2010 0	55-gal Drum	i i	Storage Tank	Ground		SITE TREATM	
i uige water u	isposed to.		_		Storage Tank	_		SHE IREATM	ENT STSTEM
Time	Temp (°F/°C)	Cond.	D.O.	pН	ORP	Turbidity (NTU)	DTW (ft)	Internal Purge	
Time		(uS/cm) ls: Stablizatio	(mg/L) on of Parame	ters for three	(mV) consecutive read	dings within the foll		Volume (gal) >/= 1 flow	Observations
	+/- 3%	+/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1333	17.5	340.9	0.05	6.59	46.1	LOW	3.39	< 0.25	
1336	17.6	340.9	0.04	6.60	32.1			0.25	
1339		340.5	0.04	6.60	29.6				
1342	17.5	339.7	0.04	6.61	25.1				
CAMPLE CO	LLECTION D	<u> </u>							
Sample Collection			Bailer		Pumn/Pumn Tyne	DED BLADDER			
Made of:	ica wini.	Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
			_		—		LI Other	Dedicated	
Decon Proced	_	Alconox Was	sh 📋	Tap Rinse	DI Water	Dedicated			
(By Numerica	ı Oraer)	☐ Other							
		. 		ar E . D. Go					
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
		-	_				DTW	Ferrous iron	Comments/
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	CLEAR, CO	ORP (mV)	S Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pH 6.61	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 17.5	Cond. (uS/cm) 339.6 339.4	D.O. (mg/L) 0.05	pH 6.61 6.60	ORP (mV) 25.0 24.8	Turbidity			
Replicate 1	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pH 6.61	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 17.5	Cond. (uS/cm) 339.6 339.4	D.O. (mg/L) 0.05	pH 6.61 6.60	ORP (mV) 25.0 24.8	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 17.5 17.5	Cond. (uS/cm) 339.6 339.4 339.4	D.O. (mg/L) 0.05 0.05	pH 6.61 6.60 6.60	ORP (mV) 25.0 24.8 24.8	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5	Cond. (uS/cm) 339.6 339.4 339.5 339.5	D.O. (mg/L) 0.05 0.05 0.05 0.05	6.61 6.60 6.60 6.60	ORP (mV) 25.0 24.8 24.8 24.7 24.8	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL	D.O. (mg/L) 0.05 0.05 0.05 0.05	pH 6.61 6.60 6.60 6.60 6.60	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle ap)	Turbidity (NTU)	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 17.5 17.5	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 WTPH-G) (1	pH 6.61 6.60 6.60 6.60 6.8 R BOTTLE TANATH-GX	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle approximate)	Turbidity (NTU) #DIV/0! plicable or write no	(ft) n-standard ana	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 17.5 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (b) (8020) (N	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 UOWED PEI WTPH-G) (iiii)	6.61 6.60 6.60 6.60 R BOTTLE T	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle approximately (BTEX) -HCID) (8081)	#DIV/0! blicable or write no	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 17.6 17.5 17.7 17.9	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 LOWED PERWIPH-G) (10 1-D) (NWTP	pH 6.61 6.60 6.60 6.60 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! blicable or write no (8141) (Oil & Green (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL () (8020) (N () (NWTPH (ctivity) (TDS () (Total PO4	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 LOWED PE WTPH-G) (1 -D) (NWTP -C) (TSS) (BC -C) (Total Kiece	6.61 6.60 6.60 6.60 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle approximately (BTEX) -HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Green (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (b) (8020) (N (c) (NWTPH (ctivity) (TDS) (Total PO4 (e) (WAD Cy.	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 LOWED PER (MTPH-G) (MTTPH-G)	6.61 6.60 6.60 6.60 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (NH3) (NO3/1	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (Cl)	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 339.6 339.4 339.4 339.5 339.5 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cy o) (As) (Sb) (1	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 LOWED PER (MTPH-G) (MTP	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cy (As) (Sb) (D etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 LOWED PER (MTPH-G) (MTP	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cy (As) (Sb) (D etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (I-D) (NWTP (S) (TSS) (BC (C) (Total Kieck (anide) (Free Ba) (Be) (Ca (C) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (US/CM)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (I-D) (NWTP (S) (TSS) (BC (C) (Total Kieck (anide) (Free Ba) (Be) (Ca (C) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (US/CM)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (I-D) (NWTP (S) (TSS) (BC (C) (Total Kieck (anide) (Free Ba) (Be) (Ca (C) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (US/CM)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (I-D) (NWTP (S) (TSS) (BC (C) (Total Kieck (anide) (Free Ba) (Be) (Ca (C) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (US/CM)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (S) (TSS) (BC (Total Kieck (anide) (Free Ba) (Be) (Ca (Ca) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (US/CM)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (S) (TSS) (BC (Total Kieck (anide) (Free Ba) (Be) (Ca (Ca) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 17.5 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (US/CM)	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 COWED PE WTPH-G) (NWTP (S) (TSS) (BC (Total Kieck (anide) (Free Ba) (Be) (Ca (Ca) (Ba) (Be) (Ca	pH 6.61 6.60 6.60 6.60 6.60 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San Comments: Signature:	Temp (°F/°C) 17.5 17.5 17.5 17.5 17.5 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth others	Cond. (uS/cm) 339.6 339.4 339.5 339.5 NALYSIS AL (U) (8020) (N (U) (NWTPHED (NOT POAR POAR POAR POAR POAR POAR POAR POAR	D.O. (mg/L) 0.05 0.05 0.05 0.05 0.05 LOWED PE WTPH-G) (I -D) (NWTP E) (Total Kiecanide) (Free et Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ba) (Be) (Ca JHA	pH 6.61 6.60 6.60 6.60 R BOTTLE T NWTPH-GX) H-DX) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) (a) (Cd) (Co)	ORP (mV) 25.0 24.8 24.8 24.7 24.8 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity) ity) (Alkalinity) (Cr) (Cu) (Fe) ((Cr) (Cu) (Fe) (Pb	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	(ft) n-standard ana ase) (SO4) (NO3) (i) (Ag) (Se) (Tl) (V) (g) (Se) (Tl) (V)	(Fe II) Alysis below) WA WA (NO2) (F) Cl) (V) (Zn) (Hg) (Zn) (Hg) (K) (N	Observations OR □ OR □ OR □



Project Nam	ie:	Boeing Ren	ton		Project Number	r <u>:</u>	0025217.099.0	99	
Event:		Quarterly M	Tay 2018		Date/Time:	5/ 8 /2018@ 142	26		
Sample Nun	nber:	RGW217S-	180508		Weather:	60'S, SUNNY			
Landau Repr	resentative:	JHA							
WATER LEV	/EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before		3.69	Time:	_	Flow through cel	•		GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	=	5/ 8 /2018 @ 1419	9	Gallons Purged:	0.75
Purge water d			55-gal Drum		Storage Tank	Ground		SITE TREATMI	
r arge water a	•		_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three	consecutive reac	dings within the following		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1406	18.4	194.7	0.42	6.50	38.8	LOW	3.69		
1409	19.1	231.7	0.19	6.45	37.7		3.69	0.25	
1412	19.9	250.5	0.14	6.45					
1415		251.5	0.13	6.45	26.5		3.69	0.5	
1418	20.2	249.6	0.13	6.47	21.1				
SAMPLE CO	LLECTION D	ATA							
Sample Colle			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	el 🗖	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 🗖	Tap Rinse	DI Water	Dedicated		_	
(By Numerica	_	Other			ш				
Sample Descr	,					S			
Sample Descr	,				LORLESS, NO/N	S			
Sample Descr Replicate	ription (color, t	urbidity, odor,	sheen, etc.):		LORLESS, NO/N	Turbidity	DTW	Ferrous iron	Comments/
	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N		DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	ription (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	b.O. (mg/L)	CLEAR, CO	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 20.3	Cond. (uS/cm) 249.2 249.3	D.O. (mg/L) 0.13	pH 6.47 6.47	ORP (mV) 21.0	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 20.3 20.3	Cond. (uS/cm) 249.2 249.3 248.9	D.O. (mg/L) 0.13 0.13	CLEAR, CO pH 6.47 6.47 6.47	ORP (mV) 21.0 21.0 20.4	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 20.3 20.3 20.3	Cond. (uS/cm) 249.2 249.3 248.9 249.0	D.O. (mg/L) 0.13 0.13 0.13	pH 6.47 6.47 6.47 6.45	ORP (mV) 21.0 21.0 20.4 20.2	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 20.3 20.3	Cond. (uS/cm) 249.2 249.3 248.9	D.O. (mg/L) 0.13 0.13	CLEAR, CO pH 6.47 6.47 6.47	ORP (mV) 21.0 21.0 20.4	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1	D.O. (mg/L) 0.13 0.13 0.13 0.13	CLEAR, CO pH 6.47 6.47 6.45 6.47	ORP (mV) 21.0 21.0 20.4 20.2	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1	D.O. (mg/L) 0.13 0.13 0.13 0.13 1.13 0.13 0.13	CLEAR, CO pH 6.47 6.47 6.45 6.47 R BOTTLE	ORP (mV) 21.0 20.4 20.2 20.7	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 20.3 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 UNTPH-G) (MTPH-G) (MTPH-G) (MTPH-G)	PH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-DX) (TPH	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX)) 1-HCID) (8081)	#DIV/0! blicable or write no	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL (b) (8020) (No. H) (NWTPH ctivity) (TDS)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PEL WTPH-G) (10 1-D) (NWTP	CLEAR, CO pH 6.47 6.47 6.45 6.47 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle app (BTEX) 1-HCID) (8081) ity) (Alkalinity)	#DIV/0! blicable or write no (8141) (Oil & Green (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL 0) (8020) (N CH) (NWTPH ctivity) (TDS C) (Total PO4	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 COMED PER (MTPH-G) (MTP	CLEAR, CO pH 6.47 6.47 6.45 6.45 6.47 R BOTTLE TOWTPH-GX) H-DX) (TPH-OD) (Turbid dahl Nitrogen	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX)) 1-HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Green (HCO3/CO3) (CI)	n-standard ana	(Fe II) alysis below) WA □ WA □	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cy.	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 CLOWED PER (WTPH-G) (I-D) (NWTP (S) (TSS) (Beta) (Free (anide) (Free (a	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle app (BTEX) I-HCID) (8081) ity) (Alkalinity) ity) (NH3) (NO3/1	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gre (HCO3/CO3) (Cl)	n-standard ana ase) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals)	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL ()) (8020) (N C) (Total PO4 e) (WAD Cyc) () (As) (Sb) (1	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 CLOWED PE (WTPH-G) (MTPH-G) (MTP	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N CH) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyc) () (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 CLOWED PE (WTPH-G) (MTPH-G) (MTP	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (g short list)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N CH) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyc) () (As) (Sb) (Setals) (As) (Sb) (Sb)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (g short list)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein Methane Eth	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (g short list)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (g short list)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Methane Eth	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (g short list)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Methane Eth	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (g short list)	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate Sar	Temp (°F/°C) 20.3 20.3 20.3 20.3 20.3 20.3 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Methane Eth	Cond. (uS/cm) 249.2 249.3 248.9 249.0 249.1 NALYSIS AL () (8020) (N () (NWTPH () (TDS () (Total PO4 (e) (WAD Cy) () (As) (Sb) (Setals) (As) (Sb) (Setals) (As) (Sb) (Setals) (Ss) (Setals) (As) (Sb) (Setals) (As) (Setals) (As) (Sb) (Setals) (As) (As) (Setals) (As) (As) (As) (As) (As) (As) (As) (A	D.O. (mg/L) 0.13 0.13 0.13 0.13 0.13 LOWED PER (WTPH-G) (MYTPH-G) (MYT	pH 6.47 6.47 6.45 6.47 R BOTTLE TOWNTPH-GX) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 21.0 21.0 20.4 20.2 20.7 TYPE (Circle approximately (BTEX) 1-HCID) (8081) (NO3/10) (NH3) (NO3/10) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Green (HCO3/CO3) (Cl) NO2) Pb) (Mg) (Mn) (Ni	n-standard ana ase) (SO4) (NO3	Hysis below) WA WA WO (NO2) (F)	Observations OR □ OR □ OR □



Project Nam	e:	Boeing Ren	ton		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 08 /2018@	1354		
Sample Num	nber:	RGW218S-	180508		Weather:	SUNNY 75F			
Landau Repr	resentative:	GJN							
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELL LOCK	W/ CAP	
DTW Before		2.62	Time:	=	Flow through cell			GW Meter No.(s	2.
	Date/Time:			End Purge:	_	5/ 08 /2018 @	1348	Gallons Purged:	1.8
Purge water d			55-gal Drum	Ě	Storage Tank	Ground		SITE TREATMI	
r arge water a	•								
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three		lings within the fo		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	LIGHT BROWN/MED
1333	14.6	127.8	0.62	7.36	37.2		2.7	0.3	TURB/ NO/NS
1336	15.9	131.2	0.31	7.15	41.6		2.7	0.6	
1339		131.2	0.20	7.00	39.2		2.69	0.9	
									-
1342	15.9	132.5	0.16	6.95	33.1		2.69	1.2	
1345	15.9	132.7	0.15	6.89	27.3		2.69	1.5	
1348	15.8	132.8	0.14	6.87	24.8		2.7	1.8	
	-								
SAMPLE CO	LLECTION D	ΔΤΔ							
Sample Collection			Bailer		Pump/Pump Type	BLADDER			
Made of:		Stainless Stee		PVC	_	Polyethylene	Other	Dedicated	
Decon Proced		Alconox Was		Tap Rinse	—	Dedicated	<u> </u>	-X	
(By Numerica	_	Other	""	rap Kinse	□ Di Water	Dedicated			
(D) I tunter tea									
Sample Descr			sheen etc.):	BROWN W/	TURRID MIXTU	IRE/ HIGH TURE	/NO/NS		
Sample Descr			sheen, etc.):	BROWN W/	TURBID MIXTU	IRE/ HIGH TURB.	/NO/NS		
Sample Descr Replicate	ription (color, t		sheen, etc.):	BROWN W/	TURBID MIXTU	Turbidity	/NO/NS DTW	Ferrous iron	Comments/
	ription (color, t	urbidity, odor,	_					Ferrous iron (Fe II)	Comments/ Observations
	ription (color, t	urbidity, odor,	D.O.		ORP	Turbidity	DTW		
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pH 6.87	ORP (mV)	Turbidity	DTW		
Replicate 1 2	Temp (°F/°C) 15.8 15.7	Cond. (uS/cm) 132.8	D.O. (mg/L) 0.14	pH 6.87 6.87	ORP (mV) 24.4 23.7	Turbidity	DTW		
Replicate 1 2 3	Temp (°F/°C) 15.8 15.7	Cond. (uS/cm) 132.8 132.8 132.8	D.O. (mg/L) 0.14 0.14	pH 6.87 6.87 6.87	ORP (mV) 24.4 23.7 23.3	Turbidity	DTW		
Replicate 1 2	Temp (°F/°C) 15.8 15.7	Cond. (uS/cm) 132.8	D.O. (mg/L) 0.14	pH 6.87 6.87 6.87 6.86	ORP (mV) 24.4 23.7	Turbidity	DTW		
Replicate 1 2 3	Temp (°F/°C) 15.8 15.7	Cond. (uS/cm) 132.8 132.8 132.8	D.O. (mg/L) 0.14 0.14	pH 6.87 6.87 6.87	ORP (mV) 24.4 23.7 23.3	Turbidity	DTW		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7	Cond. (uS/cm) 132.8 132.8 132.8 132.8 132.8	D.O. (mg/L) 0.14 0.14 0.14 0.14	6.87 6.87 6.87 6.86 6.87	ORP (mV) 24.4 23.7 23.3 22.8 23.6	Turbidity (NTU) #DIV/0!	DTW (ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 TYPICAL A	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14	6.87 6.87 6.87 6.86 6.87	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximation of the company	Turbidity (NTU)	DTW (ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 COWED PERMITTED (MTPH-G) (MTPH-G)	6.87 6.87 6.86 6.87 R BOTTLE T	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximate)	Turbidity (NTU) #DIV/0!	DTW (ft) 2.62 on-standard ana	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 15.7 15.7 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PEI WTPH-G) (iii-D) (NWTP	6.87 6.87 6.86 6.87 R BOTTLE 1 NWTPH-Gx) H-Dx) (TPH	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX)) (-HCID) (8081)	Turbidity (NTU) #DIV/0!	DTW (ft) 2.62 Dn-standard ana ease)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 132.8 132.8 132.8 132.8 132.7 132.8 NALYSIS AL (b) (8020) (Nath) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.14 0.14 0.14 0.14 COWED PERWIPH-G) (MATPH-G) (M	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX)) (-HCID) (8081)	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Groth (HCO3/CO3) (CI	DTW (ft) 2.62 Dn-standard ana ease)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 15.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 132.8 132.8 132.8 132.8 132.7 132.8 NALYSIS AL (b) (8020) (Nath) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.14 0.14 0.14 0.14 1.14 0.14 1.14 1.14 1.10 1.15	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle app (BTEX) -HCID) (8081) ity) (Alkalinity)	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Groth (HCO3/CO3) (CI	DTW (ft) 2.62 Dn-standard ana ease)	(Fe II)	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cy.	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (1-D) (NWTP E) (TSS) (Be e) (Total Kiecanide) (Free	6.87 6.87 6.86 6.87 R BOTTLE TO NWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen) Cyanide)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! #DIV/0! licable or write not (8141) (Oil & Groth (HCO3/CO3) (CI	DTW (ft) 2.62 Dn-standard ana ease)) (SO4) (NO3	(Fe II) alysis below) WA WA O (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya) o) (As) (Sb) (I	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 CLOWED PER (MTPH-G) (MT	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 132.8 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH ctivity) (TDS (C) (Total PO4 (e) (WAD Cyc) () (As) (Sb) (I (etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 CLOWED PER (MTPH-G) (MT	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 132.8 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH ctivity) (TDS (C) (Total PO4 (e) (WAD Cyc) () (As) (Sb) (I (etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals)	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Methane Eth	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Methane Eth	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL ()) (8020) (N (H) (NWTPH (ctivity) (TDS (C) (Total PO4 (e) (WAD Cya (d) (As) (Sb) (1 (etals) (As) (Sb) (g short list)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San Comments:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein, Methane Eth others mple No(s):	Cond. (uS/cm) 132.8 132.8 132.8 132.8 132.7 132.8 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya) 0 (As) (Sb) (10 etals) (As) (Sb g short list) ane Ethene Ac	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kiecanide) (Free Ba) (Be) (Ca Ba) (Be) (Ca	6.87 6.87 6.86 6.87 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! #In the property of the prop	2.62 2.62	Hysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San Comments: Signature:	Temp (°F/°C) 15.8 15.7 15.7 15.7 15.7 15.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Me VOC (Boein, Methane Eth others mple No(s): GREG NOS	Cond. (uS/cm) 132.8 132.8 132.8 132.7 132.8 NALYSIS AL (WS/cm) 132.8 132.8 132.7 132.8 NALYSIS AL (WS/cm) (WS/cm)	D.O. (mg/L) 0.14 0.14 0.14 0.14 0.14 LOWED PE WTPH-G) (II-D) (NWTP E) (TSS) (BG E) (Total Kiecanide) (Free Ba) (Be) (Ca E) (Ba) (Be) (Ca E) (Ba) (Be) (Ca Etylene	6.87 6.87 6.86 6.87 R BOTTLE T NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co) da) (Cd) (Co)	ORP (mV) 24.4 23.7 23.3 22.8 23.6 TYPE (Circle approximately (BTEX) (HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I (Cr) (Cu) (Fe) (Pb)	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.62 2.62 2.62 2.62 2.62 2.62 2.62 2.62	(Fe II) WA	Observations OR □ OR □ OR □



Project Nam	e:	Boeing Rent	ton		Project Number	:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 08 /2018@	1435		
Sample Num	nber:	RGW251S-	180508		Weather:	SUNNY 75F			
Landau Repr	resentative:	GJN							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Condition		Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	WELLCAP W/	LOCK	
DTW Before	Purging (ft)	2.72	Time:	_	Flow through cell			GW Meter No.(s	2
	Date/Time:			End Purge:		5/ 08 /2018 @	1429	Gallons Purged:	1.8
Purge water d			55-gal Drum	Š	Storage Tank	Ground		SITE TREATMI	
r argo water a	•								
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
			on of Parame	ters for three		lings within the fo		>/= 1 flow	Observations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
1414	15.0	129.9	1.10	7.05	34.1		2.74	0.3	
1417	16.6	127.3	0.61	6.82	38.4		2.74	0.6	
1420	17.3	124.7	0.46	6.80	33.4		2.74	0.9	
1423		120.0	0.30	6.92	22.9		2.75	1.2	
1426	18.0	118.9	0.28	6.94	18.0		2.74	1.5	
1429	17.7	116.5	0.25	6.93	14.5		2.74	1.8	
SAMPLE CO	LLECTION D	ATA							
Sample Collec	cted With:		Bailer	₩	Pump/Pump Type	BLADDER			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	sh 🗖	Tap Rinse	DI Water	Dedicated		^	
(By Numerica	1 Ordar)	□ 041			_	′Λ			
(by Numerica	i Oraer)	Other							
		_	sheen, etc.):	CLEAR/COI	LORLESS/NO/NS				
Sample Descr	iption (color, t	urbidity, odor,	_						
	iption (color, t	urbidity, odor,	D.O.	CLEAR/COI	ORP	Turbidity	DTW	Ferrous iron	Comments/
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)		(ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descr	iption (color, t	urbidity, odor,	D.O. (mg/L)	рН 6.92	ORP (mV)	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity	(ft)		
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm) 116.1	D.O. (mg/L)	рН 6.92	ORP (mV)	Turbidity	(ft)		
Sample Descr Replicate 1 2	Temp (°F/°C) 17.7	Cond. (uS/cm) 116.1 115.8	D.O. (mg/L) 0.25	pH 6.92 6.92	ORP (mV) 14.0 13.9	Turbidity	(ft)		
Replicate 1 2 3 4	Temp (°F/°C) 17.7 17.7 17.7	Cond. (uS/cm) 116.1 115.8 115.6 115.3	D.O. (mg/L) 0.25 0.24 0.24	6.92 6.92 6.92 6.91	ORP (mV) 14.0 13.9 13.7 13.5	Turbidity (NTU)	(ft) 2.74		
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7	Cond. (uS/cm) 116.1 115.8 115.6 115.3	D.O. (mg/L) 0.25 0.24 0.24 0.23	6.92 6.92 6.92 6.91 6.92	ORP (mV) 14.0 13.9 13.7 13.5 13.8	Turbidity (NTU) #DIV/0!	(ft) 2.74	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL A	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PE	pH 6.92 6.92 6.92 6.91 6.92 R BOTTLE 7	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximation of the content	Turbidity (NTU)	(ft) 2.74	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 17.7 17.7 17.	Cond. (uS/cm) 116.1 115.8 115.6 115.7 NALYSIS AL () (8020) (N	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PER	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximate)	Turbidity (NTU) #DIV/0!	(ft) 2.74 2.74 2.74 2.74	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA	Cond. (uS/cm) 116.1 115.8 115.6 115.7 NALYSIS AL (NWTPH	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PEI WTPH-G) (MTPH-G) (MTTPH-G) (MTTP	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-GX) H-DX) (TPH	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX)) 1-HCID) (8081)	#DIV/0!	(ft) 2.74 2.74 2.74 on-standard ana ease)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL 0) (8020) (N AH) (NWTPH ctivity) (TDS	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PERWIPH-G) (MATPH-G) (NWTPH-G) (MATPH-G) (M	6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle app (BTEX) 1-HCID) (8081) ity) (Alkalinity)	#DIV/0! slicable or write not (8141) (Oil & Gra (HCO3/CO3) (CI	(ft) 2.74 2.74 2.74 on-standard ana ease)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 17.7 17.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL 0) (8020) (N AH) (NWTPH ctivity) (TDS C) (Total PO4	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PER WITPH-G) (NWTPH-G) (NWTPH-G) (TSS) (BGC) (Total Kieck)	6.92 6.92 6.91 6.92 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX)) 1-HCID) (8081)	#DIV/0! slicable or write not (8141) (Oil & Gra (HCO3/CO3) (CI	(ft) 2.74 2.74 2.74 on-standard ana ease)	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid	Cond. (uS/cm) 116.1 115.8 115.6 115.7 NALYSIS AL 0) (8020) (N AH) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cyx	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PER WTPH-G) (March 19 (6.92 6.92 6.91 6.92 R BOTTLE TOWTPH-GX) H-DX) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N	#DIV/0! slicable or write not (8141) (Oil & Gra (HCO3/CO3) (CI	2.74 2.74 2.74 2.74 2.74 2.74 2.74 2.88e) 2.80 2.80 3.80	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 116.1 115.8 115.6 115.7 NALYSIS AL 0) (8020) (N H) (NWTPH ctivity) (TDS C) (Total PO4 e) (WAD Cya d) (As) (Sb) (I	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PER (MTPH-G) (MTPH-G) (MTSS) (MTPH-G) (MTSS) (MTPH-G) (MTSS) (MT	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOG (Total Cyanid (Total Metals)	Cond. (uS/cm) 116.1 115.8 115.6 115.7 NALYSIS AL ()) (8020) (N ()H) (NWTPH (ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (I etals) (As) (Sb)	D.O. (mg/L) 0.25 0.24 0.23 0.24 LOWED PER (MTPH-G) (MTPH-G) (MTSS) (MTPH-G) (MTSS) (MTPH-G) (MTSS) (MT	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 116.1 115.8 115.6 115.7 NALYSIS AL ()) (8020) (N ()H) (NWTPH (ctivity) (TDS () (Total PO4 e) (WAD Cya () (As) (Sb) (I etals) (As) (Sb)	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS) (TDS (MALYSIS) (TDS (MALYSIS) (TOS	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS) (TDS (MALYSIS) (TDS (MALYSIS) (TOS	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL Al (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS) (TDS (MALYSIS) (TDS (MALYSIS) (TOS	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Others	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS) (TDS (MALYSIS) (TDS (MALYSIS) (TOS	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3 Duplicate San	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Others	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS AL (MALYSIS) (TDS (MALYSIS) (TDS (MALYSIS) (TOS	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 17.7 17.7 17.7 17.7 17.7 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Dissolved Metals) (Others	Cond. (uS/cm) 116.1 115.8 115.6 115.3 115.7 NALYSIS AL (WAD Cya) (WAD Cya) (WAD Cya) (As) (Sb) (Itetals) (As) (Sb) g short list) ane Ethene Ac	D.O. (mg/L) 0.25 0.24 0.24 0.23 0.24 LOWED PER (WTPH-G) (NWTPH-G) (TSS) (BG) (Total Kieckanide) (Free Ba) (Be) (Call (Ca	6.92 6.92 6.92 6.91 6.92 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 14.0 13.9 13.7 13.5 13.8 TYPE (Circle approximately (BTEX) 1-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/N (Cr) (Cu) (Fe) (I	#DIV/0! #DIV/0! plicable or write not (8141) (Oil & Gra (HCO3/CO3) (CINO2) Pb) (Mg) (Mn) (N	2.74 2.74	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □ OR □



Project Name	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 8 /2018@ 816	<u> </u>		
Sample Num	ber:	10-71-MW1	•		Weather:	50'S, SUNNY			
Landau Repr	esentative:	JHA			•				
WATER LEV	EL/WELL/PU	IRGE DATA							
Well Conditio		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before I	Purging (ft)	6.69	Time:	_	Flow through cel	l vol.		GW Meter No.(s	HERON 3
		5/ 8 /2018 @	9 752	End Purge:	=	5/ 8/2018 @ 813		Gallons Purged:	
Purge water di	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	tous fou thus	(mV)	(NTU) dings within the foll	(ft)	Volume (gal) >/= 1 flow	Observations
	+/- 3%	us: Stabiizauc +/- 3%		+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
755	13.8	165.8	0.33	5.89	102.6	LOW	6.69	<0.25	
758	13.8	173.2	0.32	5.92	100.0		6.69		
801	13.9	174.0	0.40	6.01	91.9			0.25	
804	13.9	173.9	0.43	6.03	89.0				
807	13.9	173.9	0.43	6.05	85.8				
810	14.0	174.2	0.54	6.08	81.9			0.5	
								0.3	
812	14.0	174.3	0.58	6.09	79.2				
SAMPLE CO	I I ECTION D	ΛΤΛ							
Sample Collect			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee	ı 📮	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	ure:	Alconox Was	h 🗖	Tap Rinse	DI Water	Dedicated		_	
(By Numerica	l Order)	Other	<u>—</u>						
Sample Descr	iption (color, t	urbidity, odor,	sheen, etc.):	CLEAR, CO	LORLESS, NO/N	S			
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
Керпсис	(°F/°C)	(uS/cm)	(mg/L)	pm	(mV)	(NTU)	(ft)	(Fe II)	Observations
1	14.0	174.3	0.59	6.09	78.9				
2	14.0	174.3	0.60	6.09	78.9				
3	14.0	174.3	0.60	6.09	78.8				
4	14.0	174.4	0.60	6.09	78.3				
Average:	14.0	174.3	0.60	6.09	78.7	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AL	LOWED PE	R BOTTLE	FYPE (Circle an	plicable or write no	n-standard ana	alvsis below)	
3)) (8020) (N						WA □	OR 🗆
	(8270D) (PA	AH) (NWTPH	I-D) (NWTP	H-Dx) (TPH	I-HCID) (8081)	(8141) (Oil & Grea	ase)	wa □	OR □
	(pH) (Condu	ctivity) (TDS) (TSS) (B	OD) (Turbid	ity) (Alkalinity)	(HCO3/CO3) (Cl)	(SO4) (NO3	(NO2) (F)	
) (NH3) (NO3/	NO2)			
		e) (WAD Cya			(C) (C) (E) (DI A A A A A A A A A A A A A A A A A A A) (A) (C) (F		(II) (NI)
						Pb) (Mg) (Mn) (Ni			a) (Hardness) (Silica)
	VOC (Boein) (Da) (Dc) (C	<i>(cu)</i> (<i>co)</i>	(C1) (Cu) (1 c) (1 t) (Mg) (Mii) (M	.g) (3C) (11) (v)	(Zii) (Tg) (K) (T	a) (Hardness) (Sinea)
		ane Ethene Ac	etylene						
	others								
Duplicate San	nple No(s):								
Comments:	-								
Signature:	<u></u>	<u></u>	JHA			Date:	5/8/2018		



Project Nam	e:	Boeing Ren	ton		Project Number	·•	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 8 /2018@ 740	5		
Sample Nun	nber:	10-71-MW2	180508		Weather:	50'S, SUNNY			
Landau Repr	resentative:	JHA			·-				
WATER LEV	EL/WELL/PU	RGE DATA							
Well Condition		Secure (YES))	Damaged (N	O)	Describe:			
DTW Before		7.92	Time:	_	Flow through cel			GW Meter No.(s	HERON 3
	Date/Time:			End Purge:	=	5/ 8/2018@743		Gallons Purged:	
Purge water d			55-gal Drum	Ě	Storage Tank	Ground		SITE TREATM	
range water a			_		_				
Time	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Internal Purge Volume (gal)	Comments/ Observations
Time				ters for three		dings within the fol		>/= 1 flow	Obsci vations
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
725	14.0	180.6	0.40	5.73	115.4	MED	5.95	<0.25	
728	14.0	183.9	0.32	5.67	117.4		5.95		
731		184.1	0.40	5.72					
734	14.0	184.2	0.38	5.77	113.2		5.95		
737	14.0	184.1	0.48	5.81	109.8	LOW			
740	14.0	184.1	0.55	5.84	107.4			0.5	
742	13.9	183.8	0.63	5.87	104.5				
SAMPLE CO	LLECTION D	ATA							
Sample Collec			Bailer		Pump/Pump Type	DED BLADDER			
Made of:		Stainless Stee		PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	_	Tap Rinse	DI Water	Dedicated		_	
(By Numerica		Other	··· •	rup remse	□ Di ,, utei	Bedieuted			
(2) 111111111111111111111111111111111111		ш отте							
Sample Descr	ription (color, t	urbidity, odor.	sheen, etc.):	CLOUDY, C	OLORLESS, NO.	/NS			
Sample Descr	ription (color, to	urbidity, odor,	sheen, etc.):	CLOUDY, C	COLORLESS, NO.	/NS			
Sample Descr Replicate	Temp	urbidity, odor,	sheen, etc.):	pH	ORP	/NS Turbidity	DTW	Ferrous iron	Comments/
		-	_				DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
	Temp	Cond.	D.O.		ORP	Turbidity			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 13.9	Cond. (uS/cm) 183.8 183.8	D.O. (mg/L) 0.63	pH 5.87 5.87	ORP (mV) 104.2 104.1	Turbidity			
Replicate 1 2 3	Temp (°F/°C) 13.9 13.9	Cond. (uS/cm) 183.8 183.8	D.O. (mg/L) 0.63 0.64	pH 5.87 5.87 5.88	ORP (mV) 104.2 104.1 103.7	Turbidity			
Replicate 1 2 3 4	Temp (°F/°C) 13.9 13.9 13.9	Cond. (uS/cm) 183.8 183.8 183.7	D.O. (mg/L) 0.63 0.64 0.65	pH 5.87 5.87 5.88 5.88	ORP (mV) 104.2 104.1 103.7 103.5	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 13.9 13.9	Cond. (uS/cm) 183.8 183.8	D.O. (mg/L) 0.63 0.64	pH 5.87 5.87 5.88	ORP (mV) 104.2 104.1 103.7	Turbidity			
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9	Cond. (uS/cm) 183.8 183.8 183.7 183.7	D.O. (mg/L) 0.63 0.64 0.65 0.66	pH 5.87 5.87 5.88 5.88 5.88	ORP (mV) 104.2 104.1 103.7 103.5	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9	Cond. (uS/cm) 183.8 183.8 183.7 183.7 183.8	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65	pH 5.87 5.88 5.88 5.88 R BOTTLE	ORP (mV) 104.2 104.1 103.7 103.5 103.9	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 TYPICAL AN (8260) (8010	Cond. (uS/cm) 183.8 183.7 183.7 183.8 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE	5.87 5.88 5.88 5.88 5.88 NWTPH-GX	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle ap) (BTEX)	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 TYPICAL AT (8260) (8010 (8270D) (PA	Cond. (uS/cm) 183.8 183.7 183.7 183.8 NALYSIS AL (b) (8020) (N	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PEI WTPH-G) (10-D) (NWTP	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081)	Turbidity (NTU) #DIV/0!	n-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOO	Cond. (uS/cm) 183.8 183.7 183.7 183.8 NALYSIS AL ()) (8020) (N ().H) (NWTPHotivity) (TDS) (C) (Total PO4)	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (1	5.87 5.88 5.88 5.88 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle approximately (BTEX) 1-HCID) (8081)	#DIV/0! blicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana	(Fe II)	Observations OR OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 TYPICAL AT (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide	Cond. (uS/cm) 183.8 183.7 183.7 183.8 NALYSIS AL (b) (8020) (N (c) (NWTPH (ctivity) (TDS) (T) (Total PO4 (e) (WAD Cy.	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PER (MTPH-G) (MTTPH-G)	5.87 5.88 5.88 5.88 NWTPH-Gx) H-Dx) (TPHOD) (Turbid dahl Nitrogen Cyanide)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1)	#DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	(Fe II) alysis below) WA WA (NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals)	Cond. (uS/cm) 183.8 183.7 183.7 183.8 NALYSIS AL (b) (8020) (N (c) (NWTPHetivity) (TDS) (c) (Total PO4 (e) (WAD Cye (c) (As) (Sb) (6)	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PEL WTPH-G) (Martin (Martin Martin Ma	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (b) (8020) (N (c) (NWTPH) (ctivity) (TDS (c) (Total PO4 (e) (WAD Cy (d) (As) (Sb) (d) (etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PEL WTPH-G) (Martin (Martin Martin Ma	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanida (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanida (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (b) (8020) (N (c) (NWTPH) (ctivity) (TDS (c) (Total PO4 (e) (WAD Cy (d) (As) (Sb) (d) (etals) (As) (Sb) (Sb)	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanida (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanid (Total Metals) (Dissolved Me VOC (Boeing Methane Ethe	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanida (Total Metals) (Dissolved Metals)	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethe	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethe	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! #DIV/0! plicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.9 13.9 13.9 13.9 13.9 13.9 TYPICAL AI (8260) (8010 (8270D) (PA (pH) (Condu (COD) (TOC (Total Cyanide (Total Metals) (Dissolved Metals) VOC (Boeing Methane Ethe	Cond. (uS/cm) 183.8 183.7 183.7 183.7 183.8 NALYSIS AL (MALYSIS AL (MALY	D.O. (mg/L) 0.63 0.64 0.65 0.66 0.65 LOWED PE WTPH-G) (NWTP G) (TSS) (BG c) (Total Kieckanide) (Free Ba) (Be) (Ca	5.87 5.88 5.88 5.88 5.88 R BOTTLE 7 NWTPH-Gx) H-Dx) (TPH OD) (Turbid dahl Nitrogen Cyanide)) (Cd) (Co)	ORP (mV) 104.2 104.1 103.7 103.5 103.9 TYPE (Circle app (BTEX) (-HCID) (8081) ity) (Alkalinity) (NH3) (NO3/1) (Cr) (Cu) (Fe) (#DIV/0! #DIV/0! blicable or write no (8141) (Oil & Gree (HCO3/CO3) (CI	n-standard ana ase)) (SO4) (NO3	Ilysis below) WA WA NO2) (F)	Observations OR □ OR □ OR □



Project Nam	e:	Boeing Ren	ton		Project Numbe	r:	0025217.099.0	99	
Event:		Quarterly M	1 ay 2018		Date/Time:	5/ 08/2018@	749		
Sample Nun	nber:	10-71-MW	4 180508		Weather:	CLEAR 60 F			
Landau Repr	resentative:	GJN							
WATER LEV	'EL/WELL/PU	IRGE DATA							
Well Condition	on:	Secure (YES	or NO)	Damaged (Y	ES or NO)	Describe:	LARGE WELL	MOUNT SITTIN	IG ON WELL
DTW Before	Purging (ft)	7.74	Time:	735	Flow through cel	0.3		GW Meter No.(s	2
Begin Purge:	Date/Time:	5/ 08/2018	@0736	End Purge:	Date/Time:	5/ 08/2018@	748	Gallons Purged:	1.5
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATME	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	4 C 4]	(mV)	(NTU)	(ft)	Volume (gal) >/= 1 flow	Observations
	+/- 3%	us: Stabiizau +/- 3%	on of Parame +/- 10%	+/- 0.1 units		dings within the fo +/- 10%	< 0.3 ft	through cell	
736	14.0	231.2	0.62	5.88	134.0		7.8	0.3	
739		229.5	0.58	5.88	125.6	-	7.8	0.6	
			0.53				7.70	0.9	
742		228.9		5.91	116.2				
745	14.0	229.2	0.57	5.94	229.2	-	7.79	1.2	
748	14.0	227.9	0.80	5.98	227.8		7.8	1.5	
						_			
							·		
	LLECTION D	ATA							
Sample Collec	cted With:		Bailer		Pump/Pump Type				
Made of:	빌	Stainless Ste	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	_	Alconox Wa	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	,	Other		GLEAD/GO	L ODI EGGRIORI	,			
Sample Descr	iption (color, t	urbidity, odor	, sheen, etc.):	CLEAR/CO	LORLESS/NO/NS	<u> </u>			
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	14.0	227.7	0.84	5.97	97.7		7.8		
2	14.0	227.7	0.84	5.98	96.3		7.8		
3	14.0	227.7	0.89	5.99	94.9	-	7.8		
4	14.0	227.7	0.92	5.99	93.7		7.8		
Average:	14.0	227.7	0.87	5.98	95.7	#DIV/0!	7.80		
	1								
						plicable or write n	on-standard ana	_	OD [
3			WTPH-G) ((8141) (Oil & Gr	ranca)	WA □ WA □	OR □ OR □
						(HCO3/CO3) (C			OK L
) (NH3) (NO3/		5) (2 2 3) (2 . 2 2	/ (= - = - / (= /	
	(Total Cyanid	e) (WAD Cy	ranide) (Free	Cyanide)					
	(Total Metals)	(As) (Sb) (Ba) (Be) (Ca	(Cd) (Co)	(Cr) (Cu) (Fe) (Pb) (Mg) (Mn) (N	Ni) (Ag) (Se) (T	(1) (V) (Zn) (Hg)	(K) (Na)
			o) (Ba) (Be) (C	Ca) (Cd) (Co)	(Cr) (Cu) (Fe) (Pt	o) (Mg) (Mn) (Ni) (A	Ag) (Se) (Tl) (V)	(Zn) (Hg) (K) (Na	a) (Hardness) (Silica
	VOC (Boein								
	Methane Eth	ane Ethene Ac	cetylene						
	others								
	•								
Duplicate San	nple No(s):								
Comments:									
Signature:	GREG NOS	TRAND				Date:	5/8/2018		

P:\8888 - Boeing Renton\02 Data Management\2018\2Q2018\Field Data\SCFs - Landau Originals\LOT 20_5.8.18_GJN.xlsx



Project Nam	e:	Boeing Ren	ton		Project Number	er:	0025217.099.0	99	
Event:		Quarterly M			Date/Time:	5/ 7/2018@	730		
Sample Nun	nber:	RGW262S-	•		Weather:	60s Cloudy			
Landau Rep		SRB							
WATER LEV	/EL/WELL/PU	JRGE DATA							
Well Condition	on:	Secure (YES)	Damaged (N	NO)	Describe:			
DTW Before	Purging (ft)	4.39	Time:	658	Flow through ce	ll vol.		GW Meter No.(s	Heron1
Begin Purge:	Date/Time:	5/ 7 /2018 @	700	End Purge:	Date/Time:	<u>5/ 7 /2018 @</u>	723	Gallons Purged:	0.25
Purge water d	isposed to:		55-gal Drum		Storage Tank	Ground	Other	SITE TREATMI	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm) ls: Stablizatio	(mg/L) on of Parame	ters for three	(mV) e consecutive rea	(NTU) dings within the fo	(ft) Mowing limits	Volume (gal) >/= 1 flow	Observations
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
703	13.4	434.1	0.9	5.72	4.7	LOW	6.25		
706	13.4	429.4	1.37	5.88	-35.1		6.3		
709	13.5	429.7	1.7	5.95	-49.6		6.6		
712	13.5	428.6	2.08	5.99	-56.8		6.65		
715	13.5	428.2	2.29	6.03	-61.2		6.7		
718		427.8	2.47	6.04	-63.4		6.7		
721	13.7	427.6	2.66	6.09	-66.7		6.7		
SAMPLE CO	LLECTION D	DATA							
Sample Colle	cted With:		Bailer		Pump/Pump Type	e <u>PERI</u>			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced		Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica		Other							
Sample Descr	ription (color, t	urbidity, odor.	, sheen, etc.):	SLIGHTLY	YELLOW AND	TURBID NO/NS			
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
	(° F /° C)	(uS/cm)	(mg/L)		(mV)	(NTU)	(ft)	(Fe II)	Observations
1	13.7	427.6	2.68	6.09	-66.7				
2	13.7	427.5	2.69	6.1	-67				
3	13.7	427.5	2.74	6.11	-67.3				
4	13.7	427.5	2.74	6.12	-67.9				
Average:	13.7	427.5	2.71	6.11	-67.2	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AI	LOWED PE	R BOTTLE	TYPE (Circle a)	pplicable or write	non-standard ar	nalysis below)	
3	(<mark>8260</mark>) (8010	0) (8020) (N	WTPH-G) (NWTPH-Gx)	(BTEX)			WA □	OR 🗆
	(8270D) (PA	AH) (NWTPI	H-D) (NWTF	PH-Dx) (TPI	H-HCID) (8081)	(8141) (Oil & G	rease)	WA □	OR 🗆
	, ,					(HCO3/CO3) (C	Cl) (SO4) (NO	3) (NO2) (F)	
1					n) (NH3) (NO3)	/NO2)			
		le) (WAD Cy			(0) (0) (7)	<u></u>			\ (T) (A1)
						(Pb) (Mg) (Mn) (I			
) (Ba) (Be) (C	.a) (Ca) (Co)	(Cr) (Cu) (Fe) (P	b) (Mg) (Mn) (N1) (Ag) (Se) (11) (V) (Zn) (Hg) (K) (N	la) (Hardness) (Silica
	VOC (Boein	ane Ethene Ac	retylene						
	wichiane Eu	ane Eulene At	мунн						
	others								
	•								
Duplicate Sar		Duplicate Lo			10m P 4 mm 2 = = =	DIDIDID C			
Comments:	VERY FAS	DRAWDOV	VN. PUMPIN	G AT LOWE	ST RATE OF PE	KI PUMP			

Signature: SRB Date: 5/7/2018
P:\8888 - Boeing Renton\02 Data Management\2018\2Q2018\Field Data\SCFs - Landau Originals\ApronA_SRB_5.7.18.xlsx



Groundwater Low-Flow Sample Collection Form

Project Nam	ne:	Boeing Ren	ton		Project Number	er:	0025217.099.0	99	
Event:		Quarterly M	Iay 2018		Date/Time:	5/ 7/2018@			
Sample Nun	nber:	RGW263S-	•		Weather:	60s Cloudy			
Landau Rep		SRB							
WATEDIEV	VEL/WELL/PU	IDCE DATA							
Well Condition		Secure (YES)	Damaged (N	VO)	Describe:			
		6.02		-				GW Meter No.(s	Uaran1
DTW Before	Date/Time:		Time:		Flow through ce			Gallons Purged:	
Purge water d		3/ / /2018 (55-gal Drum	End Purge:	Storage Tank	5/ 7 /2018 @ Ground		SITE TREATM	
ruige water u	usposeu to.	₩	55-gai Diuiii	4	Storage Talik	Ш Ground	Other	SHE IKEAIM	ENI SISIEM
m·	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C) Purge Goa	(uS/cm) ls: Stablizatio	(mg/L) on of Parame	ters for three	(mV) e consecutive rea	(NTU) dings within the fo	(ft) ollowing limits	Volume (gal) >/= 1 flow	Observations
	+/- 3%	+/- 3%		+/- 0.1 units		+/- 10%	< 0.3 ft	through cell	
					-		·		
				***	. •	1 0 1			
	. ——			W at	ter Lev	el Only			
						J		-	
						<u>.</u>			
SAMPLE CO	LLECTION I	OATA							
Sample Colle	cted With:		Bailer		Pump/Pump Type	e PERI			
Made of:		Stainless Ste	el	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(By Numerica	ıl Order)	Other	_						
Sample Descr	ription (color, t	urbidity, odor.	, sheen, etc.):						
•		•	· · · · · · · · ·						
Replicate	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Ferrous iron	Comments/
	(° F /° C)	(uS/cm)	(mg/L)		(mV)	(NTU)	(ft)	(Fe II)	Observations
1					-		· 		
2									
3									
						-			
4							· 		
Average:	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!			
OUANTITY	TYPICAL A	NALYSIS AI	LOWED PE	R BOTTLE	TYPE (Circle a	pplicable or write	non-standard ar	nalysis below)	
3	i)) (8020) (N			•			WA □	OR 🗆
-						(8141) (Oil & G	rease)	WA 🗆	OR 🗆
) (HCO3/CO3) (C			
1					n) (NH3) (NO3				
		e) (WAD Cy							
	(Total Metals	(As) (Sb) (Ba) (Be) (Ca	(Cd) (Co)	(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (l	Ni) (Ag) (Se) (Tl) (V) (Zn) (Hg	g) (K) (Na)
									Na) (Hardness) (Silica
	VOC (Boein	g short list)							
	Methane Eth	ane Ethene Ad	cetylene						
	others								
- II - ~	1 37 / 1							_	
Duplicate Sar	nple No(s):								
Comments:									
Signature:	SRB					Date:	5/7/2018		



Groundwater Low-Flow Sample Collection Form

Project Nam	e:	Boeing Ren	ton		Project Number	r:	0025217.099.09	99	
Event:		Quarterly M			Date/Time:	5/ 7/2018@	810		
Sample Nun	nber:	RGW264S-	•		Weather:	60s Cloudy			
Landau Rep	resentative:	SRB							
WATER LEV	/EL/WELL/PU	JRGE DATA							
Well Condition		Secure (YES)	Damaged (N	1O)	Describe:			
DTW Before	Purging (ft)	4.9	Time:	-	Flow through ce			GW Meter No.(s	Heron1
		5/ 7 /2018 @		End Purge:	=	5/ 7 /2018 @	803	Gallons Purged:	
Purge water d			55-gal Drum		Storage Tank	Ground		SITE TREATM	
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(° F /° C)	(uS/cm)	(mg/L)	-	(mV)	(NTU)	(ft)	Volume (gal)	Observations
				ters for three +/- 0.1 units		dings within the fo		>/= 1 flow	
7.10	+/- 3%	+/- 3%				+/- 10%	< 0.3 ft	through cell	
743	14.1	690	1.15	6.11		MED	5.48		
746	14.1	691	1.49	6.13	-28.4		5.5		
749	14	691	1.76	6.14	-34		5.5		
752	14.4	692	2.18	6.15	-40.5		5.5		
755	14	693	2.94	6.17	-49.9				
758	14.3	696	3.41	6.19	-56.8				
801		697	3.49	6.19	-58.4				
	11.5	077	3.17	0.17	30.1	1		-	
SAMPLE CO	LLECTION I)ATA							
Sample Collec			Bailer		Pump/Pump Type	PERI			
Made of:		Stainless Stee	el 🔲	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 🗖	Tap Rinse	DI Water	Dedicated			
(By Numerica	l Order)	Other							
Sample Descr	ription (color, t	urbidity, odor,	sheen, etc.):	SLIGHTLY	YELLOW AND	TURBID NO/NS			
					opp.		TO CONTACT OF THE CON	E	G
Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
1	14.3	697	3.53	6.19	-59.6	, ,	,	` ,	
2	14.3	697	3.55	6.19	-60.1			-	
						•			
3	14.3	697	3.6	6.18	-60.6				
4	14.2	697	3.6	6.19	-61.2			-	
Average:	14.3	697.0	3.57	6.19	-60.4	#DIV/0!			
QUANTITY	TYPICAL A	NALYSIS AI	LOWED PE	R BOTTLE	TYPE (Circle a)	oplicable or write	non-standard ar	nalysis below)	
3		0) (8020) (N						WA □	OR 🗆
						(8141) (Oil & G		WA □	OR 🗆
						(HCO3/CO3) (C	Cl) (SO4) (NO	3) (NO2) (F)	
1		le) (WAD Cy			n) (NH3) (NO3)	/NO2)			
					(Cr) (Cu) (Fe)	(Pb) (Mg) (Mn) (I	Ni) (Ag) (Se) (Γ1) (V) (Zn) (Hs	r) (K) (Na)
									Va) (Hardness) (Silic
	VOC (Boein								
	Methane Eth	ane Ethene Ac	etylene						
	others								
Duplicate San	nple No(s):								
Comments:	· •								
Signature:	SRB					Date:	5/7/2018		



Groundwater Low-Flow Sample Collection Form

Project Nam	ie:	Boeing Ren	ton		Project Number	er:	0025217.099.0	99	
Event:		Quarterly M	ay 2018		Date/Time:	5/ 7/2018@	700		
Sample Nun	nber:	RGW262S-	180507		Weather:	60s Cloudy			
Landau Repr	resentative:	SRB							
WATER LEV	/EL/WELL/PU	JRGE DATA							
Well Condition		Secure (YES))	Damaged (N	1O)	Describe:			
DTW Before	Purging (ft)		Time:		Flow through ce	ll vol.		GW Meter No.(s	Heron1
		5/ 7 /2018 @		End Purge:	· ·	5/ 7 /2018 @		Gallons Purged:	0.25
Purge water d			55-gal Drum		Storage Tank	Ground	Other	SITE TREATM	ENT SYSTEM
	Temp	Cond.	D.O.	pН	ORP	Turbidity	DTW	Internal Purge	Comments/
Time	(°F/°C)	(uS/cm)	(mg/L)	pm	(mV)	(NTU)	(ft)	Volume (gal)	Observations
						dings within the fo	ollowing limits	>/= 1 flow	
	+/- 3%	+/- 3%	+/- 10%	+/- 0.1 units	+/- 10 mV	+/- 10%	< 0.3 ft	through cell	
		D.	1111	to to	DCW	2625			
		D	ириса	ue to	RGW2	2023			
					1	•			
	· 				-		· 		
							·- 		
					1				
SAMPLE CO									
Sample Collec	cted With:		Bailer	_	Pump/Pump Type	e PERI			
Made of:		Stainless Stee	_	PVC	Teflon	Polyethylene	Other	Dedicated	
Decon Proced	lure:	Alconox Was	sh 🔲	Tap Rinse	DI Water	Dedicated			
(D. M									
(By Numerica		Other					·		
		_	sheen, etc.):	SLIGHTLY	YELLOW AND	TURBID NO/NS			
Sample Descr	ription (color, t	curbidity, odor,					DTW	Ferrous iron	Comments/
		_	sheen, etc.):_ D.O. (mg/L)	SLIGHTLY pH	YELLOW AND ORP (mV)	TURBID NO/NS Turbidity (NTU)	DTW (ft)	Ferrous iron (Fe II)	Comments/ Observations
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L)	pН	ORP (mV)	Turbidity			
Sample Descr Replicate	Temp (°F/°C)	Cond. (uS/cm)	D.O. (mg/L) 2.69	pH 6.1	ORP (mV)	Turbidity			
Replicate 1 2	Temp (°F/°C) 13.7	Cond. (uS/cm) 427.5	D.O. (mg/L) 2.69 2.73	pH 6.1 6.11	ORP (mV) -66.9	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 13.7 13.7	Cond. (uS/cm) 427.5 427.5	D.O. (mg/L) 2.69 2.73	pH 6.1 6.11 6.12	ORP (mV) -66.9 -67.1	Turbidity (NTU)			
Replicate 1 2	Temp (°F/°C) 13.7	Cond. (uS/cm) 427.5	D.O. (mg/L) 2.69 2.73	pH 6.1 6.11	ORP (mV) -66.9	Turbidity (NTU)			
Replicate 1 2 3	Temp (°F/°C) 13.7 13.7	Cond. (uS/cm) 427.5 427.5	D.O. (mg/L) 2.69 2.73	pH 6.1 6.11 6.12	ORP (mV) -66.9 -67.1	Turbidity (NTU)			
Replicate 1 2 3 4	Temp (°F/°C) 13.7 13.7 13.7 13.7	Cond. (uS/cm) 427.5 427.5 427.6 427.5	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73	6.1 6.11 6.12 6.12 6.11	ORP (mV) 66.9 67.1 67.6 68.4 67.5	Turbidity (NTU)	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7	Cond. (uS/cm) 427.5 427.5 427.6 427.5	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.75 2.73	6.1 6.11 6.12 6.12 6.11 R BOTTLE	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 13.7 13.7 (8260) (8010	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AL 0) (8020) (N	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (1	6.1 6.11 6.12 6.12 6.11 R BOTTLE	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a	Turbidity (NTU) #DIV/0!	(ft)	(Fe II)	Observations
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 13.7 (8260) (8010 (8270D) (PA	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AI ()) (8020) (N	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (MTP	6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081)	Turbidity (NTU) #DIV/0!	non-standard ar	(Fe II) malysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average:	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 13.7 (8260) (8010 (8270D) (PA (pH) (Condu	Cond. (uS/cm) 427.5 427.5 427.6 427.6 427.5 NALYSIS AI (b) (8020) (N AH) (NWTPE octivity) (TDS (C) (Total PO4	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (M-D) (NWTP 6) (TSS) (B	6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPHOD) (Turbio dahl Nitroger	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081)	#DIV/0! pplicable or write: (8141) (Oil & G.) (HCO3/CO3) (C.)	non-standard ar	(Fe II) malysis below) WA □ WA □	Observations OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 13.7 (8260) (8010 (8270D) (PA (COD) (TOO (Total Cyanid	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AL 0) (8020) (N AH) (NWTPHactivity) (TDS C) (Total PO4 de) (WAD Cy.	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (M-D) (NWTP S) (TSS) (B-d) (Total Kieranide) (Free	6.1 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) dity) (Alkalinity a) (NH3) (NO3	#DIV/0! #DIV/0! pplicable or write: (8141) (Oil & G) (HCO3/CO3) (Oil / NO2)	non-standard arrease)	MA WA NO2) (F)	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 13.7 (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals)	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AI (D) (8020) (N AH) (NWTPH detivity) (TDS (C) (Total PO4 de) (WAD Cy. () (As) (Sb) (1)	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (March 1998) (TSS) (Bell) (Total Kiedanide) (Free Ba) (Be) (Ca	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M	Cond. (uS/cm) 427.5 427.5 427.5 427.6 427.5 NALYSIS AI (D) (8020) (N AH) (NWTPH (Inctivity) (TDS) (C) (Total PO4 (Include) (As) (Sb) (Include) (Sb) (Include) (Sb) (Include) (Sb) (Include) (Sb) (Include) (Sb) (Sb) (In	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (March 1998) (TSS) (Bel) (Total Kiedanide) (Free Ba) (Be) (Ca	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AL (NWTPHetivity) (TDS (C) (Total PO4 (e) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb) g short list)	D.O. (mg/L) 2.69 2.73 2.75 2.75 2.73 LOWED PE WTPH-G) (NWTP G) (TSS) (B H) (Total Kiedanide) (Free Ba) (Be) (Ca) (Be) (Ca)	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 427.5 427.5 427.5 427.6 427.5 NALYSIS AI (D) (8020) (N AH) (NWTPH (Inctivity) (TDS) (C) (Total PO4 (Include) (As) (Sb) (Include) (Sb) (Include) (Sb) (Include) (Sb) (Include) (Sb) (Include) (Sb) (Sb) (In	D.O. (mg/L) 2.69 2.73 2.75 2.75 2.73 LOWED PE WTPH-G) (NWTP G) (TSS) (B H) (Total Kiedanide) (Free Ba) (Be) (Ca) (Be) (Ca)	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AL (NWTPHetivity) (TDS (C) (Total PO4 (e) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb) g short list)	D.O. (mg/L) 2.69 2.73 2.75 2.75 2.73 LOWED PE WTPH-G) (NWTP G) (TSS) (B H) (Total Kiedanide) (Free Ba) (Be) (Ca) (Be) (Ca)	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein Methane Eth	Cond. (uS/cm) 427.5 427.5 427.6 427.5 NALYSIS AL (NWTPHetivity) (TDS (C) (Total PO4 (e) (WAD Cy) (As) (Sb) (1 etals) (As) (Sb) g short list)	D.O. (mg/L) 2.69 2.73 2.75 2.75 2.73 LOWED PE WTPH-G) (NWTP G) (TSS) (B H) (Total Kiedanide) (Free Ba) (Be) (Ca) (Be) (Ca)	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
Replicate 1 2 3 4 Average: QUANTITY 3	Temp (°F/°C) 13.7 13.7 13.7 13.7 13.7 TYPICAL A (8260) (8010 (8270D) (PA (pH) (Condu (COD) (Total Cyanid (Total Metals (Dissolved M VOC (Boein	Cond. (uS/cm) 427.5 427.5 427.5 427.6 427.5 NALYSIS AI ()) (8020) (N () (NWTPHactivity) (TDS () (Total PO4 ()) (As) (Sb) (J () etals) (As) (Sb () g short list) () tane Ethene Actions (1986)	D.O. (mg/L) 2.69 2.73 2.73 2.75 2.73 LOWED PE WTPH-G) (II-D) (NWTP G) (TSS) (B-II-D) (NWTP G) (TSS) (B-II-D) (Free Ba) (Be) (Ca) (Ba) (Be) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca) (Ca	pH 6.1 6.11 6.12 6.12 6.11 R BOTTLE NWTPH-Gx) H-Dx) (TPH OD) (Turbic dahl Nitroger Cyanide)) (Cd) (Co)	ORP (mV) -66.9 -67.1 -67.6 -68.4 -67.5 TYPE (Circle a) (BTEX) H-HCID) (8081) (dity) (Alkalinity) (NH3) (NO3) (NO3)	#DIV/0! #DIV/0! pplicable or write (8141) (Oil & G) (HCO3/CO3) (Oil MO2) (Pb) (Mg) (Mn) (100)	non-standard arrease) Cl) (SO4) (NO	(Fe II) malysis below) WA	Observations OR OR OR OR OR OR OR OR OR OR
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wood.

Appendix C



To: John Long, Project Manager Project: 0088880100.2018

From: Crystal Thimsen c: Project File

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: July 1, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

SWMU-172/174

ARI Group Number: 18E0134

This memo presents the summary data quality review of 11 primary groundwater samples, one groundwater field duplicate, and one trip blank sample collected on May 7, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

- Volatile organic compounds (VOCs) (cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride) by U.S. Environmental Protection Agency (EPA) Method 8260C with selected ion monitoring (SIM);
- Total organic carbon (TOC) by Standard Method (SM) 5310B;
- Total metals (arsenic, copper, and lead) by EPA Method 6020A; and
- Dissolved arsenic by EPA Method 6020A.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
RGWDUP1-180507	18E0134-01	all except dissolved arsenic
RGW232S-180507	18E0134-02 18E0134-03	all
RGW233I-180507	18E0134-04	all except dissolved arsenic
RGW081S-180507	18E0134-05	all except dissolved arsenic
RGW173S-180507	18E0134-06 18E0134-07	all
RGW226S-180507	18E0134-08	all except dissolved arsenic
RGW153S-180507	18E0134-09	all except dissolved arsenic
RGW152S-180507	18E0134-10	all except dissolved arsenic
RGW172S-180507	18E0134-11	all except dissolved arsenic
RGW235I-180507	18E0134-12	all except dissolved arsenic

Sample ID	Laboratory Sample ID	Requested Analyses
RGW236S-180507	18E0134-13 18E0134-14	all
RGW234S-180507	18E0134-15	all except dissolved arsenic
Trip Blank	18E0134-16	VOCs

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in the EPA guidance documents (EPA, 2014a and b).

ARI received the samples on May 8, 2018. The temperatures of the coolers were recorded upon receipt and were below the maximum acceptable temperature of 6 degrees Celsius.

Organic analyses

Samples were analyzed for VOCs. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The project-specific control limit for field duplicate relative percent differences (RPDs) is 30 percent for concentrations greater than five times the reporting limit. The RPD is not calculated for results that are less than five times the reporting limit, as indicated on the table below by "NC." In these cases, the absolute value of the difference between the primary and duplicate result should not exceed the value of the reporting limit. The field duplicate RPDs were within the control limits.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (ng/L)	Duplicate Result (ng/L)	Reporting Limit (ng/L)	RPD (%)
	vinyl chloride	97.2	89.2	20	NC
RGW152S-180507/	cis-1,2-dichloroethene	348	330	20	5
RGWDUP1-180507	trichloroethene	226	228	20	1
	tetrachloroethene	1,390	1,380	20	1

Abbreviations

ng/L = nanograms per liter

NC = not calculated

RPD = relative percent difference

7. Reporting Limits and Laboratory Flags – Acceptable

Inorganic analyses

Samples were analyzed for total metals and TOC. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. LCS- Acceptable
- 4. MS/MSD Acceptable
- 5. Laboratory Duplicates Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The project-specific control limit for field duplicate RPDs is 30 percent for concentrations greater than five times the reporting limit. The RPD is not calculated for results that are less than five times the reporting limit, as indicated on the table below by "NC." In these cases, the absolute value of the difference between the primary and duplicate result should not exceed the value of the reporting limit. The field duplicate RPDs were within the control limits, except for total arsenic and lead. The results for the affected analytes in samples RGW152S-180507 and RGWDUP1-180507 are qualified as estimated and flagged with a "J."

Sample ID/ Field Duplicate ID	Analyte	Primary Result (µg/L)	Duplicate Result (µg /L)	Reporting Limit (µg /L)	RPD (%)
	TOC	2.23	2.04	0.50	NC
RGW152S-180507/	total arsenic	2.99	2.08	0.200	36
RGWDUP1-180507	total copper	2.86	2.41	0.500	17
	total lead	1.52	0.992	0.100	42

Abbreviations

µg/L = micrograms per liter RPD = relative percent difference TOC = total organic carbon

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18E0134 is 100 percent. The usefulness of these data was evaluated based on EPA guidance documents listed in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data meet the project's data quality objectives.

Sample ID	Qualified Analyte	Qualified Result	Units	Qualifier Reason
RGWDUP1-180507	total arsenic total lead	2.08 J 0.992 J	μg/L	field duplicate RPD
RGW232S-180507	none			
RGW233I-180507	none			
RGW081S-180507	none			
RGW173S-180507	none			
RGW226S-180507	none			
RGW153S-180507	none			
RGW152S-180507	total arsenic total lead	2.99 J 1.52 J	μg/L	field duplicate RPD
RGW172S-180507	none			
RGW235I-180507	none			
RGW236S-180507	none			
RGW234S-180507	none			
Trip Blank	none			

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References

- Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.
- U.S. Environmental Protection Agency (EPA), 2014a, U.S. EPA National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.
- EPA, 2014b, U.S. EPA National Functional Guidelines for Inorganic Superfund Data Review: EPA 540-R-013-001, August.



To: John Long, Project Manager

From: Crystal Thimsen
Tel: (206) 342-1760
Fax: (206) 342-1761
Date: July 31, 2018

Project: 0088880100.2018

cc: Project File

Subject: Summary Data Quality Review

June 2018 Boeing Renton Soil Sampling

SWMU-172/174

ARI Group Number: 18F0363

This memo presents the summary data quality review of 13 primary soil samples and one soil field duplicate collected on June 20, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

- Volatile organic compounds (VOCs) (vinyl chloride, methylene chloride, 1,1-dichloroethene, cis-1,2-dichloroethene, benzene, trichloroethene, and tetrachloroethene) by U.S. Environmental Protection Agency (EPA) Method 8260C; and
- Total metals (copper, thallium, and zinc) by EPA Method 6020A.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
172-SB-PP01-2	18F0363-01	all
172-SB-PP01-2	18F0363-02	all
172-Dup01	18F0363-03	all
172-SB-PP02-2	18F0363-04	all
172-SB-PP02-8.5	18F0363-05	all
172-SB-PP03-2	18F0363-06	all
172-SB-PP03-8.5	18F0363-07	all
172-SB-PP04-2	18F0363-08	all
172-SB-PP04-8.5	18F0363-09	all
172-SB-PP06-2	18F0363-10	all
172-SB-PP06-8.5	18F0363-11	all
172-SB-PP05-2	18F0363-12	all

Sample ID	Laboratory Sample ID	Requested Analyses
172-SB-PP05-8.5	18F0363-13	all

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in the EPA guidance documents (EPA, 2014a and b).

ARI received the samples on June 20, 2018. The temperatures of the coolers were recorded upon receipt and were below the maximum acceptable temperature of 6 degrees Celsius (°C). The laboratory noted that the samples times for 172-SB-PP05-2 and 172-SB-PP05-8.5 were switched on the sample labels. The laboratory logged the samples according to the times listed on the chain-of-custody and proceeded with analysis.

Organic analyses

Samples were analyzed for VOCs. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable

A trip blank was not submitted with the samples as required by the EPA 5035 sample collection method. Sample results are not qualified.

- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable except as noted

<u>VOCs by EPA 8260C</u>: the recoveries for the following were below the control limits in the MS/MSD analysis performed with sample 172-SB-PP03-2: 1,1-dichloroethene at 26.2 and 29.2 percent, below the control limits of 67 to 132 percent; and tetrachloroethene at 62.1 and 74.9 percent, below the control limits of 76 to 120 percent. The low recoveries equate to a potential low bias in the sample; therefore, the 1,1-dichloroethene and tetrachloroethene results in sample 172-SB-PP03-2 are qualified as estimated with detections flagged with a "J" and non-detects flagged with a "UJ".

6. Field Duplicates – Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The project-<u>specific</u> control limit for field duplicate relative percent differences (RPDs) is 50 percent for concentrations greater than five times the

reporting limit. The RPD is not calculated for results that are less than five times the reporting limit, as indicated on the table below by "NC." In these cases, the absolute value of the difference between the primary and duplicate result should not exceed the value of the reporting limit. The field duplicate RPDs were within the control limits.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (µg/kg)	Duplicate Result (µg/kg)	Reporting Limit (µg/kg)	RPD (%)
172-SB-PP01-8.5/172-	methylene chloride	3.85	4.35	1.24	NC
Dup01	tetrachloroethene	20.1	14.3	1.24	34

Notes

 μ g/kg = microgram per kilogram

NC = not calculated

RPD= relative percent difference

7. Reporting Limits and Laboratory Flags – Acceptable

The laboratory reanalyzed samples 172-SB-PP01-2 and 172-SB-PP06-8.5 due to internal standard failures during the initial analyses. The internal standards were acceptable in the re-analyses; therefore, sample results are reporting from the reanalysis and are not qualified.

The tetrachloroethene result in the initial analysis of sample 172-SB-PP03-2 was flagged with an "E" by the laboratory to indicate the concentration was greater than the calibration range of the instrument. The sample was diluted and reanalyzed. The tetrachloroethene result is reported from the reanalysis and the remaining results are reported from the initial analysis.

Inorganic analyses

Samples were analyzed for total metals. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. LCS Acceptable except as noted:
- 4. MS/MSD Acceptable
- 5. Laboratory Duplicates Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The project-specific control limit for field duplicate RPDs is 50 percent for concentrations greater than five times the reporting limit. The field duplicate RPDs were within the control limits.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (mg/kg)	Duplicate Result (mg/kg)	Reporting Limit (mg/kg)	RPD (%)
172-SB-PP01-8.5/172-	total copper	17.8	16.3	0.58	9
Dup01	total lead	108	88.1	4.7	20

<u>Notes</u>

mg/kg = milligrams per kilogram RPD= relative percent difference TOC = total organic carbon

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18F0363 is 100 percent. The usefulness of these data was evaluated based on EPA guidance documents listed in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits.

Sample ID	Qualified Analyte	Qualified Result	Units	Qualifier Reason
172-SB-PP01-2	none			
172-SB-PP01-2	none			
172-Dup01	none			
172-SB-PP02-2	none			
172-SB-PP02-8.5	none			
172-SB-PP03-2	1,1-dichloroethene	1.18 UJ	μg/kg	MS/MSD recovery
172 35 11 03 2	tetrachloroethene	1,070 J	ру/ку	Wis/WisD recovery
172-SB-PP03-8.5	none			
172-SB-PP04-2	none			
172-SB-PP04-8.5	none			
172-SB-PP06-2	none			
172-SB-PP06-8.5	none			
172-SB-PP05-2	none			
172-SB-PP05-8.5	none			

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References

- Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.
- U.S. Environmental Protection Agency (EPA), 2014a, U.S. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.
- EPA, 2014b, U.S. EPA National Functional Guidelines for Inorganic Superfund Data Review: EPA 540-R-013-001, August.



From:

To: John Long, Project Manager

Crystal Thimsen

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: July 2, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

Building 4-78/79 SWMU/AOC Group ARI Work Order Number: 18E0137

This memo presents the summary data quality review of 16 primary groundwater samples, one field duplicate groundwater sample, and one trip blank sample collected on May 7, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

Project:

c:

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- Volatile organic compounds (VOCs) (limited suite: benzene, vinyl chloride, cis-1,2-dichloroethene, and trichloroethene) by U.S. Environmental Protection Agency (EPA) Method 8260C;
- Total petroleum hydrocarbons as gasoline (TPH-G) by Ecology Method NWTPH-G; and
- Total organic carbon (TOC) by Standard Method (SM) 5310B-00.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
RGWDUP2-180507	18E0137-01	all
RGW238I-180507	18E0137-02	all
RGW237S-180507	18E0137-03	all
RGW239I-180507	18E0137-04	all
RGW210S-180507	18E0137-05	all
RGW240D-180507	18E0137-06	all
RGW143S-180507	18E0137-07	all
RGW031S-180507	18E0137-08	all
RGW209S-180507	18E0137-09	all
RGW244S-180507	18E0137-10	all
RGW242I-180507	18E0137-11	all
RGW039S-180507	18E0137-12	all
RGW033S-180507	18E0137-13	all

Sample ID	Laboratory Sample ID	Requested Analyses
RGW241S-180507	17K0213-14	all
RGW243I-180507	18E0137-15	all
RGW034S-180507	18E0137-16	all
RGW038S-180507	18E0137-17	all
Trip Blank	18E0137-18	VOCs

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in EPA guidelines (EPA, 2014a and b).

ARI received the samples on May 8, 2018. The temperatures of the coolers were recorded upon receipt and were below the maximum acceptable temperature of 6 degrees Celsius.

Organic analyses

Samples were analyzed for VOCs and TPH-G. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The relative percent differences (RPDs) for the field duplicate are within the project-specific control limit of 30 percent for concentrations greater than five times the reporting limit. The RPD is not calculated for results that are less than five times the reporting limit, as indicated on the table below by "NC." In these cases, the absolute value of the difference between the primary and duplicate result should not exceed the value of the reporting limit. As shown in the table below, the difference between the primary and duplicate results for cis-1,2-dichloroethene exceeds the value of the reporting limit. The cis-1,2-dichloroethene results in samples RGW031S-080507 and RGWDUP2-180507 are qualified as estimated and flagged with a "J".

Sample ID/ Field Duplicate ID	Analyte	Primary Result (µg/L)	Duplicate Result (µg/L)	Reporting Limit (µg/L)	RPD (%)
RGW031S-180507/ RGWDUP2-180507	cis-1,2-dichloroethene	0.20 U	0.66	0.20	NC
	benzene	8.95	11.0	0.20	21
	trichloroethene	1.13	0.99	0.20	NC
	TPH-G	917	830	100	10

Abbreviations

 μ g/L = micrograms per liter

NC = not calculated

RPD = relative percent difference

TPH-G = total petroleum hydrocarbons as gasoline

7. Reporting Limits and Laboratory Flags – Acceptable

Inorganic analyses

Samples were analyzed for TOC. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. LCS/LCSD Acceptable
- 4. MS/MSD Acceptable
- 5. Laboratory Duplicates Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The RPDs are acceptable.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (mg/L)	Duplicate Result (mg /L)	Reporting Limit (mg /L)	RPD (%)
RGW031S-180507/ RGWDUP2-180507	TOC	6.54	6.43	0.50	2

Abbreviations

mg/L = milligrams per liter

RPD = relative percent difference

TOC = total organic carbon

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18E0137 is 100 percent. Evaluation of the usefulness of these data is based on EPA guidance documents identified in

the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data meet the project's data quality objectives.

Sample ID	Qualified Analyte	Qualified Result	Units	Qualifier Reason
RGWDUP2-180507	cis-1,2-dichloroethene	0.66 J	μg/L	field duplicate RPD
RGW238I-180507	none			
RGW237S-180507	none			
RGW239I-180507	none			
RGW210S-180507	none			
RGW240D-180507	none			
RGW143S-180507	none			
RGW031S-180507	cis-1,2-dichloroethene	0.20 UJ	μg/L	field duplicate RPD
RGW209S-180507	none			
RGW244S-180507	none			
RGW242I-180507	none			
RGW039S-180507	none			
RGW033S-180507	none			
RGW241S-180507	none			
RGW243I-180507	none			
RGW034S-180507	none			
RGW038S-180507	none			
Trip Blank	none			

Abbreviations

 μ g/L = micrograms per liter

RPD = relative percent difference

References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.

U.S. Environmental Protection Agency (EPA), 2014a, U.S. EPA National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.

EPA, 2014b, U.S. EPA National Functional Guidelines for Inorganic Superfund Data Review: EPA 540-R-013-001, August.

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To: John Long, Project Manager

From: Crystal Thimsen
Tel: (206) 342-1760
Fax: (206) 342-1761
Date: July 2, 2018

Project: 0088880100.2018

cc: Project File

Subject: Summary Data Quality Review

June 2018 Boeing Renton Soil Sampling Building 4-78/79 SWMU/AOC Group ARI Work Order Number: 18F0358

This memo presents the summary data quality review of 24 primary soil samples, one field duplicate soil sample, and one trip blank sample collected on June 20, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

- Volatile organic compounds (VOCs) (vinyl chloride, 1,1-dichloroethene, carbon disulfide, cis-1,2-dichloroethene, benzene, trichloroethene, and tetrachloroethene) by U.S. Environmental Protection Agency (EPA) Method 8260C; and
- Total petroleum hydrocarbons as gasoline (TPH-G) by Ecology Method NWTPH-G.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
478-SB-PP07-1	18F0358-01	all
478-SB-PP07-3	18F0358-02	all
478-SB-PP08-1	18F0358-03	all
478-SB-PP08-3	18F0358-04	all
478-SB-PP09-1	18F0358-05	all
478-SB-PP09-3	18F0358-06	all
478-SB-PP10-1	18F0358-07	all
478-SB-PP10-3	18F0358-08	all
478-SB-PP11-1	18F0358-09	all
478-SB-PP11-3	18F0358-10	all
478-SB-PP12-1	18F0358-11	all
478-SB-PP12-3	18F0358-12	all

Sample ID	Laboratory Sample ID	Requested Analyses
478-SB-PP13-1	18F0358-13	all
478-SB-PP13-4.5	18F0358-14	all
478-Dup02	18F0358-15	all
478-SB-PP14-1	18F0358-16	all
478-SB-PP14-3	18F0358-17	all
478-SB-PP15-1	18F0358-18	all
478-SB-PP15-3	18F0358-19	all
478-SB-PP16-1	18F0358-20	all
478-SB-PP16-3	18F0358-21	all
478-SB-PP17-1.5	18F0358-22	all
478-SB-PP17-3	18F0358-23	all
478-SB-PP18-1	18F0358-24	all
478-SB-PP18-3	18F0358-25	all
Trip Blank	18F0358-26	VOCs

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in EPA guidelines (EPA, 2014).

ARI received the samples on June 20, 2018. The temperatures of the coolers were recorded upon receipt and were below the maximum acceptable temperature of 6 degrees Celsius (°C). The laboratory noted several discrepancies between the sample information on the bottle labels compared to the chain-of-custody. The laboratory logged the samples according to the chain-of-custody and proceeded with analysis.

Organic analyses

Samples were analyzed for VOCs and TPH-G. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable

<u>VOCs by EPA 8260C:</u> the recoveries for the following were below the control limits in the MS/MSD analysis performed with sample 478-SB-PP18-3: *cis*-1,2-dichloroethene at 71.7 and 72.6 percent, below the control limits of 80 to 125 percent; and trichloroethene at 74.4 percent in the MS, below the control limits of 80 to 120 percent (the MSD recovery was acceptable). The low recoveries equate to a potential low bias in the sample; therefore, the cis-1,2-dichloroethene result in sample 478-SB-PP18-3 was qualified as estimated and because the sample result was below detection flagged with a "UJ". The trichloroethene result is not qualified due to acceptable MSD recoveries.

6. Field Duplicates - Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The relative percent differences (RPDs) for the field duplicate are within the project-specific control limit of 50 percent for concentrations greater than five times the reporting limit.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (µg/kg)	Duplicate Result (μg/kg)	Primary/Duplicate Reporting Limit (µg/kg)	RPD (%)
478-SB-PP13-4.5/	benzene	30.0	23.1	1.94	26
478-Dup02	TPH-G	147,000	131,000	13.1	12

Notes

 μ g/kg = micrograms per kilogram

RPD= relative percent difference

TPH-G = total petroleum hydrocarbons as gasoline

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18F0358 is 100 percent. Evaluation of the usefulness of these data is based on EPA guidance documents identified in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data meet the project's data quality objectives.

Sample ID	Qualified Analyte	Qualified Result	Qualifier Reason
478-SB-PP07-1	none		
478-SB-PP07-3	none		
478-SB-PP08-1	none		
478-SB-PP08-3	none		
478-SB-PP09-1	none		
478-SB-PP09-3	none		
478-SB-PP10-1	none		
478-SB-PP10-3	none		
478-SB-PP11-1	none		
478-SB-PP11-3	none		
478-SB-PP12-1	none		
478-SB-PP12-3	none		
478-SB-PP13-1	none		
478-SB-PP13-4.5	none		
478-Dup02	none		
478-SB-PP14-1	none		
478-SB-PP14-3	none		
478-SB-PP15-1	none		
478-SB-PP15-3	none		
478-SB-PP16-1	none		
478-SB-PP16-3	none		
478-SB-PP17-1.5	none		
478-SB-PP17-3	none		
478-SB-PP18-1	none		
478-SB-PP18-3	cis-1,2-dichloroethene	1.38 UJ	MS/MSD recovery
Trip Blank	none		

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References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.

U.S. Environmental Protection Agency (EPA), 2014, U.S. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.



From:

To: John Long, Project Manager

Crystal Thimsen

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: June 4, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

Former Fuel Farm AOC Group ARI Work Order Number: 18E0132

This memo presents the summary data quality review of 10 primary groundwater samples and one field duplicate collected on May 7, 2018. The samples were submitted to Analytical Resources Inc. (ARI), a Washington State Department of Ecology (Ecology)-accredited laboratory located in Tukwila, Washington. The samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D), plus motor oil (TPH-O) and Jet A (TPH Jet A) ranges by Ecology Method NWTPH-Dx.

Project:

c:

0088880100.2018

Project File

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
RGW211S-180507	18E0132-01	all
RGW212S-180507	18E0132-02	all
RGW224S-180507	18E0132-03	all
RGWDUP3-180507	18E0132-04	all
RGW256S-180507	18E0132-05	all
RGW255S-180507	18E0132-06	all
RGW257S-180507	18E0132-07	all
RGW258S-180507	18E0132-08	all
RGW183S-180507	18E0132-09	all
RGW184S-180507	18E0132-10	all
RGW221S-180507	18E0132-11	all

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Memo June 4, 2018 Page 2 of 3

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in EPA guidelines (EPA, 2014).

ARI received the samples on May 8, 2018. The temperatures of the coolers were recorded upon receipt and were below the maximum acceptable temperature of 6 degrees Celsius.

Organic analyses

Samples were analyzed for TPH-D plus TPH-O and TPH Jet A ranges. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS Acceptable
- 5. MS/MSD Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of 5 percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The field duplicate relative percent difference (RPD) is within the project-specific control limit of 30 percent for concentrations greater than five times the reporting limit.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (mg/L)	Duplicate Result (mg/L)	Reporting Limit (mg/L)	RPD (%)
RGW224S-180507/ RGWDUP3-180507	DRO C12-C24	0.560	0.664	0.100	17
	TPH JetA C10-C18	0.933	1.17	0.100	23

Abbreviations

mg/L = milligrams per liter

DRO = diesel range organics

RPD = relative percent difference

TPH = total petroleum hydrocarbons

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data review. The completeness of ARI work order number 18E0132 is 100 percent. Evaluation of the usefulness of these data is based on EPA guidance documents listed in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data meet the project's data quality objectives.

Sample ID	Qualified Analyte
RGW211S-180507	none
RGW212S-180507	none
RGW224S-180507	none
RGWDUP3-180507	none
RGW256S-180507	none
RGW255S-180507	none
RGW257S-180507	none
RGW258S-180507	none
RGW183S-180507	none
RGW184S-180507	none
RGW221S-180507	none

References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.

U.S. Environmental Protection Agency (EPA), 2014, U.S. EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.



To: John Long, Project Manager Project: 0088880100.2018

From: Crystal Thimsen c: Project File

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: July 2, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

AOC-001 and -002 and AOC-003 ARI Work Order Number: 18E0153

This memo presents the summary data quality review of 10 primary groundwater samples, one field duplicate, and one trip blank sample collected on May 8, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology).

The samples from AOC-001 and -002 were analyzed for the following:

- Volatile organic compounds (VOCs) (benzene only) by U.S. Environmental Protection Agency (EPA) Method 8260C;
- VOCs (vinyl chloride, 1,1-dichloroethene, trichloroethene, and cis-1,2-dichloroethene) by EPA Method 8260C with selected ion monitoring (SIM);
- Total organic carbon (TOC) by Standard Method (SM) 5310C.

Samples from AOC-003 were analyzed for the following:

- VOCs (cis-1,2-dichloroethene, tetrachloroethene, trichloroethene, and vinyl chloride) by EPA Method 8260C SIM; and
- TOC by SM 5310C.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
RGWDUP4-180508	18E0153-01	all AOC-001 and -002 analyses
RGW247S-180508	18E0153-02	all AOC-003 analyses
RGW249S-180508	18E0153-03	all AOC-003 analyses
RGW188S-180508	18E0153-04	all AOC-001 and -002 analyses
RGW248IS-180508	18E0153-05	all AOC-001 and -002 analyses
RGW197S-180508	18E0153-06	all AOC-001 and -002 analyses
RGW185S-180508	18E0153-07	all AOC-001 and -002 analyses
RGW196D-180508	18E0153-08	all AOC-001 and -002 analyses

Sample ID	Laboratory Sample ID	Requested Analyses
RGW245S-180508	18E0153-09	all AOC-001 and -002 analyses
RGW195S-180508	18E0153-10	all AOC-001 and -002 analyses
RGW194S-180508	18E0153-11	all AOC-001 and -002 analyses
Trip Blank	18E0153-12	VOCs

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in the EPA guidance documents (EPA, 2014a and b).

ARI received the samples on May 9, 2018. The temperatures of the coolers were recorded upon receipt and were below the maximum acceptable temperature of 6 degrees Celsius.

Organic analyses

Samples were analyzed for VOCs. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable

Extra volume was not submitted for project specific MS/MSD analyses. Sample precision is evaluated based on LCS and LCSD recoveries. The MS/MSD project frequency requirement of one MS/MSD for every 20 samples was achieved with extra volume submitted at other sites included in this sampling event.

6. Field Duplicates – Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The relative percent differences (RPDs) for the field duplicate are within the project-specific control limit of 30 percent for concentrations greater than five times the reporting limit. The RPD is not calculated for results that are less than five times the reporting limit, as indicated on the table below by "NC." In these cases, the absolute value of the difference between the primary and duplicate result should not exceed the value of the reporting limit.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (μg/L)	Duplicate Result (μg/L)	Reporting Limit (μg/L)	RPD (%)
RGW185S-180508/ RGWDUP4-180508	benzene	0.21	0.20	0.20	NC
	cis-1,2-dichloroethene	0.157	0.164	0.020	4
	vinyl chloride	0.131	0.130	0.020	1

Abbreviations

 μ g/L = micrograms per liter

NC = not calculated

RPD = relative percent difference

7. Reporting Limits and Laboratory Flags – Acceptable

Inorganic analyses

Samples were analyzed for TOC. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. LCS Acceptable
- 4. MS/MSD Acceptable

Extra volume was not submitted for project specific MS/MSD analyses. Sample precision is evaluated based on LCS and LCSD recoveries. The MS/MSD project frequency requirement of one MS/MSD for every 20 samples was achieved with extra volume submitted at other sites included in this sampling event.

- 5. Laboratory Duplicates Acceptable
- 6. Field Duplicates Acceptable

One field duplicate was submitted for TOC analysis during this sampling event, meeting the project frequency requirement of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The project-specific control limit for field duplicate RPDs is 30 percent for concentrations greater than five times the reporting limit. The field duplicate RPD was within the control limits.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (mg/L)	Duplicate Result (mg /L)	Reporting Limit (mg /L)	RPD (%)
RGW185S-180508/ RGWDUP4-180508	TOC	20.15	20.29	0.50	1

<u>Abbreviations</u>

mg/L = milligrams per liter RPD = relative percent difference

TOC = total organic carbon

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18E0153 is 100 percent. The usefulness of these data was evaluated based on EPA guidance documents listed in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits.

Sample ID	Qualified Analyte
RGWDUP4-180508	none
RGW247S-180508	none
RGW249S-180508	none
RGW188S-180508	none
RGW248IS-180508	none
RGW197S-180508	none
RGW185S-180508	none
RGW196D-180508	none
RGW245S-180508	none
RGW195S-180508	none
RGW194S-180508	none
Trip Blank	none

References

- Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.
- U.S. Environmental Protection Agency (EPA), 2014a, U.S. EPA National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.
- EPA, 2014b, U.S. EPA National Functional Guidelines for Inorganic Superfund Data Review: EPA 540-R-013-001, August.

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To: John Long, Project Manager Project: 0088880100.2018

From: Crystal Thimsen c: Project File

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: July 2, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

AOC-034 and -035

ARI Work Order Number: 18E0152

This memo presents the summary data quality review of four primary groundwater samples and one trip blank collected on May 8, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

• Volatile organic compounds (VOCs) (cis-1,2-dichloroethene and vinyl chloride) by U.S. Environmental Protection Agency (EPA) Method 8260C.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
RGW216S-180508	18E0152-01	all
RGW218S-180508	18E0152-02	all
RGW217S-180508	18E0152-03	all
RGW251S-180508	18E0152-04	all
Trip Blank	18E0152-05	all

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in EPA guidance documents (EPA, 2014).

ARI received the samples on May 9, 2018. The temperature of the cooler was recorded upon receipt and was below the maximum acceptable temperature of 6 degrees Celsius.

Organic analyses

Samples were analyzed for VOCs. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable

Extra volume was not submitted for project specific MS/MSD analyses. Sample precision is evaluated based on LCS and LCSD recoveries. The MS/MSD project frequency requirement of one MS/MSD for every 20 samples was achieved with extra volume submitted at other sites included in this sampling event.

6. Field Duplicates – Acceptable

Field duplicates were not collected at this site during this sampling event. The project frequency requirement of one field duplicate for every 20 samples was achieved with field duplicate samples collected at other sites included in this sampling event.

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data review. The completeness of work order number 18E0152 is 100 percent. Evaluation of the usefulness of these data is based on EPA guidance documents referenced in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data meet the project's data quality objectives.

Sample ID	Qualified Analyte
RGW216S-180508	none
RGW218S-180508	none
RGW217S-180508	none
RGW251S-180508	none
Trip Blank	none

References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.

U.S. Environmental Protection Agency (EPA), 2014, U.S. EPA National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.



To: John Long, Project Manager Project: 0088880100.2018

From: Crystal Thimsen c: Project File

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: July 2, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

Building 10-71 Parcel

ARI Work Order Number: 18E0151

This memo presents the summary data quality review of three primary groundwater samples and one trip blank sample collected on May 8, 2018. The samples were submitted to Analytical Resources, Inc. (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

• Volatile organic compounds (VOCs) (vinyl chloride, cis-1,2-dichloroethene, trichloroethene, and toluene) by U.S. Environmental Protection Agency (EPA) Method 8260C.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
10-71-MW2-180508	18E0151-01	VOCs
10-71-MW4-180508	18E0151-02	VOCs
10-71-MW1-180508	18E0151-03	VOCs
Trip Blank	18E0151-04	VOCs

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in EPA guidelines (EPA, 2014).

ARI received the samples on May 9, 2018. The temperature of the cooler was recorded upon receipt and was below the maximum acceptable temperature of 6 degrees Celsius .

Organic analyses

Samples were analyzed for VOCs. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- 4. LCS/LCSD Acceptable
- 5. MS/MSD Acceptable

Extra volume was not submitted for project specific MS/MSD analyses. Sample precision is evaluated based on LCS and LCSD recoveries. The MS/MSD project frequency requirement of one MS/MSD for every 20 samples was achieved with extra volume submitted at other sites included in this sampling event.

6. Field Duplicates - Acceptable

Field duplicates were not collected at this site during this sampling event. The project frequency requirement of one field duplicate for every 20 samples was achieved with field duplicate samples collected at other sites included in this sampling event.

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18E0151 is 100 percent. Evaluation of the usefulness of these data is based on EPA guidance documents listed in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data are not qualified and meet the project's data quality objectives.

Sample ID	Qualified Analyte
10-71-MW2-180508	none
10-71-MW4-180508	none
10-71-MW1-180508	none
Trip Blank	none

References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.

U.S. Environmental Protection Agency (EPA), 2014, U.S. EPA National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.

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To: John Long, Project Manager Project: 0088880100.2018

From: Crystal Thimsen c: Project File

Tel: (206) 342-1760 Fax: (206) 342-1761 Date: July 1, 2018

Subject: Summary Data Quality Review

May 2018 Boeing Renton Groundwater Sampling

Apron A

ARI Work Order Number: 18E0133

This memo presents the summary data quality review of two primary groundwater samples, one groundwater field duplicate, and one trip blank sample collected on May 7, 2018. The samples were submitted to Analytical Resources, Inc., (ARI), located in Tukwila, Washington, a laboratory accredited by the Washington State Department of Ecology (Ecology). The samples were analyzed for the following:

• Volatile organic compounds (VOCs) (vinyl chloride and cis-1,2-dichloroethene) by U.S. Environmental Protection Agency (EPA) Method 8260C; and

• Total organic carbon (TOC) by Standard Method (SM) 5310B.

The samples and the analyses conducted on the samples are listed below.

Sample ID	Laboratory Sample ID	Requested Analyses
RGWDUP5-180507	18E0133-01	all
RGW262S-180507	18E0133-02	all
RGW264S-180507	18E0133-03	all
Trip Blank	18E0133-04	VOCs

Data were reviewed in accordance with the appropriate method procedures and criteria documented in the Quality Assurance Project Plan (QAPP) (Amec Foster Wheeler, 2016). The control limits provided in the QAPP are advisory limits; therefore, the most current control limits provided by the laboratory were used to evaluate the quality control data. In cases where the laboratory did not track limits for an analyte, the limits in the QAPP were used.

Holding times, method/trip blanks, surrogate recoveries, laboratory control samples (LCS) and laboratory control sample duplicates (LCSD), matrix spike/matrix spike duplicates (MS/MSD), field duplicates, and reporting limits were reviewed where available to assess compliance with applicable methods. If qualification was required, data were qualified based on the definitions and use of qualifying flags outlined in the EPA guidance documents (EPA, 2014a and b).

ARI received the samples on May 8, 2018. The temperature of the coolers were recorded upon receipt and was below the maximum acceptable temperature of 6 degrees Celsius $\stackrel{(\circ C)}{\leftarrow}$.

Organic analyses

Samples were analyzed for VOCs. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. Surrogates Acceptable
- LCS/LCSD Acceptable
- 5. MS/MSD Acceptable

Extra volume was not submitted for project specific MS/MSD analyses. Sample precision is evaluated based on LCS and LCSD recoveries. The MS/MSD project frequency requirement of one MS/MSD for every 20 samples was achieved with extra volume submitted at other sites included in this sampling event.

6. Field Duplicates - Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency requirement of 5 percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The field duplicate relative percent difference (RPD) is within the project-specific control limit of 30 percent for concentrations greater than five times the reporting limit.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (µg/L)	Duplicate Result (µg/L)	Reporting Limit (µg/L)	RPD (%)
RGW262S-180507/ RGWDUP5-180507	vinyl chloride	0.25	0.24	0.20	NC

Abbreviations

 μ g/L = micrograms per liter

NC = not calculated

RPD = relative percent difference

7. Reporting Limits and Laboratory Flags – Acceptable

Inorganic analyses

Samples were analyzed for TOC. Laboratory data were evaluated for the following parameters:

- 1. Preservation and Holding Times Acceptable
- 2. Blanks Acceptable
- 3. LCS/LCSD Acceptable
- 4. MS/MSD Acceptable

Extra volume was not submitted for project specific MS/MSD analyses. Sample precision is evaluated based on LCS and LCSD recoveries. The MS/MSD project frequency requirement of one MS/MSD for every 20 samples was achieved with extra volume submitted at other sites included in this sampling event.

5. Laboratory Duplicates – Acceptable

6. Field Duplicates - Acceptable

One field duplicate was submitted for each analysis during this sampling event, meeting the project frequency of five percent, or one for every 20 samples. Primary and duplicate results are summarized in the table below. The PRDs are acceptable.

Sample ID/ Field Duplicate ID	Analyte	Primary Result (mg/L)	Duplicate Result (mg/L)	Reporting Limit (mg/L)	RPD (%)
RGW262S-180507/ RGWDUP5-180507	TOC	33.87	33.07	0.50	2

Abbreviations

mg/L = milligrams per liter RPD = relative percent difference TOC = total organic carbon

7. Reporting Limits and Laboratory Flags – Acceptable

Overall assessment of data

The table below summarizes the data assessment. The completeness of work order number 18E0133 is 100 percent. The usefulness of these data was evaluated based on EPA guidance documents listed in the introduction to this report. Few problems were identified, and analytical performance was generally within specified limits. The data meet the project's data quality objectives.

Sample ID	Qualified Analyte
RGWDUP5-180507	none
RGW262S-180507	none
RGW264S-180507	none
Trip Blank	none

References

Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler), 2016, Quality Assurance Project Plan, Boeing Renton Facility, Renton, Washington: Prepared for the Boeing Company, February.

U.S. Environmental Protection Agency (EPA), 2014a, U.S. EPA National Functional Guidelines for Superfund Organic Methods Data Review: EPA 540-R-014-002, August.

EPA, 2014b, U.S. EPA National Functional Guidelines for Inorganic Superfund Data Review: EPA 540-R-013-001, August.

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wood.

Appendix D

APPENDIX D

Summary of Remedial Actions at the Boeing Renton Facility April - June 2018

Boeing Renton Site Renton, Washington

Prepared for: The Boeing Company EHS Remediation

Prepared by: CALIBRE Systems, Inc. Project No. K0357000

August 15, 2018

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1.0 Introduction

CALIBRE Systems, Inc. (CALIBRE) prepared this Technical Memorandum (Tech Memo) for the Boeing Company to summarize remedial actions implemented at the Boeing Renton Facility in the second quarter of 2018 (between April 1 and June 30, 2018). The ongoing remedial actions include:

- 1. Operation of two soil vapor extraction (SVE) systems located at Solid Waste Management Unit (SWMU) and Area of Concern (AOC) locations designated as SWMU-172/174 and Building 4-78/4-79 SWMU/AOC Group;
- Biological treatment to promote Enhanced Reductive Dechlorination (ERD) of volatile organic compounds (VOCs) in groundwater underway at several AOCs located throughout the Renton Facility, and;
- 3. Anaerobic biodegradation of benzene by nitrate/sulfate injections at the 4-78/79 Building.

CALIBRE completed the work described in this Tech Memo to support remedial activities described in the Engineering Design Report (EDR), (AMEC, 2014) as supplemented by a document describing an approach for *in situ* treatment for benzene in groundwater (CALIBRE 2017).

1.1 Facility Location and Background

The Boeing Renton Facility is used for assembly of 737 airplanes and is located at the southern end of Lake Washington in Renton, Washington. The location of the Renton Facility and the locations of SWMU-172/174 and Building 4-78/79 within the Facility are shown on Figure 1-1 (SWMU-172/174 and Building 4-78/79 are the locations where the two SVE systems are operating). The locations of the other AOCs and SWMUs where groundwater treatment is ongoing are also included in Figure 1-1.

1.2 Objectives and Organization

The objective for this Tech Memo is to summarize work completed in accordance with the EDR in the second quarter of 2018. This includes rebound stabilization monitoring (asymptote test) for the SVE systems located at Building 4-78/79 and SWMU-172/174, subsequent soil characterization sampling, and a summary of the ongoing biological treatment of groundwater at the following areas:

SWMU-172/174
Building 4-78/4-79 SWMU/AOC Group (Building 4-78/79)
AOC-001/002
AOC-003
Lot 20/Former Building 10-71
AOC-060
AOC-090
Building 4-70, and
Apron A

This Tech Memo is organized as follows:

Section 1 - Introduction and Background

Section 2 – SVE System Operation and Monitoring

Section 3 – Groundwater Treatment

Section 4 – Conclusions and Recommendations

Section 5 – References

Attachment A – Field Data Sheets

Attachment B – Laboratory Report

2.0 SVE Systems Operation and Monitoring

SVE systems were installed in the Building 4-78/79 and SWMU-172/174 areas and began operation in April 2015. During the last quarter of 2017 photoionization detector (PID) results from both systems had shown low-level VOC concentrations removed at asymptotically low levels. Given these data, a rebound test for both systems was started on December 15, 2017 and continued for 80 days to March 2018. In May 2018, after an additional 76 day shut-down period, a rebound stabilization test was run for 29 days to test how fast the VOC mass removal rate would decline back down to the prior asymptote levels. The following sections summarize the rebound stabilization monitoring results for the SVE systems performed in May – June 2018.

2.1 SVE Rebound Test Summary

Both the Building 4-78/79 and SWMU-172/174 SVE systems were shut down for an additional period of 76 days starting March 6th, 2018. On May 22nd, 2018 the SVE systems were restarted and after approximately 10 minutes vapor concentrations were monitored at key points with a calibrated PID to determine if vapor concentrations had rebounded. Additional measurements were collected after approximately 1 hour and 3 hour operating periods. Vapor concentrations were measured again after 1 day, 9 days, 16 days and 29 days. The key operational question was to determine, if rebounding is present, how long the increased mass removal of accumulated vapors is sustained before the SVE systems decline back down to the asymptotic removal rates.

The vapor monitoring points tested at the Building 4-78/79 SVE area included SVE-1, SVE-5, SVE-6, SVE-10, SVE-12 and the SVE system inlet (refer to Figure 2-1). The vapor monitoring points tested in the SWMU-172/174 SVE area included SVE-1, SVE-2, SVE-3 and the SVE system inlet (refer to Figure 2-2). In addition to PID measurements, selected samples were also collected for laboratory TO-15 analysis for VOCs (gas chromatography mass spectrometry analysis). The laboratory data packages are included in Attachment B.

2.2 Building 4-78/4-79 SWMU/AOC Group SVE System

The Building 4-78/79 SVE system consists of 15 vapor extraction wells and a SVE equipment trailer as shown in Figure 2-1. The SVE system is equipped with two vapor-phase granular-activated carbon (GAC) vessels each filled with 1,800 pounds of virgin carbon. The GAC vapor treatment system is configured to run in a lead-lag configuration with vapors from the outlet of the lead vessel passing through the lag vessel. The

system also includes two smaller vessels each containing 200 pounds of zeolite impregnated with permanganate to remove and oxidize specific compounds, such as vinyl chloride, that are not efficiently adsorbed by GAC.

At the start of the additional rebound study, PID measurements were collected from five wells that have historically shown higher concentrations (SVE-1, SVE-5, SVE-6, SVE-10, and SVE-12). Based on those PID measurements, three wells (SVE-1, SVE-6, and SVE-10; one from each manifold) and the combined SVE system influent were selected for TO-15 analysis to provide operational baseline data for the planned rebound equilibrium test. These same locations were sampled for TO-15 analysis at 16 days of operation (June 7th, 2018) and 29 days of operation (June 20th, 2018) along with paired PID measurements.

The CVOCs and other VOCs detected in the TO-15 samples collected during the SVE operations and rebound periods for the Building 4-78/79 area are shown in Table 2-1. The data collected at the system influent, SVE-6, and SVE-10 during the 29 day stabilization test indicates that after 16 days all VOCs have declined and stabilized to levels equal to or below the prior asymptote levels. Concentrations remained at these asymptote levels throughout the remainder of the rebound test. TPH-G was detected at each of the four locations upon startup, with a singular high detection observed at SVE-6 (26,000 ppbv) on May 22nd, 2018. After 16 days of operation no TPH-G was detected from any of the four locations sampled. The TPH-G detection on the May 22 sampling appears to be an anomaly (no other subsequent samples had any detections) and may be associated with handling of fuel for a generator that day.

The measured PID data, displayed in Table 2-5, highlight that all six measuring points show significant reductions in detections of VOCs after only one day, with the exception of well SVE-1 which showed a temporary increase at one day after system restart. After 9 days of operation all six measuring points (including SVE-1) had stabilized below the prior asymptote levels.

2.3 VOC Mass Removal Rates from the Building 4-78/4-79 SVE System

Peak influent concentrations for the Building 4-78/79 area SVE system were measured at 5,860 ppbv (PID uncorrected) with a mass removal rate of approximately 0.213 pounds per day (lbs/day) in August 2015, approximately 4 months after SVE system startup. The baseline condition (asymptote at the end of SVE operation in December 2017) for the Building 4-78/79 area SVE system indicated an influent concentration of approximately 528 ppbv (PID uncorrected) and a mass removal rate of approximately 0.017 lbs/day; this asymptote represents approximately 8 percent of the prior peak mass removal (see Table 2-2).

The estimated daily mass removal rate for the Building 4-78/79 system at the start of the rebound test on May 22, 2018 was 0.039 lbs/day, which then dropped to 0.015 lbs/day at day 1, and down to 0.003 lbs/day by 29 day of the stabilization test. The monitoring at one-day and 29 days represent approximately 7 percent and 1 percent of the peak mass removal rate, respectively (see Table 2-2). On the second day of SVE rebound testing the system had dropped back to the asymptote observed at the end of prior SVE operation. Within that two-day operating period, mass removal was approximately 0.05 lbs.

2.4 SWMU-172/174 SVE System

The SWMU-172/174 SVE system consists of three vapor extraction wells and a SVE equipment trailer as shown in Figure 2-2. The SVE system is equipped with two vapor-phase GAC vessels, each filled with 1,800 pounds of virgin carbon. The GAC vapor treatment system is configured to run in a lead-lag configuration with vapor from the outlet of the lead vessel passing through the lag vessel. The system also includes two smaller vessels each containing 200 pounds of zeolite impregnated with permanganate.

At the start of the additional rebound study, all three extraction wells along with the system inlet and outlet were measured using a calibrated PID. In addition, SVE-3 and the SVE-system inlet were sampled for TO-15 analysis of VOCs. Vent wells SVE-1 and SVE-2 displayed little to no rebound effect and the measured VOC concentrations were immediately close to the prior asymptote levels for both wells and therefore were not included in the TO-15 sampling. These same locations (SVE-3 and SVE system inlet) were sampled for TO-15 analysis at 16 days of operation (June 7th, 2018) and 29 days of operation (June 20th, 2018) with paired PID measurements.

The CVOCs and other VOCs detected in the TO-15 samples collected during the SWMU-172/174 SVE operations are shown in Table 2-3. The data collected at SVE-3 during the stabilization test period showed PCE as the primary VOC detected. Initial PCE concentrations at this well were 790 ppbv on May 22, 2018 which was an increase from the baseline data collected on December 8, 2017 (170 ppbv). PCE concentrations at this well then stabilized at 280 ppbv and 310 ppbv after 16 days and 29 days, respectively. Marginal increases were observed from other CVOCs.

2.5 VOC Mass Removal Rates from the SWMU-172/174 SVE System

Table 2-4 presents a summary of the mass removal measurements for the system influent in the test period and peak mass removal as a reference point. The baseline condition for the SWMU-172/174 area SVE system indicated an influent concentration of approximately 1,208 ppbv (PID uncorrected) and a mass removal rate of approximately 0.029 lbs/day. This mass removal rate was not exceeded at any time during the 29 day stabilization test and the final mass removal rate for day 29 of operation was 0.004 lbs/day; approximately 7 percent of the prior peak mass removal.

2.6 Data Evaluation

A key question identified in the rebound study data evaluation is:

 Is the increased mass removal rate sustained for any significant time period after a rest/rebound period and is any increased mass removed sufficient to justify prolonged SVE system operation?

Table 2-5 presents the raw PID field measurements (uncorrected for TCE or PCE) at the various wells sampled during the rebound period at both the Building 4-78/79 and the SWMU-172/174 SVE systems. The trend for PID measurements at the Building 4-78/79 system influent show that after one day VOC

concentrations have dropped significantly and after 9 days VOC concentrations at both the 4-78/79 and SWMU-172/174 SVE systems were below the prior asymptote levels. Based on this, the effect of rebounding within the systems is marginal after 9 days of operation and a majority of the temporary increase is removed within a couple of days.

Table 2-6 presents the approximate total pore volume exchanges (PVEs) for the two SVE systems since startup. SVE design guidance from the US Army Corps of Engineers indicates that approximately 1,000 to 1,500 PVEs would be a reasonable estimate of the required air exchanges (PVEs) for SVE remediation (USACE 2002). In addition, training guidance from the EPA and Department of Defense (DOD) suggest a range of 100 to greater than a 1,000 PVEs could be expected for typical operations. The 4-78/79 and 172/174 SVE systems have both achieved close to 2,000 PVEs which is consistent with the empirical data demonstrating the SVE systems have reached asymptotic levels.

The second key question identified in the rebound study is:

2. Are there data to indicate that continued SVE system operation is having a measurable improvement on the groundwater system, over and beyond what is being accomplished with the groundwater ERD system?

Data collected during regular SVE operation indicate TCE is the primary compound detected and recovered at the 4-78/79 area and PCE is the primary compound detected and recovered at the SWMU-172/174 area. The rebound test data collected in the previous quarter show very low remaining concentrations of these compounds in soil vapor at both of the SVE systems. The prolonged rebound stabilization test, confirmed that the mass removal of TCE and PCE at the respective SVE systems declines rapidly after a few days of operation. Simultaneously, concentrations of these two compounds in groundwater have declined with the ERD treatment; TCE (at the 4-78/79 area) and PCE (at the 172/174 area) concentrations have been significantly reduced or eliminated from virtually all wells at these two areas.

Soil confirmation samples at the 4-78/79 system confirm that the benefit of continued SVE operation in the area would be very limited. The soil confirmation sample from PP-13 revealed that there are petroleum products trapped in a clay-silt layer/zone in the area. The SVE vent well directly adjacent to PP-13, SVE-08, has been sampled for TO-15 analysis twice since the start of SVE operation, once in September 2016 and again in April 2017, and both samples showed concentrations of TPH-G as non-detect. The historical spill at this location was associated with an underground fuel tank, and based on the soil, soil vapor and groundwater monitoring results in this area, it appears that any remaining hydrocarbon residuals are located in a low permeable media (silt/clay). Continued operation of the SVE system in this area is not expected have an impact on the TPH-G concentrations in soil or groundwater.

At the SWMU-172/174 area, source area well GW-152S shows PCE at 1.39 μ g/L while the other source are wells GW-153S is non-detect and all conditional point of compliance wells are non-detect for PCE. These

groundwater monitoring data indicate that continued SVE system operation in the 172/174 area is unlikely to have a measurable impact on the groundwater remediation. However, the soil confirmation samples identified a location between SVE-2 and SVE-3 which still shows elevated PCE levels in soil. The SVE system will be adjusted to alter the flushing pattern through this area by using SVE-3 as vent well with continued extraction through SVE-2.

3.0 Ongoing Groundwater Treatment

Groundwater treatment is being implemented at several AOCs/SWMUs at the Renton Facility. The remedy being implemented is enhanced reductive dechlorination (ERD) of chlorinated solvents in targeted areas. The ERD treatment involves substrate injection using sucrose as a carbon source to stimulate biological degradation of the chlorinated solvents between December 2014 and January 2018. Beginning in late 2017, anaerobic biodegradation of benzene using nitrate and sulfate injections was implemented for a small area at the 4-78/79 Building.

A third round of nitrate/sulfate injections was performed in April 2018, and groundwater samples were collected from the injection wells and monitoring wells in May 2018. The results of the performance monitoring are presented in Table 3-1 and discussed in the main text of the quarterly report. Site wide groundwater sampling was conducted as part of the quarterly monitoring program during this reporting period and the results are discussed in the main text of the quarterly report as well. Table 3-2 presents a summary of those groundwater monitoring results, by area, related to groundwater treatment/ERD implementation.

Selected wells at the SWMU-172/174, 4-78/79 Building Area, AOC-60, and AOC-90 were amended with sucrose substrate in July 2018. In addition, Boeing recently completed a 4th round of nitrate/sulfate injections for the benzene plume near Building 4-78/79 in July 2018. Performance monitoring results for those areas will be included in the next quarterly summary and will be used to make recommendations for further groundwater treatment actions.

4.0 Conclusions and Recommendations

The rebound stabilization test revealed that the effect of rebounding at the Building 4-78/79 and SWMU-172/174 SVE systems is diminished after less than 9 days of restarted SVE operation, following almost 6 months of shutdown/rest period. Since the VOC concentrations were reduced to the baseline asymptotic levels within this 30-day period, the systems were shut down for soil confirmation sampling to assess attainment of the soil cleanup levels for soil vapor COCs as discussed in the main body of the quarterly report.

The soil confirmation samples revealed that cleanup standards for CVOCs were met at all but one of the 24 samples at the 4-78/79 area. The single sample which exceed cleanup standards for TPH-G was collected from a low permeable silty/clay layer. TO-15 samples from the nearest extraction well to this location showed TPH-G was non-detect in both samples, therefore it is unlikely that continued SVE operation will

impact this layer. It is recommended that SVE operation be stopped for this area and an evaluation of utilities present and potential access for soil excavation be completed for the area near the sample location exceeding cleanup standards.

The soil confirmation samples at the SWMU-172/174 area showed some low level exceedances of selected CVOCs and metals and one sample with elevated concentrations of PCE. It is recommended that SVE operations be modified to increase flushing between extraction wells SVE-2 and SVE-3 (the area with the elevated PCE detection). The initial modification will be to open SVE-3 as a surface vent and continue extraction from SVE-2, in an attempt to flush the system further. PID measurements will be collected to monitor this operational change.

Groundwater monitoring will continue according to the EDR, with supplemental VOC and TOC sampling at selected wells. Additional substrate injections were recently completed in July 2018 at selected areas of the SWMU-172/174, Building 4-78/79, AOC-60, and AOC-90 sites for continued ERD treatment and nitrate/sulfate injections for benzene treatment at the Building 4-78/79 area. Those events will be summarized in the next quarterly report.

5.0 References

AMEC 2014. Draft Engineering Design Report Boeing Renton Cleanup Action Plan Implementation. Prepared by AMEC Environment & Infrastructure, Inc. for The Boeing Company. July 2014.

CALIBRE 2014. Operations and Maintenance Plan for the Renton Cleanup Action Soil Vapor Extraction Systems. Prepared by CALIBRE Systems, Inc. for The Boeing Company, EHS Remediation. July 2014.

CALIBRE 2017. Bioremediation of Benzene in Groundwater; Building 4-78/79 Area, Boeing Renton Facility Rev. 1. Prepared by CALIBRE Systems, Inc. for The Boeing Company, EHS Remediation. September 2017.

USACE 2002. Engineering and Design - Soil Vapor Extraction and Bioventing. Prepared by US Army Corps of Engineers. EM 1110-1-4001. June 2002.

TABLES

Table 2-1 TO-15 Analytical Results - 4-78/79 SVE System

	tem	

JVE Jystem miet																										
			cis-1,2-	trans-1,2-	Vinyl						Freon						Carbon	m,p-		Ethyl		1,2,4- Trimethylbe			Total	
Date	PCE	TCE	DCE	DCE	Chloride	1,1,1-TCA	1,1-DCA	1,1-DCE	Acetone	Benzene	113	Hexane	Pentane	Toluene	TPHg	MEK	Disulfide	Xylene	o-Xylene	Benzene	Chloroform	nzene	Cumene	Styrene	Chlorinated	Total VOCs
4/17/2015 ⁽¹⁾	2.9	280	5.2	ND	ND	8.0	ND	ND	ND	ND	98	ND	ND	1.2	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	296	416
5/18/2015	11	800	27	ND	ND	21.0	ND	ND	ND	ND	120	ND	ND	ND	ND	61	ND	ND	ND	ND	ND	ND	ND	ND	859	1,040
10/13/2015	2.7	160	11	ND	ND	2.7	ND	ND	12	ND	48	9.4	ND	ND	1,400	ND	ND	ND	ND	ND	ND	ND	ND	ND	176	1,646
3/18/2016	ND	49	2.5	ND	ND	ND	ND	ND	19	ND	16	6.6	13	2.3	69	ND	ND	ND	ND	ND	ND	ND	ND	ND	52	177
6/30/2016	1.2	100	6.0	ND	2.3	2.2	ND	ND	32	ND	49	ND	ND	ND	ND	ND	7.2	ND	ND	ND	ND	ND	ND	ND	112	200
9/12/2016	1.6	110	20	ND	5.9	2.2	ND	ND	ND	ND	54	26	100	ND	600	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	920
12/14/2016	ND	17	6.3	ND	2.4	ND	ND	ND	ND	ND	18	4.5	33	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	25.7	81.2
4/5/2017		43	3.0	ND	ND	1.7	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47.7	58.7
8/16/2017	1.3	91	8.0	ND	ND	3.1	ND	ND	ND	ND	6.4	ND	ND	7	ND	ND	ND	0.96	ND	ND	ND	ND	ND	ND	103	118
12/8/2017 - Rebound			2.5								4.7															
Start	ND	42	2.5	ND	ND	1.3	ND	ND	ND	ND	1.7	1.7	5.2	1.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	45.8	56.3
1/19/2018 - 35-Day 60 Minute Sample	ND	68	2.6	ND	2.0	5.8	ND	ND	ND	ND	13	13	26	1.0	280	7.1	ND	ND	ND	ND	ND	ND	ND	ND	78.4	419
3/6/2018 - 80-Day 60																										
Min Sample	ND	67	3.2	ND	8.9	7.6	ND	ND	ND	ND	40	44	48	1.0	510	ND	ND	ND	ND	ND	ND	ND	ND	ND	86.7	730
5/22/2018	2.6	260	10	ND	4.6	19	ND	ND	22	ND	50	49	110	2.8	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	296	2,530
6/7/2018	ND	69	3.7	ND	ND	2.1	ND	ND	ND	ND	2.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	74.8	77.6
6/20/2018	1.3	87	3.7	ND	ND	2.6	ND	ND	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	94.6	98.0

SVE-01

																						1,2,4-				
			cis-1,2-	trans-1,2-	Vinyl						Freon						Carbon	m,p-		Ethyl		Trimethylbe			Total	
Date	PCE	TCE	DCE	DCE	Chloride	1,1,1-TCA	1,1-DCA	1,1-DCE	Acetone	Benzene	113	Hexane	Pentane	Toluene	TPHg	MEK	Disulfide	Xylene	o-Xylene	Benzene	Chloroform	nzene	Cumene	Styrene	Chlorinated	Total VOCs
10/13/2015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	2,100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,111
6/30/2016	ND	1.2	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.2	12.2
9/12/2016	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	ND	62	160	1.3	1,800	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2,037
12/8/2017 - Rebound																										
Start	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	27	2.0	250	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	290
5/22/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	83	ND	630	ND	16	ND	ND	ND	ND	ND	1.7	ND	ND	757
6/7/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11
6/20/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0

SVE-6

			cis-1,2-	trans-1,2-	Vinyl						Freon						Carbon	m,p-		Ethyl		1,2,4- Trimethylbe			Total	
Date	PCE	TCE	DCE	DCE	Chloride	1,1,1-TCA	1,1-DCA	1,1-DCE	Acetone	Benzene	113	Hexane	Pentane	Toluene	TPHg	MEK	Disulfide	Xylene	o-Xylene	Benzene	Chloroform	nzene	Cumene	Styrene	Chlorinated	Total VOCs
9/12/2016	ND	98	ND	ND	190	ND	ND	ND	ND	ND	6,900	55	360	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	288	7,603
8/16/2017	16	100	4.5	ND	ND	5.4	1.5	ND	ND	ND	75	ND	ND	ND	440	ND	ND	ND	ND	ND	5.0	ND	ND	ND	127	647
12/8/2017 - Rebound																										
Start	5.4	37	ND	ND	ND	2.7	ND	ND	ND	ND	7.2	ND	ND	6.4	ND	ND	ND	ND	ND	ND	1.2	ND	ND	ND	45	60
1/19/2018 - 35-Day																										
60 Minute Sample	6.4	52	1.0	ND	ND	4.6	ND	ND	ND	ND	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	ND	64	89
3/6/2018 - 80-Day 60																										
Min Sample	9.8	67	ND	ND	ND	10	ND	ND	ND	ND	2,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	87	2,087
5/22/2018	36	220	ND	ND	29	28	ND	ND	ND	ND	1,900	350	690	ND	26,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	313	29,253
6/7/2018	20	120	3.3	ND	ND	5.9	1.4	ND	ND	ND	65	ND	ND	ND	ND	ND	ND	ND	ND	ND	2	ND	ND	ND	151	218
6/20/2018	24	120	2.7	ND	ND	4.2	1.5	ND	ND	1.5	57	ND	ND	ND	ND	ND	ND	ND	ND	ND	3.4	ND	ND	ND	152	214

Table 2-1 TO-15 Analytical Results - 4-78/79 SVE System

SVE-10

																				e.i. i		1,2,4-				
	0.05	T.0.F	-	trans-1,2-				4 4 5 65			Freon						Carbon	m,p-		Ethyl		Trimethylbe			Total	
Date	PCE	TCE	DCE	DCE	Chloride		_	_			113		Pentane		TPHg	MEK	Disulfide	Xylene			Chloroform	nzene	Cumene	Styrene		
3/18/2016		250	13	ND	ND	6.9	ND	ND	ND	ND	16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270	286
6/30/2016	1.5	250	17	ND	7.1	6.2	ND	ND	ND	ND	120	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	282	402
9/12/2016	2.6	320	97	2.1	18	7.9	2.3	1.6	ND	ND	130	ND	ND	2.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	452	584
12/16/2016	ND	91	95	1.4	28	3.3	1.6	1.4	ND	ND	95	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	222	317
4/5/2017	1.4	240	19	ND	ND	10	ND	ND	ND	ND	20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	270	290
8/16/2017	2.6	300	42	ND	ND	14	1.4	ND	ND	ND	34	ND	ND	9.5	260	ND	ND	2.9	1.6	ND	ND	1.5	ND	ND	360	670
12/8/2017 - Rebound																										
Start	ND	180	11	ND	ND	6.3	ND	ND	ND	ND	8.9	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	197	207
1/19/2018 - 35-Day																										
60 Minute Sample	1.7	330	13	ND	ND	28	1.2	ND	ND	ND	39	ND	ND	1.4	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	374	431
1/19/2018 - 35-Day																										
180 Minute Sample	1.8	350	15	ND	ND	24	1.3	ND	ND	ND	31	ND	ND	ND	ND	37	ND	ND	ND	ND	ND	ND	ND	ND	392	460
3/6/2018 - 80-Day 60																										
Min Sample	1.7	330	12	ND	ND	41	1.7	ND	ND	ND	59	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	386	445
3/6/2018 - 80-Day																										
180 Min Sample	1.6	300	12	ND	ND	32	ND	ND	ND	ND	41	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	346	387
5/22/2018	5.4	720	23	ND	ND	70	ND	ND	ND	ND	77	ND	17	38	480	ND	ND	19	7.6	6.9	ND	ND	ND	11	818	1,475
6/7/2018	1.6	230	14	ND	ND	8.5	ND	ND	ND	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	254	265
6/20/2018	1.9	300	15	ND	ND	11	ND	ND	11	ND	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	328	350

Notes:

(1) The TO-15 sample results from this day were considered anomalously low based on multiple PID measurements at the time and subsequent TO-15 samples from system operation

All results are in parts per billion by volume (ppbv).

ND = non-detect

DCA = Dichloroethane

DCE = Dichloroethene

MEK = methyl ethyl ketone or 2-butanone

PCE = Tetrachloroethene

TCA = Trichloroethane

TCE = Trichloroethene

Total Chlorinated = the sum of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1,1-TCA, 1,1-DCA, and 1,1-DCE.

Table 2-2 Mass Removal Data - 4-78/79 SVE System

Building 4-78/79 Influent	Date	PID Reading (ppbv)	Corrected Value (TCE) (ppbv) ¹	System Flow (cfm)	Mass removal (lbs/day)	Percent of Peak Removal
Peak Mass Removal	8/17/2015	5,320	2,873	150	0.213	
Baseline Condition	12/8/2017	528	285	119	0.017	8%
Rebound Start	5/22/2018	1,300	702	112	0.039	18%
1-Day	5/23/2018	502	271	112	0.015	7%
9-Day	5/31/2018	0	0	112	0.000	0%
16 -Day	6/7/2018	155	84	119	0.005	2%
29-Day	6/20/2018	79	43	119	0.003	1%

¹ Corrected PID measurements, 0.54 for TCE.

Table 2-3 TO-15 Analytical Results - SWMU-172/174 SVE System

SVE System Inlet

Date	PCE	TCE	cis-1,2- DCE	trans-1,2- DCE	Vinyl Chloride	1,1,1-TCA	1,1-DCA	Acetone	Toluene	m,p-Xylene	Chloroform	o-Xylene	Pentane	Hexane	Total Chlorinated	Total VOCs
4/17/2015	1,500	130	120	ND	ND	13	ND	ND	ND	ND	ND	ND	ND	ND	1,763	1,763
10/13/2015	400	31	13	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND	ND	447	447
3/8/2016	82	5.4	3.1	ND	ND	ND	ND	ND	1.1	2.2	ND	ND	ND	ND	91	94
6/30/2016	230	18	10	ND	ND	1.8	ND	11	ND	ND	2.4	ND	ND	ND	260	273
9/12/2016	230	16	8.3	ND	ND	1.9	ND	ND	ND	ND	1.2	ND	ND	ND	256	257
12/14/2016	100	6.2	3.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	110
5/30/2017 - 30 min	520	220	17	ND	ND	13	2.7	ND	ND	ND	ND	ND	ND	ND	773	773
5/30/2017 - 100 min	530	200	17	ND	ND	14	ND	ND	ND	ND	ND	ND	ND	ND	761	761
5/30/2017 - 225 min	510	130	16	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	668	668
8/16/2017	180	16	7.8	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	206	206
12/8/2017 - Rebound																
Start	99	7.6	3.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	110	110
5/22/2018	430	43	13	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	498	498
6/7/2018	160	13	5.4	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	180	180
6/20/2018	170	14	5.7	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	192	192

SVE-3

			cis-1,2-	trans-1,2-	Vinyl										Total	Total
Date	PCE	TCE	DCE	DCE	Chloride	1,1,1-TCA	1,1-DCA	Acetone	Toluene	m,p-Xylene	Chloroform	o-Xylene	Pentane	Hexane	Chlorinated	VOCs
5/30/2017 - 30 min	540	51	18	ND	ND	14	2.6	ND	2.2	ND	ND	ND	ND	ND	626	628
5/30/2017 - 100 min	200	16	6.5	ND	ND	5.5	ND	ND	ND	ND	ND	ND	ND	ND	228	228
8/16/2017	350	30	15	ND	ND	3.5	ND	ND	ND	ND	1.3	ND	ND	ND	399	400
12/8/2017 - Rebound																
Start	170	13	5.8	ND	ND	1.7	ND	ND	ND	ND	ND	ND	ND	ND	191	191
1/19/2018 - 35-Day 60																
Minute Sample	310	30	13	ND	ND	6.9	1.3	ND	ND	ND	1.1	ND	ND	ND	361	362
1/19/2018 - 35-Day 180																
Minute Sample	310	28	12	ND	ND	7.9	1.1	ND	ND	ND	1.1	ND	ND	ND	359	360
3/6/2018 - 80-Day 60																
Min Sample	440	41	15	ND	ND	14	2.2	ND	ND	ND	ND	ND	ND	ND	512	512
3/6/2018 - 80-Day 180																
Min Sample	410	33	13	ND	ND	13	1.6	ND	ND	ND	ND	ND	ND	ND	471	471
5/22/2018	790	66	22	ND	ND	22	ND	ND	ND	ND	ND	ND	ND	ND	900	900
6/7/2018	280	23	9.6	ND	ND	3	ND	ND	ND	ND	ND	ND	ND	ND	316	316
6/20/2018	310	24	11	ND	ND	3.4	ND	ND	ND	ND	ND	ND	ND	ND	348	348

Notes:

All results are in parts per billion by volume (ppbv).

ND = non-detect

DCE = Dichloroethene

PCE = tetrachloroethene

TCE = trichloroethene

Total Chlorinated = the sum of PCE, TCE, cis-1,2-DCE, trans-1,2-DCE, 1,1,1-TCA, and 1,1-DCA.

Table 2-4 Mass Removal Data - SWMU-172/174 SVE System

SWMU-172/174 Influent	Date	PID Reading (ppbv)	Corrected Value (PCE) (ppbv) ¹	System Flow (cfm) ^{2,3}	Mass removal (lbs/day)	Percent of Peak Removal
Peak Mass Removal	4/17/2015	NA	1,500	73	0.068	
Baseline Condition	12/8/2017	1,208	689	86	0.029	43%
Rebound Start	5/22/2018	580	331	98	0.016	24%
1-Day	5/23/2018	1,173	669	98	0.032	48%
9-Day	5/31/2018	301	171	98	0.008	12%
16 -Day	6/7/2018	454	258	105	0.013	20%
29-Day	6/20/2018	153	87	103	0.004	7%

¹ Corrected PID measurements, 0.57 for PCE, or as TO-15 lab results if adjacent column is NA

² System changes included a new blower before this test with an increased flow rate so direct comparison of mass removal needs to consider increased flow rate

³ Process changes included replacement of a plugged air filter with an increased flow rate so direct comparison of mass removal needs to consider increased flow rate

Table 2-5 Rebound Study PID Field Measurements

4-78/79 SVE	Sample Event	Date	Sample Time	PID Reading 1 (ppb)	PID Reading 2 (ppb)	Average Uncorrected PID (ppb)	Average Corrected PID (ppb)	TO-15 Results (TCE ppbv)
SVE-1	Initial Start	5/22/2018	5/22/18 10:21 AM	262	138	200	108	
			5/22/18 11:56 AM	189	145	167	90	ND
			5/22/18 1:56 PM	189	149	169	91	
	1 Day	5/23/2018	5/23/18 2:19 PM	509	378	444	239	
	9 Day	5/31/2018	5/31/18 11:30 AM	32	19	26	14	
	16 Day	6/7/2018	6/7/18 9:22 AM	44	17	31	16	ND
	29 Day	6/20/2018	6/20/18 3:18 PM	4	6	5	3	ND
SVE-5	Initial Start	5/22/2018	5/22/18 10:09 AM	12,700	15,250	13,975	7,547	
			5/22/18 12:10 PM	6,918	9,643	8,281	4,471	
			5/22/18 2:05 PM	5,589	5,568	5,579	3,012	
	1 Day	5/23/2018	5/23/18 2:22 PM	1,131	1,044	1,088	587	
	9 Day	5/31/2018	5/31/18 11:05 AM	145	139	142	77	
	16 Day	6/7/2018	6/7/18 9:28 AM	157	128	143	77	
	29 Day	6/20/2018	6/20/18 3:22 PM	31	37	34	18	
SVE-6	Initial Start	5/22/2018	5/22/18 10:18 AM	3,908	3,782	3,845	2,076	
			5/22/18 12:02 PM	4,122	4,330	4,226	2,282	220
			5/22/18 2:10 PM	3,624	4,021	3,823	2,064	
	1 Day	5/23/2018	5/23/18 2:25 PM	1,601	1,430	1,516	818	
	9 Day	5/31/2018	5/31/18 11:10 AM	181	159	170	92	
	16 Day	6/7/2018	6/7/18 9:36 AM	167	203	185	100	120
	29 Day	6/20/2018		93	107	100	54	120
SVE-10	Initial Start	5/22/2018	5/22/18 10:22 AM	1,626	1,525	1,576	851	
			5/22/18 12:02 PM	1,319	1,366	1,343	725	720
			5/22/18 2:14 PM	1,148	874	1,011	546	
	1 Day	5/23/2018		696	701	699	377	
	9 Day		5/31/18 11:15 AM	301	254	278	150	
	16 Day	6/7/2018		369	386	378	204	230
	29 Day	6/20/2018		241	221	231	125	300
SVE-12	Initial Start	5/22/2018		741	681	711	384	
		3, ==, ====	5/22/18 12:20 PM	923	518	721	389	
			5/22/18 2:17 PM	736	611	674	364	
	1 Day	5/23/2018		558	578	568	307	
	9 Day		5/31/18 11:20 AM	348	276	312	168	
	16 Day	6/7/2018		411	390	401	216	
	29 Day	6/20/2018		243	261	252	136	
VPC Inlet	Initial Start	5/22/2018		1,975	2,048	2,012	1,086	
	meiai otai t	3, 22, 2323	5/22/18 11:49 AM	1,291	1,308	1,300	702	260
			5/22/18 1:59 PM	1,419	1,178	1,299	701	
	1 Day	5/23/2018		501	503	502	271	
	9 Day	5/31/2018	5/31/18 8:40 AM	-	-	-		
	16 Day	6/7/2018		162	148	155	84	69
	29 Day		6/20/18 3:15 PM	79	79	79	43	87
VPC Outlet	Initial Start		5/22/18 10:13 AM		-	-		3,
		5, 22, 2010	5/22/18 11:53 AM	-	-	-	_	
			5/22/18 1:58 PM	-	-	-	_	
	1 Day	5/23/2018		_	-	_	_	
	9 Day	5/31/2018		-	-	-	_	
	16 Day	6/7/2018		57	52	55	29	
	29 Day	6/20/2018		-	-	-	-	

Table 2-5 Rebound Study PID Field Measurements

5-09 SVE	Sample Event	Date	Sample Time	PID Reading 1 (ppb)	PID Reading 2 (ppb)	Average Uncorrected PID (ppb)	Average Corrected PID (ppb)	TO-15 Results (PCE ppbv)
SVE-1	Initial Start	5/22/2018		74	131	103	58	(FCL ppbV)
346 1	initial Start	3/22/2010	5/22/18 10:54 AM	46	37	42	24	
			5/22/18 1:30 PM	43	4	24	13	
	1 Day	5/23/2018		62	42	52	30	
	9 Day		5/31/18 10:26 AM		86	91	52	
	16 Day		6/7/18 3:20 PM	64	45	55	31	
	29 Day	6/20/2018		-	-	_	-	
SVE-2	Initial Start	5/22/2018		185	135	160	91	
3122	miliai Start	3,22,2010	5/22/18 10:52 AM	143	147	145	83	
			5/22/18 1:32 PM	163	97	130	74	
	1 Day	5/23/2018	5/23/18 2:57 PM	192	131	162	92	
	9 Day		5/31/18 10:31 AM	_	-	_	-	
	16 Day		6/7/18 3:17 PM	232	203	218	124	
	29 Day	6/20/2018		51	31	41	23	
SVE-3	Initial Start	5/22/2018		1,394	1,428	1,411	804	
SVE-3		3, ==, ====	5/22/18 10:50 AM	1,030	1,029	1,030	587	790
			5/22/18 1:28 PM	1,048	963	1,006	573	
	1 Day	5/23/2018	5/23/18 2:51 PM	755	845	800	456	
	9 Day		5/31/18 10:32 AM	275	255	265	151	
	16 Day	6/7/2018	6/7/18 3:14 PM	636	607	622	354	280
	29 Day	6/20/2018	6/20/18 2:39 PM	200	181	191	109	310
VPC Inlet	Initial Start	5/22/2018		649	511	580	331	
			5/22/18 10:47 AM	576	608	592	337	430
			5/22/18 1:25 PM	894	873	884	504	
	1 Day	5/23/2018	5/23/18 2:48 PM	1,201	1,145	1,173	669	
	9 Day	5/31/2018	5/31/18 10:18 AM	276	325	301	171	
	16 Day	6/7/2018	6/7/18 3:10 PM	455	452	454	258	160
	29 Day	6/20/2018	6/20/18 2:35 PM	153	153	153	87	170
VPC Outlet	Initial Start	5/22/2018	5/22/18 8:50 AM	-	-	-	-	
			5/22/18 10:46 AM	-	-	-	-	
			5/22/18 1:24 PM	-	-	-	-	
<u> </u>	1 Day	5/23/2018	5/23/18 2:47 PM	-	-	-	-	
	9 Day	5/31/2018	5/31/18 10:12 AM	-	-	-	-	
	16 Day	6/7/2018	6/7/18 3:05 PM	-	-	-	-	
	29 Day	6/20/2018	6/20/18 2:33 PM	-	-	-	-	

PID measurments presented in columns PID Reading 1, PID Reading 2, and Average Uncorrected PID are raw data and do not include a correction factor. Column "Average Corrected PID" includes the correction factor for TCE (0.54) or PCE (0.57) applied to the preceding column "Average Uncorrected PID".

Table 2-6 Approximate Pore Volume Exchanges for the SWMU-172/174 and 4-78/79 SVE Systems

	SWMU-172/174		Building 4-78/79	
Area	13,500	ft ²	25,500	ft ²
Vadose Zone Thickness	12	ft	8	ft
Volume of Treatment				
Area	162,000	ft ³	204,000	ft ³
Porosity	0.3		0.3	
Pore Volume of				
Treatment Area	48,600	ft ³	61,200	ft ³
Average Total CFM	81	ft ³ /min	105	ft ³ /min
Total Run Time	2.02	yr	2.17	yr
	738	day	792	day
	1,062,000	min	1,140,000	min
Total Air Extracted	86,022,000	ft ³	119,700,000	ft ³
Total Pore Volume				
Exchanges	1,770		1,956	

Notes

Area for the SWMU-172/174 site is based on three wells each with a radius of influence of 38 ft. Area for the 4-78/79 site is based on fifteen wells each with a radius of influence of 20 ft.

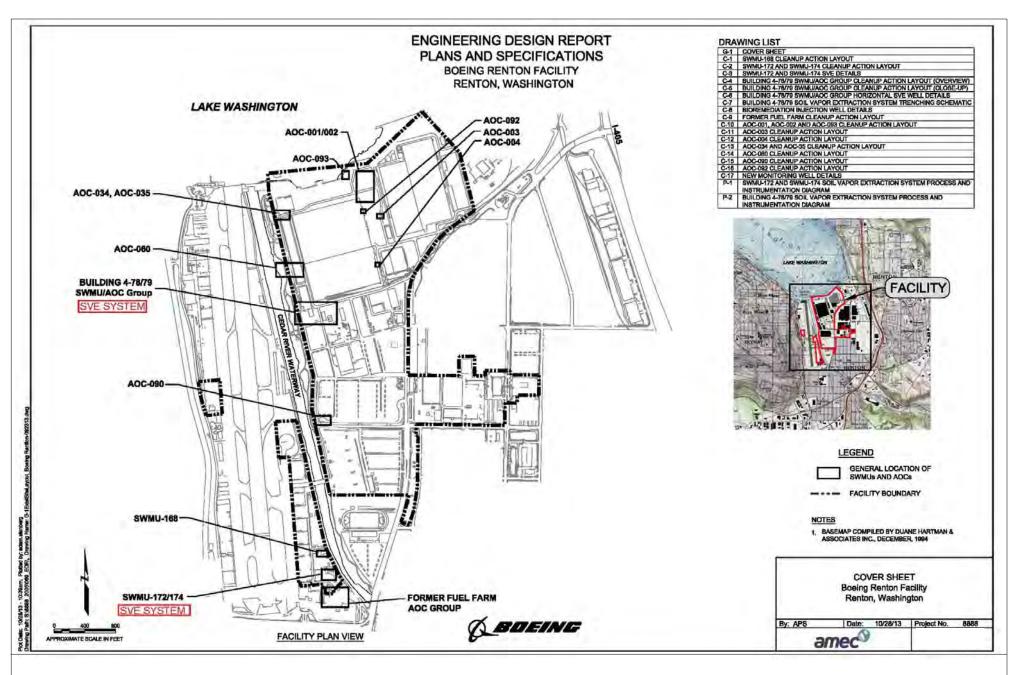
Table 3-1 - Baseline and Performance Monitoring Groundwater Data; 4-78/79 Benzene Treatment Area

		Sample Depth			cis-1,2-				Benzene		Nitrate		Nitrite		Sulfate		
Sample ID	Date	(ft bgs)	TCE (ug/L)		DCE (ug/L)		VC (ug/L)		(ug/L)		(mg-N/L)		(mg-N/L)		(mg/L)		Duplicate Well ID
																	-
378-11-8-113017	11/30/2017	8	0.42		0.98		1.11		9.66		<0.100	U	<0.100	U	1.94		
378-11-021418	2/14/2018	8	1.16		0.84		1.09		14.8		<0.100	U	<0.100	U	9.22	D	
378-11-051518	5/15/2018	8	1.86		0.78		1.06		12.6		<0.100	U	<0.100	U	34.1	D	
378-13-15-112917	11/29/2017	15	0.24		1.29		2.02		9.92		0.135		<0.100	U	0.652		
378-13-021418	2/14/2018	15	<0.2	U	1.78		8.49		4.11		<0.100	U	<0.100	U	1.31		
378-13-051518	5/15/2018	15	<0.2	U	0.85		0.87		4.94		0.182		<0.100	U	4.32	D	
378-17-9-100617	10/6/2017	9	<0.2	U	0.17	J	0.33		4.84		-		-		-		
378-17-15-112917	11/29/2017	9	1.25		0.81		1.31		6.52		<0.100	U	<0.100	U	17.1	D	
378-17-021418	2/14/2018	9	2.57		1.78		1.47		4.61		<0.100	U	<0.100	U	7.35	D	
378-17-051518	5/15/2018	9	0.91	Ц	1.63		0.53	$oxedsymbol{oxedsymbol{oxed}}$	2.6		<0.100	U	<0.100	U	8.66	D	
		T									1						
378-18-8-100617	10/6/2017	15		U	0.07	J	0.29	l	0.72		-		-		-	_	
378-18-15-112917	11/29/2017	15	<0.2	U	<0.2	U	0.35	M	3.10		<0.100	U	<0.100	U	0.343	_	
DUP-01-112917	11/29/2017	15	<0.2	U	<0.2	U	0.36		2.96		<0.100	U	<0.100	U	1.68		B78-18-15
378-18-021418	2/14/2018	15	<0.2	U	<0.2	U	0.24		1.28		<0.100	U	<0.100	U	1.47	_	
378-18-051518	5/15/2018	15	<0.2	U	<0.2	U	0.23		1.68		<0.100	U	<0.100	U	27.6	D	
378-19-9-100617	10/6/2017	15	<0.2	U	0.06	J	0.22	Ι	0.69		_						
378-19-15-112917	11/29/2017	15		U	<0.2	U	0.27	М	0.36		<0.100	U	<0.100	U	0.255		
378-19-021418	2/14/2018	15	<0.2	U	<0.2	U	0.21		0.23		<0.100	U	<0.100	U	1.22		
378-19-051518	5/15/2018	15	<0.2	U	<0.2	U	0.21		0.23		<0.100	U	<0.100	U	22.4	D	
370 13 031310	3/13/2010	13	10.2	U	10.2	Ü	0.21	-	0.54		10.100	Ů	10.100	Ŭ	22.7		
378-20-8-100617	10/6/2017	15	<0.2	U	<0.2	U	0.14	J	8.81	1	_		_		_		
378-20-15-113017	11/30/2017	15	0.41	-	<0.2	U	<0.2	U	25.9		2.93	D	<0.100	U	53.9	D	
378-20-021418	2/14/2018	15	0.25	H	0.49	М	<0.2	U	40.0		<0.100	U	<0.100	U	21.1	D	
378-20-051518	5/15/2018	15	<0.2	U	0.39		0.22	Ť	54.2		<0.100	U	<0.100	U	15.5	D	
	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			-										- 1		<u> </u>	
378-21-8-100617	10/6/2017	15	<0.2	U	0.13	J	0.21		1.42		-		-		-		
Dup01-100617	10/6/2017	15	<0.2	U	0.15	J	0.20	J	2.01		-		-		-		B78-21-8
378-21-15-112917	11/29/2017	15	<0.2	U	0.31	М	0.26		2.27		0.101		<0.100	U	4.43	D	
378-21-021418	2/14/2018	15	<0.2	U	0.24		0.30		0.86		<0.100	U	<0.100	U	1.60		
378-21-051518	5/15/2018	15	<0.2	U	0.27		0.27		1.08		<0.100	U	<0.100	U	4.59	D	
	•															•	
GW-244S-13-112917	11/29/2017	13	3.48		8.06		5.68		7.97		<0.100	U	<0.100	U	0.753		
GW-244S-021418	2/14/2018	13	1.01	Ħ	1.25		1.22		5.34		<0.100	U	<0.100	U	1.25	T	
GW-244S	3/6/2018	13	1.26	T	2		1.56		6.86		-		-		-		
GW-244S-051518	5/15/2018	13	<0.2	U	0.3		0.41		3.89		<0.100	U	<0.100	U	<0.100	U	
GW-031S-23-113017	11/30/2017	23	<0.2	U	<0.2	U	<0.2	U	17.6		<0.100	U	<0.100	U	2.54	D	
GW-031S-021418	2/14/2018	23	<0.2	U	0.45	М	0.49		21.9		<0.100	U	<0.100	U	3.67	D	
DUP-01-021418	2/14/2018	23	<0.2	U	0.46		0.42		21.4		-		-		-		GW-031S
GW-031S	3/6/2018	23	<0.2	U	1.18		<0.2	U	60.3		-		-		-		
GW-031S-051518	5/15/2018	23	0.36		0.4		0.21		2.68		<0.100	U	<0.100	U	2.95	D	
Oup-01-051518	5/15/2018	23	0.32		0.34		0.2		2.64		<0.100	U	<0.100	U	2.87	D	GW-031S

Table 3-2 Groundwater Monitoring Results Summary and Recommended ERD Treatment

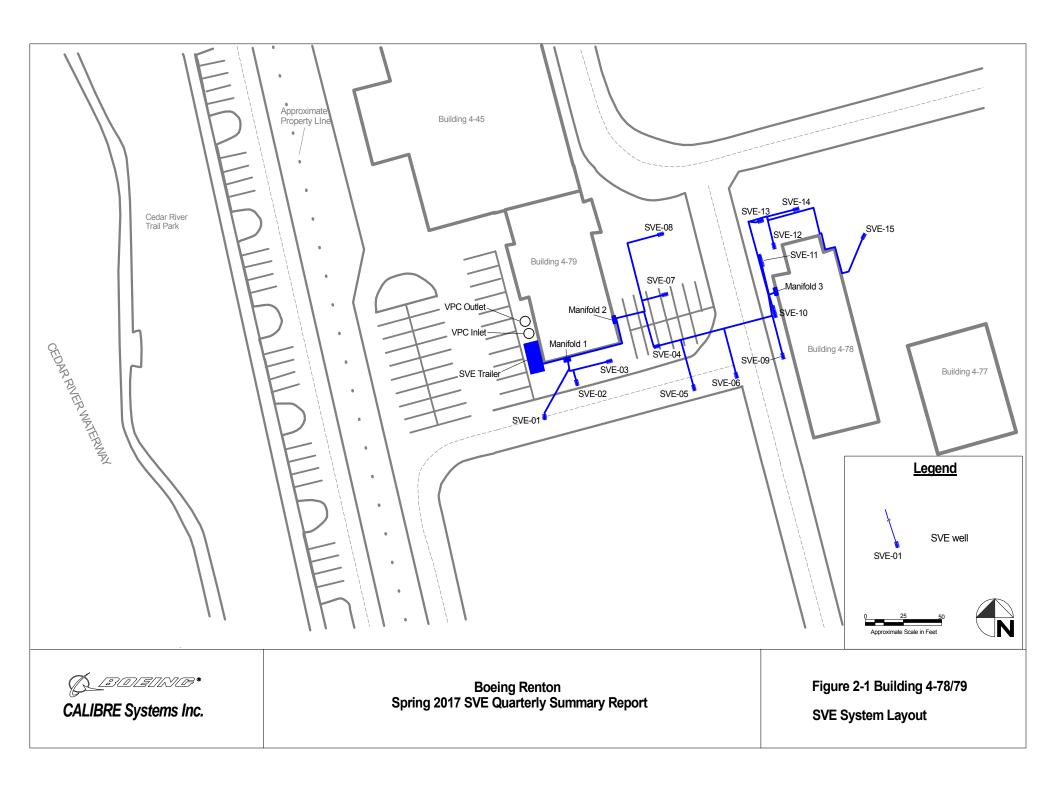
GW Treatment Area	Source and downgradient	CPOC wells	Treatment IWs	ERD Treatment
SWMU-172/174	All detections are less than 1.5 ug/L.	All detections are at 0.4 ug/L or less.	Prior data, North and South IWS showed total CVOCs range from 0.03 ug/L to 6.90 ug/L. TOC near background.	Substrate injection in all IWs B172-1 through B172- 14 completed in July 2018.
Building 4-78/4-79 SWMU/AOC Group	Most source area MWs are ND or less than 1.0 ug/L. One central well shows significant decrease in total CVOCs from 1,430 ug/L in Nov 2017 to 150 ug/L in May 2018, after substrate injections in January 2018. Benzene remains in selected wells/area (<10 typically). GW-031S was at 60 ug/L in March 2018 and now at 11 ug/L in May 2018; Nitrate/sulfate injected in July 2018.	Six of seven CPOC wells are ND or below CULs for CVOCs. The one well with detections above CUL show VC at 0.23 ug/L.	Prior data, 4 of 5 wells with low detections where sum of CVOCs are less than 3 ug/L. One central well shows total CVOCs at 2,440 ug/L. TOC near background.	Substrate injection in selected IWs/areas around GW-033S completed in July 2018.
AOC-001/002	Prior data, MW near source at 0.8 ug/L; downgradient all detections are less than 1.5 ug/L.	All detections are less than 0.20 ug/L.	Prior data, detections at or below 0.30 ug/L.	Inject infiltration galleries at source (IPRA and IPRB) when area is accessible.
AOC-003	All detections are less than 0.50 ug/L.	Detections at or below 0.60 ug/L.	Prior data, in May 2017 one of four IWs sampled – VC detection less than 0.30 ug/L	No action
Lot 20 / former 10-71	One well with VC at 0.24 ug/L, all other MWs are ND.	-	-	No action
AOC-60	Prior data, detections less than 3 ug/L.	Prior data, all detections less than 0.30 ug/L	-	Substrate injections at MWs GW-012S and GW-147S completed in July 2018.
AOC – 90	Prior data, MW near source at 3.0 ug/L CVOCs; downgradient wells less than 0.50 ug/L.	Prior data, all detections are less than 0.60 ug/L.	-	Substrate injection at GW- 189S completed in July 2018.
Apron A	Detections of VC range from 0.24 ug/L to 1.63 ug/L.	-	-	Substrate injection to be considered in conjunction with AOC-001/002.
Building 4-70	-	Prior data, CVOCs at 0.75 ug/L and 0.26 ug/L.	-	No action

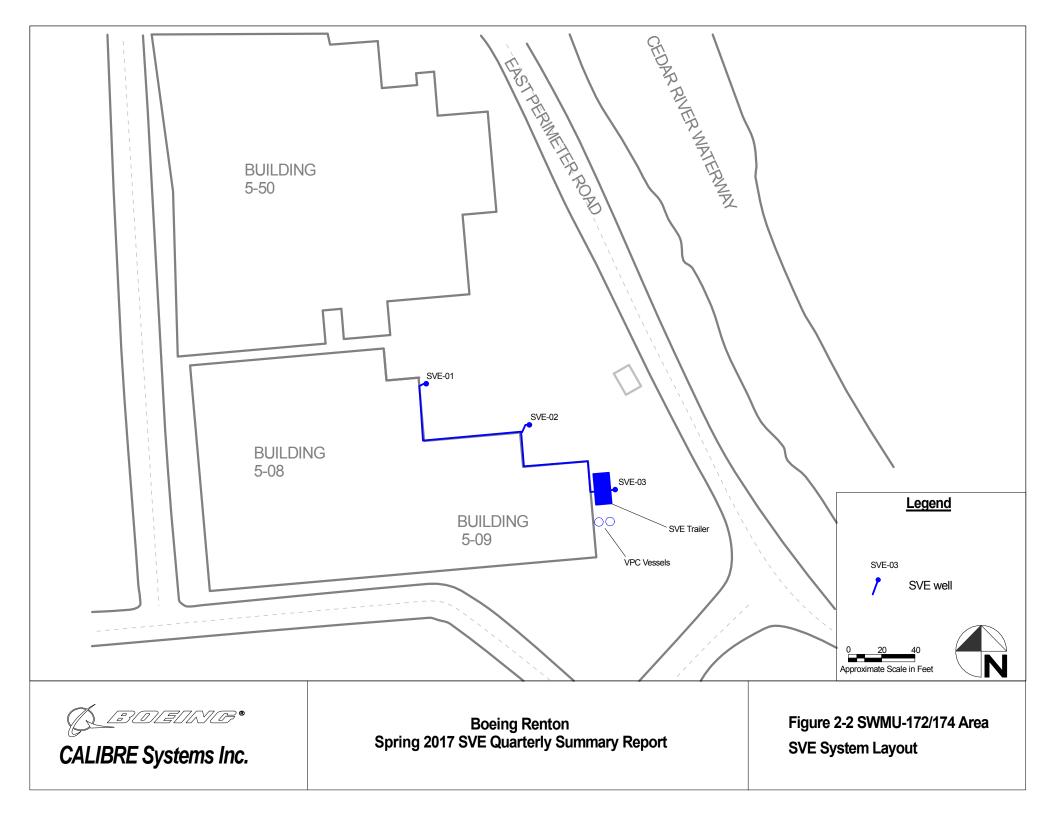
FIGURES



CALIBRE Systems, Inc.

Figure 1-1 Site Location/ AOC Outlines





Attachment A: Field Log Forms

Renton Cleanup Action SVE System – 4-78/79 Field Operations Log Form

nspection Date: geriodic systems (check. , vacuum, pressure, m /E well VPC inlet and	Date of last inspection: 3/6/18 noisture separator, water storage drums I VPC outlet with PID. Manifering interval is variable	
	Oper	ational Parameters - Monitoring interval is variable.	
Inspection Time:	0815	Motor Hours:	-
Blower	Current Value	Other Notes	
Vacuum gauge	34" H20	Changed blows oil	
Pressure gauge	17" H20		
System flow rate	112 SLFM		
Blower Temperature	88°F		
Temp.at lag VPC discharge		ts, TEFC motor fan, any unusual noise/vibration	

PID Model:	PPBRAE	2000		Details:	0 885/	110.02ppn	7				
Calibration tim		122/18 -08	50	PID check after monitoring:							
Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well Off			
SVE-01	1021	J26ppb	262pp / 138pp	0							
SVE-02			1			v					
SVE-03											
SVE-04								-			
SVE-05	1000	10000 PPb	15250 PPb								
SVE-06	1018	3908 PB	3782								
SVE-07											
SVE-08											
SVE-09											
SVE-10	1026	1626 PPS	1525 ppb								
SVE-11											
SVE-12	1030	741 PPb	681286								
SVE-13											
SVE-14											
SVE-15											
Other:											

Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well
VPC Inlet	1016	1,975 ppb	2,048,000					
VPC Midpoint								
VPC Outlet	1013	OZPO	oppb					

^{1.} Flow rate calculated from the equation Flow Rate $(cfm) = 12.24 \times \sqrt{differential}$ pressure.

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5	un Ple	1 I.me	0.10 [899]	P. 0	1 Time	18181	17(P)
IN		1149	1291		1359	1,419	1,178
000		1153	0	0	1358	0	0
1		1156	187	145,775	1354	489	149
5		1210		9,643	1405	5,589	5568
					1410	3,624	4021
	0	1202		4330 Pro	1414	1,148	874
	127		518	1366	1417	736	611

Renton Cleanup Action SVE System – 4-78/79 Field Operations Log Form

Inspection Date: Periodic systems c	neck:	Date of last inspection: 5/22/18	
1) Check flowrate.	vacuum, pressure, n	noisture separator, water storage drums	
2) Check each SVE	well, VPC inlet, and	d VPC outlet with PID.	
	Oper	rational Parameters - Monitoring interval is variable.	
Inspection Time:	1900	Motor Hours:	
Blower	Current Value	Other Notes	
Vacuum gauge		Day 1 Monitoring for SUE Resound	
Pressure gauge			
System flow rate			
Blower Temperature			
Temp.at lag VPC discharge		ts, TEFC motor fan, any unusual noise/vibration	

PID Model:	PPBRAE3	000		Details:							
Calibration tim				PID check after monitoring:							
Sampling Point	Time	PID Reading	PID Reading	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well			
SVE-01	1419	509	(2) ₃₇₈								
SVE-02											
SVE-03											
SVE-04											
SVE-05	1422	1131	1044								
SVE-06	1425	1.601	1,430								
SVE-07											
SVE-08											
SVE-09											
SVE-10	1431	698	701								
SVE-11											
SVE-12	1433	558	578								
SVE-13											
SVE-14											
SVE-15											
Other:											

Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well Off
VPC Inlet	1412	501	503					
VPC Midpoint								
VPC Outlet	1415	Ó	6					

1. Flow rate calculated from the equation Flow Rate $(cfm) = 12.24 \times \sqrt{differential}$ pressure.

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Contract to the second second second	n Neste @ (300) 901-3000		No. of Continuous of
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0:50-4-0-		Signature	Date
Signature	Printed Name	Signature	

Renton Cleanup Action SVE System – 4-78/79 Field Operations Log Form

2) Check each SVI	E well, VPC inlet, and	noisture separator, water storage drums J VPC outlet with PID. rational Parameters - Monitoring interval is variable.	
Inspection Time:	0830	Motor Hours:	
Blower	Current Value	Other Notes	
Vacuum gauge		Day 9 - SuElebound monitoring	
Pressure gauge			
System flow rate			
Blower Temperature			
Temp.at lag VPC discharge		Its, TEFC motor fan, any unusual noise/vibration	

PID Model:	ID Model:				Details:					
Calibration tim	e/ date:			PID check after monitoring:						
Sampling Point	Time	PID Reading	PID Reading (2) ppb	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well Off		
SVE-01	1130	32	19							
SVE-02										
SVE-03										
SVE-04										
SVE-05	1105	145	139							
SVE-06	1110	181	159							
SVE-07	1									
SVE-08										
SVE-09										
SVE-10	1115	301	254					1		
SVE-11										
SVE-12	1120	348	276							
SVE-13										
SVE-14										
SVE-15										
Other:										

Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well
VPC Inlet	0840	P	P					-
VPC Midpoint								
VPC Outlet	6850	6	6					

1. Flow rate calculated from the equation Flow Rate $(cfm) = 12.24 \times \sqrt{differential}$ pressure.

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Signature	Printed Name	-	Signature	Date

Renton Cleanup Action SVE System – 4-78/79 Field Operations Log Form

nspection Date: _	6-1-10	Date of la	ast inspection: _	0/3//	
JAMANIA CVETAME I	. LIMI. K				
Check flowrate,	vacuum, pressure, m	noisture separato	PID	dunia	
2) Check each SV	E well, VPC inlet, and	rational Parame	ters - Monitorin	g interval is variable.	
Inspection Time:		Motor Hours:	3592.8		
Blower	Current Value			Other Notes	
Vacuum gauge	35"H20				
Pressure gauge	152 H20				
System flow rate	tha sofm				
Blower Temperature	116°F				
Temp.at lag	eck oil level, drive be				

PID Model:	LLB KUL 3000				Details: 0 PPb / 10.00 PPm					
Calibration tim	e/ date:	1/18 0900		PID check after monitoring:						
Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well		
SVE-01	8922	44	17							
SVE-02										
SVE-03										
SVE-04										
SVE-05	0923	157	128							
SVE-06	0936	167	203					-		
SVE-07										
SVE-08								-		
SVE-09								-		
SVE-10	0940	369	386					-		
SVE-11										
SVE-12	0946	411	390							
SVE-13										
SVE-14										
SVE-15								-		
Other:							James .			

Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well
VPC Inlet	0919	162	148					
VPC Midpoint								
VPC Outlet	0915	57	52					

1. Flow rate calculated from the equation Flow Rate $(cfm) = 12.24 \times \sqrt{differential}$ pressure.

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Signature

Justin Neste

Printed Name

Signature

Signature

Date

Inspection Date:	6/20/18	Date of last inspection:	
		existure separator, water storage drums	
1) Check flowrate,	vacuum, pressure, ii	noisture separator, water storage drums d VPC outlet with PID.	
2) Check each 3 v	Oper	rational Parameters - Monitoring interval is variable.	
Inspection Time:		Motor Hours: 3910.3	
Blower	Current Value	Other Notes	
Vacuum gauge	34"1420	Day 29 SUEREboard	
Pressure gauge	16"H20		
System flow rate	119 SCFM		
Blower Temperature	142°F		
Temp.at lag VPC discharge			
Other notes ch	eck oil level drive bel	Its. TEFC motor fan, any unusual noise/vibration	

PID Model:	PPB RAE	3000		Details: 0 7pb / 10.00 ppm					
Calibration tim	7.1.1.	120/16 06	15	PID check after monitoring:					
Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well Off	
SVE-01	1518	4 775	6 ppb						
SVE-02									
SVE-03									
SVE-04									
SVE-05	1522	31	37						
SVE-06	1521	93	107						
SVE-07									
SVE-08									
SVE-09									
SVE-10	1527	241	221						
SVE-11									
SVE-12	1528	243	261						
SVE-13									
SVE-14									
SVE-15									
Other:									

Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹	Well Off
VPC Inlet	1515	79	79					
VPC Midpoint								
VPC Outlet	1512	0	0					

1. Flow rate calculated from the equation Flow Rate $(cfm) = 12.24 \times \sqrt{differential}$ pressure.

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	Justin Neste	and the contract of the contra	bleclis
Signature	Printed Name	Signature	Date

Periodic systems of Check flowrate.	vacuum, pr	essure, moisture s	separate	or, water sto	orage drums					
) Check each SV	E well, VPC	inlet and VPC ou	itlet with	n PID.	toring interval	is variable				
Inspection Time:	achia		Hours:			is variable.				
inspection rime.				3058	*	er Notes				
Blower	Curren		and 6	3 lomo oi		er Notes				
Vacuum gauge	38 He	0850		~ Stort						
Pressure gauge	23"6	120								
System flow rate	-98 SUF	m								
Blower Temperature	97°F									
Temp.at lag VPC discharge										
Other notes: che	eck oil level	, drive belts, TEFC	motor	fan, any un	usual noise/vil	oration				
PID Model:	3 2 A E 3	300		Details: 0 PP6 / 10.02 Ppm						
Calibration time/				PID check	after monitori					
Sampling Point	Time	PID Reading (1)		Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate		
SVE-01	0906	74226	131;		37	98				
SVE-02	ogw	185 pps	135							
SVE-03	0916	1,394ppb	1,42	28 000						
VPC Inlet	859	649	311							
	8 56	117	21							
VPC Midpoint	0									
VPC Midpoint VPC Outlet	8 56	暦 Oppb	弘	_						
		唐 Oppb	81	-						

Inspection Time	:		Hours:		toring interval	is variable.			
Blower	Current	t Value			Oth	er Notes			
Vacuum gauge		Da	y 1	50E Rebe	e wasted				
Pressure gauge System flow rate									
Blower Temperature Temp.at lag									
VPC discharge Other notes: ch	neck oil level	, drive belts, TEFC	motor	fan, any un	usual noise/vi	bration			
PID Model:	PPB RA	É 3000		Details:					
Calibration time	/ date:	J. Company	•	PID check	after monitor	ing:			
Sampling Point	Time	PID Reading (1) PPD	PID	Reading (2) 29	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated	
SVE-01	1500	62	4-	2					
SVE-02	1457	192	131						
SVE-03	1451	755	86	15					
VPC Inlet	1448	1,201	114	5					
VPC Midpoint									
VPC Outlet	1447	0	0)					
Other vapor point						7			
Questions? Call	Justin Neste	he equation Flow Rate (2) (360) 981-5606 oring event scan m	3				n.Neste@calibr	esys.com	

			Parame Hours:	eters - Mon	toring interval	is variable.		
Inspection Time			riours.		045	- Natas		
Blower	Curren	it Value	55.5	100		er Notes		
Vacuum gauge		Do	my 9	- Sur Re	bound we	enitarines)		
Pressure gauge								
System flow rate								
Blower Temperature								
Temp.at lag VPC discharge								
Other notes: ch	eck oil leve	I, drive belts, TEFO	motor	fan, any un	usual noise/vil	bration		
PID Model: 12	PBRAE	2000		Details:				
Calibration time	1	jou		PID check	after monitor	ing:		
Sampling Point	Time	PID Reading (1)	PID	Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated
SVE-01	1026	96	86	,				
SVE-02	1031	0	0					
SVE-03	1032	275		.55				
VPC Inlet	1018	276	3	25				
VPC Midpoint								
VPC Outlet	1012	0	D					
Other vapor point								
Flow rate c	alculated from	the equation Flow Rate	e (cfm) =	$12.24 \times \sqrt{dif}$	erential pressur	e.		
Questions? Call	Justin Neste	@ (360) 981-560 oring event scan n	6 nonitorir	na forms an	d email to Just	tin Neste: Justii	n.Neste@calibr	esys.com
At the Completio	ii oi a mome	oning event sour in	TOTILOTII	ig forme an				

	VE well, VPC	inlet, and VPC ou	Parame	ters - Mon	itoring interval	is variable.			
Inspection Time	1500		Hours:	3416					
Blower	Current		Other Notes						
Vacuum gauge	34 1.	120							
Pressure gauge	24"1	Hzv							
System flow rate	1,0550								
Blower Temperature	1170	F							
Temp.at lag VPC discharge									
Other notes: c	heck oil level	, drive belts, TEFC	motor	fan, any un	usual noise/vi	oration			
PID Model:		DE 3000		Details:		10.00 PF	m		
Calibration time	e/ date: 6/	7/18 0900)	PID checi	c after monitor				
Sampling Point	Time	PID Reading (1)	PID	Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated	
SVE-01	1320	64	45						
SVE-02	1517	232	203	,					
SVE-03	1514	636	60	7					
	1510	455	45	2					
VPC Inlet									
VPC Inlet VPC Midpoint			1 8						
	1505	0/0	0						

Instin Neste

Signature

Inspection Date:	6/10/18	Date of last inspection: 6 / 7 / 18	
Periodic systems c	HECK.	noisture separator, water storage drums	
2) Check each SVI	well VPC inlet and	VPC outlet with PID.	
Z) Check each ovi	Oper	rational Parameters - Monitoring interval is variable.	
Inspection Time:	1430	Motor Hours: 3618.8	
Blower	Current Value	Other Notes	
Vacuum gauge	34"1/20	Deg 29 - Resound monitoring	
Pressure gauge	26"420		
System flow rate	103 XFM		
Blower Temperature	124°F		
Temp.at lag VPC discharge			
Other notes: che	eck oil level, drive bel	ts, TEFC motor fan, any unusual noise/vibration	

PID Model:	PPBRI	9F 3000	Details:	O. PPb/	0.00 ppm				
Calibration time		20/18 0645	PID chec	PID check after monitoring:					
Sampling Point	Time	PID Reading (1)	PID Reading (2)	Vacuum	Flow Rate (gauge)	Differential Pressure	Flow Rate Calculated ¹		
SVE-01	1447	0 7795	O pps						
SVE-02	1445	51	31						
SVE-03	1439	200	181						
VPC Inlet	1435	153	153						
VPC Midpoint			- 10						
VPC Outlet	1433	D	0						
Other vapor point							_		

^{1.} Flow rate calculated from the equation Flow Rate (cfm) = $12.24 \times \sqrt{differential}$ pressure.

Questions? Call Justin Nes At the Completion of a mon	te @ (360) 981-5606 itoring event scan monitoring forms an	d email to Justin Neste: Justin.Nes	te@calibresys.com
Signature	Justin Westl Printed Name	Signature	6/20/18 Date

Attachment B: Laboratory Data Package



6/11/2018 Mr. Justin Neste CALIBRE, Environmental Technology Solutions 20926 Pugh Rd NE

Poulsbo WA 98370

Project Name: Boeing Renton

Project #:

Workorder #: 1805531

Dear Mr. Justin Neste

The following report includes the data for the above referenced project for sample(s) received on 5/29/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Elly Butte



WORK ORDER #: 1805531

Work Order Summary

CLIENT: Mr. Justin Neste BILL TO: Accounts Payable

> CALIBRE, Environmental Technology **Eurofins Lancaster Laboratories**

Solutions

Environmental, LLC 20926 Pugh Rd NE 2425 New Holland Pike Poulsbo, WA 98370 Lancaster, PA 17605-2425

PHONE: 360-981-5606 P.O. #

FAX: PROJECT # **Boeing Renton**

DATE RECEIVED: 05/29/2018 **CONTACT:** Kelly Buettner **DATE COMPLETED:** 06/11/2018

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	5-09-SVE-IN-052218	TO-15	3.9 "Hg	14.2 psi
02A	5-09-SVE-3-052218	TO-15	5.7 "Hg	14.2 psi
03A	4-78-SVE-1-052218	TO-15	6.3 "Hg	14.9 psi
04A	4-78-SVE-IN-052218	TO-15	4.9 "Hg	14.8 psi
05A	4-78-SVE-6-052218	TO-15	6.5 "Hg	14.8 psi
06A	4-78-SVE-10-052218	TO-15	0.6 "Hg	14.9 psi
07A	Lab Blank	TO-15	NA	NA
08A	CCV	TO-15	NA	NA
09A	LCS	TO-15	NA	NA
09AA	LCSD	TO-15	NA	NA

	Heide Tayes	
CERTIFIED BY:	0 00	DATE: <u>06/11/18</u>

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards



LABORATORY NARRATIVE EPA Method TO-15 CALIBRE, Environmental Technology Solutions Workorder# 1805531

Six 1 Liter Summa Canister samples were received on May 29, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Dilution was performed on samples 5-09-SVE-IN-052218, 5-09-SVE-3-052218, 4-78-SVE-IN-052218, 4-78-SVE-6-052218 and 4-78-SVE-10-052218 due to the presence of high level target species.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.
 - M Reported value may be biased due to apparent matrix interferences.
 - CN See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:



a-File was requantified b-File was quantified by a second column and detector r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 5-09-SVE-IN-052218

Lab ID#: 1805531-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
cis-1,2-Dichloroethene	1.9	13	7.5	50	
1,1,1-Trichloroethane	1.9	12	10	67	
Trichloroethene	1.9	43	10	230	
Tetrachloroethene	1.9	430	13	2900	

Client Sample ID: 5-09-SVE-3-052218

Lab ID#: 1805531-02A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	4.0	22	16	85
1,1,1-Trichloroethane	4.0	22	22	120
Trichloroethene	4.0	66	22	350
Tetrachloroethene	4.0	790	27	5300

Client Sample ID: 4-78-SVE-1-052218

Lab ID#: 1805531-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Carbon Disulfide	5.1	16	16	49
Hexane	1.3	26	4.5	93
Cumene	1.3	1.7	6.3	8.5
TPH ref. to Gasoline (MW=100)	130	630	520	2600
Pentane	5.1	83	15	240

Client Sample ID: 4-78-SVE-IN-052218

Lab ID#: 1805531-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	1.7	4.6	4.4	12
Freon 113	1.7	50	13	380
Acetone	17	22	41	53
Hexane	1.7	49	6.0	170



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 4-78-SVE-IN-052218

Lab ID#: 1805531-04A				
cis-1,2-Dichloroethene	1.7	10	6.8	40
1,1,1-Trichloroethane	1.7	19	9.4	100
Trichloroethene	1.7	260	9.2	1400
Toluene	1.7	2.8	6.5	11
Tetrachloroethene	1.7	2.6	12	18
TPH ref. to Gasoline (MW=100)	170	2000	700	8200
Pentane	6.9	110	20	340

Client Sample ID: 4-78-SVE-6-052218

Lab ID#: 1805531-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Vinyl Chloride	26	29	65	74
Freon 113	26	1900	200	15000
Hexane	26	350	90	1200
1,1,1-Trichloroethane	26	28	140	160
Trichloroethene	26	220	140	1200
Tetrachloroethene	26	36	170	250
TPH ref. to Gasoline (MW=100)	2600	26000	10000	110000
Pentane	100	690	300	2000

Client Sample ID: 4-78-SVE-10-052218

Lab ID#: 1805531-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	3.4	77	26	590
cis-1,2-Dichloroethene	3.4	23	14	92
1,1,1-Trichloroethane	3.4	70	19	380
Trichloroethene	3.4	720	18	3900
Toluene	3.4	38	13	140
Tetrachloroethene	3.4	5.4	23	37
Ethyl Benzene	3.4	6.9	15	30
m,p-Xylene	3.4	19	15	82
o-Xylene	3.4	7.6	15	33



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 4-78-SVE-10-052218

Lab ID#: 1805531-06A

Styrene	3.4	11	14	48
TPH ref. to Gasoline (MW=100)	340	480	1400	2000
Pentane	14	17	40	50



Client Sample ID: 5-09-SVE-IN-052218 Lab ID#: 1805531-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060711 Date of Collection: 5/22/18 11:10:00 AM Dil. Factor: 3.77 Date of Analysis: 6/7/18 03:59 PM

	5.77	Date	Ol Allalysis. Olli	0 00.00 : 111
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
· · · · · · · · · · · · · · · · · · ·				
Chloromethane	19	Not Detected	39	Not Detected
Vinyl Chloride	1.9	Not Detected	4.8	Not Detected
Freon 113	1.9	Not Detected	14	Not Detected
1,1-Dichloroethene	1.9	Not Detected	7.5	Not Detected
Acetone	19	Not Detected	45	Not Detected
Carbon Disulfide	7.5	Not Detected	23	Not Detected
Methylene Chloride	19	Not Detected	65	Not Detected
trans-1,2-Dichloroethene	1.9	Not Detected	7.5	Not Detected
Hexane	1.9	Not Detected	6.6	Not Detected
1,1-Dichloroethane	1.9	Not Detected	7.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	7.5	Not Detected	22	Not Detected
cis-1,2-Dichloroethene	1.9	13	7.5	50
Chloroform	1.9	Not Detected	9.2	Not Detected
1,1,1-Trichloroethane	1.9	12	10	67
Benzene	1.9	Not Detected	6.0	Not Detected
Trichloroethene	1.9	43	10	230
Toluene	1.9	Not Detected	7.1	Not Detected
1,1,2-Trichloroethane	1.9	Not Detected	10	Not Detected
Tetrachloroethene	1.9	430	13	2900
Chlorobenzene	1.9	Not Detected	8.7	Not Detected
Ethyl Benzene	1.9	Not Detected	8.2	Not Detected
m,p-Xylene	1.9	Not Detected	8.2	Not Detected
o-Xylene	1.9	Not Detected	8.2	Not Detected
Styrene	1.9	Not Detected	8.0	Not Detected
Cumene	1.9	Not Detected	9.3	Not Detected
Propylbenzene	1.9	Not Detected	9.3	Not Detected
1,3,5-Trimethylbenzene	1.9	Not Detected	9.3	Not Detected
1,2,4-Trimethylbenzene	1.9	Not Detected	9.3	Not Detected
TPH ref. to Gasoline (MW=100)	190	Not Detected	770	Not Detected
Acetonitrile	19	Not Detected	32	Not Detected
Vinyl Acetate	7.5	Not Detected	26	Not Detected
Octane	7.5	Not Detected	35	Not Detected
Pentane	7.5	Not Detected	22	Not Detected
Butylbenzene	7.5	Not Detected	41	Not Detected
Decane	7.5	Not Detected	44	Not Detected
Dodecane	19	Not Detected	130	Not Detected
sec-Butylbenzene	7.5	Not Detected	41	Not Detected
p-Cymene	7.5	Not Detected	41	Not Detected
p Cymone	1.0	.101 20100104	• • • • • • • • • • • • • • • • • • • •	Not Botooted

Container Type: 1 Liter Summa Canister

Surrogates Method Limits



Client Sample ID: 5-09-SVE-IN-052218

Lab ID#: 1805531-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060711 Date of Collection: 5/22/18 11:10:00 AM Dil. Factor: 3.77 Date of Analysis: 6/7/18 03:59 PM

		Method
Surrogates	%Recovery	Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	96	70-130



Client Sample ID: 5-09-SVE-3-052218 Lab ID#: 1805531-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3060712	Date of Collection: 5/22/18 11:05:00 AM
Dil. Factor:	8.09	Date of Analysis: 6/7/18 04:23 PM

Dil. Factor:	8.09 Date of Analysis: 6/1/18 04:23 PM			
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Chloromethane	40	Not Detected	84	Not Detected
Vinyl Chloride	4.0	Not Detected	10	Not Detected
Freon 113	4.0	Not Detected	31	Not Detected
1,1-Dichloroethene	4.0	Not Detected	16	Not Detected
Acetone	40	Not Detected	96	Not Detected
Carbon Disulfide	16	Not Detected	50	Not Detected
Methylene Chloride	40	Not Detected	140	Not Detected
trans-1,2-Dichloroethene	4.0	Not Detected	16	Not Detected
Hexane	4.0	Not Detected	14	Not Detected
1,1-Dichloroethane	4.0	Not Detected	16	Not Detected
2-Butanone (Methyl Ethyl Ketone)	16	Not Detected	48	Not Detected
cis-1,2-Dichloroethene	4.0	22	16	85
Chloroform	4.0	Not Detected	20	Not Detected
1,1,1-Trichloroethane	4.0	22	22	120
Benzene	4.0	Not Detected	13	Not Detected
Trichloroethene	4.0	66	22	350
Toluene	4.0	Not Detected	15	Not Detected
1,1,2-Trichloroethane	4.0	Not Detected	22	Not Detected
Tetrachloroethene	4.0	790	27	5300
Chlorobenzene	4.0	Not Detected	19	Not Detected
Ethyl Benzene	4.0	Not Detected	18	Not Detected
m,p-Xylene	4.0	Not Detected	18	Not Detected
o-Xylene	4.0	Not Detected	18	Not Detected
Styrene	4.0	Not Detected	17	Not Detected
Cumene	4.0	Not Detected	20	Not Detected
Propylbenzene	4.0	Not Detected	20	Not Detected
1,3,5-Trimethylbenzene	4.0	Not Detected	20	Not Detected
1,2,4-Trimethylbenzene	4.0	Not Detected	20	Not Detected
TPH ref. to Gasoline (MW=100)	400	Not Detected	1600	Not Detected
Acetonitrile	40	Not Detected	68	Not Detected
Vinyl Acetate	16	Not Detected	57	Not Detected
Octane	16	Not Detected	76	Not Detected
Pentane	16	Not Detected	48	Not Detected
Butylbenzene	16	Not Detected	89	Not Detected
Decane	16	Not Detected	94	Not Detected
Dodecane	40	Not Detected	280	Not Detected
sec-Butylbenzene	16	Not Detected	89	Not Detected
p-Cymene	16	Not Detected	89	Not Detected

Container Type: 1 Liter Summa Canister



Client Sample ID: 5-09-SVE-3-052218

Lab ID#: 1805531-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060712 Date of Collection: 5/22/18 11:05:00 AM
Dil. Factor: 8.09 Date of Analysis: 6/7/18 04:23 PM

		Wetnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	95	70-130	



Client Sample ID: 4-78-SVE-1-052218 Lab ID#: 1805531-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3060709	Date of Collection: 5/22/18 12:24:00 PM
Dil. Factor:	2.55	Date of Analysis: 6/7/18 03:11 PM

DII. Factor:	2.55 Date of Analysis: 6///18 03:11 PM			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	13	Not Detected	26	Not Detected
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected
Freon 113	1.3	Not Detected	9.8	Not Detected
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Acetone	13	Not Detected	30	Not Detected
Carbon Disulfide	5.1	16	16	49
Methylene Chloride	13	Not Detected	44	Not Detected
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Hexane	1.3	26	4.5	93
1,1-Dichloroethane	1.3	Not Detected	5.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	5.1	Not Detected	15	Not Detected
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected
Chloroform	1.3	Not Detected	6.2	Not Detected
1,1,1-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Benzene	1.3	Not Detected	4.1	Not Detected
Trichloroethene	1.3	Not Detected	6.8	Not Detected
Toluene	1.3	Not Detected	4.8	Not Detected
1,1,2-Trichloroethane	1.3	Not Detected	7.0	Not Detected
Tetrachloroethene	1.3	Not Detected	8.6	Not Detected
Chlorobenzene	1.3	Not Detected	5.9	Not Detected
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected
m,p-Xylene	1.3	Not Detected	5.5	Not Detected
o-Xylene	1.3	Not Detected	5.5	Not Detected
Styrene	1.3	Not Detected	5.4	Not Detected
Cumene	1.3	1.7	6.3	8.5
Propylbenzene	1.3	Not Detected	6.3	Not Detected
1,3,5-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
1,2,4-Trimethylbenzene	1.3	Not Detected	6.3	Not Detected
TPH ref. to Gasoline (MW=100)	130	630	520	2600
Acetonitrile	13	Not Detected	21	Not Detected
Vinyl Acetate	5.1	Not Detected	18	Not Detected
Octane	5.1	Not Detected	24	Not Detected
Pentane	5.1	83	15	240
Butylbenzene	5.1	Not Detected	28	Not Detected
Decane	5.1	Not Detected	30	Not Detected
Dodecane	13	Not Detected	89	Not Detected
sec-Butylbenzene	5.1	Not Detected	28	Not Detected
p-Cymene	5.1	Not Detected	28	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates %Recovery Limits



Client Sample ID: 4-78-SVE-1-052218

Lab ID#: 1805531-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060709 Date of Collection: 5/22/18 12:24:00 PM Dil. Factor: 2.55 Date of Analysis: 6/7/18 03:11 PM

		Wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	94	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	96	70-130	



Client Sample ID: 4-78-SVE-IN-052218 Lab ID#: 1805531-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060710 Date of Collection: 5/22/18 12:25:00 PM Dil. Factor: 3.43 Date of Analysis: 6/7/18 03:36 PM

	<u> </u>			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	17	Not Detected	35	Not Detected
Vinyl Chloride	1.7	4.6	4.4	12
Freon 113	1.7	50	13	380
1,1-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Acetone	17	22	41	53
Carbon Disulfide	6.9	Not Detected	21	Not Detected
Methylene Chloride	17	Not Detected	60	Not Detected
trans-1,2-Dichloroethene	1.7	Not Detected	6.8	Not Detected
Hexane	1.7	49	6.0	170
1,1-Dichloroethane	1.7	Not Detected	6.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	6.9	Not Detected	20	Not Detected
cis-1,2-Dichloroethene	1.7	10	6.8	40
Chloroform	1.7	Not Detected	8.4	Not Detected
1,1,1-Trichloroethane	1.7	19	9.4	100
Benzene	1.7	Not Detected	5.5	Not Detected
Trichloroethene	1.7	260	9.2	1400
Toluene	1.7	2.8	6.5	11
1,1,2-Trichloroethane	1.7	Not Detected	9.4	Not Detected
Tetrachloroethene	1.7	2.6	12	18
Chlorobenzene	1.7	Not Detected	7.9	Not Detected
Ethyl Benzene	1.7	Not Detected	7.4	Not Detected
m,p-Xylene	1.7	Not Detected	7.4	Not Detected
o-Xylene	1.7	Not Detected	7.4	Not Detected
Styrene	1.7	Not Detected	7.3	Not Detected
Cumene	1.7	Not Detected	8.4	Not Detected
Propylbenzene	1.7	Not Detected	8.4	Not Detected
1,3,5-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected
1,2,4-Trimethylbenzene	1.7	Not Detected	8.4	Not Detected
TPH ref. to Gasoline (MW=100)	170	2000	700	8200
Acetonitrile	17	Not Detected	29	Not Detected
Vinyl Acetate	6.9	Not Detected	24	Not Detected
Octane	6.9	Not Detected	32	Not Detected
Pentane	6.9	110	20	340
Butylbenzene	6.9	Not Detected	38	Not Detected
Decane	6.9	Not Detected	40	Not Detected
Dodecane	17	Not Detected	120	Not Detected
sec-Butylbenzene	6.9	Not Detected	38	Not Detected
p-Cymene	6.9	Not Detected	38	Not Detected
i - 2	· -		-	

Container Type: 1 Liter Summa Canister

Surrogates Method Limits



Client Sample ID: 4-78-SVE-IN-052218

Lab ID#: 1805531-04A

EPA METHOD TO-15 GC/MS FULL SCAN

 File Name:
 3060710
 Date of Collection: 5/22/18 12:25:00 PM

 Dil. Factor:
 3.43
 Date of Analysis: 6/7/18 03:36 PM

Surrogates	%Recovery	Limits
Toluene-d8	97	70-130
1,2-Dichloroethane-d4	97	70-130
4-Bromofluorobenzene	95	70-130



Client Sample ID: 4-78-SVE-6-052218 Lab ID#: 1805531-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060714 Date of Collection: 5/22/18 12:30:00 PM
Dil. Factor: 51.2 Date of Analysis: 6/7/18 05:11 PM

Dili. I dotor.	Date of Analysis. 0/1/10 05.11 1 M			
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	260	Not Detected	530	Not Detected
Vinyl Chloride	26	29	65	74
Freon 113	26	1900	200	15000
1,1-Dichloroethene	26	Not Detected	100	Not Detected
Acetone	260	Not Detected	610	Not Detected
Carbon Disulfide	100	Not Detected	320	Not Detected
Methylene Chloride	260	Not Detected	890	Not Detected
trans-1,2-Dichloroethene	26	Not Detected	100	Not Detected
Hexane	26	350	90	1200
1,1-Dichloroethane	26	Not Detected	100	Not Detected
2-Butanone (Methyl Ethyl Ketone)	100	Not Detected	300	Not Detected
cis-1,2-Dichloroethene	26	Not Detected	100	Not Detected
Chloroform	26	Not Detected	120	Not Detected
1,1,1-Trichloroethane	26	28	140	160
Benzene	26	Not Detected	82	Not Detected
Trichloroethene	26	220	140	1200
Toluene	26	Not Detected	96	Not Detected
1,1,2-Trichloroethane	26	Not Detected	140	Not Detected
Tetrachloroethene	26	36	170	250
Chlorobenzene	26	Not Detected	120	Not Detected
Ethyl Benzene	26	Not Detected	110	Not Detected
m,p-Xylene	26	Not Detected	110	Not Detected
o-Xylene	26	Not Detected	110	Not Detected
Styrene	26	Not Detected	110	Not Detected
Cumene	26	Not Detected	120	Not Detected
Propylbenzene	26	Not Detected	120	Not Detected
1,3,5-Trimethylbenzene	26	Not Detected	120	Not Detected
1,2,4-Trimethylbenzene	26	Not Detected	120	Not Detected
TPH ref. to Gasoline (MW=100)	2600	26000	10000	110000
Acetonitrile	260	Not Detected	430	Not Detected
Vinyl Acetate	100	Not Detected	360	Not Detected
Octane	100	Not Detected	480	Not Detected
Pentane	100	690	300	2000
Butylbenzene	100	Not Detected	560	Not Detected
Decane	100	Not Detected	600	Not Detected
Dodecane		Not Detected	1800	Not Detected
	260	Not Detected	1000	Not Detected
sec-Butylbenzene	260 100	Not Detected Not Detected	560	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates %Recovery Limits



Client Sample ID: 4-78-SVE-6-052218

Lab ID#: 1805531-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060714 Date of Collection: 5/22/18 12:30:00 PM Dil. Factor: 51.2 Date of Analysis: 6/7/18 05:11 PM

Surrogates	%Recovery	Metnoa Limits	
Toluene-d8	95	70-130	
1,2-Dichloroethane-d4	100	70-130	
4-Bromofluorobenzene	95	70-130	



Client Sample ID: 4-78-SVE-10-052218 Lab ID#: 1805531-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060713 Date of Collection: 5/22/18 12:36:00 PM
Dil. Factor: 6.85 Date of Analysis: 6/7/18 04:46 PM

Dil. Factor:	0.85 Date of Analysis: 6/1/18 04:46			0 U4.40 PIVI
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Chloromethane	34	Not Detected	71	Not Detected
Vinyl Chloride	3.4	Not Detected	8.8	Not Detected
Freon 113	3.4	77	26	590
1,1-Dichloroethene	3.4	Not Detected	14	Not Detected
Acetone	34	Not Detected	81	Not Detected
Carbon Disulfide	14	Not Detected	43	Not Detected
Methylene Chloride	34	Not Detected	120	Not Detected
trans-1,2-Dichloroethene	3.4	Not Detected	14	Not Detected
Hexane	3.4	Not Detected	12	Not Detected
1,1-Dichloroethane	3.4	Not Detected	14	Not Detected
2-Butanone (Methyl Ethyl Ketone)	14	Not Detected	40	Not Detected
cis-1,2-Dichloroethene	3.4	23	14	92
Chloroform	3.4	Not Detected	17	Not Detected
1,1,1-Trichloroethane	3.4	70	19	380
Benzene	3.4	Not Detected	11	Not Detected
Trichloroethene	3.4	720	18	3900
Toluene	3.4	38	13	140
1,1,2-Trichloroethane	3.4	Not Detected	19	Not Detected
Tetrachloroethene	3.4	5.4	23	37
Chlorobenzene	3.4	Not Detected	16	Not Detected
Ethyl Benzene	3.4	6.9	15	30
m,p-Xylene	3.4	19	15	82
o-Xylene	3.4	7.6	15	33
Styrene	3.4	11	14	48
Cumene	3.4	Not Detected	17	Not Detected
Propylbenzene	3.4	Not Detected	17	Not Detected
1,3,5-Trimethylbenzene	3.4	Not Detected	17	Not Detected
1,2,4-Trimethylbenzene	3.4	Not Detected	17	Not Detected
TPH ref. to Gasoline (MW=100)	340	480	1400	2000
Acetonitrile	34	Not Detected	58	Not Detected
Vinyl Acetate	14	Not Detected	48	Not Detected
Octane	14	Not Detected	64	Not Detected
Pentane	14	17	40	50
Butylbenzene	14	Not Detected	75	Not Detected
Decane	14	Not Detected	80	Not Detected
Dodecane	34	Not Detected	240	Not Detected
sec-Butylbenzene	14	Not Detected	75	Not Detected
p-Cymene	14	Not Detected	75	Not Detected
1 - 7			-	

Container Type: 1 Liter Summa Canister

Surrogates %Recovery Limits



Client Sample ID: 4-78-SVE-10-052218

Lab ID#: 1805531-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060713 Date of Collection: 5/22/18 12:36:00 PM
Dil. Factor: 6.85 Date of Analysis: 6/7/18 04:46 PM

Surrogates	%Recovery	Limits
Toluene-d8	98	70-130
1,2-Dichloroethane-d4	100	70-130
4-Bromofluorobenzene	98	70-130



Client Sample ID: Lab Blank Lab ID#: 1805531-07A

File Name: Dil. Factor:	3060708a 1.00		Date of Collection: NA Date of Analysis: 6/7/18 12:26 PM		
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Chloromethane	5.0	Not Detected	10	Not Detected	
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected	
Freon 113	0.50	Not Detected	3.8	Not Detected	
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected	
Acetone	5.0	Not Detected	12	Not Detected	
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected	
Methylene Chloride	5.0	Not Detected	17	Not Detected	
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected	
Hexane	0.50	Not Detected	1.8	Not Detected	
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected	
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected	
Chloroform	0.50	Not Detected	2.4	Not Detected	
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected	
Benzene	0.50	Not Detected	1.6	Not Detected	
Trichloroethene	0.50	Not Detected	2.7	Not Detected	
Toluene	0.50	Not Detected	1.9	Not Detected	
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected	
Tetrachloroethene	0.50	Not Detected	3.4	Not Detected	
Chlorobenzene	0.50	Not Detected	2.3	Not Detected	
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected	
m,p-Xylene	0.50	Not Detected	2.2	Not Detected	
o-Xylene	0.50	Not Detected	2.2	Not Detected	
Styrene	0.50	Not Detected	2.1	Not Detected	
Cumene	0.50	Not Detected	2.4	Not Detected	
Propylbenzene	0.50	Not Detected	2.4	Not Detected	
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected	
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected	
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected	
Acetonitrile	5.0	Not Detected	8.4	Not Detected	
	2.0	Not Detected	7.0	Not Detected	
Vinyl Acetate Octane	2.0	Not Detected	9.3	Not Detected	
Octane Pentane	2.0	Not Detected Not Detected	9.3 5.9		
				Not Detected	
Butylbenzene	2.0 2.0	Not Detected Not Detected	11 12	Not Detected	
Decane				Not Detected	
Dodecane	5.0	Not Detected	35	Not Detected	
sec-Butylbenzene	2.0	Not Detected	11	Not Detected	
p-Cymene	2.0	Not Detected	11	Not Detected	

%Recovery

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Method

Limits

Surrogates



Client Sample ID: Lab Blank Lab ID#: 1805531-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3060708a	Date of Collection: NA
Dil. Factor:	1.00	Date of Analysis: 6/7/18 12:26 PM

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	95	70-130	



Client Sample ID: CCV Lab ID#: 1805531-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060702 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/7/18 09:32 AM

Chloromethane 94	
Chilorofficularie 34	
Vinyl Chloride 93	
Freon 113 96	
1,1-Dichloroethene 93	
Acetone 97	
Carbon Disulfide 91	
Methylene Chloride 103	
trans-1,2-Dichloroethene 100	
Hexane 95	
1,1-Dichloroethane 99	
2-Butanone (Methyl Ethyl Ketone) 97	
cis-1,2-Dichloroethene 96	
Chloroform 98	
1,1,1-Trichloroethane 96	
Benzene 99	
Trichloroethene 97	
Toluene 97	
1,1,2-Trichloroethane 98	
Tetrachloroethene 103	
Chlorobenzene 101	
Ethyl Benzene 101	
m,p-Xylene 99	
o-Xylene 99	
Styrene 97	
Cumene 99	
Propylbenzene 100	
1,3,5-Trimethylbenzene 98	
1,2,4-Trimethylbenzene 97	
TPH ref. to Gasoline (MW=100)	
Acetonitrile 92	
Vinyl Acetate 97	
Octane 103	
Pentane 106	
Butylbenzene 104	
Decane 105	
Dodecane 96	
sec-Butylbenzene 106	
p-Cymene 107	

Container Type: NA - Not Applicable

		Metriod
Surrogates	%Recovery	Limits



Client Sample ID: CCV Lab ID#: 1805531-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060702 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/7/18 09:32 AM

Surrogates	%Recovery	Limits
Toluene-d8	101	70-130
1,2-Dichloroethane-d4	94	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: LCS Lab ID#: 1805531-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060703 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/7/18 09:57 AM

_		Method
Compound	%Recovery	Limits
Chloromethane	94	70-130
Vinyl Chloride	96	70-130
Freon 113	97	70-130
1,1-Dichloroethene	92	70-130
Acetone	94	70-130
Carbon Disulfide	91	70-130
Methylene Chloride	100	70-130
trans-1,2-Dichloroethene	108	70-130
Hexane	97	70-130
1,1-Dichloroethane	97	70-130
2-Butanone (Methyl Ethyl Ketone)	98	70-130
cis-1,2-Dichloroethene	90	70-130
Chloroform	97	70-130
1,1,1-Trichloroethane	96	70-130
Benzene	102	70-130
Trichloroethene	102	70-130
Toluene	99	70-130
1,1,2-Trichloroethane	101	70-130
Tetrachloroethene	102	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	99	70-130
o-Xylene	99	70-130
Styrene	98	70-130
Cumene	99	70-130
Propylbenzene	102	70-130
1,3,5-Trimethylbenzene	100	70-130
1,2,4-Trimethylbenzene	100	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
Acetonitrile	Not Spiked	
Vinyl Acetate	97	70-130
Octane	Not Spiked	
Pentane	Not Spiked	
Butylbenzene	Not Spiked	
Decane	Not Spiked	
Dodecane	Not Spiked	
sec-Butylbenzene	Not Spiked	
p-Cymene	Not Spiked	

Container Type: NA - Not Applicable

Surrogates Method Limits



Client Sample ID: LCS Lab ID#: 1805531-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060703 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/7/18 09:57 AM

		Method Limits	
Surrogates	%Recovery		
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	95	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: LCSD Lab ID#: 1805531-09AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060704 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/7/18 10:22 AM

		Method
Compound	%Recovery	Limits
Chloromethane	93	70-130
Vinyl Chloride	96	70-130
Freon 113	97	70-130
1,1-Dichloroethene	97	70-130
Acetone	96	70-130
Carbon Disulfide	93	70-130
Methylene Chloride	103	70-130
trans-1,2-Dichloroethene	109	70-130
Hexane	100	70-130
1,1-Dichloroethane	99	70-130
2-Butanone (Methyl Ethyl Ketone)	97	70-130
cis-1,2-Dichloroethene	90	70-130
Chloroform	99	70-130
1,1,1-Trichloroethane	96	70-130
Benzene	100	70-130
Trichloroethene	104	70-130
Toluene	98	70-130
1,1,2-Trichloroethane	100	70-130
Tetrachloroethene	102	70-130
Chlorobenzene	100	70-130
Ethyl Benzene	101	70-130
m,p-Xylene	100	70-130
o-Xylene	100	70-130
Styrene	99	70-130
Cumene	99	70-130
Propylbenzene	102	70-130
1,3,5-Trimethylbenzene	101	70-130
1,2,4-Trimethylbenzene	99	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
Acetonitrile	Not Spiked	
Vinyl Acetate	101	70-130
Octane	Not Spiked	
Pentane	Not Spiked	
Butylbenzene	Not Spiked	
Decane	Not Spiked	
Dodecane	Not Spiked	
sec-Butylbenzene	Not Spiked	
p-Cymene	Not Spiked	

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits



Client Sample ID: LCSD Lab ID#: 1805531-09AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3060704 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/7/18 10:22 AM

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	96	70-130	
4-Bromofluorobenzene	101	70-130	



6/20/2018 Mr. Justin Neste CALIBRE, Environmental Technology Solutions 20926 Pugh Rd NE

Poulsbo WA 98370

Project Name: Boeing Renton

Project #:

Workorder #: 1806244

Dear Mr. Justin Neste

The following report includes the data for the above referenced project for sample(s) received on 6/12/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Elly Butte



WORK ORDER #: 1806244

Work Order Summary

CLIENT: BILL TO: Mr. Justin Neste Accounts Payable

> CALIBRE, Environmental Technology **Eurofins Lancaster Laboratories**

Solutions

Environmental, LLC 20926 Pugh Rd NE 2425 New Holland Pike Poulsbo, WA 98370 Lancaster, PA 17605-2425

PHONE: 360-981-5606 P.O. # **Boeing Renton**

FAX: PROJECT # **Boeing Renton**

DATE RECEIVED: 06/12/2018 **CONTACT:** Kelly Buettner **DATE COMPLETED:** 06/20/2018

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	4-78-SVE-IN-060718	TO-15	2.8 "Hg	15.1 psi
02A	4-78-SVE-1-060718	TO-15	6.1 "Hg	15 psi
03A	4-78-SVE-6-060718	TO-15	5.5 "Hg	14.5 psi
04A	4-78-SVE-10-060718	TO-15	5.1 "Hg	14.7 psi
05A	5-09-SVE-IN-060718	TO-15	3.5 "Hg	15.1 psi
06A	5-09-SVE-3-060718	TO-15	5.5 "Hg	14.4 psi
07A	Lab Blank	TO-15	NA	NA
08A	CCV	TO-15	NA	NA
09A	LCS	TO-15	NA	NA
09AA	LCSD	TO-15	NA	NA

	Heide Tlayer	
CERTIFIED BY:	0 00	DATE: $\frac{06/20/18}{}$

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards



LABORATORY NARRATIVE EPA Method TO-15 CALIBRE, Environmental Technology Solutions Workorder# 1806244

Six 1 Liter Summa Canister samples were received on June 12, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.
 - M Reported value may be biased due to apparent matrix interferences.
 - CN See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 4-78-SVE-IN-060718

Lab ID#: 1806244-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Freon 113	1.1	2.8	8.6	22	
cis-1,2-Dichloroethene	1.1	3.7	4.4	14	
1,1,1-Trichloroethane	1.1	2.1	6.1	12	
Trichloroethene	1.1	69	6.0	370	

Client Sample ID: 4-78-SVE-1-060718

Lab ID#: 1806244-02A

	Rpt. Limit	Amount	Rpt. Limit	Amount	
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)	
Toluene	1.3	11	4.8	43	

Client Sample ID: 4-78-SVE-6-060718

Lab ID#: 1806244-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	1.2	65	9.3	500
1,1-Dichloroethane	1.2	1.4	4.9	5.7
cis-1,2-Dichloroethene	1.2	3.3	4.8	13
Chloroform	1.2	2.0	5.9	10
1,1,1-Trichloroethane	1.2	5.9	6.6	32
Trichloroethene	1.2	120	6.5	650
Tetrachloroethene	1.2	20	8.2	140

Client Sample ID: 4-78-SVE-10-060718

Lab ID#: 1806244-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	1.2	11	9.2	84
cis-1,2-Dichloroethene	1.2	14	4.8	57
1,1,1-Trichloroethane	1.2	8.5	6.6	46
Trichloroethene	1.2	230	6.5	1200
Tetrachloroethene	1.2	1.6	8.2	11



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 5-09-SVE-IN-060718

Lab ID#: 1806244-05A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.1	5.4	4.5	21
1,1,1-Trichloroethane	1.1	1.8	6.2	9.9
Trichloroethene	1.1	13	6.2	72
Tetrachloroethene	1.1	160	7.8	1100

Client Sample ID: 5-09-SVE-3-060718

Lab ID#: 1806244-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
cis-1,2-Dichloroethene	1.2	9.6	4.8	38
1,1,1-Trichloroethane	1.2	3.0	6.6	16
Trichloroethene	1.2	23	6.5	120
Tetrachloroethene	1.2	280	8.2	1900



Client Sample ID: 4-78-SVE-IN-060718 Lab ID#: 1806244-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3061509	Date of Collection: 6/7/18 10:35:00 AM
Dil. Factor:	2 24	Date of Analysis: 6/15/18 03:12 PM

DII. Factor:	2.24	Date	of Analysis: 6/15/	16 U3:12 PW
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Freon 113	1.1	2.8	8.6	22
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	Not Detected	27	Not Detected
Carbon Disulfide	4.5	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	39	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.5	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.5	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	3.7	4.4	14
Chloroform	1.1	Not Detected	5.5	Not Detected
1,1,1-Trichloroethane	1.1	2.1	6.1	12
Benzene	1.1	Not Detected	3.6	Not Detected
Trichloroethene	1.1	69	6.0	370
Toluene	1.1	Not Detected	4.2	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.1	Not Detected
Tetrachloroethene	1.1	Not Detected	7.6	Not Detected
Chlorobenzene	1.1	Not Detected	5.2	Not Detected
Ethyl Benzene	1.1	Not Detected	4.9	Not Detected
m,p-Xylene	1.1	Not Detected	4.9	Not Detected
o-Xylene	1.1	Not Detected	4.9	Not Detected
Styrene	1.1	Not Detected	4.8	Not Detected
Cumene	1.1	Not Detected	5.5	Not Detected
Propylbenzene	1.1	Not Detected	5.5	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.5	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	460	Not Detected
Acetonitrile	11	Not Detected	19	Not Detected
Vinyl Acetate	4.5	Not Detected	16	Not Detected
Octane	4.5	Not Detected	21	Not Detected
Pentane	4.5	Not Detected	13	Not Detected
Butylbenzene	4.5	Not Detected	24	Not Detected
Decane	4.5	Not Detected	26	Not Detected
Dodecane	11	Not Detected	78	Not Detected
sec-Butylbenzene	4.5	Not Detected	24	Not Detected
p-Cymene	4.5	Not Detected	24	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates Method Limits



Client Sample ID: 4-78-SVE-IN-060718

Lab ID#: 1806244-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061509 Date of Collection: 6/7/18 10:35:00 AM Dil. Factor: 2.24 Date of Analysis: 6/15/18 03:12 PM

		Wethod
Surrogates	%Recovery	Limits
Toluene-d8	96	70-130
1,2-Dichloroethane-d4	99	70-130
4-Bromofluorobenzene	100	70-130



Client Sample ID: 4-78-SVE-1-060718 Lab ID#: 1806244-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061510 Date of Collection: 6/7/18 10:43:00 AM Dil. Factor: 2.54 Date of Analysis: 6/15/18 03:38 PM

DIII I GOLOTI	2.34 Date of Allarysis. 0/13/10 03.301 in				
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
Chloromethane	13	Not Detected	26	Not Detected	
Vinyl Chloride	1.3	Not Detected	3.2	Not Detected	
Freon 113	1.3	Not Detected	9.7	Not Detected	
1,1-Dichloroethene	1.3	Not Detected	5.0	Not Detected	
Acetone	13	Not Detected	30	Not Detected	
Carbon Disulfide	5.1	Not Detected	16	Not Detected	
Methylene Chloride	13	Not Detected	44	Not Detected	
trans-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected	
Hexane	1.3	Not Detected	4.5	Not Detected	
1,1-Dichloroethane	1.3	Not Detected	5.1	Not Detected	
2-Butanone (Methyl Ethyl Ketone)	5.1	Not Detected	15	Not Detected	
cis-1,2-Dichloroethene	1.3	Not Detected	5.0	Not Detected	
Chloroform	1.3	Not Detected	6.2	Not Detected	
1,1,1-Trichloroethane	1.3	Not Detected	6.9	Not Detected	
Benzene	1.3	Not Detected	4.0	Not Detected	
Trichloroethene	1.3	Not Detected	6.8	Not Detected	
Toluene	1.3	11	4.8	43	
1,1,2-Trichloroethane	1.3	Not Detected	6.9	Not Detected	
Tetrachloroethene	1.3	Not Detected	8.6	Not Detected	
Chlorobenzene	1.3	Not Detected	5.8	Not Detected	
Ethyl Benzene	1.3	Not Detected	5.5	Not Detected	
m,p-Xylene	1.3	Not Detected	5.5	Not Detected	
o-Xylene	1.3	Not Detected	5.5	Not Detected	
Styrene	1.3	Not Detected	5.4	Not Detected	
Cumene	1.3	Not Detected	6.2	Not Detected	
Propylbenzene	1.3	Not Detected	6.2	Not Detected	
1,3,5-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected	
1,2,4-Trimethylbenzene	1.3	Not Detected	6.2	Not Detected	
TPH ref. to Gasoline (MW=100)	130	Not Detected	520	Not Detected	
Acetonitrile	13	Not Detected	21	Not Detected	
Vinyl Acetate	5.1	Not Detected	18	Not Detected	
Octane	5.1	Not Detected	24	Not Detected	
Pentane	5.1	Not Detected	15	Not Detected	
Butylbenzene	5.1	Not Detected	28	Not Detected	
Decane	5.1	Not Detected	30	Not Detected	
Dodecane	13	Not Detected	88	Not Detected	
sec-Butylbenzene	5.1	Not Detected	28	Not Detected	

Container Type: 1 Liter Summa Canister

Surrogates Method Limits



Client Sample ID: 4-78-SVE-1-060718

Lab ID#: 1806244-02A

EPA METHOD TO-15 GC/MS FULL SCAN

 File Name:
 3061510
 Date of Collection: 6/7/18 10:43:00 AM

 Dil. Factor:
 2.54
 Date of Analysis: 6/15/18 03:38 PM

Surrogates	%Recovery	wetnod Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	100	70-130	
4-Bromofluorobenzene	98	70-130	



Client Sample ID: 4-78-SVE-6-060718 Lab ID#: 1806244-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061511 Date of Collection: 6/7/18 10:53:00 AM Dil. Factor: 2.43 Date of Analysis: 6/15/18 04:04 PM

Dil. Factor:	2.43	Date	of Analysis: 6/15	/18 04:04 PM
Common d	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Chloromethane	12	Not Detected	25	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 113	1.2	65	9.3	500
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	29	Not Detected
Carbon Disulfide	4.9	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	1.4	4.9	5.7
2-Butanone (Methyl Ethyl Ketone)	4.9	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	3.3	4.8	13
Chloroform	1.2	2.0	5.9	10
1,1,1-Trichloroethane	1.2	5.9	6.6	32
Benzene	1.2	Not Detected	3.9	Not Detected
Trichloroethene	1.2	120	6.5	650
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	20	8.2	140
Chlorobenzene	1.2	Not Detected	5.6	Not Detected
Ethyl Benzene	1.2	Not Detected	5.3	Not Detected
m,p-Xylene	1.2	Not Detected	5.3	Not Detected
o-Xylene	1.2	Not Detected	5.3	Not Detected
Styrene	1.2	Not Detected	5.2	Not Detected
Cumene	1.2	Not Detected	6.0	Not Detected
Propylbenzene	1.2	Not Detected	6.0	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	6.0	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	500	Not Detected
Acetonitrile	12	Not Detected	20	Not Detected
Vinyl Acetate	4.9	Not Detected	17	Not Detected
Octane	4.9	Not Detected	23	Not Detected
Pentane	4.9	Not Detected	14	Not Detected
Butylbenzene	4.9	Not Detected	27	Not Detected
Decane	4.9	Not Detected	28	Not Detected
Dodecane	12	Not Detected	85	Not Detected
sec-Butylbenzene	4.9	Not Detected	27	Not Detected
p-Cymene	4.9	Not Detected	27	Not Detected
1 -7				

Container Type: 1 Liter Summa Canister

Surrogates Method Limits



Client Sample ID: 4-78-SVE-6-060718

Lab ID#: 1806244-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061511 Date of Collection: 6/7/18 10:53:00 AM
Dil. Factor: 2.43 Date of Analysis: 6/15/18 04:04 PM

		wetnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	97	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: 4-78-SVE-10-060718

Lab ID#: 1806244-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	3061512 2.41		of Collection: 6/7 of Analysis: 6/15	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	12	Not Detected	25	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 113	1.2	11	9.2	84
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	29	Not Detected
Carbon Disulfide	4.8	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Hexane	1.2	Not Detected	4.2	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	14	4.8	57
Chloroform	1.2	Not Detected	5.9	Not Detected
1,1,1-Trichloroethane	1.2	8.5	6.6	46
Benzene	1.2	Not Detected	3.8	Not Detected
Trichloroethene	1.2	230	6.5	1200
Toluene	1.2	Not Detected	4.5	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	1.6	8.2	11
Chlorobenzene	1.2	Not Detected	5.5	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
Styrene	1.2	Not Detected	5.1	Not Detected
Cumene	1.2	Not Detected	5.9	Not Detected
Propylbenzene	1.2	Not Detected	5.9	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	490	Not Detected
Acetonitrile	12	Not Detected	20	Not Detected
Vinyl Acetate	4.8	Not Detected	17	Not Detected

Container Type: 1 Liter Summa Canister

Octane

Pentane

Decane

Dodecane

p-Cymene

Butylbenzene

sec-Butylbenzene

Method **Surrogates** %Recovery Limits

4.8

4.8

4.8

4.8

12

4.8

4.8

Not Detected

22

14

26

28

84

26

26

Not Detected



Client Sample ID: 4-78-SVE-10-060718

Lab ID#: 1806244-04A

EPA METHOD TO-15 GC/MS FULL SCAN

 File Name:
 3061512
 Date of Collection: 6/7/18 11:03:00 AM

 Dil. Factor:
 2.41
 Date of Analysis: 6/15/18 04:30 PM

Surrogates	%Recovery	Method Limits
Toluene-d8	99	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	99	70-130



Client Sample ID: 5-09-SVE-IN-060718

Lab ID#: 1806244-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3061513	Date of Collection: 6/7/18 3:25:00 PM
Dil. Factor:	2.29	Date of Analysis: 6/15/18 04:56 PM

DII. Factor:	2.29	Date	of Analysis: 6/15/	10 U4.30 PW
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
<u> </u>				
Chloromethane	11	Not Detected	24	Not Detected
Vinyl Chloride	1.1	Not Detected	2.9	Not Detected
Freon 113	1.1	Not Detected	8.8	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Acetone	11	Not Detected	27	Not Detected
Carbon Disulfide	4.6	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	40	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.5	Not Detected
Hexane	1.1	Not Detected	4.0	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.6	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.6	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.1	5.4	4.5	21
Chloroform	1.1	Not Detected	5.6	Not Detected
1,1,1-Trichloroethane	1.1	1.8	6.2	9.9
Benzene	1.1	Not Detected	3.6	Not Detected
Trichloroethene	1.1	13	6.2	72
Toluene	1.1	Not Detected	4.3	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.2	Not Detected
Tetrachloroethene	1.1	160	7.8	1100
Chlorobenzene	1.1	Not Detected	5.3	Not Detected
Ethyl Benzene	1.1	Not Detected	5.0	Not Detected
m,p-Xylene	1.1	Not Detected	5.0	Not Detected
o-Xylene	1.1	Not Detected	5.0	Not Detected
Styrene	1.1	Not Detected	4.9	Not Detected
Cumene	1.1	Not Detected	5.6	Not Detected
Propylbenzene	1.1	Not Detected	5.6	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.6	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	470	Not Detected
Acetonitrile	11	Not Detected	19	Not Detected
Vinyl Acetate	4.6	Not Detected	16	Not Detected
Octane	4.6	Not Detected	21	Not Detected
Pentane	4.6	Not Detected	14	Not Detected
Butylbenzene	4.6	Not Detected	25	Not Detected
Decane	4.6	Not Detected	27	Not Detected
Dodecane	11	Not Detected	80	Not Detected
sec-Butylbenzene	4.6	Not Detected	25	Not Detected
p-Cymene	4.6	Not Detected	25	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates %Recovery Limits



Client Sample ID: 5-09-SVE-IN-060718

Lab ID#: 1806244-05A

EPA METHOD TO-15 GC/MS FULL SCAN

 File Name:
 3061513
 Date of Collection: 6/7/18 3:25:00 PM

 Dil. Factor:
 2.29
 Date of Analysis: 6/15/18 04:56 PM

		Wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: 5-09-SVE-3-060718 Lab ID#: 1806244-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061514 Date of Collection: 6/7/18 3:35:00 PM Dil. Factor: 2.42 Date of Analysis: 6/15/18 05:23 PM

	£.7£	Date	Of Allalysis. Of 13	10 00.20 1 111
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Chloromethane	12	Not Detected	25	Not Detected
Vinyl Chloride	1.2	Not Detected	3.1	Not Detected
Freon 113	1.2	Not Detected	9.3	Not Detected
1,1-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Acetone	12	Not Detected	29	Not Detected
Carbon Disulfide	4.8	Not Detected	15	Not Detected
Methylene Chloride	12	Not Detected	42	Not Detected
trans-1,2-Dichloroethene	1.2	Not Detected	4.8	Not Detected
Hexane	1.2	Not Detected	4.3	Not Detected
1,1-Dichloroethane	1.2	Not Detected	4.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.8	Not Detected	14	Not Detected
cis-1,2-Dichloroethene	1.2	9.6	4.8	38
Chloroform	1.2	Not Detected	5.9	Not Detected
1,1,1-Trichloroethane	1.2	3.0	6.6	16
Benzene	1.2	Not Detected	3.9	Not Detected
Trichloroethene	1.2	23	6.5	120
Toluene	1.2	Not Detected	4.6	Not Detected
1,1,2-Trichloroethane	1.2	Not Detected	6.6	Not Detected
Tetrachloroethene	1.2	280	8.2	1900
Chlorobenzene	1.2	Not Detected	5.6	Not Detected
Ethyl Benzene	1.2	Not Detected	5.2	Not Detected
m,p-Xylene	1.2	Not Detected	5.2	Not Detected
o-Xylene	1.2	Not Detected	5.2	Not Detected
Styrene	1.2	Not Detected	5.2	Not Detected
Cumene	1.2	Not Detected	5.9	Not Detected
Propylbenzene	1.2	Not Detected	5.9	Not Detected
1,3,5-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
1,2,4-Trimethylbenzene	1.2	Not Detected	5.9	Not Detected
TPH ref. to Gasoline (MW=100)	120	Not Detected	490	Not Detected
Acetonitrile	12	Not Detected	20	Not Detected
Vinyl Acetate	4.8	Not Detected	17	Not Detected
Octane	4.8	Not Detected	23	Not Detected
Pentane	4.8	Not Detected	14	Not Detected
Butylbenzene	4.8	Not Detected	26	Not Detected
Decane	4.8	Not Detected	28	Not Detected
Dodecane	12	Not Detected	84	Not Detected
sec-Butylbenzene	4.8	Not Detected	26	Not Detected
p-Cymene	4.8	Not Detected	26	Not Detected
• •				

Container Type: 1 Liter Summa Canister

Surrogates %Recovery Limits



Client Sample ID: 5-09-SVE-3-060718

Lab ID#: 1806244-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061514 Date of Collection: 6/7/18 3:35:00 PM
Dil. Factor: 2.42 Date of Analysis: 6/15/18 05:23 PM

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	99	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: Lab Blank Lab ID#: 1806244-07A

File Name: Dil. Factor:	3061508a 1.00		of Collection: NA of Analysis: 6/15/	18 12:34 PM
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	5.0	Not Detected	10	Not Detected
Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Freon 113	0.50	Not Detected	3.8	Not Detected
1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Acetone	5.0	Not Detected	12	Not Detected
Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Methylene Chloride	5.0	Not Detected	17	Not Detected
trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Hexane	0.50	Not Detected	1.8	Not Detected
1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Chloroform	0.50	Not Detected	2.4	Not Detected
1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detecte
Benzene	0.50	Not Detected	1.6	Not Detected
Trichloroethene	0.50	Not Detected	2.7	Not Detected
Toluene	0.50	Not Detected	1.9	Not Detecte
1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene	0.50	Not Detected	3.4	Not Detecte
Chlorobenzene	0.50	Not Detected	2.3	Not Detected
Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
m,p-Xylene	0.50	Not Detected	2.2	Not Detected
o-Xylene	0.50	Not Detected	2.2	Not Detected
Styrene	0.50	Not Detected	2.1	Not Detected
Cumene	0.50	Not Detected	2.4	Not Detected
Propylbenzene	0.50	Not Detected	2.4	Not Detected
1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
Acetonitrile	5.0	Not Detected	8.4	Not Detected
Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Octane	2.0	Not Detected	9.3	Not Detected
Pentane	2.0	Not Detected	5.9	Not Detected
Butylbenzene	2.0	Not Detected	11	Not Detected
Decane	2.0	Not Detected	12	Not Detected
Dodecane	5.0	Not Detected	35	Not Detecte
sec-Butylbenzene	2.0	Not Detected	11	Not Detected
p-Cymene	2.0	Not Detected	11	Not Detected

Container Type: NA - Not Applicable

Surrogates %Recovery Limits



Client Sample ID: Lab Blank Lab ID#: 1806244-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061508a Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 12:34 PM

Summa mata a	0/ Docovers	Method	
Surrogates	%Recovery	Limits	
Toluene-d8	98	70-130	
1,2-Dichloroethane-d4	95	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: CCV Lab ID#: 1806244-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061502 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 09:44 AM

Compound	%Recovery
Chloromethane	95
Vinyl Chloride	92
Freon 113	97
1,1-Dichloroethene	91
Acetone	95
Carbon Disulfide	88
Methylene Chloride	102
trans-1,2-Dichloroethene	98
Hexane	95
1,1-Dichloroethane	97
2-Butanone (Methyl Ethyl Ketone)	95
cis-1,2-Dichloroethene	97
Chloroform	97
1,1,1-Trichloroethane	95
Benzene	95
Trichloroethene	92
Toluene	93
1,1,2-Trichloroethane	93
Tetrachloroethene	98
Chlorobenzene	95
Ethyl Benzene	94
m,p-Xylene	94
o-Xylene	93
Styrene	92
Cumene	94
Propylbenzene	95
1,3,5-Trimethylbenzene	96
1,2,4-Trimethylbenzene	92
TPH ref. to Gasoline (MW=100)	100
Acetonitrile	90
Vinyl Acetate	96
Octane	102
Pentane	102
Butylbenzene	96
Decane	98
Dodecane	84
sec-Butylbenzene	97
p-Cymene	96

Container Type: NA - Not Applicable

		Method
Surrogates	%Recovery	Limits



Client Sample ID: CCV Lab ID#: 1806244-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061502 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 09:44 AM

Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	97	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: LCS Lab ID#: 1806244-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061503 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 10:09 AM

Compound	%Recovery	Method Limits
Chloromethane	88	70-130
Vinyl Chloride	87	70-130
Freon 113	91	70-130
1,1-Dichloroethene	86	70-130
Acetone	86	70-130
Carbon Disulfide	84	70-130
Methylene Chloride	95	70-130
trans-1,2-Dichloroethene	101	70-130
Hexane	91	70-130
1,1-Dichloroethane	90	70-130
2-Butanone (Methyl Ethyl Ketone)	90	70-130
cis-1,2-Dichloroethene	82	70-130
Chloroform	90	70-130
1,1,1-Trichloroethane	92	70-130
Benzene	90	70-130
Trichloroethene	90	70-130
Toluene	92	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	96	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	96	70-130
o-Xylene	95	70-130
Styrene	97	70-130
Cumene	95	70-130
Propylbenzene	98	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	95	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
Acetonitrile	Not Spiked	
Vinyl Acetate	88	70-130
Octane	Not Spiked	
Pentane	Not Spiked	
Butylbenzene	Not Spiked	
Decane	Not Spiked	
Dodecane	Not Spiked	
sec-Butylbenzene	Not Spiked	
p-Cymene	Not Spiked	

Container Type: NA - Not Applicable

Surrogates %Recovery Limits



Client Sample ID: LCS Lab ID#: 1806244-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061503 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 10:09 AM

		wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	94	70-130	
4-Bromofluorobenzene	102	70-130	



Client Sample ID: LCSD Lab ID#: 1806244-09AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061504 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 10:34 AM

		Method
Compound	%Recovery	Limits
Chloromethane	88	70-130
Vinyl Chloride	86	70-130
Freon 113	92	70-130
1,1-Dichloroethene	83	70-130
Acetone	88	70-130
Carbon Disulfide	84	70-130
Methylene Chloride	94	70-130
trans-1,2-Dichloroethene	101	70-130
Hexane	90	70-130
1,1-Dichloroethane	89	70-130
2-Butanone (Methyl Ethyl Ketone)	89	70-130
cis-1,2-Dichloroethene	83	70-130
Chloroform	91	70-130
1,1,1-Trichloroethane	92	70-130
Benzene	94	70-130
Trichloroethene	94	70-130
Toluene	94	70-130
1,1,2-Trichloroethane	94	70-130
Tetrachloroethene	97	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	97	70-130
m,p-Xylene	96	70-130
o-Xylene	96	70-130
Styrene	96	70-130
Cumene	96	70-130
Propylbenzene	98	70-130
1,3,5-Trimethylbenzene	101	70-130
1,2,4-Trimethylbenzene	95	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
Acetonitrile	Not Spiked	
Vinyl Acetate	89	70-130
Octane	Not Spiked	
Pentane	Not Spiked	
Butylbenzene	Not Spiked	
Decane	Not Spiked	
Dodecane	Not Spiked	
sec-Butylbenzene	Not Spiked	
p-Cymene	Not Spiked	

Container Type: NA - Not Applicable

Surrogates Method Limits



Client Sample ID: LCSD Lab ID#: 1806244-09AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3061504 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 6/15/18 10:34 AM

		Wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	94	70-130	
4-Bromofluorobenzene	102	70-130	



7/9/2018 Mr. Justin Neste CALIBRE, Environmental Technology Solutions 20926 Pugh Rd NE

Poulsbo WA 98370

Project Name: Boeing Renton

Project #:

Workorder #: 1806512

Dear Mr. Justin Neste

The following report includes the data for the above referenced project for sample(s) received on 6/25/2018 at Air Toxics Ltd.

The data and associated QC analyzed by TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics Inc. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,

Kelly Buettner

Project Manager

Elly Butte



WORK ORDER #: 1806512

Work Order Summary

CLIENT: Mr. Justin Neste BILL TO: Accounts Payable

> **Eurofins Lancaster Laboratories** CALIBRE, Environmental Technology

Solutions

Environmental, LLC 20926 Pugh Rd NE 2425 New Holland Pike Poulsbo, WA 98370 Lancaster, PA 17605-2425

PHONE: 360-981-5606 P.O. # **Boeing Renton**

FAX: PROJECT # **Boeing Renton**

DATE RECEIVED: 06/25/2018 **CONTACT:** Kelly Buettner **DATE COMPLETED:** 07/09/2018

			RECEIPT	FINAL
FRACTION #	<u>NAME</u>	<u>TEST</u>	VAC./PRES.	PRESSURE
01A	5-09-SVE-IN-062018	TO-15	0.5 psi	15.1 psi
02A	5-09-SVE-3-062018	TO-15	0.8 "Hg	15 psi
03A	4-78-SVE-IN-062018	TO-15	0.6 psi	15.2 psi
04A	4-78-SVE-6-062018	TO-15	2.4 "Hg	15.1 psi
05A	4-78-SVE-1-062018	TO-15	2.0 "Hg	15.3 psi
06A	4-78-SVE-10-062018	TO-15	2.2 "Hg	14.7 psi
07A	Lab Blank	TO-15	NA	NA
08A	CCV	TO-15	NA	NA
09A	LCS	TO-15	NA	NA
09AA	LCSD	TO-15	NA	NA

	Meide,	Mayer		
CERTIFIED BY:	0 0		DATE:	07/09/18

Technical Director

Certification numbers: AZ Licensure AZ0775, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP - T104704434-16-11, UT NELAP CA0093332016-7, VA NELAP - 8113, WA NELAP - C935 Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) Accreditation number: CA300005, Effective date: 10/18/2016, Expiration date: 10/17/2017. Eurofins Air Toxics Inc.. certifies that the test results contained in this report meet all requirements of the NELAC standards



LABORATORY NARRATIVE EPA Method TO-15 CALIBRE, Environmental Technology Solutions Workorder# 1806512

Six 1 Liter Summa Canister samples were received on June 25, 2018. The laboratory performed analysis via EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Receiving Notes

The Chain of Custody (COC) information for sample 4-78-SVE-1-062018 did not match the information on the canister with regard to canister identification. The client was notified of the discrepancy and the information on the canister was used to process and report the sample.

The Chain of Custody (COC) information for sample 4-78-SVE-10-062018 did not match the entry on the sample tag with regard to sample identification. The information on the COC was used to process and report the sample.

Analytical Notes

A single point calibration for TPH referenced to Gasoline was performed for each daily analytical batch. Recovery is reported as 100% in the associated results for each CCV.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicates as follows:

- B Compound present in laboratory blank greater than reporting limit (background subtraction not performed).
 - J Estimated value.
 - E Exceeds instrument calibration range.
 - S Saturated peak.
 - Q Exceeds quality control limits.
- U Compound analyzed for but not detected above the reporting limit, LOD, or MDL value. See data page for project specific U-flag definition.
 - UJ- Non-detected compound associated with low bias in the CCV
 - N The identification is based on presumptive evidence.



M - Reported value may be biased due to apparent matrix interferences. CN - See Case Narrative.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 5-09-SVE-IN-062018

Lab ID#: 1806512-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)	
cis-1,2-Dichloroethene	0.98	5.7	3.9	23	
1,1,1-Trichloroethane	0.98	1.8	5.3	9.9	
Trichloroethene	0.98	14	5.3	75	
Tetrachloroethene	0.98	170	6.6	1100	

Client Sample ID: 5-09-SVE-3-062018

Lab ID#: 1806512-02A

Compound	Rpt. Limit (ppbv)	(ppbv)	(ug/m3)	Amount (ug/m3)	
cis-1,2-Dichloroethene	1.0	11	4.1	42	
1,1,1-Trichloroethane	1.0	3.4	5.7	19	
Trichloroethene	1.0	24	5.6	130	
Tetrachloroethene	1.0	310	7.0	2100	

Client Sample ID: 4-78-SVE-IN-062018

Lab ID#: 1806512-03A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	0.98	3.4	7.5	26
cis-1,2-Dichloroethene	0.98	3.7	3.9	15
1,1,1-Trichloroethane	0.98	2.6	5.3	14
Trichloroethene	0.98	87	5.2	470
Tetrachloroethene	0.98	1.3	6.6	9.1

Client Sample ID: 4-78-SVE-6-062018

Lab ID#: 1806512-04A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	1.1	57	8.4	440
1,1-Dichloroethane	1.1	1.5	4.4	6.1
cis-1,2-Dichloroethene	1.1	2.7	4.4	11
Chloroform	1 1	3 4	5.4	16



Summary of Detected Compounds EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: 4-78-SVE-6-062018

Lab ID#: 1806512-04A				
1,1,1-Trichloroethane	1.1	4.2	6.0	23
Benzene	1.1	1.5	3.5	4.7
Trichloroethene	1.1	120	5.9	680
Tetrachloroethene	1.1	24	7.5	160

Client Sample ID: 4-78-SVE-1-062018

Lab ID#: 1806512-05A
No Detections Were Found.

Client Sample ID: 4-78-SVE-10-062018

Lab ID#: 1806512-06A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Freon 113	1.1	11	8.3	81
Acetone	11	11	26	27
cis-1,2-Dichloroethene	1.1	15	4.3	61
1,1,1-Trichloroethane	1.1	11	5.9	62
Trichloroethene	1.1	300	5.8	1600
Tetrachloroethene	1.1	1.9	7.3	13



Client Sample ID: 5-09-SVE-IN-062018 Lab ID#: 1806512-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3070314	Date of Collection: 6/20/18 2:40:00 PM
Dil. Factor:	1.96	Date of Analysis: 7/3/18 06:59 PM

DII. Factor:	1.96	Date	of Analysis: 7131	8 06:59 PW
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	9.8	Not Detected	20	Not Detected
Vinyl Chloride	0.98	Not Detected	2.5	Not Detected
Freon 113	0.98	Not Detected	7.5	Not Detected
1,1-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Acetone	9.8	Not Detected	23	Not Detected
Carbon Disulfide	3.9	Not Detected	12	Not Detected
Methylene Chloride	9.8	Not Detected	34	Not Detected
trans-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Hexane	0.98	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.98	Not Detected	4.0	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	0.98	5.7	3.9	23
Chloroform	0.98	Not Detected	4.8	Not Detected
1,1,1-Trichloroethane	0.98	1.8	5.3	9.9
Benzene	0.98	Not Detected	3.1	Not Detected
Trichloroethene	0.98	14	5.3	75
Toluene	0.98	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.98	Not Detected	5.3	Not Detected
Tetrachloroethene	0.98	170	6.6	1100
Chlorobenzene	0.98	Not Detected	4.5	Not Detected
Ethyl Benzene	0.98	Not Detected	4.2	Not Detected
m,p-Xylene	0.98	Not Detected	4.2	Not Detected
o-Xylene	0.98	Not Detected	4.2	Not Detected
Styrene	0.98	Not Detected	4.2	Not Detected
Cumene	0.98	Not Detected	4.8	Not Detected
Propylbenzene	0.98	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
1,2,4-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
TPH ref. to Gasoline (MW=100)	98	Not Detected	400	Not Detected
Acetonitrile	9.8	Not Detected	16	Not Detected
Vinyl Acetate	3.9	Not Detected	14	Not Detected
Octane	3.9	Not Detected	18	Not Detected
Pentane	3.9	Not Detected	12	Not Detected
Butylbenzene	3.9	Not Detected	22	Not Detected
Decane	3.9	Not Detected	23	Not Detected
Dodecane	9.8	Not Detected	68	Not Detected
sec-Butylbenzene	3.9	Not Detected	22	Not Detected
p-Cymene	3.9	Not Detected	22	Not Detected

Container Type: 1 Liter Summa Canister

		Method
Surrogates	%Recovery	Limits



Client Sample ID: 5-09-SVE-IN-062018

Lab ID#: 1806512-01A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070314 Date of Collection: 6/20/18 2:40:00 PM
Dil. Factor: 1.96 Date of Analysis: 7/3/18 06:59 PM

		Metnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	101	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: 5-09-SVE-3-062018 Lab ID#: 1806512-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3070315	Date of Collection: 6/20/18 2:50:00 PM
Dil. Factor:	2.08	Date of Analysis: 7/3/18 07:25 PM

DII. Factor:	2.08	Date	of Analysis: 113/1	8 U1:23 PIVI
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
·				
Chloromethane	10	Not Detected	21	Not Detected
Vinyl Chloride	1.0	Not Detected	2.6	Not Detected
Freon 113	1.0	Not Detected	8.0	Not Detected
1,1-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Acetone	10	Not Detected	25	Not Detected
Carbon Disulfide	4.2	Not Detected	13	Not Detected
Methylene Chloride	10	Not Detected	36	Not Detected
trans-1,2-Dichloroethene	1.0	Not Detected	4.1	Not Detected
Hexane	1.0	Not Detected	3.7	Not Detected
1,1-Dichloroethane	1.0	Not Detected	4.2	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.2	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	1.0	11	4.1	42
Chloroform	1.0	Not Detected	5.1	Not Detected
1,1,1-Trichloroethane	1.0	3.4	5.7	19
Benzene	1.0	Not Detected	3.3	Not Detected
Trichloroethene	1.0	24	5.6	130
Toluene	1.0	Not Detected	3.9	Not Detected
1,1,2-Trichloroethane	1.0	Not Detected	5.7	Not Detected
Tetrachloroethene	1.0	310	7.0	2100
Chlorobenzene	1.0	Not Detected	4.8	Not Detected
Ethyl Benzene	1.0	Not Detected	4.5	Not Detected
m,p-Xylene	1.0	Not Detected	4.5	Not Detected
o-Xylene	1.0	Not Detected	4.5	Not Detected
Styrene	1.0	Not Detected	4.4	Not Detected
Cumene	1.0	Not Detected	5.1	Not Detected
Propylbenzene	1.0	Not Detected	5.1	Not Detected
1,3,5-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
1,2,4-Trimethylbenzene	1.0	Not Detected	5.1	Not Detected
TPH ref. to Gasoline (MW=100)	100	Not Detected	420	Not Detected
Acetonitrile	10	Not Detected	17	Not Detected
Vinyl Acetate	4.2	Not Detected	15	Not Detected
Octane	4.2	Not Detected	19	Not Detected
Pentane	4.2	Not Detected	12	Not Detected
Butylbenzene	4.2	Not Detected	23	Not Detected
Decane	4.2	Not Detected	24	Not Detected
Dodecane	10	Not Detected	72	Not Detected
sec-Butylbenzene	4.2	Not Detected	23	Not Detected
555 - WIJ 1861 1E01 16	4.2	Not Detected	23	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates %Recovery Limits



Client Sample ID: 5-09-SVE-3-062018

Lab ID#: 1806512-02A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070315 Date of Collection: 6/20/18 2:50:00 PM
Dil. Factor: 2.08 Date of Analysis: 7/3/18 07:25 PM

		Metnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	100	70-130	



Client Sample ID: 4-78-SVE-IN-062018

Lab ID#: 1806512-03A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3070323	Date of Collection: 6/20/18 3:17:00 PM
Dil. Factor:	1.95	Date of Analysis: 7/3/18 11:30 PM

DII. Factor:	1.95	Date	of Analysis: 7/3/1	18 11:30 PW
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	9.8	Not Detected	20	Not Detected
Vinyl Chloride	0.98	Not Detected	2.5	Not Detected
Freon 113	0.98	3.4	7.5	26
1,1-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Acetone	9.8	Not Detected	23	Not Detected
Carbon Disulfide	3.9	Not Detected	12	Not Detected
Methylene Chloride	9.8	Not Detected	34	Not Detected
trans-1,2-Dichloroethene	0.98	Not Detected	3.9	Not Detected
Hexane	0.98	Not Detected	3.4	Not Detected
1,1-Dichloroethane	0.98	Not Detected	3.9	Not Detected
2-Butanone (Methyl Ethyl Ketone)	3.9	Not Detected	12	Not Detected
cis-1,2-Dichloroethene	0.98	3.7	3.9	15
Chloroform	0.98	Not Detected	4.8	Not Detected
1,1,1-Trichloroethane	0.98	2.6	5.3	14
Benzene	0.98	Not Detected	3.1	Not Detected
Trichloroethene	0.98	87	5.2	470
Toluene	0.98	Not Detected	3.7	Not Detected
1,1,2-Trichloroethane	0.98	Not Detected	5.3	Not Detected
Tetrachloroethene	0.98	1.3	6.6	9.1
Chlorobenzene	0.98	Not Detected	4.5	Not Detected
Ethyl Benzene	0.98	Not Detected	4.2	Not Detected
m,p-Xylene	0.98	Not Detected	4.2	Not Detected
o-Xylene	0.98	Not Detected	4.2	Not Detected
Styrene	0.98	Not Detected	4.2	Not Detected
Cumene	0.98	Not Detected	4.8	Not Detected
Propylbenzene	0.98	Not Detected	4.8	Not Detected
1,3,5-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
1,2,4-Trimethylbenzene	0.98	Not Detected	4.8	Not Detected
TPH ref. to Gasoline (MW=100)	98	Not Detected	400	Not Detected
Acetonitrile	9.8	Not Detected	16	Not Detected
Vinyl Acetate	3.9	Not Detected	14	Not Detected
Octane	3.9	Not Detected	18	Not Detected
Pentane	3.9	Not Detected	12	Not Detected
Butylbenzene	3.9	Not Detected	21	Not Detected
Decane	3.9	Not Detected	23	Not Detected
Dodecane	9.8	Not Detected	68	Not Detected
sec-Butylbenzene	3.9	Not Detected	21	Not Detected
p-Cymene	3.9	Not Detected	21	Not Detected

Container Type: 1 Liter Summa Canister



Client Sample ID: 4-78-SVE-IN-062018

Lab ID#: 1806512-03A

EPA METHOD TO-15 GC/MS FULL SCAN

 File Name:
 3070323
 Date of Collection: 6/20/18 3:17:00 PM

 Dil. Factor:
 1.95
 Date of Analysis: 7/3/18 11:30 PM

Surrogates		Method Limits
	%Recovery	
Toluene-d8	93	70-130
1,2-Dichloroethane-d4	98	70-130
4-Bromofluorobenzene	104	70-130



Client Sample ID: 4-78-SVE-6-062018 Lab ID#: 1806512-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3070321	Date of Collection: 6/20/18 3:25:00 PM
Dil. Factor:	2.20	Date of Analysis: 7/3/18 10:38 PM

DII. Factor:	2.20 Date of Analysis: 1/3/18 10:38 PM			18 10:38 PW
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Freon 113	1.1	57	8.4	440
1,1-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Acetone	11	Not Detected	26	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.4	Not Detected
Hexane	1.1	Not Detected	3.9	Not Detected
1,1-Dichloroethane	1.1	1.5	4.4	6.1
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	2.7	4.4	11
Chloroform	1.1	3.4	5.4	16
1,1,1-Trichloroethane	1.1	4.2	6.0	23
Benzene	1.1	1.5	3.5	4.7
Trichloroethene	1.1	120	5.9	680
Toluene	1.1	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	24	7.5	160
Chlorobenzene	1.1	Not Detected	5.1	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
Acetonitrile	11	Not Detected	18	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Octane	4.4	Not Detected	20	Not Detected
Pentane	4.4	Not Detected	13	Not Detected
Butylbenzene	4.4	Not Detected	24	Not Detected
Decane	4.4	Not Detected	26	Not Detected
Dodecane	11	Not Detected	77	Not Detected
sec-Butylbenzene	4.4	Not Detected	24	Not Detected
p-Cymene	4.4	Not Detected	24	Not Detected

Container Type: 1 Liter Summa Canister

Surrogates Method Limits



Client Sample ID: 4-78-SVE-6-062018

Lab ID#: 1806512-04A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070321 Date of Collection: 6/20/18 3:25:00 PM
Dil. Factor: 2.20 Date of Analysis: 7/3/18 10:38 PM

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	94	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	102	70-130	



Client Sample ID: 4-78-SVE-1-062018 Lab ID#: 1806512-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3070324	Date of Collection: 6/20/18 3:35:00 PM
Dil. Factor:	2.19	Date of Analysis: 7/3/18 11:57 PM

Dil. Factor:	2.19	Date of Analysis: 7/3/18 11:57 PM		
	Rpt. Limit	Amount	Rpt. Limit	Amount
Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Chloromethane	11	Not Detected	23	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Freon 113	1.1	Not Detected	8.4	Not Detected
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Acetone	11	Not Detected	26	Not Detected
Carbon Disulfide	4.4	Not Detected	14	Not Detected
Methylene Chloride	11	Not Detected	38	Not Detected
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Hexane	1.1	Not Detected	3.8	Not Detected
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detected
2-Butanone (Methyl Ethyl Ketone)	4.4	Not Detected	13	Not Detected
cis-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detected
Chloroform	1.1	Not Detected	5.3	Not Detected
1,1,1-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Benzene	1.1	Not Detected	3.5	Not Detected
Trichloroethene	1.1	Not Detected	5.9	Not Detected
Toluene	1.1	Not Detected	4.1	Not Detected
1,1,2-Trichloroethane	1.1	Not Detected	6.0	Not Detected
Tetrachloroethene	1.1	Not Detected	7.4	Not Detected
Chlorobenzene	1.1	Not Detected	5.0	Not Detected
Ethyl Benzene	1.1	Not Detected	4.8	Not Detected
m,p-Xylene	1.1	Not Detected	4.8	Not Detected
o-Xylene	1.1	Not Detected	4.8	Not Detected
Styrene	1.1	Not Detected	4.7	Not Detected
Cumene	1.1	Not Detected	5.4	Not Detected
Propylbenzene	1.1	Not Detected	5.4	Not Detected
1,3,5-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
1,2,4-Trimethylbenzene	1.1	Not Detected	5.4	Not Detected
TPH ref. to Gasoline (MW=100)	110	Not Detected	450	Not Detected
Acetonitrile	11	Not Detected	18	Not Detected
Vinyl Acetate	4.4	Not Detected	15	Not Detected
Octane	4.4	Not Detected	20	Not Detected
Pentane	4.4	Not Detected	13	Not Detected
Butylbenzene	4.4	Not Detected	24	Not Detected
Decane	4.4	Not Detected	25	Not Detected
Dodecane	11	Not Detected	76	Not Detected
sec-Butylbenzene	4.4	Not Detected	24	Not Detected
p-Cymene	4.4	Not Detected	24	Not Detected

Container Type: 1 Liter Summa Canister



Client Sample ID: 4-78-SVE-1-062018

Lab ID#: 1806512-05A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070324 Date of Collection: 6/20/18 3:35:00 PM
Dil. Factor: 2.19 Date of Analysis: 7/3/18 11:57 PM

		Method Limits	
Surrogates	%Recovery		
Toluene-d8	95	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	104	70-130	



Client Sample ID: 4-78-SVE-10-062018

Lab ID#: 1806512-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: Dil. Factor:	3070322 2.16		Date of Collection: 6/20/18 3:30:00 PM Date of Analysis: 7/3/18 11:04 PM	
Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	11	Not Detected	22	Not Detected
Vinyl Chloride	1.1	Not Detected	2.8	Not Detected
Freon 113	1.1	11	8.3	81
1,1-Dichloroethene	1.1	Not Detected	4.3	Not Detecte
Acetone	11	11	26	27
Carbon Disulfide	4.3	Not Detected	13	Not Detecte
Methylene Chloride	11	Not Detected	38	Not Detecte
trans-1,2-Dichloroethene	1.1	Not Detected	4.3	Not Detecte
Hexane	1.1	Not Detected	3.8	Not Detecte
1,1-Dichloroethane	1.1	Not Detected	4.4	Not Detecte
2-Butanone (Methyl Ethyl Ketone)	4.3	Not Detected	13	Not Detecte
cis-1,2-Dichloroethene	1.1	15	4.3	61
Chloroform	1.1	Not Detected	5.3	Not Detecte
1,1,1-Trichloroethane	1.1	11	5.9	62
Benzene	1.1	Not Detected	3.4	Not Detecte
Trichloroethene	1.1	300	5.8	1600
Toluene	1.1	Not Detected	4.1	Not Detecte
1,1,2-Trichloroethane	1.1	Not Detected	5.9	Not Detecte
Tetrachloroethene	1.1	1.9	7.3	13
Chlorobenzene	1.1	Not Detected	5.0	Not Detecte
Ethyl Benzene	1.1	Not Detected	4.7	Not Detecte
m,p-Xylene	1.1	Not Detected	4.7	Not Detecte
o-Xylene	1.1	Not Detected	4.7	Not Detecte
Styrene	1.1	Not Detected	4.6	Not Detecte
Cumene	1.1	Not Detected	5.3	Not Detecte
Propylbenzene	1.1	Not Detected	5.3	Not Detecte
1,3,5-Trimethylbenzene	1.1	Not Detected	5.3	Not Detecte
1,2,4-Trimethylbenzene	1.1	Not Detected	5.3	Not Detecte
TPH ref. to Gasoline (MW=100)	110	Not Detected	440	Not Detecte
Acetonitrile	11	Not Detected	18	Not Detecte
Vinyl Acetate	4.3	Not Detected	15	Not Detecte
Octane	4.3	Not Detected	20	Not Detecte
Pentane	4.3	Not Detected	13	Not Detecte
Butylbenzene	4.3	Not Detected	24	Not Detecte
Decane	4.3	Not Detected	25	Not Detecte
Dodecane	11	Not Detected	75	Not Detecte
sec-Butylbenzene	4.3	Not Detected	24	Not Detecte
p-Cymene	4.3	Not Detected	24	Not Detecte

Container Type: 1 Liter Summa Canister



Client Sample ID: 4-78-SVE-10-062018

Lab ID#: 1806512-06A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070322 Date of Collection: 6/20/18 3:30:00 PM
Dil. Factor: 2.16 Date of Analysis: 7/3/18 11:04 PM

		Wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	93	70-130	
1,2-Dichloroethane-d4	97	70-130	
4-Bromofluorobenzene	105	70-130	



Client Sample ID: Lab Blank Lab ID#: 1806512-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	3070311a	Dat	e of Collection: NA	
Dil. Factor:	1.00	Dat	e of Analysis: 7/3/18	3 05:43 PM
•	Rpt. Limit	Amount	Rpt. Limit	Amount

Compound (ppbv) (ug/m3) (ug/m3) Chloromethane 5.0 Not Detected 10 Not Detected Vinyl Chloride 0.50 Not Detected 1.3 Not Detected Freon 113 0.50 Not Detected 2.0 Not Detected 1,1-Dichloroethene 0.50 Not Detected 2.0 Not Detected Acetone 5.0 Not Detected 12 Not Detected Carbon Disulfide 2.0 Not Detected 17 Not Detected Methylene Chloride 5.0 Not Detected 17 Not Detected Hexane 0.50 Not Detected 2.0 Not Detected Hexane 0.50 Not Detected 1.8 Not Detected 1,1-Dichloroethane 0.50 Not Detected 2.0 Not Detected 2,2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected 2,3-Ly-Dichloroethane 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not		Rpt. Limit	Amount	Rpt. Limit	Amount
Vinyl Chloride 0.50 Not Detected 1.3 Not Detected Freon 113 0.50 Not Detected 2.0 Not Detected 1,1-Dichloroethene 0.50 Not Detected 2.0 Not Detected Acetone 5.0 Not Detected 12 Not Detected Carbon Disulfide 2.0 Not Detected 1.7 Not Detected Methylene Chloride 5.0 Not Detected 2.0 Not Detected Hexane 0.50 Not Detected 2.0 Not Detected Hy-Dichloroethane 0.50 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.0 Not Detected	Compound	(ppbv)	(ppbv)	(ug/m3)	(ug/m3)
Freon 113 0.50 Not Detected 3.8 Not Detected 1,1-Dichloroethene 0.50 Not Detected 2.0 Not Detected Acetone 5.0 Not Detected 12 Not Detected Carbon Disulfide 2.0 Not Detected 6.2 Not Detected Methylene Chloride 5.0 Not Detected 17 Not Detected Hexane 0.50 Not Detected 1.8 Not Detected Hexane 0.50 Not Detected 2.0 Not Detected 1,1-Dichloroethane 0.50 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 5.9 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 5.9 Not Detected Chloroform 0.50 Not Detected 2.7 Not Detected Chloroform 0.50 Not Detected 2.7 Not Detected <	Chloromethane	5.0	Not Detected	10	Not Detected
1,1-Dichloroethene 0.50 Not Detected 2.0 Not Detected Acetone 5.0 Not Detected 12 Not Detected Carbon Disulfide 2.0 Not Detected 6.2 Not Detected Methylene Chloride 5.0 Not Detected 17 Not Detected Hexane 0.50 Not Detected 2.0 Not Detected 1,1-Dichloroethane 0.50 Not Detected 1.8 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 5.9 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.0 Not Detected 1,1,1-Trichloroethene 0.50 Not Detected 2.7 Not Detected 1,1,1-Trichloroethene 0.50 Not Detected 2.7 Not Detected Trichloroethene 0.50 Not Detected 2.7 Not Detected<	Vinyl Chloride	0.50	Not Detected	1.3	Not Detected
Acetone 5.0 Not Detected 12 Not Detected Carbon Disulfide 2.0 Not Detected 6.2 Not Detected Methylene Chloride 5.0 Not Detected 17 Not Detected Methylene Chloride 5.0 Not Detected 2.0 Not Detected Hexane 0.50 Not Detected 1.8 Not Detected Hexane 0.50 Not Detected 2.0 Not Detected 1,1-Dichloroethane 0.50 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 5.9 Not Detected cis-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.4 Not Detected Chloroform 0.50 Not Detected 2.7 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected Trichloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloro	Freon 113	0.50	Not Detected	3.8	Not Detected
Carbon Disulfide 2.0 Not Detected 6.2 Not Detected Methylene Chloride 5.0 Not Detected 17 Not Detected trans-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Hexane 0.50 Not Detected 1.8 Not Detected 1,1-Dichloroethane 0.50 Not Detected 2.0 Not Detected 2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 5.9 Not Detected cis-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.4 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected Trichloroethene 0.50 Not Detected 2.7 Not Detected 1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected<	1,1-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Methylene Chloride 5.0 Not Detected 17 Not Detected trans-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected trans-1,2-Dichloroethene 0.50 Not Detected 1.8 Not Detected 1,1-Dichloroethane 0.50 Not Detected 1.8 Not Detected 2.0 Not Detected 2.1,1-Dichloroethene 0.50 Not Detected 2.0 Not Detected 2.4 Not Detected 2.4 Not Detected 2.7 Not Detected 2.7 Not Detected 2.7 Not Detected 3.1,1-Trichloroethane 0.50 Not Detected 3.7 Not Detected 3.4 Not Detected 3	Acetone	5.0	Not Detected	12	Not Detected
trans-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Hexane 0.50 Not Detected 1.8 Not Detected 1,1-Dichloroethane 0.50 Not Detected 2.0 Not Detected 2,-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected 5.9 Not Detected cis-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.4 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected Benzene 0.50 Not Detected 2.7 Not Detected Trichloroethane 0.50 Not Detected 2.7 Not Detected Toluene 0.50 Not Detected 2.7 Not Detected Tetrachloroethane 0.50 Not Detected 2.7 Not Detected Chlorobenzene 0.50 Not Detected 2.7 Not Detected Chlorobenzene 0.50 Not Detected 2.3 Not Detected <t< td=""><td>Carbon Disulfide</td><td>2.0</td><td>Not Detected</td><td>6.2</td><td>Not Detected</td></t<>	Carbon Disulfide	2.0	Not Detected	6.2	Not Detected
Hexane	Methylene Chloride	5.0	Not Detected	17	Not Detected
1,1-Dichloroethane0.50Not Detected2.0Not Detected2-Butanone (Methyl Ethyl Ketone)2.0Not Detected5.9Not Detectedcis-1,2-Dichloroethene0.50Not Detected2.0Not DetectedChloroform0.50Not Detected2.4Not Detected1,1-Trichloroethane0.50Not Detected2.7Not DetectedBenzene0.50Not Detected1.6Not DetectedTrichloroethene0.50Not Detected2.7Not DetectedToluene0.50Not Detected1.9Not Detected1,1,2-Trichloroethane0.50Not Detected2.7Not Detected1,1,2-Trichloroethane0.50Not Detected2.7Not Detected2-trachloroethene0.50Not Detected2.7Not DetectedChlorobenzene0.50Not Detected2.3Not DetectedEthyl Benzene0.50Not Detected2.2Not Detectedm,p-Xylene0.50Not Detected2.2Not Detectedo-Xylene0.50Not Detected2.2Not DetectedStyrene0.50Not Detected2.1Not DetectedCumene0.50Not Detected2.4Not DetectedPropylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene<	trans-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
2-Butanone (Methyl Ethyl Ketone) 2.0 Not Detected cis-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.4 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 1.6 Not Detected Trichloroethene 0.50 Not Detected 1.6 Not Detected Trichloroethene 0.50 Not Detected 1.9 Not Detected Trichloroethane 0.50 Not Detected 1.9 Not Detected Toluene 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethane 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethane 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,3 Not Detected 2.8 Not Detected 1,4 Not Detected 1,4 Not Detected 1,5 Not Detected 1,6 Not Detected 1,7 Not Detected 1,8 Not Detected 1,8 Not Detected 1,9 Not Detected 1,9 Not Detected 1,1 Not Detected 1,1 Not Detected 1,2 Not Detected 1,3 Not Detected 1,4 Not Detected 1,5 Not Detected 1,5 Not Detected 1,6 Not Detected 1,7 Not Detected 1,8 Not Detected 1,8 Not Detected 1,9 Not Detected 1,9 Not Detected 1,1	Hexane	0.50	Not Detected	1.8	Not Detected
cis-1,2-Dichloroethene 0.50 Not Detected 2.0 Not Detected Chloroform 0.50 Not Detected 2.4 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected Benzene 0.50 Not Detected 2.7 Not Detected Trichloroethene 0.50 Not Detected 2.7 Not Detected Toluene 0.50 Not Detected 2.7 Not Detected 1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethene 0.50 Not Detected 2.7 Not Detected Chlorobenzene 0.50 Not Detected 2.7 Not Detected Ethyl Benzene 0.50 Not Detected 2.3 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected O-Xylene 0.50 Not Detected 2.1 Not Detected Styrene 0.50<	1,1-Dichloroethane	0.50	Not Detected	2.0	Not Detected
Chloroform 0.50 Not Detected 2.4 Not Detected 1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected Benzene 0.50 Not Detected 1.6 Not Detected Trichloroethene 0.50 Not Detected 2.7 Not Detected Toluene 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.2 Not Detected Chlorobenzene 0.50 Not Detected 2.2 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.1 Not Detected Syren	2-Butanone (Methyl Ethyl Ketone)	2.0	Not Detected	5.9	Not Detected
1,1,1-Trichloroethane 0.50 Not Detected 2.7 Not Detected Benzene 0.50 Not Detected 1.6 Not Detected Trichloroethene 0.50 Not Detected 2.7 Not Detected Toluene 0.50 Not Detected 1.9 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.2 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.2 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.2 Not Detected 2,2 Not Detected 2.2 Not Detected 2.4 Not Detected 0-S0 Not Detected 2.4 Not Detected 2.4	cis-1,2-Dichloroethene	0.50	Not Detected	2.0	Not Detected
Benzene 0.50 Not Detected 1.6 Not Detected Trichloroethene 0.50 Not Detected 2.7 Not Detected Toluene 0.50 Not Detected 1.9 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethene 0.50 Not Detected 3.4 Not Detected Chlorobenzene 0.50 Not Detected 2.3 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.2 Not Detected Cumene 0.50 Not Detected 2.4 Not Detected Propylbenzene 0.50 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0	Chloroform	0.50	Not Detected	2.4	Not Detected
Trichloroethene 0.50 Not Detected 2.7 Not Detected Toluene 0.50 Not Detected 1.9 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected Tetrachloroethene 0.50 Not Detected 3.4 Not Detected Chlorobenzene 0.50 Not Detected 2.3 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected m,p-Xylene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.1 Not Detected Cumene 0.50 Not Detected 2.4 Not Detected Propylbenzene 0.50 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected Terrimethylbenzene	1,1,1-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Toluene 0.50 Not Detected 1.9 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 2.7 Not Detected 1,1,2-Trichloroethane 0.50 Not Detected 3.4 Not Detected Chlorobenzene 0.50 Not Detected 2.3 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected m,p-Xylene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.1 Not Detected 2.5 Not Detected Cumene 0.50 Not Detected 2.1 Not Detected Cumene 0.50 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 2.4 Not Detected 2.4 Not Detected 3.4 Not Detected 3.5 Not	Benzene	0.50	Not Detected	1.6	Not Detected
1,1,2-Trichloroethane0.50Not Detected2.7Not DetectedTetrachloroethene0.50Not Detected3.4Not DetectedChlorobenzene0.50Not Detected2.3Not DetectedEthyl Benzene0.50Not Detected2.2Not Detectedm,p-Xylene0.50Not Detected2.2Not Detectedo-Xylene0.50Not Detected2.2Not DetectedStyrene0.50Not Detected2.1Not DetectedCumene0.50Not Detected2.4Not DetectedPropylbenzene0.50Not Detected2.4Not Detected1,3,5-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected3.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected3.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected3.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected3.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected3.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected3.5Not Detect	Trichloroethene	0.50	Not Detected	2.7	Not Detected
Tetrachloroethene 0.50 Not Detected 3.4 Not Detected Chlorobenzene 0.50 Not Detected 2.3 Not Detected Ethyl Benzene 0.50 Not Detected 2.2 Not Detected m,p-Xylene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.1 Not Detected Cumene 0.50 Not Detected 2.4 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 2.4 Not Detected 2.4 Not Detected 3.4 Not Detected 3.5 Not Detected 3.	Toluene	0.50	Not Detected	1.9	Not Detected
Chlorobenzene0.50Not Detected2.3Not DetectedEthyl Benzene0.50Not Detected2.2Not Detectedm,p-Xylene0.50Not Detected2.2Not Detectedo-Xylene0.50Not Detected2.2Not DetectedStyrene0.50Not Detected2.1Not DetectedCumene0.50Not Detected2.4Not DetectedPropylbenzene0.50Not Detected2.4Not Detected1,3,5-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not DetectedTPH ref. to Gasoline (MW=100)50Not Detected2.4Not DetectedAcetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	1,1,2-Trichloroethane	0.50	Not Detected	2.7	Not Detected
Ethyl Benzene0.50Not Detected2.2Not Detectedm,p-Xylene0.50Not Detected2.2Not Detectedo-Xylene0.50Not Detected2.2Not DetectedStyrene0.50Not Detected2.1Not DetectedCumene0.50Not Detected2.4Not DetectedPropylbenzene0.50Not Detected2.4Not Detected1,3,5-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not DetectedTPH ref. to Gasoline (MW=100)50Not Detected2.0Not DetectedAcetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Tetrachloroethene	0.50	Not Detected	3.4	Not Detected
m,p-Xylene 0.50 Not Detected 2.2 Not Detected o-Xylene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.1 Not Detected Cumene 0.50 Not Detected 2.4 Not Detected Propylbenzene 0.50 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 2.0 Not Detected 3.4 Not Detected 2.0 Not Detected 3.4 Not Detected 2.0 Not Detected 3.4 Not Detected 2.0 Not Detected 3.5 Not Detected	Chlorobenzene	0.50	Not Detected	2.3	Not Detected
o-Xylene 0.50 Not Detected 2.2 Not Detected Styrene 0.50 Not Detected 2.1 Not Detected Cumene 0.50 Not Detected 2.4 Not Detected Propylbenzene 0.50 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected TPH ref. to Gasoline (MW=100) 50 Not Detected 200 Not Detected Acetonitrile 5.0 Not Detected 8.4 Not Detected Vinyl Acetate 2.0 Not Detected 7.0 Not Detected Octane 2.0 Not Detected 9.3 Not Detected Pentane 2.0 Not Detected 5.9 Not Detected Butylbenzene 2.0 Not Detected 11 Not Detected Decane 2.0 Not Detected 12 Not Detected Decane 5.0 Not Detected 35 Not Detected Decane 5.0 Not Detected 35 Not Detected Sec-Butylbenzene 2.0 Not Detected 35 Not Detected Sec-Butylbenzene 2.0 Not Detected 11 Not Detected Sec-Butylbenzene 2.0 Not Detected 3.0	Ethyl Benzene	0.50	Not Detected	2.2	Not Detected
Styrene0.50Not Detected2.1Not DetectedCumene0.50Not Detected2.4Not DetectedPropylbenzene0.50Not Detected2.4Not Detected1,3,5-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not DetectedTPH ref. to Gasoline (MW=100)50Not Detected200Not DetectedAcetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	m,p-Xylene	0.50	Not Detected	2.2	Not Detected
Cumene0.50Not Detected2.4Not DetectedPropylbenzene0.50Not Detected2.4Not Detected1,3,5-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not DetectedTPH ref. to Gasoline (MW=100)50Not Detected200Not DetectedAcetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	o-Xylene	0.50	Not Detected	2.2	Not Detected
Propylbenzene 0.50 Not Detected 2.4 Not Detected 1,3,5-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected 1,2,4-Trimethylbenzene 0.50 Not Detected 2.4 Not Detected TPH ref. to Gasoline (MW=100) 50 Not Detected 200 Not Detected Acetonitrile 5.0 Not Detected 8.4 Not Detected Vinyl Acetate 2.0 Not Detected 7.0 Not Detected Octane 2.0 Not Detected 9.3 Not Detected Pentane 2.0 Not Detected 5.9 Not Detected Butylbenzene 2.0 Not Detected 11 Not Detected Decane 2.0 Not Detected 12 Not Detected Dodecane 5.0 Not Detected 35 Not Detected sec-Butylbenzene 2.0 Not Detected 11 Not Detected 12 Not Detected 12 Not Detected 135 Not Detected 140 Not Detected 141 Not Detected 142 Not Detected 143 Not Detected 144 Not Detected 145 Not Dete	Styrene	0.50	Not Detected	2.1	Not Detected
1,3,5-Trimethylbenzene0.50Not Detected2.4Not Detected1,2,4-Trimethylbenzene0.50Not Detected2.4Not DetectedTPH ref. to Gasoline (MW=100)50Not Detected200Not DetectedAcetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Cumene	0.50	Not Detected	2.4	Not Detected
1,2,4-Trimethylbenzene0.50Not Detected2.4Not DetectedTPH ref. to Gasoline (MW=100)50Not Detected200Not DetectedAcetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Propylbenzene	0.50	Not Detected	2.4	Not Detected
TPH ref. to Gasoline (MW=100) Acetonitrile 5.0 Not Detected 8.4 Not Detected Vinyl Acetate Octane Pentane 2.0 Not Detected 9.3 Not Detected Pentane 2.0 Not Detected 5.9 Not Detected Butylbenzene 2.0 Not Detected 11 Not Detected Dodecane 5.0 Not Detected 35 Not Detected Sec-Butylbenzene 2.0 Not Detected 11 Not Detected 11 Not Detected Not Detected 11 Not Detected Not Detected 11 Not Detected 11 Not Detected Not Detected 11 Not Detected 11 Not Detected 12 Not Detected 13 Not Detected 14 Not Detected 15 Not Detected 16 Not Detected 17 Not Detected 18 Not Detected 19 Not Detected Not Detected Not Detected Not Detected Not Detected	1,3,5-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
Acetonitrile5.0Not Detected8.4Not DetectedVinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	1,2,4-Trimethylbenzene	0.50	Not Detected	2.4	Not Detected
Vinyl Acetate2.0Not Detected7.0Not DetectedOctane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	TPH ref. to Gasoline (MW=100)	50	Not Detected	200	Not Detected
Octane2.0Not Detected9.3Not DetectedPentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Acetonitrile	5.0	Not Detected	8.4	Not Detected
Pentane2.0Not Detected5.9Not DetectedButylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Vinyl Acetate	2.0	Not Detected	7.0	Not Detected
Butylbenzene2.0Not Detected11Not DetectedDecane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Octane	2.0	Not Detected	9.3	Not Detected
Decane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Pentane	2.0	Not Detected	5.9	Not Detected
Decane2.0Not Detected12Not DetectedDodecane5.0Not Detected35Not Detectedsec-Butylbenzene2.0Not Detected11Not Detected	Butylbenzene	2.0	Not Detected	11	Not Detected
sec-Butylbenzene 2.0 Not Detected 11 Not Detected	-	2.0	Not Detected	12	Not Detected
· · · · · · · · · · · · · · · · · · ·	Dodecane	5.0	Not Detected	35	Not Detected
·	sec-Butylbenzene	2.0	Not Detected	11	Not Detected
		2.0	Not Detected	11	Not Detected

		Method
Surrogates	%Recovery	Limits



Client Sample ID: Lab Blank Lab ID#: 1806512-07A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070311a Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 05:43 PM

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	98	70-130	
4-Bromofluorobenzene	99	70-130	



Client Sample ID: CCV Lab ID#: 1806512-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070302 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 11:04 AM

Compound	%Recovery	
Chloromethane	90	
Vinyl Chloride	89	
Freon 113	93	
1,1-Dichloroethene	86	
Acetone	92	
Carbon Disulfide	84	
Methylene Chloride	98	
trans-1,2-Dichloroethene	94	
Hexane	91	
1,1-Dichloroethane	94	
2-Butanone (Methyl Ethyl Ketone)	92	
cis-1,2-Dichloroethene	92	
Chloroform	94	
1,1,1-Trichloroethane	92	
Benzene	93	
Trichloroethene	92	
Toluene	92	
1,1,2-Trichloroethane	92	
Tetrachloroethene	98	
Chlorobenzene	94	
Ethyl Benzene	92	
m,p-Xylene	92	
o-Xylene	91	
Styrene	88	
Cumene	92	
Propylbenzene	93	
1,3,5-Trimethylbenzene	94	
1,2,4-Trimethylbenzene	89	
TPH ref. to Gasoline (MW=100)	100	
Acetonitrile	90	
Vinyl Acetate	94	
Octane	98	
Pentane	103	
Butylbenzene	98	
Decane	98	
Dodecane	98	
sec-Butylbenzene	101	
p-Cymene	99	

		Method
Surrogates	%Recovery	Limits



Client Sample ID: CCV Lab ID#: 1806512-08A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070302 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 11:04 AM

		Wetnoa	
Surrogates	%Recovery	Limits	
Toluene-d8	100	70-130	
1,2-Dichloroethane-d4	95	70-130	
4-Bromofluorobenzene	101	70-130	



Client Sample ID: LCS Lab ID#: 1806512-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070303 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 11:29 AM

Compound	%Recovery	Method Limits
	•	
Chloromethane	92	70-130
Vinyl Chloride	90	70-130
Freon 113	91	70-130
1,1-Dichloroethene	84	70-130
Acetone	85	70-130
Carbon Disulfide	84	70-130
Methylene Chloride	95	70-130
trans-1,2-Dichloroethene	101	70-130
Hexane	90	70-130
1,1-Dichloroethane	91	70-130
2-Butanone (Methyl Ethyl Ketone)	92	70-130
cis-1,2-Dichloroethene	85	70-130
Chloroform	92	70-130
1,1,1-Trichloroethane	92	70-130
Benzene	92	70-130
Trichloroethene	93	70-130
Toluene	92	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	96	70-130
Chlorobenzene	94	70-130
Ethyl Benzene	94	70-130
m,p-Xylene	93	70-130
o-Xylene	95	70-130
Styrene	95	70-130
Cumene	94	70-130
Propylbenzene	96	70-130
1,3,5-Trimethylbenzene	98	70-130
1,2,4-Trimethylbenzene	94	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
Acetonitrile	Not Spiked	
Vinyl Acetate	92	70-130
Octane	Not Spiked	
Pentane	Not Spiked	
Butylbenzene	Not Spiked	
Decane	Not Spiked	
Dodecane	Not Spiked	
sec-Butylbenzene	Not Spiked	
p-Cymene	Not Spiked	

		Method
Surrogates	%Recovery	Limits



Client Sample ID: LCS Lab ID#: 1806512-09A

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070303 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 11:29 AM

		Method	
Surrogates	%Recovery	Limits	
Toluene-d8	99	70-130	
1,2-Dichloroethane-d4	92	70-130	
4-Bromofluorobenzene	102	70-130	



Client Sample ID: LCSD Lab ID#: 1806512-09AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070304 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 11:54 AM

Compound	%Recovery	Method Limits
Chloromethane	88	70-130
Vinyl Chloride	87	70-130
Freon 113	90	70-130
1,1-Dichloroethene	84	70-130
Acetone	88	70-130
Carbon Disulfide	84	70-130
Methylene Chloride	95	70-130
trans-1,2-Dichloroethene	102	70-130
Hexane	90	70-130
1,1-Dichloroethane	90	70-130
2-Butanone (Methyl Ethyl Ketone)	91	70-130
cis-1,2-Dichloroethene	83	70-130
Chloroform	90	70-130
1,1,1-Trichloroethane	91	70-130
Benzene	94	70-130
Trichloroethene	94	70-130
Toluene	94	70-130
1,1,2-Trichloroethane	93	70-130
Tetrachloroethene	98	70-130
Chlorobenzene	95	70-130
Ethyl Benzene	95	70-130
m,p-Xylene	94	70-130
o-Xylene	94	70-130
Styrene	96	70-130
Cumene	95	70-130
Propylbenzene	97	70-130
1,3,5-Trimethylbenzene	99	70-130
1,2,4-Trimethylbenzene	94	70-130
TPH ref. to Gasoline (MW=100)	Not Spiked	
Acetonitrile	Not Spiked	
Vinyl Acetate	92	70-130
Octane	Not Spiked	
Pentane	Not Spiked	
Butylbenzene	Not Spiked	
Decane	Not Spiked	
Dodecane	Not Spiked	
sec-Butylbenzene	Not Spiked	
p-Cymene	Not Spiked	

		Method
Surrogates	%Recovery	Limits



Client Sample ID: LCSD Lab ID#: 1806512-09AA

EPA METHOD TO-15 GC/MS FULL SCAN

File Name: 3070304 Date of Collection: NA
Dil. Factor: 1.00 Date of Analysis: 7/3/18 11:54 AM

		wethod	
Surrogates	%Recovery	Limits	
Toluene-d8	102	70-130	
1,2-Dichloroethane-d4	95	70-130	
4-Bromofluorobenzene	102	70-130	