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January 30, 2020

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**Subject: Site Assessment Report – Revision 1**  
**Julio Properties – RS**  
**Ripley, Houghton County, Michigan**  
**EPA Contract No.: 68-HE-0519-D0005 (START V, Region 5)**  
**Task Order-Task Order Line Item No.: F0069-0002AI076**  
**Document Tracking No.: 0068A**

Dear Mr. Kelly:

The Tetra Tech, Inc. (Tetra Tech) Superfund Technical Assessment and Response Team (START) is submitting the Site Assessment Report for the Julio Properties – RS site. The report summarizes (1) the findings of a review of existing information and (2) sampling of building material, surface soil, and waste completed by START per the Sampling and Analysis Plan.

Please call me at (906) 281-3404, if you have any questions or comments regarding this report.

Sincerely,

A handwritten signature in black ink, appearing to read 'Jeffrey S. Binkley'.

Jeffrey S. Binkley  
The Mannik & Smith Group (Subcontractor of Tetra Tech) Project Manager

Enclosure

cc: TDD File  
Kevin Scott, Tetra Tech Program Manager

**SITE ASSESSMENT REPORT  
JULIO PROPERTIES – RS  
RIPLEY, HOUGHTON COUNTY, MICHIGAN**

**Revision 1**

*Prepared for*

**U.S. Environmental Protection Agency**  
Emergency Response Branch  
Region 5  
2565 Plymouth Road  
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*Submitted by*

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## 1.0 INTRODUCTION

Under the Superfund Technical Assessment and Response Team (START) Contract No.: 68-HE-0519-D0005, U.S. Environmental Protection Agency (EPA) Region 5 tasked Tetra Tech, Inc. (Tetra Tech) to prepare a site assessment report for the Julio Properties – RS Site in Ripley, Houghton County, Michigan. The purpose of the site assessment was to evaluate the potential for threats to human health and/or the environment to assess the necessity for a removal action. This assessment is considered a removal assessment.

Under Task Order-Task Order Line Item No.: F0069-0002AI076, Tetra Tech START performed the following activities during this assessment:

- Prepared a Sampling and Analysis Plan (SAP) (Tetra Tech 2019b).
- Prepared a Site Health and Safety Plan.
- Conducted written logbook documentation activities in accordance with Tetra Tech Standard Operating Procedure (SOP) No. 024-2, “Recording Notes in Field Logbooks” (Tetra Tech 2014).
- Collected samples of building material, surface soils, and debris piles in accordance with the site-specific SAP (Tetra Tech 2019b).
- Reviewed existing analytical data and background information.
- Compared existing and START analytical data to applicable screening levels.

Section 2.0 of this site assessment report discusses the site location and site history; Section 3.0 discusses the field investigation; Section 4.0 discusses the screening levels and evaluates the existing Michigan Department of Environment, Great Lakes, and Energy Remediation and Redevelopment Division (EGLE RRD), formerly the Michigan Department of Environmental Quality (MDEQ), and START data; and, Section 5.0 presents conclusions and conceptual removal actions. All references cited in this report are listed after the text. Site tables are attached following the reference list, and **Appendix A** contains figures. **Appendix B** provides the EGLE request for EPA assistance. Photographic documentation logs are provided in **Appendix C**.

## 2.0 SITE BACKGROUND

This section describes the site location and summarizes its history.

### 2.1 SITE LOCATION

The Julio Properties site consists of three non-continuous parcels totaling approximately 25 acres, a portion of which is made lands, along approximately ½ mile of the north shoreline of the Portage Canal in Ripley,

Houghton County, Michigan (**Figures 1 and 2 in Appendix A**). The approximate extent of the made lands is indicated by the 1865 shoreline depicted on **Figure 2 in Appendix A**.

The three parcels, owned by Lawrence (deceased) and Elizabeth Julio are:

- Julio Salvage (20675 Royce Road).
- Julio Contracting/Former Standard Oil Company (21021 Royce Road).
- Julio Scrap Yard & Tower (address unknown).

Ripley Products, an operating metal fabricating facility, is in the northwest corner of the Julio Salvage parcel. The parcel owner maintains an office/maintenance/fueling facility on the north side of the Julio Contracting/Former Standard Oil Company parcel. A separately maintained communications tower is within the south-central portion of the Julio Scrap Yard & Tower parcel. Inactive salvage yard operations and construction related boneyards cover the balance of the land area of all three parcels. The all season, multi-user recreational Michigan Department of Natural Resources (MDNR) Lake Linden Route trail (a.k.a. Trail No. 3) right of way (ROW) traverses each of the parcels. The Julio Properties are bordered to the north by Michigan Department of Transportation (MDOT) Highway M-26, to the south by the Portage Canal, and to the east and west by a mixture of residential/commercial/vacant, and former industrial properties.

## 2.2 SITE HISTORY

Based on a review of Sanborn Fire Insurance maps, prior Julio Properties land uses consisted of a combination of industrial operations including, but not limited to, foundry, machining, coal and coke handling, bulk fuel handling, and boiler works (Mannik Smith Group [MSG] 2018). Simultaneously with industrial development made lands were created as indicated by the 1865 shoreline depicted on **Figure 2 in Appendix A**. This is of importance as to the nature of the underlying fill material relative to the current areas of environmental interest. Salvage and construction-related operations later became the primary land use. Resulting conditions of environmental concern include (MSG 2019):

- Hundreds of containers including, but not limited to, former underground storage tanks (USTs), aboveground storage tanks (ASTs), drums, compressed gas cylinders, fuel tanks, fire extinguishers, and batteries.
- Barren, stressed, or oil-stained areas on the ground surface contaminated with polychlorinated biphenyls (PCB) and other contaminants.
- Piles, mounds, and partially buried debris including cable, asbestos-containing material (ACM) and suspect ACM (SACM), potentially abandoned containers, residual process materials (RPM), PCB and mercury-containing equipment, scrap debris, waste materials, and other unknown materials.
- Oil sheens in the sediment and on the surface water draining to the Portage Canal.
- ASTs with no secondary containment.

- A leaking tank car.
- Friable ACM and SACM on the ground surface, within waste and debris piles, and as part of equipment and materials.
- Submerged drums in the Portage Canal.

Beginning in 2018, EGLE RRD evaluated the results of key inspections and studies conducted at the Julio Properties and in the MDNR trail ROW (MSG 2018) and undertook site investigation (SI) activities. Completion of these activities identified potential risks to human and ecological receptors at the Julio Properties and users of the traversing MDNR trail ROW (MSG 2019). As well as physical hazards, human health risks included those from direct contact with surface soils contaminated with PCBs and metals, RPM, abandoned containers, and waste/debris piles and from inhalation of particulates and asbestos.

In 2018 into 2019, EGLE RRD (MSG 2019):

- Notified the Julio Properties owner of the elevated risks to human health. The property owner subsequently undertook interim measures including temporary fencing, barrier, and signage installation, and scraping/capping of an area of the Julio Salvage parcel near the MDNR trail ROW to partially mitigate exposure hazards. The property owner recently discontinued accepting salvage materials and is currently in the process of removing previously accumulated salvageable materials from the parcels.
- Notified MDNR trail ROW representatives of the elevated risks to human health. Trail ROW representatives subsequently undertook interim measures including temporary and semi-permanent fencing, gating, and signage installation to restrict access to the Julio Salvage parcel and to direct trail users to the designated MDNR trail. The MDNR is also undertaking a study to evaluate options to protect trail users from potentially unacceptable contaminant exposures from the Julio Salvage parcel while maintaining trail continuity.
- Notified Western Upper Peninsula District Health Department (WUPHD) of the elevated risks to human health and provided WUPHD with Julio Properties site information. WUPHD in turn requested assistance from the Michigan Department of Health and Human Services (MDHHS). The MDHHS provided a public health hazard determination that concluded "...there are physical and chemical hazards currently present at the Julio Properties that could cause harm to people on or near the property resulting in injury or disease now or in the future. In addition, there is the potential for presence of imminent hazards" (MDHHS 2019). Subsequently, the WUPHD issued an advisory regarding the Julio Properties<sup>1</sup>.
- Coordinated EGLE Materials Management Division (MMD), Water Resources Division (WRD), and Air Quality Division (AQD) compliance inspections of the Julio Properties that resulted in the issuance of multiple notices of violation (NOVs) to the Julio Properties owner including, but not limited to:
  - Uncharacterized and unlabeled hazardous wastes.
  - Improper storage of hazardous wastes, including open and leaking containers.

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<sup>1</sup> <https://www.wupdhd.org/homepage-top-row/health-department-issues-advisory-in-ripley/>

- Long-term storage of hazardous wastes without a permit.
- Improper storage and labeling of used batteries.
- Liquid industrial byproducts discharging to a floor drain.
- Discharge of storm water from industrial activity without a permit.
- Discharge of contaminants to surface waters.
- Multiple sites of uncontrolled storage of regulated ACM as a result of poor removal and waste handling practices.
- Continued SI activities further documenting the presence of concentrations of metals, PCBs, volatile organic compounds (VOCs) and semi volatile organic compounds (SVOCs) at concentrations in excess of multiple EGLE and EPA criteria in multiple media, and ACM.
- Completed an elemental mercury cleanup interim response (IR) at the Julio Salvage parcel.
- Completed an ACM abatement IR that entailed collection and removal of visible ACM and SACM at the Julio Contracting/Former Standard Oil Company and Julio Scrap Yard & Tower parcels.
- Collaborated with multiple stakeholders including the property owner, WUPHD, MDHHS, MDNR, EGLE MMD, WRD and AQD, and the EPA Emergency Response Branch (ERB) to identify and implement measures to address concerns posed by the Julio Properties.

Based on the evaluation, SI, and IR findings in a September 20, 2019, letter, EGLE requested assistance from the EPA ERB to address the risks posed by the Julio Properties. The request for assistance letter is included in **Appendix B**.

### **3.0 FIELD INVESTIGATION**

This section summarizes the scope of work and describes the sampling activities conducted during the EPA site assessment.

#### **3.1 SCOPE OF WORK**

Field work was conducted in accordance with the START SAP (Tetra Tech 2019b) for the Site and the contract Quality Assurance Project Plan (QAPP) (Tetra Tech 2019a).

#### **3.2 SAMPLING ACTIVITIES**

This section describes sampling activities conducted at the Site on October 23, 2019. EGLE and START sampling locations are depicted on **Figures 3 through 16 in Appendix A**.

##### **3.2.1 Surface Soil and Waste Material Sampling**

START collected two surface soil and two waste materials samples during the October 2019 sampling event along with two duplicate and two matrix spike/matrix spike duplicate (MS/MSD) samples per the site-specific SAP (Tetra Tech 2019b). Sample locations were biased to verify previous EGLE sampling events

where soils contained leachable lead in excess of toxicity characteristic leaching procedure (TCLP) criteria or total PCBs.

For sample collection, START utilized a disposable (dedicated) scoop to collect soil and waste material samples from a depth of 0 to 3 inches below ground surface. Samples were placed in laboratory-supplied, 8-ounce glass jars in accordance with the SAP (Tetra Tech 2019b). Sample labels and tags containing the unique sample identifier and date and time of sampling were attached to each 8-oz jar following sample collection. Sampling data—including sample analyses, sample collection times and dates—were recorded on laboratory chain-of-custody forms. The samples were submitted under chain-of-custody to Tetra Tech's subcontracted laboratory (CT Laboratories in Baraboo, Wisconsin) for target analyte list (TAL) and TCLP metals and PCB Aroclor analyses.

### **3.2.2 Building Material Sampling**

START collected five bulk ACM samples during the October 2019 sampling event per the site-specific SAP (Tetra Tech 2019b). Sample locations were selected by START personnel familiar with ACM and were biased toward locations that were previously identified by EGLE to contain ACM.

In accordance with the SAP (Tetra Tech 2019b) START utilized dedicated sampling equipment for each sample to prevent potential cross contamination of asbestos fibers and samples were placed in individual sealable plastic bags.

Each sample bag was labeled with the unique sample identifier, date, and time of sampling following sample collection. Sampling data—including sample analyses, sample collection times and dates—were recorded on laboratory chain-of-custody forms. The samples were submitted under chain-of-custody to ALS Laboratories in Cincinnati, Ohio for analysis of asbestos content by polarized light microscopy (PLM) analyses.

All laboratory data were validated and reviewed by START to assist in verification of the existing Julio Properties information and characterizing the on-site contamination (Tetra Tech 2020).

## 4.0 SITE SCREENING LEVELS AND EXISTING DATA EVALUATION

This section describes the selected Julio Properties screening levels and provides an evaluation of the EGLE and START analytical data.

### 4.1 SITE SCREENING LEVELS

This removal site assessment includes a compilation of soil, RPM, waste, ACM, ground water, sediment, pore water, submerged drum contents, and abandoned container analytical data. In addition to the sampling described in Section 3.2, EPA ERB and analytical data from the following key studies were included in the evaluation to assist in characterizing the impacted media at the Julio Properties:

- *Brownfield Redevelopment Assessment Report for Hancock/Ripley Trail Property – November 25, 2002.* Prepared by the MDEQ-RRD, Superfund Section, Pre-remedial Group, Site Evaluation Unit (Pre-remedial Group) (MDEQ 2002).
- *Unpublished Site Investigation Findings for Abandoned Mining Wastes Torch Lake Non-Superfund Site, Quincy Mining Company – Portage Operations Area, Houghton County, Michigan included in the EPA Referral Package.* September 2019 (MSG 2019).

The following provides a summary of the regulatory criteria utilized for evaluating EGLE and START analytical results from soil, RPM, waste, ACM, groundwater, sediment, pore water, and submerged drum content sampling.

- EPA tap water and industrial direct contact removal management levels (RMLs) (EPA 2019). EPA RMLs are modified based on target risk levels for carcinogens (TCR) and hazard quotients (HQ). EPA's generic RML tables were used with specific TCR and HQ modifiers. The EPA's RMLs were used with a criterion of  $10^{-4}$  TCR and a HQ of 3 for non-carcinogens.
  - Groundwater, Soil, RPM, abandoned container contents, and waste.
- Part 201 of Michigan's Natural Resources and Environmental Protection Act (NREPA), being Public Act (PA) 451 of 1994, as amended Groundwater Surface Water Interface Criteria (GSIC), Groundwater Surface Water Interface Protection Criteria (GSIPC), Water Solubility, Soil Saturation, Flammability and Explosivity Screening Levels, and Non Residential Drinking Water Protection Criteria (DWPC), Soil Volatilization to Indoor Air Inhalation Criteria (SVIAC), Infinite Source Volatile Soil Inhalation Criteria (VSIC), Finite VSIC for 2 and 5 meter thicknesses, Particulate Soil Inhalation Criteria (PSIC), Direct Contact Criteria (DCC), Drinking Water Criteria (DWC), and Groundwater Volatilization to Indoor Air Criteria (GVIAC) for Response Activity (EGLE 2013), and EGLE Volatilization to Indoor Air Interim Action Screening Levels (RIASLs).
  - Soil, RPM, abandoned container contents, ACM, waste, groundwater, and pore water.
- EPA, Resource Conservation and Recovery Act (RCRA), Identification and Listing of Hazardous Waste Criteria (40 CFR, Part 261, Subpart C) (EPA 2012).
  - Soil, RPM, abandoned container contents, and waste.

- EPA, Region 4 Ecological Risk Assessment Supplemental Guidance - Freshwater Ecological Screening Values (ESVs) (EPA 2018).
  - Sediment, submerged drum contents, and pore water.
- EGLE – Rule 57 Water Quality Values, Surface Water Assessment Section (February 2014).
  - Pore water.
- Sediment Quality Guidelines, Threshold Effect Concentrations (TECs) and Probable Effect Concentrations (PECs) (MacDonald, et al, 2000).
  - Sediment and submerged drum contents.
- EPA, National Emission Standards for Hazardous Air Pollutants (NESHAP) (40 CFR, Part 61, Subpart M) (EPA 1984).
  - Asbestos.

## 4.2 DATA EVALUATION

The data reviewed from key studies previously conducted by EGLE and START’s October 2019 sampling included 240 (plus 9 field duplicates) soil, RPM, waste, ground water, sediment, pore water, and submerged drum contents samples, six (plus one field duplicate) waste characterization samples, and 127 ACM samples. Analyses generally included metals, PCBs, VOCs, and SVOCs for soil, RPM, waste, ground water, sediment, pore water, and submerged drum contents, TCLP metals for waste characterization samples, and asbestos for the ACM samples. The samples were analyzed by a combination of laboratories, including the EGLE environmental laboratory, and EGLE- and EPA-contracted laboratories. Analytical results that exceeded the selected screening criteria are depicted on **Figures 3 through 16 in Appendix A** and presented in **Tables 1 through 12**.

The following provides a summary of the EGLE and EPA analytical results that exceed the applicable criteria at each of the three Julio Properties parcels.

### 4.2.1 Julio Salvage

#### Soil, RPM, Abandoned Container Contents, ACM, and Waste

Julio Salvage parcel sample analytical and x-ray fluorescence (XRF) results indicated the presence of multiple contaminants of concern (COCs) including metals, PCBs, VOCs, SVOCs, and asbestos in soil, RPM, abandoned container contents, waste, and building materials. Concentrations of lead and PCBs were above EPA industrial RMLs (EPA 2019) and EGLE Part 201 non-residential soil DCC (EGLE 2013), and concentrations of manganese were above EGLE PSIC (EGLE 2013). Asbestos percentages were above EPA NESHAP (EPA 1984) and EGLE PSIC (EGLE 2013) in soil and building materials. In addition, contaminants exceed EGLE GSIPC, and non-residential DWPC, RIASLs, SVIAC, and VSIC.



On-site friable ACM contains up to 75 percent (%) asbestos (**Figure 3 in Appendix A and Table 1**). Soil, RPM, abandoned container contents, and waste contained lead up to 5,600 milligrams per kilogram (mg/kg), manganese up to 2,000 mg/kg, and total PCBs up to 583 mg/kg or parts per million (ppm) (**Figures 4, 5, and 5a in Appendix A, and Tables 2 and 3**). **Figure 4 in Appendix A** provides a summary of the hundreds of abandoned containers present at the Julio Salvage parcel including the location of compressed gas cylinders. Also, TCLP results for lead exceed hazardous waste criteria (EPA 2012), indicating an increased potential for migration from the waste to groundwater and surface water (**Figure 4 in Appendix A and Table 2**). **Figure 7 in Appendix A** depicts the ubiquitous RML, DCC, and PSIC exceedances in soil, RPM, abandoned container contents, waste, and ACM in building materials present at the Julio Salvage parcel. Of note the most significant contamination is located in Areas, 1, 2, and 7 near and/or within the MDNR trail ROW that traverses the parcel as depicted on **Figure 7 in Appendix A**.

#### Groundwater

Julio Salvage parcel sample analytical results indicated the presence of VOCs, SVOCs and metals in groundwater. COCs detected in groundwater were in excess of EPA tap water RMLs (EPA 2019) or EGLE GSIC and non-residential DWC (EGLE 2013) or RIASLs (**Figure 6 in Appendix A and Table 4**). Also of note, PCBs, at a concentration below criteria, were detected near a Portage Canal shore location (QMCP-GW16).

#### Pore Water, Sediment, and Submerged Drum Contents

Sample analytical results indicated the presence of SVOCs and metals immediately offshore of the Julio Salvage parcel in pore water, sediment, and/or submerged drum contents. COCs detected in pore water, sediment, and submerged drum contents were in excess of EPA ESVs (EPA 2018), EGLE Part 201 and Rule 57 drinking water or GSIC (EGLE 2013) and TECs or PECs (MacDonald, et al. 2000) (**Figure 16 in Appendix A and Table 12**). Also of note, the nearshore COCs were also detected in terrestrial soil, RPM, abandoned container contents, and waste samples.

Photographic documentation of the Julio Salvage parcel indicating the closed status of the salvage yard and highlighting the presence of abandoned containers and ACM proximal to the MDNR trail ROW is provided in **Appendix C**.



#### **4.2.2 Julio Contracting/Former Standard Oil Company**

##### Soil, Abandoned Containers, and ACM

Julio Contracting/Former Standard Oil Company parcel sample analytical results indicate the presence of multiple COCs including metals, PCBs, VOCs and SVOCs in soil and RPM, and asbestos in building materials. The concentrations of lead was above the EPA industrial RML (EPA 2019) and EGLE Part 201 non-residential soil DCC (EGLE 2013) in a single sample. Asbestos percentages in building materials were above EPA NESHAP (EPA 1984) and EGLE PSIC (EGLE 2013). In addition, contaminants exceed EGLE GSIPC, non-residential DWPC, and RIASLs.

On-site friable ACM contains up to 65 % asbestos (**Figure 8 in Appendix A and Table 5**). The EGLE ACM abatement IR entailed collection and removal of visible ACM and SACM from the parcel surface, including some of the sampled material as indicated on **Figure 8 in Appendix A and Table 5**. **Figure 9 in Appendix A** provides a summary of the abandoned containers present at the Julio Contracting/Former Standard Oil Company parcel including the location of a compressed gas cylinder. One soil sample contained lead at 1,700 mg/kg (**Figure 10 in Appendix A, and Table 6**). **Figure 10 in Appendix A** depicts the EGLE staining and sheen observations related to soil, and drainage ditch sediment and surface water.

##### Groundwater

Julio Contracting/Former Standard Oil Company parcel sample analytical results indicated the presence of SVOCs and metals in groundwater. COCs detected in groundwater were in excess of EPA tap water RMLs (EPA 2019) or EGLE GSIC and non-residential DWC, and water solubility levels (EGLE 2013) or RIASLs (**Figure 11 in Appendix A and Table 7**). Of particular note is the SVOC GSIC and water solubility exceedances detected near the drainage ditch at location QMCP-GW77 indicating it may be near a potential source related to the EGLE drainage ditch sediment and surface water staining and sheen observations depicted on **Figure 11 in Appendix A**.

##### Pore Water and Sediment

Sample analytical results indicated the presence of SVOCs and metals in sediment and metals in pore water in the Julio Contracting/Former Standard Oil Company parcel drainage ditch and at the drainage ditch outlet into the Portage Canal. COCs detected in pore water and sediment were in excess of EPA ESVs (EPA 2018), EGLE Part 201 and Rule 57 drinking water or GSIC (EGLE 2013), and TECs or PECs (MacDonald, et al. 2000) (**Figure 16 in Appendix A and Table 12**). Of note, the COCs were also detected in terrestrial soil and groundwater samples, and align with EGLE drainage ditch sediment and surface water stained and sheen observations depicted on **Figure 11 in Appendix A**.

Photographic documentation of the Julio Contracting/Former Standard Oil Company parcel indicating the limited site control measures and highlighting the presence of ACM proximal to the MDNR trail ROW and sheen on the drainage ditch is provided in **Appendix C**.

#### **4.2.3 Julio Scrap Yard & Tower**

##### Soil, RPM, Abandoned Containers, and ACM

Julio Scrap Yard & Tower parcel sample analytical results indicate the presence of multiple COCs including metals, VOCs, SVOCs, and PCBs in soil and RPM, and ACM in building materials. Concentrations of lead, arsenic, benzo (a) pyrene, mercury, and PCBs were above the EPA industrial RML (EPA 2019) and/or EGLE Part 201 non-residential soil DCC (EGLE 2013), and concentrations of manganese were above EGLE PSIC (EGLE 2013). Asbestos percentages in building materials were above EPA NESHAP (EPA 1984) and EGLE PSIC (EGLE 2013). In addition, contaminants exceed EGLE GSIPC, and non-residential DWPC, RIASLs, SVIAC, and VSIC.

On-site friable ACM contains up to 70 % asbestos (**Figure 12 in Appendix A and Table 8**). The EGLE ACM abatement IR entailed collection and removal of visible ACM and SACM from the parcel surface, including some of the sampled material as indicated on **Figure 12 in Appendix A and Table 8**. **Figure 13 in Appendix A** provides a summary of the abandoned containers present at the Julio Scrap Yard & Tower parcel including the location of a compressed gas cylinder. Soil and RPM contained lead up to 18,000 mg/kg, arsenic up to 50 mg/kg, mercury up to 520 mg/kg, benzo (a) pyrene up to 13,000 micrograms per kilogram (ug/kg), manganese up to 1,800 mg/kg, and total PCBs up to 120 mg/kg or ppm (**Figures 13 and 14 in Appendix A, and Tables 9 and 10**). Of note is that significant contamination is located in a berm-like series of piles, mounds, and partially buried debris along the northern portion of the parcel near the MDNR trail ROW that traverses the north side of the parcel. Also of particular note, the greatest concentration of PCBs detected were in a sample of oil stained soils near a formerly leaking tank car valve.

##### Groundwater

Julio Scrap Yard & Tower parcel sample analytical results indicated the presence of metals in groundwater. COCs detected in groundwater were in excess of EPA tap water RMLs (EPA 2019) and/or EGLE RIASLs (**Figure 15 in Appendix A and Table 11**).

##### Sediment

Sample analytical results indicated the presence of SVOCs and metals immediately offshore of the Julio Scrap Yard & Tower parcel in sediment. COCs detected in sediment were in excess of EPA ESVs (EPA

2018) and TECs or PECs (MacDonald, et al. 2000) (**Figure 16 in Appendix A and Table 12**). Of note, the COCs were also detected in terrestrial soil and/or groundwater samples.

Photographic documentation of the Julio Scrap Yard & Tower parcel indicating the limited site control measures, and highlighting the presence of ACM and abandoned containers proximal to the MDNR trail ROW, PCB-contaminated soils near a formerly leaking tank car, and a berm-like series of piles, mounds, and partially buried debris along the northern portion of the parcel is provided in **Appendix C**.

## **5.0 CONCLUSIONS AND CONCEPTUAL REMOVAL ACTION**

### **5.1 CONCLUSIONS**

Removal assessment activities consisted of: reviewing EGLE information, EGLE RRD, MMD, WRD, and AQD NOV's issued to the parcels owner; reviewing MDHHS' public health hazard determination and the WUPHD health advisory; START collection of verification soil, waste, and building material samples; and, comparison of EGLE and START analytical data to applicable screening levels to evaluate the potential for threats to human health and/or the environment.

Based on the analytical results and previously completed EGLE RRD IRs, multi-media contamination, abandoned containers, ACM, improper waste handling and operational practices, and physical hazards associated with the Julio Properties exist. These include:

- Friable ACM (greater than 1% asbestos) across the parcel surfaces, within waste and debris piles, and as part of equipment and materials, and asbestos in soil.
- RPM, soil, and waste with concentrations of PCBs, lead, arsenic, manganese, and benzo (a) pyrene that exceed the EPA RML for industrial soil and/or EGLE non-residential DCC and PSIC, and other EGLE criteria.
- Waste with leachable lead concentrations in excess of the characteristically hazardous limit, as determined through TCLP testing, thus characterizing them as a hazardous waste.
- Drainage ditch and Portage Canal nearshore sediments, submerged drum contents, and pore water with concentrations of metals and SVOCs that exceed ESVs, TECs, and PECs, and, EGLE Part 201 and Rule 57 drinking water or GSIC.
- Groundwater with VOCs, SVOCs and metals concentrations that exceed tap water RMLs and/or EGLE GSIC and non-residential DWC, and other EGLE criteria.
- Potential for wind and water erosion and deposition of contaminated surface soils, RPM, abandoned container contents, wastes, and ACM into the environment.
- Physical hazards associated with the conditions at the minimally secured parcels.
- Hundreds of abandoned containers with unknown contents including, but not limited to, former USTs, ASTs, drums, compressed gas cylinders, fuel tanks, fire extinguishers, and batteries.

- Barren, stressed, or oil stained areas on the ground surface contaminated with PCBs, including near a formerly leaking tank car.
- Piles, mounds, and partially buried debris including cable, ACM and SACM, potentially abandoned containers, RPM, PCB and mercury-containing equipment, scrap debris, waste materials, and other unknown materials.
- Petroleum sheens in the sediment and on the surface water of a drainage ditch that discharges to the Portage Canal.
- ASTs with no secondary containment.
- Submerged drums in the Portage Canal.
- EGLE RRD, MMD, WRD, and AQD compliance inspections resulting in multiple NOV's including, but not limited to:
  - Uncharacterized and unlabeled hazardous wastes.
  - Improper storage of hazardous wastes, including open and leaking containers.
  - Long-term storage of hazardous wastes without a permit.
  - Improper storage and labeling of used batteries.
  - Liquid industrial byproducts discharging to a floor drain.
  - Discharge of storm water from industrial activity without a permit.
  - Discharge of contaminants to surface waters.
  - Multiple sites of uncontrolled storage of regulated ACM as a result of poor removal and waste handling practices.

The Julio Properties are bordered to the north by MDOT Highway M-26, to the south by the Portage Canal, and to the east and west by a mixture of residential/commercial/vacant, and former industrial properties. The all season, multi-user recreational MDNR Lake Linden Route trail (a.k.a. Trail No. 3) ROW traverses each of the parcels. Though partially temporarily fenced and signed, the Julio Properties are widely accessible to trespassers.

The damaged and friable ACM and ACM with the potential to become friable pose a potential risk to human health related to the inhalation pathway, including users of the MDNR trail ROW which traverses each of the Julio Properties parcels. TCLP testing identified wastes likely to leach concentrations of lead that may be harmful to human health or the environment as well. There is also potential exposure of ecological receptors to Julio Properties contamination as the potential for wind and water erosion, and deposition of contaminated soils and wastes into the environment, including the adjacent Portage Canal. There is potential exposure of contamination to human receptors through inhalation of and direct contact with the contaminated media including RPM, soil, waste, abandoned container contents, and ACM. In addition to direct contact, elevated concentrations in surface soil indicate that the Julio Properties are a potential source

of PCBs and heavy metals to the Portage Canal environment, including to fish, through bioaccumulation and biomagnification pathways, and ultimately humans through fish ingestion. Physical hazards associated with the minimally secured parcels, and berm-like piles, mounds, and partially buried debris including cable, abandoned containers, scrap, debris, waste materials, and other unknown materials also exist. The close proximity of the MDNR trail ROW, residences and commercial facilities, and potential for trespassers greatly increases the likelihood of human health impacts.

Potential exposure could occur through each of these migration pathways and cause imminent danger to human health and the environment. The conditions at the Julio Properties may present a threat to the public health or welfare, and the environment, and meet the criteria for a time-critical removal action as provided for in the NCP as outlined in 40 CFR § 300.415(b) and/or 300.317. These criteria include, but are not limited to, the following:

**Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants;**

Analytical data and background information reviewed during development of this site assessment report documented multiple media contaminated with metals (lead, manganese, and arsenic), PCBs, asbestos, and leachable lead at the Julio Properties and proximal to the MDNR trail ROW. These contaminants pose an actual or potential exposure to human health including adjacent land users and trespassers, and the environment.

The toxicological effects of lead, arsenic, manganese, PCBs, and asbestos have been studied by the Agency for Toxic Substances and Disease Registry (ATSDR). Toxicological information taken directly from ATSDR documents is provided below and referenced at the end of this report.

**Lead** – The effects of lead are the same whether it enters the body through breathing or swallowing. Lead can affect almost every organ and system in the body. The main target for lead toxicity is the nervous system, both in adults and children. Long-term exposure of adults can result in decreased performance in some tests that measure functions of the nervous system. It may also cause weakness in fingers, wrists or ankles. Lead exposure also causes small increases in blood pressure, particularly in middle-aged and older people and can cause anemia. Exposure to high lead levels can severely damage the brain and kidneys in adults or children and ultimately cause death. In pregnant women, high levels of exposure to lead may cause miscarriage (ATSDR 2007b).

**Arsenic** – Ingesting very high levels of arsenic can result in death. Exposure to lower levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood vessels, and a sensation of “pins and needles” in hands and feet. Ingesting or breathing low levels of inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small “corns” or “warts” on the palms, soles, and torso. Skin contact with inorganic arsenic may cause redness and swelling (ATSDR 2007a).

**Manganese** – Manganese is a naturally occurring substance found in many types of rocks and soil. Manganese is used principally in steel production to improve hardness, stiffness, and strength. Manganese is also used in a wide variety of other products. When you breathe air containing manganese, a small amount of the manganese will enter your body through your lungs and the remainder can become trapped in your lungs. Some of the manganese in your lungs can also be trapped in mucus which you may cough up and swallow into your stomach. The most common health problems in workers exposed to high levels of manganese involve the nervous system. These health effects include behavioral changes and other nervous system effects, which include movements that may become slow and clumsy. (ATSDR 2012).

**PCBs** – PCBs affect primarily the liver, stomach, and thyroid gland in the body. The main target for PCB toxicity is the liver in adults. Studies of long-term exposure of adult workers indicated changes in the blood and urine that may indicate liver damage. PCBs have also been shown to cause anemia and are a probable carcinogen found to cause cancer in the liver and biliary tract. Short-term exposure to high levels of PCBs by dermal contact can cause skin conditions such as acne and rashes. Women who were exposed to relatively high levels of PCBs had babies that weighed slightly less than babies from women who did not have these exposures. Babies born to women exposed to PCBs showed abnormal responses in tests of infant behavior. Some of these behaviors, such as problems with motor skills and a decrease in short-term memory, lasted for several years. Other studies suggest that the immune system was affected in children born to and nursed by mothers exposed to increased levels of PCBs (ATSDR 2014).

**Asbestos** – Asbestos is the name given to a group of six different fibrous minerals (amosite, chrysotile, crocidolite, and the fibrous varieties of tremolite, actinolite, and anthophyllite) that occur naturally in the environment. Asbestos minerals have separable long fibers that are strong and flexible enough to be spun and woven and are heat resistant. Because of these characteristics, asbestos has been used for a wide range of manufactured goods, mostly in building materials (roofing shingles, ceiling and floor tiles, paper products, and asbestos cement products), friction products (automobile clutch, brake, and transmission parts), heat-resistant fabrics, packaging, gaskets, and coatings.

Asbestos mainly affects the lungs and the membrane that surrounds the lungs. Breathing high levels of asbestos fibers for a long time may result in scar-like tissue in the lungs and in the pleural membrane (lining) that surrounds the lung (ATSDR 2001).

**Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released; and,**

The Upper Peninsula of Michigan receives a substantial amount of precipitation, and winter temperatures are normally below freezing. Weather conditions will contribute to the further deterioration of the abandoned containers, ACM, and wind and water erosion and deposition of contaminated RPM, abandoned container contents, soils, ACM, and wastes into the environment. Barren stained soils and waste subject to erosion are proximal to the Portage Canal.

**The availability of other appropriate federal or state response mechanisms to respond to the release;**

EGLE referred the Julio Properties to EPA Region 5. Neither the property owner nor the State are known to have funding available to address the issues associated with the Julio Properties. In a September 20, 2019 letter, EGLE requested assistance from the EPA ERB to address the risks posed by the Julio Properties. **Appendix B** includes a copy of the request letter.

## **5.2 CONCEPTUAL REMOVAL ACTION**

The following provides a conceptualized removal plan to address the primary direct contact and inhalation concerns associated with the contaminations at each of the three Julio Properties parcels.

### **5.2.1 Julio Salvage**

The conceptualized removal plan entails addressing a number of hazards on the parcel, with a focus in Areas 1, 2, and 7 that are near the MDNR designated trail. **Figure 17 in Appendix A** depicts the conceptual removal action and **Table 13** provides the removal cost estimate. In support of the removal activities, it is assumed that the parcel owner will:

- Clear trees from Area 1 and Area 2 and relocate them elsewhere on the parcel outside of work areas. Stumps should be left in-place.
- Remove scrap materials, empty containers, compressed gas cylinders, and the large equipment in Areas 1 and 2.
- Remove scrap materials, empty containers, and compressed gas cylinders in Area 7.
- Identify a location where cleaned and empty abandoned containers can be placed on the parcel.



- Provide ongoing cap operation and maintenance.

Temporary facilities will be constructed and soil erosion and sedimentation control (SESC) measures and perimeter air monitoring will be implemented. Visible ACM and SACM will be collected and removed from across the entire parcel and contained prior to commencing activities that could damage or abrade the material and throughout the removal action as ACM/SACM is observed. In Areas 1, 2, and 7, the following removal actions will occur:

- Abandoned containers with contents will be characterized, staged, and over packed or bulked with other similar wastes for disposal.
- ASTs and USTs that do not have openings available to confirm that they are empty will be opened and emptied as necessary. Removed contents will be contained and characterized for disposal. Cleaned, empty tanks will be placed elsewhere on the parcel.
- Mercury- and PCB-containing equipment such as light ballasts and transformers will be collected, characterized, staged, and packaged for disposal.
- Waste piles will be characterized, removed, and disposed.

In preparation for soil and debris removal and capping, it is assumed that Areas 1 and 2 will be cleared of trees by the parcel owner to allow access for EPA removal activities. Removed trees will be relocated elsewhere on the parcel by the parcel owner. Stumps should be left in-place. Stumps that must be removed to accommodate other cleanup activities will be disposed off-site or buried as part of capping.

In Area 1, soil and debris will be removed to a depth of 2 feet below the existing ground surface (bgs) to remove PCB and metals-contaminated materials. It is assumed that the parcel owner will remove scrap materials, empty abandoned containers, compressed gas cylinders, and the large equipment so that excavation can occur beneath them. The excavated area will be backfilled with sand. As part of the removal activities in Area 1, soil/waste in the area of sample QMCP-SS284, which was characteristically hazardous for lead, will be blended with a stabilization agent such as EnviroBlend to render the material characteristically non-hazardous. A sample of the stabilized material will be collected and analyzed for TCLP metals to confirm that the soil is non-hazardous prior to loading for disposal. Upon completion of removal activities, Area 1 will be capped with 6 inches of sandy loam soil in accordance with the standards used for other EPA Superfund caps that have been applied in the region. Amendments will be applied to the surface of the cap to increase nutrient and organic matter content, and grass seed and mulch will be applied. A 1-year warranty will be required on the vegetation establishment and cap integrity, after which time the capped area would be subject to ongoing cap operation and maintenance by the parcel owner.

For the purposes of cost estimating, the assumption has been made that no waste from Julio Salvage will be designated as PCB remediation waste.



In Area 2, the lead contamination at QMCP-SS278 which exceeds characteristically hazardous waste concentrations will be blended with a stabilization agent such as EnviroBlend to render the soil characteristically non-hazardous. A composite sample will be collected and analyzed for TCLP metals to confirm that the stabilized soil is non-hazardous. The soil will then be excavated, loaded, and disposed. The excavation will be backfilled with sand. Upon completion of removal activities, Area 2 will be capped following the same specifications as Area 1 to address surface soils that may contain asbestos or exceed EGLE non-residential DCC.

The waste pile in Area 7, near assessment location QMCP-DB-79, will be characterized for waste disposal. Pending characterization results, the material will be loaded directly into haul trucks for transportation to appropriate disposal facilities. If ACM/SACM is present in the waste pile, the material will be handled and transported accordingly.

To address a lead concentration exceeding non-residential DCC adjacent to the north side of the MDNR trail ROW immediately north of Area 7, the area around sample location QMCP-SS276 will be excavated. Removed soils will be characterized, loaded, and disposed. The excavated area will be backfilled with sand then covered with non-woven geotextile fabric and stone rip-rap to prevent erosion due to the slope.

To address other areas where PCBs were detected at concentrations above 25 ppm, the soil around sample location QMCP-SB16 will be excavated, characterized, and disposed. The area is assumed to be approximately 50-feet by 50-feet square and a maximum of 2 feet deep. The excavated area will be backfilled with sand. Similar to the soils from Area 1, soil generated from the QMCP-SB-16 area may be PCB remediation waste, subject to further waste characterization. The large gray cubical piece of equipment containing greasy paper with 71 ppm PCBs at the QMCP-RPM01 sample location will also be removed and disposed.

It is anticipated that soil/waste/debris will be loaded directly into haul trucks and transported to appropriate disposal facilities. The facilities selected for disposal and final costs will be subject to further waste characterization and waste acceptance. Non-hazardous waste and debris intended for removal would be loaded directly into haul trucks and transported to the Waste Management landfill in Ontonagon, Michigan, subject to waste disposal acceptance. All loads containing ACM would be appropriately wrapped and packaged. For the purposes of cost estimating, the assumption has been made that no waste will be sent for disposal as hazardous waste.

At the completion of the removal activities, the temporary facilities will be removed and any remaining disturbed areas will be restored to existing conditions.

Coupled with MDNR's contemplated capping and access-limiting measures (i.e. fencing and/or guardrails) of the designated trail immediately north of Areas 1, 2, and 7, the level of expected risk reduction achieved by the conceptualized remedy, expressed as the Removal Action Objectives (RAOs) for the parcel, is the following:

- Address ACM across the surface of the parcel.
- Address the potential for wind and water erosion and deposition of asbestos, ACM, contaminated soils, and waste into the environment adjacent to and on the MDNR designated trail.
- Mitigate PCBs above 1 ppm within 50 feet of the MDNR trail, public areas, shoreline, or drainage ways.
- Mitigate PCBs above 25 ppm in all other areas of the parcel.
- Mitigate soils with concentrations of metals that exceed hazardous waste limits at the parcel.
- Mitigate soils with concentrations of metals that exceed non-residential DCC within 50 feet of and on the MDNR designated trail and public areas.
- Remove abandoned containers with contents in Areas 1, 2, and 7.
- Mitigate mercury- and PCB-containing equipment in Areas 1, 2, and 7.

Conceptually, the conditions to be achieved are removal of ACM from the parcel, removal of abandoned containers near the MDNR trail, treatment and/or removal of hazardous waste, mitigation of PCBs, and cap installation and grading to promote drainage and mitigate direct contact and wind and water erosion concerns near publicly accessible areas. Cap maintenance could be subject to on-going operation and maintenance, preferably by the parcel owner. Deed restrictions may be required.

### 5.2.2 Julio Contracting/Former Standard Oil Company

The conceptualized Oil Pollution Act (OPA) removal plan entails addressing the petroleum-like sheen that has been observed on surface water and within sediments of the drainage ditch along the west edge of the parcel. **Figure 18 in Appendix A** depicts the conceptual removal action and **Table 14** provides the removal cost estimate. In support of the removal activities, it is assumed that the parcel owner will:

- Clear trees as needed to access the drainage ditch with excavation equipment and relocate them elsewhere on the parcel outside of work areas. Stumps should be left in-place.
- Remove scrap materials, empty containers, compressed gas cylinders, and large equipment from along the ditch banks to allow access for removal activities.

Temporary facilities will be constructed and SESC measures will be implemented. Sediments exhibiting sheen will be excavated and removed starting approximately 15 feet south of the existing concrete culvert outfall beneath Highway M-26 and extending downstream to the Portage Canal. Excavation of the bottom

of the ditch banks may also be necessary to remove sheen that has penetrated beyond the ditch bottom. It is anticipated that excavation may remove up to 2 feet of sediments from the bottom of the ditch. Note that the source of the oil sheen has not been entirely defined. Other measures such as a low permeability slurry wall may be necessary to stop the re-intrusion of sheen into the ditch.

Restoration will consist of placing non-woven geotextile separator fabric and then applying MDOT plain riprap to stabilize the bottom of the ditch and any disturbed or rebuilt bank areas. It is assumed that up to 1 foot of rip rap may be placed along the ditch bottom.

At the completion of the removal activities the temporary facilities will be removed and any remaining disturbed areas will be restored to existing conditions.

Conceptually, the conditions to be achieved are removal of affected media from the ditch to abate the presence of oil sheen and address the source of the sheen to the extent that it does not reappear in the ditch. Coupled with EGLE's ACM removal activities, the level of expected risk reduction achieved by the conceptualized remedy, expressed as the RAOs for the parcel, is the following:

- Mitigate the presence of oil sheen in the drainage ditch.
- Address ACM and SACM for worker protection.
- Address the potential for wind and water erosion and deposition of ACM into the environment adjacent to and on the MDNR designated trail separate from the OPA removal.

### 5.2.3 Julio Scrap Yard & Tower

The conceptualized removal plan entails addressing the PCB contaminated soils associated with a former tank car and in the berm in the northern portion of the parcel. **Figure 19 in Appendix A** depicts the conceptual removal action and **Table 15** provides the removal cost estimate. Temporary facilities will be constructed and SESC measures will be implemented. In support of the removal activities, it is assumed that the parcel owner will:

- Clear trees on and around the berm to facilitate capping. Also clear trees around the former tank car to facilitate excavation and backfilling. Removed trees should be relocated elsewhere on the parcel outside of work areas. Stumps should be left in-place.
- Remove scrap materials, empty containers, compressed gas cylinders, and large equipment from on and around the berm and around the former tank car to allow access for removal activities.

The former tank car that has been observed to leak petroleum containing PCBs (until the drain pipe was recently plugged) will be opened and cleaned out, similar to the proper closing of an UST. Removed contents will be contained and characterized for disposal. The cleaned, empty tank will be placed elsewhere on the parcel to facilitate excavation of underlying soil.

An area approximately 30 feet wide by 30 feet long and 2 feet deep will be excavated around the tank car location to remove soil impacted with PCBs. The excavated area will be backfilled with sand so that water does not pond up against the adjacent structure. Soil generated from this area may be PCB remediation waste, subject to further waste characterization. For the purposes of cost estimating, the assumption has been made that no waste from Julio Salvage will be designated as PCB remediation waste.

The berm-like area in the northern portion of the parcel will be graded to reduce the slope along the southern side of the berm. Then approximately 1 foot of sand will be placed and graded atop the berm area to further reduce the side slopes and yield a surface amenable to capping. Upon completion of removal activities, the berm area will be capped with 6 inches of sandy loam soil in accordance with the standards used for other EPA Superfund caps that have been applied in the region. Amendments will be applied to the surface of the cap to increase nutrient and organic matter content and grass seed and mulch will be applied. A 1-year warranty will be required on the vegetation establishment and cap integrity, after which time the capped area would be subject to ongoing cap operation and maintenance by the parcel owner.

At the completion of the removal activities, the temporary facilities will be removed and any remaining disturbed areas will be restored to existing conditions.

Conceptually, the conditions to be achieved are capping of the PCB-affected berm materials, preventing further leaking of petroleum containing PCBs, and removal of PCB-contaminated soils. Coupled with EGLE's ACM removal activities, the level of expected risk reduction achieved by the conceptualized remedy, expressed as the RAOs for the parcel, is the following:

- Mitigate soils contaminated with PCBs above 1 ppm.
- Address ACM across the surface of the parcel.
- Address the potential for wind and water erosion and deposition of ACM into the environment adjacent to and on the MDNR designated trail.

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**TABLE 1**  
**SUMMARY OF ACM ANALYTICAL RESULTS**  
**JULIO SALVAGE**  
**JULIO PROPERTIES - RS**

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
JP-ACM-01	JP-ACM-01-102319	10/23/2019	75%	CHRYSTILE	Rope gasket
JP-ACM-02	JP-ACM-02-102319	10/23/2019	20%	CHRYSTILE	Brown/white TSI
JP-ACM-03	JP-ACM-03-102319	10/23/2019	30%	CHRYSTILE	White TSI
QMCP-ASBBLK01	QMCP-ASBBLK01A-091918	9/19/2018	65%	CHRYSTILE	White TSI
	QMCP-ASBBLK01B-091918	9/19/2018	--	Not analyzed due to prior positive series.	White TSI
QMCP-ASBBLK02	QMCP-ASBBLK02A-091918	9/19/2018	65%	CHRYSTILE	White/gray TSI
	QMCP-ASBBLK02B-091918	9/19/2018	--	Not analyzed due to prior positive series.	White/gray TSI
QMCP-ASBBLK03	QMCP-ASBBLK03A-091918	9/19/2018	50%	CHRYSTILE	Gray Transite board
	QMCP-ASBBLK03B-091918	9/19/2018	--	Not analyzed due to prior positive series.	Gray Transite board
QMCP-ASBBLK04	QMCP-ASBBLK04A-091918	9/19/2018	50%	CHRYSTILE	Black tar paper roofing
	QMCP-ASBBLK04B-091918	9/19/2018	--	Not analyzed due to prior positive series.	Black tar paper roofing
QMCP-ASBBLK05	QMCP-ASBBLK05A-091918	9/19/2018	10%	CHRYSTILE	Black roofing with metallic pain
	QMCP-ASBBLK05B-091918	9/19/2018	--	Not analyzed due to prior positive series.	Black roofing with metallic pain
QMCP-ASBBLK06	QMCP-ASBBLK06A-091918	9/19/2018	60%	CHRYSTILE	White woven fabric
	QMCP-ASBBLK06B-091918	9/19/2018	--	Not analyzed due to prior positive series.	White woven fabric
QMCP-ASBBLK07	QMCP-ASBBLK07A-091918	9/19/2018	3%	AMOSITE	Incinerator insulation
	QMCP-ASBBLK07B-091918	9/19/2018	--	Not analyzed due to prior positive series.	Incinerator insulation
QMCP-ASBBLK08	QMCP-ASBBLK08A-091918	9/19/2018	65%	CHRYSTILE	White TSI material
	QMCP-ASBBLK08B-091918	9/19/2018	--	Not analyzed due to prior positive series.	White TSI material
QMCP-ASBBLK09	QMCP-ASBBLK09A-091918	9/19/2018	ND		Boiler insulation
	QMCP-ASBBLK09B-091918	9/19/2018	ND		Boiler insulation
QMCP-ASBBLK10	QMCP-ASBBLK10A-091918	9/19/2018	ND		Layered paper material
	QMCP-ASBBLK10B-091918	9/19/2018	ND		Layered paper material
QMCP-ASBBLK11	QMCP-ASBBLK11A-091918	9/19/2018	70%	CHRYSTILE	Rope gasket
	QMCP-ASBBLK11B-091918	9/19/2018	--	Not analyzed due to prior positive series.	Rope gasket
QMCP-ASBBLK12	QMCP-ASBBLK12A-091918	9/19/2018	ND		Black layered roofing
	QMCP-ASBBLK12B-091918	9/19/2018	ND		Black layered roofing
QMCP-ASBBLK13	QMCP-ASBBLK13A-092818	9/28/2018	ND		White/gray fibrous material
	QMCP-ASBBLK13B-092818	9/28/2018	ND		White/gray fibrous material
QMCP-ASBBLK14	QMCP-ASBBLK14A-092818	9/28/2018	65%	CHRYSTILE	Gray pegboard-Transite
	QMCP-ASBBLK14B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Gray pegboard-Transite
QMCP-ASBBLK15	QMCP-ASBBLK15A-092818	9/28/2018	ND		Safe lining
	QMCP-ASBBLK15B-092818	9/28/2018	ND		Safe lining
QMCP-ASBBLK16	QMCP-ASBBLK16A-092818	9/28/2018	ND		Cardboard with black tar
	QMCP-ASBBLK16B-092818	9/28/2018	ND		Cardboard with black tar
QMCP-ASBBLK17	QMCP-ASBBLK17A-092818	9/28/2018	15%	CHRYSTILE	Transite in debris pile



**TABLE 1**  
**SUMMARY OF ACM ANALYTICAL RESULTS**  
**JULIO SALVAGE**  
**JULIO PROPERTIES - RS**

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
QMCP-ASBBLK18	QMCP-ASBBLK18A-092818	9/28/2018	ND		Fabric with insulation
	QMCP-ASBBLK18B-092818	9/28/2018	ND		Fabric with insulation
QMCP-ASBBLK59	QMCP-ASBBLK59A-100118	10/1/2018	ND		White fibers in drum
	QMCP-ASBBLK59B-100118	10/1/2018	ND		White fibers in drum
QMCP-ASBBLK60	QMCP-ASBBLK60A	7/22/2019	40%	CHRYSTILE	White TSI, deteriorated, 1SF
	QMCP-ASBBLK60B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, 1SF
QMCP-ASBBLK61	QMCP-ASBBLK61A	7/22/2019	ND		Black roofing with silver specks, buried in waste pile, 10SF
	QMCP-ASBBLK61B	7/22/2019	ND		Black roofing with silver specks, buried in waste pile, 10SF
QMCP-ASBBLK62	QMCP-ASBBLK62A	7/22/2019	30%	CHRYSTILE	White TSI, deteriorated, on board, 5SF
	QMCP-ASBBLK62B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, on board, 5SF
QMCP-ASBBLK63	QMCP-ASBBLK63A	7/22/2019	40%	CHRYSTILE	White TSI, deteriorated, mixed with debris, 5SF
	QMCP-ASBBLK63B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, mixed with debris, 5SF
QMCP-ASBBLK64	QMCP-ASBBLK64A	7/22/2019	30%	CHRYSTILE	White TSI, deteriorated, mixed with debris, 5SF
	QMCP-ASBBLK64B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, mixed with debris, 5SF
QMCP-ASBBLK65	QMCP-ASBBLK65A	7/22/2019	ND		Gray/silver TSI, mixed with debris, 5SF
	QMCP-ASBBLK65B	7/22/2019	ND		Gray/silver TSI, mixed with debris, 5SF
QMCP-ASBBLK66	QMCP-ASBBLK66A	7/22/2019	ND		Black woven fabric around metal pipe, 5SF
	QMCP-ASBBLK66B	7/22/2019	ND		Black woven fabric around metal pipe, 5SF
QMCP-ASBBLK67	QMCP-ASBBLK67A	7/22/2019	ND		Fabric woven tubing, 20LF
	QMCP-ASBBLK67B	7/22/2019	ND		Fabric woven tubing, 20LF
QMCP-ASBBLK68	QMCP-ASBBLK68A	7/22/2019	30%	CHRYSTILE	White TSI, deteriorated, 5SF
	QMCP-ASBBLK68B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, 5SF
QMCP-ASBBLK69	QMCP-ASBBLK69A	7/22/2019	30%	CHRYSTILE	White TSI, deteriorated, 10SF
	QMCP-ASBBLK69B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, 10SF
QMCP-ASBBLK70	QMCP-ASBBLK70A	7/22/2019	30%	CHRYSTILE	White TSI, deteriorated, 5SF
	QMCP-ASBBLK70B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, 5SF
QMCP-ASBBLK71	QMCP-ASBBLK71A	7/22/2019	60%	CHRYSTILE	White TSI, mixed in soil
	QMCP-ASBBLK71B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, mixed in soil
QMCP-ASBBLK72	QMCP-ASBBLK72A	7/22/2019	ND		Crumbling white deteriorated material, 5SF
	QMCP-ASBBLK72B	7/22/2019	ND		Crumbling white deteriorated material, 5SF
QMCP-ASBBLK73	QMCP-ASBBLK73A	7/22/2019	60%	CHRYSTILE	White TSI in Stamp Sand, 5SF
	QMCP-ASBBLK73B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI in Stamp Sand, 5SF
QMCP-ASBBLK74	QMCP-ASBBLK74A	7/22/2019	ND		Gray fibrous material, 5 SF
	QMCP-ASBBLK74B	7/22/2019	ND		Gray fibrous material, 5 SF

TABLE 1  
SUMMARY OF ACM ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
QMCP-ASBBLK75	QMCP-ASBBLK75A	7/22/2019	60%	CHRYSTILE	Brown fibrous material, 1SF
	QMCP-ASBBLK75B	7/22/2019	--	Not analyzed due to prior positive series.	Brown fibrous material, 1SF
QMCP-ASBBLK76	QMCP-ASBBLK76A	7/22/2019	ND		White TSI, deteriorated, 1SF
	QMCP-ASBBLK76B	7/22/2019	ND		White TSI, deteriorated, 1SF
QMCP-ASBBLK77	QMCP-ASBBLK77A	7/22/2019	ND		Long white fibers, 1SF
	QMCP-ASBBLK77B	7/22/2019	ND		Long white fibers, 1SF
QMCP-ASBBLK78	QMCP-ASBBLK78A	7/22/2019	60%	CHRYSTILE	White TSI, deteriorated, 1SF
	QMCP-ASBBLK78B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, 1SF
QMCP-ASBBLK79	QMCP-ASBBLK79A	7/22/2019	60%	CHRYSTILE	White TSI, deteriorated, mixed in WP003 10SF
	QMCP-ASBBLK79B	7/22/2019	--	Not analyzed due to prior positive series.	White TSI, deteriorated, mixed in WP003 10SF
QMCP-ASBBLK80	QMCP-ASBBLK80A	7/22/2019	ND		Gasket pipe, 10 LF
	QMCP-ASBBLK80B	7/22/2019	ND		Gasket pipe, 10 LF

ND = Not detected

LF = Linear Feet

TSI = Thermal System Insulation

SF = Square Feet

-- = Not analyzed

Results greater than the National Emissions Standard for Hazardous Air Pollutants (NESHAP) and EGLE Particulate Soil Inhalation Criteria of 1% are bolded and shaded.

Indicates sampled item/material has been removed from the site.

Evaluation based on EGLE/EPA Criteria at time of Project completion.

TABLE 2  
SUMMARY OF RPM, ABANDONED CONTAINERS, AND WASTE ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	Hazardous Waste Toxicity <sup>d</sup>	JP-WM-01		JP-WM-02	QMCP-RPM01	QMCP-RPM02
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	Hazardous Waste Toxicity Value	JP-WM-01-102319	JP-WM-01-102319-1A	JP-WM-02-102319	QMCP-RPM01-0-6in	QMCP-RPM02
Sample Date														10/23/2019	10/23/2019	10/23/2019	9/19/2018	9/19/2018
Inorganics - Metals (mg/kg)																		
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	NA	4,520 J	2,400	1,880	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	NA	5.9 J-	6	1.8	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	NA	7.3 J-	8.9	2.2	--	--
BARIIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	NA	224 J-	243	28.1	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	NA	<0.179 UJ	<0.112 U	<0.154 U	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	NA	1.1 J	3 J-	1.5	--	--
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,740 J-	4,230	2,370	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	NA	38.9 J-	100	11	--	--
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	NA	9.6 J-	27.4	4.1	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	NA	8,380 J	16,200	481	--	--
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	NA	210,000 J	230,000	11,100	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	NA	1,340 J	1,160	209	--	--
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	NA	1,740 J-	1,500	1,260	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	NA	351 J	369	354	--	--
MERCURY	7439-97-6	140 (ns)	0.13 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	NA	3.1	3.1	0.55	--	--
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	NA	45.8 J-	209	18.1	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,060	687	363	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	NA	<0.5 UJ	<0.51 U	<0.48 U	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	NA	21	26.3	2.1	--	--
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	2,650 J	2,290	799	--	--
THALLIUM	7440-28-0	35	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	NA	5.2 J-	6.1	1.4	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	NA	12.1 J-	8.7	9	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	NA	2,120	2,430	243	--	--
Inorganics- TCLP Metals (mg/l)																		
ARSENIC	7440-38-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	0.0047 J	0.0062 J	0.015 J	--	--
BARIIUM	7440-39-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	2	2.3	0.013	--	--
CADMIUM	7440-43-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	0.53	0.44	0.12	--	--
CHROMIUM	7440-47-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	0.012	0.013	0.0067	--	--
LEAD	7439-92-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	20	19	48	--	--
MERCURY	7439-97-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2	<0.00012 UJ	<0.00012 UJ	<0.00012 UJ	--	--
SELENIUM	7782-49-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	<0.013 U	<0.013 U	<0.013 U	--	--
SILVER	7440-22-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	0.00076 J-	<0.004 U	<0.004 UJ	--	--
Organics - PCBs (ug/kg)																		
AROCLOR-1016	12674-11-2	150,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<12000 U	5,400
AROCLOR-1254	11097-69-1	44,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	71,000	4,800
TOTAL PCBS	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	NA	--	--	--	71,000 J	10,200 J

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 2  
SUMMARY OF RPM, ABANDONED CONTAINERS, AND WASTE ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	Hazardous Waste Toxicity <sup>d</sup>	JP-WM-01		JP-WM-02	QMCP-RPM01	QMCP-RPM02
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	Hazardous Waste Toxicity Value	JP-WM-01-102319	JP-WM-01-102319-1A	JP-WM-02-102319	QMCP-RPM01-0-6in	QMCP-RPM02
Sample Date														10/23/2019	10/23/2019	10/23/2019	9/19/2018	9/19/2018
Organics - SVOCs (ug/kg)																		
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	NA	--	--	--	--	--
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	NA	--	--	--	--	--
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	NA	--	--	--	--	--
BENZALDEHYDE	100-52-7	8.2E+7 (c**s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	NA	--	--	--	--	--
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	NA	--	--	--	--	--
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	NA	--	--	--	--	--
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	NA	--	--	--	--	--
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	NA	--	--	--	--	--
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	NA	--	--	--	--	--
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	NA	--	--	--	--	--
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	NA	--	--	--	--	--
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	NA	--	--	--	--	--
NAPHTHALENE (SVOC)	91-20-3	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	NA	--	--	--	--	--
PHENANTHRENE	91-20-3S	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	NA	--	--	--	--	--
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	NA	--	--	--	--	--
Organics - VOCs (ug/kg)																		
2-BUTANONE (MEK)	78-93-3	5.80E+8 (nms)	44,000 (I)	2.70E+07 (I)	760,000 (I)	9.9E+7 (C,I)	3.50E+7 (I)	3.50E+7 (I)	3.60E+7 (I)	2.90E+10 (I)	7.00E+8 (C,I,DD)	NA	NA	--	--	--	--	--
2-METHYLNAPHTHALENE (VOC)	91-57-6	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	NA	--	--	--	--	--
ACETONE	67-64-1	2.00E+9 (nms)	34,000 (I)	1.10E+08 (I)	42,000 (I)	5.4E+8 (C,I)	1.60E+08 (I)	1.60E+08 (I)	2.00E+08 (I)	1.70E+11 (I)	7.30E+07 (I)	780,000	NA	--	--	--	--	--
BENZENE	71-43-2	510,000 (c**)	240 (X,I)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+8 (I)	840,000 (C,I)	12 (M)	NA	--	--	--	--	--
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (C,I)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (C,I)	86	NA	--	--	--	--	--
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	NA	--	--	--	--	--
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
NAPHTHALENE (VOC)	91-20-3	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	NA	--	--	--	--	--
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	NA	--	--	--	--	--
STYRENE	100-42-5	1.00E+8 (nms)	530 (X)	520,000	2,700	1.3E+6 (C)	3.30E+06	3.30E+06	4.20E+06	6.90E+09	1.9E+6 (C)	NA	NA	--	--	--	--	--
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (C,I)	3.30E+6 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (C,I)	16,000	NA	--	--	--	--	--
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.2E+7 (C,I)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.00E+9 (C,D,I)	1,200	NA	--	--	--	--	--
Organics - Herbicides (ug/kg)																		
2,4,5-T	93-76-5	2.50E+7 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
2,4,5-TP (Silvex)	93-72-1	2.00E+7 (n)	2,200	NA	3,600	NLV	NLV	NLV	NLV	ID	5.50E+06	NA	NA	--	--	--	--	--
2,4-D	94-75-7	2.90E+7 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
Other																		
PERCENT MOISTURE (%)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
pH (s.u.)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
Temperature (field measure, °C)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 2  
SUMMARY OF RPM, ABANDONED CONTAINERS, AND WASTE ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>f</sup>	Hazardous Waste Toxicity <sup>d</sup>	QMCP-RPM03	QMCP-RPM04	QMCP-DM01	QMCP-SS278	QMCP-SS284
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	Hazardous Waste Toxicity Value	QMCP-RPM 03-0-6in	QMCP-RPM04	QMCP-DM01-0-6in	QMCP-SS278-0-3"	QMCP-SS284-0-3"
Sample Date														9/19/2018	9/28/2018	9/28/2018	7/22/2019	7/22/2019
Inorganics - Metals (mg/kg)																		
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	NA	--	--	--	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	NA	--	--	--	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	NA	9.2	--	<0.39 U	--	--
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	NA	44	--	2.6	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	NA	--	--	--	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	NA	1.4	--	<0.78 U	--	--
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	NA	260	--	4.8	--	--
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	NA	--	--	--	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	NA	--	--	--	--	--
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	NA	--	--	--	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	NA	1,000	--	2.0	--	--
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	NA	--	--	--	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	NA	--	--	--	--	--
MERCURY	7439-97-6	140 (ns)	0.13 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	NA	0.35	--	<0.02 UJ	--	--
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	NA	--	--	--	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	NA	2.3	--	<0.78 U	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	NA	<0.38 UJ	--	<0.39 UJ	--	--
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--
THALLIUM	7440-28-0	35	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	NA	--	--	--	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	NA	--	--	--	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	NA	--	--	--	--	--
Inorganics- TCLP Metals (mg/l)																		
ARSENIC	7440-38-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	<0.05 U	--	<0.050 U	<0.05 UJ	<0.05 UJ
BARIUM	7440-39-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	100	0.52	--	0.066	1.5	2.6
CADMIUM	7440-43-9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	<0.1 UJ	--	<0.10 U	0.17	0.43
CHROMIUM	7440-47-3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	<0.05 UJ	--	<0.05 UJ	<0.05 UJ	<0.05 UJ
LEAD	7439-92-1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	0.29	--	<0.050 U	120	6.9
MERCURY	7439-97-6	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.2	<0.002 U	--	<0.002 UJ	<0.002 U	<0.002 U
SELENIUM	7782-49-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1	<0.1 U	--	<0.10 U	<0.05 U	<0.05 UJ
SILVER	7440-22-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5	<0.05 U	--	<0.05 UJ	<0.05 U	<0.05 U
Organics - PCBs (ug/kg)																		
AROCLOR-1016	12674-11-2	150,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<71 U	<4000 U	<270 U	<67 U	<76 U
AROCLOR-1254	11097-69-1	44,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<71 U	<4000 U	<270 U	650	5,000
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	NA	ND	ND	ND	650	5,000

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 2  
SUMMARY OF RPM, ABANDONED CONTAINERS, AND WASTE ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>f</sup>	Hazardous Waste Toxicity <sup>d</sup>	QMCP-RPM03	QMCP-RPM04	QMCP-DM01	QMCP-SS278	QMCP-SS284
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	Hazardous Waste Toxicity Value	QMCP-RPM 03-0-6in	QMCP-RPM04	QMCP-DM01-0-6in	QMCP-SS278-0-3"	QMCP-SS284-0-3"
Sample Date														9/19/2018	9/28/2018	9/28/2018	7/22/2019	7/22/2019
Organics - SVOCs (ug/kg)																		
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	NA	--	--	1,400	--	--
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	NA	33	--	<390 UJ	--	--
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	NA	76	--	<390 UJ	--	--
BENZALDEHYDE	100-52-7	8.2E+7 (c**s)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<70 U	--	28,000 J	--	--
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	NA	160	--	<390 UJ	--	--
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	NA	170	--	<390 UJ	--	--
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c )	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	NA	250	--	<390 UJ	--	--
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	NA	150	--	<390 UJ	--	--
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	NA	100	--	<390 UJ	--	--
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	NA	190	--	<390 UJ	--	--
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	NA	48	--	<390 UJ	--	--
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	NA	300	--	<390 UJ	--	--
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	NA	180	--	<390 UJ	--	--
NAPHTHALENE (SVOC)	91-20-3	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	NA	--	--	4,700 J	--	--
PHENANTHRENE	91-20-3S	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	NA	210	--	1,700 J	--	--
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	NA	260	--	<390 UJ	--	--
Organics - VOCs (ug/kg)																		
2-BUTANONE (MEK)	78-93-3	5.80E+8 (nms)	44,000 (l)	2.70E+07 (l)	760,000 (l)	9.9E+7 (C,I)	3.50E+7 (l)	3.50E+7 (l)	3.60E+7 (l)	2.90E+10 (l)	7.00E+8 (C,I,DD)	NA	NA	<240 U	--	1,700	--	--
2-METHYLNAPHTHALENE (VOC)	91-57-6	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	NA	<120 UJ	--	1,300	--	--
ACETONE	67-64-1	2.00E+9 (nms)	34,000 (l)	1.10E+08 (l)	42,000 (l)	5.4E+8 (C,I)	1.60E+08 (l)	1.60E+08 (l)	2.00E+08 (l)	1.70E+11 (l)	7.30E+07 (l)	780,000	NA	<120 U	--	17,000	--	--
BENZENE	71-43-2	510,000 (c**)	240 (X,I)	400,000 (l)	100 (l)	8,400 (l)	45,000 (l)	99,000 (l)	230,000 (l)	4.70E+8 (l)	840,000 (C,I)	12 (M)	NA	<36 U	--	3,700	--	--
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (l)	140,000 (l)	1,500 (l)	460,000 (C,I)	2.40E+6 (l)	3.10E+6 (l)	6.50E+6 (l)	1.30E+10 (l)	7.1E+7 (C,I)	86	NA	<36 U	--	8,000	--	--
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C )	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C )	NA	NA	<36 U	--	870	--	--
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<72 U	--	620	--	--
NAPHTHALENE (VOC)	91-20-3	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	NA	<120 U	--	4,700	--	--
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (l)	4,600 (l)	ID	ID	ID	ID	5.90E+8 (l)	8.00e+6 (l)	NA	NA	<36 U	--	520	--	--
STYRENE	100-42-5	1.00E+8 (nms)	530 (X)	520,000	2,700	1.3e+6 (C )	3.30E+06	3.30E+06	4.20E+06	6.90E+09	1.9E+6 (C )	NA	NA	<36 U	--	1,800	--	--
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (l)	250,000 (l)	16,000 (l)	610,000 (C,I)	3.30E+6 (l)	3.60E+7 (l)	3.60E+7 (l)	1.20E+10 (l)	1.60E+8 (C,I)	16,000	NA	<36 U	--	5,900	--	--
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (l)	150,000 (l)	5,600 (l)	1.2E+7 (C,I)	5.40E+7 (l)	6.50E+7 (l)	1.30E+8 (l)	1.30E+11 (l)	1.00E+9 (C,D,I)	1,200	NA	<0 U	--	620 J	--	--
Organics - Herbicides (ug/kg)																		
2,4,5-T	93-76-5	2.50E+7 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5.3 U	--	40	--	--
2,4,5-TP (Silvex)	93-72-1	2.00E+7 (n)	2,200	NA	3,600	NLV	NLV	NLV	NLV	ID	5.50E+06	NA	NA	<5.3 U	--	86	--	--
2,4-D	94-75-7	2.90E+7 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<11 U	--	230	--	--
Other																		
PERCENT MOISTURE (%)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.4	--	9.5	4.2	13
pH (s.u.)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.89	--	6.65	7.86	8.13
Temperature (field measure, °C)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	22.4	22.2

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 2 SUMMARY OF RPM, ABANDONED CONTAINERS, AND WASTE ANALYTICAL RESULTS JULIO SALVAGE JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

<sup>d</sup>Hazardous Waste Toxicity Screening values are from Title 40 of the Code of Federal Regulation, Chapter 1, Section 261.20-24

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for nonresidential soil, or Hazardous Waste Toxicity Value.

Samples described in this evaluation may actually refer to stamp sands or to other mining waste from historic mining and reclamation processes conducted in the area.

-- = Not analyzed

mg/kg = Milligrams per kilogram.

bgs = Below ground surface

ug/kg = Micrograms per kilogram

in = Inches

PCBs = Polychlorinated biphenyls

ft = Feet

SVOC = Semi-volatile organic compound

VOC = Volatile organic compound

## Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLL = Hazardous substance is not likely to leach under most soil conditions.

NLV = Hazardous substance is not likely to volatilize under most conditions.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(D) = Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).

(DD) = Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Department of Environmental Quality (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(J) = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(Q) = Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

(T) = Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the published table if TSCA standards are not applicable.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

## Laboratory Footnotes

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J- = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased low.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	JP-SS-01	JP-SS-02			QMCP-SB09		QMCP-SB10	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	JP-SS-01-102319	JP-SS-02-102319	JP-SS-02-102319-1A	QMCP-SB-9 0-6in	QMCP-SB-9 6in-12ft	QMCP-SB 10 0-6in	QMCP-SB 10 6in-6ft		
Sample Date	10/23/2019												10/23/2019	10/23/2019	9/6/2018	9/6/2018	9/7/2018	9/7/2018			
Sample Interval (ft bgs)	0-0.25 ft												0-0.25 ft	0-0.25 ft	0-0.5 ft	0.5-12 ft	0-0.5 ft	0.5-6 ft			
Sample Description	Soil on east side of former meter pile												Dark stained SAND with debris	Dark stained SAND with debris	SAND, Medium to coarse, brown	SAND, fine to medium, saturated at 12 feet	SAND and GRAVEL, medium to coarse, brown	SAND, Fine, brown, saturated at 6 feet			
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--		
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--		
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	--	--	--	9.6	<0.5 U	7	2.8		
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--		
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--		
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	8.1	<0.2 U	0.4	<0.2 U		
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	78	9.4	29	15		
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--		
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	1,800	260	1,100	870		
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--		
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	--	870	4.7	110	27		
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--		
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	1,100	210	580	320		
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	0.4	0.06	0.09	0.2		
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--		
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--		
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	3.2	0.7	1.2	2.7		
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--		
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--		
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	1,400	25	93	59		
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--		
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--		
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--		
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3,500 U	461,000 J	583,000 J	<190 U	--	<110 U	<120 U		
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	48,400 J+	<39000 U	<38000 U	270 J	--	100 J	<120 U		
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13,700 J+	<39000 U	<38000 U	200 J	--	<120 U	<120 U		
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3500 U	<39000 U	<38000 U	<210 U	--	<110 U	<120 U		
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3500 U	<39000 U	<38000 U	<110 U	--	<110 U	<120 U		
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	62,000 J+	460,000 J	580,000 J	470 J	--	100 J	ND		

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	JP-SS-01	JP-SS-02			QMCP-SB09		QMCP-SB10	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	JP-SS-01-102319	JP-SS-02-102319	JP-SS-02-102319-1A	QMCP-SB-9 0-6in	QMCP-SB-9 6in-12ft	QMCP-SB 10 0-6in	QMCP-SB 10 6in-6ft		
Sample Date													10/23/2019	10/23/2019	10/23/2019	9/6/2018	9/6/2018	9/7/2018	9/7/2018		
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.5 ft	0.5-12 ft	0-0.5 ft	0.5-6 ft		
Sample Description													Soil on east side of former meter pile	Dark stained SAND with debris	Dark stained SAND with debris	SAND, Medium to coarse, brown	SAND, fine to medium, saturated at 12 feet	SAND and GRAVEL, medium to coarse, brown	SAND, Fine, brown, saturated at 6 feet		
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	<550 U	<540 U	<550 U	<580 U		
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	<220 U	<220 U	<220 U	<230 U		
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	<220 U	<220 U	<220 U	<230 U		
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	<220 U	<220 U	<220 U	<230 U		
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (O)	NA	--	--	--	400	<220 U	260	320		
BENZO(A)PYRENE	50-32-8	210,000 (c*)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (O)	8,000 (O)	NA	--	--	--	430 J	<430 U	<440 U	<460 U		
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (O)	NA	--	--	--	650	<430 U	470	<460 U		
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	<440 U	<430 U	<440 U	<460 U		
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (O)	NA	--	--	--	<440 U	<430 U	<440 U	<460 U		
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--		
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (O)	NA	--	--	--	410	<220 U	310	280		
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (O)	NA	--	--	--	<440 U	<430 U	<440 U	<460 U		
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	820	<220 U	490	650		
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	<220 U	<220 U	<220 U	<230 U		
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	<440 U	<430 U	<440 U	<460 U		
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c*)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	<220 U	<220 U	240	<230 U		
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	450	<220 U	360	480		
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	620	<220 U	430	530		
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	<60 UJ	<58 UJ	<61 U	<63 U		
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	66 J	66 J	110	<63 U		
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	<300 UJ	<290 UJ	<310 U	<320 U		
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	<60 UJ	<58 UJ	<61 U	<63 U		
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	<60 UJ	<58 UJ	<61 U	<63 U		
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	230 J	<58 UJ	<61 U	<63 U		
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<120 UJ	<120 UJ	170	<130 U		
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c*)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	<300 UJ	<290 UJ	<310 U	<320 U		
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	76 J	<58 UJ	<61 U	<63 U		
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<60 UJ	<58 UJ	160	<63 U		
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	98 J	<58 UJ	<61 U	<63 U		
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	330 J	<58 UJ	<61 U	<63 U		
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	73 J	<58 UJ	<61 U	<63 U		
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	<60 UJ	<58 UJ	90	<63 U		
TRICHLOROFLUOROMETHANE (CFC)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	180 J	<58 UJ	<61 U	<63 U		
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	ND	ND	330	ND		
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c*)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--		
4,4-DDT	50-29-3	850,000 (c*)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--		
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--		

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB11		QMCP-SB12		QMCP-SB13	QMCP-SB14		QMCP-SB15
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB-11 0-6in	QMCP-SB-11 6in-7ft	QMCP-SB-12 0-6in	QMCP-SB-12 6in-4ft	QMCP-SB-13 0-2ft	QMCP-SB 14 0-3ft	QMCP-SB 14 SS	QMCP-SB 15 0-2ft	
Sample Date													9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	
Sample Interval (ft bgs)													0-0.5 ft	0.5-7 ft	0-0.5 ft	0.5-4 ft	0-2 ft	0-3 ft	--	0-2 ft	
Sample Description													SAND, Medium to coarse, brown, saturated at 7 feet	SAND, Medium to coarse, brown, saturated at 7 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 2 feet	SAND, Medium to coarse, brown, saturated at 3 feet	--	FILL, Sand and wood debris	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	7	<0.5 U	7.8	<0.5 U	2.8	4.4	14	3.3	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	3.1	<0.2 U	2.1	0.2	1.1	1	6.3	<0.2 U	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	47	15	170	21	36	26	52	5.4	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	1,000	3,500	1,300	3,600	3,400	2,300	1,500	520	
IRON	7439-89-6	2.50E+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	500	8.2	460	15	71	1,300	1,200	26	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	490	550	760	660	660	1,700	1,200	200	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	6.9	0.3	0.3	2.4	0.2	0.2	0.2	0.1	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	2.1	6.2	1.8	4.7	4.1	4	2.3	0.9	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	440	66	280	80	240	200	750	37	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSTOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	980 J	<110 U	<120 U	<120 U	<2700 U	<110 U	<120 U	<150 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	580 J	<110 U	270 J	<120 U	<2700 U	<110 U	130 J	<150 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<290 U	<110 U	180 J	<120 U	2,400	<130 U	<190 U	<170 U	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<290 U	<110 U	<180 U	<120 U	<2700 U	<130 U	180 J	<170 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<110 U	<110 U	<110 U	<120 U	<2700 U	<110 U	<150 U	<150 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	1,560 J	ND	450 J	ND	2,400 J	ND	310 J	ND	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB11		QMCP-SB12		QMCP-SB13	QMCP-SB14		QMCP-SB15
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL		QMCP-SB-11 0-6in	QMCP-SB-11 6in-7ft	QMCP-SB-12 0-6in	QMCP-SB-12 6in-4ft	QMCP-SB-13 0-2ft	QMCP-SB 14 0-3ft	QMCP-SB 14 SS	QMCP-SB 15 0-2ft
Sample Date														9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018
Sample Interval (ft bgs)														0-0.5 ft	0.5-7 ft	0-0.5 ft	0.5-4 ft	0-2 ft	0-3 ft	--	0-2 ft
Sample Description														SAND, Medium to coarse, brown, saturated at 7 feet	SAND, Medium to coarse, brown, saturated at 7 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 2 feet	SAND, Medium to coarse, brown, saturated at 3 feet	--	FILL, Sand and wood debris
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA		<550 U	<550 U	<560 U	<610 U	<540 U	700	1,200	<760 U
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA		<220 U	<220 U	<230 U	<240 U	<220 U	<230 U	<250 U	1,100
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA		<220 U	<220 U	<230 U	<240 U	<220 U	<230 U	770	<310 U
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA		460	<220 U	<230 U	<240 U	<220 U	<230 U	400	1,900
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA		1,700	<220 U	210	<240 U	<220 U	300	2,700	4,600
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA		1,700	<440 U	<450 U	<480 U	<430 U	<460 U	3,200	3,800
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA		2,600	<440 U	<450 U	<480 U	<430 U	660	6,500	5,500
BENZO(G,H)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA		500	<440 U	<450 U	<480 U	<430 U	<460 U	870	1,000
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA		770	<440 U	<450 U	<480 U	<430 U	<460 U	2,100	1,800
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA		--	--	--	--	--	--	--	--
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA		1,500	<220 U	260	<240 U	<220 U	390	3,500	4,000
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA		<440 U	<440 U	<450 U	<480 U	<430 U	<460 U	<490 U	<610 U
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA		3,600	<220 U	350	<240 U	<220 U	740	7,700	10,000
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA		<220 U	<220 U	<230 U	<240 U	<220 U	<230 U	310	1,300
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA		560	<440 U	<450 U	<480 U	<430 U	<460 U	1,000	1,200
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA		300	<220 U	<230 U	<240 U	<220 U	470	1,000	910
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA		2,500	<220 U	<230 U	<240 U	220	690	6,100	9,400
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA		2,700	<220 U	310	<240 U	<220 U	640	6,800	8,300
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA		<290 UJ	<300 UJ	<310 UJ	<350 UJ	<290 U	<330 U	--	<540 U
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<120 UJ	<120 UJ	<130 UJ	<140 UJ	<120 U	<130 U	--	<220 U
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA		<290 UJ	<300 UJ	<310 UJ	<350 UJ	<290 U	<330 U	--	<540 U
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
TRICHLOROFLUOROMETHANE (CFC-11)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA		<59 UJ	<60 UJ	<63 UJ	<69 UJ	<58 U	<65 U	--	<110 U
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200		ND	ND	ND	ND	ND	ND	--	ND
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA		--	--	--	--	--	--	--	--
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA		--	--	--	--	--	--	--	--
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--	--
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB16	QMCP-SB17		QMCP-SB18		QMCP-SB51		QMCP-SB74
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB-16 0-2ft	QMCP-SB 17 0in-6in	QMCP-SB 17 6in-4ft	QMCP-SB 18 0in-6in	QMCP-SB 18 6in-4ft	QMCP-SB-51 0-6in	QMCP-SB-51 6in-10ft	QMCP-SB74 0-12in	
Sample Date													9/6/2018	9/7/2018	9/7/2018	9/7/2018	9/7/2018	9/6/2018	9/6/2018	9/11/2018	
Sample Interval (ft bgs)													0-2 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-10 ft	0-1 ft	
Sample Description													SAND, Medium to coarse, brown, saturated at 2 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	TOPSOIL	SILTY CLAY, Brown; SAND, Fine to medium, brown, sa	SAND, Medium to coarse, brown	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	4.6	6.7	1.7	1.7	6.2	9.3	0.9	7.4	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	0.2	0.5	0.2	0.2	<0.2 U	4.7	0.3	0.5	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	13	87	16	21	19	35	16	22	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	1,800	1,500	3,400	3,100	3,400	1,200	220 J	500	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	45	9.5	52	22	31	170	18	97	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	490	850	970	610	730	450	190	2,000	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.2	<0.05 U	0.2	0.2	0.1	3	<0.06 U	0.2	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	11	1.8	3.2	4.6	2.9	1.1	1.3	0.7	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	79	79	97	81	91	510	54	94	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSTOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<20000 U	<100 U	<2600 U	<110 U	<110 U	--	--	<540 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	72,000	<100 U	8,200	<110 U	<110 U	--	--	<540 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12000 U	<100 U	<1100 U	<170 U	<110 U	--	--	<710 U	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12000 U	<100 U	<1100 U	<170 U	<110 U	--	--	<710 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<12000 U	<100 U	<1100 U	<110 U	<110 U	--	--	<600 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	72,000 J	ND	8,200 J	ND	ND	--	--	ND	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB16	QMCP-SB17		QMCP-SB18		QMCP-SB51		QMCP-SB74
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB-16 0-2ft	QMCP-SB 17 0in-6in	QMCP-SB 17 6in-4ft	QMCP-SB 18 0in-6in	QMCP-SB 18 6in-4ft	QMCP-SB-51 0-6in	QMCP-SB-51 6in-10ft	QMCP-SB74 0-12in	
Sample Date													9/6/2018	9/7/2018	9/7/2018	9/7/2018	9/7/2018	9/6/2018	9/6/2018	9/11/2018	
Sample Interval (ft bgs)													0-2 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-10 ft	0-1 ft	
Sample Description													SAND, Medium to coarse, brown, saturated at 2 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	TOPSOIL	SILTY CLAY, Brown: SAND, Fine to medium, brown, sa	SAND, Medium to coarse, brown	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<600 U	<520 U	<570 U	<550 U	<560 U	<570 U	<580 U	<540 U	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	<240 U	<210 U	<230 U	<220 U	<220 U	<230 U	<230 U	<220 U	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<240 U	<210 U	<230 U	<220 U	<220 U	<230 U	<230 U	<220 U	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	230 J	<210 U	<230 U	<220 U	<220 U	<230 U	<230 U	800	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	1,400	<210 U	1,400	450	<220 U	240	<230 U	11,000	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	1,400	<420 U	1,400	<440 U	<450 U	<460 U	<460 U	11,000	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	2,500	<420 U	3,200	840	<450 U	480	<460 U	23,000	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	720	<420 U	590	<440 U	<450 U	<460 U	<460 U	3,600	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	720	<420 U	780	<440 U	<450 U	<460 U	<460 U	6,200	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	1,400	<210 U	1,800	500	<220 U	290	<230 U	13,000	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	<480 U	<420 U	<460 U	<440 U	<450 U	<460 U	<460 U	4,600	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	2,800	<210 U	2,300	520	<220 U	490	<230 U	15,000	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<240 U	<210 U	<230 U	<220 U	<220 U	<230 U	<230 U	<220 U	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	750	<420 U	670	<440 U	<450 U	<460 U	<460 U	4,800	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	260	<210 U	230	380	<220 U	<230 U	<230 U	<220 U	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	1,600	<210 U	1,200	400	<220 U	310	<230 U	4,500	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	1,900	<210 U	1,800	450	<220 U	380	<230 U	10,000	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	<70 U	<55 U	<62 U	87	<66 U	<67 UJ	<65 UJ	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	74	<55 U	<62 U	180	<66 U	<67 UJ	<65 UJ	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<350 U	<280 U	<310 U	440	<330 U	<340 UJ	<330 UJ	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	<70 U	<55 U	<62 U	<60 U	<66 U	<67 UJ	<65 UJ	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	1,100	<55 U	<62 U	<60 U	180	<67 UJ	<65 UJ	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	<70 U	<55 U	<62 U	<60 U	<66 U	<67 UJ	<65 UJ	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<140 U	<110 U	<120 U	280	<130 U	<130 UJ	<130 UJ	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<350 U	<280 U	<310 U	390	<330 U	<340 UJ	<330 UJ	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	<70 U	<55 U	<62 U	<60 U	<66 U	<67 UJ	<65 UJ	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<70 U	<55 U	<62 U	220	<66 U	<67 UJ	<65 UJ	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	<70 U	<55 U	<62 U	<60 U	<66 U	<67 UJ	<65 UJ	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	<70 U	<55 U	<62 U	<60 U	<66 U	<67 UJ	<65 UJ	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	<70 U	<55 U	<62 U	<60 U	<66 U	<67 UJ	<65 UJ	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	110	<55 U	<62 U	180	<66 U	<67 UJ	<65 UJ	--	
TRICHLOROFLUOROMETHANE (CFC-11)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	110	<55 U	<62 U	<60 U	<66 U	280 J	<65 UJ	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	ND	ND	ND	500	ND	ND	ND	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	SS-20 (MDEQ H RTP 2002)	SS-21 (MDEQ H RTP 2002)	SS-22 (MDEQ H RTP 2002)	SS-23 (MDEQ H RTP 2002)	SS-34 (MDEQ H RTP 2002)	QMCP-SS01	QMCP-SS02
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL		SS 20	SS 21	SS 22	SS 23	SS 34	QMCP-SS 01-0-6in	QMCP-SS 02-0-6in
Sample Date														6/5/2002	6/5/2002	6/5/2002	6/5/2002	6/5/2002	9/5/2018	9/5/2018
Sample Interval (ft bgs)														0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0-0.5 ft	0-0.5 ft
Sample Description														0-½" - Dry, black/red medium to coarse stamp sand. ½-4" - Slightly moist, dark brown/red medium to coarse sand with some fine gravel.	0-½" - Dry, dark brown medium sand with some fine gravel. 10% black/red stamp sand on top. ½-4" - Dark red/brown medium to fine sand, slight amounts of gravel.	0-½" - Dry, dark brown, coarse sand and fine gravel. ½-4" - Slightly moist, dark brown, medium to coarse sand. Oil/gas/rubber odor present. Some dark red/black stamp sand.	0-½" - Dry, black/red, coarse stamp sand. ½-4" - Slightly moist, dark brown and dark red, coarse to medium sand with some fine gravel.	0-4" - Dry, dark brown, medium sand, with 50-70% black stamp sand. Sample was sieved through #30 size sieve. (Discrepancy in sample IDs in MDEQ H RTP 2002 report, description may actually refer to SS 35)	Brown coarse SAND with gravel, organics, slag	Dark brown fine to medium SAND
Inorganics - Metals (mg/kg)																				
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA		11,900	8,950	8,930	12,300	6,560	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA		<0.79 UJ	1.3 J	0.96 J	0.89 J	1.1 J	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA		1	3.1	2.8	3.3	5.1	4.7	5.8
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA		17.3	75.1	33.2	22.4	37.8	56	76
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA		0.08	0.09	<0.06 U	<0.06 U	0.07	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA		0.26	1.2	0.41	0.19	0.3	0.4	1
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		13,300	9,400	13,000	18,200	8,550	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA		15.9	22	23.7	24.4	20.1	10	30
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA		26.9	11	15.8	22	12.2	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA		2,420 J	1,050 J	1,390 J	1,590 J	987 J	1,200	900
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA		19,600	19,400	20,000	20,300	20,400	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA		24.3 J	217 J	132 J	21.7 J	37.5 J	140	190
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA		16,400	5,740	8,510	13,200	5,760	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA		663	311	551	529	290	400	700
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012		0.1 J	0.13 J	0.21 J	0.09 J	0.06 J	0.4	0.2
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA		25.3	22.6	22.7	33.3	15.9	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		141 J	505 J	299 J	204 J	285 J	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA		0.65 J	0.91 J	1.1 J	0.74 J	1.2 J	<0.2 U	<0.2 U
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA		1.3 J	0.82 J	0.41 J	0.48 J	<0.22 U	1.9	2
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		629 J	1,060 J	821 J	621 J	782 J	--	--
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA		0.73 R	0.75 R	0.74 R	0.74 R	0.71 R	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA		47.3	30.5	35.3	44.5	31.3	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA		92.1 J	189 J	114 J	62.2 J	91.7 J	97	190
Inorganics - Cyanide (mg/kg)																				
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA		0.11 J	<0.04 UJ	<0.04 UJ	<0.04 UJ	3.3 J	<0.12 U	<0.11 U
Asbestos (%)																				
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA		--	--	--	--	--	--	--
ASBESTOS-CHRYSTOLE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA		--	--	--	--	--	--	--
Organics - DRO/ORO (ug/kg)																				
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--
Organics - PCBs (ug/kg)																				
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<34 U	<36 U	<35 U	<35 U	<340 UJ	<120 U	--
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<34 U	<36 U	<35 U	<35 U	<340 UJ	<120 U	--
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<34 U	<36 U	<35 U	<35 U	<340 UJ	<220 U	--
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	<220 U	--
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	<120 U	--
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA		ND	ND	ND	ND	ND	ND	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	SS-20 (MDEQ H RTP 2002)	SS-21 (MDEQ H RTP 2002)	SS-22 (MDEQ H RTP 2002)	SS-23 (MDEQ H RTP 2002)	SS-34 (MDEQ H RTP 2002)	QMCP-SS01	QMCP-SS02
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	SS 20	SS 21	SS 22	SS 23	SS 34	QMCP-SS 01-0-6in	QMCP-SS 02-0-6in	
Sample Date													6/5/2002	6/5/2002	6/5/2002	6/5/2002	9/5/2018	9/5/2018		
Sample Interval (ft bgs)													0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0 - 4 in 0 - 12 in	0-0.5 ft	0-0.5 ft	
Sample Description													0-½" - Dry, black/red medium to coarse stamp sand. ½-4" - Slightly moist, dark brown/red medium to coarse sand with some fine gravel.		0-½" - Dry, dark brown medium sand with some fine gravel. 10% black/red stamp sand on top. ½-4" - Dark red/brown medium to fine sand, slight amounts of gravel.		0-½" - Dry, dark brown, coarse sand and fine gravel. ½-4" - Slightly moist, dark brown, medium to coarse sand. Oil/gas/rubber odor present. Some dark red/black stamp sand.		0-½" - Dry, black/red, coarse stamp sand. ½-4" - Slightly moist, dark brown and dark red, coarse to medium sand with some fine gravel.	
Organics - SVOCs (ug/kg)																				
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	120 J	160 J	<3500 U	690 J	<100000 U	690	<560 U	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	<340 U	<720 U	<3500 U	<1700 U	<100000 U	<240 U	<230 U	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<340 U	<720 U	<3500 U	<1700 U	37,000 J	470	<230 U	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	<340 U	<720 U	<3500 U	<1700 U	42,000 J	840	<230 U	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	83 J	150 J	520 J	180 J	120,000 J	3,700	780	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	86 J	160 J	570 J	<1700 U	120,000 J	3,600	810	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	110 J	180 J	540 J	170 J	110,000 J	6,000	2,100	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	<340 U	<720 U	<3500 U	<1700 U	64,000 J	610	<450 U	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	86 J	190 J	540 J	200 J	100,000 J	1,900	530	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	<340 U	170 J	<3500 U	<1700 U	<100000 U	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	100 J	220 J	620 J	260 J	130,000 J	3,600	1,100	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	<340 U	<720 U	<3500 U	<1700 U	<100000 U	<470 U	<450 U	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	160 J	290 J	920 J	290 J	330,000 J	8,200	1,500	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<340 U	<720 U	<3500 U	<1700 U	30,000 J	270	<230 U	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<340 U	74 J	<3500 U	<1700 U	66,000 J	960	<450 U	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	81 J	100 J	<3500 U	460 J	21,000 J	760	<230 U	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	140 J	220 J	450 J	540 J	270,000 J	5,100	1,000	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	140 J	280 J	920 J	280 J	300,000 J	6,800	1,300	
Organics - VOCs (ug/kg)																				
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	<51 U	170	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	<260 U	480	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	<51 U	70	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	<51 U	<51 U	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	<100 U	310	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	<260 U	410	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	<51 U	54	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	<51 U	270	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	<51 U	<51 U	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	<51 U	<51 U	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	<51 U	<51 U	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	<51 U	240	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-11)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	<51 U	<51 U	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	ND	580	--	--	--	
Organics - Pesticides (ug/kg)																				
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	<3.4 U	<3.6 U	<3.5 U	<3.5 U	73 J	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	<3.4 U	<3.6 U	<3.5 U	5.5	<34 UJ	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3.4 U	<3.6 U	<3.5 U	3.8	<34 UJ	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<3.4 U	<3.6 U	4.1	8	<34 UJ	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.8 U	2.8	1.9	<1.8 U	<17 UJ	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS03	QMCP-SS04	QMCP-SS05	QMCP-SS32	QMCP-SS33	QMCP-SS34	QMCP-SS37	QMCP-SS38
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS 03-0-6in	QMCP-SS 04-0-6in	QMCP-SS 05-0-4in	QMCP-SS 32-0-6in	QMCP-SS 33-0-6in	QMCP-SS 34-0-6in	QMCP-SS 37-0-6in	QMCP-SS 38-0-6in	
Sample Date													9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	
Sample Interval (ft bgs)													0-0.5 ft	0-0.5 ft	0-0.33 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	
Sample Description													Brown stamp SAND, very coarse	Brown SAND, fine, black pellets, truck, covered pi	Black/brown medium SAND with black staining, petro	Dark brown medium SAND, moist, organics	Dark brown coarse SAND, rock debris	Dark brown/black coarse SAND, moist, organic	Dark brown fine to medium SAND, organics, slag at	Dark brown fine SAND with gravel, organics, near d	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	1.4 J	1.5	4	4.9	3.6	4.5	19	3.7	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	13	29	35	230	85	96	74	140	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	0.3	<0.2 U	2.8	3.5	0.2	1	2.2	8.7	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	14	3.6	15	25	9.5	32	<20 U	38	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	2,400	390 J	990	1,100	190	1,200	1,000	1,800	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	28	4.3	84	280	110	180	340	560	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	720	57	370	280	140	350	980	520	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.3	<0.05 U	0.08	0.4	0.07	0.2	0.2	0.6	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	0.3	<2 U	<0.2 U	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	4.7	<0.1 U	1.3	1.7	0.3	1.1	1.5	2.1	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	93	9.8	160	860	190	300	590	980	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	<0.11 U	<0.1 U	<0.1 U	<0.12 U	<0.12 U	<0.12 U	<0.13 U	<0.12 UJ	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	ND	--	--	--	--	--	--	--	
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	0.25 <	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	<510000 U	--	--	--	91,000	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	4,600,000	--	--	--	360,000	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<100 U	<1600 UJ	--	--	--	--	<620 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<100 U	<1200 UJ	--	--	--	--	<620 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<100 UJ	<1400 UJ	--	--	--	--	710	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<100 U	<1400 UJ	--	--	--	--	<710 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<100 U	<1000 UJ	--	--	--	--	<620 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	ND	ND	--	--	--	--	710 J	

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS03	QMCP-SS04	QMCP-SS05	QMCP-SS32	QMCP-SS33	QMCP-SS34	QMCP-SS37	QMCP-SS38
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS 03-0-6in	QMCP-SS 04-0-6in	QMCP-SS 05-0-4in	QMCP-SS 32-0-6in	QMCP-SS 33-0-6in	QMCP-SS 34-0-6in	QMCP-SS 37-0-6in	QMCP-SS 38-0-6in	
Sample Date													9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	
Sample Interval (ft bgs)													0-0.5 ft	0-0.5 ft	0-0.33 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	
Sample Description													Brown stamp SAND, very coarse	Brown SAND, fine, black pellets, truck, covered pi	Black/brown medium SAND with black staining, petro	Dark brown medium SAND, moist, organics	Dark brown coarse SAND, rock debris	Dark brown/black coarse SAND, moist, organic	Dark brown fine to medium SAND, organics, slag at	Dark brown fine SAND with gravel, organics, near d	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<550 U	<510 U	<2600 U	<2900 U	<590 U	<6100 U	<630 U	<3100 U	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	<250 U	<1200 U	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	290	<1200 U	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	<250 U	<1200 U	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	1,200	<1200 U	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	<440 U	<410 U	<20000 U	<2300 U	<480 U	<4800 U	<5000 U	<2500 U	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	<440 U	<410 U	<20000 U	<2300 U	<480 U	<4800 U	<5000 U	<2500 U	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	<440 U	<410 U	<20000 U	<2300 U	<480 U	<4800 U	<5000 U	<2500 U	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	<440 U	<410 U	<20000 U	<2300 U	<480 U	<4800 U	<5000 U	<2500 U	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	2,300	1,400	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	<440 U	<410 U	<20000 U	<2300 U	<480 U	<4800 U	<5000 U	<2500 U	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	<220 U	<200 U	<1000 U	<1200 U	310	2,500	2,400	2,800	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	<250 U	<1200 U	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<440 U	<410 U	<20000 U	<2300 U	<480 U	<4800 U	<5000 U	<2500 U	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	870	<1200 U	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	<220 U	<200 U	<1000 U	<1200 U	<240 U	<2400 U	1,900	1,800	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	<220 U	<200 U	<1000 U	<1200 U	270	<2400 U	2,100	2,300	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS41	QMCP-SS42	QMCP-SS43	QMCP-SS44	QMCP-SS45	QMCP-SS46	QMCP-SS47	QMCP-SS48
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS41-0-6in	QMCP-SS42-0-6in	QMCP-SS43-0-6in	QMCP-SS44-0-6in	QMCP-SS45-0-6in	QMCP-SS46-0-3in	QMCP-SS47-0-3in	QMCP-SS48-0-3in	
Sample Date													9/5/2018	9/19/2018	9/19/2018	9/19/2018	9/19/2018	9/19/2018	9/28/2018	9/28/2018	
Sample Interval (ft bgs)													0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Dark brown SAND, organics	Greasy, dark brown, collected next to valve	Stained soil near potential transforms	Soil near split transformer case, topsoil, leaves	Stained soil near warehouse fire	Stained soil near overturned equipment	Soil on west side of meter pile	Soil on east side of meter pile	
Inorganics - Metals (mg/kg)																					
ALUMINIUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	--	--	--	--	--	--	8.9	13	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	180	270	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	11	12	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	160	140	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	1,500	1,600	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	--	--	--	--	810	930	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	1,100	1,100	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	1.1	3.6	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	<0.2 U	0.3	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	2.3	2.1	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	940	1,800	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	<0.57 U	<0.58 U	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	ND	--	--	--	--	--	--	--	
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<110 U	52,000	<1200 U	<1100 U	--	<1600 U	<120000 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<110 U	<17000 U	<1200 U	<1100 U	--	8,200	360,000	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<110 U	9,500 J	<2600 U	<1100 U	--	<1300 U	<120000 U	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<110 U	<12000 U	2,500	<1100 U	--	<1300 U	<120000 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<110 U	<12000 U	<1200 U	<1100 U	--	<1100 U	<120000 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	ND	61,500 J	2,500 J	ND	--	8,200 J	360,000 J	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS41	QMCP-SS42	QMCP-SS43	QMCP-SS44	QMCP-SS45	QMCP-SS46	QMCP-SS47	QMCP-SS48
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS41-0-6in	QMCP-SS42-0-6in	QMCP-SS43-0-6in	QMCP-SS44-0-6in	QMCP-SS45-0-6in	QMCP-SS46-0-3in	QMCP-SS47-0-3in	QMCP-SS48-0-3in	
Sample Date													9/5/2018	9/19/2018	9/19/2018	9/19/2018	9/19/2018	9/19/2018	9/28/2018	9/28/2018	
Sample Interval (ft bgs)													0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Dark brown SAND, organics	Greasy, dark brown, collected next to valve	Stained soil near potential transforms	Soil near split transformer case, topsoil, leaves	Stained soil near warehouse fire	Stained soil near overturned equipment	Soil on west side of meter pile	Soil on east side of meter pile	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	<550 U	<620 U	610	870	<530 U	--	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	<220 U	<250 U	<240 U	<230 U	<210 U	--	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	<220 U	<250 U	730	<230 U	<210 U	--	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	<220 U	<250 U	360	<230 U	550	--	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (O)	NA	--	<220 U	530	2,300	1,200	5,100	--	--	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (O)	8,000 (O)	NA	--	<440 U	600	3,400	<4500 U	--	--	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (O)	NA	--	<440 U	1,300	6,100	<4500 U	<42000 U	--	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	<440 U	<500 U	1,200	<4500 U	--	--	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (O)	NA	--	<440 U	<500 U	1,900	<4500 U	<42000 U	--	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (O)	NA	--	<220 U	770	3,700	1,500	6,400	--	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (O)	NA	--	<440 U	<500 U	890	<4500 U	<42000 U	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	<220 U	1,100	7,700	2,300	9,300	--	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	<220 U	<250 U	310	<230 U	<210 U	--	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	<440 U	<500 U	1,700	<4500 U	<42000 U	--	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	<220 U	<250 U	840	700	<210 U	--	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	<220 U	580	5,500	1,400	4,500	--	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	<220 U	810	6,000	3,500	16,000	--	--	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS49	QMCP-SS50	QMCP-SS71	QMCP-SS75	QMCP-SS79	QMCP-SS83	QMCP-SS84	QMCP-SS87
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS49-0-3in	QMCP-SS50-0-3in	QMCP-SS71-0-3"	QMCP-SS75-0-3"	QMCP-SS79-0-3"	QMCP-SS83-0-3"	QMCP-SS84-0-3"	QMCP-SS87-0-3"	
Sample Date													9/28/2018	9/28/2018	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Soil under black electrical items	Black soil under drum with electrical equipment	--	--	--	--	--	--	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	--	--	--	7.3	19	--	26		
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	280	710	390	--	900		
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	1,000	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSTOLE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1300 U	<120 U	<170 U	<330 U	<110 U	<110 U	<590 U	<390 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5,100	170 J	260 J	1,300 J	<110 U	<110 U	<590 U	550J	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	170 J	170	450 J	<190 U	<110 U	<590 U	470 J	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	<180 U	<170 U	<460 U	<190 U	<110 U	<590 U	<480 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	<120 U	<110 U	<120 U	<110 U	<110 U	<590 U	<120 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	5,100 J	340 J	430 J	1,750 J	ND	ND	ND	1,020 J	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS49	QMCP-SS50	QMCP-SS71	QMCP-SS75	QMCP-SS79	QMCP-SS83	QMCP-SS84	QMCP-SS87
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS49-0-3in	QMCP-SS50-0-3in	QMCP-SS71-0-3"	QMCP-SS75-0-3"	QMCP-SS79-0-3"	QMCP-SS83-0-3"	QMCP-SS84-0-3"	QMCP-SS87-0-3"	
Sample Date													9/28/2018	9/28/2018	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Soil under black electrical items	Black soil under drum with electrical equipment	--	--	--	--	--	--	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<600 U	<3000 U	<270 U	--	--	<270 U	<3000 U	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	<240 U	<1200 U	<110 U	--	--	<110 U	<1200 U	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<240 U	<1200 U	<110 U	--	--	<110 U	<1200 U	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	<240 U	<1200 U	<110 U	--	--	<110 U	<1200 U	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (O)	NA	1,100	1,900	310	--	--	240	<1500 U	--	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (O)	8,000 (O)	NA	1,200	<2400 U	380	--	--	<210 U	<2400 U	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (O)	NA	2,100	4,700	630	--	--	400	<2400 U	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	560	<2400 U	230 J	--	--	<210 U	<2400 U	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (O)	NA	680	<2400 U	<220 U	--	--	<210 U	<2400 U	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (O)	NA	1,300	3,000	400	--	--	300	1,500	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (O)	NA	680	<2400 U	<220 U	--	--	<210 U	<2400 U	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	2,100	2,900	520	--	--	510	2,700	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<240 U	<1200 U	<110 U	--	--	<110 U	<1200 U	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	660	<2400 U	220 J	--	--	<210 U	<2400 U	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	430	<1200 U	<110 U	--	--	110 J	1,200	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	1,600	1,500	220	--	--	420	2,400	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	1,500	2,200	430	--	--	440	2,200	--	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS88	QMCP-SS91	QMCP-SS96	QMCP-SS100	QMCP-SS101	QMCP-SS105	QMCP-SS113	QMCP-SS121
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS88-0-3"	QMCP-SS91-0-3"	QMCP-SS96-0-3"	QMCP-SS100-0-3"	QMCP-SS101-0-3"	QMCP-SS105-0-3"	QMCP-SS113-0-3"	QMCP-SS121-0-3"	
Sample Date													8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													--	--	--	--	--	--	--	--	--
Inorganics - Metals (mg/kg)																					
ALUMINIUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA			9.1						
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	590	--	--	--	--	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	1,200	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120 U	3,600 J	<11000 U	<110 U	<120 U	<190 U	<560 U	<160 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120 U	2,900 J	27,000	<110 U	110	410	<560 U	290	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<150 U	<1100 U	<11000 U	<110 U	<220 U	<190 U	<560 U	<600 U	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<150 U	<1100 U	<11000 U	<110 U	<220 U	<190 U	<560 U	<600 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<120 U	<1100 U	<11000 U	<110 U	<110 U	<190 U	<560 U	<110 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	6,500 J	27,000	ND	110	410	ND	290	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS88	QMCP-SS91	QMCP-SS96	QMCP-SS100	QMCP-SS101	QMCP-SS105	QMCP-SS113	QMCP-SS121
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS88-0-3"	QMCP-SS91-0-3"	QMCP-SS96-0-3"	QMCP-SS100-0-3"	QMCP-SS101-0-3"	QMCP-SS105-0-3"	QMCP-SS113-0-3"	QMCP-SS121-0-3"	
Sample Date													8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													--	--	--	--	--	--	--	--	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	<270 U	--	630	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	--	<110 U	--	<110 U	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	--	<110 U	--	130	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	--	<110 U	--	170	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (O)	NA	--	--	--	--	170	--	1,700	--	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (O)	8,000 (O)	NA	--	--	--	--	<210 U	--	1,900	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (O)	NA	--	--	--	--	340	--	4,300	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	--	<210 U	--	930	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (O)	NA	--	--	--	--	<210 U	--	1,100	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (O)	NA	--	--	--	--	200	--	2,400	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (O)	NA	--	--	--	--	<210 U	--	360	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	--	300	--	2,700	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	--	<110 U	--	<110 U	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	--	<210 U	--	920	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	110	--	510	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	--	180	--	1,500	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	--	280	--	2,300	--	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS122	QMCP-SS123	QMCP-SS125	QMCP-SS133	QMCP-SS137	QMCP-SS145	QMCP-SS149	QMCP-SS153
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS122-0-3"	QMCP-SS123-0-3"	QMCP-SS125-0-3"	QMCP-SS133-0-3"	QMCP-SS137-0-3"	QMCP-SS145-0-3"	QMCP-SS149-0-3"	QMCP-SS153-0-3"	
Sample Date													8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													--	--	--	--	--	--	--	--	--
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA			4.6	7.7	8.2				
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	--	580	1,000	--	1,200	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSTOLE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	<550 U	<530 U	<610 U	<1100 U	<1200 U	4,000 J	<120 U	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,700	<550 U	<910 U	<1300 U	2,300	<1200 U	2,100 J	<120 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	<1100 U	<2400 U	4,800	<1100 U	<1300 U	2,400 J	<190 U	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	<1100 U	<2400 U	<4800 U	<1100 U	<1300 U	<2500 U	<190 U	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1200 U	<550 U	<530 U	<540 U	<1100 U	5,100 J	<1100 U	<120 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	1,700	ND	ND	4,800	2,300	5,100 J	8,500 J	ND	

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS122	QMCP-SS123	QMCP-SS125	QMCP-SS133	QMCP-SS137	QMCP-SS145	QMCP-SS149	QMCP-SS153
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS122-0-3"	QMCP-SS123-0-3"	QMCP-SS125-0-3"	QMCP-SS133-0-3"	QMCP-SS137-0-3"	QMCP-SS145-0-3"	QMCP-SS149-0-3"	QMCP-SS153-0-3"	
Sample Date													8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													--	--	--	--	--	--	--	--	--
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	280 J	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	--	--	--	--	<120 U	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	--	--	--	--	<120 U	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	--	--	--	--	<120 U	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	250	
BENZO(A)PYRENE	50-32-8	210,000 (c*)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	--	--	--	--	--	--	--	240	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	450	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	--	--	--	--	<230 U	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	--	--	--	--	--	--	--	<230 U	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	--	--	--	--	--	--	--	340	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	--	--	--	--	--	--	--	<230 U	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	--	--	--	--	600	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	--	--	--	--	<120 U	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	--	--	--	--	<230 U	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	190	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	--	--	--	--	590	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	--	--	--	--	460	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS276	QMCP-SS277	QMCP-SS279	QMCP-SS280	QMCP-SS281	QMCP-SS282	QMCP-SS283	QMCP-SS285
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS276-0-3ft	QMCP-SS277-0-3ft	QMCP-SS279-0-3ft	QMCP-SS280-0-3ft	QMCP-SS281-0-3ft	QMCP-SS282-0-3ft	QMCP-SS283-0-3ft	QMCP-SS285-0-3ft	
Sample Date													7/18/2019	7/18/2019	7/18/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Brown SAND, fine grain, with small roots	SAND with slag in Trail ROW	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Dark brown SAND with gravel and debris	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	4.2	13	4.2	19	12	15	17	12	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	5,600	71	210	1,800	1,100	710	1,800	1,400	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.1	<0.05 U	0.4	7.5	1.8	5.3	29	5.6	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSTOLE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS276	QMCP-SS277	QMCP-SS279	QMCP-SS280	QMCP-SS281	QMCP-SS282	QMCP-SS283	QMCP-SS285
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS276-0-3ft	QMCP-SS277-0-3ft	QMCP-SS279-0-3ft	QMCP-SS280-0-3ft	QMCP-SS281-0-3ft	QMCP-SS282-0-3ft	QMCP-SS283-0-3ft	QMCP-SS285-0-3ft	
Sample Date													7/18/2019	7/18/2019	7/18/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Brown SAND, fine grain, with small roots	SAND with slag in Trail ROW	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Dark brown SAND with gravel and debris	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	--	--	--	--	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	--	--	--	--	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	--	--	--	--	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (O)	NA	--	--	--	--	--	--	--	--	
BENZO(A)PYRENE	50-32-8	210,000 (c*)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (O)	8,000 (O)	NA	--	--	--	--	--	--	--	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (O)	NA	--	--	--	--	--	--	--	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	--	--	--	--	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (O)	NA	--	--	--	--	--	--	--	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (O)	NA	--	--	--	--	--	--	--	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (O)	NA	--	--	--	--	--	--	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	--	--	--	--	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	--	--	--	--	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c*)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	--	--	--	--	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	--	--	--	--	--	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c*)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c*)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c*)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS286	QMCP-SS287	QMCP-SS288	QMCP-SS289	QMCP-SS290	QMCP-SS291	QMCP-SS292	QMCP-SS293
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS286-0-3ft	QMCP-SS287-0-3ft	QMCP-SS288-0-3ft	QMCP-SS289-0-3ft	QMCP-SS290-0-3ft	QMCP-SS291-0-3ft	QMCP-SS292-0-3ft	QMCP-SS293-0-3"	
Sample Date													7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Dark brown SAND with gravel and debris	Brown SAND with gravel and debris	Brown SAND with gravel under scrap pile	Dark stained SAND with debris	Dark stained SAND with debris	Dark stained SAND with debris	Dark stained SAND with debris	Brown SAND with gravel	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	3.8	14	11	--	--	--	--	--	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	180	2,300	580	--	--	--	--	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.3	1.5	1.1	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	0.1 <	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	98,000	<1300 U	<1500 U	7,700 J	--	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<22000 U	2,700	<2100 U	3,300 J	--	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<12000 U	<1100 U	5,800	<1200 U	--	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<12000 U	<1100 U	<1200 U	<1200 U	--	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<U	<1100 U	<1200 U	<1200 U	--	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	--	--	98,000	2,700	5,800	11,000	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS286	QMCP-SS287	QMCP-SS288	QMCP-SS289	QMCP-SS290	QMCP-SS291	QMCP-SS292	QMCP-SS293
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS286-0-3ft	QMCP-SS287-0-3ft	QMCP-SS288-0-3ft	QMCP-SS289-0-3ft	QMCP-SS290-0-3ft	QMCP-SS291-0-3ft	QMCP-SS292-0-3ft	QMCP-SS293-0-3"	
Sample Date													7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Dark brown SAND with gravel and debris	Brown SAND with gravel and debris	Brown SAND with gravel under scrap pile	Dark stained SAND with debris	Dark stained SAND with debris	Dark stained SAND with debris	Dark stained SAND with debris	Brown SAND with gravel	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	--	--	--	--	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	--	--	--	--	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	--	--	--	--	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	--	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	--	--	--	--	--	--	--	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	--	--	--	--	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	--	--	--	--	--	--	--	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	--	--	--	--	--	--	--	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	--	--	--	--	--	--	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	--	--	--	--	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	--	--	--	--	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	--	--	--	--	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	--	--	--	--	--	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS294	QMCP-SS295	QMCP-SS296	QMCP-SS297	QMCP-SS298	QMCP-SS299	QMCP-SS300	QMCP-SS301
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS294-0-3"	QMCP-SS295-0-3"	QMCP-SS296-0-3"	QMCP-SS297-0-3"	QMCP-SS298-0-3"	QMCP-SS299-0-3"	QMCP-SS300-0-3"	QMCP-SS301-0-3"	
Sample Date													7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel and debris	Brown SAND with gravel and debris	
Inorganics - Metals (mg/kg)																					
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c~R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	--	--	--	--	--	--	--	--	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	--	--	--	--	--	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	ND	ND	--	--	--	
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	0.5	1.6	0.4	--	--	0.1 <	1	0.3	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS294	QMCP-SS295	QMCP-SS296	QMCP-SS297	QMCP-SS298	QMCP-SS299	QMCP-SS300	QMCP-SS301
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS294-0-3"	QMCP-SS295-0-3"	QMCP-SS296-0-3"	QMCP-SS297-0-3"	QMCP-SS298-0-3"	QMCP-SS299-0-3"	QMCP-SS300-0-3"	QMCP-SS301-0-3"	
Sample Date													7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel in wastepile	Brown SAND with gravel and debris	Brown SAND with gravel and debris	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	--	--	--	--	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	--	--	--	--	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	--	--	--	--	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	--	
BENZO(A)PYRENE	50-32-8	210,000 (c*)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	--	--	--	--	--	--	--	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	--	--	--	--	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	--	--	--	--	--	--	--	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	--	--	--	--	--	--	--	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	--	--	--	--	--	--	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	--	--	--	--	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	--	--	--	--	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c*)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	--	--	--	--	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	--	--	--	--	--	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c*)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c*)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c*)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS302	QMCP-SS303	QMCP-SS304	QMCP-SS305	QMCP-SS306	QMCP-SS307	QMCP-SS308
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS302-0-3*	QMCP-SS303-0-3*	QMCP-SS304-0-3*	QMCP-SS305-0-3*	QMCP-SS306-0-3*	QMCP-SS307-0-3*	QMCP-SS308-0-3*	
Sample Date													7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Brown SAND with gravel and debris	Medium stamp SAND	Brown SAND with gravel and debris	Brown SAND with gravel and debris	Brown SAND with gravel	Brown SAND with gravel and debris	Brown SAND with gravel in wastepile	
Inorganics - Metals (mg/kg)																				
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	--	--	--	--	--	--	--	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	--	--	--	--	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																				
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	
Asbestos (%)																				
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	ND	ND	ND	ND	--	--	
ASBESTOS-CHRYSTOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	0.1 <	--	--	--	--	0.2	0.1 <	
Organics - DRO/ORO (ug/kg)																				
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																				
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
AROCLOR-1254	11097-69-1	44,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
AROCLOR-1262	37324-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
AROCLOR-1268	11100-14-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 3  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS302	QMCP-SS303	QMCP-SS304	QMCP-SS305	QMCP-SS306	QMCP-SS307	QMCP-SS308
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS302-0-3"	QMCP-SS303-0-3"	QMCP-SS304-0-3"	QMCP-SS305-0-3"	QMCP-SS306-0-3"	QMCP-SS307-0-3"	QMCP-SS308-0-3"	
Sample Date													7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	7/22/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													Brown SAND with gravel and debris	Medium stamp SAND	Brown SAND with gravel and debris	Brown SAND with gravel and debris	Brown SAND with gravel	Brown SAND with gravel and debris	Brown SAND with gravel in wastepile	
Organics - SVOCs (ug/kg)																				
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	--	--	--	--	--	--	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	--	--	--	--	--	--	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	--	--	--	--	--	--	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	--	--	--	--	--	--	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	--	--	--	--	--	--	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	3.50E+08	7.00E+06	NA	--	--	--	--	--	--	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	--	--	--	--	--	--	--	
BUTYL BENZYL PHTHALATE	85-68-7	1.20E+8 (c**m)	13,000 (X)	310,000	5.00E+6 (C)	NLV	NLV	NLV	NLV	2.10E+10	1.20E+8 (C)	NA	--	--	--	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	--	--	--	--	--	--	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	--	--	--	--	--	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	--	--	--	--	--	--	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	--	--	--	--	--	--	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	--	--	--	--	--	--	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	--	--	--	--	--	--	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	--	--	--	--	--	--	--	
Organics - VOCs (ug/kg)																				
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
SEC-BUTYLBENZENE	135-98-8	3.50E+8 (nms)	ID	1.00E+07	4,600	ID	ID	ID	ID	1.80E+08	8.00E+06	NA	--	--	--	--	--	--	--	
TERT-BUTYLBENZENE	98-06-6	3.50E+8 (nms)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	2.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	
TETRACHLOROETHYLENE	127-18-4	1.20E+6 (ns)	1,200 (X)	88,000	100	21,000	210,000	490,000	1.10E+06	1.20E+09	930,000 (C)	19 (M)	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	
TRICHLOROFLUOROMETHANE (CFC-113)	75-69-4	1.10E+9 (nms)	NA	560,000	150,000	5.10E+06	1.10E+08	1.40E+11	1.40E+11	1.70E+12	2.60E+8 (C)	NA	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																				
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	
ENDRIN ALDEHYDE	7421-93-4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 3

## SUMMARY OF SOIL ANALYTICAL RESULTS

### JULIO SALVAGE

### JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for Groundwater.

Samples described in this evaluation may actually refer to stamp sands or to other mining waste from historic mining and reclamation processes conducted in the area.

-- = Not analyzed

mg/kg = Milligrams per kilogram

bgs = Below ground surface

ug/kg = Micrograms per kilogram

in = Inches

PCBs = Polychlorinated biphenyls

ft = Feet

SVOC = Semi-volatile organic compound

VOC = Volatile organic compound

#### Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLL = Hazardous substance is not likely to leach under most soil conditions.

NLV = Hazardous substance is not likely to volatilize under most conditions.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(BB) = The state drinking water standard for asbestos (fibers greater than 10 micrometers in length) is in units of a million fibers per liter of water (MFL). Soil concentrations of asbestos are determined by polarized light microscopy.

(C) = The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (Csat). The person proposing or implementing response activity shall document whether additional response activity is required to control free-phase liquids or NAPL to protect against risks associated with free-phase liquids by using methods appropriate for the free-phase liquids present. Development of a site-specific Csat or methods presented in R 299.22, R 299.24(5), and R 299.26(8) may be conducted for the relevant exposure pathways.

(D) = Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).

(DD) = Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.

(E) = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information)

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Department of Environmental Quality (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(J) = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(M) = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(P) = Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria. Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria. Nonresidential direct contact criteria may not be protective of the potential for release of hydrogen cyanide gas. Additional land or resource use restrictions may be necessary to protect for the acute inhalation concerns associated with hydrogen cyanide gas.

(O) = Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

(R) = Hazardous substance may exhibit the characteristic of reactivity as defined in 40 C.F.R. §261.23 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(T) = Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.

Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the published table if TSCA standards are not applicable.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF+1; m = ceiling limit exceeded; s = Csat exceeded.

#### Laboratory Footnotes

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

J+ = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample and may be biased high.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 4  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>					EGLE Volatilization to Indoor Air Interim Action Screening Levels <sup>c</sup>				QMCP-GW09	QMCP-GW10	QMCP-GW11	QMCP-GW12	QMCP-GW13	QMCP-GW14
Field Sample ID		Residential Tapwater	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Shallow Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL <sub>12</sub>	Groundwater Nonresidential TSRIASL <sub>12</sub>	QMCP-GW-9 12-16	QMCP-GW 10 6-10ft	QMCP-GW-11 7-11	QMCP-GW-12 4-8	QMCP-GW-13 4-8	QMCP-GW-14 4-8
Sample Date												9/6/2018	9/7/2018	9/6/2018	9/6/2018	9/6/2018	9/6/2018
Sample Interval												12-16 ft	6-10 ft	7-11 ft	4-8 ft	4-8 ft	4-8 ft
Inorganics - Metals (ug/l)																	
ARSENIC	7440-38-2	5.2 (c <sup>**</sup> )	10 (A)	10	NLV	NA	ID	NA	NA	NA	NA	1.3	5.1	1.6	<1 U	<1 U	1.5
CADMIUM	7440-43-9	28 (n)	5.0 (B,A)	1.3 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	<0.2 U	<0.2 U	0.3	<0.2 U	<0.2 U	<0.2 U
CHROMIUM	7440-47-3	NA	100 (B,H,A)	40 (B,H,G,X)	NLV	NA	ID	NA	NA	NA	NA	9.3	68	34	2.7	<1 U	1.9
COPPER	7440-50-8	2,400 (n)	1,000 (E)	4.7 (B,G)	NLV	NA	ID	NA	NA	NA	NA	1,100	200	9,100	1,200	28	1,500
LEAD	7439-92-1	15 (G)	4.0 (B,L)	14 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	13	5.3	14	1.8	<1 U	4
MANGANESE	7439-96-5	1,300 (n)	50 (B,E)	1,000 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	5,100	770	560	270	350	300
MERCURY	7439-97-6	1.9 (n)	2.0 (A,B,Z)	0.0013 (B,Z)	56	56	ID	0.14	7.2	14	60	<0.2 U	<0.2 U	0.6	0.3	<0.2 U	<0.2 U
SILVER	7440-22-4	280 (n)	98 (B)	0.2 (B,M)	NLV	NA	ID	NA	NA	NA	NA	0.6	0.3	13	2	<0.2 U	0.7
ZINC	7440-66-6	18,000 (n)	5,000 (B,E)	63 (B,G)	NLV	NA	ID	NA	NA	NA	NA	33	43	60	20	6	17
Organics - PCBs (ug/l)																	
AROCLOR-1254	11097-69-1	0.78 (c <sup>**</sup> )	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<0.1 U	<0.1 U	<0.1 U	<0.1 U	<0.1 U
TOTAL PCBs	1336-36-6	NA	0.5	0.2	45	44.7	NA	NA	NA	NA	NA	--	ND	ND	ND	ND	ND
Organics - SVOCs (ug/l)																	
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	22	<5.1 U	<5.1 U	<5 U	<5.1 U	<5 U
NAPHTHALENE (SVOC)	91-20-3S	17 (c <sup>**</sup> )	1,500	11	31,000 (S)	31,000	NA	NA	NA	NA	NA	42	<1 U	<1 U	<1 U	<1 U	<1 U
Organics - VOCs (ug/l)																	
1,2,3-TRIMETHYLBENZENE	526-73-8	160 (n)	NA	NA	NA	NA	NA	71	3,900	7,900	72,000	18	<1 U	<1 U	<1 U	<1 U	<1 U
1,2,4-TRIMETHYLBENZENE	95-63-6	170 (n)	63 (E,I)	17 (I)	56,000 (I,S)	55,890 (I)	56,000 (I,S)	44	2,200	4,400	40,000	420	<1 U	<1 U	<1 U	<1 U	<1 U
1,3,5-TRIMETHYLBENZENE	108-67-8	180 (n)	72 (E,I)	45 (I)	61,000 (I,S)	61,150 (I)	ID	34	1,500	3,100	28,000	230	<1 U	<1 U	<1 U	<1 U	<1 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	62	<5 U	<5 U	<5 U	<5 U	<5 U
CYCLOHEXANE	110-82-7	38,000 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	480	<5 U	<5 U	<5 U	<5 U	<5 U
ETHYLBENZENE	100-41-4	150 (c <sup>*</sup> )	74 (E,I)	18 (I)	170,000 (I,S)	169,000 (I)	43,000 (I)	8.5	360	710	22,000	230	<1 U	<1 U	<1 U	<1 U	<1 U
HEXANE	110-54-3	4,400 (n)	8,600	NA	12,000 (S)	12,000	12,000 (S)	130	130 (GW)	130 (GW)	6,000 (GW)	260	<1 U	<1 U	<1 U	<1 U	<1 U
ISOPROPYLBENZENE	98-82-8	1,400 (n)	2,300	28	56,000 (S)	56,000	29,000	NA	NA	NA	NA	71	<1 U	<1 U	<1 U	<1 U	<1 U
M,P-XYLENE	1330-20-7	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	410	<2 U	<2 U	<2 U	<2 U	<2 U
NAPHTHALENE (VOC)	91-20-3V	17 (c <sup>**</sup> )	1,500	11	31,000	31,000	NA	NA	NA	NA	NA	88	<5 U	<5 U	<5 U	<5 U	<5 U
N-PROPYLBENZENE	103-65-1	2,000 (n)	230 (I)	ID	ID	NA	ID	NA	NA	NA	NA	160	<1 U	<1 U	<1 U	<1 U	<1 U
O-XYLENE	95-47-6	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	15	<1 U	<1 U	<1 U	<1 U	<1 U
TRICHLOROFLUOROMETHANE (CFC-11)	75-69-4	15,000 (n)	7,300	NA	1,100,000 (S)	1,100,000 (S)	ID	NA	NA	NA	NA	<10 U	<1 U	<1 U	<1 U	<1 U	<1 U
XYLENE - TOTAL	1330-20-7	580 (n)	280 (E,I)	49 (I)	190,000 (I,S)	186,000 (I)	70,000 (I)	140	6,000	12,000	110,000 (S)	425	ND	ND	ND	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 4  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
JULIO SALVAGE  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>					EGLE Volatilization to Indoor Air Interim Action Screening Levels <sup>c</sup>				QMCP-GW15	QMCP-GW16	QMCP-GW17	QMCP-GW18	QMCP-GW51	QMCP-GW52
Field Sample ID		Residential Tapwater	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Shallow Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL <sub>12</sub>	Groundwater Nonresidential TSRIASL <sub>12</sub>	QMCP-GW-15 2-6	QMCP-GW-16 2-4	QMCP-GW 17 5-9ft	QMCP-GW 18 5-9ft	QMCP-GW-51 10-14	QMCP-GW-52 8-12
Sample Date												9/6/2018	9/6/2018	9/7/2018	9/7/2018	9/6/2018	9/6/2018
Sample Interval												2-6 ft	2-4 ft	5-9 ft	5-9 ft	10-14 ft	8-12 ft
Inorganics - Metals (ug/l)																	
ARSENIC	7440-38-2	5.2 (c <sup>**</sup> )	10 (A)	10	NLV	NA	ID	NA	NA	NA	NA	1.6	1.8	1.7	<1 U	<1 U	1.5
CADMIUM	7440-43-9	28 (n)	5.0 (B,A)	1.3 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U
CHROMIUM	7440-47-3	NA	100 (B,H,A)	40 (B,H,G,X)	NLV	NA	ID	NA	NA	NA	NA	3.3	19	5.8	17	2	24
COPPER	7440-50-8	2,400 (n)	1,000 (E)	4.7 (B,G)	NLV	NA	ID	NA	NA	NA	NA	400	3,600	200	3,800	12	140
LEAD	7439-92-1	15 (G)	4.0 (B,L)	14 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	24	23	49	3.5	<1 U	1
MANGANESE	7439-96-5	1,300 (n)	50 (B,E)	1,000 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	160	680	520	1,200	170	690
MERCURY	7439-97-6	1.9 (n)	2.0 (A,B,Z)	0.0013 (B,Z)	56	56	ID	0.14	7.2	14	60	<0.2 U	2.5	<0.2 U	1.2	<0.2 U	<0.2 U
SILVER	7440-22-4	280 (n)	98 (B)	0.2 (B,M)	NLV	NA	ID	NA	NA	NA	NA	1.4	14	<0.2 U	19	<0.2 U	<0.2 U
ZINC	7440-66-6	18,000 (n)	5,000 (B,E)	63 (B,G)	NLV	NA	ID	NA	NA	NA	NA	43	84	81	51	6.6	25
Organics - PCBs (ug/l)																	
AROCLOR-1254	11097-69-1	0.78 (c <sup>**</sup> )	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	0.1 J	<0.1 U	--	--	<0.1 U
TOTAL PCBs	1336-36-6	NA	0.5	0.2	45	44.7	NA	NA	NA	NA	NA	--	0.1 J	ND	--	--	ND
Organics - SVOCs (ug/l)																	
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	<5 U	<5 U	<5.1 U	<5 U	<5 U	<5 UJ
NAPHTHALENE (SVOC)	91-20-3S	17 (c <sup>**</sup> )	1,500	11	31,000 (S)	31,000	NA	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 UJ
Organics - VOCs (ug/l)																	
1,2,3-TRIMETHYLBENZENE	526-73-8	160 (n)	NA	NA	NA	NA	NA	71	3,900	7,900	72,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2,4-TRIMETHYLBENZENE	95-63-6	170 (n)	63 (E,I)	17 (I)	56,000 (I,S)	55,890 (I)	56,000 (I,S)	44	2,200	4,400	40,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,3,5-TRIMETHYLBENZENE	108-67-8	180 (n)	72 (E,I)	45 (I)	61,000 (I,S)	61,150 (I)	ID	34	1,500	3,100	28,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
CYCLOHEXANE	110-82-7	38,000 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
ETHYLBENZENE	100-41-4	150 (c <sup>*</sup> )	74 (E,I)	18 (I)	170,000 (I,S)	169,000 (I)	43,000 (I)	8.5	360	710	22,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
HEXANE	110-54-3	4,400 (n)	8,600	NA	12,000 (S)	12,000	12,000 (S)	130	130 (GW)	130 (GW)	6,000 (GW)	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
ISOPROPYLBENZENE	98-82-8	1,400 (n)	2,300	28	56,000 (S)	56,000	29,000	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
M,P-XYLENE	1330-20-7	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
NAPHTHALENE (VOC)	91-20-3V	17 (c <sup>**</sup> )	1,500	11	31,000	31,000	NA	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
N-PROPYLBENZENE	103-65-1	2,000 (n)	230 (I)	ID	ID	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
O-XYLENE	95-47-6	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
TRICHLOROFLUOROMETHANE (CFC-11)	75-69-4	15,000 (n)	7,300	NA	1,100,000 (S)	1,100,000 (S)	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	1.4	<1 U
XYLENE - TOTAL	1330-20-7	580 (n)	280 (E,I)	49 (I)	190,000 (I,S)	186,000 (I)	70,000 (I)	140	6,000	12,000	110,000 (S)	ND	ND	ND	ND	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 4

## SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

### JULIO SALVAGE

### JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for Groundwater.

-- = Not analyzed

bgs = Below ground surface

ft = Feet

ug/l = micrograms per liter.

PCBs = Polychlorinated biphenyls

VOC = Volatile organic compound

SVOC = Semi-volatile organic compound

#### Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLV = Hazardous substance is not likely to volatilize under most conditions.

(A) = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(E) = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information)

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Michigan Department of Environment, Great Lakes, and Energy (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(L) = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(9) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 ug/L is linked to the generic residential soil direct contact criterion of 400 mg/kg. A higher concentration in the drinking water, up to the state action level of 15 ug/L, may be allowed as a site-specific remedy and still allow for drinking water use, under Section 20120a(2) and 20120b of the NREPA if soil concentrations are appropriately lower than 400 mg/kg. If a site-specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 ug/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase. Acceptable combinations of site-specific soil and drinking water concentrations are presented in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site (See R 299.49 Footnotes for generic cleanup criteria tables for additional information).

(M) = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(S) = Criterion defaults to the hazardous substance-specific water solubility limit.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

(GW) = The calculated value for a hazardous substance based upon shallow groundwater is considered protective when it is greater than the calculated value for groundwater.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

#### Laboratory Footnotes

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 5  
SUMMARY OF ACM ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
JP-ACM-04	JP-ACM-04-102319	10/23/2019	40%	CHRYSTILE	White TSI
QMCP-ASBBLK19	QMCP-ASBBLK19A-092818	9/28/2018	ND		Concrete piping
	QMCP-ASBBLK19B-092818	9/28/2018	ND		Concrete piping
QMCP-ASBBLK20	QMCP-ASBBLK20A-092818	9/28/2018	65%	CHRYSTILE	Whiteboard
	QMCP-ASBBLK20B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Whiteboard
QMCP-ASBBLK21	QMCP-ASBBLK21A-092818	9/28/2018	ND		Green roofing
	QMCP-ASBBLK21B-092818	9/28/2018	ND		Green roofing
QMCP-ASBBLK22	QMCP-ASBBLK22A-092818	9/28/2018	ND		Metallic tar paper
	QMCP-ASBBLK22B-092818	9/28/2018	ND		Metallic tar paper
QMCP-ASBBLK23	QMCP-ASBBLK23A-092818	9/28/2018	ND		Tarpaper with white fibers
	QMCP-ASBBLK23B-092818	9/28/2018	ND		Tarpaper with white fibers
QMCP-ASBBLK24	QMCP-ASBBLK24A-092818	9/28/2018	30%	CHRYSTILE	White TSI
	QMCP-ASBBLK24A-092818	9/28/2018	3%	AMOSITE	White TSI
	QMCP-ASBBLK24B-092818	9/28/2018	--	Not analyzed due to prior positive series.	White TSI
QMCP-ASBBLK25	QMCP-ASBBLK25A-092818	9/28/2018	2%	CHRYSTILE	Silver and black roof coating
	QMCP-ASBBLK25B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Silver and black roof coating

ND = Not detected

LF = Linear Feet

TSI = Thermal System Insulation

SF = Square Feet

-- = Not analyzed

Results greater than the National Emissions Standard for Hazardous Air Pollutants (NESHAP) and EGLE Particulate Soil Inhalation Criteria of 1% are bolded and shaded.

Indicates sampled item/material has been removed from the site.

Evaluation based on EGLE/EPA Criteria at time of Project completion.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SB22			QMCP-SB23		QMCP-SB24	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB 22 0in-6in	QMCP-SB 22 6in-4ft	QMCP-SB 22 6in-4ft DUP	QMCP-SB 23 0in-6in	QMCP-SB 23 6in-4ft	QMCP-SB 24 0in-6in	QMCP-SB 24 6in-4ft
Sample Date													9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018
Sample Interval (ft bgs)													0-0.5 ft	0.5-4 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft
Sample Description													SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet
Inorganics - Metals (mg/kg)																			
ALUMINIUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	1.3	3.4	1.6	2.2	2.9	4.3	30
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	0.8
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	13	4.5	7.6	15	19	17	11
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	230	610	2,000	790	810	1,400	2,400
IRON	7439-89-6	2.50E+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	5.5	12	9.1	160	28	22	50
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	170	120	250	270	250	260	240
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.07	0.06	0.2	0.07	0.2	0.1	0.1
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	0.3	1.7	3.6	1.3	0.9	1.3	4.5
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	21	22	35	46	46	44	190
Inorganics - Cyanide (mg/kg)																			
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--
Asbestos (%)																			
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--
Organics - DRO/ORO (ug/kg)																			
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
Organics - PCBs (ug/kg)																			
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	ND	ND	ND	ND	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SB22			QMCP-SB23		QMCP-SB24	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB 22 0in-6in	QMCP-SB 22 6in-4ft	QMCP-SB 22 6in-4ft DUP	QMCP-SB 23 0in-6in	QMCP-SB 23 6in-4ft	QMCP-SB 24 0in-6in	QMCP-SB 24 6in-4ft
Sample Date													9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018
Sample Interval (ft bgs)													0-0.5 ft	0.5-4 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft
Sample Description													SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Medium to coarse, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet
Organics - SVOCs (ug/kg)																			
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<520 U	<570 U	3,000	740	2,500	2,300	1,900
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<210 U	<230 U	<230 U	<220 U	<220 U	<220 U	<230 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	<210 U	260	<230 U	<220 U	<220 U	<220 U	220 J
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	<420 U	<460 U	<460 U	<430 U	<440 U	<430 U	<450 U
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c )	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	<420 U	<460 U	<460 U	<430 U	<440 U	<430 U	<450 U
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	<420 UJ	<460 U	<460 U	<430 UJ	<440 UJ	<430 U	<450 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	<210 U	240	230	<220 U	220	<220 U	340
DIBENZOFURAN	132-64-9	3,100,000 (n)	1,700	NA	ID	3,600,000	160,000	160,000	160,000	2,900,000	ID	NA	--	--	--	--	--	--	--
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	<210 U	430	<230 U	280	<220 U	210 J	490
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<210 U	<230 U	<230 U	<220 U	<220 U	<220 U	<230 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<420 U	<460 U	<460 U	<430 U	<440 U	<430 U	<450 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<210 U	<230 U	1,900	520	1,600	1,900	1,500
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	<210 U	280	1,300	480	1,100	820	1,000
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	<210 U	370	<230 U	220	<220 U	220	370
Organics - VOCs (ug/kg)																			
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	<55 U	170	150	160	<61 U	120	140
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	110	440	430	450	84	250	350
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	<55 U	97	96	95	<61 U	<57 U	73
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00 E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	290	930	930	950	<300 U	650	790
BENZENE	71-43-2	510,000 (c**)	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	<55 U	93	120	110	<61 U	<57 U	120
CYCLOHEXANE	110-82-7	8.20E+7 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<280 U	450	490	400	<300 U	<290 U	380
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	<55 U	110	130	130	<61 U	71	130
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C )	950,000 (C )	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C )	110	<55 U	120	170	140	<61 U	59	120
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C )	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C )	NA	<55 U	<67 U	70	72	<61 U	92	81
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	150	740	820	710	120	390	690
METHYLENE CHLORIDE	75-09-2	9.50E+6 (ns)	30,000 (X)	2.30E+06	100	240,000	700,000	1.70E+06	4.00E+06	8.30E+09	5.8E+6 (C )	570	<110 U	<130 U	<130 U	<120 U	<120 U	<110 U	<120 U
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<280 U	780	800	790	<300 U	580	820
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	<55 U	67	75	90	<61 U	84	98
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	120	540	560	530	100	370	530
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	120	520	620	580	74	260	620
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	270	1,280	1,380	1,240	220	760	1,220
Organics - Pesticides (ug/kg)																			
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SB25		QMCP-SB26	QMCP-SB27	QMCP-SB28	QMCP-SB29	QMCP-SB65	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB-25 0-6in	QMCP-SB-25 6in-4ft	QMCP-SB-26 0-2ft	QMCP-SB-27 0-2ft	QMCP-SB-28 0-2ft	QMCP-SB-29 0-2ft	QMCP-SB 65 0in-6in	QMCP-SB 65 6in-4ft
Sample Date													9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018
Sample Interval (ft bgs)													0-0.5 ft	0.5-4 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft	0-0.5 ft	0.5-4 ft
Sample Description													SAND and GRAVEL, Medium, brown	SAND, Fine to medium, brown, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Fine to medium, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet
Inorganics - Metals (mg/kg)																				
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	2	1.1 J	1.9	1.5 J	12	0.9 J	2.2	1.8
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	<0.2 U	<0.2 U	0.4	0.3	0.3	<0.2 U	0.2	<0.2 U
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	44	13	28	14	59	14	26	27
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	210	2,100	4,000	5,600	1,300	3,200	590	1,000
IRON	7439-89-6	2.50E+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	3.8	7	38	27	36	8.1	44	25
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	380	510	540	630	560	590	270	380
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	<0.05 U	0.2	0.2	0.2	0.1	0.2	<0.05 U	0.09
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	0.3	2.5	4.1	3.5	1.8	4.2	0.8	1.7
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	39	60	170	92	71	86	110	88
Inorganics - Cyanide (mg/kg)																				
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--
Asbestos (%)																				
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--
Organics - DRO/ORO (ug/kg)																				
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
Organics - PCBs (ug/kg)																				
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	ND	ND	ND	ND	ND	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SB25		QMCP-SB26	QMCP-SB27	QMCP-SB28	QMCP-SB29	QMCP-SB65	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL		QMCP-SB-25 0-6in	QMCP-SB-25 6in-4ft	QMCP-SB-26 0-2ft	QMCP-SB-27 0-2ft	QMCP-SB-28 0-2ft	QMCP-SB-29 0-2ft	QMCP-SB 65 0in-6in	QMCP-SB 65 6in-4ft
Sample Date														9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018
Sample Interval (ft bgs)														0-0.5 ft	0.5-4 ft	0-2 ft	0-2 ft	0-2 ft	0-2 ft	0-0.5 ft	0.5-4 ft
Sample Description														SAND and GRAVEL, Medium, brown	SAND, Fine to medium, brown, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Medium to coarse, gray, saturated at 2 feet	SAND, Fine to medium, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA		<550 U	<570 U	<550 U	<530 U	<550 U	<560 U	<530 U	<560 U
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA		<220 U	<230 U	<220 U	<210 U	<220 U	<230 U	<210 U	<220 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA		<220 U	<230 U	390	<210 U	520	<230 U	<210 U	450
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA		<440 U	<450 U	<440 U	<430 U	<440 U	<450 U	<430 U	430 J
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA		<440 U	<450 U	620	<430 U	680	<450 U	<430 U	680
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA		<440 UJ	<450 UJ	<440 UJ	<430 UJ	<440 UJ	<450 UJ	<430 U	<440 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA		<220 U	<230 U	480	<210 U	540	<230 U	<210 U	430
DIBENZOFURAN	132-64-9	3,100,000 (n)	1,700	NA	ID	3,600,000	160,000	160,000	160,000	2,900,000	ID	NA		--	--	--	--	--	--	--	--
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA		<220 U	<230 U	720	<210 U	1,400	<230 U	<210 U	1,000
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA		<220 U	<230 U	<220 U	<210 U	<220 U	<230 U	<210 U	<220 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA		<440 U	<450 U	<440 U	<430 U	<440 U	<450 U	<430 U	<440 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA		<220 U	<230 U	<220 U	<210 U	<220 U	<230 U	<210 U	<220 U
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA		<220 U	<230 U	390	<210 U	1,500	<230 U	<210 U	530
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA		<220 U	<230 U	730	<210 U	930	<230 U	<210 U	790
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200		<60 U	<63 U	<61 U	78	<58 U	<64 U	<66 U	<64 U
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650		<60 U	<63 U	<61 U	120	<58 U	<64 U	<66 U	<64 U
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00 E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA		<300 U	<320 U	<310 U	350	<290 U	<320 U	<330 U	<320 U
BENZENE	71-43-2	510,000 (c**)	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
CYCLOHEXANE	110-82-7	8.20E+7 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<300 U	<320 U	<310 U	<290 U	<290 U	<320 U	<330 U	<320 U
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C )	950,000 (C )	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C )	110		<60 U	<63 U	<61 U	66	<58 U	<64 U	<66 U	<64 U
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C )	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C )	NA		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<120 U	<130 U	<120 U	<120 U	<120 U	<130 U	<130 U	<130 U
METHYLENE CHLORIDE	75-09-2	9.50E+6 (ns)	30,000 (X)	2.30E+06	100	240,000	700,000	1.70E+06	4.00E+06	8.30E+09	5.8E+6 (C )	570		<120 U	<130 U	<120 U	<120 U	130	<130 U	<130 U	<130 U
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA		<300 U	<320 U	<310 U	<290 U	<290 U	<320 U	<330 U	<320 U
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000		<60 U	<63 U	<61 U	<58 U	<58 U	<64 U	<66 U	<64 U
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200		ND	ND	ND	ND	ND	ND	ND	ND
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA		--	--	--	--	--	--	--	--
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA		--	--	--	--	--	--	--	--
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--	--
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SB66		QMCP-SB82	QMCP-SB86	SS-26 (MDEQ H RTP 2002)	SS-27 (MDEQ H RTP 2002)	QMCP-SS10	QMCP-SS11
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB 66 0in-6in	QMCP-SB 66 6in-4ft	QMCP-SB82-6-18"	QMCP-SB86-12-18"	SS 26	SS 27	QMCP-SS-10-0-6in	QMCP-SS-11-0-6in	
Sample Date													9/8/2018	9/8/2018	8/17/2019	8/17/2019	6/5/2002	6/5/2002	9/5/2018	9/5/2018	
Sample Interval (ft bgs)													0-0.5 ft	0.5-4 ft	0.5-1.5 ft	0-1.5 ft	--	--	0-0.5 ft	0-0.5 ft	
Sample Description													SAND, Fine to medium, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet	--	--	0-3½" - Moist, dark brown, medium sand with some fine gravel and some stamp sand. 3½-4" - Medium to light brown, moist, medium sand.	0-½" - Slightly moist, top crusted with tan, medium to fine sand with some fine gravel. ½-4" - Slightly moist, dark brown, , medium sand with some coarse sand and fine gravel.	Black medium to coarse stamp SAND, darkened, sligh	Dark brown medium SAND, darker staining, slight odor	
Inorganics - Metals (mg/kg)																					
ALUMINIUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	5,360	9,490	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	<0.81 UJ	1.6 J	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	1.6	1.8	--	37	18.2	3.5	2.9	12	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	23	20.8	39	480	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	0.1	<0.07 U	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	<0.2 U	0.3	--	--	0.13	0.19	0.4	4.9	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	3,320	11,100	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	18	19	--	--	11.6	12.4	13	35	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	7.8	20.5	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	180	510	--	--	756 J	2,370 J	1,400	1,800	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	10,600	17,200	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	22	53	--	--	21 J	39.7 J	96	1,700	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	3,590	9,580	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	260	310	--	--	192	463	370	560	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	<0.05 U	0.1	--	--	<0.05 UJ	0.14 J	0.1	18	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	15.7	18.3	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	279 J	209 J	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	0.77 J	0.81 J	<0.2 U	<0.2 U	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	0.2	0.6	--	--	<0.23 U	1.3 J	40	2.9	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	573 J	640 J	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	0.75 R	0.84 R	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	19.9	46	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	48	72	--	--	40.8 J	72.4 J	140	2,100	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	<0.04 UJ	<0.04 UJ	<0.11 U	<0.14 U	
Asbestos (%)																					
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	110,000	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	520,000	--	
Organics - PCBs (ug/kg)																					
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	ND	--	--	ND	ND	ND	ND	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SB66		QMCP-SB82	QMCP-SB86	SS-26 (MDEQ HRTF 2002)	SS-27 (MDEQ HRTF 2002)	QMCP-SS10	QMCP-SS11
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB 66 0in-6in	QMCP-SB 66 6in-4ft	QMCP-SB82-6-18"	QMCP-SB86-12-18"	SS 26	SS 27	QMCP-SS-10-0-6in	QMCP-SS-11-0-6in	
Sample Date													9/8/2018	9/8/2018	8/17/2019	8/17/2019	6/5/2002	6/5/2002	9/5/2018	9/5/2018	
Sample Interval (ft bgs)													0-0.5 ft	0.5-4 ft	0.5-1.5 ft	0-1.5 ft	--	--	0-0.5 ft	0-0.5 ft	
Sample Description													SAND, Fine to medium, brown, saturated at 4 feet	SAND, Fine to medium, brown, saturated at 4 feet	--	--	0-3½" - Moist, dark brown, medium sand with some fine gravel and some stamp sand. 3½-4" - Medium to light brown, moist, medium sand.	0-½" - Slightly moist, top crusted with tan, medium to fine sand with some fine gravel. ½-4" - Slightly moist, dark brown, , medium sand with some coarse sand and fine gravel.	Black medium to coarse stamp SAND, darkened, sligh	Dark brown medium SAND, darker staining, slight odor	
Organics - SVOCs (ug/kg)																					
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<530 U	<550 U	<280 U	<260 U	510 J	1,400 J	890	4,600	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<210 U	<220 U	<110 U	<110 U	<1700 U	<3500 U	<220 U	<1400 U	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	<210 U	<220 U	<110 U	<110 U	<1700 U	<3500 U	230	<1400 U	
BENZO(A)PYRENE	50-32-8	210,000 (c'')	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	<420 U	<440 U	<220 U	<210 U	<1700 U	<3500 U	<440 U	<2800 U	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c )	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	<420 U	<440 U	<220 U	<210 U	<1700 U	<3500 U	460	<2800 U	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	<420 U	<440 U	<220 U	<210 U	<1700 U	<3500 U	<440 U	<2800 U	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	<210 U	<220 U	<110 U	<110 U	<1700 U	<3500 U	340	1,600	
DIBENZOFURAN	132-64-9	3,100,000 (n)	1,700	NA	ID	3,600,000	160,000	160,000	160,000	2,900,000	ID	NA	--	--	--	--	<1700 U	410 J	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	<210 U	<220 U	<110 U	<110 U	<1700 U	<3500 U	400	<1400 U	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<210 U	<220 U	<110 U	<110 U	<1700 U	<3500 U	<220 U	<1400 U	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<420 U	<440 U	<220 U	<210 U	<1700 U	<3500 U	<440 U	<2800 U	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c'')	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<210 U	<220 U	120	<110 U	340 J	810 J	590	2,600	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	<210 U	<220 U	<110 U	<110 U	300 J	800 J	700	2,800	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	<210 U	<220 U	<110 U	<110 U	<1700 U	<3500 U	340	1,400	
Organics - VOCs (ug/kg)																					
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	<56 U	<59 U	<63 UJ	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	<56 U	<59 U	<63 UJ	--	130	390	--	--	
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	<56 U	<59 U	<63 UJ	--	<85 U	77	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00 E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<280 U	<300 U	<320 UJ	--	650	980	--	--	
BENZENE	71-43-2	510,000 (c'')	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	<56 U	<59 U	<63 UJ	--	<85 U	61	--	--	
CYCLOHEXANE	110-82-7	8.20E+7 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<280 U	<300 U	<320 UJ	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c's)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	<56 U	<59 U	<63 UJ	--	<85 U	100	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C )	950,000 (C )	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C )	110	<56 U	<59 U	<63 UJ	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C )	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C )	NA	<56 U	<59 U	<63 UJ	--	<85 U	84	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<110 U	<120 U	<130 UJ	--	170	610	--	--	
METHYLENE CHLORIDE	75-09-2	9.50E+6 (ns)	30,000 (X)	2.30E+06	100	240,000	700,000	1.70E+06	4.00E+06	8.30E+09	5.8E+6 (C )	570	<110 U	<120 U	<63 UJ	--	<420 U	<280 U	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c'')	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<280 U	<300 U	<63 UJ	--	<420 U	750	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	<56 U	<59 U	<63 UJ	--	<85 U	78	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<56 U	<59 U	<63 UJ	--	150	500	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	<56 U	<59 U	81 J	--	120	420	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	ND	ND	ND	--	320	1,110	--	--	
Organics - Pesticides (ug/kg)																					
4,4-DDE	72-55-9	930,000 (c'')	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	<3.5 U	4.2	--	--	
4,4-DDT	50-29-3	850,000 (c'')	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	<3.5 U	5.6	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	<3.5 U	8.2	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	<1.8 U	<1.8 U	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SS12	QMCP-SS13	QMCP-SS14	QMCP-SS15	QMCP-SS52	QMCP-SS67	QMCP-SS68
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS-12-0-6in	QMCP-SS-13-0-6in	QMCP-SS-14-0-6in	QMCP-SS-15-0-6in	QMCP-SS52-0-3in	QMCP-SS67-0-3"	QMCP-SS68-0-3"
Sample Date													9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/28/2018	8/17/2019	8/17/2019
Sample Interval (ft bgs)													0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft
Sample Description													Dark fine to medium stamp SAND, oil near equipment	Dark fine to medium stamp SAND	Grey medium to coarse stamp SAND, petrol odor unde	Dark black stamp SAND	Stained soil, hydraulic oil	--	--
Inorganics - Metals (mg/kg)																			
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	0.9	0.8 J	4.5	1 J	--	--	--
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	13	8.7	12	17	--	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	0.3	<0.2 U	0.2	5.8	--	--	--
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	17	12	41	9.7	--	--	--
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	2,000	3,800	640	1,200	--	--	--
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	11	6.2	6.2	20	--	--	--
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	590	510	460	260	--	--	--
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.1 J	0.2	<0.05 U	0.06	--	--	--
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	<0.2 U	<0.2 U	<0.2 U	<0.2 U	--	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	2.1	2.6	0.7	1.4	--	--	--
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	150	64	90	84	--	--	--
Inorganics - Cyanide (mg/kg)																			
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	<0.11 U	<0.11 U	<0.11 U	<0.12 U	--	--	--
Asbestos (%)																			
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	ND	--	--	--
Organics - DRO/ORO (ug/kg)																			
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	310,000	--	520,000	<290000 U	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7,000,000	--	21,000,000	4,100,000	--	--	--
Organics - PCBs (ug/kg)																			
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	--	--	--	ND	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SS12	QMCP-SS13	QMCP-SS14	QMCP-SS15	QMCP-SS52	QMCP-SS67	QMCP-SS68
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS-12-0-6in	QMCP-SS-13-0-6in	QMCP-SS-14-0-6in	QMCP-SS-15-0-6in	QMCP-SS52-0-3in	QMCP-SS67-0-3"	QMCP-SS68-0-3"
Sample Date													9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/28/2018	8/17/2019	8/17/2019
Sample Interval (ft bgs)													0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft
Sample Description													Dark fine to medium stamp SAND, oil near equipment	Dark fine to medium stamp SAND	Grey medium to coarse stamp SAND, petrol odor unde	Dark black stamp SAND	Stained soil, hydraulic oil	--	--
Organics - SVOCs (ug/kg)																			
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<540 U	<540 U	<540 U	<590 U	<2800 U	<300 U	<310 U
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	<120 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	<120 U
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	<4300 U	<430 U	<4400 U	<4700 U	<23000 U	<240 U	<250 U
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	<4300 U	<430 U	<4400 U	<4700 U	<23000 U	<240 U	<250 U
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	<4300 U	<430 U	<4400 U	<4700 U	<23000 U	<240 U	<250 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	140
DIBENZOFURAN	132-64-9	3,100,000 (n)	1,700	NA	ID	3,600,000	160,000	160,000	160,000	2,900,000	ID	NA	--	--	--	--	--	--	--
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	280
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	<120 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<4300 U	<430 U	<4400 U	<4700 U	<23000 U	<240 U	<250 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	<120 U
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	120
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	<220 U	<210 U	<220 U	<230 U	<1100 U	<120 U	210
Organics - VOCs (ug/kg)																			
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00 E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--
BENZENE	71-43-2	510,000 (c**)	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	--	--	--	--	--	--	--
CYCLOHEXANE	110-82-7	8.20E+7 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
METHYLENE CHLORIDE	75-09-2	9.50E+6 (ns)	30,000 (X)	2.30E+06	100	240,000	700,000	1.70E+06	4.00E+06	8.30E+09	5.8E+6 (C)	570	--	--	--	--	--	--	--
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--
Organics - Pesticides (ug/kg)																			
4,4-DDE	72-55-9	930,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--
4,4-DDT	50-29-3	850,000 (c**)	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SS161	QMCP-SS165	QMCP-SS169	QMCP-SS173	QMCP-SS270	QMCP-SS271	QMCP-SS272	QMCP-SS273	QMCP-SS274	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS161-0-3"	QMCP-SS165-0-3"	QMCP-SS169-0-3"	QMCP-SS173-0-3"	QMCP-SS270-0-3"	QMCP-SS271-0-3"	QMCP-SS272-0-3"	QMCP-SS273-0-3"	QMCP-SS274-0-3"	
Sample Date													8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019		
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft		
Sample Description													--	--	--	--	--	--	--	--	--	--
Inorganics - Metals (mg/kg)																						
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	--	--	--	--	--	--	--	--	--	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	--	--	--	--	--	--	--	--	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																						
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	--	
Asbestos (%)																						
ASBESTOS	ASB	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																						
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																						
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 6  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Levels <sup>c</sup>	QMCP-SS161	QMCP-SS165	QMCP-SS169	QMCP-SS173	QMCP-SS270	QMCP-SS271	QMCP-SS272	QMCP-SS273	QMCP-SS274	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS161-0-3"	QMCP-SS165-0-3"	QMCP-SS169-0-3"	QMCP-SS173-0-3"	QMCP-SS270-0-3"	QMCP-SS271-0-3"	QMCP-SS272-0-3"	QMCP-SS273-0-3"	QMCP-SS274-0-3"	
Sample Date													8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019	8/17/2019		
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft		
Sample Description													--	--	--	--	--	--	--	--	--	
Organics - SVOCs (ug/kg)																						
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<280 U	1,700	<260 U	<2800 U	<270 U	<270 U	<2600 U	39,000 J	190	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<110 U	260	<100 U	<1100 U	<110 U	<110 U	<1000 U	<1100 U	380	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	<1100 U	160	<100 U	<1100 U	260	<1100 U	2,800	<1100 J	<210 U	
BENZO(A)PYRENE	50-32-8	210,000 (c'')	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	<22000 U	<220 U	<210 U	<23000 U	280	<2100 U	2,500	<2200 U	240	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c )	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	<22000 U	250	<210 U	<23000 U	530	<2100 U	3,700	<2200 U	<210 U	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	<22000 U	<220 U	<210 U	<23000 U	<220 U	<2100 U	2,000 J	<2200 U	400	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	<1100 U	230	<100 U	<1100 U	310	<1100 U	2,900	<1100 U	<210 U	
DIBENZOFURAN	132-64-9	3,100,000 (n)	1,700	NA	ID	3,600,000	160,000	160,000	160,000	2,900,000	ID	NA	--	--	--	--	--	--	--	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	<110 U	290	<100 U	<1100 U	530	<110 U	5,100	<1100 U	270	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<110 U	<110 U	<100 U	<1100 U	<110 U	<110 U	<1000 U	6,000 J	320	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c )	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<22000 U	<220 U	<210 U	<23000 U	<220 U	<2100 U	<2100 U	<2200 U	<260 U	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c'')	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<110 U	1,600	<100 U	<1100 U	<110 U	<110 U	<1000 U	4,900 J	<100 U	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	<110 U	930	<100 U	<1100 U	240	150	2,000	14,000 J	<100 U	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	<1100 U	300	<100 U	<1100 U	450	<1100 U	4,500	3,200 J	<100 U	
Organics - VOCs (ug/kg)																						
1,2,3-TRIMETHYLBENZENE	526-73-8	6.10E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,200	--	--	--	--	--	--	--	--	--	
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--	--	
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	--	--	--	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00 E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--	--	
BENZENE	71-43-2	510,000 (c'')	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	--	--	--	--	--	--	--	--	--	
CYCLOHEXANE	110-82-7	8.20E+7 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c's)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C )	950,000 (C )	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C )	110	--	--	--	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C )	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C )	NA	--	--	--	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
METHYLENE CHLORIDE	75-09-2	9.50E+6 (ns)	30,000 (X)	2.30E+06	100	240,000	700,000	1.70E+06	4.00E+06	8.30E+09	5.8E+6 (C )	570	--	--	--	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c'')	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																						
4,4-DDE	72-55-9	930,000 (c'')	NA	NA	NA	NA	NA	NA	NA	4.00E+07	190,000	NA	--	--	--	--	--	--	--	--	--	
4,4-DDT	50-29-3	850,000 (c'')	NA	NA	NA	NA	NA	NA	NA	4.00E+07	280,000	NA	--	--	--	--	--	--	--	--	--	
ENDRIN KETONE	53494-70-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	
GAMMA-CHLORDANE	5103-74-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.



# **TABLE 6** **SUMMARY OF SOIL ANALYTICAL RESULTS** **JULIO CONTRACTING/FORMER STANDARD OIL COMPANY** **JULIO PROPERTIES - RS**

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for nonresidential soil.

Samples described in this evaluation may actually refer to stamp sands or to other mining waste from historic mining and reclamation processes conducted in the area.

-- = Not analyzed	mg/kg = Milligrams per kilogram.
bgs = Below ground surface	ug/kg = Micrograms per kilogram
in = Inches	PCBs = Polychlorinated biphenyls
ft = Feet	SVOC = Semi-volatile organic compound
	VOC = Volatile organic compound

## **Criteria Footnotes**

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLL = Hazardous substance is not likely to leach under most soil conditions.

NLV = Hazardous substance is not likely to volatilize under most conditions.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(BB) = The state drinking water standard for asbestos (fibers greater than 10 micrometers in length) is in units of a million fibers per liter of water (MFL). Soil concentrations of asbestos are determined by polarized light microscopy.

(C) = The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (Csat). The person proposing or implementing response activity shall document whether additional response activity is required to control free-phase liquids or NAPL to protect against risks associated with free-phase liquids by using methods appropriate for the free-phase liquids present. Development of a site-specific Csat or methods presented in R 299.22, R 299.24(5), and R 299.26(8) may be conducted for the relevant exposure pathways.

(D) = Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).

(DD) = Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Department of Environmental Quality (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(J) = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(P) = Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria. Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria. Nonresidential direct contact criteria may not be protective of the potential for release of hydrogen cyanide gas. Additional land or resource use restrictions may be necessary to protect for the acute inhalation concerns associated with hydrogen cyanide gas.

(Q) = Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

(R) = Hazardous substance may exhibit the characteristic of reactivity as defined in 40 C.F.R. §261.23 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(T) = Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the published table if TSCA standards are not applicable.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

## **Laboratory Footnotes**

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 7  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>					EGLE Volatilization to Indoor Air Interim Action Screening Levels <sup>c</sup>				QMCP-GW22	QMCP-GW22	QMCP-GW23	QMCP-GW24	QMCP-GW25	QMCP-GW26	QMCP-GW27	QMCP-GW28
Field Sample ID		Residential Tapwater	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Shallow Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL <sub>12</sub>	Groundwater Nonresidential TSRIASL <sub>12</sub>	QMCP-GW 22 4-8ft	QMCP-GW 22 4-8ft DUP	QMCP-GW 23 5-9ft	QMCP-GW 24 4-8ft	QMCP-GW 25 4-8ft	QMCP-GW 26 2-6ft	QMCP-GW 27 2-6ft	QMCP-GW 28 2-6ft
Sample Date												9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/8/2018	
Sample Interval												4-8 ft	4-8 ft	5-9 ft	4-8 ft	4-8 ft	2-6 ft	2-6 ft	2-6 ft
Inorganics - Metals (ug/l)																			
ARSENIC	7440-38-2	5.2 (c**)	10 (A)	10	NLV	NA	ID	NA	NA	NA	NA	<1 U	<1 U	10	<1 U	<1 U	<1 U	2.2	4.4
CADMIUM	7440-43-9	28 (n)	5.0 (B,A)	1.3 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<2 U	<0.2 U	<0.2 U	0.9
CHROMIUM	7440-47-3	NA	100 (B,H,A)	40 (B,H,G,X)	NLV	NA	ID	NA	NA	NA	NA	2.8	2	29	1.2	<10 U	1.1	78	160
COPPER	7440-50-8	2,400 (n)	1,000 (E)	4.7 (B,G)	NLV	NA	ID	NA	NA	NA	NA	270	240	3,100	110	6,700	1,300	27,000	970
LEAD	7439-92-1	15 (G)	4.0 (B,L)	14 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	<1 U	<1 U	59	<1 U	<10 U	2.7	12	200
MANGANESE	7439-96-5	1,300 (n)	50 (B,E)	1,000 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	260	250	1,300	80	9,500	1,000	3,800	2,200
MERCURY	7439-97-6	1.9 (n)	2.0 (A,B,Z)	0.0013 (B,Z)	56	56	ID	0.14	7.2	14	60	<0.2 U	<0.2 U	0.3	<0.2 U	2.3	<0.2 U	9.9	<0.2 U
SILVER	7440-22-4	280 (n)	98 (B)	0.2 (B,M)	NLV	NA	ID	NA	NA	NA	NA	0.6	0.5	2.7	<0.2 U	49	2.3	49	2
ZINC	7440-66-6	18,000 (n)	5,000 (B,E)	63 (B,G)	NLV	NA	ID	NA	NA	NA	NA	12	11	96	7.5	140 J	<5 U	360	180
Organics - DRO/ORO (ug/l)																			
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
Organics - PCBs as Aroclors (ug/l)																			
TOTAL PCBs	1336-36-6	NA	0.5	0.2	45	44.7	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Organics - SVOCs (ug/l)																			
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	<5 U	<5 UJ	<5 U	<5 U	<5 U	50	<5 U	<5 U
BENZO(A)ANTHRACENE	56-55-3	3 (c)	8.5 (Q)	ID	NLV	9.4 (Q)	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
BENZO(A)PYRENE	50-32-8	2.5 (c**)	5.0 (Q,A)	ID	NLV	1.62 (Q)	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
BENZO(B)FLUORANTHENE	205-99-2	25 (c)	1.5 (Q,S,AA)	ID	ID	1.5 (Q)	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	0.96 J
BENZO(G,H,I)PERYLENE	191-24-2	NA	1.0 (M)	ID	NLV	0.26	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
BENZO(K)FLUORANTHENE	207-08-9	250 (c)	1.0 (M)	NA	NLV	0.8	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
CHRYSENE	218-01-9	2,500 (c)	1.6 (Q,S)	ID	ID	1.6 (Q)	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
FLUORANTHENE	206-44-0	2,400 (n)	210 (S)	1.6	210 (S)	206	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
FLUORENE	86-73-7	880 (n)	2,000 (S)	12	2,000 (S)	1,980	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	1.2	<1 U	<1 U
NAPHTHALENE (SVOC)	91-20-3S	17 (c**)	1,500	11	31,000 (S)	31,000	NA	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	5.4	<1 U	<1 U
PHENANTHRENE	85-01-8	NA	150	2.0 (M)	1,000 (S)	1,000	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	1.2	<1 U	<1 U
PYRENE	129-00-0	360 (n)	140 (S)	ID	140 (S)	135	ID	NA	NA	NA	NA	<1 U	<1 UJ	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
Organics - VOCs (ug/l)																			
1,2,3-TRIMETHYLBENZENE	526-73-8	160 (n)	NA	NA	NA	NA	NA	71	3,900	7,900	72,000	<1 U	<1 U	<1 U	<1 U	<1 U	37	2.9	<1 U
1,2,4-TRIMETHYLBENZENE	95-63-6	170 (n)	63 (E,I)	17 (I)	56,000 (I,S)	55,890 (I)	56,000 (I,S)	44	2,200	4,400	40,000	<1 U	<1 U	<1 U	<1 U	<1 U	36	5.4	<1 U
1,3,5-TRIMETHYLBENZENE	108-67-8	180 (n)	72 (E,I)	45 (I)	61,000 (I,S)	61,150 (I)	ID	34	1,500	3,100	28,000	<1 U	<1 U	<1 U	<1 U	<1 U	20	1.9	<1 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	120	6.8	<5 U
ETHYLBENZENE	100-41-4	150 (c*)	74 (E,I)	18 (I)	170,000 (I,S)	169,000 (I)	43,000 (I)	8.5	360	710	22,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
HEXANE	110-54-3	4,400 (n)	8,600	NA	12,000 (S)	12,000	12,000 (S)	130	130 (GW)	130 (GW)	6,000 (GW)	<1 U	<1 U	<1 U	<1 U	<1 U	24	1.2	<1 U
ISOPROPYLBENZENE	98-82-8	1,400 (n)	2,300	28	56,000 (S)	56,000	29,000	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	6.6	<1 U	<1 U
M,P-XYLENE	1330-20-7	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2 U	<2 U	<2 U	<2 U	<2 U	3.3	<2 U	<2 U
NAPHTHALENE (VOC)	91-20-3V	17 (c**)	1,500	11	31,000	31,000	NA	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	12	<5 U	<5 U
N-PROPYLBENZENE	103-65-1	2,000 (n)	230 (I)	ID	ID	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	5.4	<1 U	<1 U
O-XYLENE	95-47-6	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	2.6	<1 U	<1 U
SEC-BUTYLBENZENE	135-98-8	6,000 (n)	230	ID	ID	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	5.7	<1 U	<1 U
XYLENE - TOTAL	1330-20-7	580 (n)	280 (E,I)	49 (I)	190,000 (I,S)	186,000 (I)	70,000 (I)	140	6,000	12,000	110,000 (S)	ND	ND	ND	ND	ND	5.9	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 7  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
JULIO CONTRACTING/FORMER STANDARD OIL COMPANY  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>					EGLE Volatilization to Indoor Air Interim Action Screening Levels <sup>c</sup>				QMCP-GW29	QMCP-GW65	QMCP-GW66	QMCP-GW75	QMCP-GW76	QMCP-GW77
Field Sample ID		Residential Tapwater	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Shallow Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL <sub>12</sub>	Groundwater Nonresidential TSRIASL <sub>12</sub>	QMCP-GW 29 2-6ft	QMCP-GW 65 5-9ft	QMCP-GW 66 4-8ft	QMCP-GW 75 5ft	QMCP-GW 76 5.25ft	QMCP-GW 77 1ft
Sample Date												9/8/2018	9/8/2018	9/8/2018	10/31/2018	10/31/2018	10/31/2018
Sample Interval												2-6 ft	5-9 ft	4-8 ft	5 ft	5.25 ft	1 ft
Inorganics - Metals (ug/l)																	
ARSENIC	7440-38-2	5.2 (c <sup>**</sup> )	10 (A)	10	NLV	NA	ID	NA	NA	NA	NA	<1 U	<1 U	1.3	--	--	--
CADMIUM	7440-43-9	28 (n)	5.0 (B,A)	1.3 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	0.3	<0.2 U	<0.2 U	--	--	--
CHROMIUM	7440-47-3	NA	100 (B,H,A)	40 (B,H,G,X)	NLV	NA	ID	NA	NA	NA	NA	4.4	3.7	5.4	--	--	--
COPPER	7440-50-8	2,400 (n)	1,000 (E)	4.7 (B,G)	NLV	NA	ID	NA	NA	NA	NA	2,900	850	68	--	--	--
LEAD	7439-92-1	15 (G)	4.0 (B,L)	14 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	3.1	3.5	<1 U	--	--	--
MANGANESE	7439-96-5	1,300 (n)	50 (B,E)	1,000 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	630	1,500	470	--	--	--
MERCURY	7439-97-6	1.9 (n)	2.0 (A,B,Z)	0.0013 (B,Z)	56	56	ID	0.14	7.2	14	60	1.4	<0.2 U	<0.2 U	--	--	--
SILVER	7440-22-4	280 (n)	98 (B)	0.2 (B,M)	NLV	NA	ID	NA	NA	NA	NA	18	1.8	<0.2 U	--	--	--
ZINC	7440-66-6	18,000 (n)	5,000 (B,E)	63 (B,G)	NLV	NA	ID	NA	NA	NA	NA	40	13	9.5	--	--	--
Organics - DRO/ORO (ug/l)																	
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	170	220	580
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<530 U	690	1,800
Organics - PCBs as Aroclors (ug/l)																	
TOTAL PCBs	1336-36-6	NA	0.5	0.2	45	44.7	NA	NA	NA	NA	NA	ND	ND	ND	--	--	--
Organics - SVOCs (ug/l)																	
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	<5.6 U	<5 UJ	<5 U	<5.3 U	<5.3 U	<5.2 U
BENZO(A)ANTHRACENE	56-55-3	3 (c)	8.5 (Q)	ID	NLV	9.4 (Q)	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	2.2
BENZO(A)PYRENE	50-32-8	2.5 (c <sup>**</sup> )	5.0 (Q,A)	ID	NLV	1.62 (Q)	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	2.5
BENZO(B)FLUORANTHENE	205-99-2	25 (c)	1.5 (Q,S,AA)	ID	ID	1.5 (Q)	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	4.2
BENZO(G,H,I)PERYLENE	191-24-2	NA	1.0 (M)	ID	NLV	0.26	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	1.7
BENZO(K)FLUORANTHENE	207-08-9	250 (c)	1.0 (M)	NA	NLV	0.8	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	1.5
CHRYSENE	218-01-9	2,500 (c)	1.6 (Q,S)	ID	ID	1.6 (Q)	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	2.3
FLUORANTHENE	206-44-0	2,400 (n)	210 (S)	1.6	210 (S)	206	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	4.5
FLUORENE	86-73-7	880 (n)	2,000 (S)	12	2,000 (S)	1,980	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	<1 U
NAPHTHALENE (SVOC)	91-20-3S	17 (c <sup>**</sup> )	1,500	11	31,000 (S)	31,000	NA	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	<1 U
PHENANTHRENE	85-01-8	NA	150	2.0 (M)	1,000 (S)	1,000	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	1.5
PYRENE	129-00-0	360 (n)	140 (S)	ID	140 (S)	135	ID	NA	NA	NA	NA	<1.1 U	<1 UJ	<1 U	<1.1 U	<1.1 U	3.8
Organics - VOCs (ug/l)																	
1,2,3-TRIMETHYLBENZENE	526-73-8	160 (n)	NA	NA	NA	NA	NA	71	3,900	7,900	72,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,2,4-TRIMETHYLBENZENE	95-63-6	170 (n)	63 (E,I)	17 (I)	56,000 (I,S)	55,890 (I)	56,000 (I,S)	44	2,200	4,400	40,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
1,3,5-TRIMETHYLBENZENE	108-67-8	180 (n)	72 (E,I)	45 (I)	61,000 (I,S)	61,150 (I)	ID	34	1,500	3,100	28,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	110 (n)	750	19	25,000 (S)	24,600	ID	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
ETHYLBENZENE	100-41-4	150 (c <sup>*</sup> )	74 (E,I)	18 (I)	170,000 (I,S)	169,000 (I)	43,000 (I)	8.5	360	710	22,000	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
HEXANE	110-54-3	4,400 (n)	8,600	NA	12,000 (S)	12,000	12,000 (S)	130	130 (GW)	130 (GW)	6,000 (GW)	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
ISOPROPYLBENZENE	98-82-8	1,400 (n)	2,300	28	56,000 (S)	56,000	29,000	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
M,P-XYLENE	1330-20-7	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2 U	<2 U	<2 U	<2 U	<2 U	<2 U
NAPHTHALENE (VOC)	91-20-3V	17 (c <sup>**</sup> )	1,500	11	31,000	31,000	NA	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	<5 U	<5 U
N-PROPYLBENZENE	103-65-1	2,000 (n)	230 (I)	ID	ID	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
O-XYLENE	95-47-6	580 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
SEC-BUTYLBENZENE	135-98-8	6,000 (n)	230	ID	ID	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	<1 U	<1 U
XYLENE - TOTAL	1330-20-7	580 (n)	280 (E,I)	49 (I)	190,000 (I,S)	186,000 (I)	70,000 (I)	140	6,000	12,000	110,000 (S)	ND	ND	ND	ND	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 7

## SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

### JULIO CONTRACTING/FORMER STANDARD OIL COMPANY

### JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for Groundwater.

-- = Not analyzed

bgs = Below ground surface

PCBs = Polychlorinated biphenyls

ft = Feet

VOC = Volatile organic compound

ug/l = micrograms per liter.

SVOC = Semi-volatile organic compound

#### Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLV = Hazardous substance is not likely to volatilize under most conditions.

(A) = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(E) = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information)

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation.

The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure

described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Michigan Department of Environment, Great Lakes, and Energy (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(L) = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(9) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 ug/L is linked to the generic residential soil direct contact criterion of 400 mg/kg. A higher concentration in the drinking water, up to the state action level of 15 ug/L, may be allowed as a site-specific remedy and still allow for drinking water use, under Section 20120a(2) and 20120b of the NREPA if soil concentrations are appropriately lower than 400 mg/kg. If a site-specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 ug/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase. Acceptable combinations of site-specific soil and drinking water concentrations are presented in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site (See R 299.49 Footnotes for generic cleanup criteria tables for additional information).

(M) = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(S) = Criterion defaults to the hazardous substance-specific water solubility limit.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

(GW) = The calculated value for a hazardous substance based upon shallow groundwater is considered protective when it is greater than the calculated value for groundwater.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

#### Laboratory Footnotes

J = The analyte was positively identified: the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 8  
SUMMARY OF ACM ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Sample Location	Field Sample ID	Sample Date	Asbestos	Note	Sample Description
JP-ACM-05	JP-ACM-05-102319	10/23/2019	50%	CHRYSTILE	Gasket material
JP-ACM-06	JP-ACM-06-102319	10/23/2019	40%	CHRYSTILE	Beige TSI
QMCP-ASBBLK26	QMCP-ASBBLK26A-092818	9/28/2018	30%	CHRYSTILE	Black and white pipe wrap
	QMCP-ASBBLK26B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Black and white pipe wrap
QMCP-ASBBLK27	QMCP-ASBBLK27A-092818	9/28/2018	60%	CHRYSTILE	Gasket material
	QMCP-ASBBLK27B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Gasket material
QMCP-ASBBLK28	QMCP-ASBBLK28A-092818	9/28/2018	70%	CHRYSTILE	Beige TSI
	QMCP-ASBBLK28B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Beige TSI
QMCP-ASBBLK29	QMCP-ASBBLK29A-092818	9/28/2018	50%	CHRYSTILE	Gasket
	QMCP-ASBBLK29B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Gasket
QMCP-ASBBLK30	QMCP-ASBBLK30A-092818	9/28/2018	ND		Red roofing
	QMCP-ASBBLK30B-092818	9/28/2018	ND		Red roofing
QMCP-ASBBLK31	QMCP-ASBBLK31A-092818	9/28/2018	ND		White roofing
	QMCP-ASBBLK31B-092818	9/28/2018	ND		White roofing
QMCP-ASBBLK32	QMCP-ASBBLK32A-092818	9/28/2018	ND		Green roofing
	QMCP-ASBBLK32B-092818	9/28/2018	ND		Green roofing
QMCP-ASBBLK33	QMCP-ASBBLK33A-092818	9/28/2018	ND		Black roofing
	QMCP-ASBBLK33B-092818	9/28/2018	ND		Black roofing
QMCP-ASBBLK34	QMCP-ASBBLK34A-092818	9/28/2018	ND		Insulation in doors
	QMCP-ASBBLK34B-092818	9/28/2018	ND		Insulation in doors
QMCP-ASBBLK35	QMCP-ASBBLK35A-092818	9/28/2018	40%	CHRYSTILE	Black corrugated material
	QMCP-ASBBLK35B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Black corrugated material
QMCP-ASBBLK36	QMCP-ASBBLK36A-092818	9/28/2018	ND		Rubber coated fabric on duct
	QMCP-ASBBLK36B-092818	9/28/2018	ND		Rubber coated fabric on duct
QMCP-ASBBLK37	QMCP-ASBBLK37A-092818	9/28/2018	ND		Heater insulation
	QMCP-ASBBLK37B-092818	9/28/2018	ND		Heater insulation
QMCP-ASBBLK38	QMCP-ASBBLK38A-092818	9/28/2018	ND		Insulation on tank
	QMCP-ASBBLK38B-092818	9/28/2018	ND		Insulation on tank
QMCP-ASBBLK39	QMCP-ASBBLK39A-092818	9/28/2018	5%	CHRYSTILE	Transite tile
	QMCP-ASBBLK39B-092818	9/28/2018	--	Not analyzed due to prior positive series.	Transite tile

ND = Not detected

TSI = Thermal System Insulation

-- = Not analyzed

LF = Linear Feet

SF = Square Feet

Results greater than the National Emissions Standard for Hazardous Air Pollutants (NESHAP) and EGLE Particulate Soil Inhalation Criteria of 1% are bolded and shaded.

Indicates sampled item/material has been removed from the site.

Indicates a portion of sampled material mixed with underlying soil/waste remains.

Evaluation based on EGLE/EPA Criteria at time of Project completion.

TABLE 9  
SUMMARY OF RPM, ABANDONED CONTAINER, AND WASTE ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-RPM05
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-RPM05	
Sample Date													9/28/2018	
Organics - PCBs (ug/kg)														
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	
Organics - SVOCs (ug/kg)														
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	85,000	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	240,000	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	200,000	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	530,000	
PHENANTHRENE	91-20-3S	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	250,000	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	510,000	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 9 SUMMARY OF RPM, ABANDONED CONTAINER, AND WASTE ANALYTICAL RESULTS JULIO SCRAP YARD & TOWER JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for nonresidential soil.

Samples described in this evaluation may actually refer to stamp sands or to other mining waste from historic mining and reclamation processes conducted in the area.

-- = Not analyzed

mg/kg = Milligrams per kilogram.

bgs = Below ground surface

ug/kg = Micrograms per kilogram

in = Inches

PCBs = Polychlorinated biphenyls

ft = Feet

SVOC = Semi-volatile organic compound

VOC = Volatile organic compound

## Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLL = Hazardous substance is not likely to leach under most soil conditions.

NLV = Hazardous substance is not likely to volatilize under most conditions.

(D) = Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).

(J) = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(Q) = Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

(T) = Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the published table if TSCA standards are not applicable.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

## Laboratory Footnotes

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB30		QMCP-SB31		QMCP-SB32		QMCP-SB33	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB-30 0-6in	QMCP-SB-30 6in-7ft	QMCP-SB-31 0-6in	QMCP-SB-31 6in-4ft	QMCP-SB32 0-6in	QMCP-SB32 6in-4ft	QMCP-SB33 0-6in	QMCP-SB33 6in-4ft	
Sample Date	9/8/2018												9/8/2018	9/8/2018	9/8/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018		
Sample Interval (ft bgs)	0-0.5 ft												0.5-7 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft		
Sample Description													SAND, Medium to coarse, gray, saturated at 7 feet	SAND, Medium to coarse, gray, saturated at 7 feet	SAND, Medium to coarse, gray, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 4.5 fee	SAND, Medium to coarse, gray, saturated at 4.5 fee	SAND, Medium to coarse, gray, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 4 feet	
Inorganics - Metals (mg/kg)																					
ALUMINIUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	50	8.4	14	2.3	1.1	5.9	3.2	1.7	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	61	17	2.1	0.3	<0.2 U	0.2	<0.2 U	<0.2 U	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	140	46	15	17	7.1	14	36	15	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	12,000	1,100	540	600 J	68	510	790	240	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	18,000	1,700	530	13	13	79	27	4.6	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	1,100	470	360	310	110	340	380	310	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	520	13	0.9	0.07	<0.05 U	0.09	0.08	<0.05 U	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	4.3	0.9	0.6	0.3	0.2	1	0.7	0.3	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	33,000	4,600	750	99	33	95	61	34	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--	--	
Asbestos (%)																					
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1300 U	<130 U	<1100 U	<1100 U	<110 U	<110 U	<550 U	<540 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<2500 U	250	3,500	3,600	<110 U	<110 U	<550 U	<540 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	250 J	3,500 J	3,600 J	ND	ND	ND	ND	

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB30		QMCP-SB31		QMCP-SB32		QMCP-SB33	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB-30 0-6in	QMCP-SB-30 6in-7ft	QMCP-SB-31 0-6in	QMCP-SB-31 6in-4ft	QMCP-SB32 0-6in	QMCP-SB32 6in-4ft	QMCP-SB33 0-6in	QMCP-SB33 6in-4ft
Sample Date													9/8/2018	9/8/2018	9/8/2018	9/8/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018
Sample Interval (ft bgs)													0-0.5 ft	0.5-7 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-4 ft
Sample Description													SAND, Medium to coarse, gray, saturated at 7 feet	SAND, Medium to coarse, gray, saturated at 7 feet	SAND, Medium to coarse, gray, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 4.5 fee	SAND, Medium to coarse, gray, saturated at 4.5 fee	SAND, Medium to coarse, gray, saturated at 4 feet	SAND, Medium to coarse, gray, saturated at 4 feet
Organics - SVOCs (ug/kg)																				
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<2900 U	<550 U	660	<540 U	<540 U	<540 U	<550 U	<540 U
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	<1200 U	<220 U	<220 U	<210 U	<220 U	<220 U	<220 U	<220 U
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<1200 U	<220 U	<220 U	<210 U	<220 U	<220 U	620 J	<220 U
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	<1200 U	<220 U	<220 U	<210 U	<220 U	<220 U	1,400 J	<220 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	3,600	680	2,200	<210 U	<220 U	<220 U	10,000 J	700
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	4,600	790	2,500	<430 U	<430 U	<430 U	13,000 J	670
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	8,900	2,100	5,300	<430 U	<430 U	<430 U	20,000 J	1,300
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	2,400 J	<440 UJ	1,000 J	<430 UJ	<430 U	<430 U	6,900 J	<430 U
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	2,600	590	1,600	<430 U	<430 U	<430 U	7,400 J	<430 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	4,900	1,100	2,300	<210 U	<220 U	220	9,300 J	710
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	<2400 U	<440 U	<430 U	<430 U	<430 U	<430 U	<4400 UJ	<430 U
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	7,600	1,700	3,800	<210 U	<220 U	380	22,000 J	1,500
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<1200 U	<220 U	<220 U	<210 U	<220 U	<220 U	<220 U	<220 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<2400 U	<440 U	1,100	<430 U	<430 U	<430 U	7,000 J	<430 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<1200 U	400	390	<210 U	<220 U	<220 U	<220 U	<220 U
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	4,300	2,000	1,900	<210 U	<220 U	320	4,400 J	700
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	7,400	1,800	3,300	<210 U	<220 U	350	18,000 J	1,800
Organics - VOCs (ug/kg)																				
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<360 U	<300 U	<320 U	<280 U	<300 UJ	<290 U	<320 U	<300 U
BENZENE	71-43-2	510,000 (c**)	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	<72 U	<59 U	<65 U	<56 U	<59 UJ	56 J	<63 U	<60 U
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<140 U	<120 U	<130 U	<110 U	<120 UJ	<110 U	<130 U	<120 U
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<360 U	<300 U	<320 U	<280 U	<300 UJ	<290 U	<320 U	<300 U
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<72 U	<59 U	<65 U	<56 U	<59 UJ	<57 U	<63 U	<60 U
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	160	<59 U	67	<56 U	<59 UJ	120	<63 U	<60 U
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	ND	ND	ND	ND	ND	ND	ND	ND
Organics - Pesticides (ug/kg)																				
TOTAL PESTICIDES	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB34		QMCP-SB35			QMCP-SB36	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB34 0-6in	QMCP-SB34 6in-4ft	QMCP-SB35 0-6in	QMCP-SB35 6in-6ft	QMCP-SB35 6in-6ft DUP	QMCP-SB36 0-6in	QMCP-SB36 6in-4ft
Sample Date													9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018
Sample Interval (ft bgs)													0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-6 ft	0.5-6 ft	0-0.5 ft	0.5-4 ft
Sample Description													TOPSOIL	CLAY, Brown to 1 ft: SAND, Medium to coarse, gray,	SAND, Medium to coarse, gray with wood debris	SAND, Medium to coarse, gray, saturated at 6 feet	SAND, Medium to coarse, gray, saturated at 6 feet	SAND, Medium to coarse, gray with wood debris, sat	SAND, Medium to coarse, gray with wood debris, sat
Inorganics - Metals (mg/kg)																			
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	2	1.4	1.5	<0.5 U	<0.5 U	2.9	3.1
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	<0.2 U	0.3	0.4	<0.2 U	<0.2 U	0.5	0.8
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	20	21	20	<20 U	<20 U	20	32
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	180	300	120	2,200	3,200	570	250
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	15	26	29	12	15	43	200
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2,90E+6 (B)	1,00E+6 (B,D)	NA	--	--	--	--	--	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	230	260	370	640	650	340	340
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	<0.06 U	<0.06 U	0.07	0.2	0.2	0.1	0.2
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	0.2	0.2	0.2	2.9	3.4	0.3	0.3
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	120	140	70	73	68	95	180
Inorganics - Cyanide (mg/kg)																			
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	--	--
Asbestos (%)																			
ASBESTOS-CHRYSTOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--
Organics - DRO/ORO (ug/kg)																			
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--
Organics - PCBs (ug/kg)																			
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<110 U	<110 U	<120 U	<110 U	<110 U	<130 U	<130 U
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<110 U	<110 U	<120 U	<110 U	<110 U	<130 U	<130 U
TOTAL PCBS	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	ND	ND	ND	ND	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB34		QMCP-SB35			QMCP-SB36	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL		QMCP-SB34 0-6in	QMCP-SB34 6in-4ft	QMCP-SB35 0-6in	QMCP-SB35 6in-6ft	QMCP-SB35 6in-6ft DUP	QMCP-SB36 0-6in	QMCP-SB36 6in-4ft
Sample Date														9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018
Sample Interval (ft bgs)														0-0.5 ft	0.5-4 ft	0-0.5 ft	0.5-6 ft	0.5-6 ft	0-0.5 ft	0.5-4 ft
Sample Description														TOPSOIL	CLAY, Brown to 1 ft: SAND, Medium to coarse, gray, SAND, Medium to coarse, gray, saturated at 6 feet	SAND, Medium to coarse, gray with wood debris	SAND, Medium to coarse, gray, saturated at 6 feet	SAND, Medium to coarse, gray, saturated at 6 feet	SAND, Medium to coarse, gray with wood debris, sat	SAND, Medium to coarse, gray with wood debris, sat
Organics - SVOCs (ug/kg)																				
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA		<550 U	<570 U	<590 U	<540 U	<550 U	<670 U	<3200 U
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA		<220 U	<230 U	<240 U	<220 U	<220 U	<270 U	<1300 U
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA		<220 U	<230 U	<240 U	<220 U	<220 U	<270 U	<1300 U
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA		<220 U	<230 U	<240 U	<220 U	<220 U	<270 U	<1300 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (O)	NA		<220 U	<230 U	<b>300</b>	<220 U	<220 U	<b>680</b>	<1300 U
BENZO(A)PYRENE	50-32-8	210,000 (c")	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA		<440 U	<450 U	<470 U	<430 U	<440 U	<b>680</b>	<2500 U
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA		<440 U	<450 U	<b>450 J</b>	<430 U	<440 U	<b>1,100</b>	<2500 U
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA		<440 U	<450 U	<470 U	<430 U	<440 U	<540 U	<2500 U
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA		<440 U	<450 U	<470 U	<430 U	<440 U	<540 U	<2500 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA		<220 U	<230 U	<b>310</b>	<220 U	<220 U	<b>710</b>	<1300 U
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA		<440 U	<450 U	<470 U	<430 U	<440 U	<540 U	<2500 U
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA		<220 U	<230 U	<b>630</b>	<220 U	<220 U	<b>1,500</b>	<b>1,600</b>
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA		<220 U	<230 U	<240 U	<220 U	<220 U	<270 U	<1300 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA		<440 U	<450 U	<470 U	<430 U	<440 U	<540 U	<2500 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c")	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA		<220 U	<230 U	<240 U	<220 U	<220 U	<270 U	<1300 U
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA		<220 U	<230 U	<b>290</b>	<220 U	<220 U	<b>580</b>	<1300 U
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA		<220 U	<230 U	<b>590</b>	<220 U	<220 U	<b>1,400</b>	<b>1,500</b>
Organics - VOCs (ug/kg)																				
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA		<340 U	<320 U	<350 U	<300 U	<290 UJ	<460 U	<390 U
BENZENE	71-43-2	510,000 (c")	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
ETHYLBENZENE	100-41-4	2.5E+6 (c"s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<130 U	<130 U	<140 U	<120 U	<120 UJ	<180 U	<150 U
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c")	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA		<340 U	<320 U	<350 U	<300 U	<290 UJ	<460 U	<390 U
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000		<67 U	<64 U	<69 U	<60 U	<58 UJ	<92 U	<77 U
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200		ND	ND	ND	ND	ND	ND	ND
Organics - Pesticides (ug/kg)																				
TOTAL PESTICIDES	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB90	SS-28 (MDEQ H RTP 2002)	QMCP-SS16	QMCP-SS17	QMCP-SS18	QMCP-SS19		QMCP-SS20
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB90-0-10"	SS 28	QMCP-SS-16-0-6in	QMCP-SS-17-0-6in	QMCP-SS-18-0-6in	QMCP-SS-19-0-6in	QMCP-SS-19-0-6in DUP2	QMCP-SS-20-0-6in	
Sample Date													8/19/2019	6/5/2002	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	
Sample Interval (ft bgs)													0-0.83 ft	--	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	
Sample Description													--	--	Dark brown fine SAND	Brown fine SAND, black staining	Brown fine SAND, organics	Brown fine SAND with gravel, organics, product on	Brown fine SAND with gravel, organics, product on	Brown fine SAND, some dark staining	
Inorganics - Metals (mg/kg)																					
ALUMINIUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	10,700	--	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	2 J	--	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	22	6	40	1.6	2.9	1.8	2.4	1.6	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	27.1	68	9.2	44	25	35	42	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	0.23	--	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	0.15	1.5	0.6	0.2	0.4	0.3	0.4	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	5,910	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	14.7	45	19	24	12	16	14	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	15.6	--	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	875 J	10,000	81	330	150	190	87	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	22,700	--	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	9400	65.4 J	240	51	32	70	76	61	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	8,330	--	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	392	720	95	230	190	220	180	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	0.08 J	0.3	<0.05 U	<0.06 U	0.2	0.2	<0.06 U	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	30.8	--	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	287 J	--	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	1.1 J	2.8	<0.2 U	<0.2 U	<0.2 U	<0.2 U	<0.2 U	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	<0.24 U	6.4	<0.1 U	0.3	0.2	0.3	0.1	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	707 J	--	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	0.76 R	--	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	30.1	--	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	48.7 J	510	77	36	290	200	120	
Inorganics - Cyanide (mg/kg)																					
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	0.05 J	<0.11 U	<0.11 U	<0.12 U	<0.13 U	<0.13 U	<0.12 U	
Asbestos (%)																					
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	0.25 <	
Organics - DRO/ORO (ug/kg)																					
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	<540000 U	--	77,000	2,100,000	40,000	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	9,900,000	--	480,000	23,000,000	240,000	
Organics - PCBs (ug/kg)																					
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<360 U	<110 U	--	--	--	--	<120 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	<360 U	<150 U	--	--	--	--	<120 U	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	--	ND	ND	--	--	--	--	ND	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SB90	SS-28 (MDEQ HRTF 2002)	QMCP-SS16	QMCP-SS17	QMCP-SS18	QMCP-SS19		QMCP-SS20
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SB90-0-10"	SS 28	QMCP-SS-16-0-6in	QMCP-SS-17-0-6in	QMCP-SS-18-0-6in	QMCP-SS-19-0-6in	QMCP-SS-19-0-6in DUP2	QMCP-SS-20-0-6in
Sample Date													8/19/2019	6/5/2002	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018
Sample Interval (ft bgs)													0-0.83 ft	--	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft	0-0.5 ft
Sample Description													--	--	Dark brown fine SAND	Brown fine SAND, black staining	Brown fine SAND, organics	Brown fine SAND with gravel, organics, product on	Brown fine SAND with gravel, organics, product on	Brown fine SAND, some dark staining
Organics - SVOCs (ug/kg)																				
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<3000 U	3,700	<540 U	<540 U	<580 U	<660 U	<640 U	<580 U
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	< 1200	<3600 U	<220 U	<220 U	<230 U	<260 U	<260 U	<230 U
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<1200 U	<3600 U	<220 U	<220 U	<230 U	<260 U	<260 U	<230 U
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	<1200 U	<3600 U	<220 U	<220 U	<230 U	<260 U	<260 U	<230 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (C)	NA	--	450 J	400	<220 U	240	<260 U	630	<230 U
BENZO(A)PYRENE	50-32-8	210,000 (c")	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (C)	8,000 (C)	NA	--	<3600 U	450	<4400 U	<470 U	<5300 U	600	<470 U
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (C)	NA	--	450 J	1,100	<4400 U	460 J	<5300 U	1,100	<470 U
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	--	<3600 U	<430 U	<4400 U	<470 U	<5300 U	<510 U	<470 U
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (C)	NA	--	420 J	<430 U	<4400 U	<470 U	<5300 U	<510 U	<470 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (C)	NA	3,500	870 J	490	<220 U	270	<260 U	800	<230 U
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (C)	NA	< 24000	<3600 U	<430 U	<4400 U	<470 U	<5300 U	<510 U	<470 U
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	5,100	780 J	730	<220 U	550	<260 U	1,500	340
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<1200 U	<3600 U	<220 U	<220 U	<230 U	290 J	<260 U	<230 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<24000 U	<3600 U	<430 U	<4400 U	<470 U	<5300 U	<510 U	<470 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c")	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<1200 U	2,200 J	<220 U	<220 U	<230 U	<260 U	<260 U	<230 U
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	3,100	2,200 J	410	<220 U	230	1,800 J	620	<230 U
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	9,400	690 J	660	<220 U	430	<260 U	1,000	320
Organics - VOCs (ug/kg)																				
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	650	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	--	160	--	--	--	--	--	--
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	1,900	--	--	--	--	--	--
BENZENE	71-43-2	510,000 (c")	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	--	91	--	--	--	--	--	--
ETHYLBENZENE	100-41-4	2.5E+6 (c's)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	170	--	--	--	--	--	--
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	95	--	--	--	--	--	--
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	1,000	--	--	--	--	--	--
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c")	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	1400	--	--	--	--	--	--
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	110	--	--	--	--	--	--
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	770	--	--	--	--	--	--
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	720	--	--	--	--	--	--
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	1770	--	--	--	--	--	--
Organics - Pesticides (ug/kg)																				
TOTAL PESTICIDES	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	ND	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS21	QMCP-SS35	QMCP-SS36	QMCP-SS39	QMCP-SS40	QMCP-SS53	QMCP-SS54	QMCP-SS55
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS-21-0-6in	QMCP-SS-35-0-6in	QMCP-SS-36-0-6in	QMCP-SS-39-0-6in	QMCP-SS-40-0-6in	QMCP-SS53-0-3in	QMCP-SS54-0-3in	QMCP-SS55-0-3in
Sample Date													9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/28/2018	9/28/2018	9/28/2018
Sample Interval (ft bgs)													0-0.5 ft					0-0.25 ft	0-0.25 ft	0-0.25 ft
Sample Description													Dark brown fine SAND	Fine to medium grained grey stamp SAND	Fine to medium coarse grained grey stamp SAND, org	Brown fine SAND, metal filings	Dark brown SAND, oily sheen on leaf litter and thr	Soil under electrical equipment	Soil under electrical pile	Stained soil, oil odor
Inorganics - Metals (mg/kg)																				
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	--	--	--
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	--	--	--
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	3.4	21	3.6	7.8	5.7	--	--	--
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	37	11	47	16	150	--	--	--
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	--	--	--
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	0.7	0.3	<0.2 U	0.2	2	--	--	--
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	35	140	34	24 J	28	--	--	--
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	--	--	--
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	2200	2500	580	110	490	--	--	--
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	--	--	--
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	190	110	46	59	480	--	--	--
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	--	--	--
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	650	1800	370	540 J	250	--	--	--
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	0.7	<0.06 U	0.08	<0.06 U	0.2	--	--	--
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	--	--	--
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	<0.2 U	3.3	<0.2 U	<0.2 U	<0.2 U	--	--	--
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	3.4	1.4	0.4	<0.1 U	0.4	--	--	--
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	--	--	--
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	--	--	--
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	170	81	58	34	590	--	--	--
Inorganics - Cyanide (mg/kg)																				
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	<0.11 U	<0.11 U	<0.11 U	<0.11 U	<0.12 U	--	--	--
Asbestos (%)																				
ASBESTOS-CHRYSOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	--	--	--
Organics - DRO/ORO (ug/kg)																				
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	<310000 U	--	--	--
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	4,800,000	--	--	--
Organics - PCBs (ug/kg)																				
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<110 U	--	<110 U	<110 U	<120 UJ	3,400	<570 U	<100 U
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<110 U	--	<110 U	<110 U	<380 UJ	<830 U	<570 U	<100 U
TOTAL PCBS	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	--	ND	ND	ND	3,400 J	ND	ND

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>									EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS21	QMCP-SS35	QMCP-SS36	QMCP-SS39	QMCP-SS40	QMCP-SS53	QMCP-SS54	QMCP-SS55
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS-21-0-6in	QMCP-SS-35-0-6in	QMCP-SS-36-0-6in	QMCP-SS-39-0-6in	QMCP-SS-40-0-6in	QMCP-SS53-0-3in	QMCP-SS54-0-3in	QMCP-SS55-0-3in
Sample Date													9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/28/2018	9/28/2018	9/28/2018
Sample Interval (ft bgs)													0-0.5 ft					0-0.25 ft	0-0.25 ft	0-0.25 ft
Sample Description													Dark brown fine SAND	Fine to medium grained grey stamp SAND	Fine to medium coarse grained grey stamp SAND, org	Brown fine SAND, metal filings	Dark brown SAND, oily sheen on leaf litter and thr	Soil under electrical equipment	Soil under electrical pile	Stained soil, oil odor
Organics - SVOCs (ug/kg)																				
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<550 U	<560 U	<570 U	<560 U	<3100 U	<4100 U	670	<510 U
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	<220 U	<220 U	<230 U	<220 U	<1200 U	<1700 U	<230 U	<200 U
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	<220 U	<220 U	270	<220 U	<1200 U	<1700 U	230	<200 U
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	<220 U	<220 U	<230 U	<220 U	<1200 U	<1700 U	<230 U	<200 U
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	<220 U	<220 U	1,900	<220 U	<1200 U	<1700 U	540	<2000 U
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	<440 U	<450 U	1,900	<450 U	<24000 U	<3300 U	560	<4100 U
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	460	<450 U	3,400	<450 U	<24000 U	<3300 U	1,100	<4100 U
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	<440 U	<450 U	1,300	<450 U	<24000 U	<3300 U	<460 U	<4100 U
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	<440 U	<450 U	940	<450 U	<24000 U	<3300 U	<460 U	<4100 U
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	240	<220 U	1,800	<220 U	<1200 U	<1700 U	580	<2000 U
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	<440 U	<450 U	<460 U	<450 U	<24000 U	<3300 U	<460 U	<4100 U
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	400	<220 U	2,200	320	<1200 U	<1700 U	990	430
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	<220 U	<220 U	<230 U	<220 U	<1200 U	<1700 U	<230 U	<2000 U
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	<440 U	<450 U	1,300	<450 U	<24000 U	<3300 U	<460 U	<4100 U
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	<220 U	<220 U	<230 U	<220 U	<1200 U	<1700 U	810	<200 U
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	<220 U	<220 U	340	<220 U	<1200 U	<1700 U	770	240
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	370	<220 U	2,100	280	<1200 U	<1700 U	870	<2000 U
Organics - VOCs (ug/kg)																				
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	--	--
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	--	--	--	--	--	--	--	--
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	--	--
BENZENE	71-43-2	510,000 (c**)	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	--	--	--	--	--	--	--	--
ETHYLBENZENE	100-41-4	2.5E+6 (c's)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	--	--
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	--	--
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	--	--
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	--	--
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	--	--
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	--	--
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	--	--
Organics - Pesticides (ug/kg)																				
TOTAL PESTICIDES	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS185	QMCP-SS186	QMCP-SS197	QMCP-SS199	QMCP-SS213
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS 185-0-3"	QMCP-SS 186-0-3"	QMCP-SS 197-0-3"	QMCP-SS 199-0-3"	QMCP-SS 213-0-3"	
Sample Date													8/19/2019	8/19/2019	8/19/2019	8/19/2019	8/20/2019	
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	
Sample Description													oily	--	--	--	--	
Inorganics - Metals (mg/kg)																		
ALUMINUM	7429-90-5	3.40E+6 (nm)	NA	NA	6,900 (B)	NLV	NLV	NLV	NLV	ID	370,000 (B,DD)	NA	--	--	--	--	--	
ANTIMONY	7440-36-0	1,400 (n)	1.2 (X)	NA	4.3	NLV	NLV	NLV	NLV	5,900	670	NA	--	--	--	--	--	
ARSENIC	7440-38-2	300 (c**R)	4.6	NA	4.6	NLV	NLV	NLV	NLV	910	37	NA	5.4	37	--	--	--	
BARIUM	7440-39-3	650,000 (nm)	130 (B,G)	NA	1,300 (B)	NLV	NLV	NLV	NLV	150,000 (B)	130,000 (B)	NA	--	--	--	--	--	
BERYLLIUM	7440-41-7	6,900 (n)	24 (G)	NA	51	NLV	NLV	NLV	NLV	590	1,600	NA	--	--	--	--	--	
CADMIUM	7440-43-9	2,900 (n)	1.6 (B,G,X)	NA	6 (B)	NLV	NLV	NLV	NLV	2,200 (B)	2,100 (B)	NA	--	--	--	--	--	
CALCIUM	7440-70-2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	1.20E+6 (B,H,G,X)	NA	1.00E+6 (B,H,D)	NLV	NLV	NLV	NLV	150,000 (B,H)	1.00E+6 (B,H,D)	NA	--	--	--	--	--	
COBALT	7440-48-4	1,000 (n)	2	NA	2	NLV	NLV	NLV	NLV	5,900	9,000	NA	--	--	--	--	--	
COPPER	7440-50-8	140,000 (nm)	32 (B,G)	NA	5,800 (B)	NLV	NLV	NLV	NLV	59,000 (B)	73,000 (B)	NA	--	--	--	--	--	
IRON	7439-89-6	2.50e+6 (nm)	NA	NA	12,000 (B)	NLV	NLV	NLV	NLV	ID	580,000 (B)	NA	--	--	--	--	--	
LEAD	7439-92-1	800 (G)	2,500 (B,G,X)	NA	700 (B)	NLV	NLV	NLV	NLV	44,000 (B)	900 (B,DD)	NA	220	580	--	--	--	
MAGNESIUM	7439-95-4	NA	NA	NA	22,000 (B)	NLV	NLV	NLV	NLV	2.90E+6 (B)	1.00E+6 (B,D)	NA	--	--	--	--	--	
MANGANESE	7439-96-5	77,000 (n)	440 (B,G,X)	NA	440 (B)	NLV	NLV	NLV	NLV	1,500 (B)	90,000 (B)	NA	--	--	--	--	--	
MERCURY	7439-97-6	140 (ns)	0.12 (B,Z)	NA	1.7 (B,Z)	89 (B,Z)	62 (B,Z)	62 (B,Z)	62 (B,Z)	8,800 (B,Z)	580 (B,Z)	0.00012	--	--	--	--	--	
NICKEL	7440-02-0	67,000 (n)	29 (B,G)	NA	100 (B)	NLV	NLV	NLV	NLV	16,000 (B)	150,000 (B)	NA	--	--	--	--	--	
POTASSIUM	7440-09-7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	
SELENIUM	7782-49-2	18,000 (n)	0.41 (B)	NA	4 (B)	NLV	NLV	NLV	NLV	59,000 (B)	9,600 (B)	NA	--	--	--	--	--	
SILVER	7440-22-4	18,000 (n)	1 (B)	NA	13 (B)	NLV	NLV	NLV	NLV	2,900 (B)	9,000 (B)	NA	--	--	--	--	--	
SODIUM	7440-23-5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	
THALLIUM	7440-28-0	35 (n)	1.4 (B,X)	NA	2.3 (B)	NLV	NLV	NLV	NLV	5,900 (B)	130 (B)	NA	--	--	--	--	--	
VANADIUM	7440-62-2	17,000 (n)	430	NA	990	NLV	NLV	NLV	NLV	ID	5,500 (DD)	NA	--	--	--	--	--	
ZINC	7440-66-6	1.10E+6 (nm)	62 (B,G)	NA	5,000 (B)	NLV	NLV	NLV	NLV	ID	630,000 (B)	NA	--	--	--	--	--	
Inorganics - Cyanide (mg/kg)																		
CYANIDE	57-12-5	440 (n)	0.1 (P,R)	NA	4 (P,R)	NLV	NLV	NLV	NLV	250 (P,R)	250 (P,R)	NA	--	--	--	--	--	
Asbestos (%)																		
ASBESTOS-CHRYSTOTILE	ASB-C	NA	NA	NA	NA	NA	NA	NA	NA	1.0 (BB)	NA	NA	--	--	--	--	--	
Organics - DRO/ORO (ug/kg)																		
DIESEL RANGE ORGANICS (C10-C20)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	
OIL RANGE ORGANICS (C20-C34)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	
Organics - PCBs (ug/kg)																		
AROCLOR-1248	12672-29-6	94,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1000 U	<13000 U	<110 U	<1400 U	<1400 U	
AROCLOR-1260	11096-82-5	99,000 (c)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1000 U	120,000	<110 U	510 J	910 J	
TOTAL PCBs	1336-36-6	NA	NLL	NA	NLL	1.60E+7 (J,T)	810,000 (J,T)	2.80E+7 (J,T)	2.80E+7 (J,T)	6.50E+6 (J,T)	1,000 (T)	NA	ND	120,000	ND	510 J	910 J	

Note: Analytical and Criteria Footnotes are included on the last page of the table.



TABLE 10  
SUMMARY OF SOIL ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>										EGLE Interim Action Screening Level <sup>c</sup>	QMCP-SS185	QMCP-SS186	QMCP-SS197	QMCP-SS199	QMCP-SS213	
Field Sample ID		Industrial Soil	Groundwater Surface Water Interface Protection Criteria	Soil Saturation	Nonresidential Drinking Water Protection Criteria	Nonresidential Soil Volatilization to Indoor Air Inhalation Criteria	Nonresidential Infinite Source VSIC	Nonresidential Finite VSIC - 5 meter	Nonresidential Finite VSIC - 2 meter	Nonresidential Particulate Soil Inhalation Criteria	Nonresidential Direct Contact Criteria	Soil Nonresidential RIASL	QMCP-SS 185-0-3"	QMCP-SS 186-0-3"	QMCP-SS 197-0-3"	QMCP-SS 199-0-3"	QMCP-SS 213-0-3"		
Sample Date													8/19/2019	8/19/2019	8/19/2019	8/19/2019	8/20/2019		
Sample Interval (ft bgs)													0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft	0-0.25 ft		
Sample Description													oily	--	--	--	--	--	
Organics - SVOCs (ug/kg)																			
2-METHYLNAPHTHALENE (SVOC)	91-57-6S	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	<260 U	44,000	--	--	--	--	
ACENAPHTHENE	83-32-9	1.40E+8 (nm)	8,700	NA	880,000	3.50E+08	9.70E+07	9.70E+07	9.70E+07	6.20E+09	1.30E+08	NA	180	6,900	--	--	--	--	
ACENAPHTHYLENE	208-96-8	NA	ID	NA	17,000	3.00E+06	2.70E+06	2.70E+06	2.70E+06	1.00E+09	5.20E+06	NA	170	<3300 U	--	--	--	--	
ANTHRACENE	120-12-7	6.80E+8 (nm)	ID	NA	41,000	1.00E+9 (D)	1.60E+09	1.60E+09	1.60E+09	2.90E+10	7.30E+08	NA	920	7,600	--	--	--	--	
BENZO(A)ANTHRACENE	56-55-3	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	80,000 (Q)	NA	2,700 J	<3300 U	--	--	--	--	
BENZO(A)PYRENE	50-32-8	210,000 (c**)	NLL	NA	NLL	NLV	NLV	NLV	NLV	1.90E+6 (Q)	8,000 (Q)	NA	2,400 J	<6600 U	--	--	--	--	
BENZO(B)FLUORANTHENE	205-99-2	2.10E+6 (c)	NLL	NA	NLL	ID	ID	ID	ID	ID	80,000 (Q)	NA	3,900 J	<6600 U	--	--	--	--	
BENZO(G,H,I)PERYLENE	191-24-2	NA	NLL	NA	NLL	NLV	NLV	NLV	NLV	350,000,000	7.00E+06	NA	990	<6600 U	--	--	--	--	
BENZO(K)FLUORANTHENE	207-08-9	2.10E+7 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	800,000 (Q)	NA	1,300	<6600 U	--	--	--	--	
CHRYSENE	218-01-9	2.10E+8 (cm)	NLL	NA	NLL	ID	ID	ID	ID	ID	8.00E+6 (Q)	NA	2700 J	<3300 U	--	--	--	--	
DIBENZO(A,H)ANTHRACENE	53-70-3	210,000 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	ID	8,000 (Q)	NA	320	<6600 U	--	--	--	--	
FLUORANTHENE	206-44-0	9.00E+7 (n)	5,500	NA	730,000	1.00E+9 (D)	8.90E+08	8.80E+08	8.80E+08	4.10E+09	1.30E+08	NA	6,600 J	3,600	--	--	--	--	
FLUORENE	86-73-7	9.00E+7 (n)	5,300	NA	890,000	1.00E+9 (D)	1.50E+08	1.50E+08	1.50E+08	4.10E+09	8.70E+07	NA	240	11,000	--	--	--	--	
INDENO(1,2,3-CD)PYRENE	193-39-5	2.10E+6 (c)	NLL	NA	NLL	NLV	NLV	NLV	NLV	NLV	80,000	NA	920	<6600 U	--	--	--	--	
NAPHTHALENE (SVOC)	91-20-3S	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	150	<3300 U	--	--	--	--	
PHENANTHRENE	85-01-8	NA	2,100	NA	160,000	5.10E+06	190,000	190,000	190,000	2.90E+06	5.20E+06	NA	4,500 J	44,000	--	--	--	--	
PYRENE	129-00-0	6.80E+7 (n)	ID	NA	480,000	1.00E+9 (D)	7.80E+08	7.80E+08	7.80E+08	2.90E+09	8.40E+07	NA	5,300 J	8,100	--	--	--	--	
Organics - VOCs (ug/kg)																			
1,2,4-TRIMETHYLBENZENE	95-63-6	5.30E+6 (ns)	570 (I)	110,000 (I)	2,100 (I)	8.00E+6 (I,C)	2.50E+7 (I)	6.00E+9 (I)	6.00E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	650	--	--	--	--	--	--	
1,3,5-TRIMETHYLBENZENE	108-67-8	4.50E+6 (ns)	1,100 (I)	94,000 (I)	1,800 (I)	4.80E+6 (I,C)	1.90E+7 (I)	4.60E+9 (I)	4.60E+9 (I)	3.60E+10 (I)	1.00E+9 (I,C)	450	--	--	--	--	--	--	
2-METHYLNAPHTHALENE (VOC)	91-57-6V	9.00E+6 (n)	4,200	NA	170,000	4.90E+06	1.80E+06	1.80E+06	1.80E+06	2.90E+08	2.60E+07	NA	--	--	--	--	--	--	
BENZENE	71-43-2	510,000 (c**)	240 (I,X)	400,000 (I)	100 (I)	8,400 (I)	45,000 (I)	99,000 (I)	230,000 (I)	4.70E+9 (I)	840,000 (I,C)	12 (M)	--	--	--	--	--	--	
ETHYLBENZENE	100-41-4	2.5E+6 (c*s)	360 (I)	140,000 (I)	1,500 (I)	460,000 (I,C)	2.40E+6 (I)	3.10E+6 (I)	6.50E+6 (I)	1.30E+10 (I)	7.1E+7 (I,C)	86	--	--	--	--	--	--	
HEXANE	110-54-3	7.60E+7 (ns)	NA	44,000	510,000 (C)	950,000 (C)	3.50E+06	3.50E+06	6.40E+06	5.90E+09	3.0E+8 (C)	110	--	--	--	--	--	--	
ISOPROPYLBENZENE	98-82-8	3.00E+7 (ns)	3,200	390,000	260,000	730,000 (C)	2.00E+06	2.00E+06	3.00E+06	2.60E+09	8.0E+7 (C)	NA	--	--	--	--	--	--	
M,P-XYLENE	1330-20-7	7.50E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	
NAPHTHALENE (VOC)	91-20-3V	1.70E+6 (c**)	730	NA	100,000	470,000	350,000	350,000	350,000	8.80E+07	5.20E+07	NA	--	--	--	--	--	--	
N-PROPYLBENZENE	103-65-1	7.30E+7 (ns)	ID	1.00E+7 (I)	4,600 (I)	ID	ID	ID	ID	5.90E+8 (I)	8.00E+6 (I)	NA	--	--	--	--	--	--	
O-XYLENE	95-47-6	8.40E+6 (ns)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	
TOLUENE	108-88-3	1.40E+8 (nms)	5,400 (I)	250,000 (I)	16,000 (I)	610,000 (I,C)	3.30E+7 (I)	3.60E+7 (I)	3.60E+7 (I)	1.20E+10 (I)	1.60E+8 (I,C)	16,000	--	--	--	--	--	--	
XYLENE - TOTAL	1330-20-7	7.50E+6 (ns)	980 (I)	150,000 (I)	5,600 (I)	1.20E+7 (I,C)	5.40E+7 (I)	6.50E+7 (I)	1.30E+8 (I)	1.30E+11 (I)	1.0E+9 (C,D)	1,200	--	--	--	--	--	--	
Organics - Pesticides (ug/kg)																			
TOTAL PESTICIDES	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 10 SUMMARY OF SOIL ANALYTICAL RESULTS JULIO SCRAP YARD & TOWER JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for nonresidential soil.

Samples described in this evaluation may actually refer to stamp sands or to other mining waste from historic mining and reclamation processes conducted in the area.

-- = Not analyzed	mg/kg = Milligrams per kilogram.
bgs = Below ground surface	ug/kg = Micrograms per kilogram
in = Inches	PCBs = Polychlorinated biphenyls
ft = Feet	SVOC = Semi-volatile organic compound
	VOC = Volatile organic compound

## Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLL = Hazardous substance is not likely to leach under most soil conditions.

NLV = Hazardous substance is not likely to volatilize under most conditions.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(BB) = The state drinking water standard for asbestos (fibers greater than 10 micrometers in length) is in units of a million fibers per liter of water (MFL). Soil concentrations of asbestos are determined by polarized light microscopy.

(C) = The criterion developed under R 299.20 to R 299.26 exceeds the chemical-specific soil saturation screening level (Csat). The person proposing or implementing response activity shall document whether additional response activity is required to control free-phase liquids or NAPL to protect against risks associated with free-phase liquids by using methods appropriate for the free-phase liquids present. Development of a site-specific Csat or methods presented in R 299.22, R 299.24(5), and R 299.26(8) may be conducted for the relevant exposure pathways.

(D) = Calculated criterion exceeds 100 percent, hence it is reduced to 100 percent or 1.0E+9 parts per billion (ppb).

(DD) = Hazardous substance causes developmental effects. Residential direct contact criteria are protective of both prenatal and postnatal exposure. Nonresidential direct contact criteria are protective for a pregnant adult receptor.

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Department of Environmental Quality (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(J) = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(P) = Amenable cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with all groundwater criteria. Total cyanide methods or method OIA-1677 shall be used to quantify cyanide concentrations for compliance with soil criteria. Nonresidential direct contact criteria may not be protective of the potential for release of hydrogen cyanide gas. Additional land or resource use restrictions may be necessary to protect for the acute inhalation concerns associated with hydrogen cyanide gas.

(Q) = Criteria for carcinogenic polycyclic aromatic hydrocarbons were developed using relative potential potencies to benzo(a)pyrene.

(R) = Hazardous substance may exhibit the characteristic of reactivity as defined in 40 C.F.R. §261.23 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(T) = Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the published table if TSCA standards are not applicable.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

## Laboratory Footnotes

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 11  
SUMMARY OF GROUNDWATER ANALYTICAL RESULTS  
JULIO SCRAP YARD & TOWER  
JULIO PROPERTIES - RS

StationName	CAS Number	EPA RML <sup>a</sup>	EGLE Part 201 Generic Cleanup Criteria <sup>b</sup>					EGLE Volatilization to Indoor Air Interim Action Screening Levels <sup>c</sup>				QMCP-GW30	QMCP-GW31	QMCP-GW32	QMCP-GW33	QMCP-GW34	QMCP-GW35	QMCP-GW35	QMCP-GW36
Field Sample ID		Residential Tapwater	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Nonresidential Groundwater Volatilization to Indoor Air Inhalation Criteria	Water Solubility	Flammability and Explosivity Screening Level	Shallow Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL	Groundwater Nonresidential RIASL <sub>12</sub>	Groundwater Nonresidential TSRIASL <sub>12</sub>	QMCP-GW 30 7-11ft	QMCP-GW 31 6-10ft	QMCP-GW32 5-9	QMCP-GW33 5-9	QMCP-GW34 5-9	QMCP-GW35 6-10	QMCP-GW35 6-10 DUP	QMCP-GW36 5-9
Sample Date												9/8/2018	9/8/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018	9/9/2018
Sample Interval												7-11 ft	6-10 ft	5-9 ft	5-9 ft	5-9 ft	6-10 ft	6-10 ft	5-9 ft
Inorganics - Metals (ug/l)																			
ARSENIC	7440-38-2	5.2 (c**)	10 (A)	10	NLV	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	1.3	1.8	1.2	<1 U
CADMIUM	7440-43-9	28 (n)	5.0 (B,A)	1.3 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	<0.2 U	<0.2 U	0.3	<0.2 U	<0.2 U	0.3	0.2	<0.2 U
CHROMIUM	7440-47-3	NA	100 (B,H,A)	40 (B,H,G,X)	NLV	NA	ID	NA	NA	NA	NA	5.9	1.6	31	1.4	26	31	20	3.9
COPPER	7440-50-8	2,400 (n)	1,000 (E)	4.7 (B,G)	NLV	NA	ID	NA	NA	NA	NA	46	15	4,300	290	200	15,000	9,500	1,200
LEAD	7439-92-1	15 (G)	4.0 (B,L)	14 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	2.2	<1 U	3.8	<1 U	1.2	12	7.3	9.7
MANGANESE	7439-96-5	1,300 (n)	50 (B,E)	1,000 (B,G,X)	NLV	NA	ID	NA	NA	NA	NA	510	230	960	400	820	1,600	1,300	1,100
MERCURY	7439-97-6	1.9 (n)	2.0 (A,B,Z)	0.0013 (B,Z)	56	56	ID	0.14	7.2	14	60	<0.2 U	<0.2 U	1.1	<0.2 U	<0.2 U	3.2	2.2	0.7
SILVER	7440-22-4	280 (n)	98 (B)	0.2 (B,M)	NLV	NA	ID	NA	NA	NA	NA	<0.2 U	<0.2 U	7.9	0.6	<0.2 U	20	16	2.3
ZINC	7440-66-6	18,000 (n)	5,000 (B,E)	63 (B,G)	NLV	NA	ID	NA	NA	NA	NA	15	11	77	<5 U	52	90	59	25
Organics - PCBs as Aroclors (ug/l)																			
TOTAL PCBs	1336-36-6	NA	0.5	0.2	45	44.7	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Organics - SVOCs (ug/l)																			
TOTAL SVOCs	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Organics - VOCs (ug/l)																			
CYCLOHEXANE	110-82-7	38,000 (n)	NA	NA	NA	NA	NA	NA	NA	NA	NA	<5 U	<5 U	<5 U	<5 U	6.2	<5 U	<5 U	<5 U
ETHYLBENZENE	100-41-4	150 (c*)	74 (E,I)	18 (I)	170,000 (I,S)	169,000 (I)	43,000 (I)	8.5	360	710	22,000	<1 U	<1 U	<1 U	<1 U	2.7	<1 U	<1 U	<1 U
HEXANE	110-54-3	4,400 (n)	8,600	NA	12,000 (S)	12,000	12,000 (S)	130	130 (GW)	130 (GW)	6,000 (GW)	<1 U	<1 U	<1 U	<1 U	2.3	<1 U	<1 U	<1 U
ISOPROPYLBENZENE	98-82-8	1,400 (n)	2,300	28	56,000 (S)	56,000	29,000	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	1.9	<1 U	<1 U	<1 U
N-PROPYLBENZENE	103-65-1	2,000 (n)	230 (I)	ID	ID	NA	ID	NA	NA	NA	NA	<1 U	<1 U	<1 U	<1 U	4.5	<1 U	<1 U	<1 U

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 11

## SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

### JULIO SCRAP YARD & TOWER

### JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Removal Management Levels for Chemicals (RMLs), dated November 2019

<sup>b</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>c</sup>EGLE Media-Specific Volatilization to Indoor Air Interim Action Screening Levels, dated August, 2017.

EPA RML using 10-4 risk level for carcinogens or a Hazard Quotient (HQ) of 3 for non-carcinogens

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA RML.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Volatilization to Indoor Air Interim Action Screening Levels for Groundwater.

-- = Not analyzed

bgs = Below ground surface

ft = Feet

ug/l = micrograms per liter.

PCBs = Polychlorinated biphenyls

VOC = Volatile organic compound

SVOC = Semi-volatile organic compound

#### Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLV = Hazardous substance is not likely to volatilize under most conditions.

(A) = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(E) = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information)

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO3/L, use 400 mg CaCO3/L for the FCV calculation.

The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Michigan Department of Environment, Great Lakes, and Energy (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(I) = Hazardous substance may exhibit the characteristic of ignitability as defined in 40 C.F.R. §261.21 (revised as of July 1, 2001), which is adopted by reference in these rules and is available for inspection at the EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulation may be purchased, at a cost as of the time of adoption of these rules of \$45, from the Superintendent of documents, Government Printing Office, Washington, DC 20401 (stock number 869-044-00155-1), or from EGLE, Remediation and Redevelopment Division (RRD), 525 West Allegan Street, Lansing, Michigan 48933, at cost.

(L) = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(9) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 ug/L is linked to the generic residential soil direct contact criterion of 400 mg/kg. A higher concentration in the drinking water, up to the state action level of 15 ug/L, may be allowed as a site-specific remedy and still allow for drinking water use, under Section 20120a(2) and 20120b of the NREPA if soil concentrations are appropriately lower than 400 mg/kg. If a site-specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 ug/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase. Acceptable combinations of site-specific soil and drinking water concentrations are presented in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site (See R 299.49 Footnotes for generic cleanup criteria tables for additional information).

(M) = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(S) = Criterion defaults to the hazardous substance-specific water solubility limit.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

(Z) = Mercury is typically measured as total mercury. The generic cleanup criteria, however, are based on data for different species of mercury. Specifically, data for elemental mercury, chemical abstract service (CAS) number 7439976, serve as the basis for the soil volatilization to indoor air criteria, groundwater volatilization to indoor air, and soil inhalation criteria. Data for methyl mercury, CAS number 22967926, serve as the basis for the GSI criterion; and data for mercuric chloride, CAS number 7487947, serve as the basis for the drinking water, groundwater contact, soil direct contact, and the groundwater protection criteria. Comparison to criteria shall be based on species-specific analytical data only if sufficient facility characterization has been conducted to rule out the presence of other species of mercury.

(GW) = The calculated value for a hazardous substance based upon shallow groundwater is considered protective when it is greater than the calculated value for groundwater.

RML Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied; c = cancer; n = noncancer;

\* = where: n SL < 100X c SL; \*\* = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

#### Laboratory Footnotes

J = The analyte was positively identified: the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected

TABLE 12  
SUMMARY OF SEDIMENT, PORE WATER, AND SUBMERGED DRUM CONTENTS ANALYTICAL RESULTS  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA Region IV Ecological Screening Values <sup>a</sup>			EPA Sediment Quality Guidelines <sup>b</sup>		EGLE Part 201 Groundwater Generic Cleanup Criteria <sup>c</sup>			EGLE Rule 57 Water Quality Values <sup>d</sup>	QMCP-SD01		QMCP-SD02			QMCP-SD03	QMCP-SD04	
Sample ID		Sediment - Freshwater Ecological Screening Value	Surface Water - Freshwater Ecological Screening Value - Chronic	Surface Water - Freshwater Ecological Screening Value - Acute	Threshold Effect Concentration (TEC)	Probable Effect Concentration (PEC)	Residential Drinking Water Criteria	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Human Noncancer Value Drink	QMCP-SD01-0-6"	QMCP-SD01-6-26"	QMCP-SD02-0-12"	QMCP-SD02-0-12" FD	QMCP-SD02-12-21.5"	QMCP-SD 03-0-6"	QMCP-SD 04-0-4.5"	QMCP-SD 04-4.5-9"
Sample Interval (bgs)											0 - 0.5 ft	0.5 - 2.2 ft	0 - 1 ft	0 - 1 ft	1 - 1.79 ft	0 - 0.5 ft	0 - 0.375 ft	0.375 - 0.75 ft
Sample Date											9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018
Sample Description											FINES, Dark brown, loose, very soft	SAND, Brown, fine grain, well sorted- SAND, Brown fine grain, well sorted, roots	SAND with GRAVEL, Dark brown-black, coarse grain, some organics (wood and roots), oily odor	SAND with GRAVEL, Dark brown-black, coarse grain, some organics (wood and roots), oily odor	FINES, Soft, few sands and gravel, wet	GRAVELLY SAND, Brownish purple, coarse grain sand, angular gravel	FINES, brown, trace gravel, very soft, oily sheen	SAND and FINES, brown, coarse grain, soft, loose
Inorganics - Metals (mg/kg)																		
ARSENIC	7440-38-2	9.8	NA	NA	9.79	33.0	NA	NA	NA	NA	3	0.6	6.8	8	20	2.7	8.2	11
CADMIUM	7440-43-9	1	NA	NA	0.99	4.98	NA	NA	NA	NA	<0.2 U	<0.2 U	0.2	0.3	0.9	<0.2 U	0.4	0.4
CHROMIUM	7440-47-3	43.4	NA	NA	43.4	111	NA	NA	NA	NA	20	2.3	20	20	41	98	48	56
COPPER	7440-50-8	31.6	NA	NA	31.6	149	NA	NA	NA	NA	220	4.4	690	680	2,100	1,200	1,100	1,100
LEAD	7439-92-1	35.8	NA	NA	35.8	128	NA	NA	NA	NA	11	<1.0 U	78	82	180	17	52	67
MANGANESE	7439-96-5	460	NA	NA	NA	NA	NA	NA	NA	NA	210	35	890	750	660	690	490	560
MERCURY	7439-97-6	0.18	NA	NA	0.18	1.06	NA	NA	NA	NA	0.09	<0.06 U	0.3	0.1	0.4	0.1	0.5	0.6
SILVER	7440-22-4	1	NA	NA	NA	NA	NA	NA	NA	NA	0.4	<0.1 U	1.2	1.3	8.5	3.5	2.5	2.2
ZINC	7440-66-6	121	NA	NA	121	459	NA	NA	NA	NA	34	3.6	110	99	250	94	99	130
Inorganics - Metals (ug/l)																		
ARSENIC	7440-38-2	NA	150 ^	340 ^	NA	NA	10 (A)	10 (A)	10	10 #	--	--	--	--	--	--	--	--
BARIUM	7440-39-3	NA	220	2,000	NA	NA	2,000 (A,B)	2,000 (A,B)	200 (B,G)	1,900	--	--	--	--	--	--	--	--
CHROMIUM	7440-47-3	NA	NA	NA	NA	NA	100 (A,B,H)	100 (A,B,H)	40 (B,G,H,X)	120	--	--	--	--	--	--	--	--
COPPER	7440-50-8	NA	5.16 ^ *	7.3 ^ *	NA	NA	1,000 (B,E)	1,000 (B,E)	4.7 (B,G)	470	--	--	--	--	--	--	--	--
LEAD	7439-92-1	NA	1.32 ^ *	33.8 ^ *	NA	NA	4.0 (B,L)	4.0 (B,L)	14 (B,G,X)	14	--	--	--	--	--	--	--	--
MANGANESE	7439-96-5	NA	93	1,680	NA	NA	50 (B,E)	50 (B,E)	1,000 (B,G,X)	1,300	--	--	--	--	--	--	--	--
SILVER	7440-22-4	NA	^ *	1.15 ^ *	NA	NA	34 (B)	98 (B)	0.2 (B,M)	130	--	--	--	--	--	--	--	--
ZINC	7440-66-6	NA	67 ^ *	67 ^ *	NA	NA	2,400 (B)	5,000 (B,E)	63 (B,G)	3,300	--	--	--	--	--	--	--	--
Organics - PCBs (ug/kg)																		
TOTAL PCBs	1336-36-3	59.8	NA	NA	59.8	676	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Organics - PCBs (ug/l)																		
TOTAL PCBs	1336-36-6	NA	0.014	0.014	NA	NA	0.5 (A,J,T)	0.5 (A,J,T)	0.2 (J,M,T)	NLS	--	--	--	--	--	--	--	--
Organics - SVOCs (ug/kg)																		
ACENAPHTHENE	83-32-9	6.7	NA	NA	NA	NA	NA	NA	NA	NA	<710 U	<240 U	330	600	<850 U	<250 U	<870 U	<940 U
ACENAPHTHYLENE	208-96-8	5.9	NA	NA	NA	NA	NA	NA	NA	NA	<710 U	<240 U	<290 U	290	<850 U	<250 U	<870 U	<940 U
ANTHRACENE	120-12-7	57	NA	NA	57.2	845	NA	NA	NA	NA	<710 U	<240 U	650	3,300	<850 U	<250 U	<870 U	<940 U
BENZO(A)ANTHRACENE	56-55-3	108	NA	NA	108	1,050	NA	NA	NA	NA	<710 U	<240 U	1,900	5,300	1,800	390	1,000	2,200
BENZO(A)PYRENE	50-32-8	150	NA	NA	150	1,450	NA	NA	NA	NA	<1400 U	<490 U	1,800	4,900	1,700	680	<1700 U	2,100
BENZO(B)FLUORANTHENE	205-99-2	190	NA	NA	NA	NA	NA	NA	NA	NA	<1400 U	<490 U	2,900	7,800	2,800	990	1,700	3,300
BENZO(K)FLUORANTHENE	207-08-9	240	NA	NA	NA	NA	NA	NA	NA	NA	<1400 U	<490 U	850	2,300	<1700 U	<510 U	<1700 U	<1900 U
CHRYSENE	218-01-9	166	NA	NA	166	1,290	NA	NA	NA	NA	<710 U	<240 U	1,600	4,600	1,800	440	1,100	2,100
FLUORANTHENE	206-44-0	423	NA	NA	423	2,230	NA	NA	NA	NA	<710 U	<240 U	4,400	12,000	4,100	780	2,100	4,100
FLUORENE	86-73-7	77	NA	NA	77.4	536	NA	NA	NA	NA	<710 U	<240 U	550	1,100	<850 U	<250 U	<870 U	<940 U
INDENO(1,2,3-CD)PYRENE	193-39-5	200	NA	NA	NA	NA	NA	NA	NA	NA	<1400 U	<490 U	<580 U	1,100	<1700 U	<510 U	<1700 U	<1900 U
NAPHTHALENE (SVOC)	91-20-3	176	NA	NA	176	561	NA	NA	NA	NA	<710 U	<240 U	360	920	<850 U	<250 U	<870 U	1,100
PHENANTHRENE	85-01-8	204	NA	NA	204	1,170	NA	NA	NA	NA	<710 U	<240 U	2,900	7,600	3,100	1,000	990	2,200
PYRENE	129-00-0	195	NA	NA	195	1,520	NA	NA	NA	NA	<710 U	<240 U	3,600	11,000	3,600	730	1,700	3,600
Organics - SVOCs (ug/l)																		
ACENAPHTHENE	83-32-9	NA	15	19	NA	NA	1,300	3,800	38	580	--	--	--	--	--	--	--	--
ANTHRACENE	120-12-7	NA	0.02	0.18	NA	NA	43 (S)	43 (S)	ID	1,900	--	--	--	--	--	--	--	--
FLUORANTHENE	206-44-0	NA	0.8	3.7	NA	NA	210 (S)	210 (S)	1.6	18	--	--	--	--	--	--	--	--
FLUORENE	86-73-7	NA	19	110	NA	NA	880	2,000 (S)	12	140	--	--	--	--	--	--	--	--
PHENANTHRENE	85-01-8	NA	2.3	31	NA	NA	52	150	2.0 (M)	ID*	--	--	--	--	--	--	--	--
PYRENE	129-00-0	NA	4.6	42	NA	NA	140 (S)	140 (S)	ID	15	--	--	--	--	--	--	--	--
Organics - VOCs (ug/kg)																		
TOLUENE	108-88-3	10	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 12  
SUMMARY OF SEDIMENT, PORE WATER, AND SUBMERGED DRUM CONTENTS ANALYTICAL RESULTS  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA Region IV Ecological Screening Values <sup>a</sup>			EPA Sediment Quality Guidelines <sup>b</sup>		EGLE Part 201 Groundwater Generic Cleanup Criteria <sup>c</sup>			EGLE Rule 57 Water Quality Values <sup>d</sup>	QMCP-SD05		QMCP-SD06			QMCP-SD07	QMCP-SD08		QMCP-SS61	
Sample ID		Sediment - Freshwater Ecological Screening Value	Surface Water - Freshwater Ecological Screening Value - Chronic	Surface Water - Freshwater Ecological Screening Value - Acute	Threshold Effect Concentration (TEC)	Probable Effect Concentration (PEC)	Residential Drinking Water Criteria	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Human Noncancer Value Drink	QMCP-SD 05-0-6"	QMCP-SD 05-6-18"	QMCP-SD 06-0-15"	QMCP-SD 06-0-15" FD	QMCP-SD 06-15-35"	QMCP-SD 07-0-11"	QMCP-SD 08-0-8"	QMCP-SD08-8-20"	QMCP-SS61-0-3in	
Sample Interval (bgs)											0 - 0.5 ft	0.5 - 1.5 ft	0 - 1.25 ft	0 - 1.25 ft	1.25 - 2.9 ft	0 - 0.92 ft	0 - 0.667 ft	0.87 - 1.67 ft	0 - 0.25 ft	
Sample Date											9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/5/2018	9/28/2018	
Sample Description											FINES, Brown soft, loose	CLAY, Brown, trace to some gravel, firm, strong sulfur odor; CLAY with wood debris	SAND and GRAVEL, Coarse grain (stamp sands); SILTY SAND, Brown, fine to coarse grain, firm	SAND and GRAVEL, Coarse grain (stamp sands); SILTY SAND, Brown, fine to coarse grain, firm	SAND, Dark brown, coarse grain (stamp sands), trace organics, some fines 1.7-1.9ft	SAND with GRAVEL, Dark brown-purple, coarse grain, some fines	FINES, Dark brown, organics/wood debris, soft	SILT, Gray-brown, well sorted, firm, wet	Bank sediment with sheen	
Inorganics - Metals (mg/kg)																				
ARSENIC	7440-38-2	9.8	NA	NA	9.79	33.0	NA	NA	NA	NA	22	2.8	1.2	1.4	1.1	3.3	7.4	1	--	
CADMIUM	7440-43-9	1	NA	NA	0.99	4.98	NA	NA	NA	NA	0.7	0.2	<0.2 U	<0.2 U	<0.2 U	0.2	0.4	0.3	--	
CHROMIUM	7440-47-3	43.4	NA	NA	43.4	111	NA	NA	NA	NA	58	27	9.5	12	12	18	32	23	--	
COPPER	7440-50-8	31.6	NA	NA	31.6	149	NA	NA	NA	NA	1,300	1,500	340	420	2,300	1,700	1,100	2,200	--	
LEAD	7439-92-1	35.8	NA	NA	35.8	128	NA	NA	NA	NA	84	11	10	15	16	26	65	6.5	--	
MANGANESE	7439-96-5	460	NA	NA	NA	NA	NA	NA	NA	NA	640	460	160	240	390	510	360	590	--	
MERCURY	7439-97-6	0.18	NA	NA	0.18	1.06	NA	NA	NA	NA	0.7	0.2	<0.06 U	<0.06 U	0.2	0.1	0.6	0.3	--	
SILVER	7440-22-4	1	NA	NA	NA	NA	NA	NA	NA	NA	2.6	3.1	0.4	0.8	4.2	2.8	2.0	4.3	--	
ZINC	7440-66-6	121	NA	NA	121	459	NA	NA	NA	NA	140	66	26	40	61	100	97	73	--	
Inorganics - Metals (ug/l)																				
ARSENIC	7440-38-2	NA	150 ^	340 ^	NA	NA	10 (A)	10 (A)	10	10 #	--	--	--	--	--	--	--	--	--	
BARIUM	7440-39-3	NA	220	2,000	NA	NA	2,000 (A,B)	2,000 (A,B)	200 (B,G)	1,900	--	--	--	--	--	--	--	--	--	
CHROMIUM	7440-47-3	NA	NA	NA	NA	NA	100 (A,B,H)	100 (A,B,H)	40 (B,G,H,X)	120	--	--	--	--	--	--	--	--	--	
COPPER	7440-50-8	NA	5.16 ^ ^	7.3 ^ ^	NA	NA	1,000 (B,E)	1,000 (B,E)	4.7 (B,G)	470	--	--	--	--	--	--	--	--	--	
LEAD	7439-92-1	NA	1.32 ^ ^	33.8 ^ ^	NA	NA	4.0 (B,L)	4.0 (B,L)	14 (B,G,X)	14	--	--	--	--	--	--	--	--	--	
MANGANESE	7439-96-5	NA	93	1,680	NA	NA	50 (B,E)	50 (B,E)	1,000 (B,G,X)	1,300	--	--	--	--	--	--	--	--	--	
SILVER	7440-22-4	NA	^ ^	1.15 ^ ^	NA	NA	34 (B)	98 (B)	0.2 (B,M)	130	--	--	--	--	--	--	--	--	--	
ZINC	7440-66-6	NA	67 ^ ^	67 ^ ^	NA	NA	2,400 (B)	5,000 (B,E)	63 (B,G)	3,300	--	--	--	--	--	--	--	--	--	
Organics - PCBs (ug/kg)																				
TOTAL PCBs	1336-36-3	59.8	NA	NA	59.8	676	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Organics - PCBs (ug/l)																				
TOTAL PCBs	1336-36-6	NA	0.014	0.014	NA	NA	0.5 (A,J,T)	0.5 (A,J,T)	0.2 (J,M,T)	NLS	--	--	--	--	--	--	--	--	--	
Organics - SVOCs (ug/kg)																				
ACENAPHTHENE	83-32-9	6.7	NA	NA	NA	NA	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	330	<260 U	<630 U	<280 U	<350 U	
ACENAPHTHYLENE	208-96-8	5.9	NA	NA	NA	NA	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	<250 U	<260 U	<630 U	<280 U	<350 U	
ANTHRACENE	120-12-7	57	NA	NA	57.2	845	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	310	<260 U	<630 U	<280 U	<350 U	
BENZO(A)ANTHRACENE	56-55-3	108	NA	NA	108	1,050	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	520	<300	<630 U	<280 U	700	
BENZO(A)PYRENE	50-32-8	150	NA	NA	150	1,450	NA	NA	NA	NA	<3600 U	<600 U	<510 U	<500 U	<500 U	<530 U	<1300 U	<550 U	700	
BENZO(B)FLUORANTHENE	205-99-2	190	NA	NA	NA	NA	NA	NA	NA	NA	<3600 U	<600 U	<510 U	<500 U	600	<530 U	<1300 U	<550 U	1,400	
BENZO(K)FLUORANTHENE	207-08-9	240	NA	NA	NA	NA	NA	NA	NA	NA	<3600 U	<600 U	<510 U	<500 U	<500 U	<530 U	<1300 U	<550 U	<690 U	
CHRYSENE	218-01-9	166	NA	NA	166	1,290	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	460	290	<630 U	<280 U	680	
FLUORANTHENE	206-44-0	423	NA	NA	423	2,230	NA	NA	NA	NA	2,000	350	510	<250 U	1,300	730	1,200	<280 U	1,500	
FLUORENE	86-73-7	77	NA	NA	77.4	536	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	350	<260 U	<630 U	<280 U	<350 U	
INDENO(1,2,3-CD)PYRENE	193-39-5	200	NA	NA	NA	NA	NA	NA	NA	NA	<3600 U	<600 U	<510 U	<500 U	<500 U	<530 U	<1300 U	<550 U	<690 U	
NAPHTHALENE (SVOC)	91-20-3	176	NA	NA	176	561	NA	NA	NA	NA	<1800 U	<300 U	<250 U	<250 U	360	410	1,100	<280 U	<350 U	
PHENANTHRENE	85-01-8	204	NA	NA	204	1,170	NA	NA	NA	NA	<1800 U	290 J	350	<250 U	1,400	510	980	<280 U	760	
PYRENE	129-00-0	195	NA	NA	195	1,520	NA	NA	NA	NA	1,900	290 J	380	<250 U	1,000	640	1,100	<280 U	1,400	
Organics - SVOCs (ug/l)																				
ACENAPHTHENE	83-32-9	NA	15	19	NA	NA	1,300	3,800	38	580	--	--	--	--	--	--	--	--	--	
ANTHRACENE	120-12-7	NA	0.02	0.18	NA	NA	43 (S)	43 (S)	ID	1,900	--	--	--	--	--	--	--	--	--	
FLUORANTHENE	206-44-0	NA	0.8	3.7	NA	NA	210 (S)	210 (S)	1.6	18	--	--	--	--	--	--	--	--	--	
FLUORENE	86-73-7	NA	19	110	NA	NA	880	2,000 (S)	12	140	--	--	--	--	--	--	--	--	--	
PHENANTHRENE	85-01-8	NA	2.3	31	NA	NA	52	150	2.0 (M)	ID*	--	--	--	--	--	--	--	--	--	
PYRENE	129-00-0	NA	4.6	42	NA	NA	140 (S)	140 (S)	ID	15	--	--	--	--	--	--	--	--	--	
Organics - VOCs (ug/kg)																				
TOLUENE	108-88-3	10	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	--	--	<140 U	

Note: Analytical and Criteria Footnotes are included on the last page of the table.

TABLE 12  
SUMMARY OF SEDIMENT, PORE WATER, AND SUBMERGED DRUM CONTENTS ANALYTICAL RESULTS  
JULIO PROPERTIES - RS

Station Name	CAS Number	EPA Region IV Ecological Screening Values <sup>a</sup>			EPA Sediment Quality Guidelines <sup>b</sup>		EGLE Part 201 Groundwater Generic Cleanup Criteria <sup>c</sup>			EGLE Rule 57 Water Quality Values <sup>d</sup>	QMCP-SS62	QMCP-PS02	QMCP-PS04	QMCP-PS05	QMCP-PS06	QMCP-PS07	QMCP-SDM01	QMCP-SDM02	QMCP-SDM03
Sample ID		Sediment - Freshwater Ecological Screening Value	Surface Water - Freshwater Ecological Screening Value - Chronic	Surface Water - Freshwater Ecological Screening Value - Acute	Threshold Effect Concentration (TEC)	Probable Effect Concentration (PEC)	Residential Drinking Water Criteria	Nonresidential Drinking Water Criteria	Groundwater Surface Water Interface Criteria	Human Noncancer Value Drink	QMCP-SS62 0-3in	QMCP PS02	QMCP-PS04	QMCP PS05	QMCP PS06	QMCP PS07	QMCP-SDM01	QMCP-SDM02	QMCP-SDM03
Sample Interval (bgs)											0 - 0.25 ft	--	--	--	--	--	12.66 ft	14.82 ft	14.56 ft
Sample Date											9/28/2018	9/6/2018	9/10/2018	9/6/2018	9/6/2018	9/6/2018	9/9/2018	9/9/2018	9/9/2018
Sample Description											Bank sediment with sheen	Collected near QMCP-SD02 where sediments indicated signs of contamination (oily odor)	Collected near QMCP-SD04 where sediments indicated signs of contamination (oily sheen)	Collected near QMCP-SD05 where sediments indicated signs of contamination (strong sulfur odor)	Collected near QMCP-SD06	Collected near QMCP-SD07	--	--	--
Inorganics - Metals (mg/kg)																			
ARSENIC	7440-38-2	9.8	NA	NA	9.79	33.0	NA	NA	NA	NA	--	--	--	--	--	--	8.4	4.5	9.8
CADMIUM	7440-43-9	1	NA	NA	0.99	4.98	NA	NA	NA	NA	--	--	--	--	--	--	0.5	0.3	0.5
CHROMIUM	7440-47-3	43.4	NA	NA	43.4	111	NA	NA	NA	NA	--	--	--	--	--	--	21	22	26
COPPER	7440-50-8	31.6	NA	NA	31.6	149	NA	NA	NA	NA	--	--	--	--	--	--	750	1,100	560
LEAD	7439-92-1	35.8	NA	NA	35.8	128	NA	NA	NA	NA	--	--	--	--	--	--	63	38	89
MANGANESE	7439-96-5	460	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	470	480	350
MERCURY	7439-97-6	0.18	NA	NA	0.18	1.06	NA	NA	NA	NA	--	--	--	--	--	--	0.2	0.4	0.3
SILVER	7440-22-4	1	NA	NA	NA	NA	NA	NA	NA	NA	--	--	--	--	--	--	1.5	2.0	1.0
ZINC	7440-66-6	121	NA	NA	121	459	NA	NA	NA	NA	--	--	--	--	--	--	91	85	100
Inorganics - Metals (ug/l)																			
ARSENIC	7440-38-2	NA	150 ^	340 ^	NA	NA	10 (A)	10 (A)	10	10 #	--	3.2	<1.0 U	<1.0 U	2.4	1.3	--	--	--
BARIUM	7440-39-3	NA	220	2,000	NA	NA	2,000 (A,B)	2,000 (A,B)	200 (B,G)	1,900	--	8.9	--	85	56	51	--	--	--
CHROMIUM	7440-47-3	NA	NA	NA	NA	NA	100 (A,B,H)	100 (A,B,H)	40 (B,G,H,X)	120	--	5.1	2.2	4.2	7.0	2.1	--	--	--
COPPER	7440-50-8	NA	5.16 ^ ^	7.3 ^ ^	NA	NA	1,000 (B,E)	1,000 (B,E)	4.7 (B,G)	470	--	820	420	210	3500	210	--	--	--
LEAD	7439-92-1	NA	1.32 ^ ^	33.8 ^ ^	NA	NA	4.0 (B,L)	4.0 (B,L)	14 (B,G,X)	14	--	110	4.4	13	26	5.6	--	--	--
MANGANESE	7439-96-5	NA	93	1,680	NA	NA	50 (B,E)	50 (B,E)	1,000 (B,G,X)	1,300	--	150	410	1300	760	81	--	--	--
SILVER	7440-22-4	NA	^ ^	1.15 ^ ^	NA	NA	34 (B)	98 (B)	0.2 (B,M)	130	--	0.5	0.4	<0.2 U	5.3	<0.2 U	--	--	--
ZINC	7440-66-6	NA	67 ^ ^	67 ^ ^	NA	NA	2,400 (B)	5,000 (B,E)	63 (B,G)	3,300	--	50	11	19	32	7.4	--	--	--
Organics - PCBs (ug/kg)																			
TOTAL PCBs	1336-36-3	59.8	NA	NA	59.8	676	NA	NA	NA	NA	ND	--	--	--	--	--	ND	ND	ND
Organics - PCBs (ug/l)																			
TOTAL PCBs	1336-36-6	NA	0.014	0.014	NA	NA	0.5 (A,J,T)	0.5 (A,J,T)	0.2 (J,M,T)	NLS	--	ND	ND	ND	ND	ND	--	--	--
Organics - SVOCs (ug/kg)																			
ACENAPHTHENE	83-32-9	6.7	NA	NA	NA	NA	NA	NA	NA	NA	<360 U	--	--	--	--	--	<2000 U	<1500 U	<1600 U
ACENAPHTHYLENE	208-96-8	5.9	NA	NA	NA	NA	NA	NA	NA	NA	570	--	--	--	--	--	<2000 U	<1500 U	<1600 U
ANTHRACENE	120-12-7	57	NA	NA	57.2	845	NA	NA	NA	NA	750	--	--	--	--	--	<2000 U	<1500 U	<1600 U
BENZO(A)ANTHRACENE	56-55-3	108	NA	NA	108	1,050	NA	NA	NA	NA	3,900	--	--	--	--	--	<2000 U	<1500 U	<1600 U
BENZO(A)PYRENE	50-32-8	150	NA	NA	150	1,450	NA	NA	NA	NA	<7300 U	--	--	--	--	--	<4000 U	<2900 U	<3100 U
BENZO(B)FLUORANTHENE	205-99-2	190	NA	NA	NA	NA	NA	NA	NA	NA	<7300 U	--	--	--	--	--	<4000 U	<2900 U	<3100 U
BENZO(K)FLUORANTHENE	207-08-9	240	NA	NA	NA	NA	NA	NA	NA	NA	<7300 U	--	--	--	--	--	<4000 U	<2900 U	<3100 U
CHRYSENE	218-01-9	166	NA	NA	166	1,290	NA	NA	NA	NA	3,600	--	--	--	--	--	<2000 U	<1500 U	<1600 U
FLUORANTHENE	206-44-0	423	NA	NA	423	2,230	NA	NA	NA	NA	8,100	--	--	--	--	--	<2000 U	1,900	1,600
FLUORENE	86-73-7	77	NA	NA	77.4	536	NA	NA	NA	NA	<360 U	--	--	--	--	--	<2000 U	<1500 U	<1600 U
INDENO(1,2,3-CD)PYRENE	193-39-5	200	NA	NA	NA	NA	NA	NA	NA	NA	<7300 U	--	--	--	--	--	<4000 U	<2900 U	<3100 U
NAPHTHALENE (SVOC)	91-20-3	176	NA	NA	176	561	NA	NA	NA	NA	560	--	--	--	--	--	<2000 U	<1500 U	<1600 U
PHENANTHRENE	85-01-8	204	NA	NA	204	1,170	NA	NA	NA	NA	2,900	--	--	--	--	--	<2000 U	<1500 U	<1600 U
PYRENE	129-00-0	195	NA	NA	195	1,520	NA	NA	NA	NA	8,000	--	--	--	--	--	<2000 U	1,600	<1600 U
Organics - SVOCs (ug/l)																			
ACENAPHTHENE	83-32-9	NA	15	19	NA	NA	1,300	3,800	38	580	--	<1.0 U	<1.0 U	<1.0 U	2.8	<1.0 U	--	--	--
ANTHRACENE	120-12-7	NA	0.02	0.18	NA	NA	43 (S)	43 (S)	ID	1,900	--	<1.0 U	<1.0 U	<1.0 U	2.3	<1.0 U	--	--	--
FLUORANTHENE	206-44-0	NA	0.8	3.7	NA	NA	210 (S)	210 (S)	1.6	18	--	1.1	<1.0 U	<1.0 U	5.1	<1.0 U	--	--	--
FLUORENE	86-73-7	NA	19	110	NA	NA	880	2,000 (S)	12	140	--	<1.0 U	<1.0 U	<1.0 U	4.0	<1.0 U	--	--	--
PHENANTHRENE	85-01-8	NA	2.3	31	NA	NA	52	150	2.0 (M)	ID*	--	1.4	<1.0 U	<1.0 U	12.0	<1.0 U	--	--	--
PYRENE	129-00-0	NA	4.6	42	NA	NA	140 (S)	140 (S)	ID	15	--	<1.0 U	<1.0 U	<1.0 U	3.9	<1.0 U	--	--	--
Organics - VOCs (ug/kg)																			
TOLUENE	108-88-3	10	NA	NA	NA	NA	NA	NA	NA	NA	280 J	--	--	--	--	--	--	--	--

Note: Analytical and Criteria Footnotes are included on the last page of the table.

# TABLE 12 SUMMARY OF SEDIMENT, PORE WATER, AND SUBMERGED DRUM CONTENTS ANALYTICAL RESULTS JULIO PROPERTIES - RS

**Note: Only detected analytes are shown.**

Evaluation based on EGLE/EPA Criteria at time of Project completion.

<sup>a</sup>EPA Region IV Ecological Screening Values, updated March 2018.

<sup>b</sup>EPA Sediment Quality Guidelines, dated December 2002.

<sup>c</sup>EGLE Part 201 Nonresidential Generic Cleanup Criteria for Response Activity, dated January, 2018.

<sup>d</sup>EGLE Rule 57 Water Quality Values, dated August 1, 2019.

**Bold** values indicate detected concentrations.

**Shaded values exceed the EPA Ecological Screening Values or Sediment Quality Guidelines.**

**Bold borders** indicate values exceed one or more EGLE Part 201 Generic Cleanup Criteria or Rule 57 Water Quality Value.

-- = Not analyzed

bgs = Below ground surface

in = Inches

ft = Feet

ug/l = micrograms per liter.

PCBs = Polychlorinated biphenyls

SVOC = Semi-volatile organic compound

VOC = Volatile organic compound

ug/kg = Micrograms per kilogram

## Criteria Footnotes

ID = Insufficient data to develop criterion.

NA = A criterion or value is not available

NLV = Hazardous substance is not likely to volatilize under most conditions.

(A) = Criterion is the state of Michigan drinking water standard established pursuant to Section 5 of 1976 PA 399, MCL 325.1005.

(B) = Background, as defined in R 299.1(b), may be substituted if higher than the calculated cleanup criterion. Background levels may be less than criteria for some inorganic compounds.

(E) = Criterion is the aesthetic drinking water value, as required by Section 20120a(5) of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). A notice of aesthetic impact may be employed as an institutional control mechanism if groundwater concentrations exceed the aesthetic drinking water criterion, but do not exceed the applicable health-based drinking water value provided in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site. (See R 299.49)

(G) = Groundwater surface water interface (GSI) criterion depends on the pH or water hardness, or both, of the receiving surface water. The final chronic value (FCV) for the protection of aquatic life shall be calculated based on the pH or hardness of the receiving surface water. Where water hardness exceeds 400 mg CaCO<sub>3</sub>/L, use 400 mg CaCO<sub>3</sub>/L for the FCV calculation. The FCV formula provides values in units of ug/L or ppb. The generic GSI criterion is the lesser of the calculated FCV, the wildlife value (WV), and the surface water human non-drinking water value (HNDV). The soil GSI protection criteria for these hazardous substances are the greater of the 20 times the GSI criterion or the GSI soil-water partition values using the GSI criteria developed with the procedure described in this footnote. A spreadsheet that may be used to calculate GSI and GSI protection criteria for (G)-footnoted hazardous substances is available on the Michigan Department of Environment, Great Lakes, and Energy (EGLE) internet web site.

(H) = Valence-specific chromium data (Cr III and Cr VI) shall be compared to the corresponding valence-specific cleanup criteria. If both Cr III and Cr VI are present in groundwater, the total concentration of both cannot exceed the drinking water criterion of 100 ug/L. If analytical data are provided for total chromium only, they shall be compared to the cleanup criteria for Cr VI. Cr III soil cleanup criterion for protection of drinking water can only be used at sites where groundwater is prevented from being used as a public water supply, currently and in the future, through an approved land or resource use restriction.

(J) = Hazardous substance may be present in several isomer forms. Isomer-specific concentrations shall be added together for comparison to criteria.

(L) = Criteria for lead are derived using a biologically based model, as allowed for under Section 20120a(9) of the NREPA, and are not calculated using the algorithms and assumptions specified in pathway-specific rules. The generic residential drinking water criterion of 4 ug/L is linked to the generic residential soil direct contact criterion of 400 mg/kg. A higher concentration in the drinking water, up to the state action level of 15 ug/L, may be allowed as a site-specific remedy and still allow for drinking water use, under Section 20120a(2) and 20120b of the NREPA if soil concentrations are appropriately lower than 400 mg/kg. If a site-specific criterion is approved based on this subdivision, a notice shall be filed on the deed for all property where the groundwater concentrations will exceed 4 ug/L to provide notice of the potential for unacceptable risk if soil or groundwater concentrations increase. Acceptable combinations of site-specific soil and drinking water concentrations are presented in a table available on the Department of Environment, Great Lakes, and Energy (EGLE) internet web site (See R 299.49 Footnotes for generic cleanup criteria tables for additional information).

(M) = Calculated criterion is below the analytical target detection limit, therefore, the criterion defaults to the target detection limit.

(S) = Criterion defaults to the hazardous substance-specific water solubility limit.

(T) = Refer to the federal Toxic Substances Control Act (TSCA), 40 C.F.R. §761, Subpart D and 40 C.F.R. §761, Subpart G, to determine the applicability of TSCA cleanup standards. Subpart D and Subpart G of 40 C.F.R. §761 (July 1, 2001) are adopted by reference in these rules and are available for inspection at EGLE, 525 West Allegan Street, Lansing, Michigan. Copies of the regulations may be purchased, at a cost as of the time of adoption of these rules of \$55, from the Superintendent of Documents, Government Printing Office, Washington, DC 20401, or from EGLE, RRD, 525 West Allegan Street, Lansing, Michigan 48933, at cost. Alternatives to compliance with the TSCA standards listed below are possible under 40 C.F.R. §761 Subpart D. New releases may be subject to the standards identified in 40 C.F.R. §761, Subpart G. Use Part 201 soil direct contact cleanup criteria in the published table if TSCA standards are not applicable.

(X) = The GSI criterion shown in the generic cleanup criteria tables is not protective for surface water that is used as a drinking water source. (See R 299.49 Footnotes for generic cleanup criteria tables for additional information.)

EPA Ecological Screening Value Footnotes: **Red Font** indicates a bioaccumulative chemical. ^ - Screening value is for filtered (dissolved) metals. A conversion factor (CF) was used to convert the screening value for total metals in surface water to a screening value for dissolved metals in surface water. CMC (dissolved) = CMC (total) × CF. See Table 1c for screening values for total (unfiltered) metals. \* - The freshwater screening value is hardness dependent. The screening value shown in Table 1a is for dissolved metals assuming a hardness of 50 mg/L as CaCO<sub>3</sub>. A correction for site-specific hardness was based on equations listed in Tables 1b and 1c. If hardness data are unavailable hardness may be estimated as: H = 2.497 × Ca (mg/L) + 4.118 × Mg (mg/L).

Rule 57 Surface Water Quality Value Footnotes: # = carcinogen, \* = the lowest HNV, WV, HCV, or FCV given for this chemical will adequately protect the uses identified with ID\* or \*, NLS = No literature search has been conducted

## Laboratory Footnotes

J = The analyte was positively identified; the associated value is the approximate concentration of the analyte in the sample.

U = The analyte was analyzed for, but was not detected at or above the associated value (reporting limit).

UJ = The analyte was analyzed for, but not detected. The reported quantitation limit is approximate.

ND = Not detected



**TABLE 13**  
**CONCEPTUAL REMOVAL COST ESTIMATE**  
**JULIO SALVAGE**  
**JULIO PROPERTIES - RS**

Item	Unit	Quantity	Unit Price	Extended Amount
Item 1 - Mobilization and Administration	Lump Sum	1	\$ 20,000	\$ 20,000
Item 2 - Site Preparation and Soil Erosion and Sedimentation Control	Lump Sum	1	\$ 5,000	\$ 5,000
Item 3 - Asbestos Containing Material (ACM) Pickup	Day	4	\$ 2,400	\$ 9,600
Item 4 - ACM Pickup Support During Excavation	Day	15	\$ 1,200	\$ 18,000
Item 5 - ACM Disposal	Trip	1	\$ 1,000	\$ 1,000
Item 6 - Characterization, Removal, and Disposal of Drums	Drum	78	\$ 1,300	\$ 101,400
Item 7 - Tank Purging and Cleaning with up to 1 Drum of Non-Hazardous Liquid/Sludge per Tank	Each	15	\$ 3,000	\$ 45,000
Item 8 - Removal of Mercury Containing Devices	Drum	1	\$ 4,620	\$ 4,620
Item 9 - Removal of Small PCB Electrical Equipment	Drum	10	\$ 3,350	\$ 33,500
Item 10 - Removal of PCB Transformers	Drum	4	\$ 3,540	\$ 14,160
Item 11 - Excavation and Disposal of Soil Contaminated with TSCA-Level PCBs (Area 1 and QMCP-SB16)	Ton	4190	\$ 500	\$ 2,095,000
Item 12 - Stabilization of Soil Contaminated with Lead to Render Non-Hazardous	Lump Sum	1	\$ 10,000	\$ 10,000
Item 13 - Excavation and Disposal of Soil Contaminated with Lead (Non-Hazardous Post-Stabilization)	Ton	45	\$ 125	\$ 5,625
Item 14 - Excavation and Disposal of Waste Pile (Assumed Non-Hazardous)	Ton	450	\$ 125	\$ 56,250
Item 15 - Sand Backfill Provision and Placement	Ton	4235	\$ 10	\$ 42,350
Item 16 - Capping with Sandy Loam	Acre	1.1	\$ 35,000	\$ 38,500
Item 17 - PCB Equipment Disposal (RPM-01 Location)	Lump Sum	1	\$ 10,000	\$ 10,000
Item 18 - Geotextile and Rip Rap	Ton	10	\$ 50	\$ 500
Item 19 - Provisional Allowance	NA	NA	\$ 50,000	\$ 50,000
Item 20 - Demobilization and Project Closeout	Lump Sum	1	\$ 5,000	\$ 5,000

**TOTAL = \$ 2,565,505**

Assumptions:

- Property owner will remove all scrap metal, empty containers, equipment, compressed gas cylinders, and trees from work areas as needed.
- Waste and debris have a density of 1.5 tons per cubic yard.
- Waste and debris piles will be removed flush with surrounding grade.
- The waste pile is approximately 300 cubic yards.
- The PCB equipment can be removed intact from the property for disposal.
- Geotextile fabric and up to a 1-foot thick layer of rip rap will be placed as part of restoration at QMCP-SS276.

**TABLE 14**  
**CONCEPTUAL REMOVAL COST ESTIMATE**  
**JULIO CONTRACTING/FORMER STANDARD OIL COMPANY**  
**JULIO PROPERTIES - RS**

Item	Unit	Quantity	Unit Price	Extended Amount
Item 1 - Mobilization and Administration	Lump Sum	1	\$ 10,000	\$ 10,000
Item 2 - Site Preparation and Soil Erosion and Sedimentation Control	Lump Sum	1	\$ 2,500	\$ 2,500
Item 3 - Ditch Excavation and Disposal - Non-Hazardous	Ton	590	\$ 125	\$ 73,750
Item 4 - Ditch Restoration Geotextile and Rip Rap	Ton	420	\$ 30	\$ 12,600
Item 5 - Provisional Allowance	NA	NA	\$ 25,000	\$ 25,000
Item 6 - Demobilization and Project Closeout	Lump Sum	1	\$ 5,000	\$ 5,000

**TOTAL = \$ 128,850**

Assumptions:

- Property owner will remove all scrap metal, empty containers, equipment, compressed gas cylinders, and trees from work areas.
- Waste, debris, and soils have a density of 1.5 tons per cubic yard.
- An area of the ditch 350 feet long and 15 feet wide will be excavated.
- The ditch will be excavated up to 2 feet deep.
- Geotextile fabric and a 1-foot thick layer of rip rap will be placed in the ditch for restoration.
- Does not include a slurry wall.

**TABLE 15**  
**CONCEPTUAL REMOVAL COST ESTIMATE**  
**JULIO SCRAP YARD AND TOWER**  
**JULIO PROPERTIES - RS**

Item	Unit	Quantity	Unit Price	Extended Amount
Item 1 - Mobilization and Administration	Lump Sum	1	\$ 15,000	\$ 15,000
Item 2 - Site Preparation and Soil Erosion and Sedimentation Control	Lump Sum	1	\$ 2,500	\$ 2,500
Item 3 - Berm Preparation and Placement of 1-Foot of Sand	Square Yard	600	\$ 10	\$ 6,000
Item 4 - Berm Capping with Sandy Loam, Seed, and Mulch	Square Yard	600	\$ 10	\$ 6,000
Item 5 - Former Tank Car Purging and Cleaning into Drums	Each	1	\$ 20,000	\$ 20,000
Item 6 - Tank Contents Waste Characterization	Each	1	\$ 1,200	\$ 1,200
Item 7 - Disposal of Oil Contaminated with TSCA-level PCBs	Drum	10	\$ 3,540	\$ 35,400
Item 8 - Excavation and Disposal of Soil Contaminated with TSCA-level PCBs	Ton	100	\$ 500	\$ 50,000
Item 9 - Sand Backfill Provision and Placement	Ton	100	\$ 10	\$ 1,000
Item 10 - Provisional Allowance	NA	NA	\$ 25,000	\$ 25,000
Item 11 - Demobilization and Project Closeout	Lump Sum	1	\$ 5,000	\$ 5,000

**TOTAL = \$ 167,100**

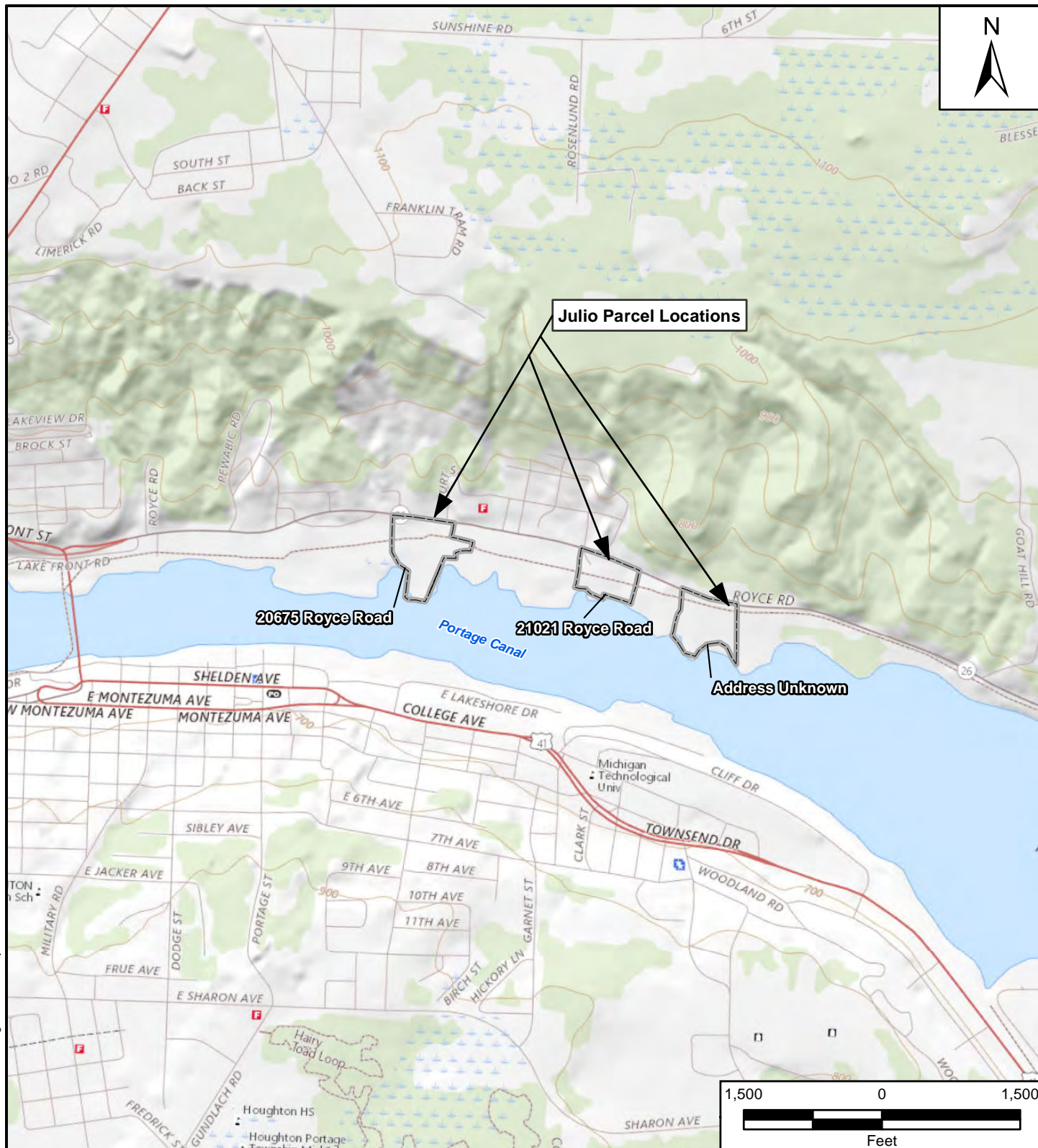
Assumptions:

- Property owner will remove all scrap metal, equipment, compressed gas cylinders, and trees from work areas.
- Waste, debris, and soils have a density of 1.5 tons per cubic yard.
- The cleaned-out former tank car will be left on the property.
- Stumps from removed trees will remain in-place.
- The capped berm area will be approximately 350 feet long and 15 feet wide.

## **APPENDIX A**

### **FIGURES**

- 1 – PROJECT LOCATION
- 2 – AREA FEATURES MAP
- 3 – ACM ANALYTICAL RESULTS (JULIO SALVAGE)
- 4 – RPM, ABANDONED CONTAINER, AND WASTE ANALYTICAL RESULTS (JULIO SALVAGE)
- 5 – SOIL ANALYTICAL RESULTS (JULIO SALVAGE)
- 5A – SOIL ANALYTICAL RESULTS (JULIO SALVAGE ROW AND ADJACENT)
- 6 – GROUNDWATER ANALYTICAL RESULTS (JULIO SALVAGE)
- 7 – SAMPLE RESULTS SUMMARY METALS, PCBS, AND ACM (JULIO SALVAGE)
- 8 – ACM ANALYTICAL RESULTS (JULIO CONTRACTING/FORMER STANDARD OIL COMPANY)
- 9 – RPM, ABANDONED CONTAINER, AND WASTE ANALYTICAL RESULTS (JULIO CONTRACTING/FORMER STANDARD OIL COMPANY)
- 10 – SOIL ANALYTICAL RESULTS (JULIO CONTRACTING/FORMER STANDARD OIL COMPANY)
- 11 – GROUNDWATER ANALYTICAL RESULTS (JULIO CONTRACTING/FORMER STANDARD OIL COMPANY)
- 12 – ACM ANALYTICAL RESULTS (JULIO SCRAP YARD & TOWER)
- 13 – RPM, ABANDONED CONTAINER, AND WASTE ANALYTICAL RESULTS (JULIO SCRAP YARD & TOWER)
- 14 – SOIL ANALYTICAL RESULTS (JULIO SCRAP YARD & TOWER)
- 15 – GROUNDWATER ANALYTICAL RESULTS (JULIO SCRAP YARD & TOWER)
- 16 – SEDIMENT, PORE WATER, AND SUBMERGED DRUM CONTENTS ANALYTICAL RESULTS
- 17 – CONCEPTUAL REMOVAL ACTION (JULIO SALVAGE)
- 18 – CONCEPTUAL REMOVAL ACTION (JULIO CONTRACTING/FORMER STANDARD OIL COMPANY)
- 19 – CONCEPTUAL REMOVAL ACTION (JULIO SCRAP YARD & TOWER)



Site Location



Approximate Julio Parcel Boundaries

Source: ESRI USGS Topo Maps map service, based on USGS 7.5-Minute Topographic Quadrangle Map: Hancock, 2017; Chassell, 2017; Point Mills, 2017; Laurium 2014

Julio Properties - RS  
Ripley, Houghton County, Michigan

**Figure 1**  
**Project Location**

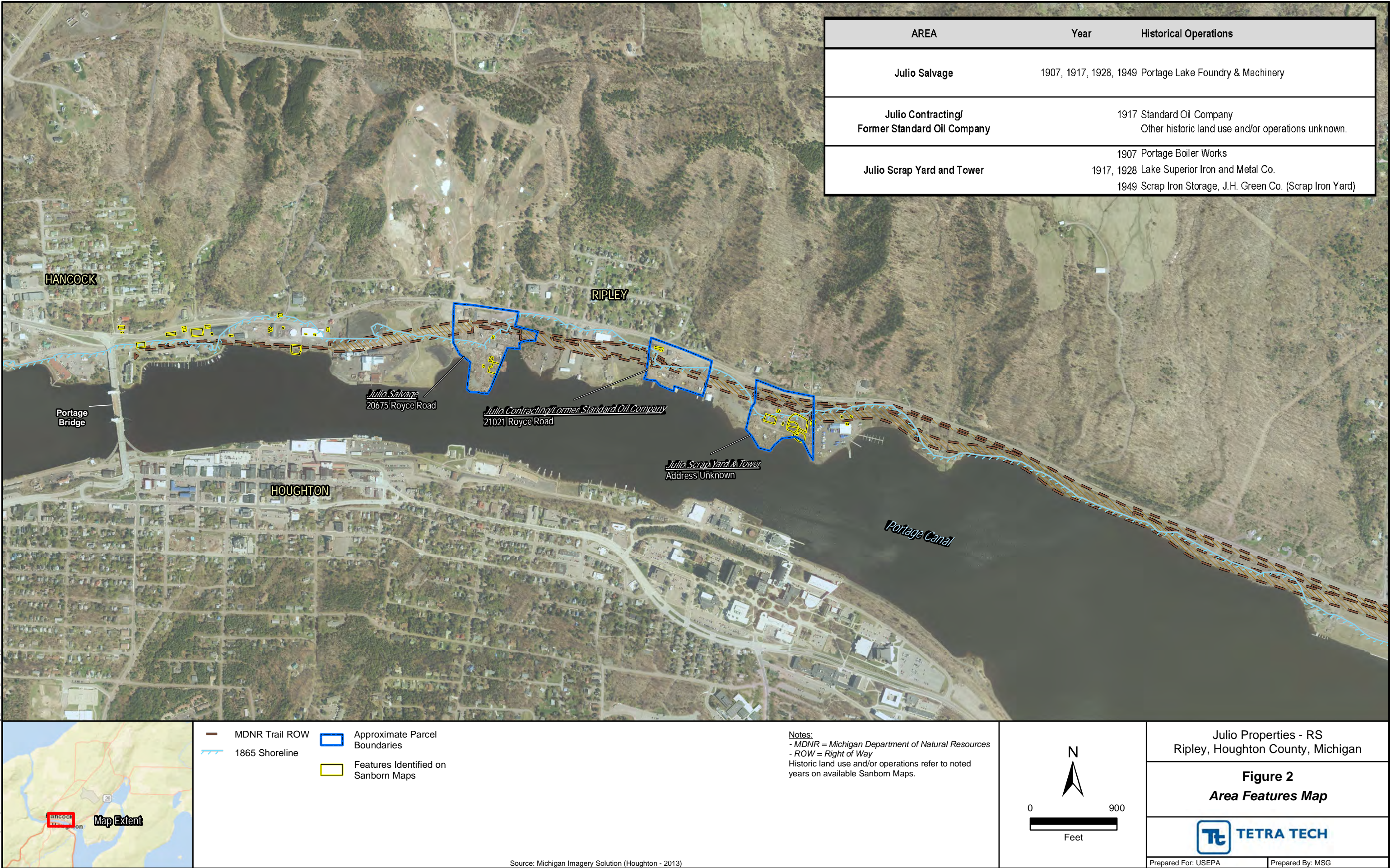


**TETRA TECH**

Prepared For: USEPA

Prepared By: AEM



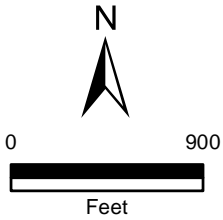


AREA	Year	Historical Operations
Julio Salvage	1907, 1917, 1928, 1949	Portage Lake Foundry & Machinery
Julio Contracting/ Former Standard Oil Company	1917	Standard Oil Company Other historic land use and/or operations unknown.
Julio Scrap Yard and Tower	1907, 1917, 1928, 1949	Portage Boiler Works Lake Superior Iron and Metal Co. Scrap Iron Storage, J.H. Green Co. (Scrap Iron Yard)



- MDNR Trail ROW
- 1865 Shoreline
- Approximate Parcel Boundaries
- Features Identified on Sanborn Maps

Notes:  
- MDNR = Michigan Department of Natural Resources  
- ROW = Right of Way  
Historic land use and/or operations refer to noted years on available Sanborn Maps.



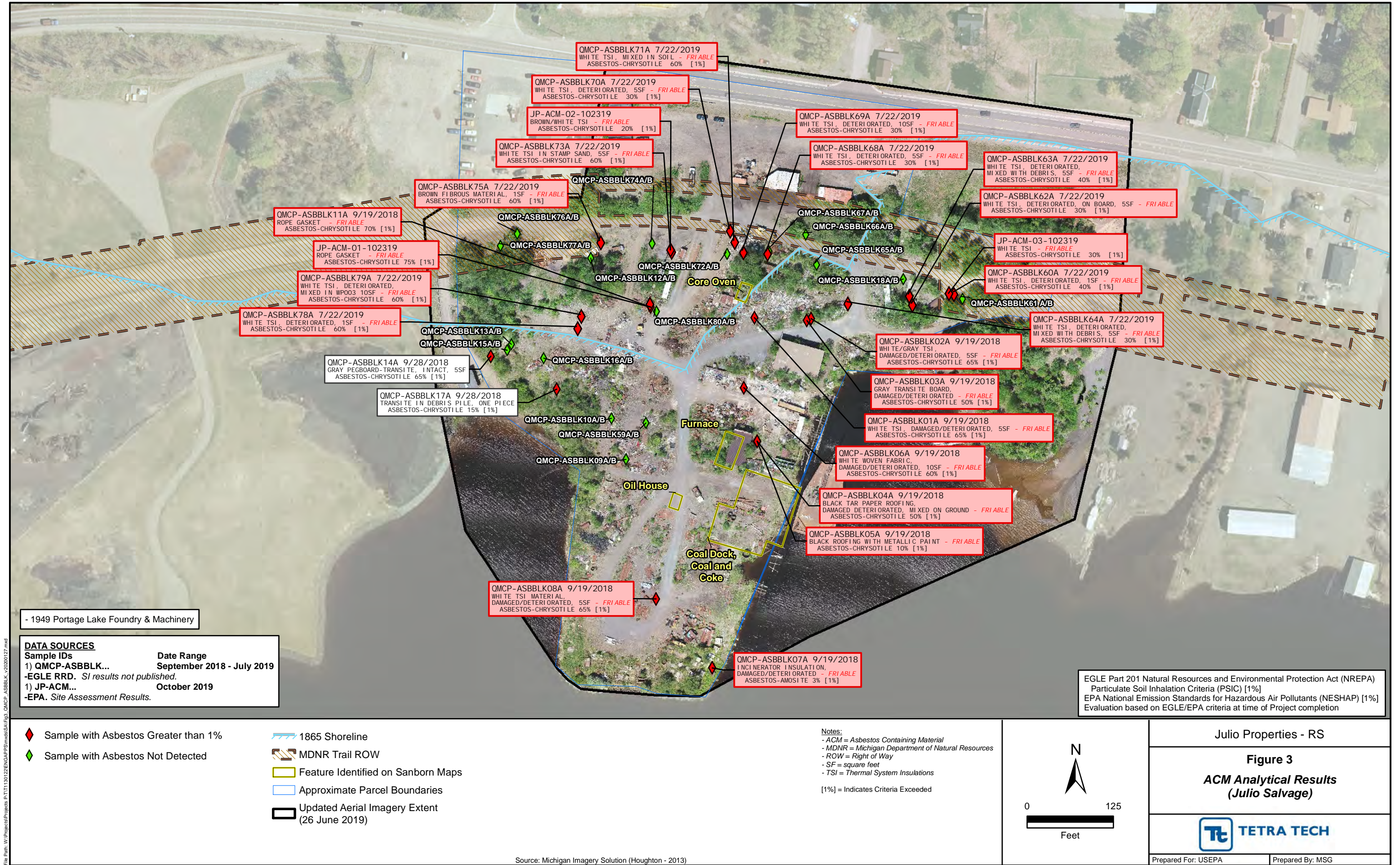
Julio Properties - RS  
Ripley, Houghton County, Michigan

Figure 2  
Area Features Map

TETRA TECH

Prepared For: USEPA | Prepared By: MSG

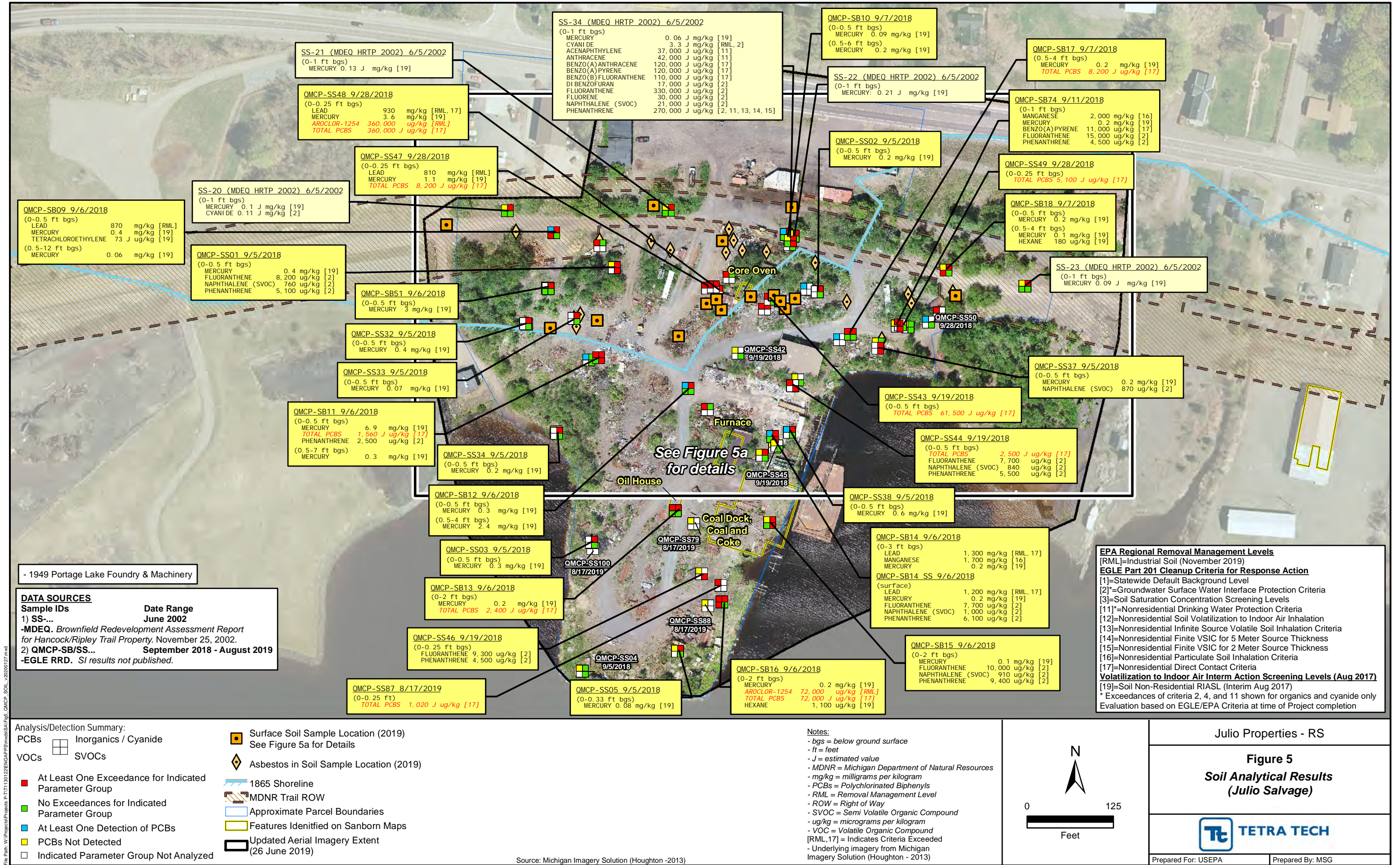




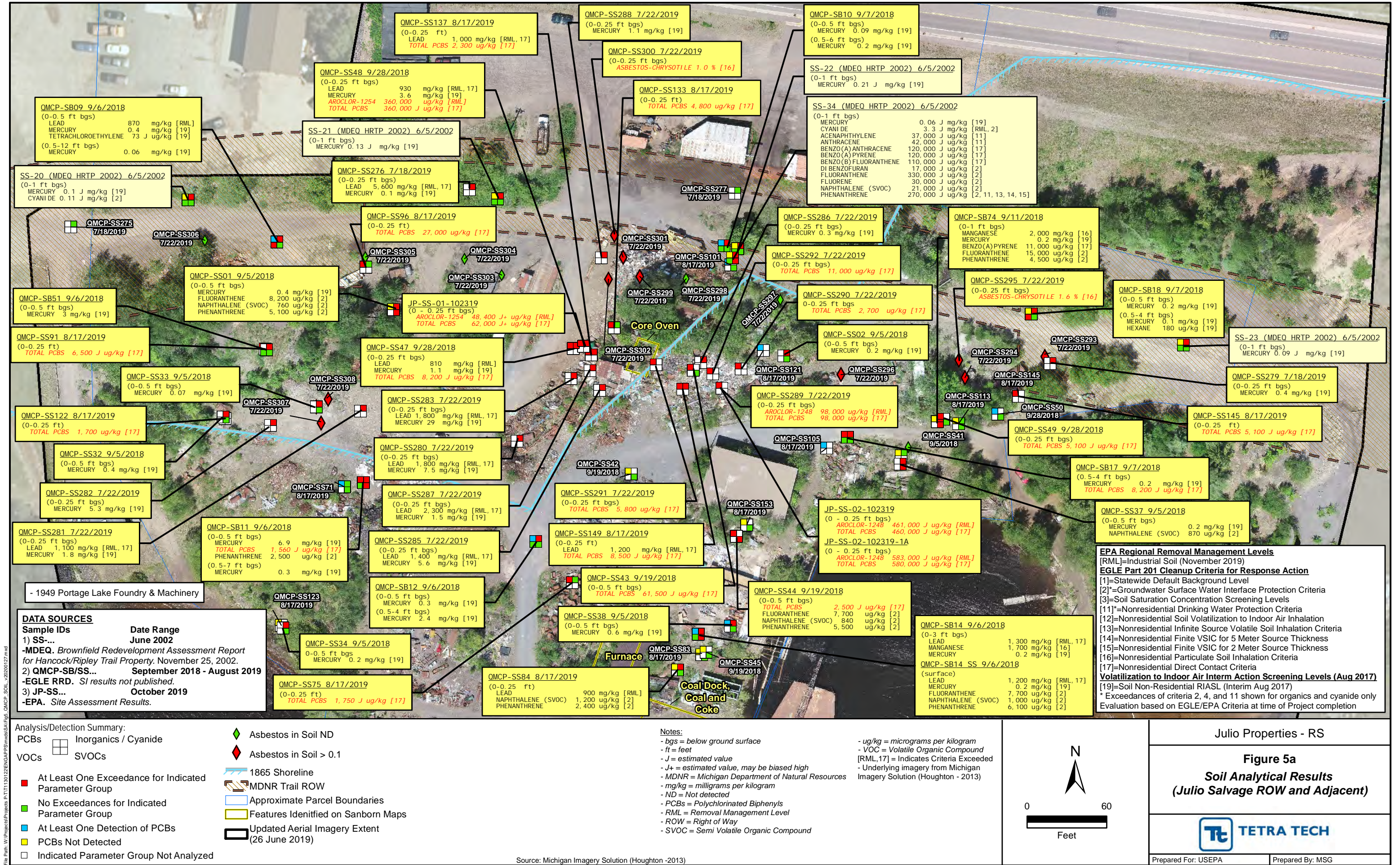








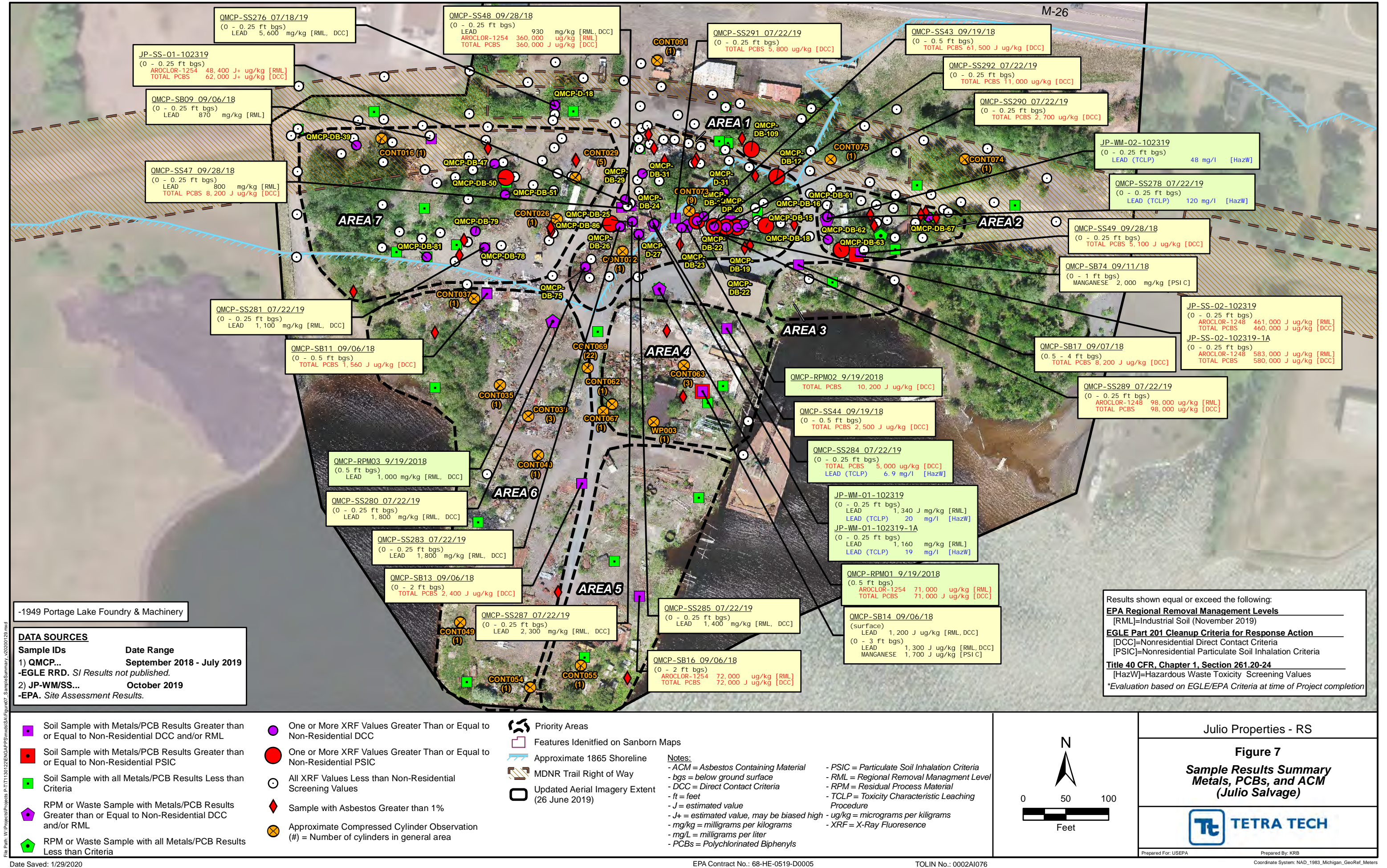




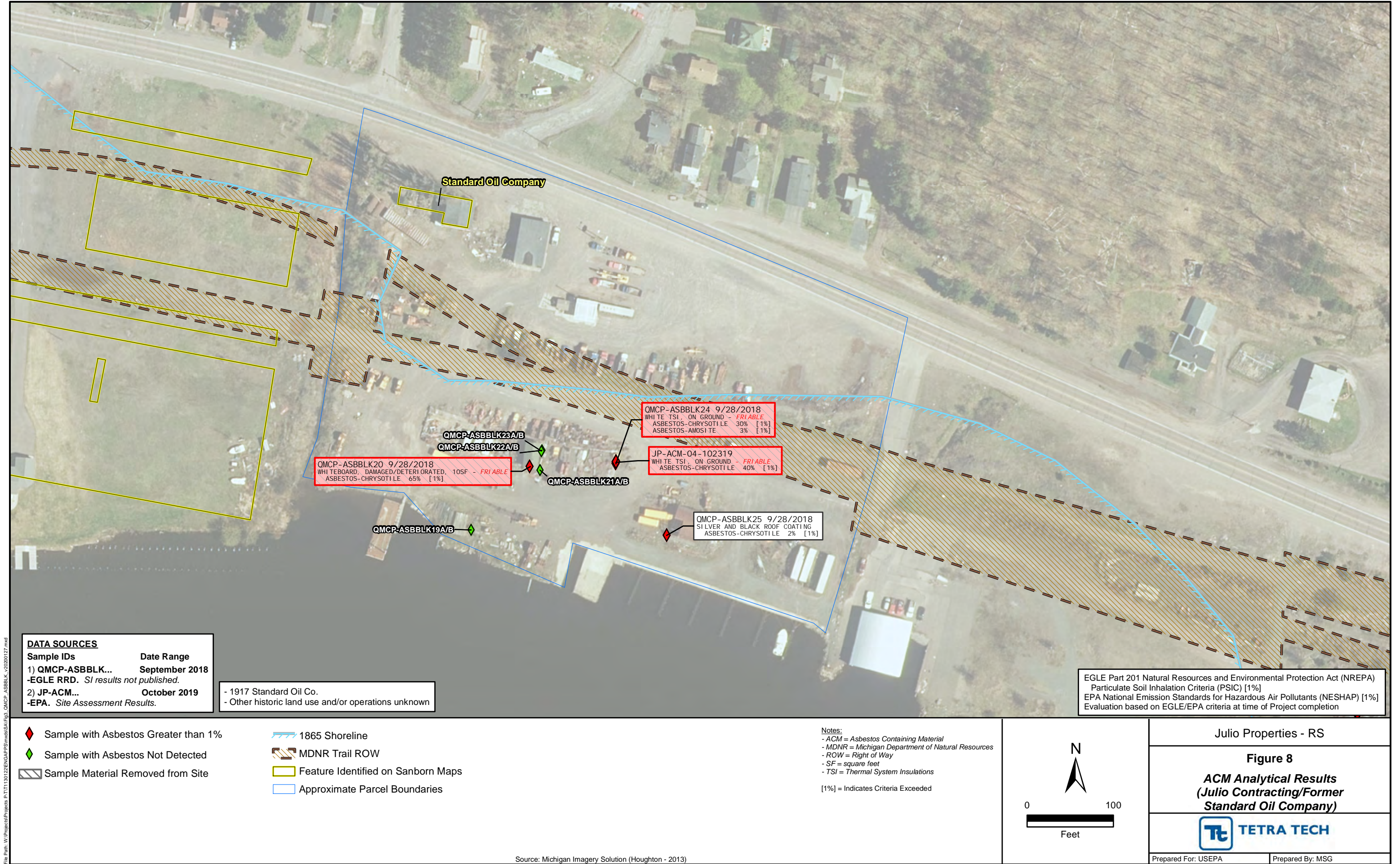




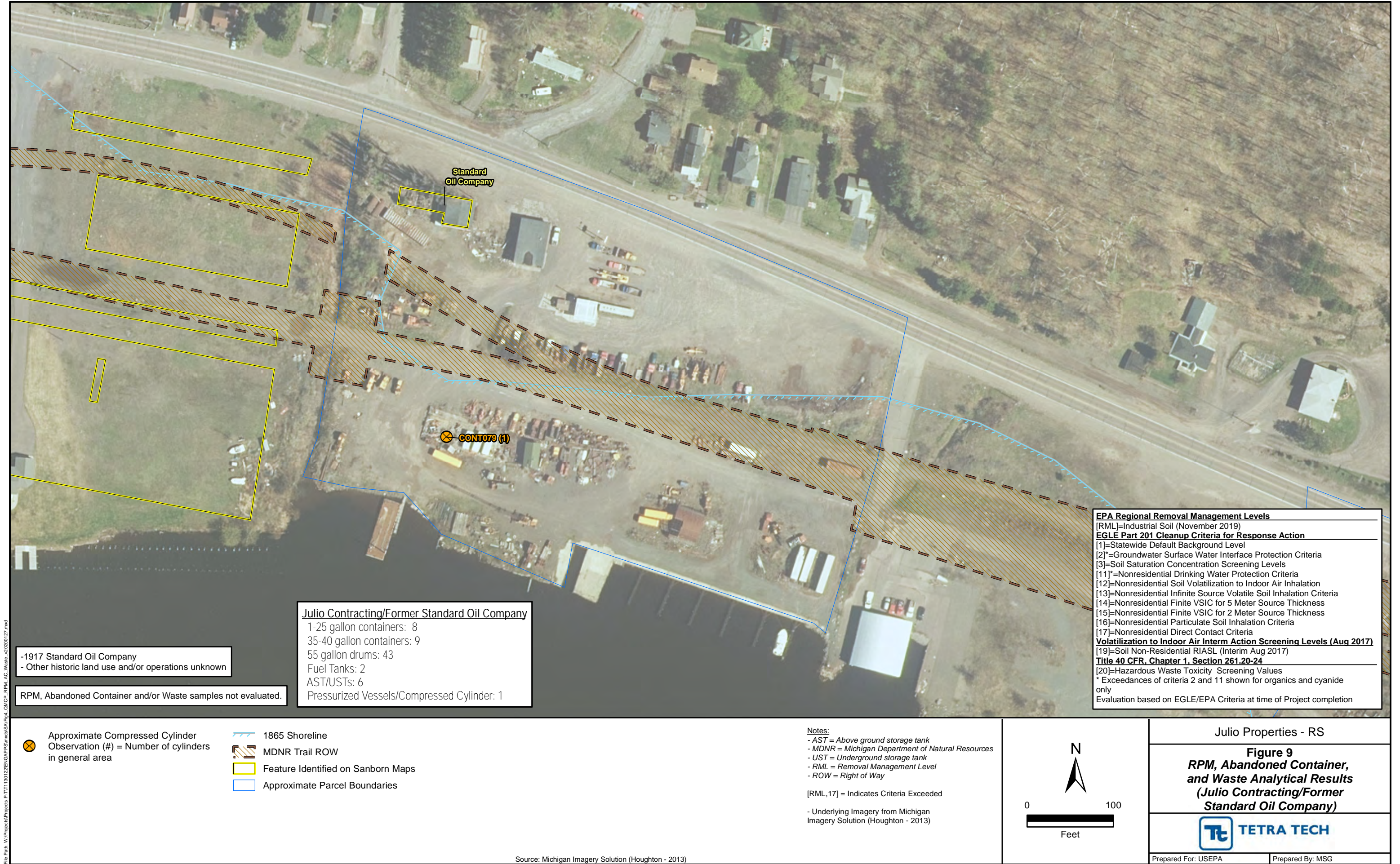




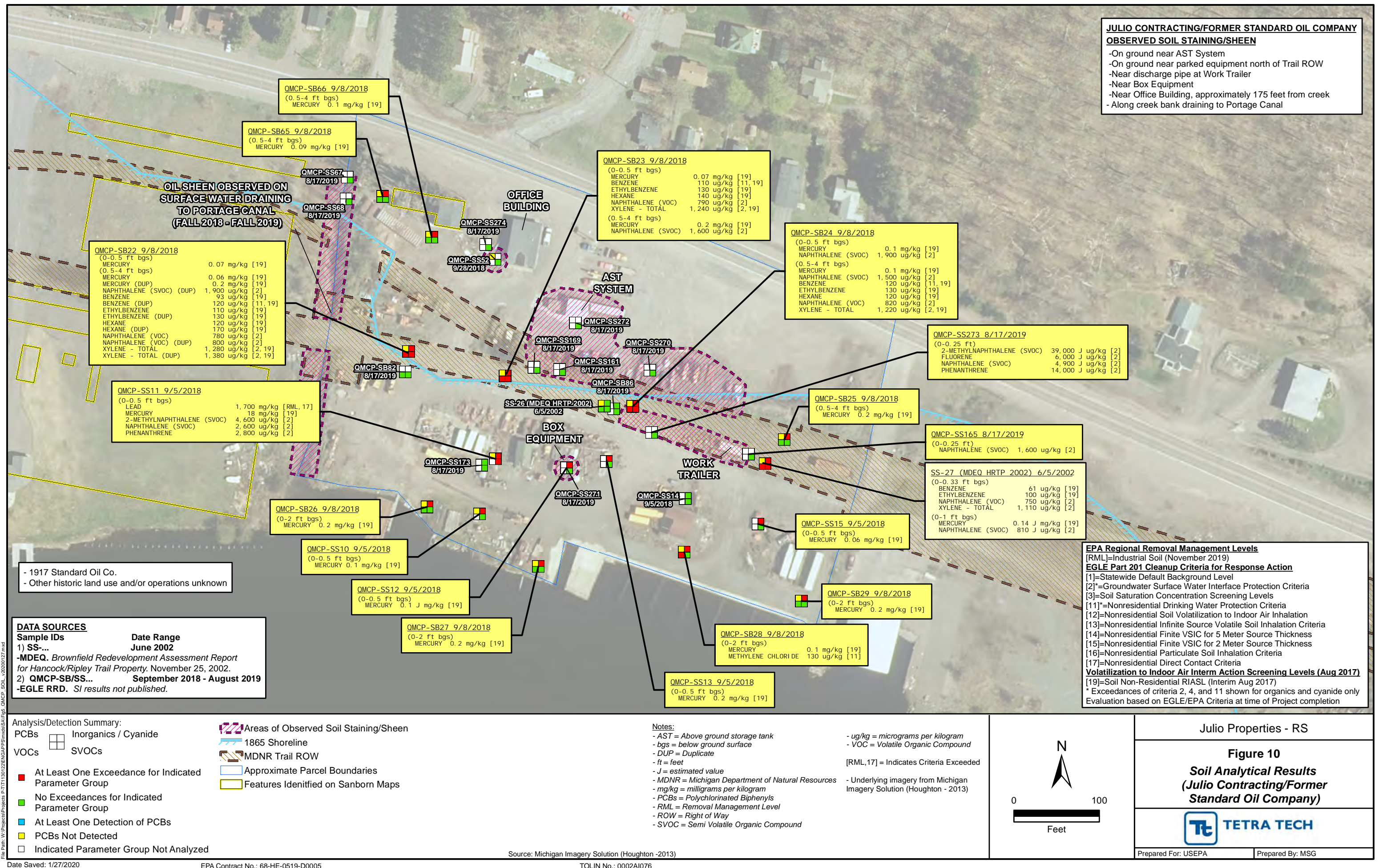








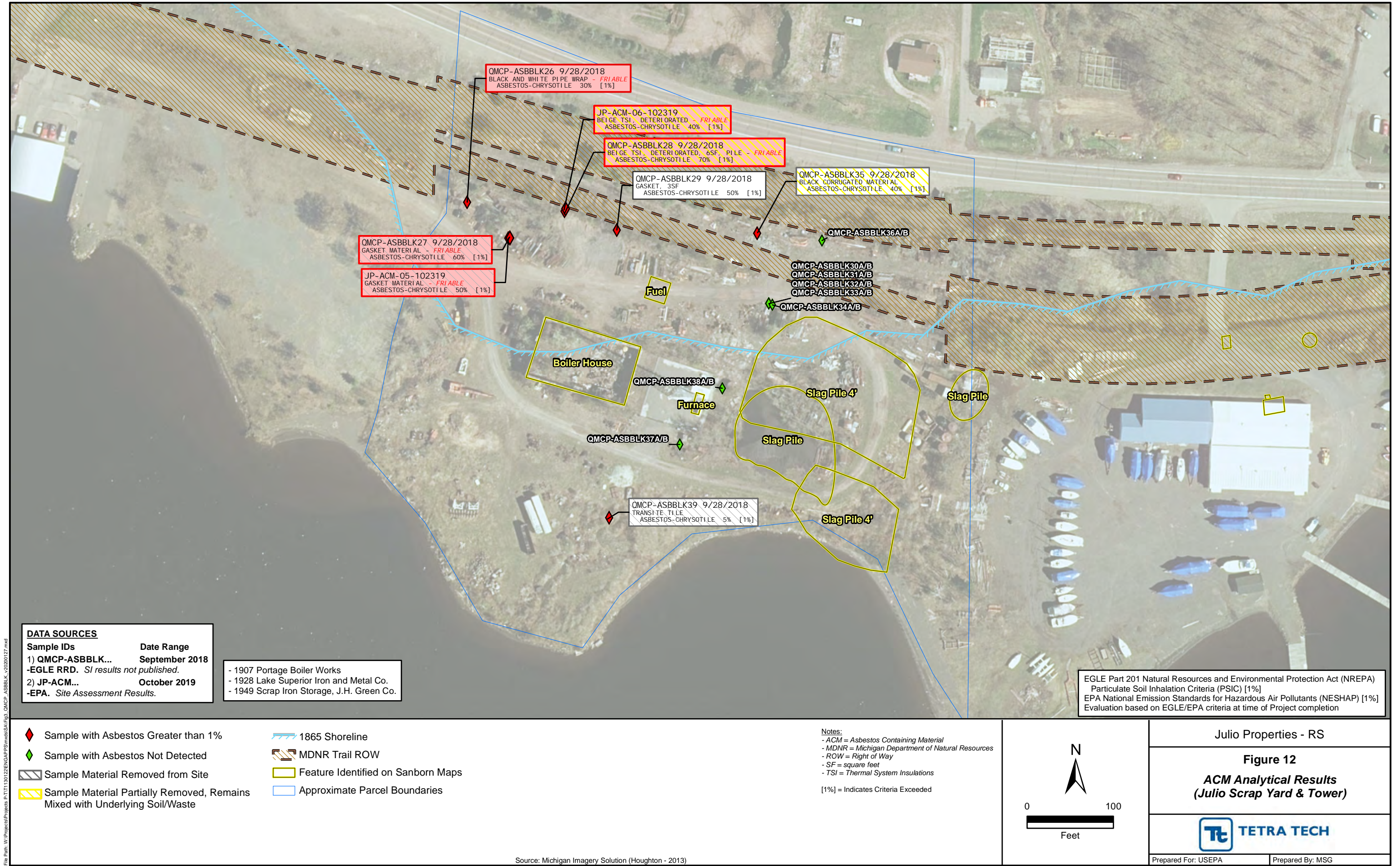




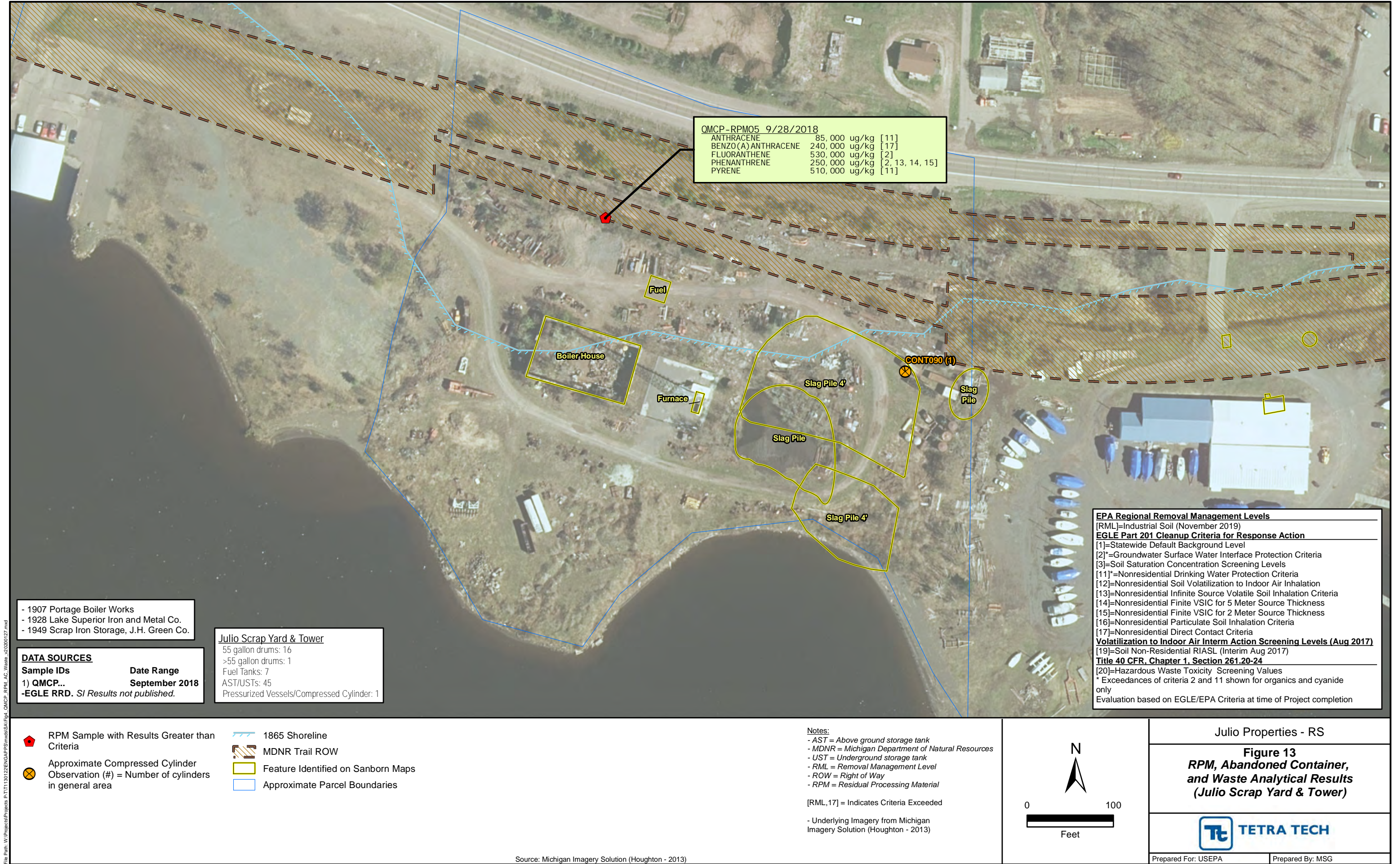












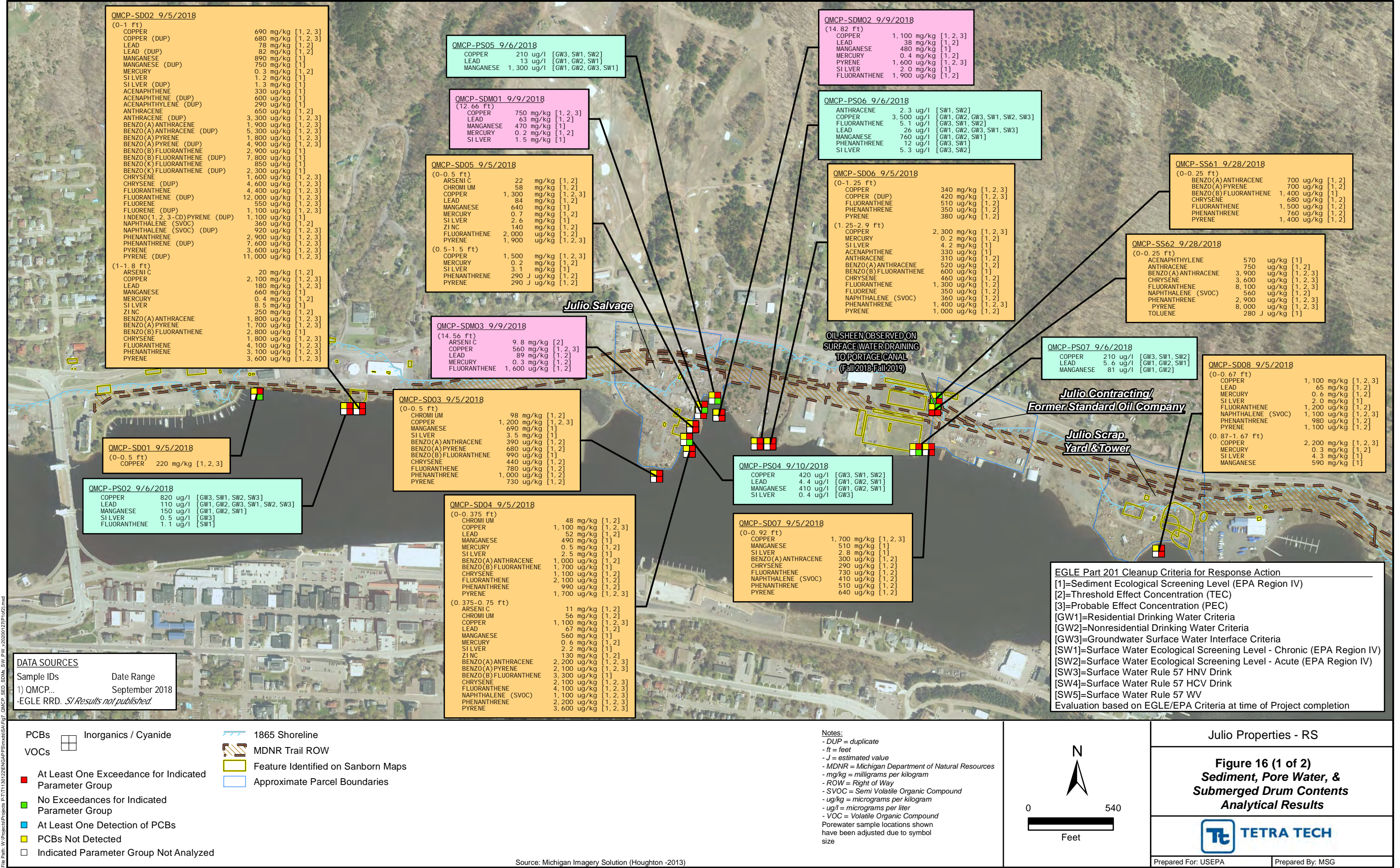












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Date Saved: 1/27/2020

DATA SOURCES	
Sample IDs	Date Range
1) QMCP...	September 2018
-EGLE RRD. <i>SI Results not published.</i>	

- PCBs

VOCs

At Least One Exceedance for Indicated Parameter Group

No Exceedances for Indicated Parameter Group

At Least One Detection of PCBs

PCBs Not Detected

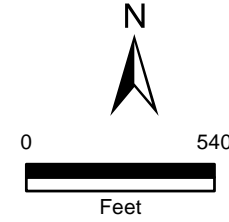
Indicated Parameter Group Not Analyzed
- Inorganics / Cyanide

MDNR Trail ROW

Feature Identified on Sanborn Maps

Approximate Parcel Boundaries
- 1865 Shoreline

Notes:  
- DUP = duplicate  
- ft = feet  
- J = estimated value  
- MDNR = Michigan Department of Natural Resources  
- mg/kg = milligrams per kilogram  
- ROW = Right of Way  
- SVOC = Semi Volatile Organic Compound  
- ug/kg = micrograms per kilogram  
- ug/l = micrograms per liter  
- VOC = Volatile Organic Compound  
Porewater sample locations shown have been adjusted due to symbol size



Julio Properties - RS

Figure 16 (1 of 2)  
Sediment, Pore Water, &  
Submerged Drum Contents  
Analytical Results

Prepared For: USEPA

Prepared By: MSG



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AREA	Year	Historical Operations
Julio Salvage	1907, 1917, 1928, 1949	Portage Lake Foundry & Machinery
Julio Contracting/ Former Standard Oil Company		1917 Standard Oil Company Other historic land use and/or operations unknown.
Julio Scrap Yard and Tower	1907, 1928	1907 Portage Boiler Works Lake Superior Iron and Metal Co.
	1949	Scrap Iron Storage, J.H. Green Co. (Scrap Iron Yard)

Julio Properties - RS

Figure 16 (2 of 2)  
Sediment, Pore Water, &  
Submerged Drum Contents  
Analytical Results



Prepared For: USEPA

Prepared By: MSG

Source: Michigan Imagery Solution (Houghton -2013)








<div><div><div> Approximate 1865 Shoreline</div><div> MDNR Trail Right of Way</div><div> MDNR Contemplated Guardrails</div><div> MDNR Contemplated Capping</div></div><div><div> Priority Areas</div><div> Capping</div><div> Soil/Waste Removal and Disposal</div><div> Soil/Waste Removal, Disposal, and Capping</div></div></div> <div data-bbox="1118 1612 2175 1923"><p><b>Notes:</b></p><ul style="list-style-type: none"><li>- Asbestos Containing Material (ACM) and suspect ACM will be picked up across the entire parcel.</li><li>- Parcel owner to clear Areas 1, 2, and 7 of abandoned containers and scrap materials, and Areas 1 and 2 of trees.</li><li>- Areas 1, 2, and 7:<ul style="list-style-type: none"><li>• Remove and dispose abandoned containers with contents</li><li>• Remove and dispose mercury and polychlorinated biphenyl containing equipment</li><li>• Clean out aboveground and underground tanks and leave onsite</li><li>• Capping of Areas 1 and 2 as indicated by hatching</li></ul></li></ul></div> <div data-bbox="2175 1612 2486 1923"><div><div>N</div><div></div><div>0 50 100</div><div>Feet</div></div></div> <div data-bbox="2486 1612 3020 1923"><div><div>Julio Properties - RS</div><div><b>Figure 17</b></div><div><b>Conceptual Removal Action</b> <b>(Julio Salvage)</b></div><div> <b>TETRA TECH</b></div><div><div>Prepared For: USEPA</div><div>Prepared By: AEM</div></div><div>Coordinate System: NAD_1983_Michigan_GeoRef_Meters</div></div></div>
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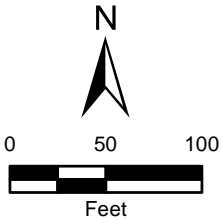




File Path: W:\Projects\Projects - R\T11130122\ENG\APSP\mags\SAT\Figure 18 Conceptual Removal\_v20200127.mxd

-  Approximate 1865 Shoreline
-  MDNR Trail Right of Way
-  Sediment Removal and Disposal

**Notes:**  
- Asbestos Containing Material (ACM) and suspect ACM is being picked up across the entire parcel by the Michigan Department of Environment, Great Lakes, and Energy (EGLE).  
- Parcel owner to clear area along ditch of abandoned containers, scrap materials, and trees.  
- Sediment removal in area indicated by hatching.







Julio Properties - RS  
**Figure 18**  
**Conceptual Removal Action**  
**(Julio Contracting/Formers**  
**Standard Oil Company)**



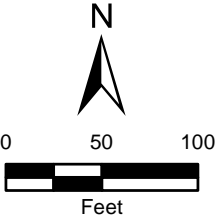
Prepared For: USEPA  
Prepared By: AEM  
Coordinate System: NAD\_1983\_Michigan\_GeoRef\_Meters





-  Approximate 1865 Shoreline
-  MDNR Trail Right of Way
-  Capping
-  Soil/Waste Removal and Disposal

Notes:  
- Asbestos Containing Material (ACM) and suspect ACM is being picked up across the entire parcel by the Michigan Department of Environment, Great Lakes, and Energy (EGLE).  
- Parcel owner to clear berm and tank car areas of abandoned containers, scrap materials, and trees.



Julio Properties - RS  
**Figure 19**  
**Conceptual Removal Action**  
**(Julio Scrap Yard & Tower)**





**APPENDIX B**  
**EGL E REQUEST FOR EPA ERB ASSISTANCE AT THE JULIO PROPERTIES SITE**



GRETCHEN WHITMER  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF  
ENVIRONMENT, GREAT LAKES, AND ENERGY  
MARQUETTE DISTRICT OFFICE



LIESL EICHLER CLARK  
DIRECTOR

September 20, 2019

Mr. Brian Kelly  
U.S. Environmental Protection Agency  
Region V - Emergency Response Branch  
2565 Plymouth Road  
Ann Arbor, Michigan 48105

SUBJECT: Julio Properties-Ripley Waterfront and Dollar Bay  
Request for Assistance  
Houghton County, Michigan

Dear Mr. Kelly:

The Michigan Department of Environment, Great Lakes, and Energy (EGLE) Remediation and Redevelopment Division (RRD) is seeking the United States Environmental Protection Agency (EPA) Emergency Response Branch's (ERB) assistance to address contamination associated with the Julio Properties along the Ripley Waterfront and in Dollar Bay (Julio Properties). Of particular concern are contaminants, including asbestos, lead, polychlorinated biphenyls (PCBs) present along the recreational trail that runs through or adjacent to four of the five recently investigated Julio Properties. The trail is used by snowmobiles in the winter and 4-wheelers, bikers, joggers including local athletic teams, and families with young children in strollers during the non-snow months. The fifth Julio property is a marine maintenance facility where liquid phase petroleum is present on the groundwater within approximately 600' of the municipal well that serves the community of Dollar Bay. The Western Upper Peninsula Health Department (WUPHD) and the Michigan Department of Health and Human Services (MDHHS) are preparing to issue an advisory regarding trail use. A copy of their letter(s) will be provided to the EPA ERB when they become available in the upcoming days.

The properties are located along the north shoreline of the Portage Canal on the south side of M-26 between Dollar Bay, Michigan and the Portage Lake Lift Bridge in Hancock, Michigan. The ERB conducted an assessment of these properties in 2007 as part of the Torch Lake Area Assessment. Current property land use consists of scrap yards and former industrial operational areas over a combined total of approximately 50 acres along a mile of the Portage Canal shoreline. EGLE RRD conducted several phases of remedial investigations from Ripley to Dollar Bay. We have compiled the data from key studies and the attached figure sets, one set for each of the subject properties, highlight the locations and concentrations of the primary contaminants of concern. Also attached is a summary of key findings by property.

EGLE RRD does not have the resources necessary to address the conditions at the Julio Properties and is requesting the EPA ERB assistance due to the widespread contamination and the common public trail use that transects several of the properties.

Please let me know if the EPA ERB can assist on this project. If you have any questions, please contact Ms. Amy Keranen, Project Manager, at EGLE RRD, 55195 U.S. 41, Calumet, Michigan 49913, at [keranena@michigan.gov](mailto:keranena@michigan.gov), or 906-337-0389.

Sincerely,

A handwritten signature in black ink, appearing to read "Clif. Cla", written in a cursive style.

Clifton Clark, District Supervisor  
Remediation and Redevelopment Division  
Upper Peninsula District Office  
906-228-4516

Attachments

cc: Ms. Kathleen Shirey, EGLE  
Mr. David O'Donnell, EGLE  
Ms. Amy Keranen, EGLE

**APPENDIX C**  
**PHOTOGRAPHIC DOCUMENTATION LOGS**



## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Salvage, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Jeffrey S. Binkley/Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002AI076r

**Dates:** 10/9, 10/23, 10/24, 11/6 & 11/15/19  
and 9/14 & 9/24/18

### Photograph No. 1

**Date:** 11/6/19

**Description:** View looking east/southeast of near trail debris in Priority Area 1 of the Julio Salvage parcel.



### Photograph No. 2

**Date:** 11/6/19

**Description:** View looking southeast of near trail debris in Priority Area 1 of the Julio Salvage parcel.





## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Salvage, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Jeffrey S. Binkley/Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002AI076r

**Dates:** 10/9, 10/23, 10/24, 11/6 & 11/15/19  
and 9/14 & 9/24/18

### Photograph No. 3

**Date:** 11/6/19

**Description:** View looking southeast of near trail abandoned containers in Priority Area 7 of the Julio Salvage parcel.



### Photograph No. 4

**Date:** 11/6/19

**Description:** View looking west of near trail salvage materials in Priority Area 7 of the Julio Salvage parcel.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Salvage, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Jeffrey S. Binkley/Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002AI076r

**Dates:** 10/9, 10/23, 10/24, 11/6 & 11/15/19  
and 9/14 & 9/24/18

### Photograph No. 5

**Date:** 9/14/18

**Description:** View looking north of compressed gas cylinder near trail in Priority Area 7 of the Julio Salvage parcel.



### Photograph No. 6

**Date:** 9/24/18

**Description:** View looking southwest of near trail abandoned containers in Priority Area 2 of the Julio Salvage parcel.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Salvage, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Jeffrey S. Binkley/Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 10/9, 10/23, 10/24, 11/6 & 11/15/19  
and 9/14 & 9/24/18

### Photograph No. 7

**Date:** 9/24/18

**Description:** View looking southwest of near trail abandoned containers in Priority Area 2 of the Julio Salvage parcel.



### Photograph No. 8

**Date:** 9/24/18

**Description:** View looking south of near trail abandoned container in Priority Area 2 of the Julio Salvage parcel.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Salvage, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Jeffrey S. Binkley/Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002AI076r

**Dates:** 10/9, 10/23, 10/24, 11/6 & 11/15/19  
and 9/14 & 9/24/18

### Photograph No. 9

**Date:** 10/23/19

**Description:** View looking southwest of stained soils near trail in Priority Area 1 of the Julio Salvage parcel. Soil was sampled as JP-SS-02-102319 and contained elevated PCB concentrations.



### Photograph No. 10

**Date:** 10/23/19

**Description:** View looking northwest of scattered, friable, white thermal systems insulation (TSI) near trail in Priority Aea 2 of the Julio Salvage parcel. White TSI was sampled as JP-ACM-03-102319 and was positive for asbestos. Note MDNR Trail markers.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Salvage, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Jeffrey S. Binkley/Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002AI076r

**Dates:** 10/9, 10/23, 10/24, 11/6 & 11/15/19  
and 9/14 & 9/24/18

### Photograph No. 11

**Date:** 10/9/19

**Description:** View looking south of an MDNR installed gate and property owner signage at the entrance to the lower portion of the Julio Salvage parcel on the north side of the trail.



### Photograph No. 12

**Date:** 11/15/19

**Description:** View looking south of the property owner installed barrier and signage indicating "no dumping" and "closed" at the entrance to the Julio Salvage parcel on the south side of the trail.





## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Contracting/Former Standard Oil Company, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 8/20, 10/14 & 10/23/19 and 10/1/18

### Photograph No. 1

**Date:** 8/20/19

**Description:** View looking south of sheen on the south side of the MDNR trail ROW on the drainage ditch at the western property line of the Julio Contracting/Former Standard Oil Company parcel.



### Photograph No. 2

**Date:** 10/1/18

**Description:** View looking down on sheen north of the trail on the drainage ditch at the western property line of the Julio Contracting/Former Standard Oil Company parcel.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Contracting/Former Standard Oil Company, Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 8/20, 10/14 & 10/23/19 and 10/1/18

### Photograph No. 3

**Date:** 10/23/19

**Description:** View looking north of scattered white thermal systems insulation (TSI) near the MDNR trail ROW in the Julio Contracting/Former Standard Oil Company parcel. White TSI was sampled as JP-ACM-04-102319. The white TSI was positive for asbestos and was removed by EGLE.



### Photograph No. 4

**Date:** 10/14/19

**Description:** View looking south of posted “keep out” and barriers placed along the MDNR trail ROW by the property owner at the Julio Contracting/Former Standard Oil Company parcel.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Scrap Yard & Tower,  
Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 10/9, 10/14, 10/23 & 11/1/19 and  
9/25/18

### Photograph No. 1

**Date:** 10/9/19

**Description:** View looking northeast to a riveted tank car with a leaking valve on the Julio Scrapyard & Tower parcel. Samples collected of the stained soils in the leak area contained elevated PCB concentrations.



### Photograph No. 2

**Date:** 10/1/19

**Description:** View looking north to the location of stained soils below the leaking valve of the riveted tank car on the Julio Scrapyard & Tower parcel. The valve has subsequently been plugged by the parcel owner.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Scrap Yard & Tower,  
Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 10/9, 10/14, 10/23 & 11/1/19 and  
9/25/18

### Photograph No. 3

**Date:** 9/25/18

**Description:** View looking east to an abandoned fuel tank on its side in the MDNR trail ROW on the Julio Scrapyrd & Tower parcel. Note MDNR Trail marker.



### Photograph No. 4

**Date:** 10/23/19

**Description:** View looking west at near MDNR trail ROW beige thermal systems insulation (TSI) on the Julio Scrapyrd & Tower parcel. Beige TSI was sampled as JP-ACM-06-102319 and was positive for asbestos, and was partially removed by EGLE.







## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Scrap Yard & Tower,  
Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 10/9, 10/14, 10/23 & 11/1/19 and  
9/25/18

### Photograph No. 5

**Date:** 10/14/19

**Description:** View looking east of locked gate and parcel owner posted “no trespassing” signage at the entrance to the Julio Scrapyard & Tower parcel.



### Photograph No. 6

**Date:** 11/1/19

**Description:** View looking northeast of the berm-like piles located south of the southern MDNR trail ROW on the Julio Scrapyard & Tower parcel.





## Photographic Documentation

**Client:** EPA

**Site Name:** Julio Scrap Yard & Tower,  
Julio Properties – RS

**Location:** Ripley, Michigan

**Prepared by:** Danielle Pilarski

**TO-TO Line Item No.:** F0069-0002A1076r

**Dates:** 10/9, 10/14, 10/23 & 11/1/19 and  
9/25/18

### Photograph No. 7

**Date:** 9/25/18

**Description:** View looking south of electrical debris mixed into the berm-like piles located south of the southern MDNR trail ROW on the Julio Scrapyard & Tower parcel.

