

Field Summary Report
For
ANC Miscellaneous Repairs
Fleet Fueling & Outlet Control Structure
Project No. CSAPT00199
Anchorage International Airport
Anchorage, Alaska

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TABLE 1 – STOCKPILE SOIL SAMPLES CONTAMINANT SUMMARY
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SHEET 5 – CIVIL DEMOLITION PLAN
DAILY FIELD REPORTS
CHAIN OF CUSTODY RECORD
DIGITAL SITE PHOTOS
LABORATORY ANALYTICAL REPORT with DATA DELIVERABLE PACKAGE
& ADEC LABORATORY DATA REVIEW CHECKLIST

EXECUTIVE SUMMARY

This Field Summary Report (report) has been prepared by TELLUS, Ltd. (TELLUS) on behalf of Roger Hickel Contracting, Inc. (RHC) for the ANC Miscellaneous Repairs Fleet Fueling & Outlet Control Structure Project No. CSAPT00199 at the Anchorage International Airport located in Anchorage, Alaska.

This report has been developed based on the criteria set forth in Section P-170 (entitled, Soil Testing) of this project's construction bid specifications. State of Alaska Statutes 18 AAC 75 and 18 AAC 78 were also used in preparing this document. These regulations serve as the Alaska Department of Environmental Conservation's (ADEC) environmental compliance guidelines which pertain to this project.

RHC obtained approval from the Alaska Department of Environmental Conservation (ADEC) for the Sampling and Analysis Work Plan (SAP) that was submitted prior to beginning the field activities associated with this project. All field screening, sampling, analytical testing and backfilling activities were performed during May and June 2019.

This report will outline guidelines and procedures implemented by Roger Hickel Contracting, Inc. (RHC) to identify any hydrocarbon contaminated soil encountered onsite during excavation activities. Based on the information contained in the project specifications, the potential was present for hydrocarbon contaminated soils to be encountered at this project site.

Contaminated soils that exceeded AIA Clean Soil Classification Levels for diesel range organics (DRO) were confirmed to be present within the subsurface soils that were excavated from adjacent to the overfill bucket assembly of the southern-most underground fuel storage tank (UST), located at the AIA Fleet Fueling Facility. Impacted soils encountered were field screened, segregated, sampled, temporarily stockpiled as contaminated, classified as Warm and then transported to AIA's Contaminated Soil Landspreading Area for subsequent disposal.

Excavated soil segregated and classified as Clean, was transported offsite and spread as fill within AIA's Clean Soil Disposal Area.

The contaminated soils were excavated as necessary to perform the work required under this contract. Impacted soils remaining in place that did not exceed the PID action level of 15.0 units, were classified as Clean and were not subjected to additional removal or analytical testing.

Field screen testing and analytical sampling were performed by personnel from TELLUS, Ltd. (TELLUS) using appropriate equipment and approved methods to identify the presence of petroleum hydrocarbon contamination. Excavated and insitu soils were field screened, sampled and analyzed according to this project's contract specifications.

1.0 INTRODUCTION

This Field Summary Report (report) has been prepared by TELLUS, Ltd. (TELLUS) on behalf of Roger Hickel Contracting, Inc. (RHC) for the ANC Miscellaneous Repairs Fleet Fueling Facility & Outlet Control Structure Project (No. CSAPT00199) at the Anchorage International Airport located in Anchorage, Alaska.

This report has been developed based on the criteria set forth in Section P-170 (entitled, Soil Testing) of this project's construction bid specifications. State of Alaska Statutes 18 AAC 75 and 18 AAC 78 were also used in preparing this document. These regulations serve as the Alaska Department of Environmental Conservation's (ADEC) environmental compliance guidelines which pertain to this project.

The objective of the site assessment portion of this project was for RHC to identify and characterize any hydrocarbon contaminated soil encountered onsite during excavation activities. This report will summarize the procedures implemented by RHC and the results obtained during this project.

RHC obtained approval from the Alaska Department of Environmental Conservation (ADEC) for the Sampling and Analysis Plan (SAP) submitted prior to beginning the field activities associated with this project. All field screening, sampling, analytical testing and backfilling activities were performed during May through June 2019.

2.0 SITE DESCRIPTION

The project area is located near the center of the Anchorage International Airport, in Anchorage, Alaska. Specifically, the project site is the Fleet Fueling Facility Area located along Taxiway V & near the AIA Airfield Maintenance Facility and the Menzies Fuel Consortium's Main Office Facility. The secondary work area is the weir structure at the outflow of Lake Spenard near the eastern boundary of AIA.

Sheet 4 – Project Layout Plan of the project bid specifications, is attached for reference. This figure shows the airport boundary, the project work area and the locations & routes associated with this project. It also depicts the project area in relation to other AIA facilities and utilities along with the traffic access & control system structures.

Sheet 5 – Fleet Fueling Facility Civil Demolition Plan of the project bid specifications, is attached for reference. This figure shows the project work area associated with the Fleet Fueling Facility and the specific components of this facility.

3.0 FIELD SCREENING PROCEDURES

Field screening monitoring, soil sampling and soil characterization activities were conducted by Mr. Scott Erdmann of TELLUS on behalf of RHC during this project. Mr. Erdmann used a Mini Rae Lite model photoionization detector (PID) to conduct field screen testing for petroleum hydrocarbon impacts of insitu and excavated soils. Mr. Erdmann is familiar with the operation of this instrument and the interpretation of field screening results based on previous project experience and manufacturer's guidelines.

The PID was calibrated in accordance with the manufacturer's guidelines to the nearest tenth of one part per million by volume (ppmv) at the beginning and the end of each work shift using isobutylene calibration gas. The first calibration was intended to set the instrument while the second calibration was performed to measure any instrument drift that may have occurred throughout the work shift.

Field screening results were obtained by measuring volatiles from head space readings associated with each soil sample obtained. To perform this task, field screening sample material was collected and placed in a plastic Ziploc® bag to the level of one-third to one-half capacity. The bag was then sealed and the soil was allowed to volatilize. A headspace reading was then measured using the PID and recorded. This method and the summarized procedure are in compliance with ADEC's Draft Field Sampling Guidance Manual.

Personnel from TELLUS utilized appropriate equipment and approved methods to identify the presence of petroleum hydrocarbon contamination during field screening and confirmation soil sampling activities. Field screening data was utilized to assess and preliminarily characterize soils encountered during excavation activities. Confirmation soil samples were then collected and submitted to a contract laboratory for analytical testing.

4.0 SOIL SEGREGATION & TEMPORARY STOCKPILING

Soil that was excavated, field screened and determined to be contaminated with petroleum hydrocarbons, was segregated and noted for identification purposes. Soil segregation activities were performed based on the physical inspection of the impacted soils at the time of excavation. The physical inspection incorporated visual and olfactory observations while the field instrument monitoring was performed using the PID to measure volatilized headspace vapors.

Care was exercised during excavation activities in order to avoid mixing contaminated soil with uncontaminated material. Soils encountered that were determined to be contaminated were staged nearby the excavation (origin) and arrangements were coordinated to have the impacted soils field screened, sampled and subsequently analyzed.

All contaminated soils that were excavated and identified (after analytical results were obtained and reported) to exceed AIA Clean Soil Classification Levels for this project, were later removed and transported to the AIA Contaminated Soil Landspreading Area for subsequent disposal.

5.0 CONFIRMATION SOIL SAMPLING

Soil sampling was conducted in accordance with all applicable ADEC and EPA guidelines. Soil samples were collected and analyzed in accordance with Item P-170 (entitled Soil Testing) of this project's construction specifications. State of Alaska Regulations 18 AAC 75 and 18 AAC 78 were also adhered to during this project. Sample packaging, handling, documentation, transportation and chain of custody procedures, were also performed according to these applicable guidelines.

Excavation activities were conducted down to a maximum total depth of 3.0 feet below former ground surface (bfgs) within the project's excavation area. All soil samples were collected as discrete samples (from a single location) and were obtained using disposable sampling equipment to eliminate the potential for cross-contamination.

The soil samples were collected from insitu and excavated soils quickly and with minimal disturbance. Confirmation samples were then selected and submitted for analyses based upon physical inspection and elevated field screening results as measured with the PID.

The contaminated soil stockpile samples identified as 1, 2 & D were collected from the five (5) cubic yard impacted soil lot.

Samples were analyzed for BTEX, GRO and DRO as defined in Section 6.0 (Analytical Testing Program) of this document. One (1) quality assurance / quality control (QA/QC) sample for every ten (10) discrete primary confirmation samples, by type, was collected and submitted for analyses.

A summary of the confirmation soil sampling conducted during this project is listed below:

1. Contaminated Soil Stockpile Samples 1 & 2 were analyzed by the contract laboratory during this project.
2. Quality Assurance / Quality Control Sample. One (1) confirmation soil sample (D) was analyzed to serve as a QA/QC (duplicate) sample of Sample 1 during this project.

Table 1 further describes these confirmation soil samples and depicts their respective associations (primary with a corresponding duplicate).

6.0 ANALYTICAL TESTING PROGRAM

All confirmation soil samples selected during this project by TELLUS were submitted to TestAmerica, Inc. (TAI) for laboratory analyses. Contaminant constituents required to be analyzed for during this project are listed in Item P-170 of this project's construction specifications and also appear below:

- Benzene, Toluene, Ethylbenzene & Xylenes (BTEX) using EPA Method 8260C,
- Gasoline Range Organics (GRO) using Method AK101 and
- Diesel Range Organics (DRO) using Method AK102.

A chain of custody record as well as a complete copy of TAI's laboratory report for the confirmation soil sampling activities have been provided with this document. Also included is a completed ADEC Laboratory Data Review Checklist with each analytical laboratory report.

7.0 QUALITY ASSURANCE / QUALITY CONTROL

RHC and their subcontractors followed all regulatory and manufacturers' guidelines while conducting environmental monitoring, sampling and analytical testing activities during this project. Mr. Scott Erdmann of TELLUS was the representative who performed all of the environmental monitoring and sampling activities on behalf of RHC during this program. Mr. Erdmann is qualified based on the requirements set forth in 18 AAC 75, 18 AAC 78 and is listed as being a qualified person for environmental sampling as approved by ADEC.

TestAmerica, Inc. (TAI) is approved by ADEC and EPA to perform all analytical testing required under this contract. Complete copies of the TAI's laboratory report, data deliverable packet and a completed ADEC Laboratory Data Review Checklist have been attached for reference and review. This report includes all of the analytical results and the quality assurance / quality control data generated during this project.

8.0 SOIL CLASSIFICATION LEVELS FOR THIS PROJECT

The Soil Classification Levels associated with this project are referenced in RHC's approved Sampling and Analysis Plan and in Table 1. Petroleum hydrocarbon concentration data were used to classify the soils encountered / excavated during this project. During this project, soil was classified as:

CLEAN - Diesel Range Organics at 0 to 250 ppm
Gasoline Range Organics at 0 to 300 ppm

and

CONTAMINATED - Hot (Greater than 12,500 ppm DRO)
Warm (Greater than 250 ppm and less than or equal to 12,500 ppm DRO)

9.0 ANALYTICAL RESULTS SUMMARY

Table 1 is included to summarize all of the analytical testing performed by TELLUS and TestAmerica on the exposed, excavated and stockpiled soil during this project. The analytical results obtained are discussed below.

9.1 Contaminated Soil Stockpile Samples 1 & 2

The two (2) confirmation soil samples, collected from the five (5) cubic yard contaminated soil lot, were utilized for soil classification purposes. Both of the soil samples (1 & 2) exceeded AIA's Clean Soil Level for DRO and fell within the Warm soil classification range.

The small soil lot classified as Contaminated - Warm, was transported to the AIA Contaminated Soil Landspreading Area for subsequent disposal. Soil lots classified as Clean were transported to the AIA Clean Soil Disposal Area and were spread.

9.2 Quality Assurance / Quality Control Sample D

One (1) confirmation soil sample was analyzed as a QA/QC (duplicate) sample. Sample D confirmed the results associated with its corresponding primary soil sample (Sample 1).

An ADEC Data Package is included in the analytical laboratory report along with a completed ADEC Laboratory Data Review Checklist.

10.0 FINAL STATUS & SOIL DISPOSAL

Based on confirmation laboratory analysis, DRO contaminated soil remains onsite at the location of the southern-most UST. Field screening readings did not exceed the PID action level of 15.0 units so additional analytical sampling was not performed. The impacts were noted near the overfill bucket assembly alongside the tank in the bedding material (pea gravel). The TELLUS Daily Field Report, dated May 2, 2019, further details this conclusion

All excavated soil found to be within AIA Clean Soil Classification Levels was spread out at the AIA Clean Soil Disposal Area while all excavated soil classified as being above AIA Clean Soil Classification Levels (approximately 5 cubic yards of Contaminated - Warm soil), was confirmed and classified using analytical laboratory testing. The contaminated soil generated during this project was characterized, transported to the AIA Contaminated Soil Landspreading Area and subsequently staged for future disposal.

No clean or contaminated soil currently exists within the project's construction limits. All stockpiled soil was hauled offsite and the Fleet Fueling Facility was reconstructed with new concrete and asphalt.