

October 22, 2019

Ms. Janine Boyette
Response and Remediation SME
Alyeska Pipeline Service Company
P.O. BOX 196660
Anchorage, AK 99519-6660

Re: OMS 35-1.2 Reconnaissance Report

Dear Ms. Boyette,

Reconnaissance of Operations Mining Site (OMS) 35-1.2 was completed on July 7, 2019 by SLR International Corporation (SLR) on behalf of Alyeska Pipeline Service Company (Alyeska). The reconnaissance was requested by the Alaska Department of Environmental Conservation (ADEC) to assess the area for the presence of petroleum stained gravel and to document the condition of the entrance gate. In addition, ADEC requested a review of mining records to evaluate whether mining activity has occurred since 2003. Alyeska retained SLR International Corporation (SLR) to complete this work. Site activities were conducted in accordance with the ADEC-approved work plan dated June 20, 2019 (SLR, 2019).

BACKGROUND

Operations Mining Site 35-1.2 is a sand and gravel mining site located within the floodplain of Phelan Creek at mile 200.2 of the Richardson Highway (Figure 1). The site coordinates listed in the ADEC Contaminated Sites Database are Latitude 63.204500, Longitude -145.601000 (ADEC, 2019). This mining site was jointly operated by Alyeska and the Alaska Department of Transportation and Public Facilities (DOT&PF) during pipeline construction and subsequently for maintenance of the pipeline and the Richardson Highway. Alyeska has not used the site for several years but maintains an active mining plan if material is needed from this site (ADEC, 2019).

On August 4, 1993, Alyeska contacted ADEC to notify the Department of an oil spill. Four distinct areas of contamination were noted, and excavations of the contaminated gravels were extended to a depth of four feet before excavation activities were halted and ADEC was notified. Alyeska maintains they were not the source of the spill but were assisting in cleanup of the contamination. No records are available in the Contaminated Sites database regarding the disposition of excavated material.

2019 FIELD ACTIVITIES

The following field activities were completed during the site reconnaissance in accordance with the project work plan:

- Assessment of gated access to the site;

- Visual inspection of accessible areas and photographs to document the current condition of the mining site for indications of recent mining activity;
- Visual inspection for the presence of petroleum hydrocarbon impacted gravel, including shallow excavations and volatile organic compound (VOC) screening in areas noted to have been impacted with petroleum hydrocarbons; and
- Background research of the mining history at OMS 35-1.2 for evidence of mining activity since 2003.

RECONNAISSANCE FINDINGS

Findings of the site reconnaissance are discussed in the following sections and are documented in the photograph log and field notebook included as Appendices A and B.

Visual inspection

Visual inspection included mapping the current site perimeter with a handheld global positioning system (GPS) unit (Figure 2), and a visual inspection of the ground surface within the perimeter. Observations included the following:

- No staining or substantial soil disturbances were identified during visual inspection of the main OMS site area (Photographs 1-7).
- No evidence of gravel mining activity in the last three years was observed, as evidenced by vegetation growing on gravel piles and the presence of observed gravel piles on historical aerial site photographs from 2016 (Figure 2).
- Site access gates do not prevent site access for vehicles as evidenced by fresh vehicle tracks on the gravel.

Soil VOC Screening

Soil screening for VOCs was conducted along two long transects established in the approximate center of the OMS site, near the ADEC site coordinate and the location of machinery observed in an aerial photograph taken in 2014. The transects were spaced approximately 50 feet (ft) apart and ran 100 ft from east to west, as shown in Figure 2. Soil samples were collected every 20 ft along each transect from a depth of approximately 0.5 ft for heated headspace screening using a photoionization detector (PID). Heated headspace PID readings for the north and south transects ranged from 0.0 to 0.3 parts per million, well within the typical VOC background range for uncontaminated soils. The location of screening transects were mapped by GPS.

Mining History Review

A review of mining activity history for OMS 35-1.2 by Alyeska indicated that mining last occurred at the site in 2003. The review concluded that 40,000 cubic yards (cy) of material were mined and processed into three different size grades of product in 2003. This material and previously-stockpiled materials at the site were used for construction and maintenance projects on the Trans-Alaska Pipeline System (TAPS). The material use history indicates that an annual average of 2,800 cy was removed from stockpiles for use on TAPS between 2000 and 2013, with an additional 2,200 cy used on TAPS projects in subsequent years. Currently,

a total of 31,086 cy of two types of screened product and pit-run gravel remain at OMS 35-1.2 for use on TAPS projects.

CONCLUSIONS

The OMS 35-1.2 site reconnaissance did not find evidence of surface staining or indications of near-surface contamination within the areas formerly indicating a surface release. On-site observations indicated that site access gates do not completely prevent access to the site from the Richardson highway. Lastly, the record of mining activity at OMS 35-1.2 indicates no active mining has occurred since 2003.

Please contact us at your convenience should you have any questions.

Sincerely,
SLR International Corporation

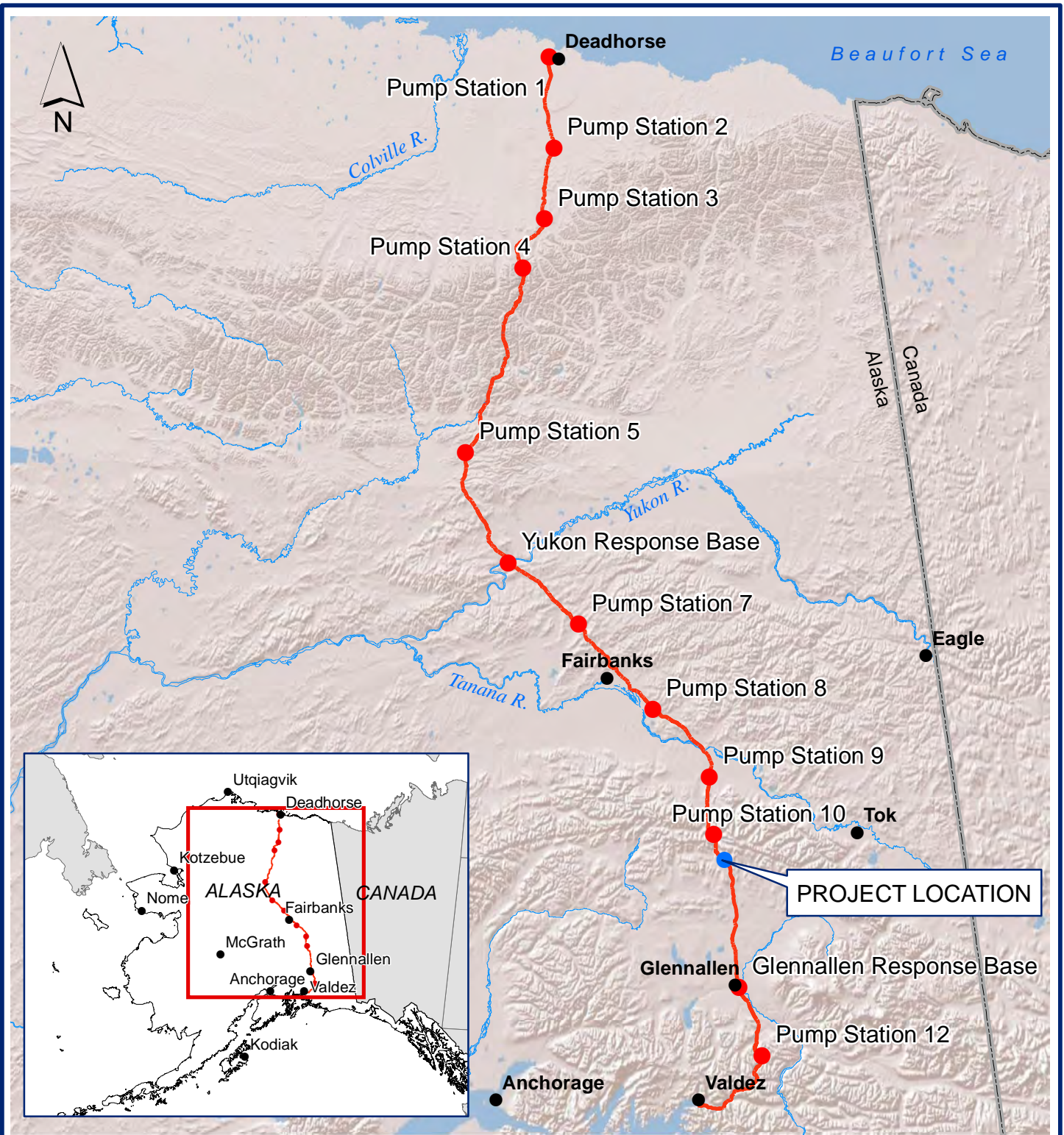

for: Christophe Venot
Senior Scientist


Carl Benson
Principal Scientist

- Enc Figure 1 – Site Location Map
 Figure 2 – Site Vicinity Map
 Appendix A – Photograph Log
 Appendix B – Field Notebook

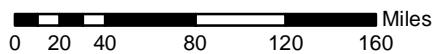
REFERENCES

- ADEC, 2019. Contaminated Sites Database
<http://dec.alaska.gov/Applications/SPAR/PublicMVC/CSP/SiteReport/1729> . June 20
SLR International Corporation, 2019. MS 35-1.2 Reconnaissance Work Plan. June 20.



Legend

- City
- Pump Station
- Trans Alaska Pipeline



THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY.
ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.



Site
 ALYESKA PIPELINE SERVICE COMPANY
 OPERATIONS MINING SITE (OMS) 35-1.2
 RICHARDSON HIGHWAY MILEPOST 200.2

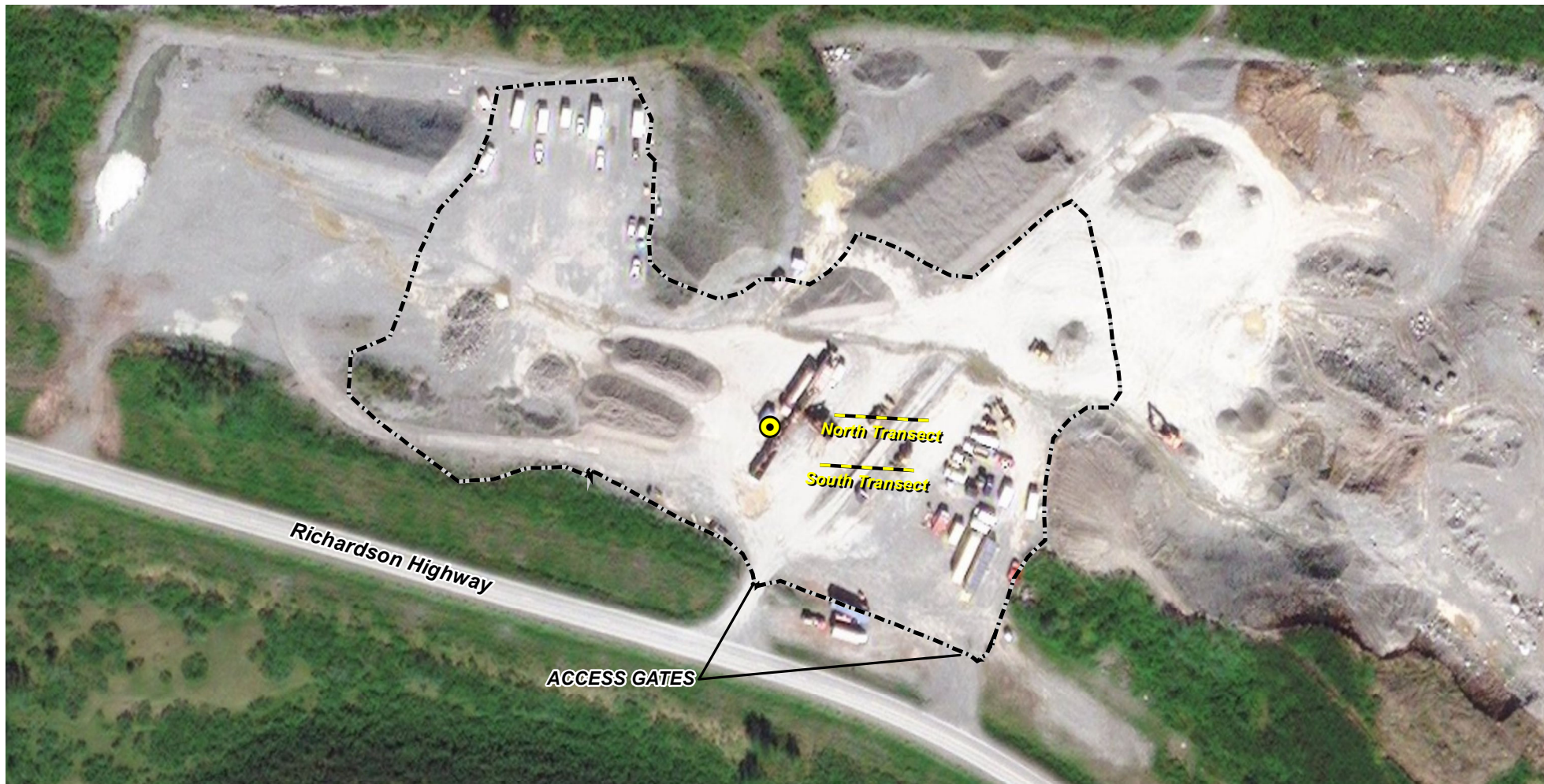
Report
 OMS 35-1.2 RECONNAISSANCE REPORT

Drawing
 SITE LOCATION MAP




Drawing September 2019
 File Name F1 MS35-1_2 RPT_19.mxd

Scale As Shown
 Project No. 105.01288.19038

Fig. No. 1



Legend

-  ADEC Site Coordinate (63.204500, -145.601000)
-  Soil Screening (Heated Headspace) Transect
-  Site Reconnaissance Perimeter

ALYESKA PIPELINE SERVICE COMPANY
 OPERATIONS MINING SITE (OMS) 35-1.2
 RICHARDSON HIGHWAY MILEPOST 200.2

Report

OMS 35-1.2 RECONNAISSANCE REPORT

Drawing

SITE VICINITY MAP

Date September 2019

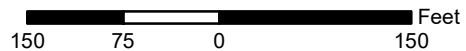
Scale 1 in = 150 feet

Fig. No.

File Name F2 MS35-1_2 RPT_19.mxd

Project No. 105.01288.19038

2



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Photograph 1: View of the OMS 35-1.2 site from the southeast gate looking northwest.



Photograph Log
OMS 35-1.2 Site Reconnaissance
July 7, 2019



Photograph 2: View of OMS 35-1.2 site from gravel piles in northeast corner looking south.



Photograph 3: View of OMS 35-1.2 site from the southwest corner looking to the east.



Photograph Log
OMS 35-1.2 Site Reconnaissance
July 7, 2019



Photograph 4: View of OMS 35-1.2 site center gravel area looking southwest. The south screening transect is shown as a dashed blue line extending west.



Photograph Log
OMS 35-1.2 Site Reconnaissance
July 7, 2019

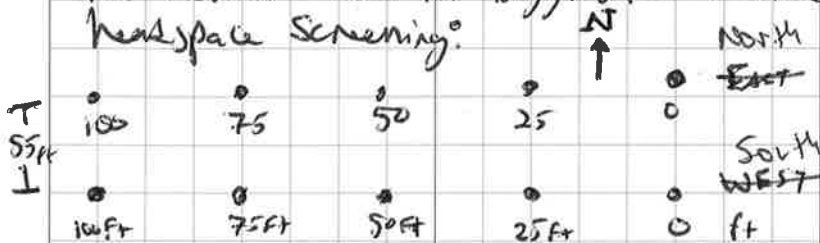


Photograph 5 (left): View to west along the north screening transect.
Photograph 6 (center): Typical screened pad gravel material.
Photograph 7 (right): View to west along the south screening transect.

MP 35-1.2 Site Recon 7/7/19

Cleveland, N. wally

0600-1100 APSC MLV project. Multi-Phase II PTO calibrated.

1100-arrive on site, layout four
100ft long transects, ^{one} across eachsuspected area. No obvious staining or signs of
contamination, debris, or excavations.1110-1200 dig 6" deep every 25ft
and collect soil in baggies for heated
headspace screening.

- Soil is very hard, sandy gravel pad. Cannot dig 76".

HH RESULTS (PPM)

<u>West</u>	<u>South</u>	<u>East</u>	<u>North</u>
250 - 0.3		0 - 0.1	
25 - 0.3		25 - 0.2	
50 - 0.1		50 - 0.1	
75 - 0.1		75 - 0.1	
100 - 0.1		100 - 0.1	

2W 8/22,
cannot

GPS survey of screening locations and pit
perimeter using handheld GPS.

1210- depart site, continue MLV project.