



12/13/2018

Wally and Barbara Hopkins
Sandventure, LLC.
P.O. Box 91949
Anchorage, AK 99509-1949

Re: Decision Document: Qwik Lube (Facility 2474)
Cleanup Complete Determination

Dear Wally and Barbara Hopkins:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Qwik Lube site located at 1780 Peger Road, in Fairbanks, Alaska (Lot 4, Block 6 in the EM Jones Subdivision), which is currently operating as a Jiffy Lube facility. Based on the information provided to date, it has been determined that the contaminant concentrations remaining on site do not pose an unacceptable risk to human health or the environment and no further remedial action will be required unless new information becomes available that indicates residual contaminants may pose an unacceptable risk.

This Cleanup Complete determination is based on the administrative record for the Qwik Lube site which is located in the offices of the ADEC in Fairbanks, Alaska. This decision letter summarizes the site history, cleanup actions and levels, and standard site closure conditions that apply.

Site Name and Location:

Qwik Lube
1780 Peger Road
Fairbanks, Alaska 99709

Name and Mailing Address of Contact Party:

Wally and Barbara Hopkins
Sandventure, LLC
P.O. Box 91949
Anchorage, AK 99509-1949

ADEC Site Identifiers:

File No.: 100.26.091
Hazard ID.: 24117

Regulatory Authority for Determination:

18 AAC 78 and 18 AAC 75

Site Description and Background

The site facility was constructed in 1986 as an automotive servicing facility. At that time, the site was operated as a Qwik Lube or Q-Lube automotive lube and fuel sales facility, by Qwik Three, Inc. In July of 1997, the facility was sold to Q-Lube, a Quaker State company. Quaker State and Pennzoil companies merged in 1998. In 1999, their respective subsidiaries, Jiffy Lube and Q-lube, were combined under the Jiffy Lube name. In 1999, Inlet Worldwide Oil, Inc. (a subsidiary of Shell Oil) obtained the rights to the Jiffy

Lube franchise at this site. The property is currently owned by Sandventure, LLC, and is leased to Inlet Worldwide Oil.

Seven underground storage tanks (USTs) have been removed at this site, with subsequent UST Site Assessments and Release Investigations being conducted. The following table summarizes information relating to the seven identified USTs on the project site:

Tank Designation	Capacity (Gallons)	Product	Date Removed/Closed
UST #1	12,000	Regular Gasoline	1997
UST #2	12,000	Unleaded Gasoline	1997
UST #3	12,000	Super Unleaded Gasoline	1997
UST #4	6,000	Diesel/Heating Oil	2005
UST #5	3,000	Waste Oil	2014
UST #6	3,000	Waste Oil	2014
UST #7	500	Diesel	2014

Contaminants of Concern

During the site investigation and cleanup activities at this site, various samples were collected from soil and groundwater, and analyzed for volatile organic compounds (VOCs); semi-volatile organic compounds (SVOCs); gasoline, diesel, and residual range organics (GRO, DRO, RRO); petroleum additives (methyl-tertiary butyl ether, or MTBE, ethylene dibromide, or EDB, and ethylene dichloride, or EDC); and metals. Based on these analyses, the following contaminants were detected above the applicable cleanup levels and are considered Contaminants of Concern at this site:

- Diesel Range Organics (DRO)
- Residual Range Organics (RRO)
- Benzene
- Naphthalene
- Tetrachloroethylene (PCE)
- Trichloroethylene (TCE)

Cleanup Levels

The migration to groundwater cleanup levels, established in 18 AAC 75.341(c), Table B1, and 18 AAC 75.341 (d), Table B2 apply to soil at this site. Groundwater cleanup levels are established in 18 AAC 75.345 Table C.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Groundwater (mg/L)
DRO	250	1.5
RRO	11,000	1.1
Benzene	0.022	0.0046

Naphthalene	0.038	0.0017
Tetrachloroethylene	0.19	0.041
Trichloroethylene	0.011	0.0028

mg/L = milligrams per liter

µg/L = micrograms per liter

Characterization and Cleanup Activities

UST removal, assessment, and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 1997 as a Leaking Underground Storage Tank (LUST) site. These activities are described below.

In 1997, USTs #1, 2, and 3 (each a 12,000 gallon regulated UST for gasoline storage and dispensing) were removed by Shannon and Wilson, Inc., and the underlying soil was sampled for fuel hydrocarbons. Confirmation sampling in 1997 indicated benzene up to 3.03 mg/kg remained at the excavation bottom, above ADEC cleanup levels. A UST site assessment report was produced at that time, however, the report was not received by ADEC until October 2004. Approximately 400 cubic yards (cy) of soil were stockpiled on an unoccupied parcel off Pickett Place for bioremediation during the 1997 tank excavations. The fate and disposition of these soils remain unknown, and attempts made by ADEC and consultants to locate historical records have been unsuccessful. It is likely they were abandoned and spread in place.

In 2005, a 6,000-gallon heating oil tank (HOT) designated as UST #4 failed vacuum tank tightness tests and was removed by Restoration Science and Engineering (RSE). RSE submitted a site assessment report to ADEC. This report concluded there was no evidence of tank leakage, and samples collected from excavation indicated contamination was not detected. Additional vacuum testing revealed a possible leak at elbow piping joints and soil samples were collected beneath the suspect elbow joints. DRO and RRO petroleum constituents were detected below ADEC soil cleanup levels (167 and 339 mg/kg, respectively). The recommendation by RSE was that UST #4 be considered for closure. No other investigation or remediation was conducted at that time.

In 2014, Nortech removed and assessed UST #5, UST #6 and UST #7, and completed a release investigation (RI) at UST #4, UST #5 and UST #6. Additional soil borings advanced at the location of UST #4 in 2014 had detections of chloroform and trichlorofluoromethane (Freon-11), but below ADEC soil cleanup levels, with no detections of petroleum compounds.

UST #5 and #6 were 3,000-gallon USTs originally used to store new lube-oil. At some point, both tanks were converted to waste oil storage and used to fuel a waste oil furnace in the facility. Stockpiled soils from UST #5 and #6 contained DRO, PCE, and TCE above migration to groundwater levels (393, 0.10, and 1.03 mg/kg, respectively) and were placed back into the tank excavations. One sample collected beneath the piping run had a DRO concentration of 249 mg/kg, just below the ADEC soil cleanup level of 250 mg/kg. Arsenic was also detected in tank excavation sidewall samples above ADEC soil cleanup levels. No contaminants above ADEC cleanup levels were found in groundwater.

UST #7 was a 500-gallon HOT. Upon removal of UST #7, the excavation was observed to be in good condition with no evidence of staining or releases. DRO, RRO and xylenes were detected in the excavation stockpile or sidewall samples, but were below ADEC soil cleanup levels. Arsenic above ADEC soil cleanup levels was found in excavation sidewall samples. The 2014 report concluded that UST #5, #6, and #7 had not leaked, and no further investigation or remedial action was warranted.

Additional investigations were conducted in 2017, where eight soil borings were advanced across the property, including near former Tanks UST #1, 2, and 3. Two borings were located hydrologically upgradient from the former UST locations; two borings were installed within the footprint of the former USTs; and one boring was located just down-gradient of the former USTs. Borings were also placed along the northwest corner of the property to assess the potential for off-site contaminant migration. Monitoring wells were installed at each boring location to assess site-wide groundwater conditions. No free product was observed in any monitoring well, and from a groundwater level survey, the groundwater flow direction was determined to be towards the northwest. (These monitoring wells were later decommissioned during October, 2018, following DEC-approved *Best Management Practices, Maintaining or Decommissioning Water Wells and Boreholes*).

Soil sample results indicated that naphthalene exceeded cleanup levels in borings upgradient of the former tanks UST #1, 2, and 3. Arsenic was also found at concentrations ranging from 2.72 mg/kg (MW-4 and MW-8) to 8.51 mg/kg (MW-1), exceeding the applicable cleanup level of 0.2 mg/kg in all samples.

Various petroleum constituents and TCE were detected in groundwater samples, but were below the ADEC groundwater cleanup levels. Chloroform was detected in four samples, with concentrations ranging from 0.00058 mg/L (MW-4) to 0.00291 mg/L (MW-5), slightly exceeding the 0.0022 mg/L cleanup level in MW-5. Arsenic was detected in seven samples, with concentrations ranging from 0.00699 mg/L (MW-2) to 0.0187 mg/L (MW-4), exceeding the applicable cleanup level of 0.00052 mg/L in all seven samples.

There are no known or suspected sources of anthropogenic arsenic on the site, and detections in soil and groundwater are within the range considered background concentrations, as indicated in 18 AAC 75. The detection of chloroform in groundwater is localized to a Coffee Shop operating near the edge of the site parking lot, which has a water supply holding tank and regular deliveries of municipal water. The presence of chloroform in groundwater is not associated with past releases of petroleum or other contaminants on the property, and is assumed to be associated with chlorine disinfection byproduct formation, and may be from a leaking water pipe. Similar observations have been made in Right-of-way parcels around the greater Fairbanks area, where water utilities are located. The presence of naphthalene in soil above cleanup levels and, at low levels in groundwater, suggests it is present due to residual contamination from former USTs, and likely site gravel re-grading activities, and not migration from an off-site source.

Cumulative Risk Evaluation

Pursuant to 18 AAS 78.600(d), when detectable contamination remains on-site following a cleanup, a cumulative risk determination must be made that the risk from hazardous substances does not exceed a cumulative carcinogenic risk standard of 1 in 100,000 across all exposure pathways and does not exceed a cumulative non-carcinogenic risk standard at a hazard index of one across all exposure pathways.

Based on a review of the environmental record, ADEC has determined that residual contaminant concentrations meet the human health cumulative risk criteria for residential land use.

Exposure Pathway Evaluation

Following investigation and cleanup at the site, exposure to the remaining contaminants was evaluated using ADEC's Exposure Tracking Model (ETM). Exposure pathways are the conduits by which contamination may reach human or ecological receptors. ETM results show all pathways to be one of the following: De-Minimis Exposure, Exposure Controlled, or Pathway Incomplete. A summary of this pathway evaluation is included in Table 2.

Table 2 – Exposure Pathway Evaluation

Pathway	Result	Explanation
Surface Soil Contact	Pathway Incomplete	Contamination is not present in surface soil (0 to 2 feet below ground surface).
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is below human health and ingestion soil cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below human health and inhalation soil cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	De-Minimis Exposure	Contaminants in soil and groundwater are not present at concentrations that pose vapor intrusion risks.
Groundwater Ingestion	De-Minimis Exposure	Groundwater contamination from petroleum releases does not exceed groundwater cleanup levels. Chloroform is present in groundwater but is assumed to be from disinfection byproduct formation.
Surface Water Ingestion	Pathway Incomplete	Surface water is not used as a drinking water source in the vicinity of the site.
Wild and Farmed Foods Ingestion	Pathway Incomplete	Wild or farmed foods are not anticipated to be harvested from the site.
Exposure to Ecological Receptors	Pathway Incomplete	Contamination is only present in the sub-surface.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be affected by the minimal volume or concentration of remaining contamination. “Pathway Incomplete” means that in ADEC’s judgment contamination has no potential to contact receptors. “Exposure Controlled” means there is an institutional control in place limiting land or groundwater use and there may be a physical barrier in place that prevents contact with residual contamination.

ADEC Decision

Soil and groundwater contamination at the site have been cleaned up to concentrations below the approved cleanup levels suitable for residential land use. This site will receive a “Cleanup Complete” designation on the Contaminated Sites Database, subject to the following standard conditions.

Standard Conditions

1. Any proposal to transport soil or groundwater from a site that is subject to the site cleanup rules or for which a written determination from the department has been made under 18 AAC 79.276(f)(1) that allows contamination to remain at the site above method two soil cleanup levels or groundwater cleanup levels listed in Table C requires ADEC approval in accordance with 18 AAC 78.600(h). A “site” as defined by 18 AAC 78.995(134) means an area that is contaminated, including areas contaminated by the migration of hazardous substances from a source area, regardless of property ownership. (See attached site figure.)
2. Movement or use of contaminated material in a manner that results in a violation of 18 AAC 70 water quality standards is prohibited.
3. Groundwater throughout Alaska is protected for use as a water supply for drinking, culinary and food processing, agriculture including irrigation and stock watering, aquaculture, and industrial

use. Contaminated site cleanup complete determinations are based on groundwater being considered a potential drinking water source. In the event that groundwater from this site is to be used for other purposes in the future, such as aquaculture, additional testing and treatment may be required to ensure the water is suitable for its intended use.

This determination is in accordance with 18 AAC 78.276(f) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

Appeal

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 555 Cordova Street, Anchorage, Alaska 99501-2617, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, P.O. Box 111800, Juneau, Alaska 99811-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions about this closure decision, please feel free to contact me at (907) 451-2117 or email at james.fish@alaska.gov.

Sincerely,

James Fish
Project Manager

cc: Spill Prevention and Response, Cost Recovery Unit



Figure of Site Location

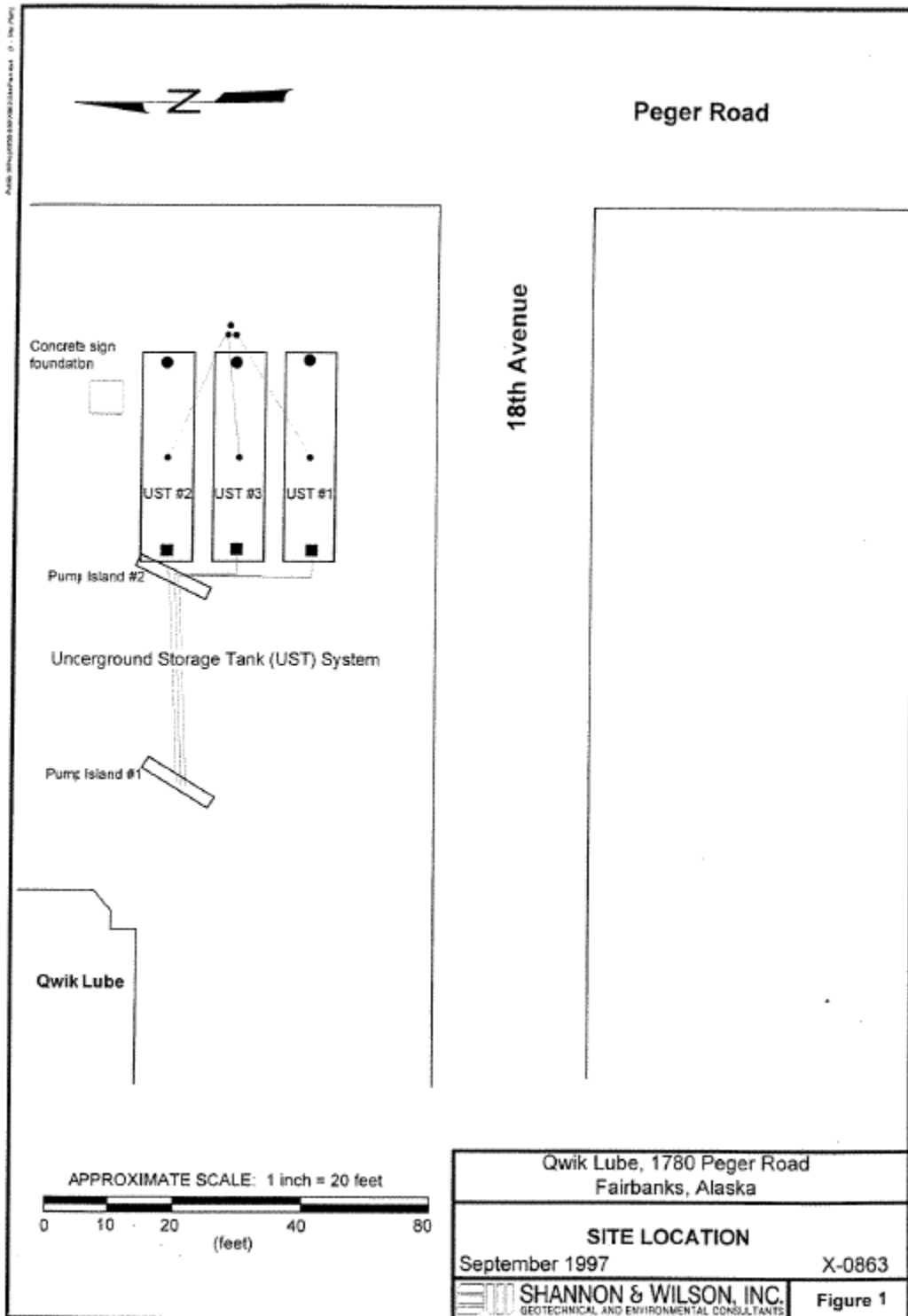


Figure of USTs 1, 2, & 3 from 1997.

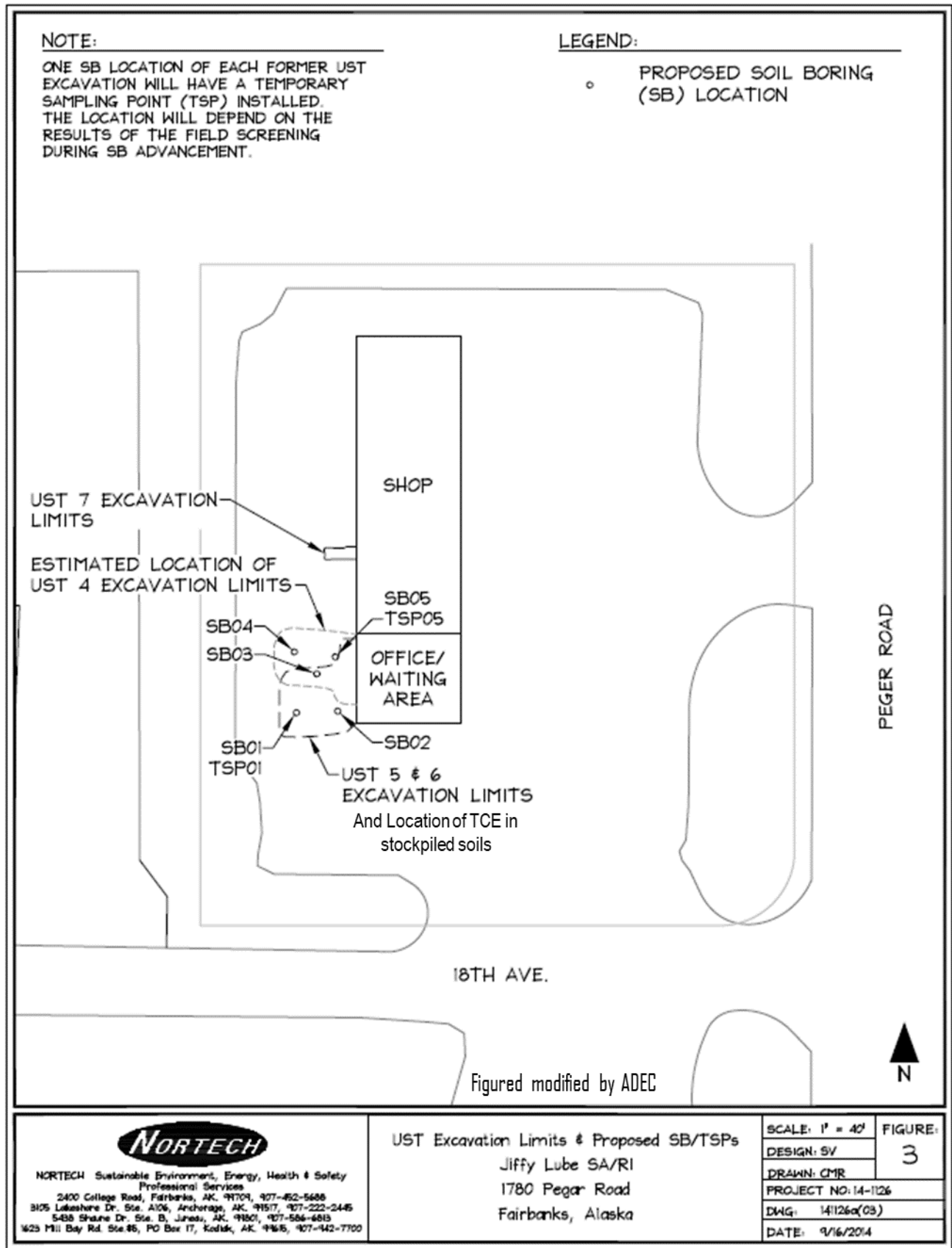


Figure of USTs 4, 5, 6, & 7 excavations



Figure of 2017 Monitoring Well locations and residual contamination in soil and groundwater