

**Phase I Environmental Site Assessment
Keku Cannery Main Building
Kake, Alaska**

February 2014

Submitted To:
Alaska Department of Environmental Conservation
610 University Avenue
Fairbanks, Alaska 99709

By:
Shannon & Wilson, Inc.
5430 Fairbanks Street, Suite 3
Anchorage, Alaska 99518
Phone: (907)561-2120
Fax: (907)561-4483
e-mail: sim@shanwil.com

32-1-17631

EXECUTIVE SUMMARY

This report documents the results of our Phase I Environmental Site Assessment (ESA) of the main cannery building at Keku Cannery, Kake, Alaska (the Property). The purpose of this Phase I ESA was to develop a professional opinion as to the presence of recognized environmental conditions (RECs), as defined by ASTM International (ASTM) Standard E 1527-13. A vicinity map is included as Figure 1, and a site plan is included as Figure 2. Aerial photographs of the Property are included as Figures 3 through 5.

This Phase I ESA included a records review and a visual evaluation of the Property grounds. Prior to the on-site evaluation, historical aerial photos were examined to identify areas of potential concern. Records at municipal and state offices and local utilities were reviewed to determine ownership information, public utility services to the Property, and incidents relating to spills or chemical releases. Property owners, users, and Alaska Department of Environmental Conservation (ADEC) officials were interviewed to gather information about potential environmental concerns on the Property. The records review also included researching state and federal databases to determine if listed contaminated sites, underground storage tanks (USTs), or leaking USTs (LUSTs) are present in the project vicinity.

Recognized Environmental Conditions

A REC is the presence or likely presence of a hazardous substance or petroleum product under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Property or into the Property's ground, groundwater, surface water, or air. This assessment revealed no evidence of RECs in connection with the Property and the surrounding parcels except the following:

On-Site Recognized Environmental Conditions

According to information provided by the Organized Village of Kake (OVK), asbestos-containing materials (ACM) are present in each building. Due to the age of the building, the presence of lead based paint (LBP) and polychlorinated biphenyls (PCBs) in the ballasts is possible. These materials could impact the water and/or air if the building were to collapse.

Floor drains were observed throughout the building. Mr. Gary Williams of OVK stated that he did not know where the floor drains discharged. It is possible, due to the condition and former use of the building that these drains dump directly into the water below the cannery. Releases of petroleum products or other chemicals discharged through the drain could potentially impact the Property's water.

Staining was observed beneath the machine shop on the beach/shoreline and boiler area on the floor. This indicated a past release onto the ground surface and/or water at high tide.

Drums, tanks, and containers of potentially hazardous substances and/or petroleum products as well as metal scraps were observed on the Property. Some of the containers were unlabeled. No evidence of leaks and/or spills associated with these materials was observed during the February 3, 2014 site visit; however, due to the potentially imminent collapse of the building, these materials constitute a material threat of a release into the water.

Vehicles, engines, and refrigerators were observed in the building during the February 3, 2014 site visit. These items likely contain motor oil, gasoline, diesel, and/or Freon which could impact the water if the building were to collapse.

Off-Site Recognized Environmental Conditions

No off-site RECs were identified.

Controlled Recognized Environmental Conditions

A controlled REC is an environmental condition that indicates a past release on the Property or into the Property's ground, groundwater, or surface water that has been addressed by a regulatory agency, but contamination is allowed to remain in place subject to the implementation of required controls.

On-Site Controlled Recognized Environmental Conditions

No on-site controlled RECs were identified.

Off-Site Controlled Recognized Environmental Conditions

Two spills were identified within the cannery complex (one in 2009 and one in 1997), based on reports provided by OVK. Though contamination still remains on the site, the 2009 spill received a no further action letter from the ADEC in 2013. The 1997 spill was capped with clean shot rock and received a no further action letter from the ADEC in 2001. The contamination associated with these spills, while inside the cannery complex, is not located on the Property.

Historical Recognized Environmental Conditions

A historical REC is an environmental condition that may have constituted a REC in the past, but has been closed by a regulatory agency without restrictions or otherwise is no longer considered to pose a material threat. No historical RECs were identified.

Other Environmental Conditions

Other Environmental Conditions include known, suspected, or potential sources of hazardous substances or petroleum products that are not considered RECs due to (a) the absence of a confirmed release or other material threat, (b) insufficient information to sufficiently evaluate the condition, (c) de minimis conditions that are not expected to be subject to regulatory action or (d) exclusion from the ASTM definition of hazardous material (e.g. asbestos-containing materials [ACM]). The following Other Environmental Conditions were identified on the Property:

- The warehouse building adjacent to the south of the Property collapsed into the water in 2011. It is possible that this building also contained PCBs, ACM, and LBP. No analytical testing was done at the time to determine if this event impacted the soil or water on the Property.
- A tank farm is present to the southeast of the Property. If a spill were to occur from these tanks, it could impact the Property's soil and/or water.

TABLE OF CONTENTS

	Page
1.0 INTRODUCTION.....	1
1.1 Purpose	1
1.2 Special Terms and Conditions.....	1
1.3 Limitations and Exceptions	1
1.4 User Reliance	2
1.5 Report Viability Date	2
2.0 SITE AND PROJECT DESCRIPTION	3
2.1 Location and Legal Description	3
2.2 Site and Vicinity Characteristics	3
2.3 Description of Improvements on the Property	4
2.4 Past and Current Use of Property	4
2.5 Environmental Assessments Conducted on the Property.....	4
2.6 Past and Current Uses of Adjoining Properties.....	4
3.0 USER-PROVIDED INFORMATION	5
4.0 RECORDS REVIEW	5
4.1 Historical Use Information.....	5
4.1.1 Aerial Photographs.....	5
4.1.2 Public Ownership Documents.....	6
4.1.3 Environmental Liens	6
4.2 Physical Setting	6
4.2.1 Groundwater Characteristics.....	7
4.2.2 Soils/Geology.....	7
4.2.3 Historical Maps	7
4.3 Regulatory Database Search.....	7
4.3.1 Federal Records Sources.....	7
4.3.2 State Records Sources	8
4.3.3 Local Agency Sources	9
5.0 SITE RECONNAISSANCE	9
5.1 Interior Evaluation.....	9
5.2 Property Grounds Evaluation	10
5.3 Surrounding Properties Evaluation	10
5.4 Hazardous Substances and Petroleum Products	10
5.5 Storage Tanks	10
5.6 Drums	11
5.7 Asbestos-Containing Materials and Lead-based Paint.....	11
5.8 Transformers	11

TABLE OF CONTENTS (Continued)

5.9	Solid Waste Disposal	11
6.0	INTERVIEWS	11
6.1	Government Official	11
6.2	Current Owners/Occupants of the Property	11
6.3	Former Owners of the Property	12
7.0	OTHER ENVIRONMENTAL CONSIDERATIONS	12
8.0	FINDINGS AND CONCLUSIONS.....	13
8.1	Recognized Environmental Conditions.....	13
8.2	Controlled Recognized Environmental Conditions.....	14
8.2.1	On-Site Controlled Recognized Environmental Conditions	14
8.2.2	Off-Site Controlled Recognized Environmental Conditions	14
8.3	Historical Recognized Environmental Conditions	14
8.4	Other Environmental Conditions	14
9.0	QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS	15
10.0	CLOSURE/LIMITATIONS.....	15

FIGURES

1	Vicinity Map
2	Cannery Complex Site Plan
3	Site Plan
4	July 10, 1965 Aerial Photograph
5	June 6, 1988 Aerial Photograph
6	June 9, 2006 Aerial Photograph

APPENDICES

A	Copy of Shannon & Wilson Proposal Dated January 24, 2014
B	Phase I Environmental Site Assessment Questionnaire
C	Ownership Documents
D	Site Photographs
E	Important Information About Your Environmental Site Assessment/Evaluation Report

ACRONYMS AND ABBREVIATIONS

ACMs	Asbestos-Containing Materials
ADEC	Alaska Department of Environmental Conservation
ADNR	Alaska Department of Natural Resources
ASTM	American Society for Testing of Materials International
CERCLIS	Comprehensive Environmental Response Compensation and Liability Information System
CORRACTs	TSD Facilities Subject to Corrective Action
DRO	Diesel Range Organics
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
LBP	Lead-Based Paint
LUST	Leaking Underground Storage Tank
NAC	National Assessment Corporation
NONCORRACTS	TSD Facilities Not Subject to Corrective Action
NPL	National Priorities List
OVK	Organized Village of Kake
PCBs	Polychlorinated biphenyls
REC	Recognized Environmental Condition
RCRA	Resource Conservation and Recovery Act
TSD	Treatment, Storage, and Disposal
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UST	Underground Storage Tank
WELTS	Well Log Tracking System

**PHASE I ENVIRONMENTAL SITE ASSESSMENT
KEKU CANNERY MAIN BUILDING
KAKE, ALASKA**

1.0 INTRODUCTION

This report documents the results of our Phase I Environmental Site Assessment (ESA) prepared for the main cannery building of the Keku Cannery, Kake, Alaska (the Property). The Property consists of a 35,000 square foot building.

1.1 Purpose

The purpose of the Phase I ESA was to develop a professional opinion regarding recognized environmental conditions (REC), as defined by American Society for Testing of Materials International (ASTM) Standard E 1527-13. This term is defined by ASTM as the presence or likely presence of a hazardous substance or petroleum product under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Property or into the Property's ground, groundwater, surface water, or air. Further understand the purpose is to assist the ADEC and other stakeholders in identifying environmental concerns that could impact the re-use and redevelopment (R&R) of the site.

1.2 Special Terms and Conditions

The Phase I ESA was prepared for the Alaska Department of Environmental Conservation (ADEC). This work was performed in general accordance with our proposal for environmental services dated January 24, 2014, and with ASTM E 1527-13. A copy of our proposal is included in Appendix A. Authorization to proceed with the Phase I ESA was received in the form of NTP number 18803603016 on January 27, 2014.

1.3 Limitations and Exceptions

The following elements of the Phase I ESA constitute deviations, exceptions, and/or data gaps, with respect to the standard requirements of ASTM E 1527-13. In our opinion, none of these considerations impacts our ability to identify RECs at the subject property.

- The Alaska Department of Environmental Conservation List of Contaminated Sites is assumed to be equivalent to a hazardous waste sites list and includes voluntary cleanup sites.
- Tribal lists of environmental concerns were not reviewed. The tribal lists are identified as "standard environmental sources" in ASTM Section 8.2.1. To our knowledge, such databases do not exist for the State of Alaska.

- Historical use of the Property is identified back to 1950, not to 1940, as required by ASTM E 1527-13. The oldest historical record is a deed from 1950 that indicates the Property was conveyed to the current owner, the Organized Village of Kake (OVK). However, based on information provided by OVK, the Property was used as a cannery from its construction in 1912 to 1977.
- All of the Standard Historical Sources listed in ASTM Section 8.3.4 were not researched for this ESA because they were not reasonably ascertainable and likely to be useful. For example, fire insurance maps, local street directories, building department records, and property tax files were not researched.
- Contact information for the previous owner of the Property was not provided by the client and could not be found online.

1.4 User Reliance

This report can be relied upon by, and has been prepared for the exclusive use of the ADEC. The ADEC can convey this report to an affiliate, subsidiary, lender, title insurer, regulatory/city agent or current property owner(s) and their agents, but further dissemination requires prior written approval from Shannon & Wilson, Inc. The limitations of the report are further described in Section 10.

1.5 Report Viability Date

The following table includes the date information used to calculate the report viability date.

Table of Critical Dates	
Report Issuance Date	February 20, 2014
Earliest Date of Interview of Owners and Occupants	February 3, 2014
Date of Recorded Environmental Cleanup Lien Search	February 7, 2014
Earliest Date of Government Record Review	February 3, 2014
Date of Visual Inspection of Subject and Adjoining Properties	February 3, 2014
Earliest Date of Interviews, Lien Search, Records Reviews, and Inspections	February 3, 2014
Report Viability Date	August 2, 2014

2.0 SITE AND PROJECT DESCRIPTION

2.1 Location and Legal Description

The street address for the Property is 541 Keku Road, Kake, Alaska. The Property comprises the main cannery building. A Vicinity Map showing the Property and surrounding area is included as Figure 1. Figure 2 is a site plan depicting the Property and adjacent parcels. Figure 3 is a site plan depicting the general site features of the Property.

The Property is located in the southwest 1/4 of the southeast 1/4 of Section 35, Township 56 South, Range 72 East, Copper River Meridian, Alaska, as referenced by the United States Geological Society (USGS) Petersburg D-6 quadrangle. The legal description the entire 14-acre cannery complex according to the ownership documents is:

Beginning at corner No. 1, on beach and not established, from which U.S. Location Monument, F.M.F. bears north, fifty-four degrees, eighteen minutes, and fifty seconds west eighty-five and sixty-eight-hundredths chains distance; thence north sixty-seven degrees, forty-three minutes east one and forty-six hundredths chains to witness corner to said corner No. 1, a granite boulder, 24 x 14 x 10 inches, marked with cross (x) on top at corner point and S 963 Cor. 1 W. C., N. C.; seven and seventeen-hundredths chains to corner No. 2, a granite boulder, 22 x 12 x 5 inches, marked with cross (x) on top at corner point and S 963 Cor. 2; thence south twenty-two degrees, seventeen minutes east nineteen and three-hundredths, chains to corner No. 3, a granite stone, 20, 12 x 5 inches, marked with cross (x) on top at corner point and S 963 Cor. 4, M. C.; eight and seventy-two-hundredths chains to corner No. 4, on beach and not established; thence meandering arm of Frederick Sound, north thirteen degrees, twenty-five minutes west five chains, north twenty-six degrees, fifty-one minutes west two and nine-tenths chains, north six degrees, forty-seven minutes east one chain, north forty-seven degrees, two minutes west one and six-tenths chains, north thirty degrees, forty-four minutes west four and four-tenths chains, north nine degrees, two minutes west three and nine-tenths chains, north twenty-nine degrees, fifty-eight minutes east one and two-tenths chains to corner No. 1, the place of beginning, containing fifteen and ninety-hundredths acres, according to the Official Plat of Survey of the said Land, returned to the General Land Office by the Surveyor-General.

Note that the Property is located in only a portion of the above described parcel.

2.2 Site and Vicinity Characteristics

The Property, located 1.5 miles south of Kake, Alaska, consists of the main cannery building of Keku Cannery. The surrounding area contains the rest of the cannery complex including warehouses and housing for cannery workers (Figure 2).

2.3 Description of Improvements on the Property

The Property presently contains the main cannery building, constructed in 1912. Historic photos show that the Property was once flush with the two warehouses located to the south of the building. The Property was expanded west to include a fish house for sorting the fish coming in from the dock. The machine shop, boiler house, egg room, a storeroom, and additional space for steam retorts used in the canning process was also added to the main cannery building. A dock was originally present to the west of the cannery building but collapsed sometime between 1994 and 2006.

2.4 Past and Current Use of Property

The Property was used as the main canning building from construction (1912) until 1977 when the cannery closed due to economic difficulties. The main cannery building was used to receive, process, can, and package fish for shipment. The larger cannery complex incorporates part of a salmon saltery from the early 1900's and is on the site of a traditional Tlingit summer camp. Since then the Property has been used for abandoned vehicle and other material storage.

2.5 Environmental Assessments Conducted on the Property

An Asbestos Survey and Hazard Assessment, provided by OVK, was performed by Med-Tox Northwest in November 1993. The assessment identified ACMs in various insulation locations and in the cement siding. PCBs were believed to be present in the light fixtures.

A Spill Response and Cleanup for the Cannery Oil Tanks report performed by Smith, Bayliss, LeResche Inc., in 1997 was provided by OVK. In 1996, approximately 150 gallons of petroleum products were released from the OVK oil shed northeast of the Property. The shed was decommissioned and the tanks inside were emptied. Ninety cubic yards of soil were excavated from the site and reused for paving jobs. The remaining contamination in the soil was capped with clean shot rock. A no further action (NFA) letter was issued in 2001.

A Keku Cannery Spill Discovery Report performed by Kai Environmental Consulting Services in 2009 was provided by OVK. In 2009 fuel contaminated soils were discovered during a geotechnical investigation for a road construction project on Keku Road. The report determined that the contaminated soil is from a historical fuel line spills in the area, though no documentation of these spills could be found. Though contamination still exists at the site, an NFA letter was issued in 2013.

2.6 Past and Current Uses of Adjoining Properties

The adjacent parcels were part of the 14-acre Keku Cannery facility that was in operation from 1912 until 1977. Seventeen buildings other than the main cannery building were constructed between 1912 and 1940 in the cannery complex. The cannery's facilities while in operation also included a cribbed log dam, 3,000 feet of water piping from Gunnuk Creek (located north of the Property), additional buildings south of the cannery complex, and ten fish traps. Three of the

buildings were demolished in 1977 when the cannery closed. The furthest south warehouse collapsed in 2006 and the warehouse adjacent to the south collapsed in 2011. The warehouse to the east is currently used as storage facility for OVK.

3.0 USER-PROVIDED INFORMATION

Ms. Teresa Gaudette, representative of OVK, completed the Phase I User Questionnaire. Ms. Gaudette indicated that she is not aware of any environmental cleanup liens or institutional controls on the Property. Ms. Gaudette referenced the asbestos report and spill cleanup report discussed in Sections 2.5 and 6.1. She also stated that the purpose for this Phase I ESA is to qualify for the Landowner Liability Protections under CERCLA.

4.0 RECORDS REVIEW

The purpose of the records review was to identify previous activities that may have constituted environmental misuse and/or contributed to the presence of waste residuals at the Property. Standard Environmental Record Sources and the Additional Environmental Record Sources identified in ASTM E 1527-13 were reviewed to the extent reasonably ascertainable and likely to be useful.

4.1 Historical Use Information

Two methods were used to verify previous land use: review of historical aerial photographs and review of available land ownership information. As part of this review, visits or telephone contacts were made to firms and individuals knowledgeable of the Property.

4.1.1 Aerial Photographs

Aerial photographs from Quantum Spatial, Inc. were reviewed to evaluate prior land use in this area. The photos that are included in this report are from 1965, 1988, and 2006. These photos are included as Figures 4 through 6, respectively, and are each enlarged to an approximate scale of 1 inch equals 100 feet. Although not chosen to print, aerial photographs from 1972 and 1994 were also reviewed. The approximate Property boundary is shown in red on the figures for reference.

The 1965 aerial photograph, included as Figure 4, shows the main cannery building with a dock adjacent to the west. There is a boat and an object present at the dock. According to information previously provided by OVK, this object could be a raft to haul fish remnants away. Two warehouse buildings and another dock are present to the south and one warehouse building is present to the east. To the north of the Property, are more cannery buildings and the beach. A tank farm is present to the southeast of the Property.

In the 1972 aerial photograph, the Property and adjacent parcels remain the same as in the 1965 aerial photograph. In the 1988 aerial photograph, included as Figure 5, the main cannery

building is still present but there is no longer a boat and raft at the dock. The warehouses and structures surrounding the Property remain the same as the 1972 photograph.

In the 2006 aerial photograph, included as Figure 6, the dock to the west of the main cannery building is absent. One of the warehouses to the south of the Property appears to have collapsed, while the warehouse adjacent to the south remains standing. The warehouse the east of the Property is present, as are the buildings to the north. The tank farm to the southeast of the Property is still present.

4.1.2 Public Ownership Documents

Ownership history between 1906 and 1950 was provided by representatives of OVK and the HABS report for the adjacent superintendent's house. A summary of the ownership beginning in 1906 is listed below, with copies of ownership documents beginning in 1950 included in Appendix C:

- The Property was owned by Kake Trading and Packing Company from 1906 to 1914.
- The Property was owned by Sanborn Cutting Company from 1914 to 1926.
- The Property was owned by Sunny Point Packing Company/Alaska Pacific Salmon Corporation from 1926 to 1940.
- The Property was owned by P.E. Harris and Company from 1940 to 1950.
- Deed recorded February 15, 1950. The Property is conveyed from P.E. Harris and Company to the Organized Village of Kake (OVK).
- Plat Map recorded June 21, 2007. The Property is platted as a portion of the Kake Seafood Alaska Plant Parcel, Kake Seafood Alaska Subdivision. The Property is owned by Kake Tribal Corporation.

4.1.3 Environmental Liens

Shannon & Wilson investigated whether environmental liens were placed on the Property on February 7, 2014 using the ADNRR Recorder's Office database. No environmental liens were identified.

4.2 Physical Setting

Geologic, hydrogeologic, hydrologic, and topographic characteristics of the Property were researched to further develop an understanding of the previous and current uses of the Property and surrounding area.

4.2.1 Groundwater Characteristics

The local groundwater flow direction and gradient were not established as part of this project. The building is constructed on piles.

The State of Alaska Well Log Tracking System (WELTS) was researched to provide information about drinking water wells on or near the Property. The WELTS database, reviewed on February 6, 2014, does not identify drinking water wells on the Property.

4.2.2 Soils/Geology

According to the National Resources Conservation Service, the soils in the area are 75 percent Kupreanof and similar soils, 15 percent Tolstoi and similar soils, and 10 percent minor components. A typical profile is listed as silt loam from 0 to 1 inches, gravelly sandy loam from 1 to 8 inches, very gravelly coarse sandy loam from 8 to 25 inches, and very gravelly sandy loam from 25 to 30 inches. The majority of the building is constructed on piles placed directly on the rocky shore of Keku Bay (Photo 1).

4.2.3 Historical Maps

A 1952 USGS 1:63,360 Topographic Map was reviewed and the portion of the map showing the Property and vicinity is included as Figure 1. The main cannery building is present along with the surrounding buildings associated with the cannery.

4.3 Regulatory Database Search

Federal and state database records were researched on February 3 through 6, 2014 for pertinent information regarding the environmental condition of the Property and adjacent parcels. In addition, local agency sources were contacted as part of the database search. This database search complies with ASTM E 1527-13, with the exceptions noted in Section 1.3.

4.3.1 Federal Records Sources

The National Priorities List (NPL) specifies those properties assigned the Environmental Protection Agency's (EPA) highest cleanup priority. The EPA website was reviewed for NPL sites in Alaska on February 3, 2014. There are no listed NPL sites in the Kake area.

The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) is also compiled by the EPA and includes sites the EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the NPL. According to the CERCLIS list, reviewed on February 5, 2014, no CERCLIS sites are located in the Kake area.

According to the EPA Region 10 report, reviewed on February 5, 2014, there are no Resource Conservation and Recovery Act (RCRA) treatment, storage, or disposal (TSD)

facilities subject to corrective action (CORRACTS) within 1 mile of the Property. There is one listed hazardous materials TSD facility not subject to corrective action (NONCORRACTS) in the the Kake area: the City of Kake Landfill. The City of Kake Landfill site is located greater than 1 mile from the Property.

The Emergency Response Notification System (ERNS) lists reported hazardous substance releases in quantities greater than the reportable quantity. As of February 5, 2014, the Property is not listed on the ERNS list.

The Brownfield list was reviewed on February 5, 2014 and contains no EPA Brownfield Assessment, Cleanup, and Revolving Loan Fund Grantees in Kake.

4.3.2 State Records Sources

The ADEC Spills List was reviewed on February 5, 2014 for information regarding spills on the Property. A spill was reported at the cannery site of 25 gallons of an unknown substance. No further action was issued by the ADEC on September 4, 2013. A report by Kai Environmental Consulting Services was provided by OVK regarding the spill (see Section 2.5).

The State Landfill/Solid Waste Disposal Site List was reviewed on February 5, 2014. According to the ADEC's Solid Waste Management database, no landfills or solid waste disposal sites are identified within 0.5 mile of the Property.

Registered Underground Storage Tank Database

The ADEC registered Underground Storage Tank (UST) records, available on the ADEC website were viewed on February 5, 2014. The Property is not a registered UST site and no registered UST sites are listed within 0.25 miles of the Property.

Leaking Underground Storage Tank Database

The ADEC's Leaking Underground Storage Tank (LUST) database was reviewed February 5, 2014, for information regarding registered LUST sites within 0.5 mile of the Property. ADEC records do not identify the Property as a LUST site and no LUST sites are located within 0.5 mile of the Property.

Contaminated Sites Database

The ADEC Contaminated Sites database was reviewed February 5, 2014 for sites within 1 mile of the Property. This list is assumed to be equivalent to a State Hazardous Waste Sites list, as required by ASTM E 1527-13. The Property is not listed as a contaminated site and no contaminated sites were identified within 1 mile of the Property.

4.3.3 Local Agency Sources

According to Mr. Gary Williams, executive director of OVK, and Ms. Teresa Gaudette, the Property is not currently connected to water, sewer, natural gas, or electric. In addition, we understand that the building was never heated when it was in operation. Mr. Williams stated that it was connected to water when it was in operation as a cannery and the NHL nomination report stated that water was piped onto the Property from Gunnuk Creek.

5.0 SITE RECONNAISSANCE

A Shannon & Wilson representative (Ms. Laura Coulson), accompanied by Mr. Gary Williams and Ms. Teresa Gaudette, visited the Property on February 3, 2014 to observe and document potential sources or impacts of petroleum hydrocarbons and/or hazardous substances. Significant findings observed during site reconnaissance activities are reported below. Photographs taken during site reconnaissance activities are included in Appendix D.

5.1 Interior Evaluation

The main cannery building consists of a crating and storage area, boiler area, bathrooms, shop, machine shop, cleaning room, fish house, egg room, and attic area. The attic area is located above the cleaning room and egg room. A photo of the building is included as Photo 2.

The boiler area contained retort and boilers that were previously used in the canning process (Photos 3 and 4). According to information provided by OVK, the retort held between five and seven retort car loads of canned salmon and the boilers are brick and cast iron. Reportedly, an old steam engine located behind the boilers was used as a backup generator in 1949. There were also several buses and cars stored near the retort (Photo 5) and an engine with staining around it (Photo 6). A white substance that appeared to have fallen off the pipes on the ceiling was also present (Photo 7). Many rusted containers and pieces of debris and trash were also present in the boiler area.

The shop largely contained rusted containers, trash, and debris (Photo 8). The bathrooms (Photo 9) and fish house were not entered due to the instability of the building.

Metal scraps and empty containers were observed in the machine shop, along with other pieces of equipment (Photos 10 and 11). Cans connected to piping and used for capture of hydraulic oil and a hole in the floor beneath the equipment was also observed (Photo 12). Several holes associated with the deterioration of the building were also observed in the floor of the machine shop. Staining was observed under the machine shop (Photo 20).

The cleaning room included several pieces of equipment for cleaning fish (Photo 13). Based on information provided by OVK, these pieces of equipment include two iron chinks (for fish processing) and a high speed canning line. Holes in the floor and strip drains were also observed in the cleaning room (Photo 14). Mr. Williams stated that he did not where the strip drains discharged.

The egg room could not be entered due to structural instability. Various debris and fish cleaning equipment were observed in this room (Photo 15).

In the crating and storage room, a car and several motorcycles, discarded refrigerators, and other debris were observed (Photo 16). A representative of OVK also identified several boxes in the attic of the crating and storage area as asbestos siding from one of the collapsed warehouses.

Only the portion of the attic above the cleaning room and egg room was entered. This portion of the attic contained a box making area and a can making area (Photo 17). A white substance was observed on the floor outside the can making area (Photo 18).

The ground surface of the building was concrete (cleaning room) or wood which was in poor condition. Many holes were present in the floor through which the ground surface and/or pilings could be observed. Many parts of the building could not be accessed due to the instability of the building.

5.2 Property Grounds Evaluation

The Property sits on pilings above the beach/ocean (Photo 19). A boardwalk connects the main cannery building to the adjacent parcels. The pilings located in the water zone were in poor condition. Staining was noted on the pilings underneath the mechanic shop (Photo 20).

5.3 Surrounding Properties Evaluation

The Property is surrounded by other cannery buildings to the east and south, the ocean to the west, and the beach and ocean to the north. The warehouse located to the east of the Property is currently in use by OVK. The warehouse to the south of the Property collapsed in 2011.

5.4 Hazardous Substances and Petroleum Products

An unlabeled 5-gallon bucket by blue bus in the boiler area was observed. A container of multi-purpose cement, an unlabeled jug, and various other unlabeled containers were observed in the shop. Three unlabeled compressed gas containers and an unlabeled bucket with brown liquid in it were observed in the machine shop. Various other unlabeled containers were also observed in the machine shop.

Ballasts were observed throughout the building (Photo 21). Due to the age of the building it is possible that these lights contain PCBs.

5.5 Storage Tanks

Two tanks were observed in the fish house (Photo 22) and Mr. Williams stated that he did not know what was in the tanks or if they are empty. Several tanks were observed in the egg room and Mr. Williams stated that they were empty (Photo 23).

5.6 Drums

An unlabeled drum was observed in the crating and storage area but could not be accessed due to structural instability (Photo 16). Two empty unlabeled drums were observed in the cleaning room (Photo 24). One drum was observed behind the boiler but also could not be accessed. According to information previously provided by OVK, several drums are located to the northwest of the boiler room and are presumed to contain oil and machine parts.

5.7 Asbestos-Containing Materials and Lead-based Paint

Due to the construction dates of the Property (1912), it is likely that ACM and lead-based paint are present. An asbestos survey performed in 1993 indicates that ACM are present on the Property (See Section 2.5). Paint was observed to be flaking off of various objects inside and outside the building (Photo 23).

5.8 Transformers

Transformers were not observed on the Property during the February 3, 2014 site visit. Mr. Lloyd Davis, facility maintenance for OVK, stated that he removed two transformers from the cannery two years ago and they are now with the utility company.

5.9 Solid Waste Disposal

Based on our visual observations during the February 3, 2014 site visit, the Property has been used for the disposal of vehicles, refrigerators, and other debris.

6.0 INTERVIEWS

6.1 Government Official

On February 7, 2014, Ms. Sarah Moore, ADEC State on Scene Coordinator for the Kake Tribal Fuel Gasoline Spill, was contacted by telephone. We were made aware of a nearby spill by Ms. Teresa Gaudette, representative of OVK. According to the situation report provided by Ms. Gaudette, approximately 5,500 gallons of gasoline was spilled from a severed fuel line to a floating dock on December 14, 2013 approximately 1,800 feet south of the Property. According to Ms. Moore, no noticeable shoreline contamination has been reported and the spill is unlikely to affect the Property.

6.2 Current Owners/Occupants of the Property

On February 3, 2014, Ms. Teresa Gaudette, representative of the current owner of the Property (OVK), completed the subject property ESA questionnaire. Ms. Gaudette stated that an environmental assessment related to an old tar and oil spill was conducted on the Property. The Property has never been connected to natural gas and diesel generators were used as a heat source while the cannery was in operation. The diesel generators are no longer on the Property.

Ms. Williams indicated that there is asbestos present in the building (see Section 5.7) and that 55-gallon drums are present on the Property. Ms. Williams stated that there was a fuel dock attached to the main cannery building when the cannery was in operation. Ms. Guadette indicated that PCBs were present in the light fixtures on the Property. She also stated that it is possible that fish waste was discharged directly into the surface water from cold storage when the cannery was in operation.

6.3 Former Owners of the Property

Contact information for the previous owner of the Property was not provided by the client and could not be found online as of February 14, 2014.

7.0 OTHER ENVIRONMENTAL CONSIDERATIONS

High Voltage Power Lines. No overhead power lines were observed during the February 3, 2014 site visit.

Lead in Drinking Water. Drinking water is not currently utilized on the Property.

Wetlands and Surface Waters. According to the U.S. Army Corps of Engineers (USACE) and the EPA, wetlands are defined as areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Three indicators are used to identify wetlands: (1) vegetation, (2) soil, and (3) hydrology. According to the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory map, wetlands are not present on the Property. The Property is located on Keku Bay.

Cultural, Historic, and Archeological Resources. The National Register of Historic Places is the Nation's official list of cultural resources worthy of preservation. The database, viewed on February 7, 2014, lists the Property as a cultural resource site. The Property is the third oldest cannery in Alaska and the only cannery listed and a National Historic Landmark. The National Register of Historic Places notes that several key buildings of the cannery complex continue to deteriorate and in 2013 the site was added to the threatened list.

Threatened and Endangered Species. According to USFWS, 12 endangered animal species and one endangered plant species exist in Alaska. Five animal species are considered endangered by the Alaska Department of Fish and Game, Division of Wildlife Conservation. According to the USFWS database viewed on February 7, 2014, humpback whales, considered endangered by federal and state governments, are found in the Kake area.

Wildlife Sanctuaries and Other Natural Resource Preserves. The USFWS database, viewed on February 7, 2014, does not list the Property as a wildlife sanctuary.

8.0 FINDINGS AND CONCLUSIONS

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E 1527-13, of the Property identified as the main cannery building of Keku Cannery, Kake, Alaska. Exceptions to, or deletions from, this practice are described in Section 1.3 of this report.

Multiple environmental conditions were identified at the Property. Based on our opinion regarding the potential for a release, material threat of a release, or other threat to human health and the environment, we have classified the conditions as RECs, Historical RECs, or Other Environmental Conditions.

8.1 Recognized Environmental Conditions

A REC is the presence or likely presence of a hazardous substance or petroleum product under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the Property or into the Property's ground, groundwater, surface water, or air. This assessment revealed no evidence of RECs in connection with the Property and the surrounding parcels except the following.

8.1.1 On-Site Recognized Environmental Conditions

According to information provided by the Organized Village of Kake (OVK), asbestos-containing materials (ACM) are present in each building. Due to the age of the building, the presence of lead based paint (LBP) and polychlorinated biphenyls (PCBs) in the ballasts is possible. These materials could impact the water and/or air if the building were to collapse.

Floor drains were observed throughout the building. Mr. Gary Williams of OVK stated that he did not know where the floor drains discharged. It is possible, due to the condition and former use of the building that these drains dump directly into the water below the cannery. Releases of petroleum products or other chemicals discharged through the drain could potentially impact the Property's water.

Staining was observed beneath the machine shop on the beach/shoreline and boiler area on the floor. This indicated a past release onto the ground surface and water at high tide.

Drums, tanks, and containers of potentially hazardous substances and/or petroleum products as well as metal scraps were observed on the Property. Some of the containers were unlabeled. No evidence of leaks and/or spills associated with these materials was observed during the February 3, 2014 site visit; however, due to the potentially imminent collapse of the building, these materials constitute a material threat of a release into the water.

Vehicles, engines, and refrigerators were observed in the building during the February 3, 2014 site visit. These items likely contain motor oil, gasoline, diesel, and/or Freon which could impact the water if the building were to collapse.

8.1.2 Off-Site Recognized Environmental Conditions

No off-site RECs were identified.

8.2 Controlled Recognized Environmental Conditions

A controlled REC is an environmental condition that indicates a past release on the Property or into the Property's ground, groundwater, or surface water that has been addressed by a regulatory agency, but contamination is allowed to remain in place subject to the implementation of required controls.

8.2.1 On-Site Controlled Recognized Environmental Conditions

No on-site controlled RECs were identified.

8.2.2 Off-Site Controlled Recognized Environmental Conditions

Two spills were identified within the cannery complex (one in 2009 and one in 1997), based on reports provided by OVK. Though contamination still remains on the site, the 2009 spill received a no further action letter from the ADEC in 2013. The 1997 spill was capped with clean shot rock and received a no further action letter from the ADEC in 2001. The contamination associated with these spills, while inside the cannery complex, is not located on the Property.

8.3 Historical Recognized Environmental Conditions

A Historical REC is an environmental condition that may have constituted a REC in the past, but has been closed by a regulatory agency without restrictions or otherwise is no longer considered to pose a material threat. No off-site or on-site historical RECs were identified.

8.4 Other Environmental Conditions

Other Environmental Conditions include known, suspected, or potential sources of hazardous substances or petroleum products that are not considered RECs due to (a) the absence of a confirmed release or other material threat, (b) insufficient information to sufficiently evaluate the condition, (c) de minimis conditions that are not expected to be subject to regulatory action or (d) exclusion from the ASTM definition of hazardous material (e.g. ACM). The following Other Environmental Conditions were identified on the Property:

- The warehouse building adjacent to the south of the Property collapsed into the water in 2011. It is possible that this building also contained PCBs, ACM, and lead based paint. No analytical testing was done at the time to determine if this event impacted the soil or water on the Property.

- A tank farm is present to the southeast of the Property. If a spill were to occur from these tanks, it could impact the Property's soil and/or water.

9.0 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONALS

This Phase I Environmental Site Assessment was prepared by Ms. Laura Coulson under the direct supervision of Ms. Shayla Marshall, and Mr. Matthew Hemry, P.E. Ms. Coulson, an Environmental Chemist, received a B.A. in Chemistry from Whitman College in 2012. A Project Manager, Ms. Marshall received a B.S. in Environmental Studies from Concordia College in 2002, and a M.S. in Environmental Science from Alaska Pacific University in 2004. Mr. Hemry, Vice President, received a B.S. in Engineering Sciences from Dartmouth College in 1990 and a M.S. in Environmental Engineering from Duke University in 1992. These individuals have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Property, and they have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312. Shannon & Wilson declares that, to the best of our professional knowledge and belief, Ms. Marshall and Mr. Hemry meet the definition of "Environmental Professional" as defined in 40 CFR 312.10.

10.0 CLOSURE/LIMITATIONS

This report is an instrument of service prepared by Shannon & Wilson for the exclusive use of the ADEC herein referred to as the Client, and its affiliates. This report was prepared for the exclusive use of the Client for evaluating the Property as it relates to the environmental aspects discussed herein. The conclusions contained in this report are based on information provided from the observed site conditions, personal interviews, and other sources identified herein, and further assume that the conditions observed are representative of the conditions throughout the Property. The data presented in this report should be considered representative of the time of our site assessment. Changes due to natural processes or human activity can occur over time. In addition, changes in government codes, regulations, or laws may occur. Because of such changes beyond our control, our observations and interpretations applicable to this Property may need to be revised.

In order to create a report on which the Client can rely, Shannon & Wilson worked closely with the Client and their representatives to develop the scope of services upon which all subsequent tasks have been based. No party other than the Client and its affiliates is permitted by Shannon & Wilson to rely on this instrument of Shannon & Wilson's service, except as stipulated in Section 1.4. With the permission of the Client, Shannon & Wilson will meet with a third party, approved in writing by the Client, to identify the additional services required, if any, to permit such third party to rely on the information contained in this report. Such reliance by any third party is limited to the same extent of Client's reliance, and subject to the same contractual, technological and other limitations to which the Client has agreed.

SHANNON & WILSON, INC.

Copies of documents that may be relied upon by our client are limited to the printed copies (also known as hard copies) that are signed or sealed by Shannon & Wilson with a wet, blue ink signature. Files provided in electronic media format are furnished solely for the convenience of the client. Any conclusion or information derived from electronic files shall be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, or you question the authenticity of the report, please contact the undersigned.

Shannon & Wilson has prepared the attachments in Appendix E, "Important Information About Your Environmental Site Assessment/Evaluation Report," to assist you and others in understanding the use and limitations of our report.

Please contact Mr. Matthew Henry, P.E. or the undersigned at (907) 561-2120 with questions or comments concerning the contents of this report.

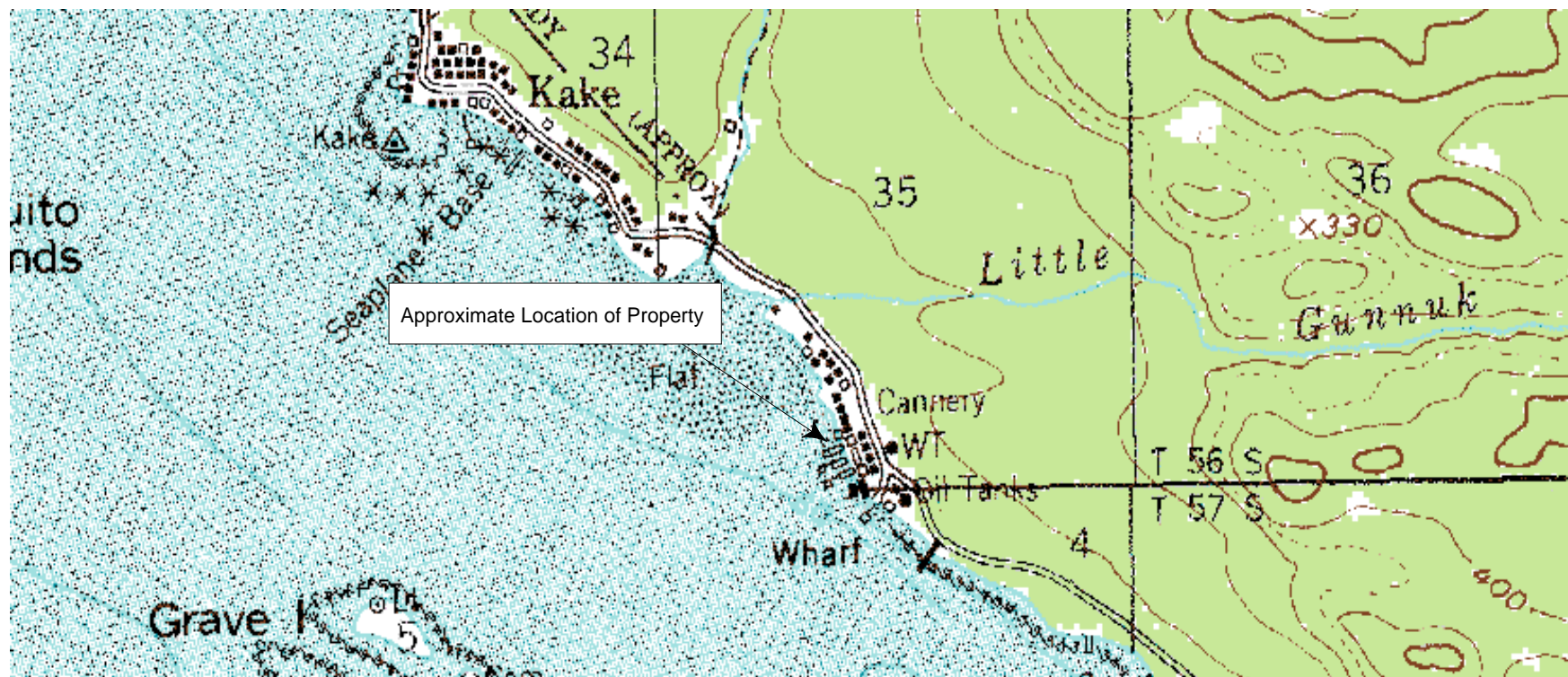
SHANNON & WILSON, INC.



Laura Coulson
Environmental Chemist



Shayla Marshall
Principal Scientist



Elevation in Meters
 Contour Interval 5 Meters
 Taken from Petersburg D-6
 U.S. Geological Survey Quadrangles

0 2,000 4,000
 APPROXIMATE SCALE IN FEET



Keku Cannery Main Building
 Kake, Alaska

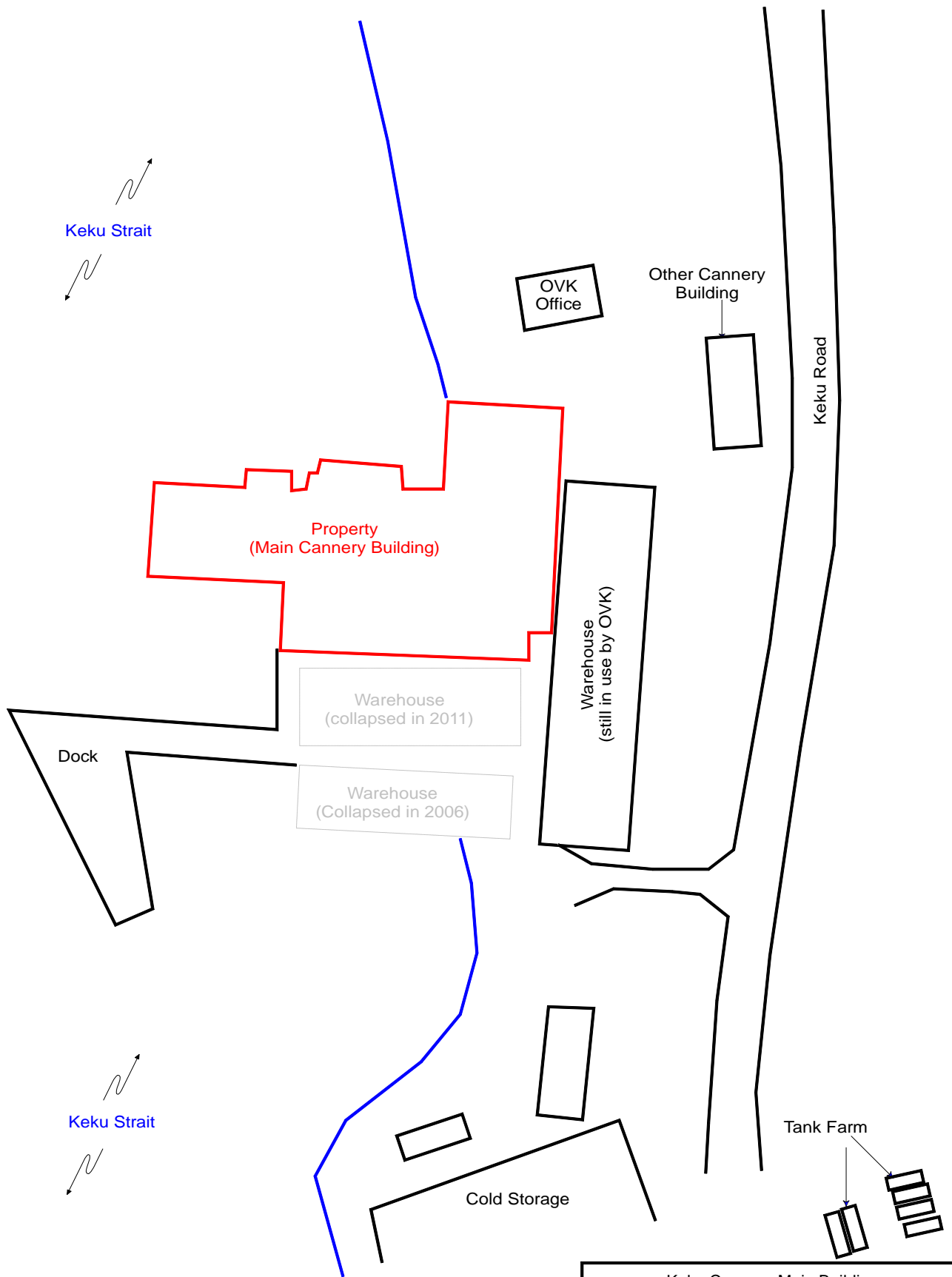
VICINITY MAP

February 2014

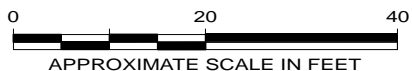
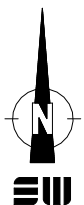
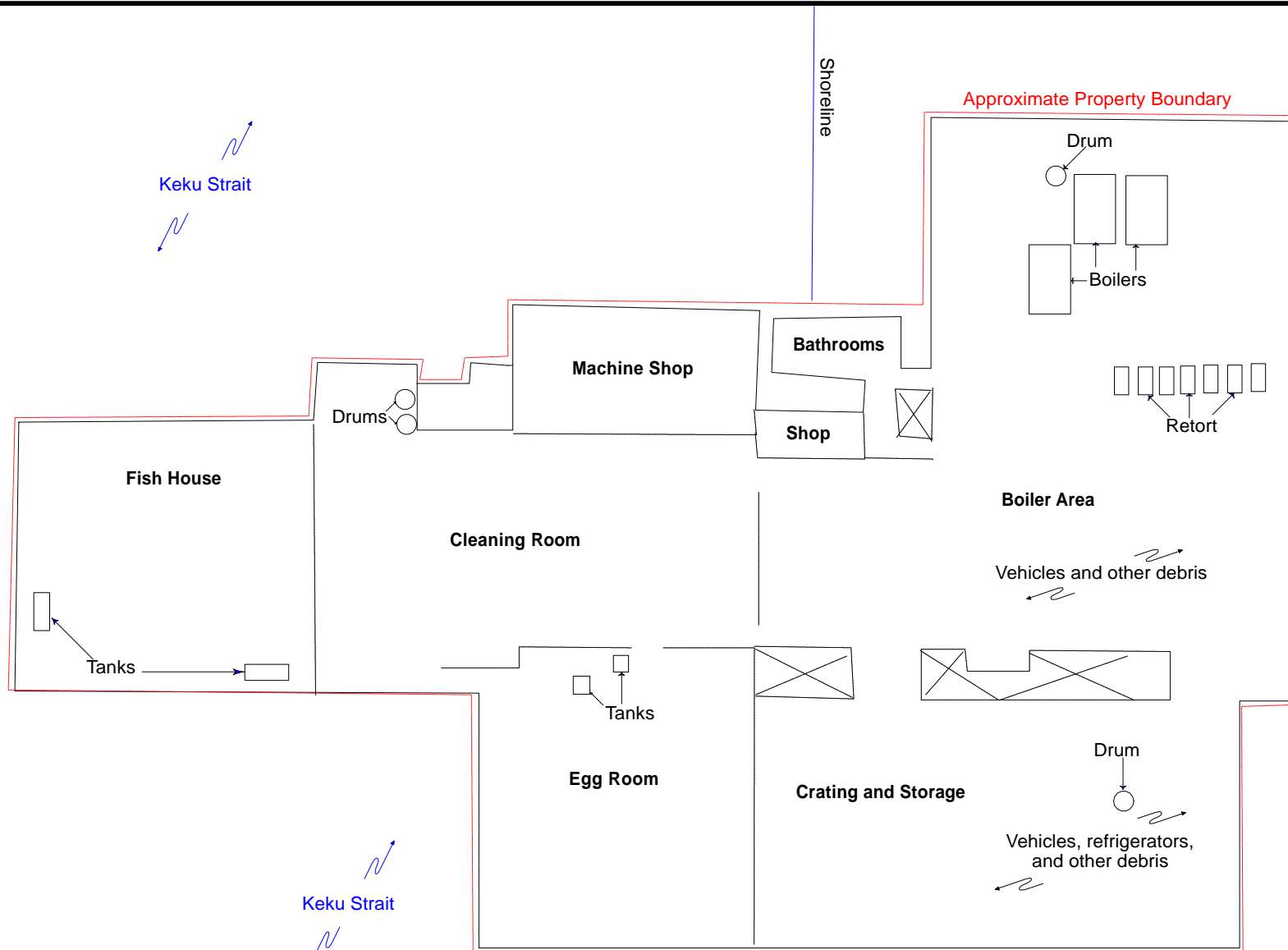
32-1-17631

SW SHANNON & WILSON, INC.
 Geotechnical & Environmental Consultants

Fig. 1



Keku Cannery Main Building Kake, Alaska	
CANNERY COMPLEX SITE PLAN	
February 2014	32-1-17631
 SHANNON & WILSON, INC. Geotechnical & Environmental Consultants	Fig. 2



Keku Cannery Main Building
Kake, Alaska

SITE PLAN

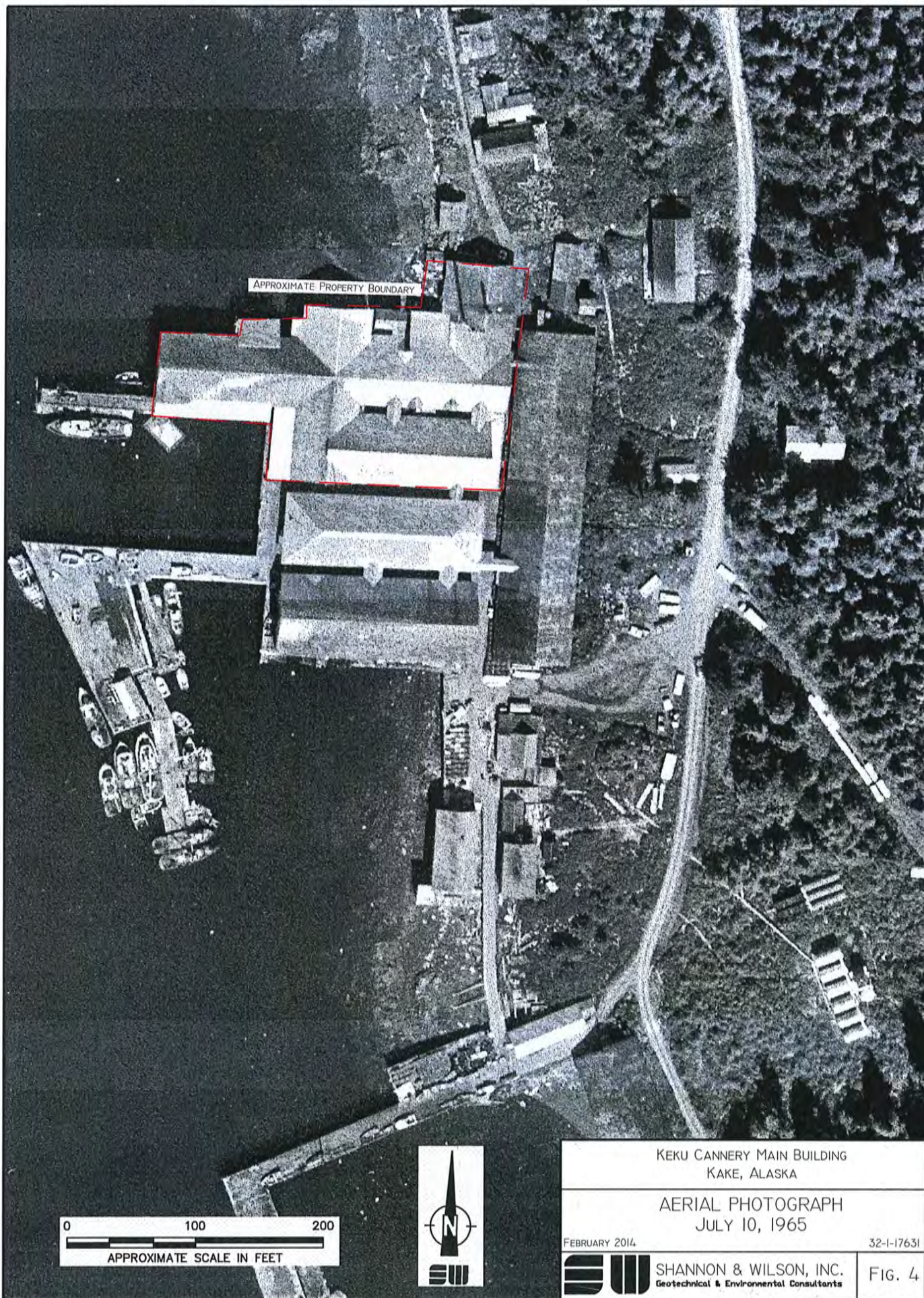
February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

Fig. 3



APPROXIMATE PROPERTY BOUNDARY

0 100 200
APPROXIMATE SCALE IN FEET



KEKU CANNERY MAIN BUILDING
KAKE, ALASKA

AERIAL PHOTOGRAPH
JULY 10, 1965

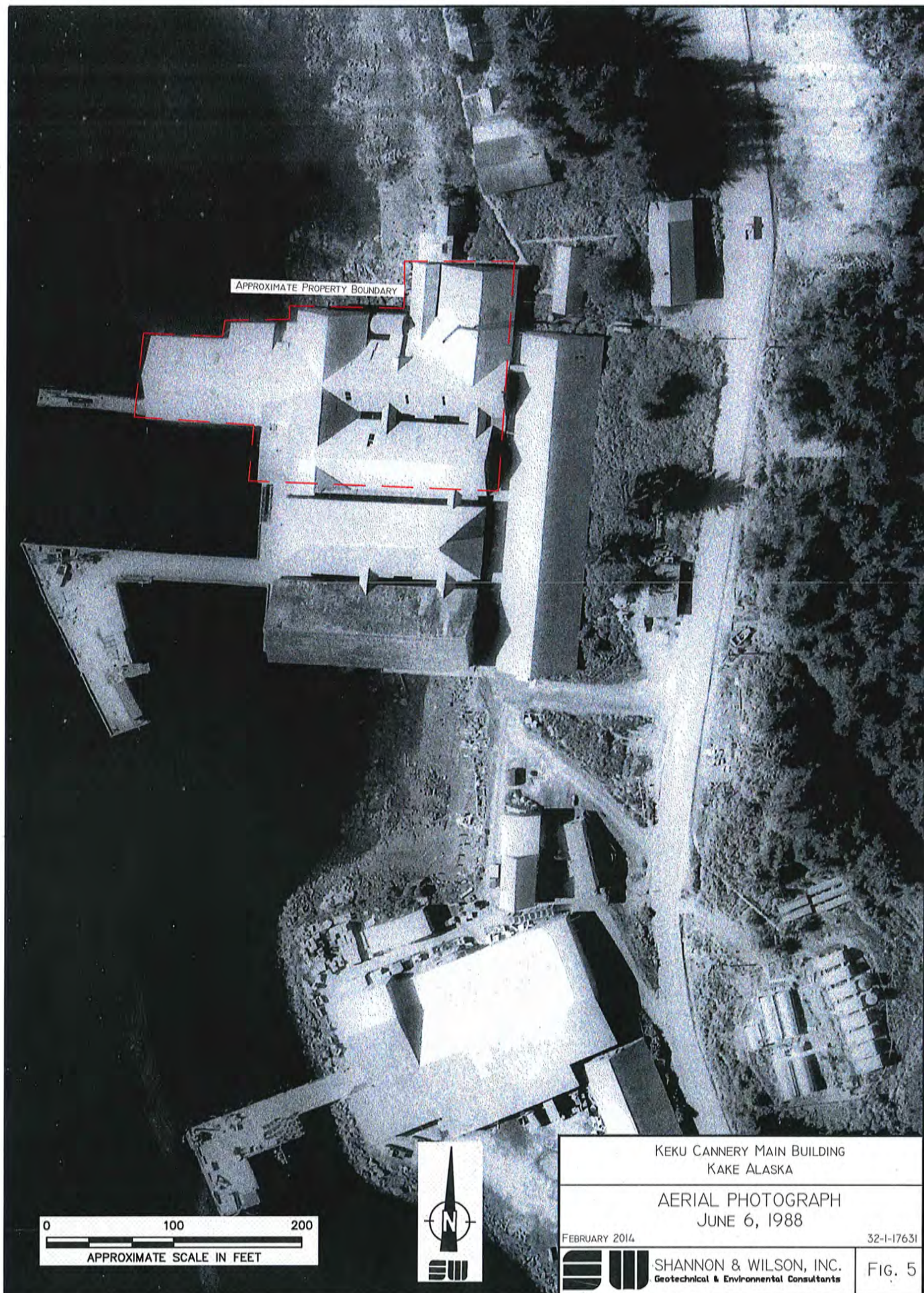
FEBRUARY 2014

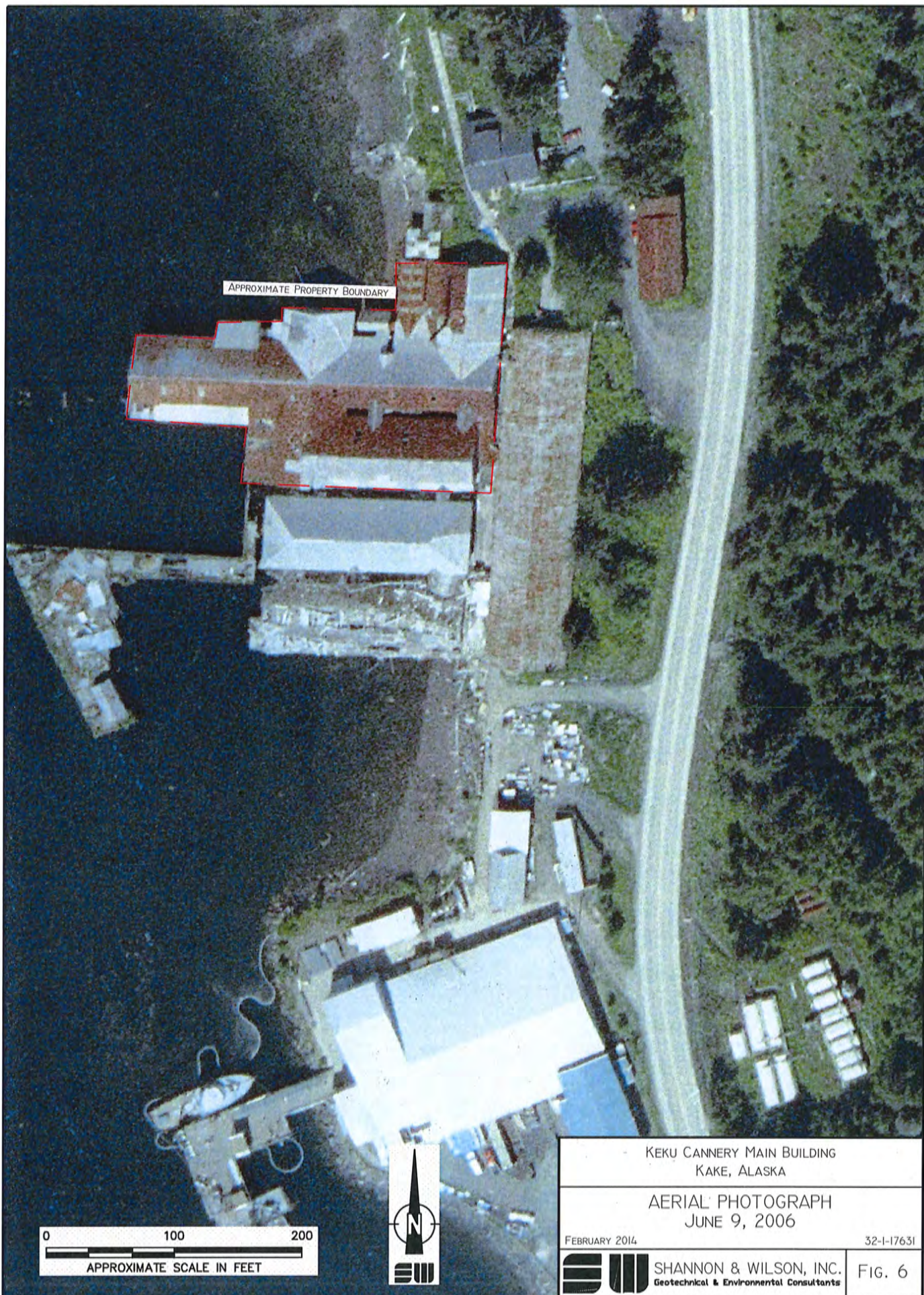
32-I-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

FIG. 4





APPENDIX A

COPY OF SHANNON & WILSON PROPOSAL DATED JANUARY 24, 2014

January 24, 2014

Alaska Department of Environmental Conservation
Spill Prevention and Response Division
RFA Contract Management Section
555 Cordova Street
Anchorage, Alaska 99501

Attn: Mr. Dennis Harwood

**RE: TECHNICAL PROPOSAL, PHASE I ENVIRONMENTAL SITE ASSESSMENT
AND ADDITIONAL SERVICES, KEKU CANNERY, KAKE, ALASKA**

We are pleased to submit our technical proposal to provide a Phase I Environmental Site Assessment (ESA) and Additional Services for the Keku Cannery, Kake, Alaska. Our scope of services was prepared in response to your Request for Proposal (RFP) dated January 17, 2014. Our services will be conducted in accordance with the terms and conditions of our Alaska Department of Environmental Conservation (ADEC) Hazardous Substance Spill Prevention and Cleanup Term Contract 18-8036-03. Our cost proposal is submitted under separate cover.

Shannon & Wilson has no known conflict of interest with present property owners, operators, or potential responsible party associated with the project area. We appreciate the opportunity to prepare this proposal and look forward to working with you. If you have questions or comments, or wish to discuss the scope of services, please contact me.

Sincerely,

SHANNON & WILSON, INC.



Matthew S. Hemry, P.E.
Vice President

Attachments: Technical Proposal
Estimated Level of Effort and Other Direct Costs

TECHNICAL PROPOSAL

1. INTRODUCTION

The Alaska Department of Environmental Conservation (ADEC) is contracting a Phase I Environmental Site Assessment (ESA) and Additional Services for the Keku Cannery building in Kake, Alaska. The project purpose is to assist the ADEC and other stakeholders in identifying environmental concerns that could impact the re-use and redevelopment (R&R) of the site.

2. STAFF QUALIFICATIONS

Shannon & Wilson will staff the project using the three key individuals listed below, but will supplement the team as needed for specialized expertise. The project personnel were selected based on their broad-based environmental expertise, histories of successful ADEC projects, and specialized experience/ qualifications in the following areas.

1. ***Site Assessment.*** The three project staff have more than 35 years collective experience conducting environmental site assessments (ESA), including hundreds of Phase I ESAs.
2. ***Brownfields Re-Use/Re-development Evaluations.*** Shannon & Wilson conducted one of the first property assessment and cleanup plan (PACP) projects for the ADEC in 2009 (Glenn Highway ADOT facility), and has since worked on several other re-use/re-development evaluations including Brownfields grant application assistance, and performing Brownfields assessment and cleanup for ADEC sites in Anchorage, Fairbanks, Hughes, Selewick, Larsen Bay, Buckland, and Kwigilingok.
3. ***Local Site Knowledge.*** Shannon & Wilson has been on the subject property and is familiar with the environmental conditions of the structure including the asbestos containing materials (ACMs), lead-based paint (LBP), polychlorinated biphenyl (PCB) ballasts throughout the building, stained flooring, and drums of unknown fluids. We have also had conversations with the Organized Village of Kake (OVK) and understand the cultural impact and ecological concerns with subsistence with the potential collapse/loss of the main cannery building.
4. ***Alaska Cannery and Fisheries Evaluations.*** Shannon & Wilson has completed many Phase I ESAs on cannery or fisheries throughout Alaska including locations in Dillingham, Kenai, Naknek, Uganik Bay, Chignik, Ekuk, Ketchikan, and Kodiak. We have also done more extensive Phase II ESA or remedial action evaluations at fishery locations in Dillingham and Togiak, Alaska.

Matt Hemry, P.E. will serve as contract manager and quality assurance (QA) reviewer. Matt has more than 21 years of consulting and engineering experience in Alaska, and has conducted and/or managed a variety of assessment and remedial action evaluation projects at remote Alaska cannery/fishery sites, including each of the cannery and fisheries sites described above. Scopes of work for these facilities have included Phase I and II ESAs, re-use/re-development evaluations, spill prevention control and countermeasure (SPCC) plans, third party review of remedial action, and expert testimony. Matt has also contributed to risk assessment evaluations of varying complexity, ranging from informal site alternative analyses to full-scale feasibility studies in accordance with the comprehensive environmental response, compensation, and liability act (CERCLA).

Shayla Marshall, project manager, will be the primary contact, will act as technical lead, and conduct initial review of all deliverables. She has managed hundreds of Phase I ESAs in Alaska during her 10-year career with Shannon & Wilson. Shayla also managed the Phase I and limited Phase II ESA that Shannon & Wilson conducted for a fisheries site in Dillingham, Alaska. Per ASTM 1527-13 standards, Matt and Shayla both qualify as “Environmental Professionals” with their years of full-time experience specifically conducting and/or managing Phase I ESAs.

Laura Coulson will be the lead technical staff and will be the primary author of the reports. Laura has worked on nearly 20 Phase I ESAs and familiar with the unique logistics and costs associated with conducting environmental remediation at remote Alaska sites. Laura also assisted in writing the documents for the Anchorage-Spenard PACP, under the existing ADEC contract.

Rone Brewer of Sound Ecological Endeavors, LLC will provide technical support in evaluating the ecological risks for the Environmental Hazard and Risk Evaluation (Task 2a). Rone has over 23 years of experience conducting ecological risk assessments, primarily in Alaska, Oregon, and Washington. Mr. Brewer has provided detailed technical evaluations of environmental reports and risk assessments prepared by others with special evaluation of sampling locations, analytical tests performed, risk assessment protocols and methodologies, and consideration of whether data were adequate and sufficient to draw conclusions with respect to risk estimates and/or remediation recommendations.

3. PROJECT SUMMARY AND UNDERSTANDING

Background

The Keku Cannery is a National Historic Landmark and was constructed between 1912 and 1940. The cannery closed in 1977 for economic reasons and has fallen into a state of disrepair. The historic facility comprises approximately 18 buildings and structures. This assessment will focus exclusively on the main cannery building.

Several areas within the cannery building are not accessible due to poor structural integrity. Recently two structures failed. We understand the OVK is primarily concerned with the imminent failure of the cannery building and the environmental concerns that may result if the building and contents are discharged into the water. The village relies heavily on subsistence including salmon and clam fisheries, and a release of known contaminants including LBP, ACMs, chemicals from drums and containers, equipment, and other unknown concerns may impact these fisheries.

We understand the work is likely a part of a larger R&R evaluation conducted by the OVK and/or to support the request for federal funding to rehabilitate the structure. The Phase I ESA is a pre-requisite for the use of this federal Brownfields funding.

Summary of Proposed Approach

The Phase I ESA and Additional Services will be used to identify and clarify known and suspected environmental concerns at the site and to determine a magnitude of costs associated with environmental cleanup in the event of a catastrophic failure. We understand the environmental cleanup costs may be compared to preventative costs such as engineered support of the dock and

structure. The findings will benefit the understanding of the overall impact of collapse of the main cannery building. This proposal will constitute the work plan to implement the project tasks.

Task 1: Phase I Environmental Site Assessment

The objective of the Phase I ESA is to identify RECs, as defined by ASTM E 1527-13. The Phase I ESA will consist of a records review, site reconnaissance, interviews with owners, contacting government agencies, and reporting. The Phase I ESA will be managed and/or conducted by an environmental professional, as defined by ASTM 1527-13.

Task 1a: Records Review.

The records review consists of two primary components – historical use information and agency databases. Aerial photographs taken by a local mapping company will be reviewed, and up to three photographs will be purchased and submitted with our report. These photos typically include one of the subject property or surrounding properties prior to surface disturbance, one interim photo showing significant land use patterns, and one showing the site as it appears today. The historical use research will also include a database search from the Alaska Department of Natural Resources (ADNR) Records Office website in an effort to determine current and past ownership of the Property. We will also review title searches completed for the Property, if made available by you, and incorporate this information into our reports. Shannon & Wilson will also attempt to contact local utility companies for additional information about the site. If transformers are observed at this site, we will contact the local electrical utility for information regarding the presence or absence of PCBs in the utility-owned equipment.

We will review site physical data pertaining to hydrogeologic/flood plain information, ecological data, wetlands, endangered or protected flora/fauna, historic structures, surface waters, nearby well locations, and subsurface geological and soil characterizations. The sources used will be referenced in the report along with the names of persons interviewed.

We will conduct a search of state and federal databases, using the radii specified in ASTM 1527-13. Primary databases include the ADEC lists of registered underground storage tanks (USTs), leaking USTs (LUSTs), and contaminated sites; and federal databases pertaining to known Resource, Conservation, and Recovery Act (RCRA) and/or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) sites. Additional information may also be obtained from site use permits, utility companies, and local fire department. The results of the database search will be discussed and tabulated in our summary report.

We will contact appropriate local, state, and federal regulatory/governmental agencies to obtain information on known fires involving hazardous materials, sources of water at the Property and surrounding area, presences of a sole-source aquifer/aquifer recharge area, sewage disposal method at the subject property, and known environmental incidents.

Task 1b: Site Reconnaissance.

A site visit will be conducted to evaluate the site for recognized environmental conditions (RECs). We understand due to the structural integrity of the main cannery building several areas may not be able to be accessed including the egg room, fish house, and second floor boxing room. This will be included as a limitation in our report. We will use the information from our site visit to discuss the

indicators of potential environmental issues (i.e., underground or aboveground storage tanks, waste oil tanks, waste disposal drums, hazardous chemical storage, etc.). A site plan will be developed showing the approximate location of the observed potential environmental concerns. Observed chemicals or hazardous materials stored on the properties will be noted in the report.

Task 1c: Interviews.

We will make reasonable efforts to interview the OVK representatives and adjacent property owners. Past uses and storage or disposal of petroleum hydrocarbon/hazardous substances on the Property will be discussed. A government agency will be contacted regarding sites that may comprise or contain recognized environmental condition(s).

Task 1d: Non-Scope Considerations.

We will comment on additional relevant items and factors that could pose a Business Environmental Risk to the main cannery building as discussed in ASTM 1527-13. We understand there have been previous investigations of the cannery building that assessed the asbestos, lead-based paint, and PCB ballasts; information from these investigations will be incorporated into the report.

Task 1e: Phase I ESA Report.

The report will summarize the results of our research, interviews, and site reconnaissance; and will identify RECs, controlled RECs, historical RECs, and other environmental conditions not classified as RECs. The report will also include a brief environmental setting, including predominant land use in the vicinity, distance to the nearest water bodies, wetlands and critical terrestrial environments (parks, wildlife refuges, sanctuaries, etc.).

Color copies of aerial photographs and site photographs will be included in the report. The report will be signed by the environmental professional managing the assessment. Four original reports will be provided.

The project documents will be provided in the hard-copy and electronic formats specified in the RFP. Assuming a notice to proceed is provided January 27, 2014, a draft Phase I ESA report will be provided to ADEC by February 19, 2014.

Task 2: Additional Services

The objective of the Additional Services is to provide a professional opinion on the environmental impact and remediation costs if the cannery building collapses into the bay. We understand that there are materials on site that may not have been previously tested (e.g. drums, 5-gallon buckets). The Additional Services will be based on what information is presently available; no additional investigation, including analysis of the unknown containers or a comprehensive investigation of ACMs and LBP, will be conducted under Task 2.

Task 2a: Environmental Hazard and Risk Evaluation.

An environmental hazard and risk evaluation will be performed based on the information gathered in the Phase I ESA. The purpose of the assessment is to evaluate and summarize the potential environmental hazard and risks posed by collapse of the Keku Cannery building into the water.

APPENDIX B

PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE

Phase I Assessment User Questionnaire

The information in this User Questionnaire is prepared and provided by the user to the environmental professional pursuant to 40 CFR 312.22. Pursuant to ASTM E 1527-05, the "user" is the party seeking to complete the environmental site assessment of the property and also any person seeking to establish one or more of the Landowner Liability Protections (LLPs) under CERCLA. A user may include, without limitation, a potential purchaser or potential tenant of the property, a lender or a property manager.

The information on this Questionnaire must be performed and/or provided by the User of the Phase I Assessment in order to potentially qualify for one of the *Landowner Liability Protections* under the Comprehensive Environmental Response Compensation and Liability Act of 1980, as amended.

PERSON COMPLETING QUESTIONNAIRE: Teresa Gaudette

SUBJECT PROPERTY (address): 514 Keku Rd. Kake, AK 99830

USER TYPE (purchaser, tenant, lender): Tenant

* Note: Each person or entity that will rely on this Phase I ESA is considered a "User" and must also provide the information requested below. Make additional copies of this form for any additional Users.

**** (1). Environmental cleanup liens, institutional controls and engineering controls that are filed or recorded against the site (40 CFR 312.25; ASTM Section 6.2).**

Are there any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law? Yes / No If yes, please describe.

Are there any institutional controls (such as land use restrictions) or engineering controls (such as cap or engineered barriers) that are in place at the site and/or have been filed or recorded in land records or a registry under federal, tribal, state or local law? Yes / No If yes, please describe.

**** Important Note:** A search for environmental cleanup liens filed or recorded against the property is required, but is not the responsibility of the environmental professional. If you do not include in your Request for Phase I Assessment that Shannon & Wilson arrange for this activity, then you should engage a title company or other title professional for a comprehensive review of land title and judicial records for evidence of cleanup liens as well as any institutional or engineering controls recorded against the property. Please provide us with copies of surveys, chain of title and any other relevant land records obtained by your review. The ASTM Phase I Standard indicates that only the User commissioning the Phase I ESA must perform this task.

- (2) **Specialized knowledge or experience of the person seeking to qualify for the Landowner Liability Protections (LLPs) (40 CFR 312.28; ASTM Section 6.3).**

Do you have any specialized knowledge or experience in connection with the property or nearby properties relevant to environmental matters? (For example, are you involved in the same line of business as the current or former occupants of the property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?)

Yes / No

If you do have such knowledge or experience, please describe.

- (3) **Relationship of the purchase price to the fair market value of the property if it were not contaminated (40 CFR 312.29; ASTM Section 6.5).**

If the transaction at issue involves the purchase of the property, does the proposed purchase price for this property reasonably reflect the fair market value of the property? Yes / No / NA

If you conclude that the purchase price is less than the fair market value, have you considered whether the lower purchase price is because contamination is known or believed to be present at the property? Yes / No / NA

After such consideration, do you have reason to believe that the lower price is because of real or perceived contamination at the property? Yes / No / NA

- (4) **Commonly known or reasonably ascertainable information about the property (40 CFR 312.30; ASTM Section 6.6).**

Are you aware of commonly known or reasonably ascertainable information about the property or community that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

Do you have information about the past uses of the property or adjoining property? Yes / No
If yes, please describe.

*Please See Spill Response + Cleanup, 1977
and Keku Cannery Spill Discovery attachments*

Do you have information about specific chemicals that are present or once were present at the property? Yes / No

If yes, please describe.

See Med-Tox report

Do you know of any spills or other releases of petroleum products, oil, chemicals, solvents or other hazardous materials at the property or adjoining property? Yes/ No

If yes, please describe and/or attach copies of relevant documents/reports.

See Attachments

Do you know of any environmental cleanups or investigations that have taken place at the property or adjoining property? Yes/ No

If yes, please describe and/or attach copies of relevant documents/reports.

See Attachments

Do you have any environmental reports, permits, notices of violation or other documents concerning environmental matters at the property? Yes/ No

If yes, please attach copies.

See Attachments

- (5) The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

Based on your knowledge and experience related to the property or the community, are you aware of any obvious indicators pointing to the presence or likely presence of contamination at the property? Yes/ No

If yes, please describe.

See Med-Tax Report

- (6) The purpose for the Phase I Environmental Site Assessment (ASTM Section 6.7).

Is the purpose for this Phase I to potentially qualify for the Landowner Liability Protections under CERCLA? Yes/ No

If not, what is the purpose for this Phase I?

- (7) Although you are not required to obtain any of the following documents, please provide us with copies of any of the following documents that you may already have in your possession or could easily obtain for our use.

ALTA Survey showing the boundary of the Property
Previous Environmental Site Assessment Reports (Phase I and/or Phase II reports)
Environmental Compliance Audit Reports
Environmental Permits (air, wastewater, stormwater, etc.)
Underground and Aboveground Storage Tank Registrations
Tank Removal or Investigation Reports
Governmental Notices relating to alleged violation of environmental laws

SHANNON & WILSON
PHASE I ENVIRONMENTAL SITE ASSESSMENT QUESTIONNAIRE
FOR SUBJECT PROPERTY

The purpose of this Environmental Assessment is to acquire sufficient information to develop a professional opinion as to the presence of petroleum hydrocarbon/hazardous substances on or near the subject property that may affect this site. This questionnaire should be completed to the fullest extent possible during an interview with the owner or the owner's representative conducted by an environmental assessor.

Date of Visit: Feb. 3, 2014 Interviewer (if applicable): _____

Project Name/Project Number: Keku Cannery

Legal Description/Site Address: 541 Keku Rd. P.O. Box 316

City Kake State AK Zip 99830

Property Owner(s): Organized Village of Kake

Owner Representative(s) Interviewed: Teresa Gaudette

Length of Time Familiar with Site: _____

Phone: 907-785-6471 ext. 123

Previous Ownership:

Please provide the following information regarding the history of past ownership of the property.

Owner	Dates		Type of Business
	From	To	
1. <u>Kake Trading & Packing Co.</u>	<u>1906</u>	<u>1910</u>	<u>Cannery</u>
2. <u>Sanborn Cutting Company</u>	<u>1910</u>	<u>- ?</u>	<u>Cannery</u>
3. <u>Skinner & Eddy</u>	<u>?</u>	<u>-</u>	<u>Cannery</u>
4. <u>P.E. Harris & Company</u>	<u>1940?</u>	<u>1950</u>	<u>Cannery</u>
5. <u>Organized Village of Kake</u>	<u>1950</u>	<u>- Present</u>	<u>Cannery until 1981</u>
6. _____	<u>no longer in operation</u>		_____

Please answer the following questions to the best of your knowledge. Circle the best answer and provide additional information if known.

- 1) Have you ever had an environmental audit or assessment completed on any of your businesses or properties? *an old tar + oil spill*
☒ Yes no don't know
- 2) Did any other structures exist on this property before the present structures were built?
Yes ☒ no don't know
- 3) Are there any as-built plans of the subject property?
☒ Yes no don't know
- 4) Are any of the existing structures on the property built prior to 1978?
☒ Yes no don't know
- 5) Is there asbestos in buildings located on the property?
☒ Yes no don't know
- 6) Is there any evidence that the properties have seen previous commercial or industrial activities?
☒ Yes no don't know
- 7) Does this property have its own water well?
Yes ☒ no don't know
- 8) Does this property have a septic system and leachfield?
Yes ☒ no don't know
- 9) Does this property have natural gas?
Yes ☒ no don't know
- 10) Prior to having natural gas, did this property use an above ground storage tank or an underground storage tank to store heating fuel? If not, what heat source was used before natural gas was available?
☒ Yes no don't know
diesel generators

- 11) Does the site contain above ground or buried fuel or chemical storage tanks? If yes, list which authorities the tanks were registered with, the tank capacities, the age of the tanks, the tank contents, and whether any problems such as vapors or soil contamination have been encountered.

Yes

no

don't know

Registered with:

EPA

ADEC

Other

Capacity of Tanks _____ gallons; Tank contains _____

Age of tank is _____ years;

Any problems? _____

- 12) Have there been any excavations on the property?

Yes

no

don't know

If yes, explain: _____

- 13) Has off-site fill ever been deposited on the site?

Yes

no

don't know

If yes, explain: _____

- 14) Have any areas of the site been treated with petroleum products or other chemicals for dust control?

Yes

no

don't know

If yes, areas treated: _____

- 15) Does the site contain any 55 gallon drums or other containers?

Yes

no

don't know

Contents of drums: _____

- 16) Is there any cause to believe that any operation or equipment on or around the facility has been the cause of a spill or release of hazardous waste? Is there any evidence of a hazardous substance release such as stained ground areas, drums, transformers, trash, general disrepair, chemicals, areas where plants refuse to grow, or other indications of hazardous substance contamination?

Yes

no

don't know

If yes, nature? _____

25) Indicate if any of the following uses, stores, transports, generates or disposes of any hazardous substance.

a) Property owner's business?

Yes

no

don't know

b) All related businesses?

Yes

no

don't know

c) All tenant's businesses?

Yes

no

don't know

d) Neighboring properties?

Yes

no

don't know

26) Have you or any previous owner ever been issued a hazardous waste generator's identification number for the property or have a permit for treatment, storage or disposal of hazardous materials?

Yes

no

don't know

27) Please state all licenses and permits which you, your business, or any tenant possesses or is required to have for treatment, storage or disposal of hazardous materials or relating to environmental law matters, including any pending applications?

Licenses: _____

28) Are you or any of your property currently, ever have been, or are anticipated to be, the subject of a letter of non-compliance, administrative, legal enforcement, or any other action or actions by any federal, state, or local government agency relating to environmental laws, permits, orders, or other requirements?

Yes

no

don't know

If yes, please describe: _____

APPENDIX C
OWNERSHIP DOCUMENTS

D E E D

The Grantor, F. E. HARRIS & CO., a Washington corporation, for and in consideration of the sum of ONE DOLLAR (\$1.00), lawful money of the United States in hand paid, and other valuable considerations, conveys and warrants to the UNITED STATES OF AMERICA in trust for the ORGANIZED VILLAGE OF KAKE, Alaska, the following described real estate located in Southeastern Alaska, to-wit:

Beginning at corner No. 1, on beach and not established, from which U. S. Location Monument, F. M. R. bears north fifty-four degrees, eighteen minutes, fifty seconds west eighty-five and sixty-eight-hundredths chains distant; thence north sixty-seven degrees, forty-three minutes east one and forty-six-hundredths chains to witness corner to said corner No. 1, a granite boulder, 24 x 14 x 10 inches, marked with cross (x) on top at corner point and S 963, Cor. 1 W. C., M. C.; seven and seventeen-hundredths chains to corner No. 2, a granite boulder, 22 x 12 x 5 inches, marked with cross (x) on top at corner point and S 963 Cor. 2; thence south twenty-two degrees, seventeen minutes east nineteen and three-hundredths chains to corner No. 3, a granite stone, 20, 12 x 5 inches, marked with cross (x) on top at corner point and S 963 Cor. 3; thence south sixty-seven degrees, forty-three minutes west six and fifty-six-hundredths chains to witness corner to corner No. 4, a granite boulder, 20 x 12 x 10 inches, marked with cross (x) on top at corner point and S 963 Cor. 4 W. C., M.C.; eight and seventy-two-hundredths chains to corner No. 4, on beach and not established; thence meandering arm of Frederick Sound, north thirteen degrees, twenty-five minutes west five chains, north twenty-six degrees, fifty-one minutes west two and nine-tenths chains, north six degrees, forty-seven minutes east one chain, north forty-seven degrees, two minutes west one and six-tenths chains, north thirty degrees, forty-four minutes west four and four-tenths chains, north nine degrees, two minutes west three and nine-tenths chains, north twenty-nine degrees, fifty-eight minutes east one and two-tenths chains to corner No. 1, the place of beginning, containing fifteen and ninety-hundredths acres, according to the Official Plat of the Survey of the said land. returned

ber 15, 1959; this instrument being executed for recording in the Petersburg Recording District.

IN WITNESS WHEREOF said Grantor has caused these presents to be executed by its proper officers and its corporate seal to be hereunto affixed this 15th day of February, 1950.

P. E. HARRIS & CO.

By E. M. Brennan
(E. M. Brennan)
Vice-President

ATTEST:

Darline Fravel
(Darline Fravel)
Assistant Secretary

(SEAL)

STATE OF WASHINGTON)

COUNTY OF KING)

ss.

On this 15th day of February, 1950, before me personally appeared E. M. BRENNAN and DARLINE FRAVEL, to me known to be the Vice-President and Assistant Secretary, respectively, of P. E. HARRIS & CO., the corporation that executed the within and foregoing instrument, and acknowledged the said instrument to be the free and voluntary act and deed of said corporation for the uses and purposes therein mentioned, and on oath stated that they were authorized to execute said instrument and that the seal affixed is the corporate seal of said corporation.

IN WITNESS WHEREOF I have hereunto set my hand and affixed my official seal the day and year first above written.

John V. Hagg
Notary Public for the State of Washington

APPENDIX D
SITE PHOTOGRAPHS



Photo 1: The south side of the main cannery building on piles.
(February 3, 2014)



Photo 2: The Property, looking northeast. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 1 AND 2

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-1



Photo 3: Retort in the boiler area. (February 3, 2014)



Photo 4: Boilers in the boiler area on the north side of the Property. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 3 AND 4

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-2



Photo 5: Cars and other discarded items near the retort in the boiler area. (February 3, 2014)



Photo 6: Engine with staining on the floor in the boiler area. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 5 AND 6

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-3



Photo 7: White substance on floor of boiler area. (February 3, 2014)



Photo 8: Rusty containers and debris in shop. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 7 AND 8

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-4



Photo 9: Bathrooms on the Property. (February 3, 2014)



Photo 10: Metal scraps in machine shop. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 9 AND 10

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-5



Photo 11: Rusted containers in machine shop. (February 3, 2014)



Photo 12: Cans for catching hydraulic oil in machine shop. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 11 AND 12

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-6



Photo 13: Cleaning room. (February 3, 2014)



Photo 14: Strip drains in cleaning room. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 13 AND 14

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-7



Photo 15: Egg room. (February 3, 2014)



Photo 16: Car and other debris in crating and storage room. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 15 AND 16

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-8



Photo 17: Can making area in attic. (February 3, 2014)



Photo 18: White substance on floor in attic. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 17 AND 18

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-9



Photo 19: The Property, looking northeast. (February 3, 2014)



Photo 20: Staining under the machine shop. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 19 AND 20

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-10



Photo 21: Presumed PCB-containing lighting in cleaning room.
(February 3, 2014)



Photo 22: Unlabeled tanks in fish house. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 21 AND 22

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-11



Photo 23: Unlabeled tank in egg room. (February 3, 2014)



Photo 24: Empty unlabeled drums in cleaning room. (February 3, 2014)

Keku Cannery Main Building
Kake, Alaska

PHOTOS 23 AND 24

February 2014

32-1-17631



SHANNON & WILSON, INC.
Geotechnical & Environmental Consultants

D-12

APPENDIX E
IMPORTANT INFORMATION ABOUT YOUR ENVIRONMENTAL SITE
ASSESSMENT/EVALUATION REPORT



Dated: February 2014

To: ADEC

Re: Phase I ESA, Keku Cannery Main Building, Kake,
Alaska

Important Information About Your Environmental Site Assessment/Evaluation Report

ENVIRONMENTAL SITE ASSESSMENTS/EVALUATIONS ARE PERFORMED FOR SPECIFIC PURPOSES AND FOR SPECIFIC CLIENTS.

This report was prepared to meet the needs you specified with respect to your specific site and your risk management preferences. Unless indicated otherwise, we prepared your report expressly for you and for the purposes you indicated. No one other than you should use this report for any purpose without first conferring with us. No one is authorized to use this report for any purpose other than that originally contemplated without our prior written consent.

The findings and conclusions documented in this site assessment/evaluation have been prepared for specific application to this project and have been developed in a manner consistent with that level of care and skill normally exercised by members of the environmental science profession currently practicing under similar conditions in this area. The conclusions presented are based on interpretation of information currently available to us and are made within the operational scope, budget, and schedule constraints of this project. No warranty, express or implied, is made.

OUR REPORT IS BASED ON PROJECT-SPECIFIC FACTORS.

Our environmental site assessment is based on several factors and may include (but not be limited to): reviewing public documents to chronicle site ownership for the past 30, 40, or more years; investigating the site's regulatory history to learn about permits granted or citations issued; determining prior uses of the site and those adjacent to it; reviewing available topographic and real estate maps, historical aerial photos, geologic information, and hydrologic data; reviewing readily available published information about surface and subsurface conditions; reviewing federal and state lists of known and potentially contaminated sites; evaluating the potential for naturally occurring hazards; and interviewing public officials, owners/operators, and/or adjacent owners with respect to local concerns and environmental conditions.

Except as noted within the text of the report, no sampling or quantitative laboratory testing was performed by us as part of this site assessment. Where such analyses were conducted by an outside laboratory, Shannon & Wilson relied upon the data provided and did not conduct an independent evaluation regarding the reliability of the data.

CONDITIONS CAN CHANGE.

Site conditions, both surface and subsurface, may be affected as a result of natural processes or human influence. An environmental site assessment/evaluation is based on conditions that existed at the time of the evaluation. Because so many aspects of a historical review rely on third party information, most consultants will refuse to certify (warrant) that a site is free of contaminants, as it is impossible to know with absolute certainty if such a condition exists. Contaminants may be present in areas that were not surveyed or sampled, or may migrate to areas that showed no signs of contamination at the time they were studied.

Unless your consultant indicates otherwise, your report should not be construed to represent geotechnical subsurface conditions at or adjacent to the site and does not provide sufficient information for construction-related activities. Your report also should not be used following floods, earthquakes, or other acts of nature; if the size or configuration of the site is altered; if the location of the site is modified; or if there is a change of ownership and/or use of the property.

INCIDENTAL DAMAGE MAY OCCUR DURING SAMPLING ACTIVITIES.

Incidental damage to a facility may occur during sampling activities. Asbestos and lead-based paint sampling often require destructive sampling of pipe insulation, floor tile, walls, doors, ceiling tile, roofing, and other building materials. Shannon & Wilson does not provide for paint repair. Limited repair of asbestos sample locations are provided. However, Shannon & Wilson neither warrants repairs made by our field personnel, nor are we held liable for injuries or damages as a result of those repairs. If you desire a specific form of repair, such as those provided by a licensed roofing contractor, you need to request the specific repair at the time of the proposal. The owner is responsible for repair methods that are not specified in the proposal.

READ RESPONSIBILITY CLAUSES CAREFULLY.

Environmental site assessments/evaluations are less exact than other design disciplines because they are based extensively on judgment and opinion, and there may not have been any (or very limited) investigation of actual subsurface conditions. Wholly unwarranted claims have been lodged against consultants. To limit this exposure, consultants have developed a number of clauses for use in their contracts, reports, and other documents. These responsibility clauses are not exculpatory clauses designed to transfer the consultant's liabilities to other parties; rather, they are definitive clauses that identify where responsibilities begin and end. Their use helps all parties involved recognize their individual responsibilities and take appropriate action. Some of these definitive clauses may appear in this report, and you are encouraged to read them closely. Your consultant will be pleased to give full and frank answers to your questions.

Consultants cannot accept responsibility for problems that may develop if they are not consulted after factors considered in their reports have changed, or conditions at the site have changed. Therefore, it is incumbent upon you to notify your consultant of any factors that may have changed prior to submission of the final assessment/evaluation.

An assessment/evaluation of a site helps reduce your risk, but does not eliminate it. Even the most rigorous professional assessment may fail to identify all existing conditions.

ONE OF THE OBLIGATIONS OF YOUR CONSULTANT IS TO PROTECT THE SAFETY, HEALTH, PROPERTY, AND WELFARE OF THE PUBLIC.

If our environmental site assessment/evaluation discloses the existence of conditions that may endanger the safety, health, property, or welfare of the public, we may be obligated under rules of professional conduct, statutory law, or common law to notify you and others of these conditions.

The preceding paragraphs are based on information provided by the
ASFE/Association of Engineering Firms Practicing in the Geosciences, Silver Spring, Maryland