



THE STATE
of **ALASKA**
GOVERNOR MIKE DUNLEAVY

**Department of Environmental
Conservation**

SPILL PREVENTION & RESPONSE
Contaminated Sites Program

610 University Avenue
Fairbanks, Alaska 99709
Main: 907.451.2143
Fax: 907.451.2155
www.dec.alaska.gov

File: 380.38.002

March 20, 2020

Kenneth Andrashko
United States Army Corps of Engineers, Alaska District
P.O. Box 6898
JBER, AK 99506-0898

Re: Decision Document: Collinson Point DEW Line POL Pipeline Corridor
Cleanup Complete Determination

Dear Mr. Andrashko:

The Alaska Department of Environmental Conservation, Contaminated Sites Program (ADEC) has completed a review of the environmental records associated with the Collinson Point DEW Line POL Pipeline Corridor located at Collinson Point, Alaska. 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 Collinson Point DEW Line POL Pipeline Corridor, which is located in the ADEC office 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:

Collinson Point Former Distant -
Early Warning Site
Simpson Cove, Camden Bay, Alaska
Near Kaktovik, Alaska 99747

Name and Mailing Address of Contact Party:

Kenneth Andrashko
United States Army Corps of Engineers,
Alaska District
P.O. Box 6898
JBER, AK 99506-0898

DEC Site Identifiers:

File No.: 380.38.002
Hazard ID.: 25328

Regulatory Authority for Determination:

18 AAC 75

Site Description and Background

The Collinson Point DEW Line Station is located approximately 40 miles southwest of Kaktovik, Alaska, on the shore of Simpson Cove at Camden Bay on the Beaufort Sea (Figure 1). The facility is located within the Arctic National Wildlife Refuge (ANWR) at 69.974692 latitude and -144.835815 longitude. Ownership of Collinson Point was transferred to the United States Air Force (USAF) in 1957, when the entire DEW Line became active. Following deactivation in 1962, site ownership was transferred to the U.S. Navy in 1965. In 1970, ownership was transferred to the United States Bureau of Land Management (BLM). When ANWR was created in 1980, ownership was transferred to the United States Fish and Wildlife Service. Most site structures have been removed. The gravel pads remain as does the concrete foundations for the former Composite Building, Shop Building, and Warehouse Building.

POL supply and transfer piping at the Collinson Point DEW Line Station consisted of the primary piping from Camden Bay, laid roughly parallel to the beach of Simpson Cove, to the Pumphouse and aboveground storage tank (AST) area at the main facility area, as well as smaller-diameter, secondary piping from the AST area to the main building at the facility.

Contaminants of Concern

During the site characterization and cleanup activities at this site, samples were collected from soil and analyzed for gasoline range organics (GRO); diesel range organics (DRO); residual range organics (RRO); benzene, toluene, ethylbenzene, and xylenes (BTEX); polychlorinated biphenyls (PCBs); organochlorine pesticides; and total lead. All in situ detected analytes were below the approved cleanup levels for this site.

Cleanup Levels

The human health soil cleanup levels listed in 18 AAC 75.341(c), Table B1 for the Arctic Zone, as well as the more restrictive of either the inhalation or ingestion cleanup levels listed in 18 AAC 75.341(d), Table B2 for Arctic Zone, apply at this site. Migration to groundwater soil cleanup levels are not applicable at this site because the site is in the Arctic Zone and underlain by continuous permafrost starting at a depth of approximately two feet below ground surface.

Table 1 – Approved Cleanup Levels

Contaminant	Soil (mg/kg)	Highest Detected Concentration (mg/kg)
GRO	1,400	150
DRO	12,500	4,100
RRO	13,700	930
Benzene	16	0.056
Ethylbenzene	72	1
Toluene	200	0.16
Xylenes	57	5.1
Lead	400	12
PCBs	1	0.140

mg/kg = milligrams per kilogram

Characterization and Cleanup Activities

Characterization and cleanup activities conducted under the regulatory authority of the Contaminated Sites Program began in 1994. These activities are described below.

During the 1994 field season, EMI removed 14.78 tons of petroleum, oil and lubricant (POL) pipeline. EMI field reports from this removal activity detail the contractors' removal of approximately 820 linear feet of 6.5-inch aboveground POL pipeline and 570 linear feet of 2.5-inch aboveground POL pipeline. The contractor then welded caps to the end of each section of pipeline after it had been drained, cut, and removed.

EMCON removed the remainder of the POL piping in 2000, including 244 feet of 2.5-inch aboveground POL pipeline, 573 feet of 2.5-inch belowground POL pipeline, and 2,263 feet of 6.5-inch POL pipeline. Pipeline locations were visually verified as the pipelines were exposed with the use of heavy equipment or traced along surface locations. Piping was removed from excavations and aboveground runs, cut into manageable sections, and placed onto pallets for off-site transportation and disposal. Contaminated soils were removed based on photoionization detector (PID) field-screening results, and confirmation soil samples were collected at a frequency of a minimum of one sample per 100 feet of pipeline, or where a field screening indicated petroleum contamination above established removal action levels. A total of 42 analytical soil samples were collected along the POL pipeline corridors. Detected contaminants in the confirmation samples were all below approved cleanup levels for this site.

Cumulative Risk Evaluation

Pursuant to 18 AAC 75.325(g), 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 noncarcinogenic 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 cumulative risk criteria for human health.

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	De-Minimis Exposure	Contamination remains in surface soil, but is below human health and ingestion cleanup levels.
Sub-Surface Soil Contact	De-Minimis Exposure	Contamination remains in the sub-surface, but is

Pathway	Result	Explanation
		below human health and ingestion cleanup levels.
Inhalation – Outdoor Air	De-Minimis Exposure	Contamination remains in the sub-surface, but is below human health and inhalation cleanup levels.
Inhalation – Indoor Air (vapor intrusion)	Pathway Incomplete	There are no occupied buildings located within 30 feet of the remaining contamination.
Groundwater Ingestion	Pathway Incomplete	Groundwater is not a potential drinking water source since the site is underlain by permafrost starting at two feet below ground surface.
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	The site is not used for the collection of wild or farmed foods.
Exposure to Ecological Receptors	De-Minimis Exposure	Remaining soil contamination concentrations and volumes are unlikely to adversely impact ecological receptors.

Notes to Table 2: “De-Minimis Exposure” means that in ADEC’s judgment receptors are unlikely to be adversely 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 contamination at the site has been cleaned up to concentrations below the human health, ingestion, and inhalation Arctic Zone soil cleanup levels found in 18 AAC 75.341(c) and (d). 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 75.380(d)(1) that allows contamination to remain at the site above method two soil cleanup levels or groundwater cleanup levels listed in Table C requires DEC approval in accordance with 18 AAC 75.325(i). A “site” [as defined by 18 AAC 75.990 (115)] 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.

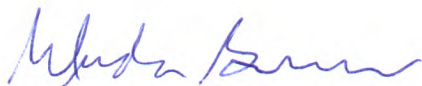
This determination is in accordance with 18 AAC 75.380 and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that contaminants at this site may pose an unacceptable risk to human health, safety, or welfare or to the environment.

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 20 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, 410 Willoughby Avenue, Suite 303, 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.

Please contact Melinda Brunner by telephone at (907) 451-2192 or by email at melinda.brunner@alaska.gov with questions about this closure decision.

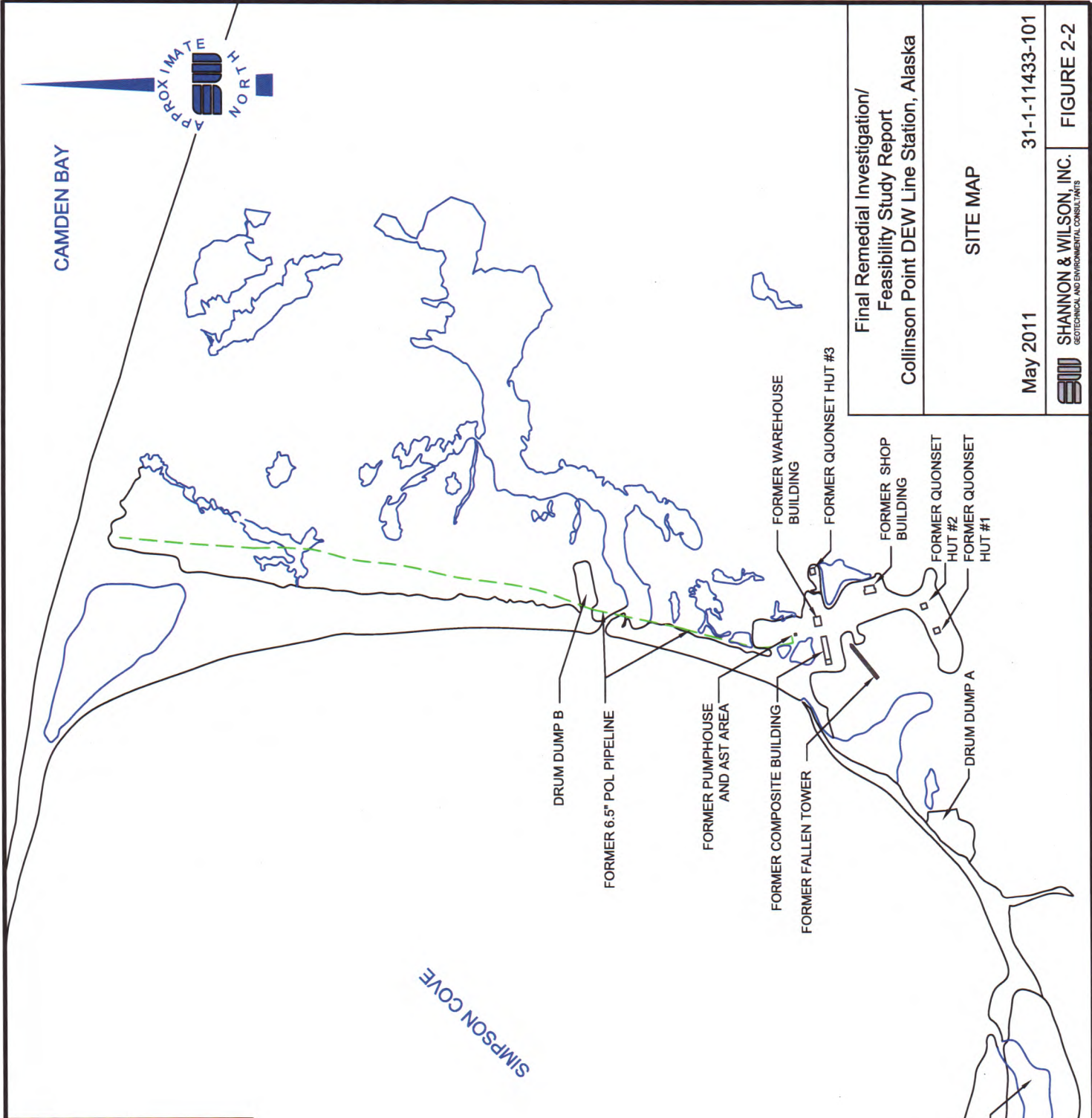
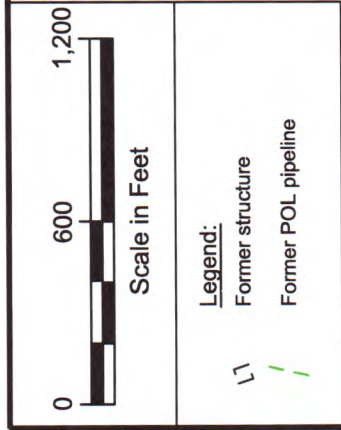
Sincerely,



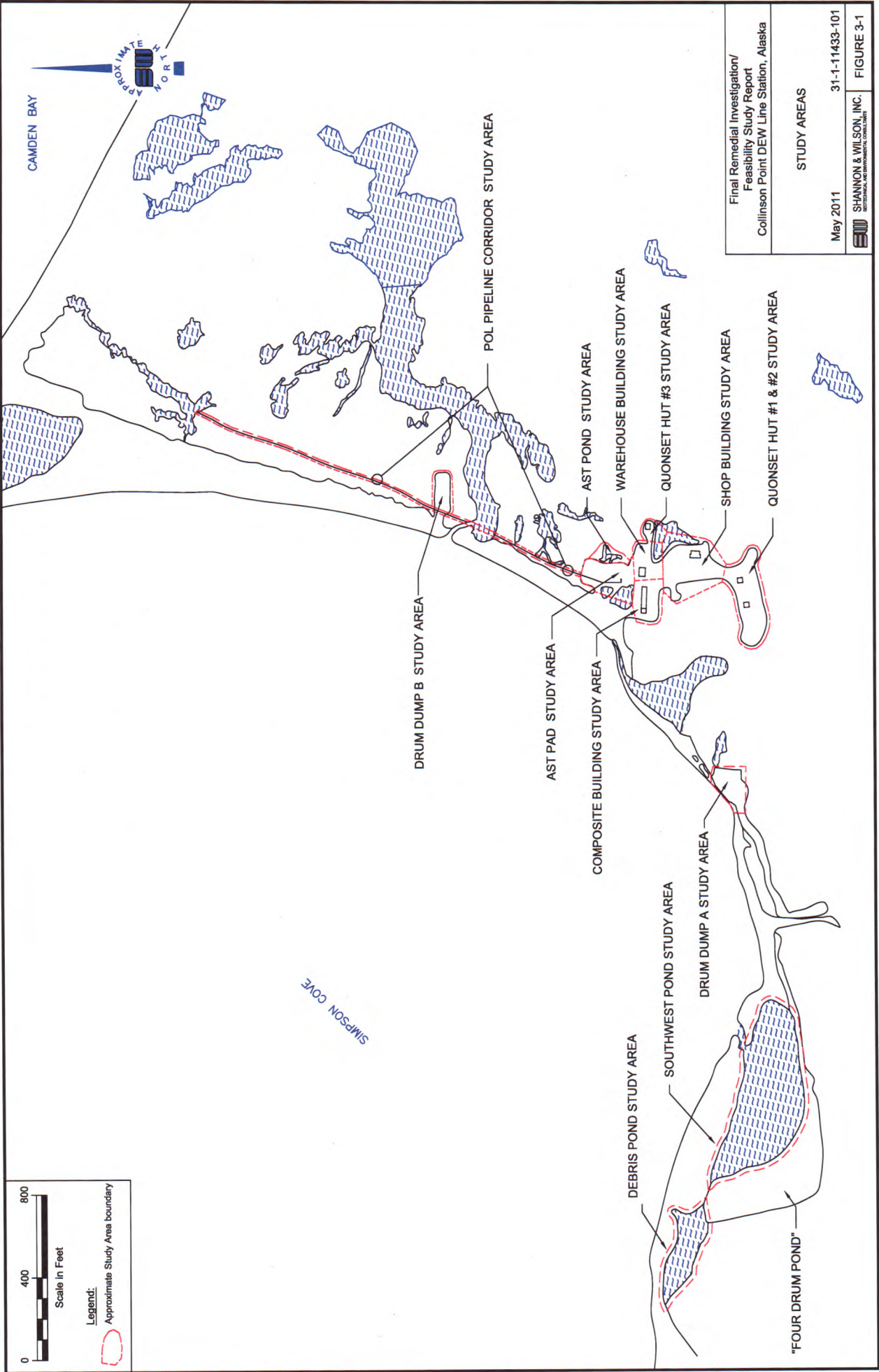
Melinda Brunner
Environmental Program Manager

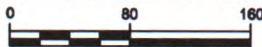
Enclosure

Cc: Spill Prevention and Response, Cost Recovery Unit
Eric Breitenberger, ADEC, via email



Final Remedial Investigation/ Feasibility Study Report Collinson Point DEW Line Station, Alaska
SITE MAP
May 2011
31-1-11433-101
SHANNON & WILSON, INC. GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS
FIGURE 2-2





Notes:

Basemap and sample locations from previous project documentation.
 Pre-2000 sample locations are approximate.
 Aerial photo date: August 1987.
 Aerial photo included for illustrative purposes only.

DEBRIS AND MANY STRUCTURES IN PHOTO ARE NO LONGER PRESENT.

Legend:

- Soil sample not exceeding ADEC Table B cleanup levels
- Water sample not exceeding ADEC Table C cleanup levels
- Year sample collected
- Former POL pipeline

Final Remedial Investigation/
 Feasibility Study Report
 Collinson Point DEW Line Station, Alaska

**PREVIOUS SAMPLE LOCATIONS
 NORTH END POL PIPELINE CORRIDOR**

May 2011

31-1-11433-101

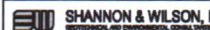
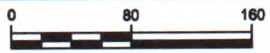


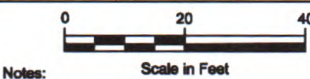
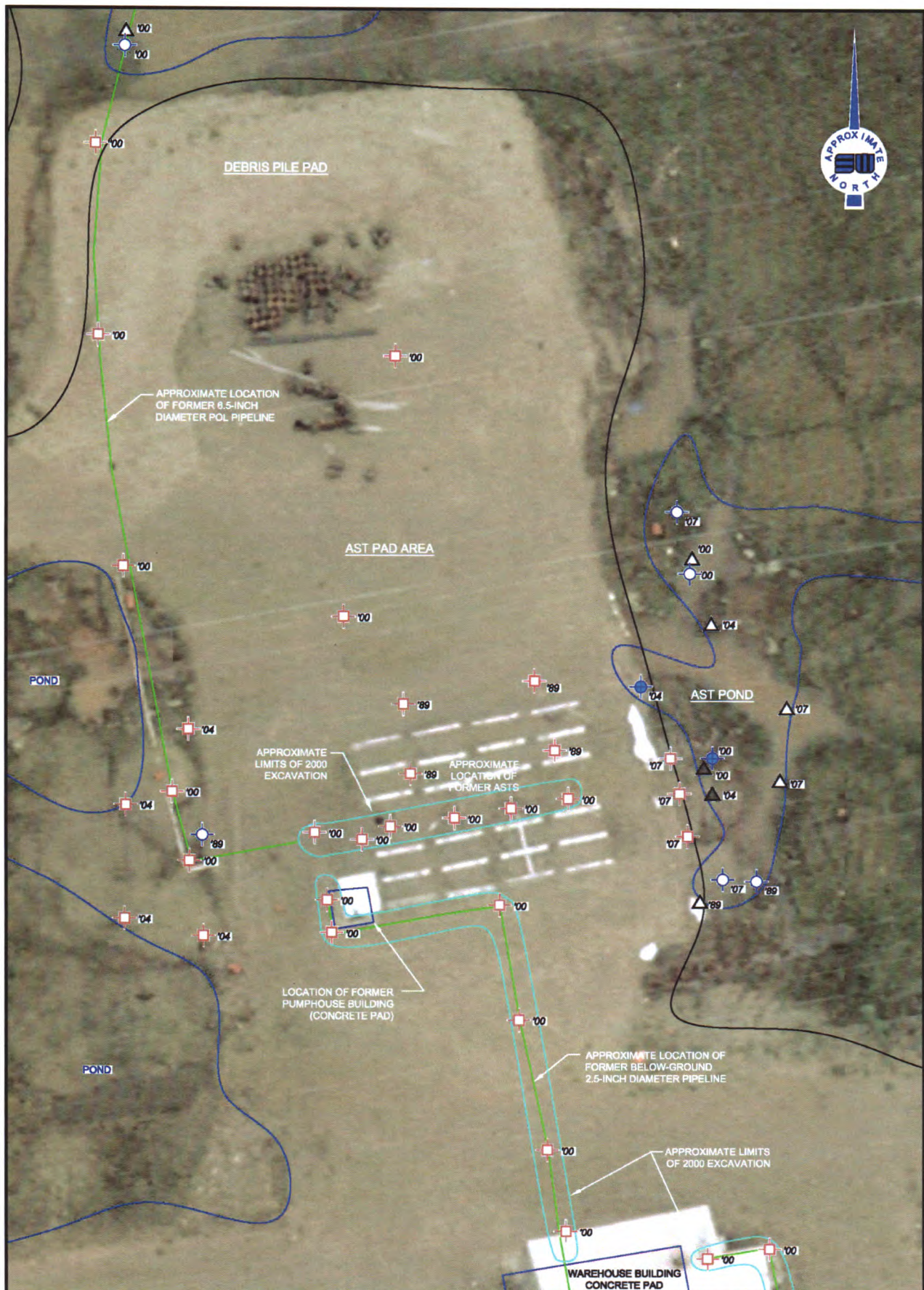
FIGURE 5-1



Notes:
 Basemap and sample locations from previous project documentation.
 Pre-2000 sample locations are approximate.
 Aerial photo data: August 1987.
 Aerial photo included for illustrative purposes only.
DEBRIS AND MANY STRUCTURES IN PHOTO ARE NO LONGER PRESENT.

- Legend:**
- Soil sample not exceeding ADEC Table B cleanup levels
 - Soil sample exceeding ADEC Table B cleanup levels
 - Water sample not exceeding ADEC Table C cleanup levels
 - 00 Year sample collected
 - Former POL pipeline

Final Remedial Investigation/ Feasibility Study Report Collinson Point DEW Line Station, Alaska	
PREVIOUS SAMPLE LOCATIONS DRUM DUMP B AND SOUTH END POL PIPELINE CORRIDOR	
May 2011	31-1-11433-101
SHANNON & WILSON, INC. <small>GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS</small>	FIGURE 5-2



Notes:
 Basemap and sample locations from previous project documentation. Pre-2000 sample locations are approximate.
 Aerial photo date: August 1987.
 Aerial photo included for illustrative purposes only.
DEBRIS AND MANY STRUCTURES IN PHOTO ARE NO LONGER PRESENT.

- Legend:**
- Soil sample not exceeding ADEC Table B cleanup levels
 - Water sample not exceeding ADEC Table C cleanup levels
 - Water sample exceeding ADEC Table C cleanup levels
 - ▲ Sediment sample not exceeding ADEC Table B cleanup levels
 - ▲ Sediment sample exceeding ADEC Table B cleanup levels
 - '00 Year sample collected

Final Remedial Investigation/
 Feasibility Study Report
 Collinson Point DEW Line Station, Alaska

**PREVIOUS SAMPLE LOCATIONS
 AST PAD AND AST POND**

May 2011 31-1-11433-101

SHANNON & WILSON, INC. FIGURE 5-3



Final Remedial Investigation/
Feasibility Study Report
Collinson Point DEW Line Station, Alaska

PREVIOUS SAMPLE LOCATIONS
COMPOSITE BUILDING AND
WAREHOUSE BUILDING AREAS

May 2011 31-1-11433-101

SHANNON & WILSON, INC.
Remediation and Environmental Consultants

FIGURE 5-4

Notes:

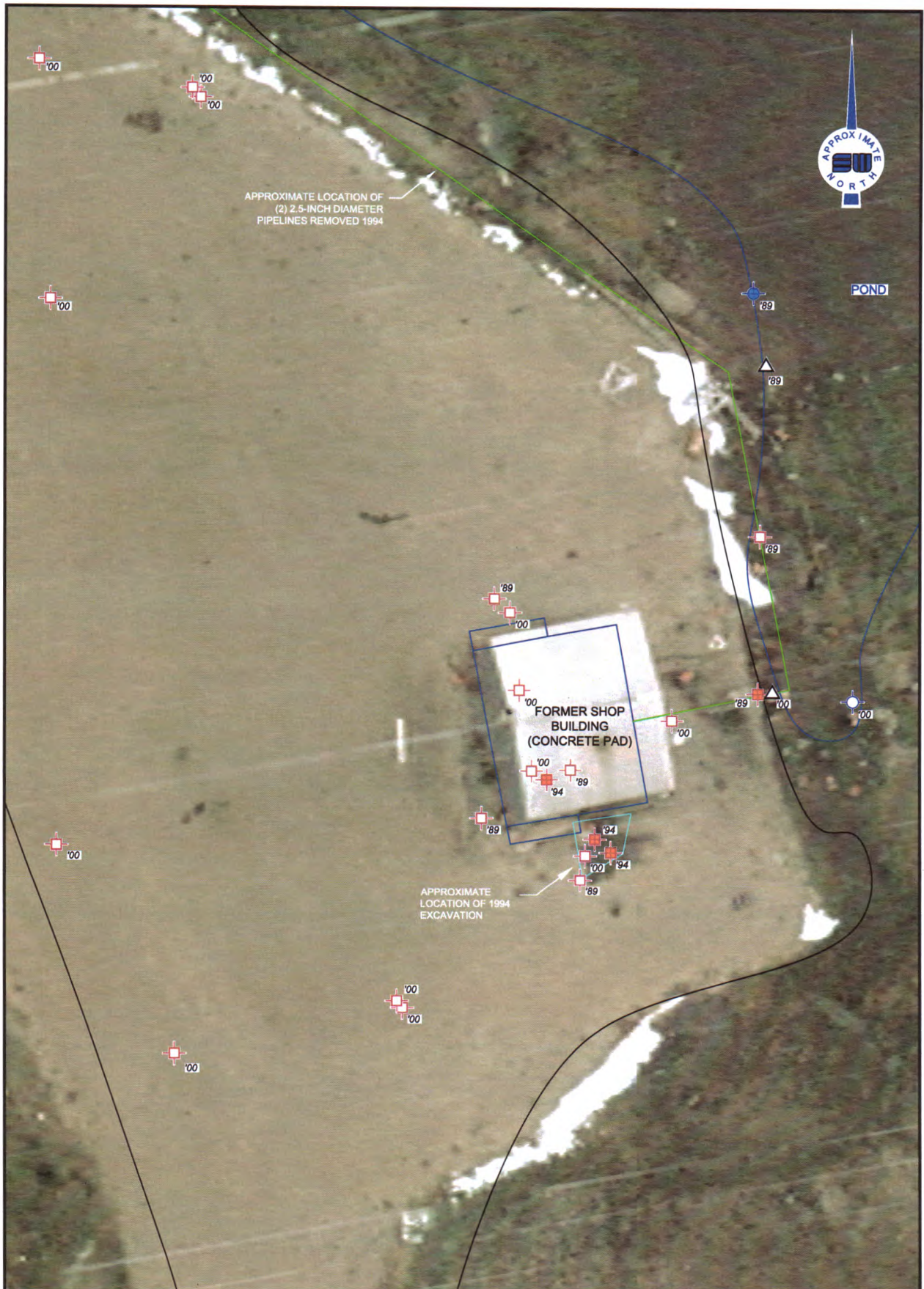
Basemap and sample locations from previous project documentation.
Pre-2000 sample locations are approximate.
Aerial photo date: August, 1987.

Aerial photo included for illustrative purposes only.
DEBRIS AND MANY STRUCTURES IN PHOTO ARE NO LONGER PRESENT.

Legend:

- Soil sample not exceeding ADEC Table B cleanup levels
- Soil sample exceeding ADEC Table B cleanup levels
- Concrete chip sample ≥ 25 mg/kg PCB
- Concrete chip sample < 25 mg/kg PCB
- '00 Year sample collected

Scale in Feet



Notes:
 Basemap and sample locations from previous project documentation. Pre-2000 sample locations are approximate.
 Aerial photo date: August 1987.
 Aerial photo included for illustrative purposes only.
DEBRIS AND MANY STRUCTURES IN PHOTO ARE NO LONGER PRESENT.

- Legend:**
- '00 Soil sample not exceeding ADEC Table B cleanup levels
 - '89 '94 Soil sample exceeding ADEC Table B cleanup levels
 - '89 '00 Water sample not exceeding ADEC Table C cleanup levels
 - '89 Water sample exceeding ADEC Table C cleanup levels
 - △ Sediment sample not exceeding ADEC Table B cleanup levels
 - '00 Year sample collected

Final Remedial Investigation/ Feasibility Study Report Collinson Point DEW Line Station, Alaska	
PREVIOUS SAMPLE LOCATIONS SHOP BUILDING AREA	
May 2011	31-1-11433-101
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FIGURE 5-6	