U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Response and Restoration
Pribilof Project Office
7600 Sand Point Way N.E
Seattle, Washington 98115
Ph: 206-526-6965, fax: 206-526-4819

November 8, 2005

Mr. Louis Howard
Project Manager
Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
Contaminated Sites Program
555 Cordova Street
Anchorage, AK 99501-2617

Subject: Technical Memorandum, Characterization Soil Sample Collection at the Former Big Polovina Hill Debris Pile

Dear Mr. Howard:

Introduction:
This technical memorandum documents the results of a characterization sampling effort at the Big Polovina Hill Debris Site (debris site), owned by the National Oceanic and Atmospheric Administration (NOAA) on St. Paul Island, Alaska. The site is also known as NOAA Site 44, a non-Two Party Agreement (TPA) site (NOAA 1996). St. Paul Island is approximately 800 miles southwest of Anchorage in the Bering Sea (Figure 1). Big Polovina Hill is located at the east end of the Island, approximately 2 miles northeast of the airport, at Latitude: 57 11 7.40 N Longitude: 170 11 36.38 W. During the fall of 2005, NOAA submitted a sampling plan (NOAA 2005) for the collection of soil samples at the site to characterize potential petroleum contamination that had been found in an earlier sampling effort. The sampling plan was subsequently approved by ADEC (ADEC 2005), and the sampling was carried out by NOAA in October, 2005. This Technical Memorandum provides the results of that sampling effort.

Summary of Response Activities:
On October 15, 2005, NOAA employees John Lindsay, Bernie Denno, and James Wright collected 2 samples at each of 3 locations at the site as shown in Figure 2. Photographs of the sampling activities are provided in the attached Photo Log. At each sample location approximately 6 inches of soil was removed by hand shovel and pick, then a soil sample was collected with a new wooden paddle and sealed in a plastic bag. The sample collector was NOAA employee James P. Wright, P.E., who was granted permission by ADEC to collect samples for this effort as requested by NOAA in the approved sampling plan. The

sample was then mixed in the bag and placed into a 40 milliliter glass jar. The same location was then excavated to a depth of 18 inches and a second sample was collected in a like manner. Two jars were filled from a depth of 18 inches at the location of sample SP44-CH001, one designated as having a depth of 1.5 feet, and the other as 10 feet. This latter sample is a duplicate of the first. Wooden stakes were partially buried at each sample location so they may be located in the future if necessary.

The samples were stored in a freezer at the NOAA staff quarters until being shipped to the laboratory on Monday, October 17. The samples were received by the laboratory on Tuesday, October 18. During shipping, two sample jars containing soil from location SP44-CH003 were broken. The laboratory notified NOAA of this fact on Monday, October 24. The soil from the samples had commingled in the bottom of the shipping cooler and had not been stored in a refrigerator since being received by the lab. Since the samples were from the same location, but at different depths, NOAA directed the laboratory to combine the two samples and homogenize them into one and complete the analysis, noting on the laboratory report that this had occurred. These two samples had been stored in the shipping cooler at room temperature for six days after the laboratory staff discovered their glass jars had broken in transit. These two samples were not in sealed jars during this period, which is not in accordance with the NOAA Master Quality Assurance Plan (NOAA 2003). However, DRO and RRO are relatively low volatility constituents and analytical results of the soil samples are still useful. This sample will be considered a composite sample representing the depth of surface to 18 inches.

Analytical Results

The analytical results show that the soil samples do not exceed ADEC soil cleanup standards under 18 AAC 75.340 Method 2, Table B-2 for DRO or RRO as shown in Table 1. DRO results ranged from undetected (with a sample quantitation limit of 10 milligrams per kilogram [mg/kg]) to a high of 97 mg/kg. RRO results ranged from undetected (with a sample quantitation limit of 50 mg/kg) to a high of 480 mg/kg. Laboratory analytical reports are provided in Appendix A.

Recommended Action:
NOAA requests that ADEC provide written confirmation on the attached page that NOAA completed all appropriate investigation and remediation to the maximum extent required at the Big Polovina Hill Debris Site, St. Paul Island. NOAA requests ADEC grant a conditional closure that will not require further investigation or remedial action from NOAA. NOAA understands ADEC will require additional containment, investigation, or cleanup if subsequent information indicates that the level of residual contamination does not protect human health, safety, or welfare, or the environment.

Please sign one copy of the attached Written Confirmation Page and return it to NOAA for our records. If you have any questions, please contact me either in writing or at 206/526-4560.

Sincerely,

John Lindsay
Pribilof Project Office Manager

cc St. Paul Island RAB Members

REFERENCES

Alaska Department of Environmental Conservation (ADEC). 2005. *Sampling Plan Big Polovina Hill Debris Site 44, St. Paul Island, Alaska.* Letter from Louis Howard, Project Manager, ADEC to John Lindsay, NOAA. October 6.

National Oceanic and Atmospheric Administration (NOAA). 1996. *Pribilof Islands Environmental Restoration Two Party Agreement,* Attorney General's Office File No. 66 1-95-0126. January 26, 1996.

NOAA. 2003. *Master Quality Assurance Plan. Pribilof Islands Environmental Restoration Project. National Oceanic and Atmospheric Administration, Pribilof Project Office.*

NOAA. 2005. *Sampling Plan and Waiver Request for Third Party Sampler, Big Polovina Hill Debris Site, Site 44/Non-Two Party Agreement*. Letter to Mr. Louis Howard, Environmental Specialist, Department of Environmental Conservation, Contaminated Sites Program. October 6.

WRITTEN CONFIRMATION PAGE

For the National Oceanic and Atmospheric Administration:

John Lindsay
NOAA, Pribilof Project Office

Date

Approvals: This is to confirm that all investigative and corrective action has been completed to the maximum extent required at the Big Polovina Hill Debris Site, St. Paul Island, Alaska, with cleanup criteria applied to the maximum extent practicable (18 AAC 75.325 (f), 18 AAC 75.990) and that no further investigation or remedial action is required as a part of this conditional closure granted by ADEC.

For the Alaska Department of Environmental Conservation:

Louis Howard
Alaska Department of Environmental Conservation
Remedial Project Manager

Date

TABLE 1

TABLE 1
SOIL CHARACTERIZATION SAMPLING RESULTS
BIG POLOVINA HILL DEBRIS PILE
ST. PAUL ISLAND, ALASKA

Sample Identification	Analytical Results	
	AK102 DRO (mg/kg)	AK103 RRO (mg/kg)
SP44-CH001-005	97	480
SP44-CH001-015	12	115
SP44-CH001-100 (duplicate of SP44-CH001-015)	24	115
SP44-CH002-005	<10	72
SP44-CH002-015	<10	94
SP44-CH003-005*		
SP44-CH003-015*	<10	93
Table B2 Method 2 migration to groundwater cleanup levels	250	11,000
Table B2 Method 2 Inhalation cleanup levels	12,500	22,000
Table B2 Method 2 Ingestion cleanup levels	10,250	10,000

AK 102 DRO -State of Alaska method 102 for analysis of Diesel Range Organics

AK 103 RRO -State of Alaska method 102 for analysis of Diesel Range Organics

ADEC -Alaska Department of Environmental Conservation

Table B2 Method 2 -Cleanup levels under 18 AAC 75.340

* Samples SP44-CH003-005 and SP44-CH003-015 composited together, and were stored for 6 days at room temperature prior to analysis.

FIGURES

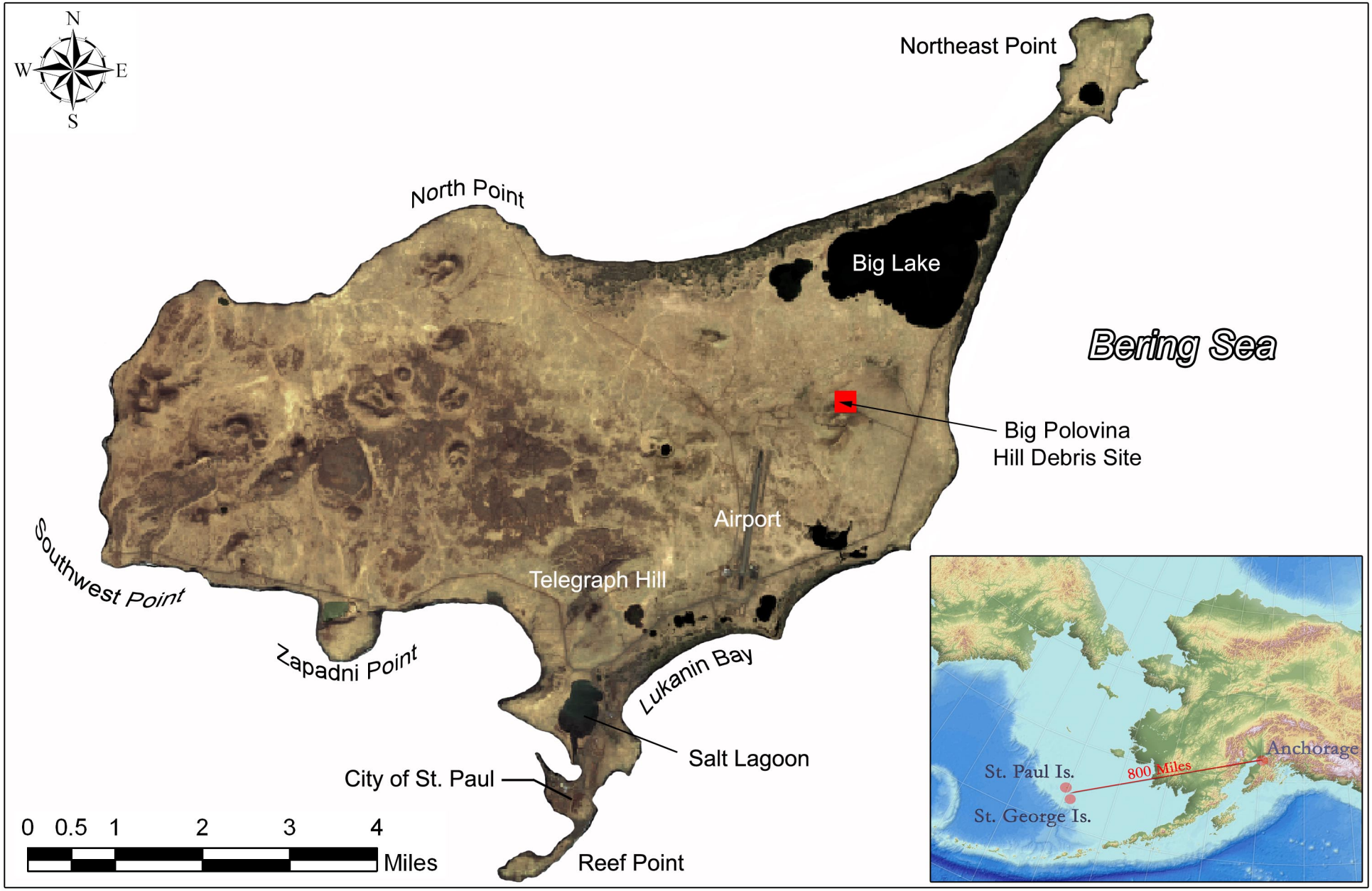

Figure 1	St. Paul Island Vicinity Map Big Polovina Hill Debris Site NOAA Site 44 St. Paul Island, Alaska	Source: Ikonos Satellite Imagery, 2001

Pribilof Islands Restoration Project

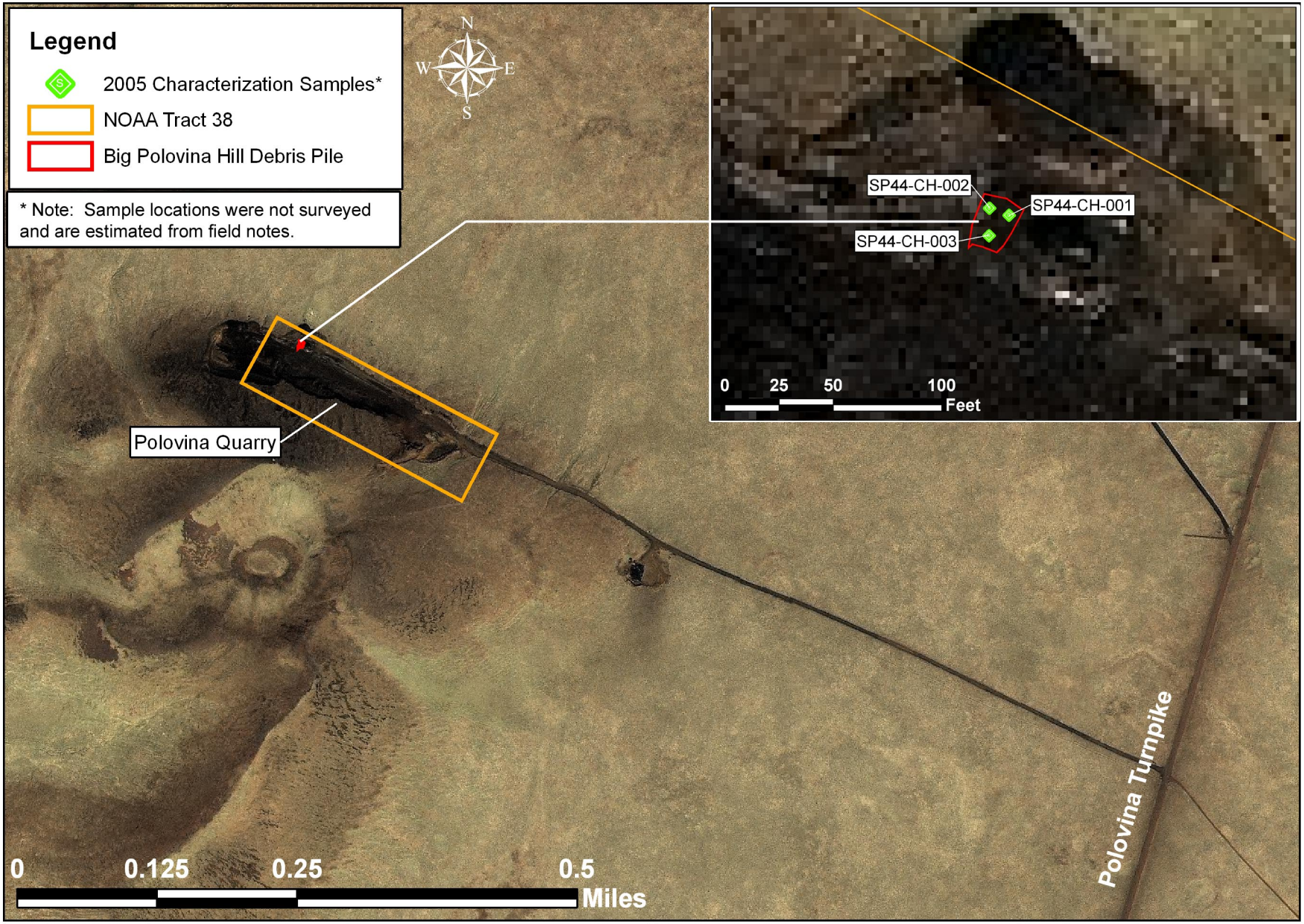

Figure 2	Site Vicinity Map and Sampling Locations Big Polovina Hill Debris Site NOAA Site 44 St. Paul Island, Alaska	Sources: Tract 38 (BLM MTPs 1983), Debris Pile (TTEMI 2000), Sample Locations (NOAA 2005), Satellite Imagery (Ikonos 2001).

Pribilof Islands Restoration Project

PHOTO LOG

Photo Log
October 15, 2005 Characterization Sampling at the Big Polovina Hill Debris Pile
St. Paul Island, Alaska

Photograph 1. NOAA employees digging to 18 inches deep at sample location SP44-CH001 at the Big Polovina Hill Debris Pile site, facing north. October 15, 2005.

Photograph 2. Disturbed soil showing locations of the three characterization samples collected by NOAA on October 15, 2005. Facing Northeast.

APPENDIX A
LABORATORY REPORTS