

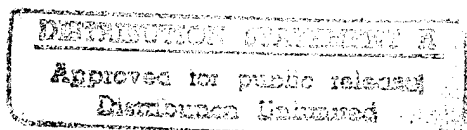
**United States Air Force
611th Air Support Group/
Civil Engineering Squadron**

Elmendorf AFB, Alaska

Final

**Decision Document for
No Further Response Action Planned**

**Point Lonely Radar Installation,
Alaska**



19960808 089

Prepared by:

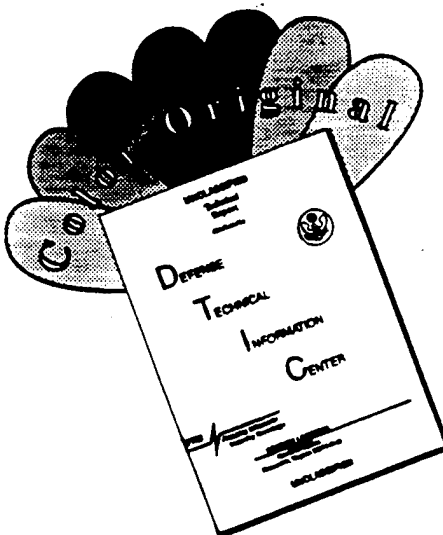
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29 MAY 1996

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PREFACE

This report presents information supporting decisions for no further action at sites located at the Point Lonely radar installation in northern Alaska. The sites were characterized based on sampling and analyses conducted during Remedial Investigation activities performed during August and September 1993. This report meets the requirements of the United States Air Force (Air Force) Installation Restoration Program (IRP) and is designed to comply with all federal, state, and local laws governing the conduct of environmental investigations in Alaska. This report was prepared by ICF Technology Incorporated.

This report was prepared between March and May 1996. Mr. Samer Karmi of the Air Force Center for Environmental Excellence Environmental Restoration Division (AFCEE/ESR) was the Alaska Restoration Team Chief for this task. Dr. Jerome Madden and Mr. Richard Borsetti of the 611th CES/CEVR were the Remedial Project Managers for the project.

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NOTICE

This report has been prepared for the Air Force by ICF Technology Incorporated to support no further action decisions for specified sites under the Air Force Installation Restoration Program (IRP). The limited objectives of this report and the ongoing nature of the IRP, along with the evolving knowledge of site conditions and chemical effects on the environment and health, must be considered when evaluating this report, since subsequent facts may become known which may make this report premature or inaccurate. Acceptance does not mean that the Air Force adopts the conclusions, recommendations or other views expressed herein, which are those of the contractor only and do not necessarily reflect the official position of the Air Force.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADEC	Alaska Department of Environmental Conservation
AFCEE/ESR	Air Force Center for Environmental Excellence Environmental Restoration Division
ARAR	Applicable or Relevant and Appropriate Requirements
Air Force	United States Air Force
BTEX	Benzene, Toluene, Ethylbenzene, and Xylenes
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DEW	Distant Early Warning
DRPH	Diesel Range Petroleum Hydrocarbons
DTIC	Defense Technical Information Center
GRPH	Gasoline Range Petroleum Hydrocarbons
IRP	Installation Restoration Program
LRR	Long Range Radar
PCB	Polychlorinated Biphenyl
POL	Petroleum, Oil, and Lubricant
RAB	Restoration Advisory Board
RI	Remedial Investigation
RRPH	Residual Range Petroleum Hydrocarbons
SRR	Short Range Radar
SVOC	Semi-Volatile Organic Compound
TPH	Total Petroleum Hydrocarbon
VOC	Volatile Organic Compound

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1.0 INTRODUCTION

This Decision Document discusses the selection of no further action as the recommended action for five sites located at the Point Lonely radar installation. The United States Air Force (Air Force) completed a Remedial Investigation/Feasibility Study and a Risk Assessment for the 11 sites located at the Point Lonely installation (U.S. Air Force 1996a,b). Based on the findings of these activities, five sites are recommended for no further action. Each recommendation for no further action is based on one or more of the following criteria:

- The findings of the Remedial Investigation/Feasibility Study demonstrate that chemical constituents are not present or occur at low concentrations;
- There is no unacceptable risk to potential human or ecological receptors posed by chemical constituents detected at the site; and
- The Air Force was unable to identify a source of suspected contamination during the Remedial Investigation/Feasibility Study process.

The following five sites at the Point Lonely radar installation are recommended for no further action:

- Old Dump Site (LF07);
- Diesel Tank (West of Hangar) (ST10);
- Inactive Landfill (LF11)/Vehicle Storage Area (SS14)¹;
- Module train (SS12); and
- Hangar Pad Area (SS13).

The recommendation of no further action is considered to be protective of human health and the environment, to be cost effective, and to meet applicable or relevant and appropriate requirements (ARARs). Sites at the Point Lonely installation requiring remedial action are addressed in the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a).

The Distant Early Warning (DEW) Line community relations program was developed to educate the residents on the nature of the Installation Restoration Program (IRP) activities and findings and to ensure the community has input to the decision-making process. The activities include researching, developing, and maintaining a mailing list; producing and distributing fact sheets; and establishing and maintaining administrative records/information repositories at the Elmendorf Air Force Base in Anchorage and at the Tuzvy Library in Barrow, Alaska. The Air Force will continue to seek input from the community by informing the community of the possible organization of a Restoration Advisory Board (RAB) informational meeting and being available

¹ The Inactive Landfill (LF11) and Vehicle Storage Area (SS14) were found to be the same site (i.e., the landfill was covered with gravel and then used as a vehicle storage area); therefore, the site is reported in this document as one site referred to as the Inactive Landfill/Vehicle Storage Area.

for informal visits and small group meetings. The Air Force will broadcast radar announcements, hang posters in public areas, and publish notices announcing the RAB informational meeting to inform the community.

In October 1994, a fact sheet was distributed to everyone on the mailing list summarizing public involvement opportunities during the overall remedial action decision making process. The fact sheet provided a brief history of the DEW Line installations, an overview of the IRP, an update on the environmental investigations at each installation, and a description of the Community Relations Plan, including Air Force plans to keep the community informed about environmental activities at the various installations. The fact sheet also provided a general schedule of the process leading up to the public comment period. The Final Remedial Investigation/Feasibility Study, Final Risk Assessment, and Draft Final Decision Document for Point Lonely were placed in the information repository for public review in April 1996. A fact sheet explaining the Remedial Investigation/Feasibility Study and Risk Assessment findings was prepared and distributed to individuals on the mailing list. A public comment period on the Draft Final Decision Document for the Point Lonely installation was announced via public notice published in the Arctic Sounder and via posters mailed to the city office.

To facilitate public participation, the Final Remedial Investigation/Feasibility Study, Final Risk Assessment, and Draft Final Decision Document for the Point Lonely radar installation were placed in the Administrative Record/Information Repository and were available for review at the Elmendorf AFB in Anchorage and at the Tuzvy Library in Barrow, Alaska. The public comment period for the Draft Final Decision Document for the no further action sites was held from 26 April to 25 May 1996. Individuals who visited the repositories over the course of the public comment period were asked to sign in so that the Air Force could determine if the repository was being used. The repository was not visited during the comment period as per the sign up sheet. Questions or comments in regard to information presented in these documents should be addressed to:

Mr. Roger Lucio
Community Relations Coordinator
611 CES/CEVR
6900 - 9th Street, Suite 360
Elmendorf AFB, Alaska 99506-2270
(907) 552-4532 or 1-800-222-4137

1.1 OVERVIEW OF THE POINT LONELY RADAR INSTALLATION RESTORATION PROGRAM

The Point Lonely radar installation, also known as POW-1, was constructed as an auxiliary station in 1953 and was active until 1989. The installation is located at 70°54'N, 153°15'W on the north coast of Alaska. The 2,830-acre installation is situated approximately one mile west of Pitt Point, a broad point of land extending northward toward the Beaufort Sea. The main station structures include the inactive module train, warehouse, garage, fixed petroleum, oils, and lubricants (POL) tanks, pumphouse, radar antennas, and 5,000-foot lighted gravel runway. Parts of the property

were previously owned by Husky Oil Company. These areas include an airplane hangar, two warehouses, a control tower, and a tank farm. The general location of the Point Lonely radar installation is shown on Figure 1-1, and an area location map is presented in Figure 1-2.

The Air Force initiated IRP activities at the Point Lonely radar installation in 1980 in response to the Department of Defense's commitment to identify past waste disposal sites and eliminate hazards to public health. The initial Phase I activities conducted by the Air Force concluded that past waste management activities at the installation may have resulted in adverse environmental impacts at several sites (CH2M Hill 1981).

An Air Force contractor prepared a Technical Operations Plan for the Phase II, Stage 2 work in August 1986 (Dames and Moore 1987). Phase II, Stage 2 activities involved field investigation of three sites. Five water samples were collected and onsite observations and analytical results were recorded in the Phase II, Stage 2 Draft Report (Dames and Moore 1987).

In January 1987, an Air Force contractor released the Environmental Assessment for North Warning System (Alaska) (Hart Crowser 1987). The assessment, although not an IRP activity, discussed the impacts of the construction of a short range radar (SRR) station at the then-active Point Lonely DEW Line installation.

A private contractor prepared the Environmental Assessment for the North Warning System (Alaska) in January 1987 (Hart Crowser 1987). The report discussed the impacts of retrofitting with long range radar (LRR) equipment at the Point Lonely DEW Line facility.

An Air Force contractor conducted Remedial Investigation/Feasibility Study Stage 3 activities at the Point Lonely installation, and prepared the Final Work Plan in June 1988 (Woodward-Clyde 1988). The Stage 3 Final Work Plan called for investigation of four sites at the Point Lonely installation. The Stage 3 Final Report of August 1990 recommended remedial of the Large Fuel Spill [currently identified as Diesel Spills (SS05)] and some remedial action was planned at the Husky Landfill, POL Storage Area, Old Sewage Outfall, and Beach Tanks (Woodward-Clyde 1990a). In September 1990 a contractor released two reports for Stage 3 Remedial Investigation/Feasibility Study activities, the Final Technical Document to Support a Remedial Action Alternative (for the large Fuel Spill), and the Final Technical Document to Support No Further Action (for the remaining sites at the Point Lonely installation (Woodward-Clyde 1990b,c).

In 1989, plans for the scheduled closure of the Point Lonely installation were implemented, including concerns about contamination and whether remedial action was warranted. In conjunction with the proposed installation closure, another contractor released an Environmental Impact Assessment for the Point Lonely installation (Radian 1989).

The installation was closed in September 1989. Remediation of the Large Fuel Spill Site, which consisted of gravel pad and tundra areas, was planned to commence in 1991. No documentation of this cleanup was found during the records search for this Remedial Investigation/Feasibility Study Work Plan.

In preparation for construction activities associated with proposed SRR station at Point Lonely, an Air Force contractor conducted a hydrocarbon soil sampling program (ENSR 1992). A total of 294 screening samples and 36 analytical samples were collected from at least nine areas at the formerly active Point Lonely installation. Petroleum products were detected in several soil samples; complete results are described in the report. The SRR system under construction during the 1993 Remedial Investigation field activities and was operational by 1994.

The Air Force initiated Remedial Investigation/Feasibility Study activities at the Point Lonely radar installation in the summer of 1993. During the initial scoping activities, which included record searches, personnel interviews, and physical inspection of the installation, the Air Force and Alaska Department of Environmental Conservation (ADEC) personnel concluded that 11 sites warranted investigation under the IRP.

The Air Force conducted Remedial Investigation/Feasibility Study field activities at the Point Lonely radar installation during 1993. The objectives of these activities were to confirm the presence or absence of chemical contamination at specific areas of the installation; define the extent and magnitude of confirmed chemical releases; gather adequate data to determine the magnitude of potential risks to human health and the environment; and gather adequate data to identify and select the appropriate remedial actions for sites where apparent risks exceed acceptable limits.

The Final Point Lonely Remedial Investigation/Feasibility Study was completed in April 1996 (U.S. Air Force 1996a).

Once the data had been validated and compiled, the Air Force conducted human and ecological risk assessments to evaluate the human health and ecological risks that may be associated with chemicals released to the environment. The risk assessments characterized the probability that measured concentrations of hazardous chemical substances will cause adverse effects in humans or the environment in the absence of remediation. The risk assessment is used in conjunction with state and federal standards and/or guidance to determine if site remediation is warranted. The Final Point Lonely Risk Assessment was completed in April 1996 (U.S. Air Force 1996b).

Based on the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and Final Point Lonely Risk Assessment (U.S. Air Force 1996b), remedial actions are recommended at six of the sites and no further action is recommended at the remaining five sites.

1.2 DECISION DOCUMENT ORGANIZATION

Section 1.0 of this decision document presents general information regarding the Point Lonely radar installation, past environmental investigations, and community involvement activities conducted by the Air Force. Sections 2.0 through 6.0 present the Decision Documents for the five no further action sites. These sections are intended to be stand-alone documents

2

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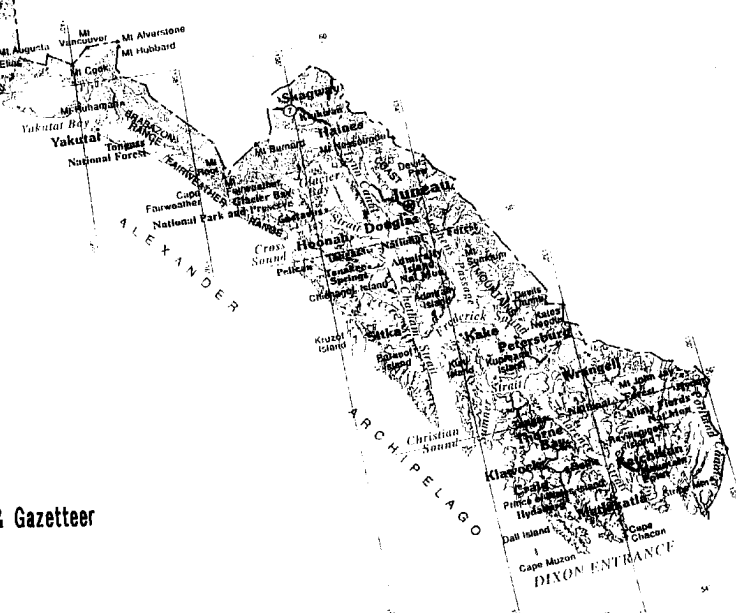
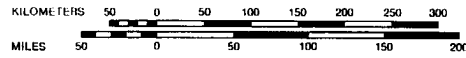
▲ RADAR SITE

ALASKA REMOTE RADAR INSTALLATION

USAF 611th CES

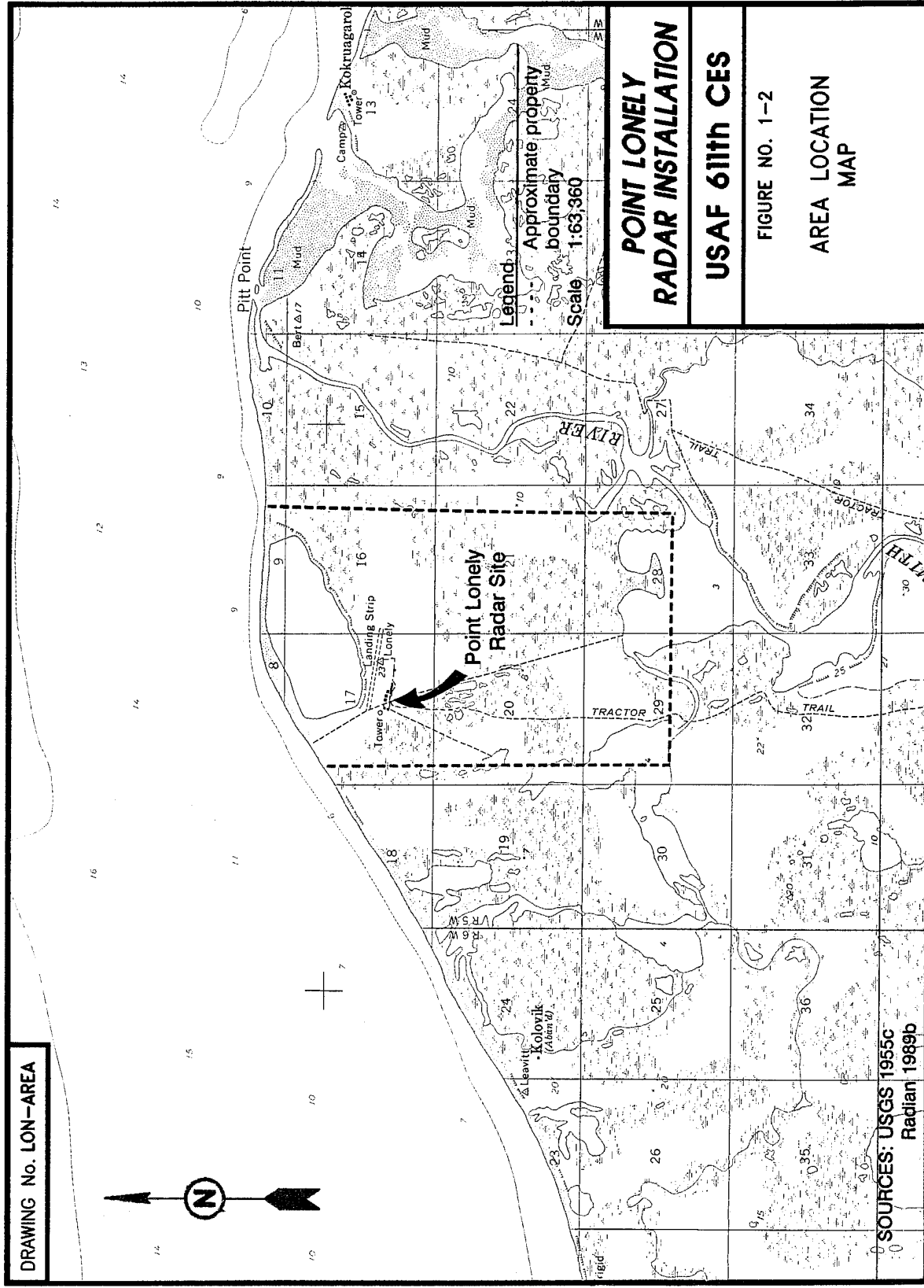
FIGURE NO. 1-1

GENERAL
LOCATION
MAP



Source: Alaska Atlas & Gazetteer

DRAWING No. LON-AREA



**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 1-2

AREA LOCATION
MAP

SOURCES: USGS 1955c
Radian 1989b

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summarizing information from the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment Report (U.S. Air Force 1996b). Table 1-1 presents the five sites and the section of this document applicable to each site. The locations of the five sites recommended for no further action site are presented in Figure 1-3.

TABLE 1-1. POINT LONELY NO FURTHER ACTION SITES

SITE NAME	SITE NUMBER	SECTION NUMBER
Old Dump Site	LF07	2.0
Diesel Tank	ST10	3.0
Inactive Landfill/Vehicle Storage Area	LF11/SS14	4.0
Module Train	SS12	5.0
Hangar Pad Area	SS13	6.0

The organization of Sections 2.0 through 6.0 was developed based on guidance received from ADEC. Each section includes a Declaration of Decision that contains a Statement of Basis, a Description of the Selected Remedy, a Declaration, and signature pages for ADEC and Air Force representatives. The Declaration of Decision is followed by information to support the Decision Document including site identification and history, investigation findings, results of the risk assessment, the selected remedial action, and references used to support the Decision Document.

1.3 REFERENCES

CH2M Hill. 1981. Installation Restoration Program Search, Alaska Dewline Stations. Prepared for the United States Air Force.

Dames and Moore. 1987. Installation Restoration Program, Phase II, Stage 2 - Confirmation/Quantification. Prepared for USAFOEHL/TS.

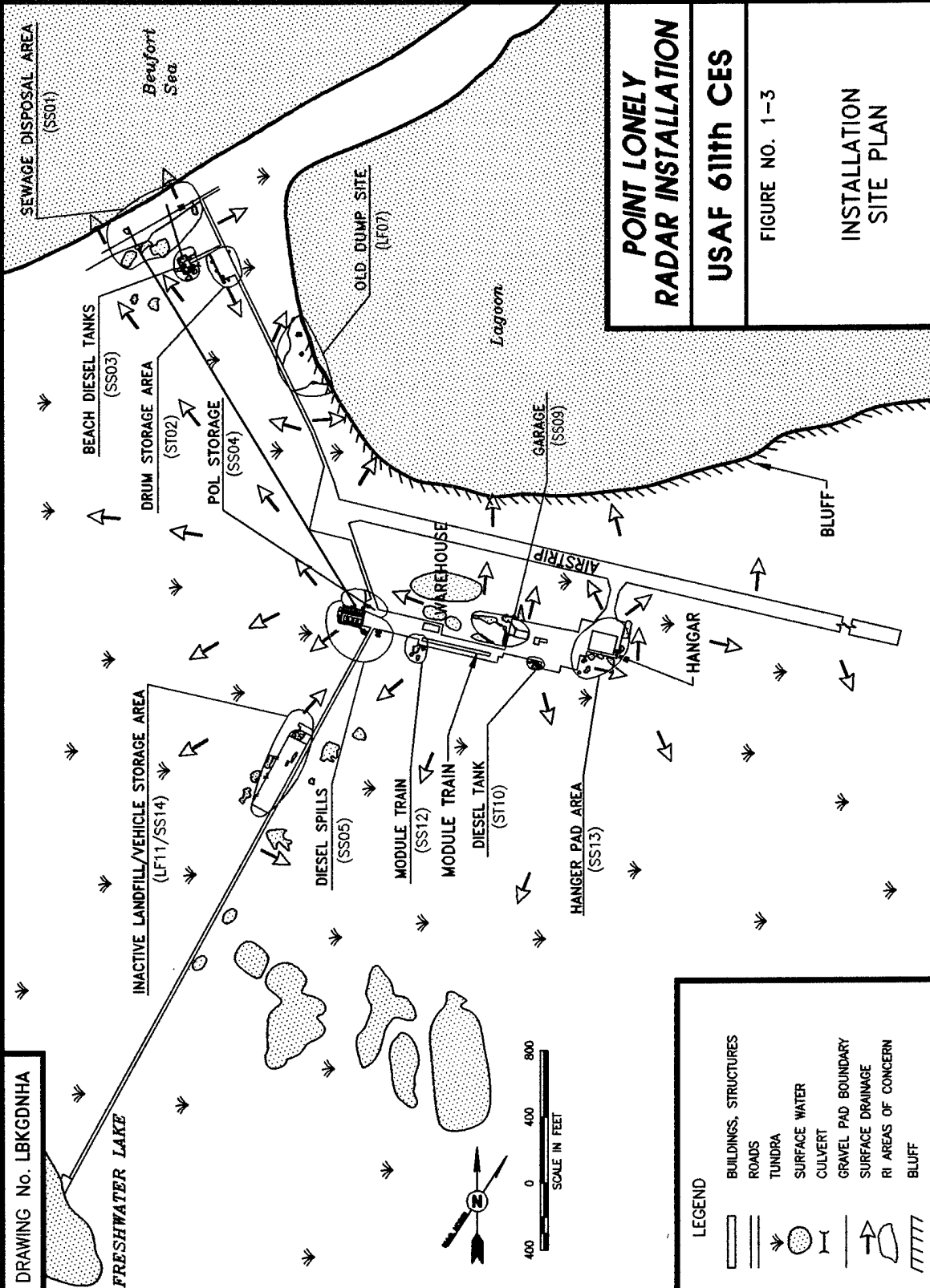
Delorme Mapping. 1992. Alaska Atlas and Gazetteer. First Edition. Second Printing.

ENSR. 1992. Hydrocarbon Screening at Proposed North Warning Radar Stations: Wainwright, Lonely, and Bullen Point, Alaska. Appendices A, B, and C.

Hart Crowser. 1987. Environmental Assessment for North Warning System. Alaska.

Radian Corporation. 1989. Environmental Impact Assessment for POW-1 Distant Early Warning Radar Station. Lonely, Alaska.

- U.S. Air Force. 1996a. Final Remedial Investigation and Feasibility Study, Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.
- U.S. Air Force. 1996b. Final Risk Assessment for the Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.
- U.S. Geologic Survey. 1995 (minor revision 1985). Teshek Puk (D-1) Quadrangle, Alaska, 1:63,360 Series (Topographic).
- Woodward-Clyde. 1988. Final Work Plan, Installation Restoration Program Remedial Investigation/Feasibility Study, Phase II, Stage 3, Barter Island AFS (BAR-M), Bullen Point AFS (POW-3), Point Lonely AFS (POW-1), Alaska.
- Woodward-Clyde. 1990a. Installation Restoration Program Remedial Investigation/Feasibility Study, Stage 3, Barter Island (BAR-M) AFS, Alaska; Bullen Point (POW-3) AFS, Alaska; Point Lonely (POW-1) AFS, Alaska. Final Report.
- Woodward-Clyde. 1990b. Installation Restoration Program Remedial Investigation/Feasibility Study, Stage 3, Technical Document to Support No Further Action. Point Lonely AFS (POW-1), Alaska.
- Woodward-Clyde. 1990c. Installation Restoration Program Remedial Investigation/ Feasibility Study Stage 3 Final Technical Document to Support No Further Action for Point Lonely Air Force Station (POW-1), Alaska, Large Fuel Spill (Sites 29/29A).



**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 1-3

INSTALLATION
SITE PLAN

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**DECISION DOCUMENT FOR
NO FURTHER RESPONSE ACTION PLANNED
POINT LONELY RADAR INSTALLATION**

SECTION 2.0

<u>SITE NUMBER</u>	<u>SITE NAME</u>
LF07	Old Dump Site

2.0 DECLARATION OF DECISION
Old Dump Site (LF07)
Page 1 of 6

SITE NAME AND LOCATION

Site Number: LF07
Site Name: Old Dump Site
Location: Point Lonely Radar Installation, Alaska

STATEMENT OF BASIS

This decision is based on the results of Installation Restoration Program (IRP) investigations including records searches, field investigations, and data analyses, and the human health and ecological risk assessments prepared with information gained from the 1993 Remedial Investigation (RI). Based on the results of soil and surface water sampling for inorganics and organics and the completion of a human health and ecological risk assessment, potential adverse effects to human and ecological receptors resulting from conditions at the Old Dump Site, site LF07, are not expected. The information on which the decision is based is available to the public in administrative records/information repositories. The information available includes the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

DESCRIPTION OF THE SELECTED REMEDY

Based on the current conditions at the Old Dump Site (LF07), it has been determined that no significant risk or threat to public health or the environment exists. Therefore, no further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, is required.

DECLARATION

This Decision Document presents the selected remedy for the site developed in accordance with CERCLA (as amended by the Superfund Amendments and Reauthorization Act of 1986), the National Contingency Plan, the regulations of the State of Alaska Department of Environmental Conservation (ADEC), and the United States Air Force (Air Force) IRP. It has been determined that no further action is protective of human health and the environment, attains federal and state requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further treatment is not satisfied because further treatment was not found to be necessary. Contaminant levels at the site have been determined to present no significant threat to human health or the environment; therefore, no treatment is necessary.

2.0 DECLARATION OF DECISION
Old Dump Site (LF07)
Page 2 of 6

This decision does not preclude future remedial or site investigations if information indicates that there is previously undiscovered contamination or exposures that may cause risk to human health or the environment. The ADEC reserves all of its rights to request additional activities in the future, if necessary.

2.0 DECLARATION OF DECISION
Old Dump Site (LF07)
Page 3 of 6

UNITED STATES AIR FORCE

Signature: _____
Name: Samuel C. Johnson, III, Colonel, USAF
Commander, 611th Air Support Group

Date: _____

**2.0 DECLARATION OF DECISION
Old Dump Site (LF07)
Page 4 of 6**

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2.0 DECLARATION OF DECISION
Old Dump Site (LF07)
Page 5 of 6

REVIEW AND CONCURRENCE: STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

Signature: _____ Date: _____
Kurt Fredriksson
Director, Division of Spill Prevention and Response

2.0 DECLARATION OF DECISION
Old Dump Site (LF07)
Page 6 of 6

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2.1 DECISION DOCUMENT SUPPORT

The following sections summarize the site history, sample analyses, human health and ecological risk assessments, public involvement, and selected action and decision for the Old Dump Site, site LF07.

2.1.1 Relevant Site History

Old Dump Site (LF07) is an old landfill site used from approximately 1955 to 1976. This inactive landfill is located near the western edge of the lagoon north of the main station facilities and is less than one acre in size (Figure 2-1). The area has been covered with gravel and graded flat. The lagoon side of the landfill is eroding, and some of the debris is exposed. No additional information on the types of waste disposed of at the site is available.

2.1.2 Sample Analyses Summary

Historic sampling conducted at the Old Dump Site (LF07) (Dames and Moore 1987; Radian 1989; Woodward-Clyde 1990) detected petroleum hydrocarbons and three metals at low levels in landfill soil. Volatile organic compounds (VOCs) were also identified in one surface water sample from the landfill perimeter. Historic sampling encompassed four samples collected from four locations at the landfill. A summary of sample analytical results for historic investigations is presented in Table 2-1.

During the 1993 RI, the Air Force collected 11 soil, sediment, and surface water samples from the same general locations as the historic investigations. Organic compounds detected in soil samples collected at the site include diesel range and residual range petroleum hydrocarbons (DRPH and RRPH) (Figure 2-2).

Metals were not detected above levels of concern in soil or surface water samples collected at the site. Table 2-2 summarizes the organic chemicals detected above background levels.

A comparison between historical and 1993 RI data indicates contaminant concentrations are lower now than during previous IRP investigations. The primary contaminants at the Old Dump Site (LF07) are relatively low levels of petroleum hydrocarbons. The highest concentration of organic compounds (DRPH and RRPH) detected during the 1993 RI were collected from two stained areas on the gravel cap of the landfill. The suspected source of petroleum hydrocarbons is spills/leaks of oil on the gravel surface of the landfill and/or previous waste disposal practices. The landfill has been inactive since 1976.

2.1.3 Risk Assessment Summary

The Final Point Lonely Risk Assessment (U.S. Air Force 1996b) concluded that risks posed to human and ecological receptors by site contaminants are minimal given current or future site uses. The potential noncancer hazards and cancer risks identified in the human health risk assessment were below the level at which remediation is usually required (EPA 1991). No

TABLE 2-1. SUMMARY OF HISTORIC SAMPLING AT THE OLD DUMP SITE (LF07)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
TPH ^a	Soil	11,000 mg/kg	2
Arsenic	Soil	11 mg/kg	1
Barium	Soil	34 mg/kg	1
Lead	Soil	5.2 mg/kg	1
Trichlorofluoromethane	Surface Water	0.73 µg/L	1

^a TPH = Total Petroleum Hydrocarbons.

TABLE 2-2. SUMMARY OF 1993 REMEDIAL INVESTIGATION SAMPLING AT THE OLD DUMP SITE (LF07)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
DRPH ^a	Soil	270 mg/kg	2
RRPH ^b	Soil	5,900 mg/kg	4

^a DRPH = Diesel Range Petroleum Hydrocarbons.

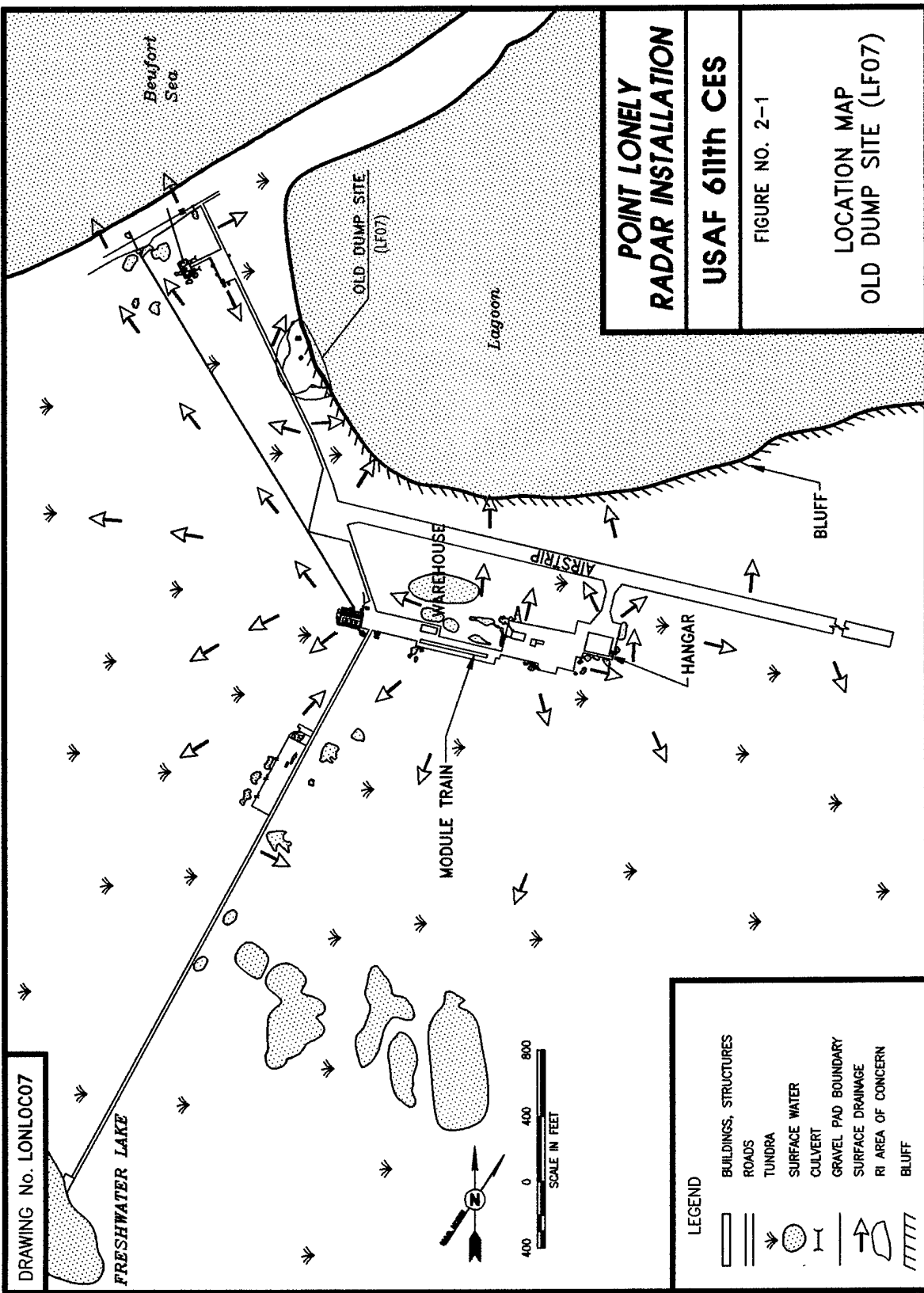
^b RRPH = Residual Range Petroleum Hydrocarbons.

significant ecological risks were identified based on an evaluation of chemicals detected in soil/sediment and surface water.

Based on the 1993 RI sampling and analyses, risk assessment, and current or future site uses, remedial actions are not warranted at the site. No significant human health or ecological risks were identified at the site, and the petroleum compounds detected at the site do not appear to be migrating offsite. Therefore, the Old Dump Site (LF07) site is recommended for no further action.

2.2 PUBLIC INVOLVEMENT AND COMMENT

Community relations activities that have taken place for the Point Lonely radar installation include the following: residents of Point Barrow were interviewed by Air Force community relations personnel on 26 June, 1993; a mailing list of residents of the North Slope is being maintained



DRAWING No. LONLOC07

FRESHWATER LAKE

WAREHOUSE

MODULE TRAIN

AIRSTRIP

HANGAR

BLUFF

Lagoon

OLD DUMP SITE (LF07)

Beaufort Sea

**POINT LONELY
RADAR INSTALLATION**

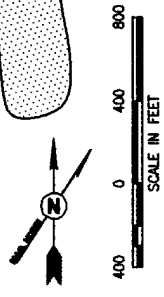
USAF 611th CES

FIGURE NO. 2-1

LOCATION MAP
OLD DUMP SITE (LF07)

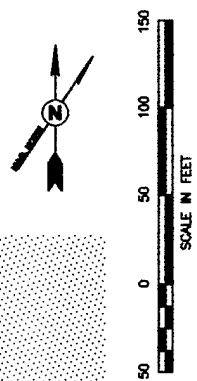
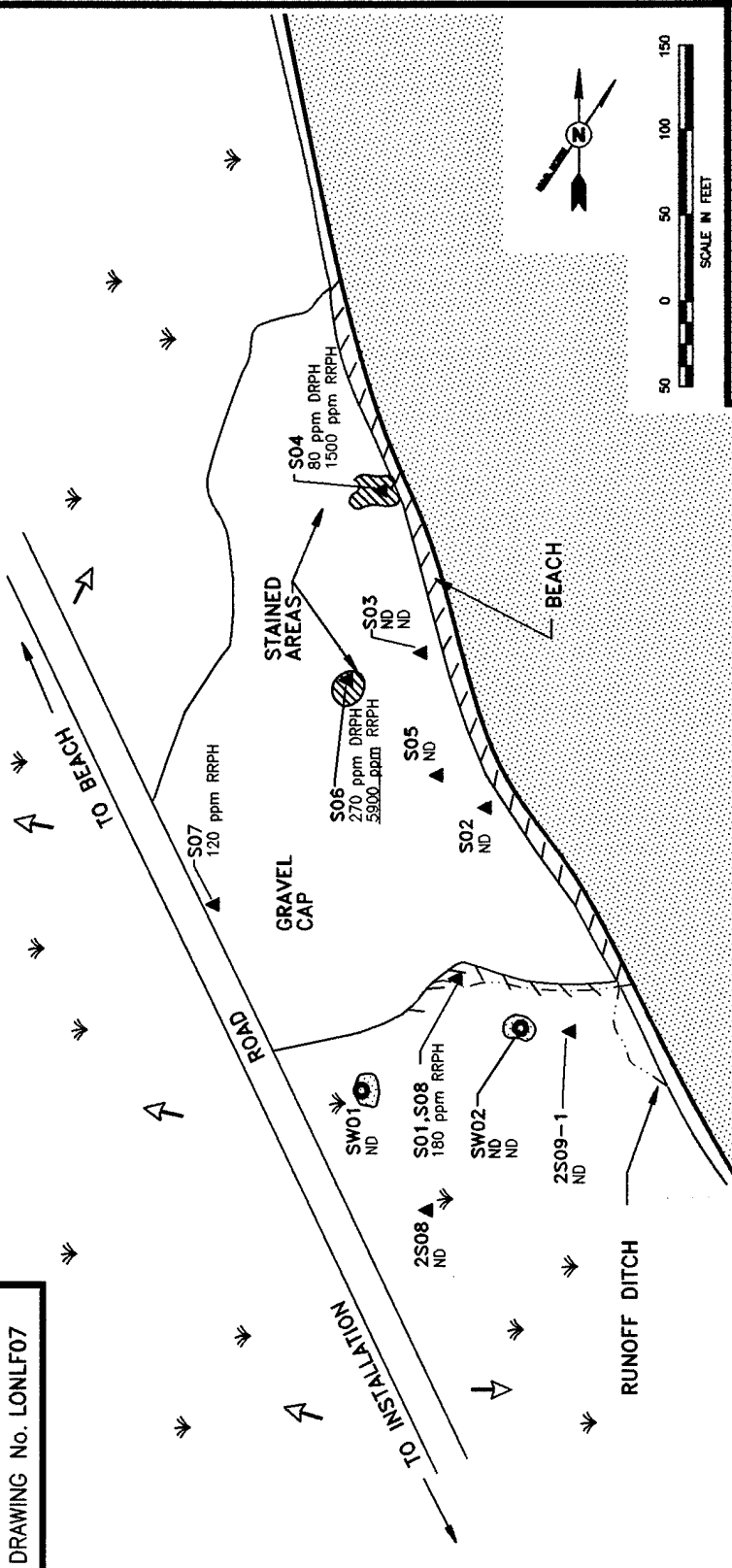
LEGEND

- BUILDINGS, STRUCTURES
- ROADS
- TUNDRA
- SURFACE WATER
- CULVERT
- GRAVEL PAD BOUNDARY
- SURFACE DRAINAGE
- RI AREA OF CONCERN
- BLUFF



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DRAWING No. LONLF07



**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 2-2

OLD DUMP SITE (LF07)
SAMPLE LOCATIONS
AND
ANALYTICAL RESULTS

LEGEND

- ROADS
- SOIL SAMPLE
- SURFACE WATER SAMPLE
- TUNDRA
- SURFACE WATER
- GRAVEL PAD BOUNDARY
- SURFACE DRAINAGE
- CT&E DATA
- F&B DATA
- BLUFF

CONCENTRATIONS ARE ABOVE ACTION LEVELS

ND NO CONTAMINATION DETECTED

DRPH DIESEL RANGE PETROLEUM HYDROCARBONS

RRPB RESIDUAL RANGE PETROLEUM HYDROCARBONS

2.5 ppm

0.9 ppm

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by the 611th CES/CEVR; a fact sheet describing the status of the Installation Restoration Program at the radar installation was distributed to the mailing list on October 1994; a fact sheet was distributed to the mailing list during August 1995 explaining the Restoration Advisory Board (RAB) and how community residents could become RAB members; two RAB meetings were held in Barrow, Alaska in 1995; public notices were published in April 1996 regarding the decision for no further action at the Old Dump Site (LF07); fact sheets were sent to all residents on the mailing list during mid-April 1996 describing the sites recommended for no further action at the Point Lonely radar installation; a public review and comment period on the Draft Final Decision Document for no further action sites was held from 26 April to 25 May 1996; and documents have been, and continue to be, available for review at information repositories that have been established in Tuzvy Library in Barrow, Alaska, and Elmendorf Air Force Base in Anchorage, Alaska, since April 1996. The Air Force has received no public comments in response to the fact sheets, public notices distributed to date, or during the formal public comment period.

To facilitate public participation the Air Force plans to conduct a RAB informational meeting during 1996.

2.3 SELECTED ACTION AND DECISION

The selected action and decision for the Old Dump Site (LF07) is no further action. This action is consistent with the requirements of ADEC, the Air Force, and federal regulations regarding the remediation of hazardous waste sites. This decision is based on the conclusions provided above and the supporting documentation contained in the Final Point Lonely Remedial Investigation/ Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

2.4 REFERENCES

Dames and Moore. 1987. Installation Restoration Program, Phase II, Stage 2 - Confirmation/ Quantification. Prepared for USAFOEHL/TS.

Radian Corporation. 1989. Environmental Impact Assessment for POW-1 Distant Early Warning Radar Station. Lonely, Alaska.

U.S. Air Force. 1996a. Final Remedial Investigation and Feasibility Study, Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

U.S. Air Force. 1996b. Final Risk Assessment for the Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

Woodward-Clyde. 1990. Installation Restoration Program Remedial Investigation/Feasibility Study, Stage 3, Barter Island (BAR-M) AFS, Alaska; Bullen Point (POW-3) AFS, Alaska; Point Lonely (POW-1) AFS, Alaska. Final Report.

DECISION DOCUMENT FOR
NO FURTHER RESPONSE ACTION PLANNED
POINT LONELY RADAR INSTALLATION

SECTION 3.0

<u>SITE NUMBER</u>	<u>SITE NAME</u>
ST10	Diesel Tank

3.0 DECLARATION OF DECISION

Diesel Tank (ST10)

Page 1 of 6

SITE NAME AND LOCATION

Site Number: ST10

Site Name: Diesel Tank

Location: Point Lonely Radar Installation, Alaska

STATEMENT OF BASIS

This decision is based on the results of Installation Restoration Program (IRP) investigations including records searches, field investigations, and data analyses, and the human health and ecological risk assessments prepared with information gained from the 1993 Remedial Investigation (RI). Based on the results of soil, surface water, and sediment sampling for organics and the completion of a human health and ecological risk assessment, potential adverse effects to human and ecological receptors resulting from conditions at the Diesel Tank, site ST10, are not expected. The information on which the decision is based is available to the public in administrative records/information repositories. The information available includes the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

DESCRIPTION OF THE SELECTED REMEDY

Based on the current conditions at the Diesel Tank (ST10), it has been determined that no significant risk or threat to public health or the environment exists. Therefore, no further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, is required.

DECLARATION

This Decision Document presents the selected remedy for the site developed in accordance with CERCLA (as amended by the Superfund Amendments and Reauthorization Act of 1986), the National Contingency Plan, the regulations of the State of Alaska Department of Environmental Conservation (ADEC), and the United States Air Force (Air Force) IRP. It has been determined that no further action is protective of human health and the environment, attains federal and state requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further treatment is not satisfied because further treatment was not found to be necessary. Contaminant levels at the site have been determined to present no significant threat to human health or the environment; therefore, no treatment is necessary.

3.0 DECLARATION OF DECISION
Diesel Tank (ST10)
Page 2 of 6

This decision does not preclude future remedial or site investigations if information indicates that there is previously undiscovered contamination or exposures that may cause risk to human health or the environment. The ADEC reserves all of its rights to request additional activities in the future, if necessary.

**3.0 DECLARATION OF DECISION
Diesel Tank (ST10)
Page 3 of 6**

UNITED STATES AIR FORCE

Signature: _____
Name: Samuel C. Johnson, III, Colonel, USAF
Title: Commander, 611th Air Support Group

Date: _____

3.0 DECLARATION OF DECISION
Diesel Tank (ST10)
Page 4 of 6

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3.0 DECLARATION OF DECISION
Diesel Tank (ST10)
Page 5 of 6

REVIEW AND CONCURRENCE: STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

Signature: _____

Date: _____

Kurt Fredericksson
Director, Division of Spill Prevention
and Response

3.0 DECLARATION OF DECISION
Diesel Tank (ST10)
Page 6 of 6

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3.1 DECISION DOCUMENT SUPPORT

The following sections summarize the site history, sample analyses, human health and ecological risk assessments, public involvement, and selected action and decision for the Diesel Tank, site ST10.

3.1.1 Relevant Site History

The Diesel Tank (ST10) site is the former location of a 20,000-gallon fuel tank located east of the module train and southwest of the new short range radar (SRR) technical services building (Figure 3-1). The site consists of tank supports and the associated pumphouse in a bermed gravel area located on the south edge of the gravel pad. The gravel pad and berm at the site are raised approximately three feet above the tundra, which is located south of the site. No records have indicated historical spills in the area, but previous sampling and analysis, conducted in 1989 by an Air Force contractor, indicate the presence of petroleum hydrocarbon contaminated soils.

3.1.2 Sample Analysis Summary

Historic sampling conducted at the Diesel Tank (ST10) (Radian 1989) identified organic contaminants in soil. Total petroleum hydrocarbons (TPH) were detected in one soil sample collected from the site. A summary of sample analytical results for historic investigations is presented in Table 3-1.

During the 1993 RI, the Air Force collected 14 samples from gravel pads and drainage areas at the site. Samples consisted of four soil, eight sediment, and two surface water samples. Organic compounds detected in soil/sediment samples included low levels of diesel and gasoline range petroleum hydrocarbons (GRPH and DRPH) and volatile organic compounds (VOCs) [including benzene, toluene, ethylbenzene, and xylenes (BTEX)] commonly associated with diesel fuel.

Metals were not a concern at the site; therefore, no metals analysis was performed. Table 3-2 summarizes the organic chemicals detected above background levels. Sample locations are shown on Figure 3-2.

A comparison between historical and the 1993 RI data indicates a general decrease in the concentration of petroleum compounds in soils at the site. During the 1993 RI, only low levels of organic contaminants were detected in a limited area adjacent to the pump house valve and surrounding berm. The source is suspected to be previous leaks and/or spills associated with the diesel tank that was formerly located at this site. The installation is presently unmanned and the diesel tank has been removed. Therefore, there is no longer a source of potential contaminants at the site. Migration of contaminants from the site appears minimal based on samples collected downgradient of the site.

TABLE 3-1. SUMMARY OF HISTORIC SAMPLING AT THE DIESEL TANK (ST10)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
TPH ^a	Soil	5,600 mg/kg	1

^a Total Petroleum Hydrocarbons.

TABLE 3-2. SUMMARY OF 1993 REMEDIAL INVESTIGATION SAMPLING AT THE DIESEL TANK (ST10)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
DRPH ^a	Soil/Sediment	900 mg/kg	3
GRPH ^b	Soil/Sediment	380 mg/kg	3
Benzene	Soil/Sediment	0.1 mg/kg	2
Xylenes (Total)	Soil/Sediment	0.2 mg/kg	3
1,3,5-Trimethylbenzene	Soil/Sediment	0.284 mg/kg	1

^a DRPH = Diesel Range Petroleum Hydrocarbons.

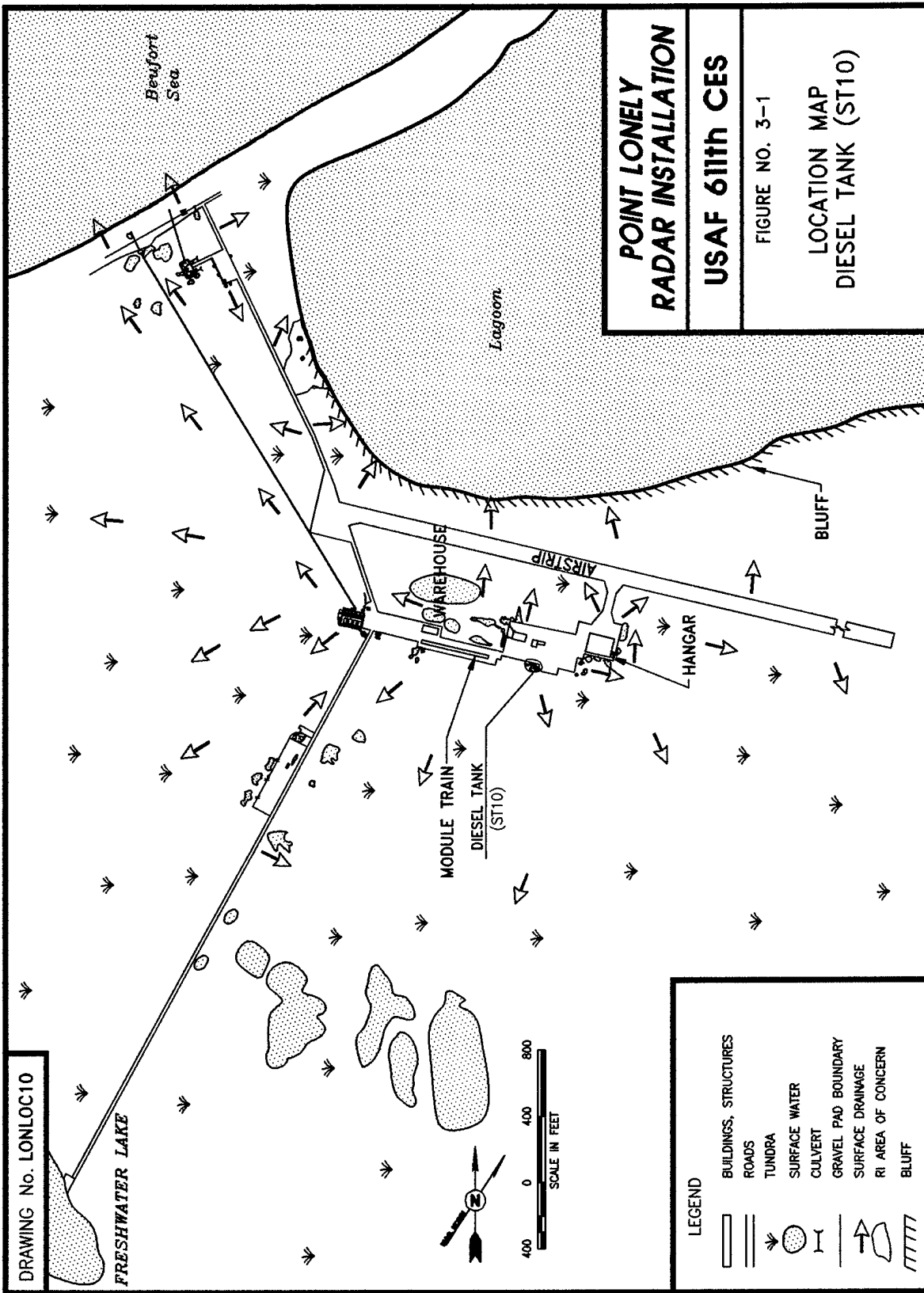
^b GRPH = Gasoline Range Petroleum Hydrocarbons.

3.1.3 Risk Assessment Summary

The Final Point Lonely Risk Assessment (U.S. Air Force 1996b) concluded that risks posed to human and ecological receptors by site contaminants are minimal given current or future site uses. Even using the conservative future scenario, the potential human health risks at the site are not of a magnitude that normally requires remedial action. The overall potential risk to ecological receptors at the site is minimal. Based on the RI sampling and analyses, risk assessment, and current or future site uses, remedial actions are not warranted at the site. No significant human health or ecological risk was identified at the site. Therefore, the Diesel Tank (ST10) site is recommended for no further action.

3.2 PUBLIC INVOLVEMENT AND COMMENT

Community relations activities that have taken place for the Point Lonely radar installation include the following: residents of Barrow were interviewed by Air Force community relations personnel on 26 June, 1993; a mailing list of residents of the North Slope is being maintained by the 611th CES/CEVR; a fact sheet describing the status of the Installation Restoration Program at the radar



DRAWING No. LONLOC10

FRESHWATER LAKE

Beaufort Sea

Lagoon

WAREHOUSE

AIRSTRIP

BLUFF

HANGAR

MODULE TRAIN

DIESEL TANK (ST10)

DRAWING No. LONLOC10

POINT LONELY
RADAR INSTALLATION

USAF 611th CES

FIGURE NO. 3-1

LOCATION MAP
DIESEL TANK (ST10)

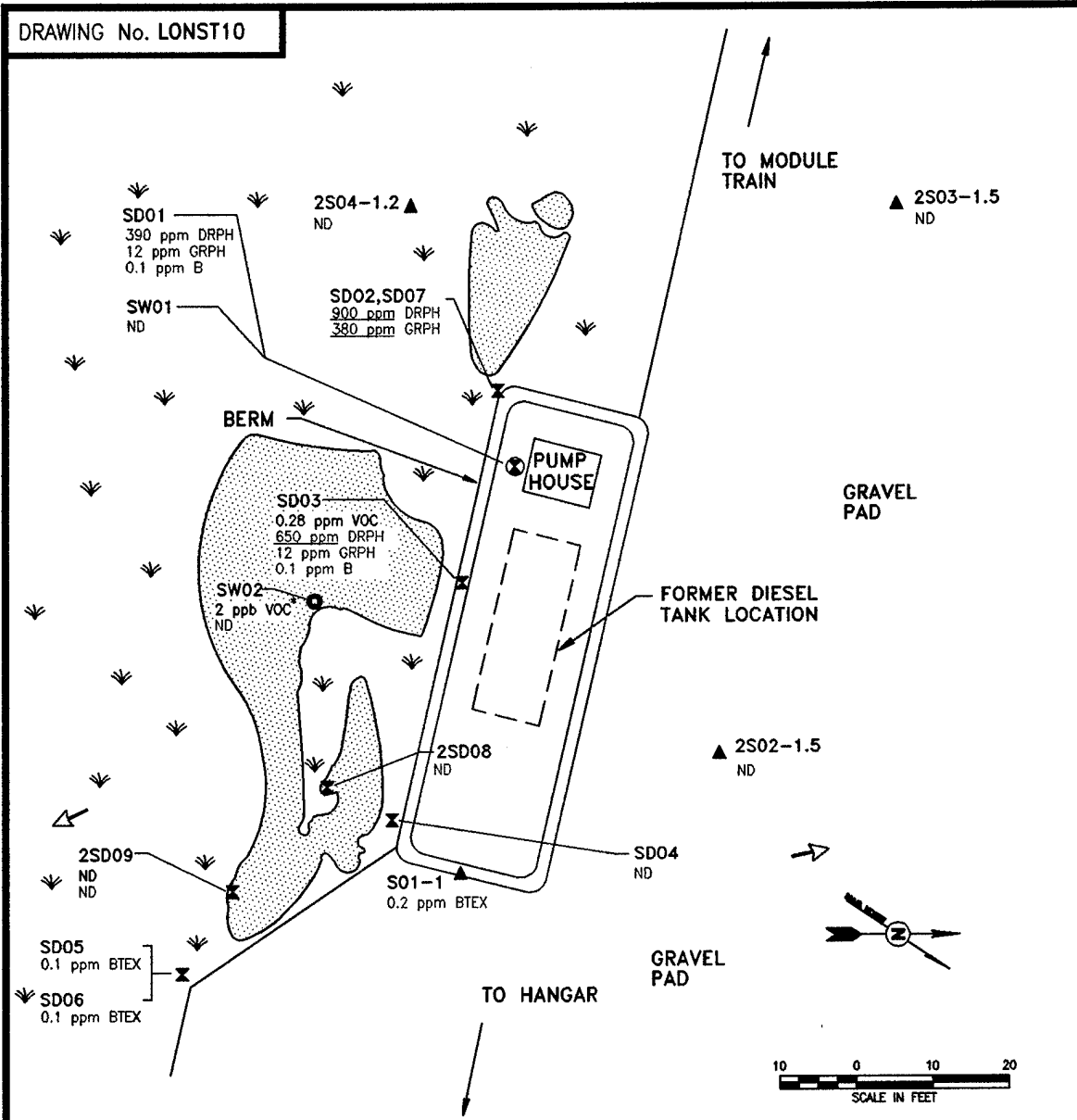
LEGEND

[Symbol: Solid rectangle]	BUILDINGS, STRUCTURES
[Symbol: Double line]	ROADS
[Symbol: Arrow pointing right]	TUNDRA
[Symbol: Circle with dots]	SURFACE WATER
[Symbol: T-shaped symbol]	CULVERT
[Symbol: Dashed line]	GRAVEL PAD BOUNDARY
[Symbol: Arrow pointing right]	SURFACE DRAINAGE
[Symbol: Wavy line]	RI AREA OF CONCERN
[Symbol: Zigzag line]	BLUFF



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DRAWING No. LONST10



LEGEND

- BUILDINGS, STRUCTURES
- ROADS
- SOIL SAMPLE
- SEDIMENT SAMPLE
- SURFACE WATER SAMPLE
- SEDIMENT AND WATER SAMPLES
- TUNDRA
- SURFACE WATER
- GRAVEL PAD BOUNDARY
- SURFACE DRAINAGE
- 2.6 ppm CT&E DATA
- 0.9 ppm F&B DATA

- 0000 CONCENTRATIONS ARE ABOVE ACTION LEVELS
- ND NO CONTAMINATION DETECTED
- VOC TOTAL VOLATILE ORGANIC COMPOUNDS
- DRPH DIESEL RANGE PETROLEUM HYDROCARBONS
- GRPH GASOLINE RANGE PETROLEUM HYDROCARBONS
- BTEX TOTAL BTEX COMPOUNDS
- B BENZENE

* COMMON LAB OR FIELD CONTAMINANT AND/OR DETECTED IN NUMEROUS BLANK SAMPLES.

**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 3-2

**DIESEL TANK (ST10)
SAMPLE LOCATIONS
AND
ANALYTICAL RESULTS**

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installation was distributed to the mailing list on October 1994; a fact sheet was distributed to the mailing list during August 1995 explaining the Restoration Advisory Board (RAB) and how community residents could become RAB members; two RAB meetings were held in Barrow, Alaska in 1995; public notices were published in April 1996 regarding the decision for no further action at the Diesel Tank (ST10); fact sheets were sent to all residents on the mailing list during mid-April 1996 describing the sites recommended for no further action at the Point Lonely radar installation; a public review and comment period on the Draft Final Decision Document for no further action sites was held from 26 April to 25 May 1996; and documents have been, and will continue to be, available for review at information repositories that have been established in Tuzvy Library in Barrow, Alaska, and Elmendorf Air Force Base in Anchorage, Alaska, since April 1996. The Air Force has received no public comments in response to the fact sheets, public notices distributed to date, or during the formal public comment period.

To facilitate public participation the Air Force plans to conduct a RAB informational meeting during 1996.

3.3 SELECTED ACTION AND DECISION

The selected action and decision for the Diesel Tank (ST10) is no further action. The action is consistent with the requirements of ADEC, the Air Force, and federal regulations regarding the remediation of hazardous waste sites. This decision is based on the conclusions provided above and the supporting documentation contained in the Final Point Lonely Remedial Investigation/ Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

3.4 REFERENCES

U.S. Air Force. 1996a. Final Remedial Investigation and Feasibility Study, Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

U.S. Air Force. 1996b. Final Risk Assessment for the Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

Radian Corporation. 1989. Environmental Impact Assessment for POW-1 Distant Early Warning Radar Station. Lonely, Alaska.

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**DECISION DOCUMENT FOR
NO FURTHER RESPONSE ACTION PLANNED
POINT LONELY RADAR INSTALLATION**

SECTION 4.0

<u>SITE NUMBER</u>	<u>SITE NAME</u>
LF11/SS14	Inactive Landfill/Vehicle Storage Area

4.0 DECLARATION OF DECISION
Inactive Landfill/Vehicle Storage Area (LF11/SS14)
Page 1 of 6

SITE NAME AND LOCATION

Site Number: LF11/SS14
Site Name: Inactive Landfill/Vehicle Storage Area
Location: Point Lonely Radar Installation, Alaska

STATEMENT OF BASIS

This decision is based on the results of Installation Restoration Program (IRP) investigations including records searches, field investigations, and data analyses, and the human health and ecological risk assessments prepared with information gained from the 1993 Remedial Investigation (RI). Based on the results of soil, surface water, and sediment sampling for inorganics and organics and the completion of a human health and ecological risk assessment, potential adverse effects to human and ecological receptors resulting from conditions at the Inactive Landfill/Vehicle Storage Area, site LF11/SS14, are not expected. The information on which the decision is based is available to the public in administrative records/information repositories. The information available includes the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

DESCRIPTION OF THE SELECTED REMEDY

Based on the current conditions at the Inactive Landfill/Vehicle Storage Area (LF11/SS14), it has been determined that no significant risk or threat to public health or the environment exists. Therefore, no further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, is required.

DECLARATION

This Decision Document presents the selected remedy for the site developed in accordance with CERCLA (as amended by the Superfund Amendments and Reauthorization Act of 1986), the National Contingency Plan, the regulations of the State of Alaska Department of Environmental Conservation (ADEC), and the United States Air Force (Air Force) IRP. It has been determined that no further action is protective of human health and the environment, attains federal and state requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further treatment is not satisfied because further treatment was not found to be necessary. Contaminant levels at the site have been determined to present no significant threat to human health or the environment; therefore, no treatment is necessary.

4.0 DECLARATION OF DECISION
Inactive Landfill/Vehicle Storage Area (LF11/SS14)
Page 2 of 6

This decision does not preclude future remedial or site investigations if information indicates that there is previously undiscovered contamination or exposures that may cause risk to human health or the environment. The ADEC reserves all of its rights to request additional activities in the future, if necessary.

4.0 DECLARATION OF DECISION
Inactive Landfill/Vehicle Storage Area (LF11/SS14)
Page 3 of 6

UNITED STATES AIR FORCE

Signature: _____
Name: Samuel C. Johnson, III, Colonel, USAF
Title: Commander, 611th Air Support Group

Date: _____

4.0 DECLARATION OF DECISION
Inactive Landfill/Vehicle Storage Area (LF11/SS14)
Page 4 of 6

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4.0 DECLARATION OF DECISION
Inactive Landfill/Vehicle Storage Area (LF11/SS14)
Page 5 of 6

REVIEW AND CONCURRENCE: STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

Signature: _____

Date: _____

Kurt Fredriksson
Director, Division of Spill Prevention
and Response

4.0 DECLARATION OF DECISION
Inactive Landfill/Vehicle Storage Area (LF11/SS14)
Page 6 of 6

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4.1 DECISION DOCUMENT SUPPORT

The following sections summarize the site history, sample analyses, human health and ecological risk assessments, public involvement, and selected action and decision for the Inactive Landfill/Vehicle Storage Area, site LF11/SS14.

4.1.1 Relevant Site History

Inactive Landfill (LF11)/Vehicle Storage Area (SS14) is located along the west side of the road to Freshwater Lake in the same location as the Vehicle Storage Area (SS14) (Figure 4-1). This landfill was active until the installation closure in 1989. The landfill is covered with a gravel cap and a gravel pile is present at the site.

The Vehicle Storage Area (SS14) is co-located with the Inactive Landfill (LF11). This site, like the Inactive Landfill, has been regraded and otherwise modified such that its shape in 1993 differed substantially from that indicated on earlier site maps. A second gravel pad north of the largest pad making up the Inactive Landfill site (LF11) was tentatively identified as the Vehicle Storage Area; however, there is no discernable boundary so these two areas are referred to as one site.

4.1.2 Sample Analyses Summary

Historic sampling conducted at the Inactive Landfill/Vehicle Storage Area (LF11/SS14) in 1989 identified chemical concentrations in soil (Radian 1989). Concentrations of petroleum hydrocarbons [measured as total petroleum hydrocarbons (TPH)] were detected in one soil sample collected at the site. A summary of sample analytical results for historic investigations is presented in Table 4-1.

During the 1993 Remedial Investigation/Feasibility Study, the Air Force collected a total of 10 samples from gravel pads, tundra, and streams at the site (Figure 4-2). Samples consisted of four soil, three sediment, and three surface water samples. Organic compounds detected in soil and sediment samples included gasoline range petroleum hydrocarbons (GRPH) and benzene, toluene, ethylbenzene, and xylenes (BTEX) compounds. One surface water sample also contained low levels of GRPH and BTEX. One metal, magnesium, was detected in one soil sample at levels exceeding background; however, concentrations were below regulatory action levels. Table 4-2 summarizes the organic chemicals detected above the background levels.

A comparison between historical and the 1993 RI data indicates that there is a lower concentration of petroleum compounds in soil than there has been in the past. Sampling and analyses have determined that there is no significant contamination at the Inactive Landfill (LF11)/Vehicle Storage Area (SS14). Only very low levels of contaminants were detected. The source, although unknown, is possibly isolated spills or leaks caused by previous vehicle storage activities at the site, or from previous waste disposal practices. The installation and site are presently inactive, so waste is no longer being disposed at the site. Analytical data indicate that migration of contaminants from the site is minimal.

TABLE 4-1. SUMMARY OF HISTORIC SAMPLING AT THE INACTIVE LANDFILL/VEHICLE STORAGE AREA (LF11/SS14)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
TPH ^a	Soil	110 mg/kg	1

^a TPH = Total Petroleum Hydrocarbons.

TABLE 4-2. SUMMARY OF 1993 REMEDIAL INVESTIGATION SAMPLING AT THE INACTIVE LANDFILL/VEHICLE STORAGE AREA (LF11/SS14)

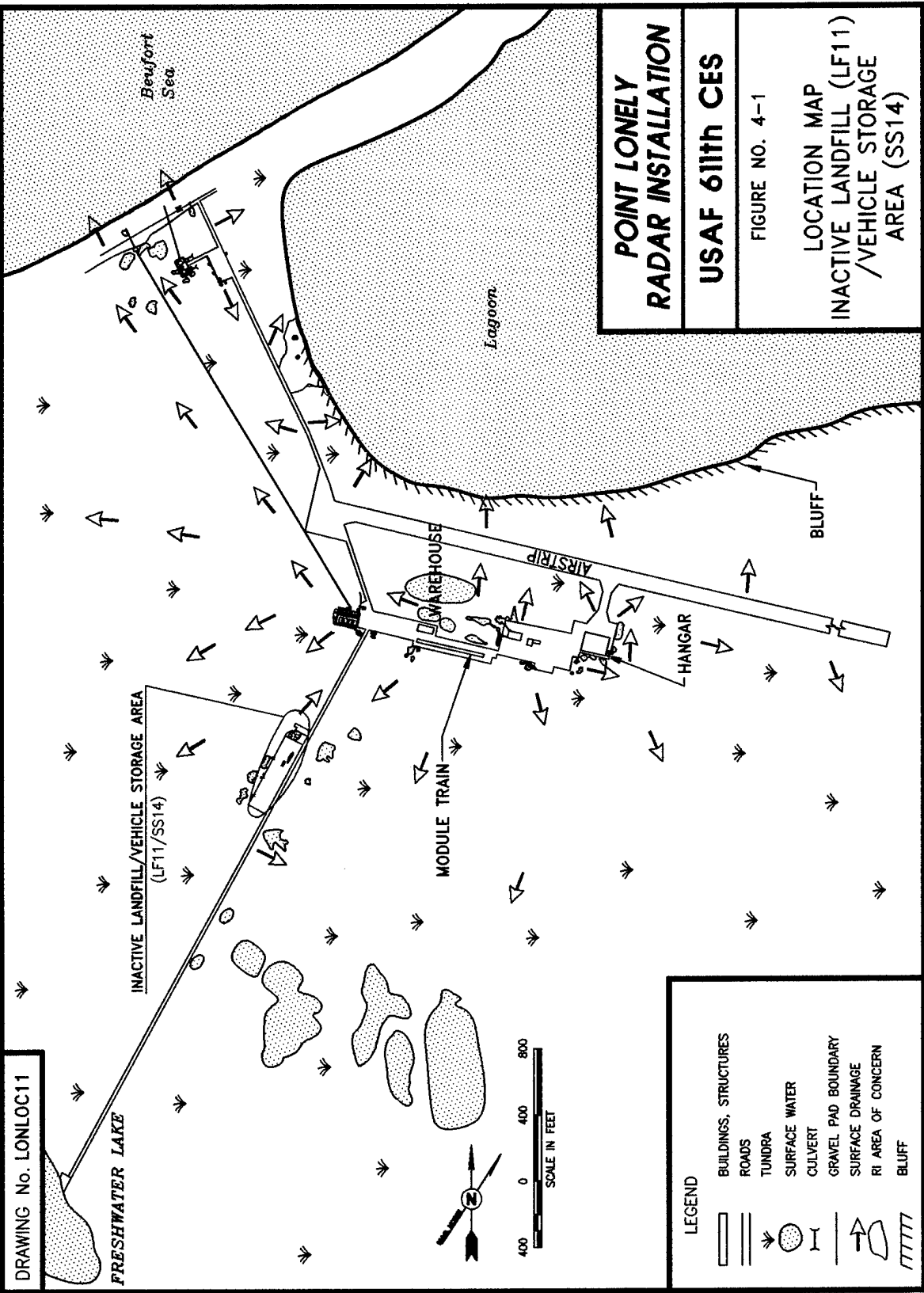
CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
GRPH ^a	Sediment	8 mg/kg	1
Ethylbenzene	Soil	0.2 mg/kg	1
Xylenes (Total)	Soil	1.2 mg/kg	1
GRPH ^a	Surface water	200 µg/L	1
Benzene	Surface water	4 µg/L	1
Toluene	Surface water	17 µg/L	1
Xylenes (Total)	Surface water	7 µg/L	1

^a GRPH = Gasoline Range Petroleum Hydrocarbons.

4.1.3 Risk Assessment Summary

The Final Point Lonely Risk Assessment (U.S. Air Force 1996b) concluded that risks posed to human and ecological receptors by site contaminants are minimal given current or future site uses. The potential noncancer hazards and cancer risks identified in the human health risk assessment were below the level at which remediation is usually required (EPA 1991). No significant ecological risks were identified based on an evaluation of chemicals detected in soil/sediment and surface water.

Based on the RI sampling and analysis, risk assessment, and current or future site uses, remedial actions are not warranted at the site. No significant human health or ecological risks were identified at the site and the migration of organic compounds detected at the site is minimal.



DRAWING No. LONLOC11

FRESHWATER LAKE

INACTIVE LANDFILL/VEHICLE STORAGE AREA
(LF11/SS14)

MODULE TRAIN

WAREHOUSE

AIRSTRIP

HANGAR

BLUFF

Lagoon

Beaufort Sea



LEGEND

	BUILDINGS, STRUCTURES
	ROADS
	TUNDRA
	SURFACE WATER
	CULVERT
	GRAVEL PAD BOUNDARY
	SURFACE DRAINAGE
	RI AREA OF CONCERN
	BLUFF

**POINT LONELY
RADAR INSTALLATION**

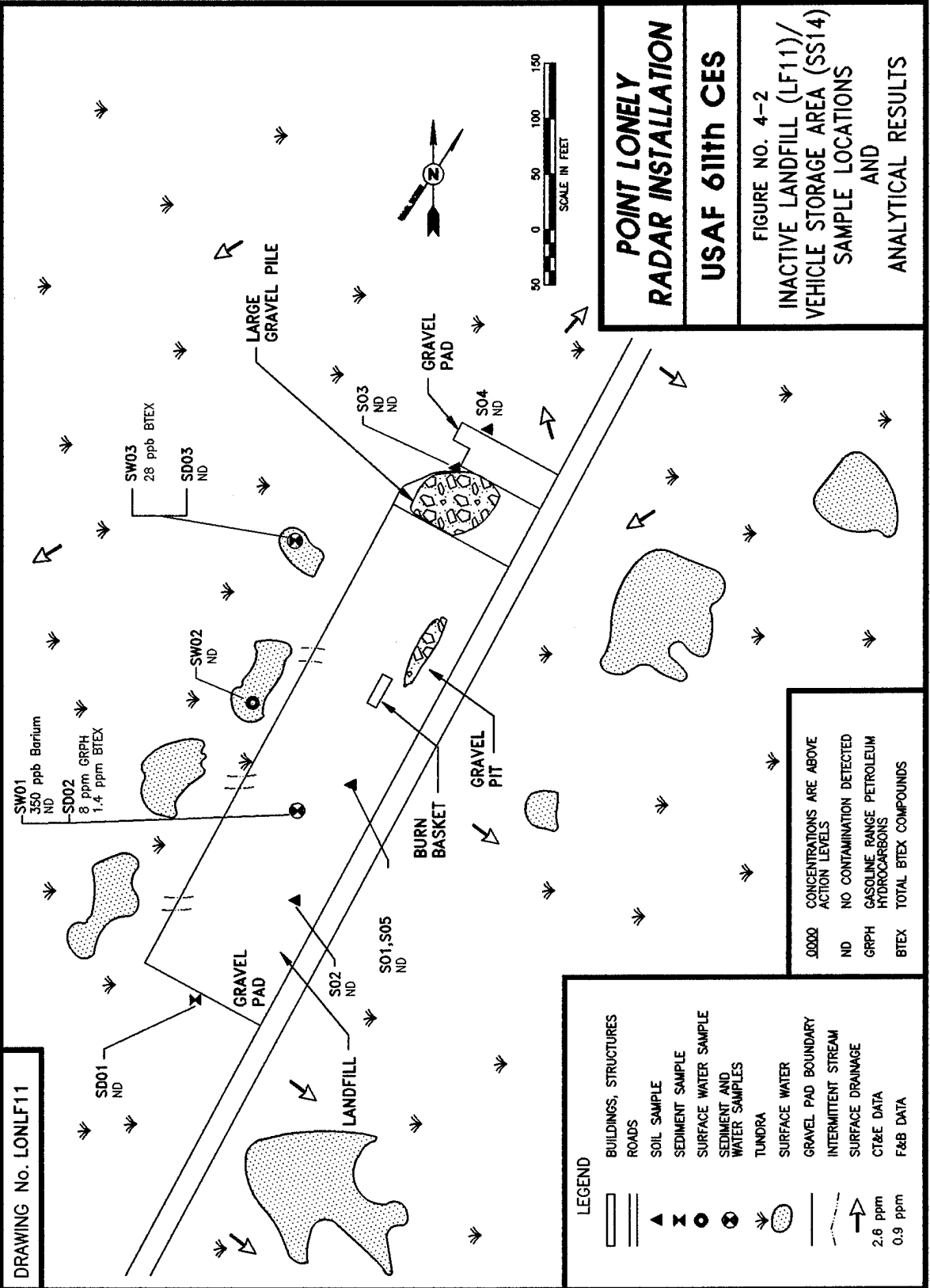
USAF 611th CES

FIGURE NO. 4-1

LOCATION MAP
INACTIVE LANDFILL (LF11)
/VEHICLE STORAGE
AREA (SS14)

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DRAWING No. LONLF11



**POINT LONELY
RADAR INSTALLATION**

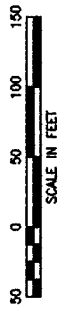
USAF 611th CES

FIGURE NO. 4-2
INACTIVE LANDFILL (LF11)/
VEHICLE STORAGE AREA (SS14)
SAMPLE LOCATIONS
AND
ANALYTICAL RESULTS

LEGEND

- ▭ BUILDINGS, STRUCTURES
- ▬ ROADS
- ▲ SOIL SAMPLE
- SEDIMENT SAMPLE
- ⊙ SURFACE WATER SAMPLE
- ⊗ SEDIMENT AND WATER SAMPLES
- TUNDRA
- SURFACE WATER
- ▬ GRAVEL PAD BOUNDARY
- ▬ INTERMITTENT STREAM
- ▬ SURFACE DRAINAGE
- 2.6 ppm CT&E DATA
- 0.9 ppm F&B DATA

00000 CONCENTRATIONS ARE ABOVE ACTION LEVELS
 ND NO CONTAMINATION DETECTED
 GRPH GASOLINE RANGE PETROLEUM HYDROCARBONS
 BTEX TOTAL BTEX COMPOUNDS



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Therefore, the Inactive Landfill/Vehicle Storage Area (LF11/SS14) site is recommended for no further action.

4.2 PUBLIC INVOLVEMENT AND COMMENT

Community relations activities that have taken place for the Point Lonely radar installation include the following: residents of Barrow were interviewed by Air Force community relations personnel on 26 June, 1993; a mailing list of residents of the North Slope is being maintained by the 611th CES/CEVR; a fact sheet describing the status of the Installation Restoration Program at the radar installation was distributed to the mailing list on October 1994; a fact sheet was distributed to the mailing list during August 1995 explaining the Restoration Advisory Board (RAB) and how community residents could become RAB members; two RAB meetings were held in Barrow, Alaska in 1995; public notices were published in April 1996 regarding the decision for no further action at the Inactive Landfill/Vehicle Storage Area (LF11/SS14); fact sheets were sent to all residents on the mailing list during mid-April 1996 describing the sites recommended for no further action at the Point Lonely radar installation; a public review and comment period on the Draft Final Decision Document for no further action sites was held from 26 April to 25 May 1996; and documents have been, and will continue to be, available for review at information repositories that have been established in Tuzvy Library in Barrow, Alaska, and Elmendorf Air Force Base in Anchorage, Alaska, since April 1996. The Air Force has received no public comments in response to the fact sheets, public notices distributed to date, or during the formal public comment period.

To facilitate public participation the Air Force plans to conduct a RAB informational meeting during 1996.

4.3 SELECTED ACTION AND DECISION

The selected action and decision for the Inactive Landfill/Vehicle Storage Area (LF11/SS14) is no further action. The action is consistent with the requirements of ADEC, the Air Force, and federal regulations regarding the remediation of hazardous waste sites. This decision is based on the conclusions provided above and the supporting documentation contained in the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

4.4 REFERENCES

U.S. Air Force. 1996a. Final Remedial Investigation and Feasibility Study, Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

U.S. Environmental Protection Agency. 1991. Role of the Baseline Risk Assessment in Superfund Remedy Selection Decisions. Office of Solid Waste and Emergency Response. Washington, D.C. 22 April 1991.

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**DECISION DOCUMENT FOR
NO FURTHER RESPONSE ACTION PLANNED
POINT LONELY RADAR INSTALLATION**

SECTION 5.0

<u>SITE NUMBER</u>	<u>SITE NAME</u>
SS12	Module Train

5.0 DECLARATION OF DECISION

Module Train (SS12)

Page 1 of 6

SITE NAME AND LOCATION

Site Number: SS12

Site Name: Module Train

Location: Point Lonely Radar Installation, Alaska

STATEMENT OF BASIS

This decision is based on the results of Installation Restoration Program (IRP) investigations including records searches, field investigations, and data analyses, and the human health and ecological risk assessments prepared with information gained from the 1993 Remedial Investigation (RI). Based on the results of soil, sediment, and surface water sampling for organic compounds and the completion of a human health and ecological risk assessment, potential adverse effects to human and ecological receptors resulting from conditions at the Module Train, site SS12, are not expected. The information on which the decision is based is available to the public in administrative records/information repositories. The information available includes the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

DESCRIPTION OF THE SELECTED REMEDY

Based on the current conditions at the Module Train (SS12), it has been determined that no significant risk or threat to public health or the environment exists. Therefore, no further action under the Comprehensive Environmental Response, Compensation, Liability Act (CERCLA), as amended, is required.

DECLARATION

This Decision Document presents the selected remedy for the site developed in accordance with CERCLA (as amended by the Superfund Amendments and Reauthorization Act of 1986), the National Contingency Plan, the regulations of the State of Alaska Department of Environmental Conservation (ADEC), and the United States Air Force (Air Force) IRP. It has been determined that no further action is protective of human health and the environment, attains federal and state requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further treatment is not satisfied because further treatment was not found to be necessary. Contaminant levels at the site have been determined to present no significant threat to human health or the environment; therefore, no treatment is necessary.

5.0 DECLARATION OF DECISION
Module Train (SS12)
Page 2 of 6

This decision does not preclude future remedial or site investigations if information indicates that there is previously undiscovered contamination or exposures that may cause risk to human health or the environment. The ADEC reserves all of its rights to request additional activities in the future, if necessary.

5.0 DECLARATION OF DECISION
Module Train (SS12)
Page 3 of 6

UNITED STATES AIR FORCE

Signature: _____
Name: Samuel C. Johnson, III, Colonel, USAF
Commander, 611th Air Support Group

Date: _____

5.0 DECLARATION OF DECISION
Module Train (SS12)
Page 4 of 6

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5.0 DECLARATION OF DECISION
Module Train (SS12)
Page 5 of 6

REVIEW AND CONCURRENCE: STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

Signature: _____ Date: _____

Kurt Fredriksson
Director, Division of Spill Prevention and Response

5.0 DECLARATION OF DECISION
Module Train (SS12)
Page 6 of 6

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5.1 DECISION DOCUMENT SUPPORT

The following sections summarize the site history, sample analyses, human health and ecological risk assessments, public involvement, and selected action and decision for the Module Train, site SS12.

5.1.1 Relevant Site History

Module Train (SS12). The site is located below and adjacent to the west end of the Module Train, below the diesel generators and diesel day tanks. The site consists of the gravel pad and tundra, and is in the area of a previous diesel spill.

5.1.2 Sample Analyses Summary

Historic sampling conducted at the Module Train (SS12) (Radian 1989) identified contaminants in soil. Total petroleum hydrocarbons (TPH) were detected in one soil sample collected from the site. A summary of sample analytical results for historic investigations is presented in Table 5-1. During the 1993 RI, the Air Force collected eight samples from the site. These consisted of four soil, two sediment, and two surface water samples. Organic compounds detected in soil and sediment samples at the site include residual range petroleum hydrocarbons (RRPH) and styrene. Styrene is a common component of diesel fuel. Toluene was detected in one surface water sample above background concentrations. Table 5-2 summarizes the organic chemicals detected above background levels. Sample locations are shown on Figure 5-2.

Metals were not a concern at the site; therefore, no metals analysis was performed.

A comparison of historical data and current project data indicates that there is a lower concentration of petroleum hydrocarbons in soil than there has been in the past. Two compounds were detected at low concentrations in soil during the 1993 RI and include one semi-volatile organic compound (SVOC) in soil and one volatile organic compound (VOC) in surface water that are both common components of diesel fuel. Differences between past and current data are likely to be a result of more extensive sampling during the 1993 RI. The suspected source of contaminants detected during sampling conducted at the Module Train is fuel spills and/or leaks from the diesel day tank at the west end of the Module Train. The Module Train is no longer active.

5.1.3 Risk Assessment Summary

The Final Point Lonely Risk Assessment (U.S. Air Force 1996b) concluded that risks posed to human and ecological receptors by site contaminants are minimal given current or future site uses. Based on the RI sampling and analyses, risk assessment, and current or future site uses, remedial actions are not warranted at the site. Therefore, the Module Train (SS12) site is recommended for no further action.

TABLE 5-1. SUMMARY OF HISTORIC SAMPLING AT MODULE TRAIN (SS12)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
TPH ^a	Soil	24,000 mg/kg	1
PCB ^b	Soil	2 mg/kg	1
Arsenic	Soil	18 mg/kg	1
Barium	Soil	170 mg/kg	1
Cadmium	Soil	1.6 mg/kg	1
Chromium	Soil	54 mg/kg	1
Lead	Soil	420 mg/kg	1
Mercury	Soil	0.64 mg/kg	1

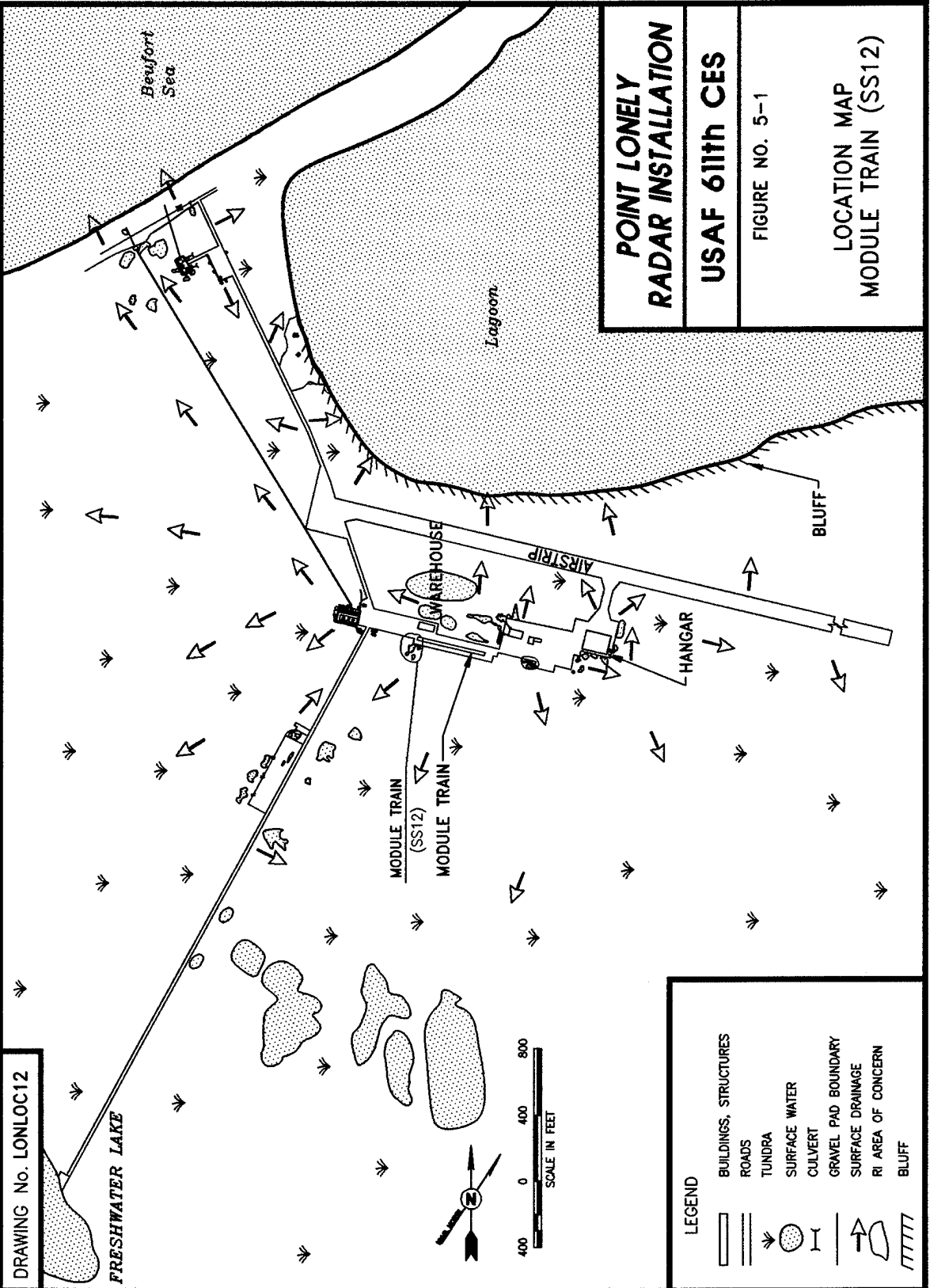
^a TPH = Total Petroleum Hydrocarbons.

^b PCB = Polychlorinated Biphenyl.

TABLE 5-2. SUMMARY OF 1993 REMEDIAL INVESTIGATION SAMPLING AT MODULE TRAIN (SS12)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
RRPH ^a	Soil	560 mg/kg	1
Styrene	Sediment	0.08 mg/kg	1
Toluene	Surface water	1.6 µg/L	1

^a RRPH = Residual Range Petroleum Hydrocarbons.



DRAWING No. LONLOC12

FRESHWATER LAKE

Beaufort Sea

Lagoon

MODULE TRAIN (SS12)
MODULE TRAIN

WAREHOUSE

AIRSTRIIP

HANGAR

BLUFF

0 400 800
SCALE IN FEET

LEGEND

- BUILDINGS, STRUCTURES
- ROADS
- TUNDRA
- SURFACE WATER
- CULVERT
- GRAVEL PAD BOUNDARY
- SURFACE DRAINAGE
- RI AREA OF CONCERN
- BLUFF

**POINT LONELY
RADAR INSTALLATION**

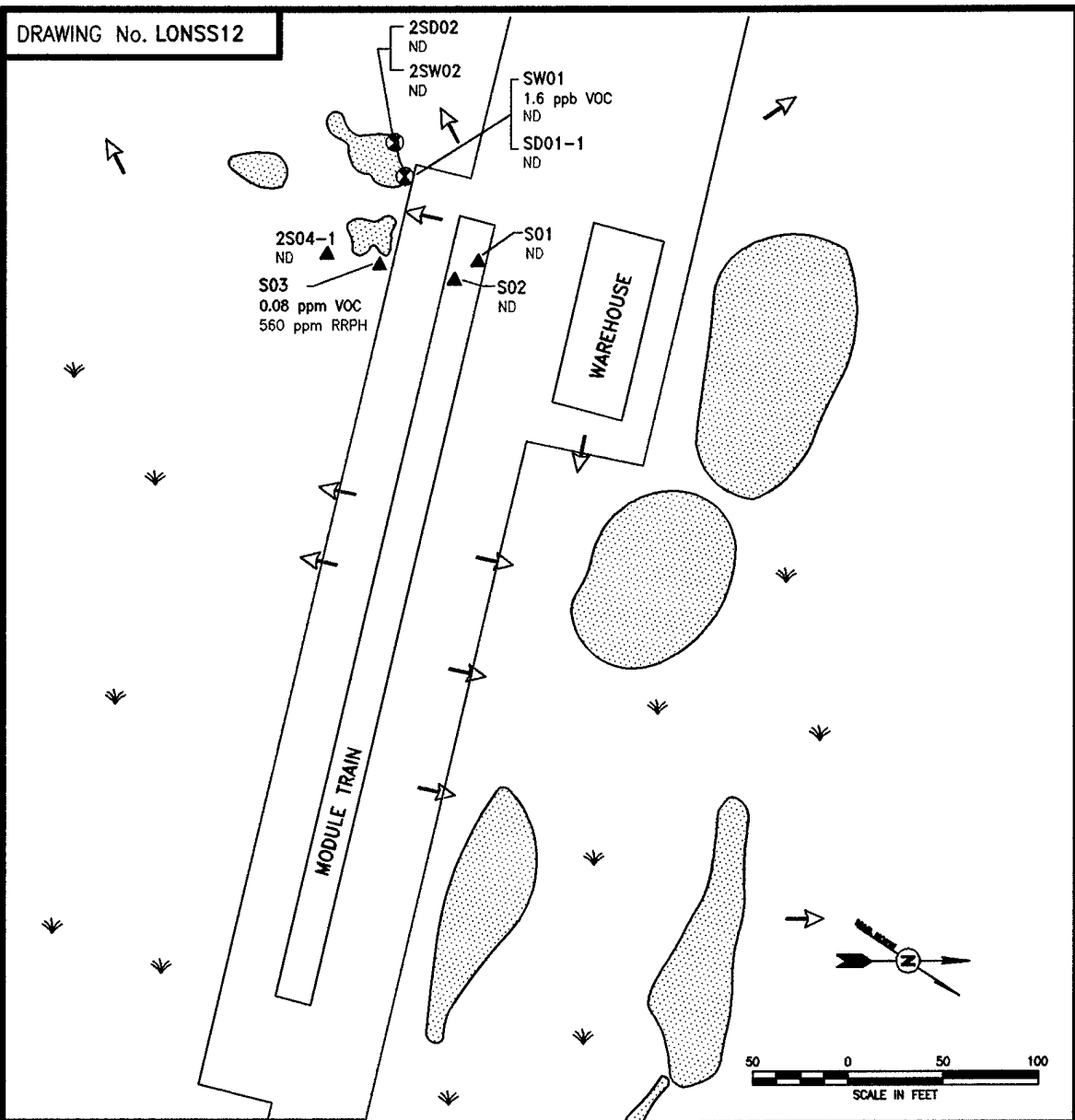
USAF 611th CES

FIGURE NO. 5-1

LOCATION MAP
MODULE TRAIN (SS12)

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DRAWING No. LONSS12



LEGEND

	BUILDINGS, STRUCTURES
	SOIL SAMPLE
	SEDIMENT AND WATER SAMPLES
	TUNDRA
	SURFACE WATER
	GRAVEL PAD BOUNDARY
	SURFACE DRAINAGE
2.6 ppm	CT&E DATA
0.9 ppm	F&B DATA

0000	CONCENTRATIONS ARE ABOVE ACTION LEVELS
ND	NO CONTAMINATION DETECTED
VOC	TOTAL VOLATILE ORGANIC COMPOUNDS
GRPH	GASOLINE RANGE PETROLEUM HYDROCARBONS
RRPH	RESIDUAL RANGE PETROLEUM HYDROCARBONS
BTEX	TOTAL BTEX COMPOUNDS
B	BENZENE

**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 5-2

**MODULE TRAIN (SS12)
SAMPLE LOCATIONS
AND
ANALYTICAL RESULTS**

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5.2 PUBLIC INVOLVEMENT AND COMMENT

Community relations activities that have taken place for the Point Lonely radar installation include the following: residents of Barrow were interviewed by Air Force community relations personnel on 26 June, 1993; a mailing list of residents of the North Slope is being maintained by the 611th CES/CEVR; a fact sheet describing the status of the Installation Restoration Program at the radar installation was distributed to the mailing list on October 1994; a fact sheet was distributed to the mailing list during August 1995 explaining the Restoration Advisory Board (RAB) and how community residents could become RAB members; two RAB meetings were held in Barrow, Alaska in 1995; public notices were published in April 1996 regarding the decision for no further action at the Module Train (SS12); fact sheets were sent to all residents on the mailing list during mid-April 1996 describing the sites recommended for no further action at the Point Lonely radar installation; a public review and comment period on the Draft Final Decision Document for no further action sites was held from 26 April to 25 May 1996; and documents have been, and will continue to be, available for review at information repositories that have been established in Tuzvy Library in Barrow, Alaska, and Elmendorf Air Force Base in Anchorage, Alaska, since April 1996. The Air Force has received no public comments in response to the fact sheets, public notices distributed to date, or during the formal public comment period.

To facilitate public participation the Air Force plans to conduct a RAB informational meeting during 1996.

5.3 SELECTED ACTION AND DECISION

The selected action and decision for the Module Train (SS12) is no further action. This action is consistent with the requirements of ADEC, the Air Force, and federal regulations regarding the remediation of hazardous waste sites. This decision is based on the conclusions provided above, and the supporting documentation contained in the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

5.4 REFERENCES

U.S. Air Force. 1996a. Final Remedial Investigation and Feasibility Study, Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

U.S. Air Force. 1996b. Final Risk Assessment, Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

Radian Corporation. 1989. Environmental Impact Assessment for POW-1 Distant Early Warning Radar Station. Lonely, Alaska.

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DECISION DOCUMENT FOR
NO FURTHER RESPONSE ACTION PLANNED
POINT LONELY RADAR INSTALLATION

SECTION 6.0

<u>SITE NUMBER</u>	<u>SITE NAME</u>
SS13	Hangar Pad Area

6.0 DECLARATION OF DECISION

Hangar Pad Area (SS13)

Page 1 of 6

SITE NAME AND LOCATION

Site Number: SS13

Site Name: Hangar Pad Area

Location: Point Lonely Radar Installation, Alaska

STATEMENT OF BASIS

This decision is based on the results of Installation Restoration Program (IRP) investigations including records searches, field investigations, and data analyses, and the human health and ecological risk assessments prepared with information gained from the 1993 Remedial Investigation (RI). Based on the results of soil, sediment, and surface water sampling for organic compounds and the completion of a human health and ecological risk assessment, potential adverse effects to human and ecological receptors resulting from conditions at the Hangar Pad Area, site SS13, are not expected. The information on which the decision is based is available to the public in administrative records/information repositories. The information available includes the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996a) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996b).

DESCRIPTION OF THE SELECTED REMEDY

Based on the current conditions at the Hangar Pad Area (SS13), it has been determined that no significant risk or threat to public health or the environment exists. Therefore, no further action under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, is required.

DECLARATION

This Decision Document presents the selected remedy for the site developed in accordance with CERCLA (as amended by the Superfund Amendments and Reauthorization Act of 1986), the National Contingency Plan, the regulations of the State of Alaska Department of Environmental Conservation (ADEC), and the United States Air Force (Air Force) IRP. It has been determined that no further action is protective of human health and the environment, attains federal and state requirements that are applicable or relevant and appropriate, and is cost effective. The statutory preference for further treatment is not satisfied because further treatment was not found to be necessary. Contaminant levels at the site have been determined to present no significant threat to human health or the environment; therefore, no treatment is necessary.

6.0 DECLARATION OF DECISION
Hangar Pad Area (SS13)
Page 2 of 6

This decision does not preclude future remedial or site investigations if information indicates that there is previously undiscovered contamination or exposures that may cause risk to human health or the environment. The ADEC reserves all of its rights to request additional activities in the future, if necessary.

6.0 DECLARATION OF DECISION
Hangar Pad Area (SS13)
Page 3 of 6

UNITED STATES AIR FORCE

Signature: _____
Name: Samuel C. Johnson, III, Colonel, USAF
Commander, 611th Air Support Group

Date: _____

6.0 DECLARATION OF DECISION
Hangar Pad Area (SS13)
Page 4 of 6

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6.0 DECLARATION OF DECISION
Hangar Pad Area (SS13)
Page 5 of 6

REVIEW AND CONCURRENCE: STATE OF ALASKA, DEPARTMENT OF ENVIRONMENTAL
CONSERVATION

Signature: _____ Date: _____
Kurt Fredriksson
Director, Division of Spill Prevention and Response

6.0 DECLARATION OF DECISION
Hangar Pad Area (SS13)
Page 6 of 6

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6.1 DECISION DOCUMENT SUPPORT

The following sections summarize the site history, sample analyses, human health and ecological risk assessments, public involvement, and selected action and decision for the Hangar Pad Area, site SS13.

6.1.1 Site History

Hangar Pad Area (SS13) is located approximately 600 feet west of the Garage (SS09) site and south of the airstrip. It consists of an inactive hangar, surrounding gravel pad area, and a 1,000-gallon petroleum, oil, and lubricants (POL) storage tank on the east side of the hangar. The POL tank has been reported to have been cleaned (Radian 1989).

6.1.2 Sample Analyses Summary

Historic sampling conducted at Hangar Pad Area (SS13) (ENSR 1992) detected concentrations of petroleum hydrocarbons (diesel and gasoline range organics), toluene, and ethylbenzene in gravel pad areas at the site. Historic sampling encompassed two samples collected from locations around the 1,000 gallon POL storage tank and hangar. A summary of sample analytical results for historic investigations is presented in Table 6-1.

During the 1993 RI, the Air Force collected a total of 10 soil, sediment, and surface water samples from locations around the Hangar Pad Area. One sediment sample contained diesel range petroleum hydrocarbons (DRPH), gasoline range petroleum hydrocarbons (GRPH), and residual range petroleum hydrocarbons (RRPH). Ethylbenzene, toluene, and xylene were detected in two surface water samples. Table 6-2 summarizes organic chemicals detected above background levels. Sample locations and analytical results are shown on Figure 6-2.

A comparison of historical and current project data indicates that there is a lower concentration of contaminants in soil than there has been in the past. Past and current sample data indicate contamination at the site is not widespread, and only relatively low concentrations were detected. The suspected source of contaminants detected during sampling conducted at the Hangar Pad Area is fuel spills and/or leaks from the 1,000-gallon POL storage tank adjacent to the hangar.

6.1.3 Risk Assessment Summary

The Final Point Lonely Risk Assessment (U.S. Air Force 1996b) concluded that risks posed to human and ecological receptors by site contaminants are minimal given current or future site uses. The potential noncancer hazards and cancer risks identified in the human health risk assessment were below the level at which remediation is usually required (EPA 1991). No significant ecological risks were identified based on an evaluation of chemicals detected in soil/sediment and surface water.

Based on the RI sampling and analyses, risk assessment, and current or future site uses, remedial actions are not warranted at the site. No significant human health or ecological risks

TABLE 6-1. SUMMARY OF HISTORIC SAMPLING AT THE HANGAR PAD AREA (SS13)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
DRO ^a	Soil	3,100 mg/kg	2
GRO ^b	Soil	181 mg/kg	1
Ethylbenzene	Soil	0.7 mg/kg	1
Xylenes	Soil	4.4 mg/kg	1

^a DRO = Diesel Range Organics.

^b GRO = Gasoline Range Organics.

TABLE 6-2. SUMMARY OF 1993 REMEDIAL INVESTIGATION SAMPLING AT THE HANGAR PAD AREA (SS13)

CHEMICAL	SAMPLE MEDIA	MAXIMUM CONCENTRATION	NUMBER OF DETECTIONS
DRPH ^a	Sediment	190 mg/kg	1
GRPH ^b	Sediment	40 mg/kg	1
RRPH ^c	Sediment	220 mg/kg	1
Ethylbenzene	Surface water	3 µg/L	1
Toluene	Surface water	2 µg/L	1
Xylenes (Total)	Surface water	18 µg/L	2

^a DRPH = Diesel Range Petroleum Hydrocarbons.

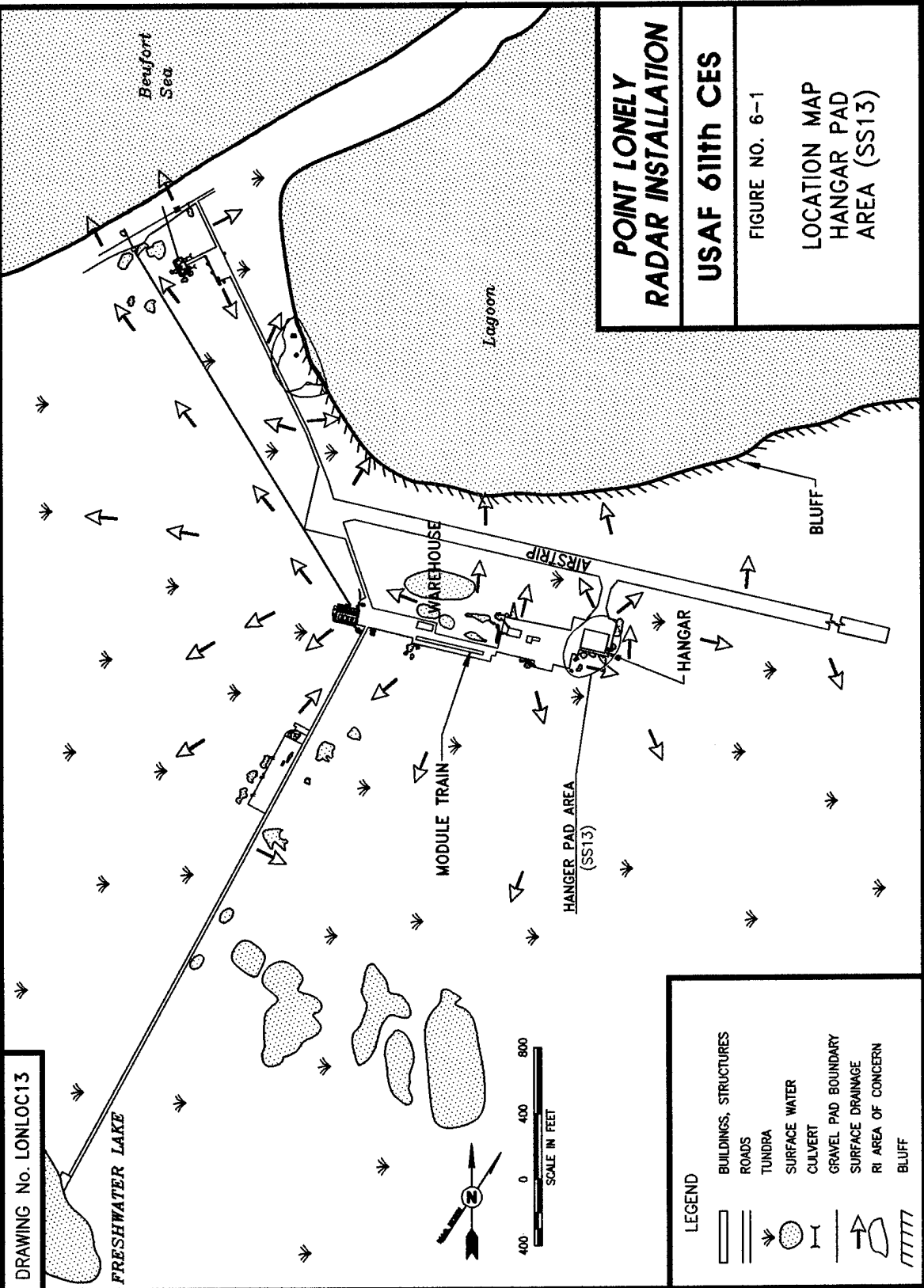
^b GRPH = Gasoline Range Petroleum Hydrocarbons.

^c RRPH = Residual Range Petroleum Hydrocarbons.

were identified at the site. Therefore, the Hangar Pad Area (SS13) site is recommended for no further action.

6.2 PUBLIC INVOLVEMENT AND COMMENT

Community relations activities that have taken place for the Point Lonely radar installation include the following: residents of Barrow were interviewed by Air Force community relations personnel



DRAWING No. LONLOC13

FRESHWATER LAKE

Beaufort Sea

Lagoon

WAREHOUSE

AIRSTRIP

BLUFF

HANGER

MODULE TRAIN

HANGER PAD AREA (SS13)

SCALE IN FEET
0 400 800

**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 6-1

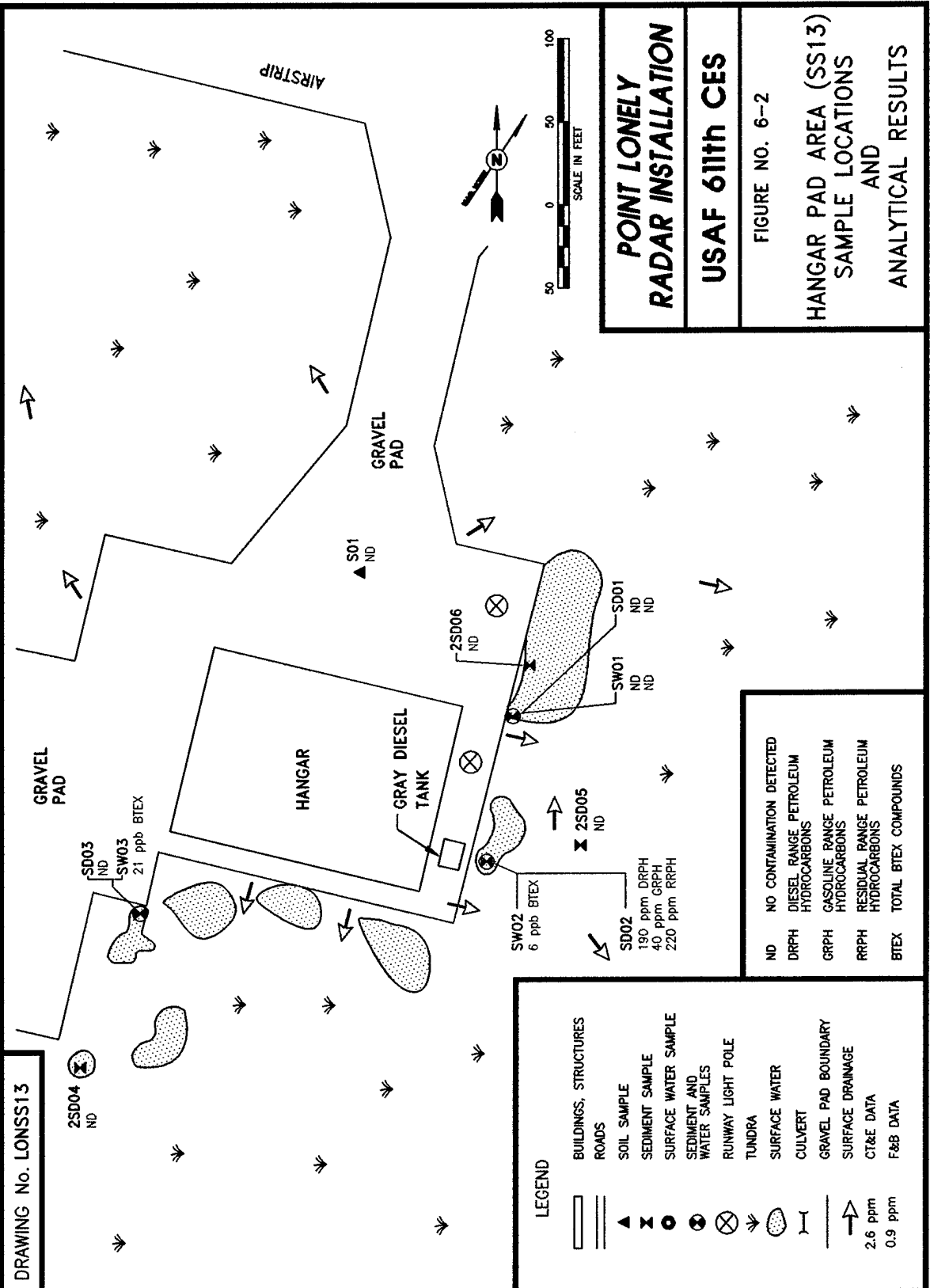
LOCATION MAP
HANGER PAD
AREA (SS13)

LEGEND

	BUILDINGS, STRUCTURES
	ROADS
	TUNDRA
	SURFACE WATER
	CULVERT
	GRAVEL PAD BOUNDARY
	SURFACE DRAINAGE
	RI AREA OF CONCERN
	BLUFF

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DRAWING No. LONSS13



2SD04
ND

SD03
ND

SW03
21 ppb BTEX

S01
ND

SW02
6 ppb BTEX

SD02
190 ppm DRPH
40 ppm GRPH
220 ppm RPPH

2SD05
ND

2SD06
ND

SW01
ND
ND
ND

SD01
ND
ND
ND

ND	NO CONTAMINATION DETECTED
DRPH	DIESEL RANGE PETROLEUM HYDROCARBONS
GRPH	GASOLINE RANGE PETROLEUM HYDROCARBONS
RPPH	RESIDUAL RANGE PETROLEUM HYDROCARBONS
BTEX	TOTAL BTEX COMPOUNDS

LEGEND

- BUILDINGS, STRUCTURES
- ROADS
- SOIL SAMPLE
- SEDIMENT AND WATER SAMPLES
- SURFACE WATER SAMPLE
- SEDIMENT AND WATER SAMPLES
- RUNWAY LIGHT POLE
- TUNDRA
- SURFACE WATER
- CULVERT
- GRAVEL PAD BOUNDARY
- SURFACE DRAINAGE
- CT&E DATA
- F&B DATA

**POINT LONELY
RADAR INSTALLATION**

USAF 611th CES

FIGURE NO. 6-2

**HANGAR PAD AREA (SS13)
SAMPLE LOCATIONS
AND
ANALYTICAL RESULTS**



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on 26 June, 1993; a mailing list of residents of the North Slope is being maintained by the 611th CES/CEVR; a fact sheet describing the status of the Installation Restoration Program at the radar installation was distributed to the mailing list on October 1994; a fact sheet was distributed to the mailing list during August 1995 explaining the Restoration Advisory Board (RAB) and how community residents could become RAB members; two RAB meetings were held in Barrow, Alaska in 1995; public notices were published in April 1996 regarding the decision for no further action at the Hangar Pad Area (SS13); fact sheets were sent to all residents on the mailing list during mid-April 1996 describing the sites recommended for no further action at the Point Lonely radar installation; a public review and comment period on the Draft Final Decision Document for no further action sites was held from 26 April to 25 May 1996; and documents have been, and will continue to be, available for review at information repositories that have been established in Tuzvy Library in Barrow, Alaska, and Elmendorf Air Force Base in Anchorage, Alaska, since 1996. The Air Force has received no public comments in response to the fact sheets, public notices distributed to date, or during the formal public comment period.

To facilitate public participation the Air Force plans to conduct a RAB information meeting during 1996.

6.3 SELECTED ACTION AND DECISION

The selected action and decision for the Hangar Pad Area (SS13) is no further action. This action is consistent with the requirements of ADEC, the Air Force, and federal regulations regarding the remediation of hazardous waste sites. This decision is based on the conclusions provided above and the supporting documentation contained in the Final Point Lonely Remedial Investigation/Feasibility Study (U.S. Air Force 1996b) and the Final Point Lonely Risk Assessment (U.S. Air Force 1996a).

6.4 REFERENCES

U.S. Air Force. 1996a. Final Risk Assessment for the Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

U.S. Air Force. 1996b. Final Remedial Investigation/Feasibility Study Report for the Point Lonely Radar Installation, Alaska. Prepared for the USAF Center for Environmental Excellence, Environmental Restoration Division. Prepared by ICF Technology, Inc. May.

ENSR. 1992. Hydrocarbon Screening at Proposed North Warning Radar Stations: Wainwright, Lonely, and Bullen Point, Alaska. Appendices A, B, and C.

ERA. 1991. EPA Region 10 Supplemental Risk Assessment Guidance for Superfund.

Radian Corporation. 1989. Environmental Impact Assessment for POW-1 Distant Early Warning Radar Station. Lonely, Alaska.

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