

# Hydraulic Hoist Closure Assessment

**Oneawa Union 76 Service Station  
153 Oneawa Street  
Kailua, Hawaii 96734**

**TMK No. (1) 4-3-059:087**



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# **Hydraulic Hoist Closure Assessment**

**Oneawa Union 76 Service Station  
153 Oneawa Street  
Kailua, Hawaii 96734**

**TMK No. (1) 4-3-059:087**

**DOH HEER Case No. 20070813-1554**

**Prepared for:**

**Mid Pac Petroleum  
Topa Financial Center  
677 Ala Moana Boulevard, Suite 625  
Honolulu, HI 96813-5419**

**Prepared by:**

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**Project No. 107062**

**October 11, 2007**

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## LIST OF ACRONYMS

amsl	above mean sea level
bgs	below ground surface
DOH	Department of Health, State of Hawaii
EAL	Environmental Action Level
EPA	Environmental Protection Agency
ESI	Environmental Science International, Inc.
HEER	Hazard Evaluation and Emergency Response
HMR	Hawaii Metal Recycling
LFR	Levine-Fricke, Inc.
M. Nakai	M. Nakai, Inc.
MRL	Method Reporting Level
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyls
PHC	petroleum hydrocarbon
PID	Photo-Ionization Detector
ppm	parts per million
PSC	Phillips Services Corporation
SSI	Schnitzer Steel, Industries
TMK	Tax Map Key
TPH-o	Total Petroleum Hydrocarbons as oil
UIC	Underground Injection Control
UST	Underground Storage Tank
VOC	Volatile Organic Compound

## EXECUTIVE SUMMARY

The following report describes the removal and permanent closure of three single post hydraulic hoists. ESI oversaw the removal and closure of the hydraulic hoists and performed the closure assessment on behalf of Mid Pac Petroleum. The hoists were located at the Oneawa Union 76 Service Station, which is located at 153 Oneawa, Kailua, Hawaii [Tax Map Key No. (1) 4-3-059:087]. The DOH HEER Case No. is 20070813-1554.

The hydraulic hoist systems consisted of three self contained single-post hydraulic hoists (hoists H1, H2, and H3). The three single-pole hoists were located in the middle of the service bay.

On August 1, 2007, the area around each hoist was excavated and the hoists removed from the ground. The hoists extended from the ground surface to approximately 7.0 feet bgs. The hoists were removed from the ground and placed on 6-mil plastic sheeting.

The depth of the excavations at H1, H2, and H3 extended to approximately 7.0 feet bgs. Groundwater was not encountered during the excavations. No petroleum hydrocarbon odor or staining were observed in the soil surrounding and beneath the hoists.

On August 1, 2007, three verification soil samples (samples H1-7.0, H2-7.0, and H3-7.0) were collected. The three soil samples were collected at 7.0 feet bgs (directly beneath each hydraulic hoist post). The samples were analyzed for the DOH chemical constituents of concern for hydraulic oil. The samples were analyzed for TPH-o, PAHs, and PCBs. TPH-o (150 ppm) was detected in one sample (H1-7.0). None of the other chemical constituents analyzed for were detected. No chemical constituents were detected at concentrations above DOH EALs.

Based on the results of the closure assessment, ESI concludes that a minor release of hydraulic oil has occurred from the H1 hydraulic hoist, however, the contaminant (TPH-o) is below DOH EALs. The nearest drinking water well is approximately 2.5 miles from the Station, therefore, it is unlikely that contaminants originating at the Station have impacted or could impact drinking water sources. Also, it is unlikely that contaminants pose a threat to sensitive ecological receptors because the source of contamination has been removed. The impacted soil is greater than 7.0 feet bgs, which prevents human contact with potentially impacted soils, thereby essentially eliminating direct exposure routes. Based on these observations, ESI concludes that it is unlikely that contaminants originating at the Station pose a threat to human health or the environment.

Based on our conclusions, ESI does not recommend that additional subsurface soil investigation or remediation be performed. We recommend that a copy of this report be submitted to the DOH and that a copy be maintained at Mid Pac Petroleum.

## SECTION 1 - INTRODUCTION

This report describes the removal and permanent closure of three single post hydraulic hoists at the Oneawa Union 76 Service Station, which is located at 153 Oneawa Street, Kailua, Hawaii, hereinafter referred to as the "Station" (Tax Map Key [TMK] No. (1) 4-3-059:087). The State of Hawaii Department of Health [DOH] Hazard Evaluation and Emergency Response [HEER] Case No. is 20070813-1554. Environmental Science International, Inc. [ESI], oversaw the removal and closure of the hydraulic hoists and performed the closure assessment. This assessment was conducted on behalf of Mid Pac Petroleum.

Photographic documentation is provided in Appendix A. The laboratory analytical reports are provided in Appendix B. The waste disposition forms are provided in Appendix C.

### 1.1 SITE DESCRIPTION

The Station is located adjacent and above the underground injection control [UIC] line, at a surface elevation of approximately 10 feet above mean sea level [amsl]. It is bounded on the south by a parking lot, on the east by Oneawa Street, on the north by Kawainui Street, and on the west by a residential building. The nearest surface body of water is Kawainui Marsh, which is approximately 0.20 miles to the west.

The Station is paved with concrete and asphalt and it consists of a station building, four fuel dispenser islands, and two 12,000-gallon capacity [USTs] used to store supreme unleaded gasoline (92 octane) and regular unleaded gasoline (87 octane). The gasoline USTs are located on the north side of the fuel dispenser islands. At the time of the hoist removals, the Station was in operation and the two USTs were listed by the DOH as *Currently in Use*.

Groundwater in the area of the Station, which is part of the Waimanalo Aquifer System of the Windward Aquifer Sector, resides in sedimentary deposits and is not a drinking water source (Mink and Lau, 1990). The water table beneath the Station may be tidally influenced, owing to its relative proximity from the ocean and surrounding bodies of water. In the general area of the Station, the direction of groundwater flow is flat throughout the Station. The Station is located approximately 2.5 miles from the nearest drinking water well.

### 1.2 BACKGROUND

Based on available information, the Station commenced operation in 1959, following the installation of a 5,000-gallon and a 7,500-gallon gasoline UST, a 550-gallon waste oil UST, and a 1,200-gallon septic tank and cesspool. In 1971, the two gasoline USTs were removed during the expansion of the Station, and replaced with two 10,000-gallon USTs. The 550-gallon waste oil UST was also abandoned at the same time. The waste oil UST was closed in place. The closures were not documented or the closure reports could not be located. The two 10,000-gallon USTs originally contained leaded gasoline products. In 1975, the "Regular" leaded gasoline UST was converted to unleaded. In 1987, the "High-Octane" leaded gasoline UST was converted to unleaded. In March 1991, two 12,000-gallon USTs were installed and replaced the

two 10,000-gallon USTs. The DOH issued a determination of *No Further Action* for the closure of the two 10,000-gallon USTs on August 13, 1996.

On November 9, 1995, a 350-gallon used oil UST was removed and permanently closed (Levine-Fricke [LFR], 1996). During the closure, a small volume of stained soil was observed. None of the chemical constituents detected in the verification soil samples collected from the UST excavation were at concentrations above DOH action levels. On August 13, 1996, the DOH issued a determination of *No Further Action* for the 350-gallon used oil UST. The installation of the 350-gallon used oil UST was not documented.

## SECTION 2 – HYDRAULIC HOIST EXCAVATION AND REMOVAL

On August 1, 2007, ESI personnel (Mr. Travis P. Hiramoto) observed and documented the removal and permanent closure of three single post hydraulic hoists. Prior to removal, the hydraulic oil in each hydraulic hoist system was removed. The purpose of the hydraulic hoist closures was to remove the hoists from the ground and determine if a release had occurred.

### 2.1 HYDRAULIC HOIST SYSTEMS

The hydraulic hoist systems consisted of three single-post hydraulic hoists (hoists H1, H2, and H3). The three single-post hoists were located in the middle of the service bay, adjacent to one another. The locations of the hoists are shown in Figure 3.

The three hoists were self contained single-post hydraulic hoist systems. Each hoist measured approximately 1.2 feet in diameter and 7.0 feet in length. No holes or leaks were observed in the hoists. The hydraulic hoist specifications are listed in Table 2.1.

**TABLE 2.1**  
**Hydraulic Hoist Specifications**  
**Onewa Union 76 Service Station**  
**Hydraulic Hoist Closure Assessment**

Hydraulic Hoist	Type	Dimensions (diameter x length)	External Tank	Date Removed
H1	single post	1.2 x 7.0	no	8/1/2007
H2	single post	1.2 x 7.0	no	8/1/2007
H3	single post	1.2 x 7.0	no	8/1/2007

Dimensions measured in feet.

### 2.2 HYDRAULIC HOIST EXCAVATIONS

On August 1, 2007, under the supervision of ESI personnel (Mr. Travis P. Hiramoto), M. Nakai, Inc. [M. Nakai], excavated the area around each hoist (H1, H2, and H3) and removed the hoists from the ground (Photograph 1). The hoists extended from ground surface to approximately 7 feet below ground surface. The hoists were removed from the ground and placed on 6-mil plastic sheeting (Photograph 2).

The subsurface soil around each hoist consisted of a brown basecourse fill material from the ground surface to approximately 0.5 feet bgs. Underlying the brown basecourse fill material was a layer of brown silty sand (from approximately 0.5 to 7.0 bgs). Groundwater was not encountered during the excavations. No petroleum hydrocarbon odor or staining were observed in the soil surrounding and beneath the hoists (Photograph 3).

The excavated soil was temporarily stockpiled at the Station. The excavated soil was used to backfill the excavations (Photograph 4).

### **2.3 HYDRAULIC HOIST DISPOSAL**

Following the removal of the hoists, each hoist was properly cleaned, triple-rinsed, and placed on 6-mil plastic sheeting (Photograph 2). On August 1, 2007, the three hoists were loaded onto a flat-bed truck and transported by Phillips Services Corporation [PSC] to Schnitzer Steel Industries [SSI] (formerly Hawaii Metal Recycling [HMR]). The waste disposal manifests are included in Appendix C.

### **2.4 REMOVAL OF HYDRAULIC OIL**

On August 1, 2007, prior to the removal of each hoist, PSC personnel opened the top of each hoist and removed the hydraulic oil from each hoist using a pump. The hydraulic oil from each hoist was pumped into two 55-gallon drums. A total of 110-gallons of hydraulic oil were removed from the three hoists. The waste disposal manifests are included in Appendix C.

## SECTION 3 - VERIFICATION SOIL SAMPLING

On August 1, 2007, ESI personnel (Mr. Travis P. Hiramoto) collected three verification soil samples from the soil beneath each hoist. The purpose of the soil sampling was to determine if there had been releases from the hydraulic hoists.

### 3.1 FIELD MEASUREMENTS

A photo-ionization detector [PID] (miniRAE 2000) was used to monitor volatile organic compound [VOC] vapors in soil. Prior to use, the PID was calibrated using a 100 parts per million [ppm] isobutylene standard. A soil sample was collected at 7.0 feet bgs beneath each hydraulic hoist post, and analyzed for VOC vapors with the PID using the ambient temperature headspace method. The samples were placed into Ziploc bags and allowed to equilibrate for approximately 15 minutes, after which the PID probe tip was inserted into the bags and a measurement made. VOC vapors were detected (0.0 to 0.1 ppm) in the samples collected from 7.0 feet bgs. Table 3.1 lists the results.

**TABLE 3.1**  
**PID Measurement of VOCs in Verification Soil Sample (August 1, 2007)**  
**Oneawa Union 76 Service Station**  
**Hydraulic Hoist Closure Assessment**

Sample	Sample Location	Description	Depth (feet bgs)	VOCs (ppm)
H1-7.0*	Beneath H1	Brown silty sand, moist, no petroleum hydrocarbon [PHC] odor or staining.	7.0	0.1
H2-7.0*	Beneath H2	Brown silty sand, moist, no petroleum hydrocarbon [PHC] odor or staining.	7.0	0.0
H3-7.0*	Beneath H3	Brown silty sand, moist, no petroleum hydrocarbon [PHC] odor or staining.	7.0	0.1

VOCs Volatile Organic Compounds.  
ppm parts per million.  
bgs below ground surface.  
n.d. not detected.  
\* Sample collected for laboratory analysis.

### **3.2 VERIFICATION SOIL SAMPLING FOR LABORATORY ANALYSIS**

On August 1, 2007, ESI personnel (Mr. Travis P. Hiramoto) collected three verification soil samples (samples H1-7.0, H2-7.0, and H3-7.0). Each soil sample was collected at 7.0 feet bgs (directly beneath each hydraulic hoist post). A description of the samples is provided in Table 3.1 and the sample locations are shown in Figure 4.

The samples were collected in new, stainless steel sleeves, capped, placed into a cooler with ice, chilled to approximately 4°C, and delivered to Advanced Analytical Laboratory, Inc. The chain-of-custody procedure was used to track the sample from collection to final disposition. The chain-of-custody form is included in Appendix B.

### **3.3 ANALYTICAL RESULTS FOR VERIFICATION SOIL SAMPLE**

The three verification soil samples were analyzed for the DOH chemical constituents of concern for hydraulic oil. The samples were analyzed for total petroleum hydrocarbons as oil [TPH-o] using the Environmental Protection Agency [EPA] Method 8015 California Department of Health Services Modified, polycyclic aromatic hydrocarbons [PAHs] using EPA Method 8270, and polychlorinated biphenyls [PCBs] using EPA Method 8082. TPH-o (150 ppm) was detected in one sample (H1-7.0). None of the other chemical constituents analyzed for were detected. No chemical constituents were detected at concentrations above DOH EALs.

**TABLE 3.2**  
**Analytical Results for Verification Soil Sample (August 1, 2007)**  
**Oneawa Union 76 Service Station**  
**Hydraulic Hoist Closure Assessment**

<b>Chemical Constituent</b>	<b>H1-7.0</b>	<b>H2-7.0</b>	<b>H3-7.0</b>	<b>MRL</b>	<b>DOH EAL</b>
TPH-o	150	n.d.	n.d.	100	5,000
Acenaphthene	n.d.	n.d.	n.d.	0.20	130
Benzo[a]pyrene	n.d.	n.d.	n.d.	0.20	0.62
Fluoranthene	n.d.	n.d.	n.d.	0.20	40
Naphthalene	n.d.	n.d.	n.d.	0.20	18
PCBs	n.d.	n.d.	n.d.	0.20	1.1

The data are in parts per million. Shaded values exceed DOH EALs.

TPH-o Total Petroleum Hydrocarbons as oil.

PCBs Polychlorinated Biphenyls.

DOH EAL State of Hawaii Department of Health Environmental Action Level for soil where drinking water sources are not threatened.

MRL Method Reporting Limit.

n.d. not detected.

## **SECTION 4 - SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**

On August 1, 2007, the area around each hoist was excavated and the hoists removed from the ground. Hoists H1, H2, and H3 extended from the ground surface to approximately 7.0 feet bgs. The hoists were removed from the ground and placed on 6-mil plastic sheeting.

The depth of the excavations at H1, H2, and H3 extended to approximately 7.0 feet bgs. Groundwater was not encountered during excavation. No petroleum hydrocarbon odor or staining were observed in the soil surrounding and beneath the hoists.

On August 1, 2007, the hydraulic oil from each hoist was removed using a powered pump. The hydraulic oil was pumped into two 55-gallon drums. Approximately 110 gallons of hydraulic oil were removed from the three hoists.

Following the removal of the hoists, each hoist was properly cleaned, triple-rinsed, and covered with 6-mil plastic sheeting. On August 1, 2007, the hoists were loaded onto a flat-bed truck and transported by PSC to SSI to be recycled.

On August 1, 2007, three verification soil samples (samples H1-7.0, H2-7.0, and H3-7.0) were collected. The three samples were collected at 7.0 feet bgs (directly beneath each hydraulic hoist post). The samples were analyzed for the DOH chemical constituents of concern for hydraulic oil. The samples were analyzed for TPH-o, PAHs, and PCBs. TPH-o (150 ppm) was detected in one sample. None of the other chemical constituents analyzed for were detected. No chemical constituents were detected at concentrations above DOH EALs.

Based on the results of the closure assessment, ESI concludes that a minor release of hydraulic oil has occurred from the H1 hydraulic hoist, however, the contaminant (TPH-o) is below the DOH EAL. The nearest drinking water well is approximately 2.5 miles from the Station, therefore, it is unlikely that contaminants originating at the Station have impacted or could impact drinking water sources. Also, it is unlikely that contaminants pose a threat to sensitive ecological receptors because the source of contamination has been removed. The impacted soil is greater than 7.0 feet bgs, which prevents human contact with potentially impacted soils, thereby essentially eliminating direct exposure routes. Based on these observations, ESI concludes that it is unlikely that contaminants originating at the Station pose a threat to human health or the environment.

Based on our conclusions, ESI does not recommend that additional subsurface soil investigation or remediation be performed. We recommend that a copy of this report be submitted to the DOH and that a copy be maintained at Mid Pac Petroleum.

## SECTION 5 - REFERENCES

DOH, 1992, *Technical Guidance Manual for Underground Storage Tank Closure and Release Response*, 1st edition, August 1992.

DOH, 1996, *Risk-Based Corrective Action and Decision Making at Sites with Contaminated Soil and Groundwater*. Volumes I and II, December 1995 (Revised June 1996).

DOH, 1997, *Technical Guidance Manual for the Implementation of the Hawaii State Contingency Plan*, Draft edition, October 1997.

DOH, 2000a, *Underground Storage Tanks: Hawaii Administrative Rules, Title 11, Chapter 281*, January 12, 2000.

DOH, 2000b, *Technical Guidance Manual for Underground Storage Tank Closure and Release Response*, 2<sup>nd</sup> edition, March 2000.

DOH, 2005, *Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater*, Interim Final, May 2005.

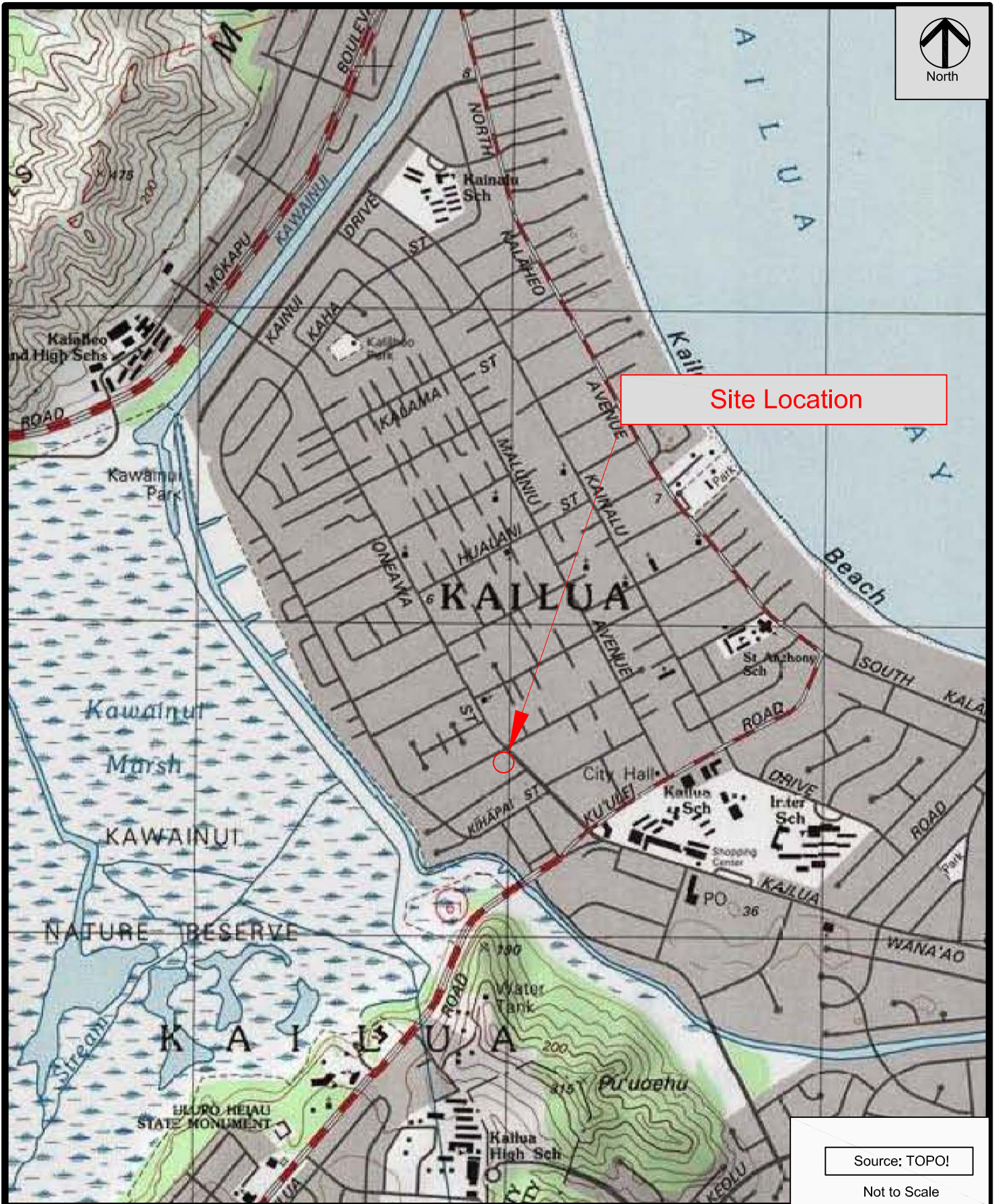
LFR, 1996, *Underground Storage Tank Closure Report, Unocal Service Station #4342: Levine-Fricke, Incorporated*, January 1996.

Mink, J. F. and Lau, L. S., 1990, *Aquifer Identification and Classification for O'ahu: Groundwater Protection Strategy for Hawaii: Water Resources Research Center Technical Report No. 179*, February 1990.

Stearns, H. T. and Vaksvik, K. N., 1935, *Geology and Groundwater Resources of the Island of Oahu, Hawaii: Hawaii Div. Hydrogr. Bull. 1*, 479 p.

Stearns, H. T. and Vaksvik, K. N., 1938, *Records of the Drilled Wells on the Island of Oahu, Hawaii: Hawaii Div. Hydrogr. Bull. 4*, 213 p.

# FIGURES



Site Location

Source: TOPO!

Not to Scale



Site Area Topographic Map

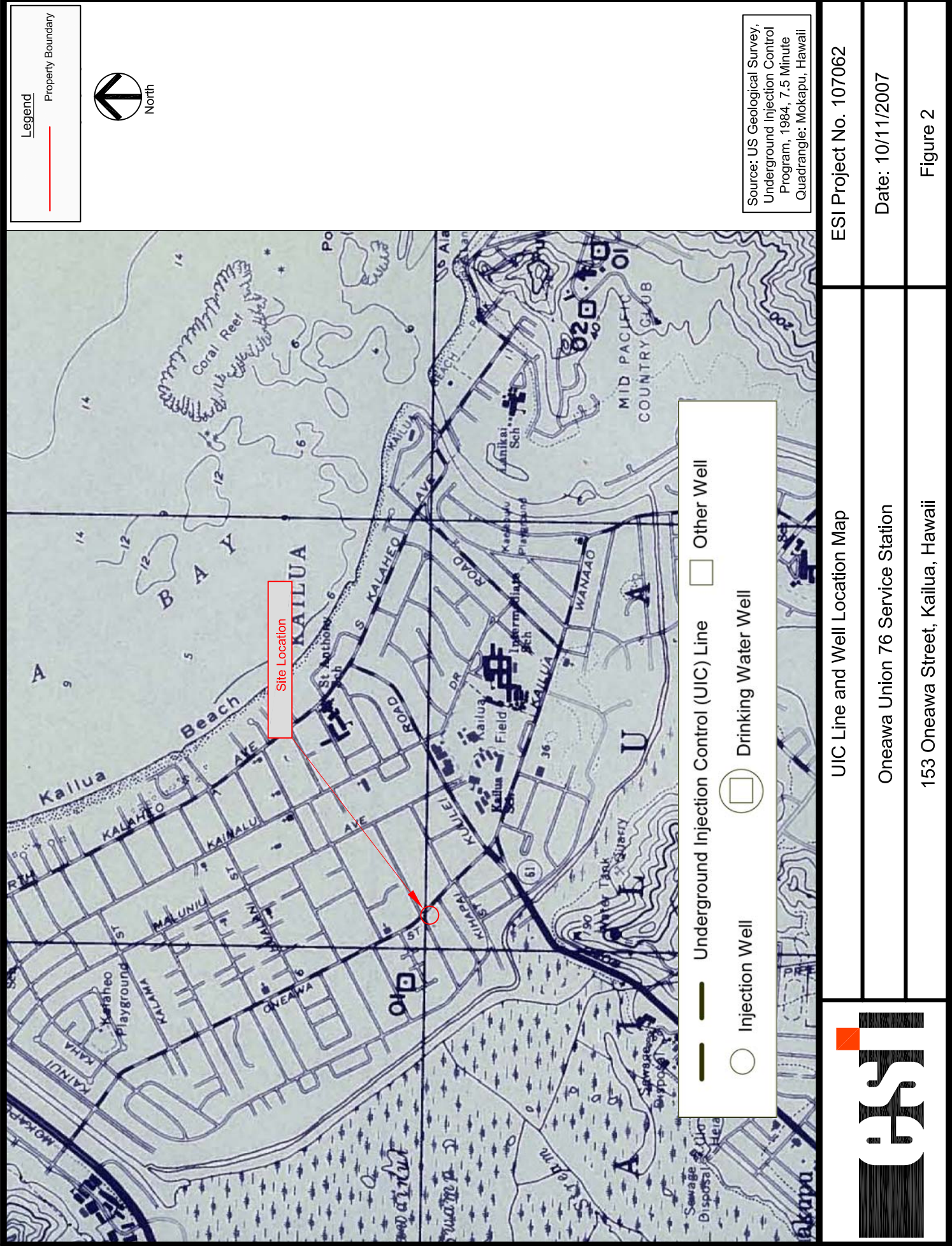
Oneawa Union 76 Service Station

153 Oneawa Street, Kailua, Hawaii

ESI Project No. 107062

Date: 10/11/2007

Figure 1



Legend  
 Property Boundary

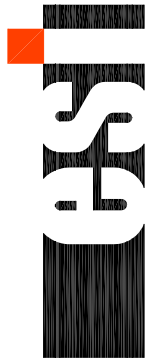


Source: US Geological Survey,  
 Underground Injection Control  
 Program, 1984, 7.5 Minute  
 Quadrangle: Mokapu, Hawaii

Site Location

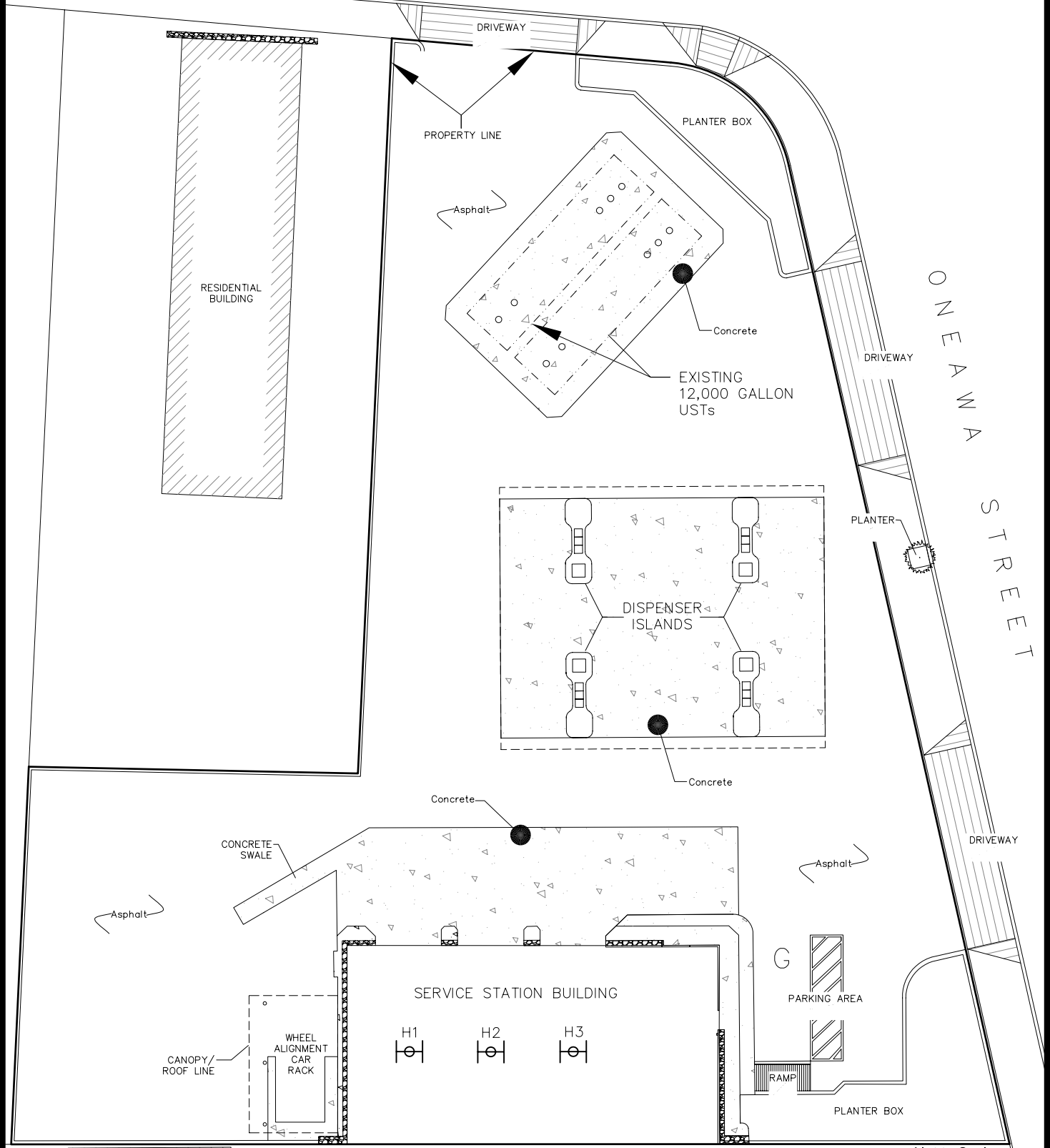
-  Underground Injection Control (UIC) Line
-  Injection Well
-  Drinking Water Well
-  Other Well

ESI Project No. 107062	UIC Line and Well Location Map
Date: 10/11/2007	Oneawa Union 76 Service Station
Figure 2	153 Oneawa Street, Kailua, Hawaii





KAWAINUI STREET



Not to Scale

Site Map

ESI Project No. 107062

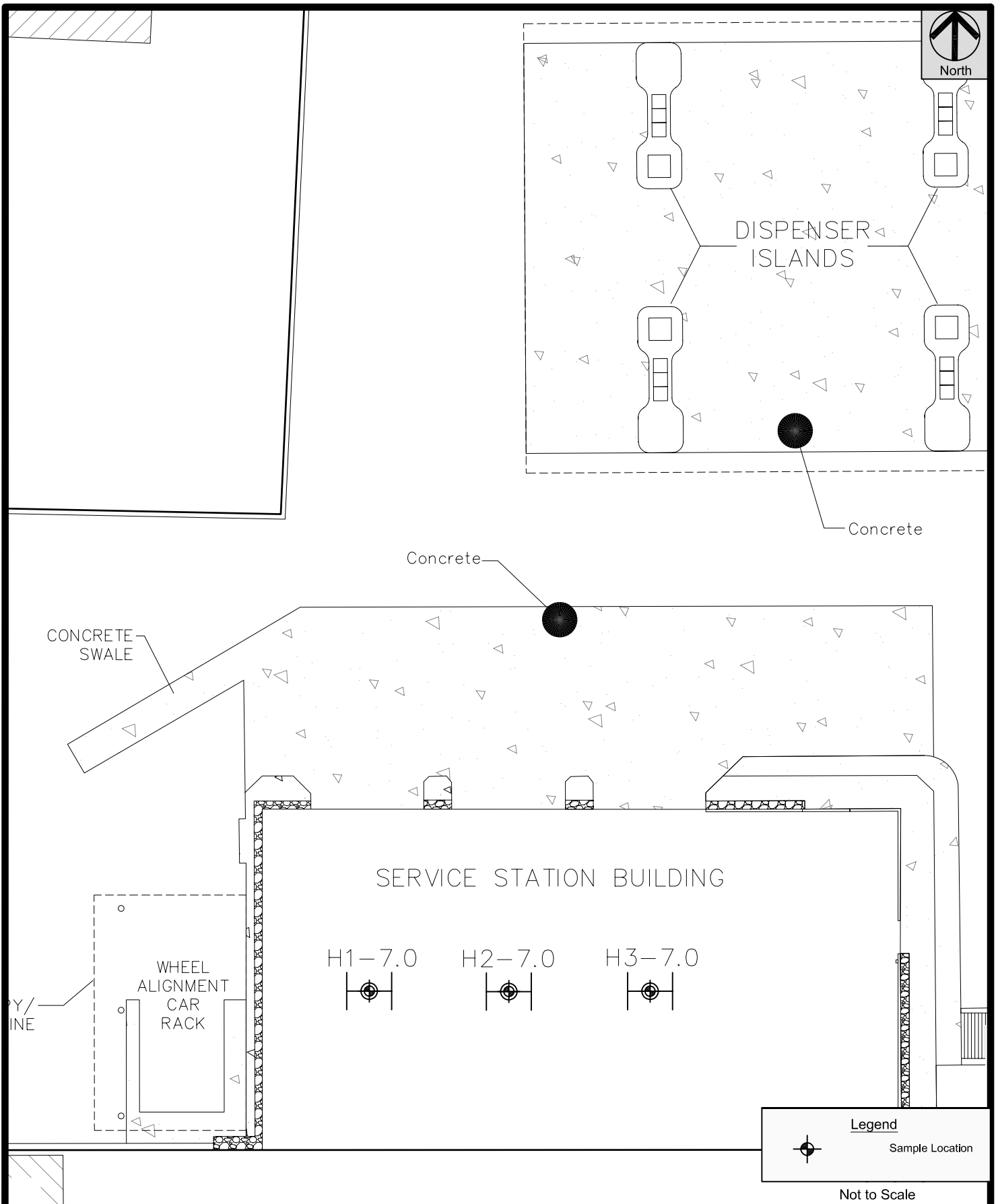
Onewa Union 76 Service Station


Date: 10/11/2007

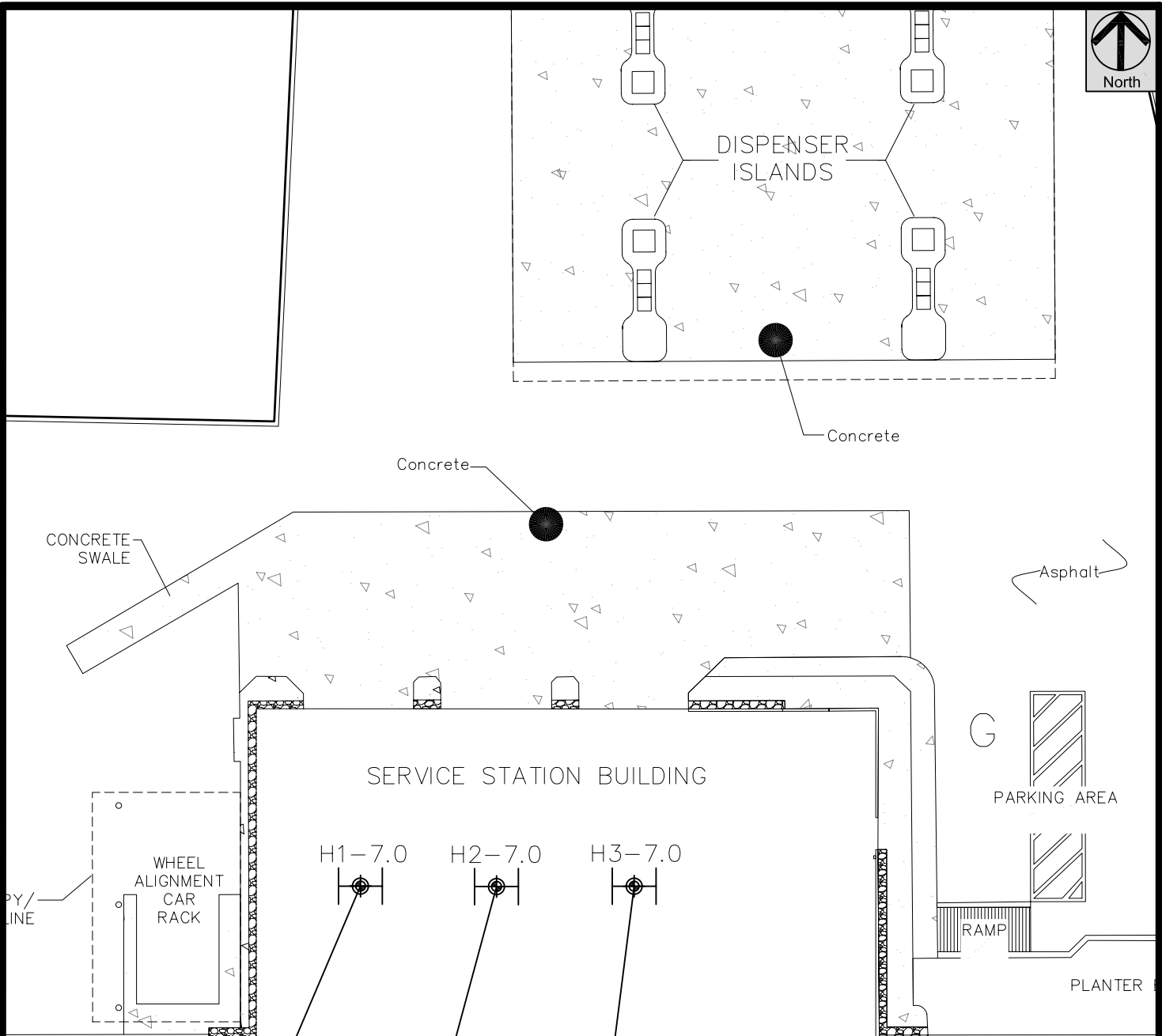
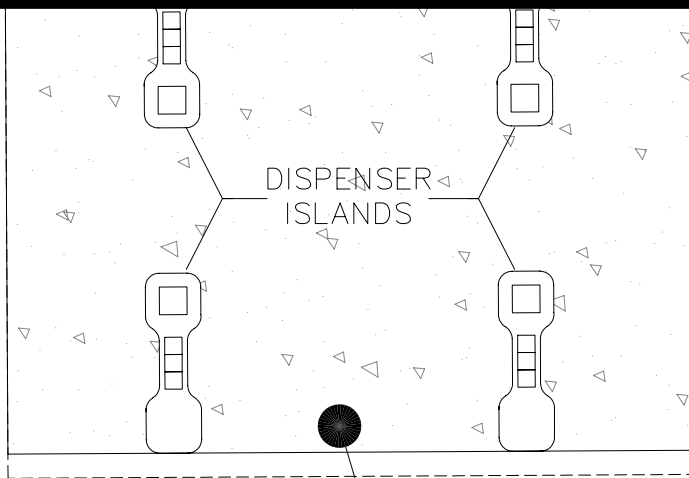
153 Onewa Street, Kailua, Hawaii

Figure 3





	Sample Location Map	ESI Project No. 107062
	Oneawa Union 76 Service Station	Date: 10/11/2007
	153 Oneawa Street, Kailua, Hawaii	Figure 4



H1-7.0
150
n.d.
n.d.
n.d.
n.d.
n.d.

H2-7.0
n.d.
n.d.
n.d.
n.d.
n.d.
n.d.

H3-7.0
n.d.
n.d.
n.d.
n.d.
n.d.
n.d.

CHEMICAL CONSTITUENTS	RESULTS	DOH EAL
TPH-o	150	5,000
ACENAPHTHENE	n.d.	130
BENZO[A]PYRENE	n.d.	0.62
FLUORANTHENE	n.d.	40
NAPHTHALENE	n.d.	18
PCBs	n.d.	1.1

TPH-o Total Petroleum Hydrocarbons as oil.  
 PCBs Polychlorinated Biphenyls  
 DOH EAL State of Hawaii Department of Health Environmental Action Levels for soil where drinking water sources are not threatened.  
 n.d. not detected

**Legend**

Sample Location

Not to Scale

Summary of Analytical Results for Verification Samples

ESI Project No. 107062



Onewa Union 76 Service Station

Date: 10/11/2007

153 Onewa Street, Kailua, Hawaii

Figure 5

# **APPENDIX A**

## **Photographic Documentation**



**Photo 1.** M. Nakai personnel removing H1 from the ground.




**Photo 2.** H2 placed on 6-mil plastic sheeting.



**Photo 3.** The H1 excavation after the removal of the hoist. Note no staining was observed.

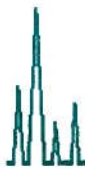


**Photo 4.** M. Nakai personnel backfilling the H2 excavation. Note no staining was observed.

	Photographic Documentation  Oneawa 76 Hydraulic Hoist Closure Assessment  153 Oneawa Street, Kailua, Hawaii	ESI Project No. 107062  Date: 10/11/2007  Photos: 1 - 4
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# **APPENDIX B**

## **Laboratory Reports**



ADVANCED ANALYTICAL LABORATORY INC

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RECEIVED

AUG 14 2007

August 8, 2007

Environmental Science International  
56 Oneawa St.  
Kailua, HI  
96734

Dear Robert Chong:

Please find enclosed the laboratory report for your project "Oneawa 76". If you have any questions regarding this project, please don't hesitate to contact AAL.

Thank you for your business and continuing support.

Sincerely,

Uwe Baumgartner, Ph.D  
Owner

Elisa M. Young  
Owner



**AAL Project #F168**

**Environmental Science International**

Client Project #: 107062 Method: 8015M  
Client Project Name: Oneawa 76 Matrix: Soil

CLIENT SAMPLE ID	TPH-OIL [mg/kg]	SURROGATE RECOVERY	FLAGS	DATE ANALYZED
Blank	nd	95%		8/6/2007
H3-7.0	nd	101%		8/6/2007
H2-7.0	nd	94%		8/6/2007
H1-7.0	150	98%		8/6/2007
<b>PQL</b>	100	Acceptable Range		
<b>MDL</b>	35	70%-130%		

**QA/QC DATA**

QC BATCH # 080607	TPH-OIL [mg/kg]	Acceptable Range
Lab Control Spike (LCS)	521	350-650
Matrix Spike (MS)	560	350-650
Matrix Spike Dup (MSD)	574	350-650
Recovery MS	112%	70%-130%
Recovery MSD	115%	70%-130%
RPD of MS/MSD	2.5%	20%

Analyst: U. Baumgartner, Ph.D.  
Data review: E. Young



ADVANCED ANALYTICAL LABORATORY INC

AAL Project #F168

Environmental Science International

Client Project #: 107062  
Client Project Name: Oneawa 76

Method: 8100  
Matrix: Soil

CLIENT SAMPLE ID	Naphthalene [mg/kg]	Acenaphthene [mg/kg]	Fluoranthene [mg/kg]	Benzo(a)pyrene [mg/kg]	SURROGATE RECOVERY	FLAGS	DATE ANALYZED
Blank	nd	nd	nd	nd	123%		8/7/2007
H3-7.0	nd	nd	nd	nd	124%		8/7/2007
H2-7.0	nd	nd	nd	nd	128%		8/7/2007
H1-7.0	nd	nd	nd	nd	126%		8/7/2007
<b>PQL</b>	0.20	0.20	0.20	0.20	Acceptable Range		
<b>MDL</b>	0.04	0.04	0.04	0.04	70%-130%		

QA/QC DATA

QC BATCH #	Naphthalene [mg/kg]	Acenaphthene [mg/kg]	Fluoranthene [mg/kg]	Benzo(a)pyrene [mg/kg]	Acceptable Range
Lab Control Spike (LCS)	4.83	5.02	5.31	5.28	3.50-6.50
Matrix Spike (MS)	4.76	4.85	4.78	4.91	3.50-6.50
Matrix Spike Dup (MSD)	4.84	5.11	5.31	5.33	3.50-6.50
Recovery MS	95%	97%	96%	98%	70%-130%
Recovery MSD	97%	102%	106%	107%	70%-130%
RPD of MS/MSD	1.6%	5.2%	10.5%	8.1%	20%

Analyst: E. Young  
Data review: U. Baumgartner, Ph.D.

LD

AAL Job Number: A70803-2  
 Client: Advanced Analytical Lab  
 Project Manager: Elisa Young  
 Client Project Name: Oneawa 76  
 Client Project Number: F168  
 Date received: 08/03/07

Analytical Results							Dupl
8082(PCBs), mg/kg		MTH BLK	LCS	H1-7.0	H2-7.0	H3-7.0	H3-7.0
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil
Date extracted	Reporting	08/06/07	08/06/07	08/06/07	08/06/07	08/06/07	08/06/07
Date analyzed	Limits	08/06/07	08/06/07	08/06/07	08/06/07	08/06/07	08/06/07
A1221	0.20	nd		nd	nd	nd	nd
A1232	0.20	nd		nd	nd	nd	nd
A1242 (A1016)	0.20	nd		nd	nd	nd	nd
A1248	0.20	nd		nd	nd	nd	nd
A1254	0.20	nd	93%	nd	nd	nd	nd
A1260	0.20	nd		nd	nd	nd	nd

Surrogate recoveries:

Tetrachloro-m-xylene	92%	101%	89%	94%	94%	96%
Decachlorobiphenyl	95%	99%	97%	93%	116%	90%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits  
 na - not analyzed  
 C - coelution with sample peaks  
 M - matrix interference  
 J - estimated value  
 Results reported on dry-weight basis  
 Acceptable Recovery limits: 70% TO 130%  
 Acceptable RPD limit: 30%



## **APPENDIX C**

### **Waste Disposal Manifests**



288 Mokauea St. Honolulu, HI 96819 • (808) 841-7581 • FAX (808) 842-7012

RECEIVED

SEP 04 2007

LETTER OF TRANSMITTAL

DATE: August 30, 2007

TO: Environmental Science International  
56 Oneawa Street, Suite 103  
Kailua, Hawaii 96734

PROJECT: KAILUA 76 - ONEAWA STREET  
Clean & Dispose of (1) one Used Oil  
Tank and (3) Single Post Hoists

WE ARE TRANSMITTING:

HEREWITH                       DELIVERED BY HAND                       UNDER SEPARATE COVER

THE FOLLOWING ITEMS:

SUBMITTALS                       SHOP DRAWINGS                       OTHER

COPIES	DATE	DESCRIPTION
1	8/2/07	Non-Hazardous Waste Manifest
1	8/3/07	Certificate of Disposal (Hoists & Used Oil Tank)

FOR YOUR FILES                       AS REQUESTED                       SIGN & RETURN  
 FOR YOUR APPROVAL                       RETURNING                       PLEASE RETURN ONE COPY  
 REVIEW & COMMENT                       RESUBMITTING                       REVIEW & FORWARD

Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

SUBMITTED BY: Stephen Taguchi

<b>NON-HAZARDOUS WASTE MANIFEST</b>	1. Generator's US EPA ID No. EXEMPT	Manifest Document No.	2. Page 1 1 of	UO-070 266
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3. Generator's Name and Mailing Address 153 ONEAWA ST 76 KAILUA HI 96740	
4. Generator's Phone ( )	

5. Transporter 1 Company Name PHILIP SERVICES HAWAII	6. US EPA ID Number H.I.D. 9 8 2 0 4 1 4 0 2 .	A. Transporter's Phone 682-3696
7. Transporter 2 Company Name	8. US EPA ID Number	B. Transporter's Phone
9. Designated Facility Name and Site Address PHILIP SERVICES HAWAII 91-410 KOMOHANA ST KAPOLEI, HI 96707	10. US EPA ID Number H.I.D. 9 8 2 0 4 1 4 0 2 .	C. Facility's Phone 682-7087

11. Waste Shipping Name and Description	12. Containers		13. Total Quantity	14. Unit Wt/Vol
	No.	Type		
a. NON REGULATED OIL FROM HOIST	42	DM	710	GAL
b. NON REGULATED used oil	2	DM	100	Gal
c.				
d.				

D. Additional Descriptions for Materials Listed Above CLOR D TECT 300 PPM	E. Handling Codes for Wastes Listed Above
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15. Special Handling Instructions and Additional Information  
24 HOUR EMERGENCY CONTACT NUMBER (800) 567-7465  
LEVEL D PPE

CUSTOMER:  
nakai repairs

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name Jr. Luki	Signature <i>Jr. Luki</i>	Month Day Year 08 02 07
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17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name TODD AKIONA	Signature <i>Todd Akiona</i>	Month Day Year 08 02 07
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18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature	Month Day Year
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19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

PHILIP SERVICES WASTE WATER TREATMENT FACILITY

Printed/Typed Name ASOTAU ULUFALE	Signature <i>ASOTAU ULUFALE</i>	Month Day Year 08 02 07
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Industrial Services Group  
License # C-20637  
Western Region

# CERTIFICATE OF DISPOSAL

JOB# 183-0707-0091

As an authorized agent of PHILIP SERVICES HAWAII, LTD., I hereby certify that the

HOIST & USED OIL TANK removed from Oncarna 76

has been properly cleaned, triple-rinsed, rendered unusable and delivered to

\_\_\_\_\_ for disposal in compliance with applicable Federal and State laws, rules and regulations.

By: Chaleh Title: oper Date: 8/3/07

I hereby certify as a corporate officer, owner, partner or general manager of OSMIC, that the above described HOIST & USED OIL TANK

has been properly demolished and disposed of in compliance with applicable Federal and State laws, rules and regulations.

By: Mahulu Title: weighmaster Date: 18.03.07