

SITE CLOSURE REPORT

3201 Hurst Rd.,
North Pole, Alaska 99705

December 6, 2013



ADEC File # 100.02.155

Prepared for: GEICO, Region IV
Anchorage Claims Office
5701 Lake Otis Parkway, Suite 100
Anchorage, AK 99507

Prepared by: Amundsen Environmental Services
P.O. Box 10726
Fairbanks, Alaska 99710
Suzan Amundsen, B.S., M.S.

SUMMARY

A November 2011 truck accident, resulted in damage to a cabin and the release of heating fuel to the property at 3201 Hurst Road in rural North Pole, Alaska. This diesel fuel and its hazardous cold weather additives, migrated downward into the soil, eastward into the septic leach field and westward with the snow melt and rain for nearly 2 years. Hydrocarbon-contaminated soils (approximately 50 cubic yards) were excavated, temporarily stockpiled and removed from the property in early October, 2013, and then hauled to OIT, Inc. for thermal remediation. Closure soil and well water samples indicate that the majority of the accident-related hydrocarbon contamination has been removed. The site cleanup was necessary to protect human health, safety, welfare and the environment.

Table of Contents

	Page
Summary	i
1.0 Introduction	1
2.0 Site Background	1
Site Description.....	2
3.0 Site Sampling	2
4.0 Analytical Results	12
5. 0 Soils Remediation	16
6.0 Conclusions	17
Appendix A. Environmental Site Assessment Site Characterization Work Plan	
Appendix B. Alaska Analytical Laboratory (AA1) Results from 9/16/13 (10 p) Pace Analytical Laboratory (Pace 1) Results from 9/16/13 (23 p) Alaska Analytical Results (AA2) from 9/26/13 (29 p) Pace Analytical Results (Pace 2) from 9/26/13 (43 p) Alaska Analytical Results (AA3) from 10/11/13 (14p) Pace Analytical Results (Pace 3) from 10/11/13 (38p)	
Appendix C. ADEC Laboratory Data Review Checklist (12/2/13)	
Appendix D. Field Notes from 9/16/13 (soil sampling), 9/27/13 (soil sampling), 10/7/13 and 10/8/13 field screening and 10/11/13 (water sampling)	
Appendix E. OIT, Inc. Documentation, sampling results and Certificate of Thermal Remediation (14 pages)	

1.0 INTRODUCTION

The Alaska Department of Environmental Conservation (ADEC) administers 18 AAC 75 of the Alaska Administrative Code (AAC), for Oil and Other Hazardous Substances Pollution Control. The “Site Cleanup Rules”, 18 AAC 75.325 – 390, establish administrative processes and standards to determine the necessity for and degree of cleanup required to protect human health, safety, and welfare, and the environment at a site where hazardous substances are located. The site cleanup rules apply to 3201 Hurst Road because of a release of hazardous substances (heating oil) caused by past activities.

This Site Closure Report summarizes the background information and the environmental cleanup, including soils field screening, soil and water sampling and laboratory analysis; removal and final disposal of contaminated soil from 3201 Hurst Road, North Pole, AK.

2.0 SITE BACKGROUND

On November 23, 2011, a Ford F-350 pickup, slid off of the roadway and struck a cabin at 3201 Hurst Road with enough force to knock the 14-foot by 24-foot structure off its’ concrete block foundation, 3½ feet on the SE and 1½ feet on NE. The property owner Charles E. “Spud” Burnett, was in the cabin at the time of the accident and was knocked unconscious. The collision also caused significant damage to the cabin’s structure and a heating fuel line breakage (outside the cabin). A 120-gallon Above Ground Storage Tank (AST) of heating fuel with 0.3 gallons of hazardous Arctic Shield (Trade Name) cold weather protection, had been providing #1diesel fuel to a monitor stove inside the cabin. The release of fuel oil resulted in the property owners’ estimate of 83 gallons of diesel fuel underneath the cabin. Chena Slough is located 100 feet to the south and a potable well is 80 feet to the west. Amundsen Environmental Services (AES) was contracted by the Anchorage GEICO Claims Office, to prepare an Environmental Site Assessment (ESA) of the property. The document prepared was dated April 20, 2012.

AES was contracted again in August 2013 to prepare a Site Characterization Work Plan for GEICO and ADEC, to clean up the contamination at 3201 Hurst Rd. The object of a Site Characterization Work Plan is to describe events which have occurred, document existing conditions, evaluate the potential threat to human health, safety, welfare and the environment and to propose cleanup options. This work plan is found in Appendix A and is the revised ESA.

2.0 SITE BACKGROUND (con't)

Site Description

Figure 1 is the Alaska State Map which indicates the project area is located in the Interior of Alaska, near the City of North Pole. Figure 2 is the Vicinity Map showing the property of concern is situated north of and outside the city limits of North Pole, Alaska.

The property is known as Tax Lot 313, Section 3, Township 2 South, Range 2 East, Fairbanks Meridian and is located within the Fairbanks North Star Borough (FNSB). The address is 3201 Hurst Road, North Pole, Alaska 99705. The zoning is GU-1 (General Use District) and the land class is General Residential. The owner since 1969 is Charles E. Burnett (Spud).

Figure 3 is a 2007 photograph taken by the FNSB. The property is featured in the center of the picture. This 1.75 acre Lot is located on an accreting (growing) side of Chena Slough which means the erosion is on the opposite side of the waterway. The property lines on Figure 3 are approximate and need to shift to the northeast. The site of the accident/spill is the red-roofed cabin to the west of the car seen travelling on Hurst Road. A shallow (30 foot deep) potable well (summer use) is located between the 2 red roofed cabins, to the NW of the spill site, adjacent to the horseshoe-shaped driveway. Another well lies 30 feet to the NW beyond the first well.

Figure 4 is a FNSB soils and flood zone map, based on a May 2010 topography map. The subject property lies within the Jarvis-Salchaket Soil Complex. Jarvis soils are very fine sandy loam, moderately deep, well-drained and do not contain permafrost. Salchaket soils are nearly level, well-drained soils recently deposited, These soils are sandy with some layers of silt and are underlain by thick deposits of coarse sand and gravel. Mr. Burnett brought in gravel to build the site up 3 ½ feet many years ago (personal communication). Most of property is located in Flood Zone A, a special flood hazard area inundated by the 100-year flood.

3.0 SITE SAMPLING

Amundsen Environmental Services sampled the soils under the center of the cabin at 3201 Hurst Road on September 16, 2013, shortly after the building was moved. This was an emergency sampling episode with no warning that the cabin was being moved that day, therefore the field screening PID had not been charged. The sample was taken from the center of a line drawn in the soil by Spud Burnett, which represented the fuel oil line of travel. Appendix A, Figures 13 and 14 show the sample site. Appendix B contains the laboratory reports (Alaska Analytical and Pace Analytical) with discussion presented in Section 4.0 of this Closure Report. Appendix E contains the Field Notes.

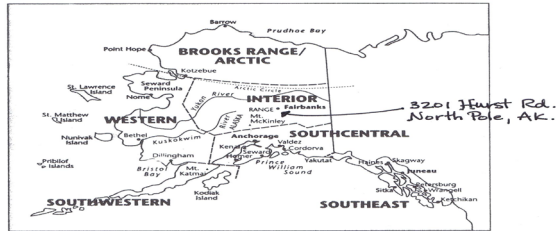


Figure 1. State of Alaska Location Map

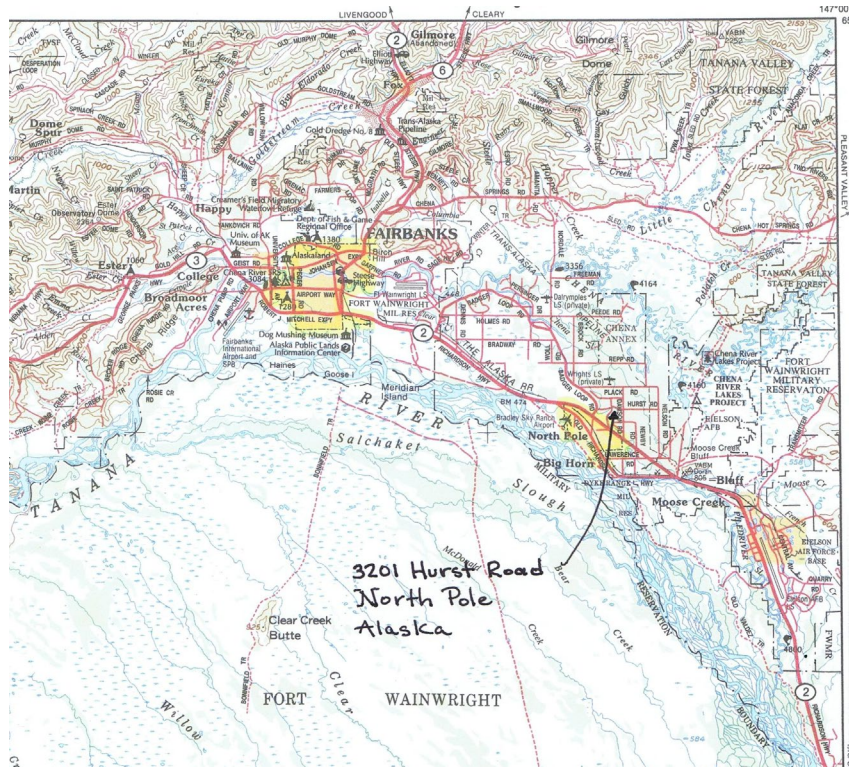


Figure 2. Project Vicinity Map



Figure 3. FNSB (2007) photo of 3201 Hurst Rd., North Pole, Alaska
(center of photo)



Figure 4. FNSB Soils and National Flood Insurance Rate Map

3.0 SITE SAMPLING (con't)

Suzan Amundsen, B.S., M.S., Environmental Engineer, provided the qualified, impartial third party oversight, soils field screening on September 26, 2013. Field screening was performed with a PhoCheck 1000 Ion Science Photo-Ionization Detector (PID), calibrated with 100 parts per million (ppm) Isobutylene. Headspace field screening was undertaken by collecting fresh soil 3-6 inches deep with disposable gloves, from below the center of a shoveled excavation and placing it into resealable polyethylene bags, filling the bag to 1/3 capacity (per ADEC Draft Field Sampling Guidance, May 2010, p.12). Results were read after the soil warmed up and began to volatilize (less than 1 hour). The samples collected were part of the surface hydrocarbon plume which has migrated downslope to the west from the AST due to snowmelt and storm water runoff for nearly 2 years. The field screening revealed a plume over 100 feet long at relative hydrocarbon concentrations greater than 4000 ppm (Appendix A, Figure 15).

All activities were logged into a field notebook (Appendix D) and photographs were taken. Figure 5 is a sketch of 3201 Hurst Road and shows the first soil sample location (September 16, 2013) and the ten field screening locations (September 26, 2013).

Figure 6 shows the pre-soils excavation AST/cabin site location during field screening.

The ADEC authorized the Site Characterization Work Plan (Appendix A). Soil removal and stockpiling, field screening and soils sampling began on September 27, 2013. The temperature was sunny and 47 deg F. Spud Burnett, under the direction of Amundsen Environmental, used his Mustang Skidsteer to excavate contaminated soils from the former site of the AST and stockpile it on tarps laid out to the north (Fig.7). Figure 8 shows the stockpiled soils as of October 6th.

Field screening of soils was undertaken at approximately 1 sample per 10 cubic yards of excavated soil, on sidewalls at the horizontal limit of excavation and at the excavation base (floor) at the limit of excavation. The top foot of soil was also excavated along a western gradient towards and beyond the white trailer, following the surface plume field-screened the day before.

Soils samples were collected where the highest PID readings were found and at the limit of excavation for GRO, DRO, RRO, VOC and Semi-VOC analysis. The discrete soil samples were collected with disposable gloves, from the center of the Skidsteer bucket or shovel excavation and placed into laboratory-provided sample bottles (Alaska Analytical Laboratory, an ADEC-certified laboratory). Duplicate samples were collected for QA/QC at a rate of one field duplicate per analysis and 10 project samples. Samples were collected with methanol preservative for GRO/BTEX analysis under Method AK 101/8021B, and VOCs via Method 8260B. Quality control of field sample collection includes appropriateness and accuracy of sample collection, adherence to sample handling protocols and appropriateness of the lab analyses. In addition to collecting field duplicates for each target analyte, trip blanks and a temperature blank were utilized. All samples were placed immediately into iced coolers for transport under Chain of Custody, to the laboratory for analysis on a 3-day rush request .

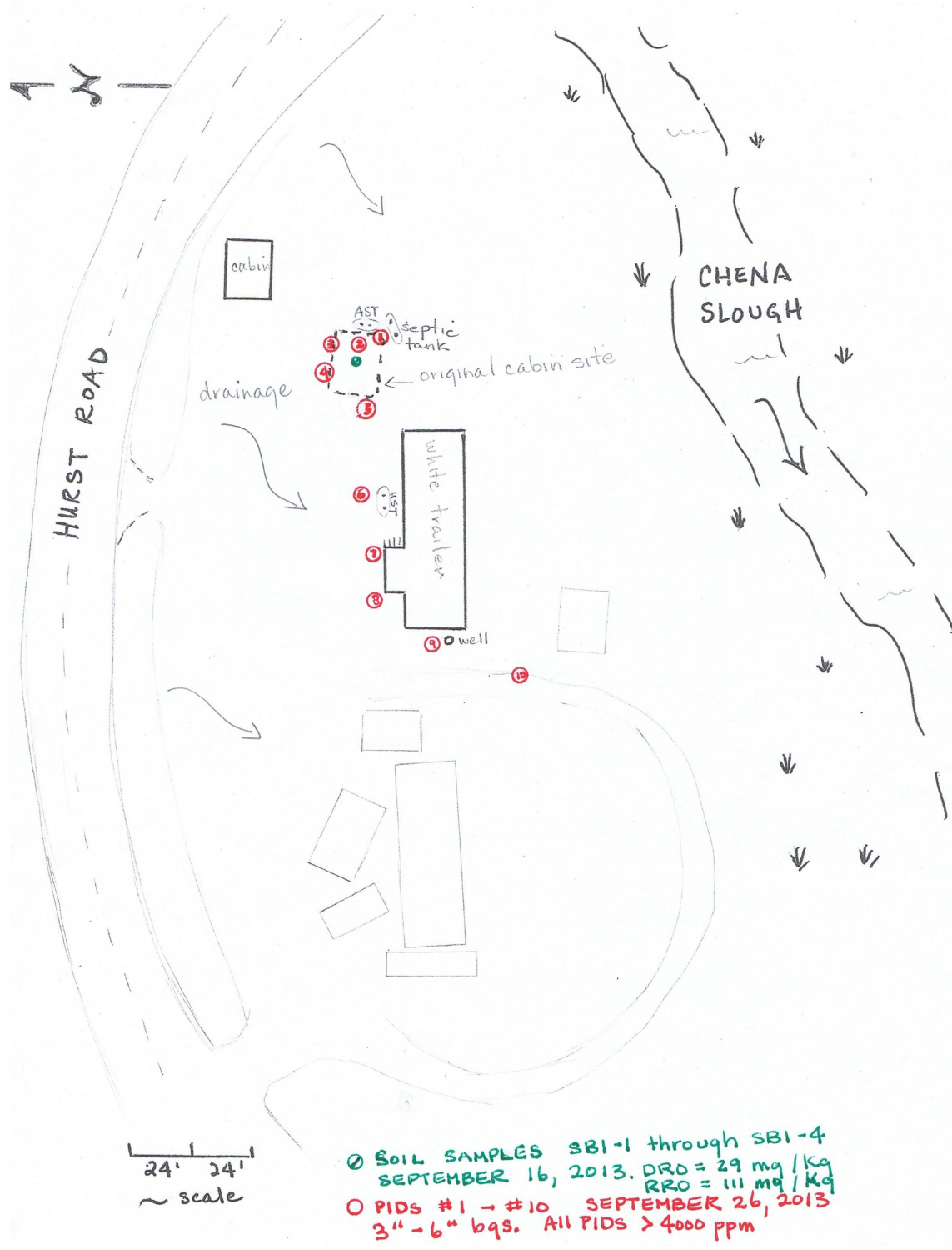


Figure 5. Soils sampling (9/16/13) and soils field screening (9/26/13) at 3201 Hurst Road, North Pole, AK



Figure 6. Looking SE at a pre-soils excavation view of the cabin and above-ground fuel storage tank site, during soils field screening at 3201 Hurst Road, North Pole, AK, on September 26, 2013



Figure 7. Looking east on September 27, 2013 at the former cabin and AST site after hydrocarbon-contaminated soils were removed and temporarily stockpiled under the blue tarp to the left in the photo



Figure 8. Looking NE on October 6, 2013 at the growing, temporary hydrocarbon stockpile at 3201 Hurst Rd.



Figure 9. Looking West on October 6, 2013 at soil removal from the path of hydrocarbon transport during snowmelt and rainfall

3.0 SITE SAMPLING (con't)

The soil sampling preliminary results (GRO, DRO, BTEX) were available from Alaska Analytical the following week but not from their associate Pace Analytical (Volatiles and Semi-Volatiles), due to end of the year/pre-freeze up, sample overload. On October 6th through October 8th more soil was field screened, excavated and stockpiled. Richard Nicolai, owner of Tangent and Taper Construction, was the contractor hired to transport the five dump truck loads of soil to OIT, Inc. for thermal remediation (as approved by ADEC), and haul in 5 clean loads of fill. Spud Burnett loaded Mr. Nicolai's truck with stockpiled soils on October 7th and 8th and while he was gone to OIT, field screening and soils excavation cleanup continued until all accessible areas were tested and excavated if hydrocarbons were detected. The analytical results are found in Appendix B (AA2 and Pace2) and are discussed in Section 4.0 Analytical Results.

On the morning of October 11, 2013, Fairbanks Pumping and Thawing steamed out the well to the white trailer at 3201 Hurst Road, in order for water samples to be collected for testing. The temperature was 25 deg. F the previous evening. Amundsen Environmental waited until the afternoon (42 deg. F) to sample the well because steam can affect the volatile chemistry. The well was found to have refrozen in early afternoon and Fairbanks Pumping and Thawing returned, thawing a larger hole. The well was bailed of some 8 gallons of water over a period of one hour. Water samples were collected with a new Teflon bailer at 22 feet below ground surface and placed into laboratory provided glassware. Duplicate samples were collected for GRO, DRO, Volatiles and Semi-Volatiles, placed into an iced cooler and taken under Chain-of-Custody to Alaska Analytical Laboratory. The analytical results are found in Appendix B (AA3 and Pace 3) and are discussed in Section 4.

4.0 ANALYTICAL RESULTS

The Alaska Analytical Laboratory results (GRO, DRO, RRO, BTEX) and Pace Analytical Laboratory results (VOC's and Semi-VOCs) for the soils and well water are found in Appendix B with a summary found in Table 1 below. No Gasoline Range Organics (GRO) or BTEX (Benzene, Toluene, Ethylbenzene, or Xylene) was found.

Diesel Range Organics (DRO) was detected in all samples, but most were well below ADEC Cleanup Levels for Method 2, Migration to Groundwater, Under 40 inches of annual rainfall. One sample exceeded the ADEC Cleanup Level of 250 mg/Kg and that was collected from Sample Site #5, a hole beside the white trailer stairs (Figure 10). Spud Burnette said this was where the water pooled during a downpour. This site is also downgradient of the UST for the white trailer. Sample #7 had a DRO of 220 mg/Kg, just below ADEC Cleanup Level, but the chromatogram was atypical (some other fuel oil). Table 2 shows the well water results were all non-detect except DRO, which was found in duplicate samples, but well below ADEC Cleanup Levels. (con't on p.16)

Table 1
3201 Hurst Rd. Soils Results (milligrams per Killogram {mg/Kg})

Sample #	Depth (bgs)	PID (ppm)	GRO	BTEX	DRO	RRO	VOCs	Semi-Vocs
(9/16/13)								
SB1 (1-4)	1'	-	ND	ND	29	111	ND	ND
(9/27/13)								
1. SB2 (1-8)	5'	40	*ND	ND	*34.5	*ND	*ND	*ND
			*ND		*7.6	*ND	*ND	*ND
2. SB2 (9-11)	3'	69	-	*ND	2.42	ND	-	-
				*ND				
3. SB2 (12-14)	1.5'	99	-	-	5.5	19.8	ND	ND
4. SB2 (15-17)	1.5'	905	-	-	9.06	27	0.234	ND
							Trichloro- Fluoromethane (Freon-11)	
5. SB2 (18-20)	2.5'	750	-	-	893 [^]	24.7	#0.477	ND
							Methylene- Chloride	ND
6. SB2 (21-22)	1.4'	397	-	ND	46.9	150	-	-
7. SB2 (23)	1.5'	620	-	-	220!	51.8	-	-
8. SB2 (24)	1.5'	44	-	-	10.2	30.1	-	-
9. SB2 (25)	1'	30	-	-	3.22	ND	-	-
10. SB2 (26)	1.6'	123	-	-	4.99	21	-	-
Trip Blanks			ND	ND	-	-	ND	-
ADEC Soil Cleanup Levels, Method 2, Migration to GW, Under 40" Rainfall, (mg/Kg)			+	+	250	11,000	Freon-11 = 86 Methylene- Chloride = 0.016	+

bgs = below ground surface

ND = Non Detection; (-) not analyzed

*duplicate; (+) analyte not detected therefore ADEC Cleanup Level irrelevant

[^] dilution factor 20. Surrogate outside control limits

! Sample chromatogram does not have the typical hydrocarbon pattern when compared to the standard chromatogram

#Alaska Analytical lab believes this analyte is present due to lab-contaminated glassware

Table 2
3201 Hurst Rd. Well Water Results (milligrams per Liter {mg/L})

Sample	Depth (bgs)	GRO	BTEX	DRO	VOCs	Semi-Vocs
(10/11/13)						
SB3-1A	22'			*0.0165		
SB3-1B	"			*0.0309		
SB3-2A	"	*ND				
SB3-2B	"	*ND				
SB3-3A	"		ND!		*ND	
SB3-3B	"		ND!		*ND	
SB3-4A	"					*ND
SB3-4B	"					*ND
Trip Blanks		ND			#0.002 Toluene #0.026 Methylene- Chloride	
ADEC Table C. Groundwater Cleanup Levels (mg/L)		+	+	1.5	1.0 Toluene 0.005 Methylene- Chloride	+

mg/L = milligrams per liter

bgs = below ground surface

ND = Non Detection, *duplicate

!BTEX analyzed as Method 524.2-VOCs

+ analyte not detected therefore ADEC Cleanup Level irrelevant

Alaska Analytical Laboratory believes these analytes are present due to lab-contaminated glassware. Neither analyte was found in the well water samples.

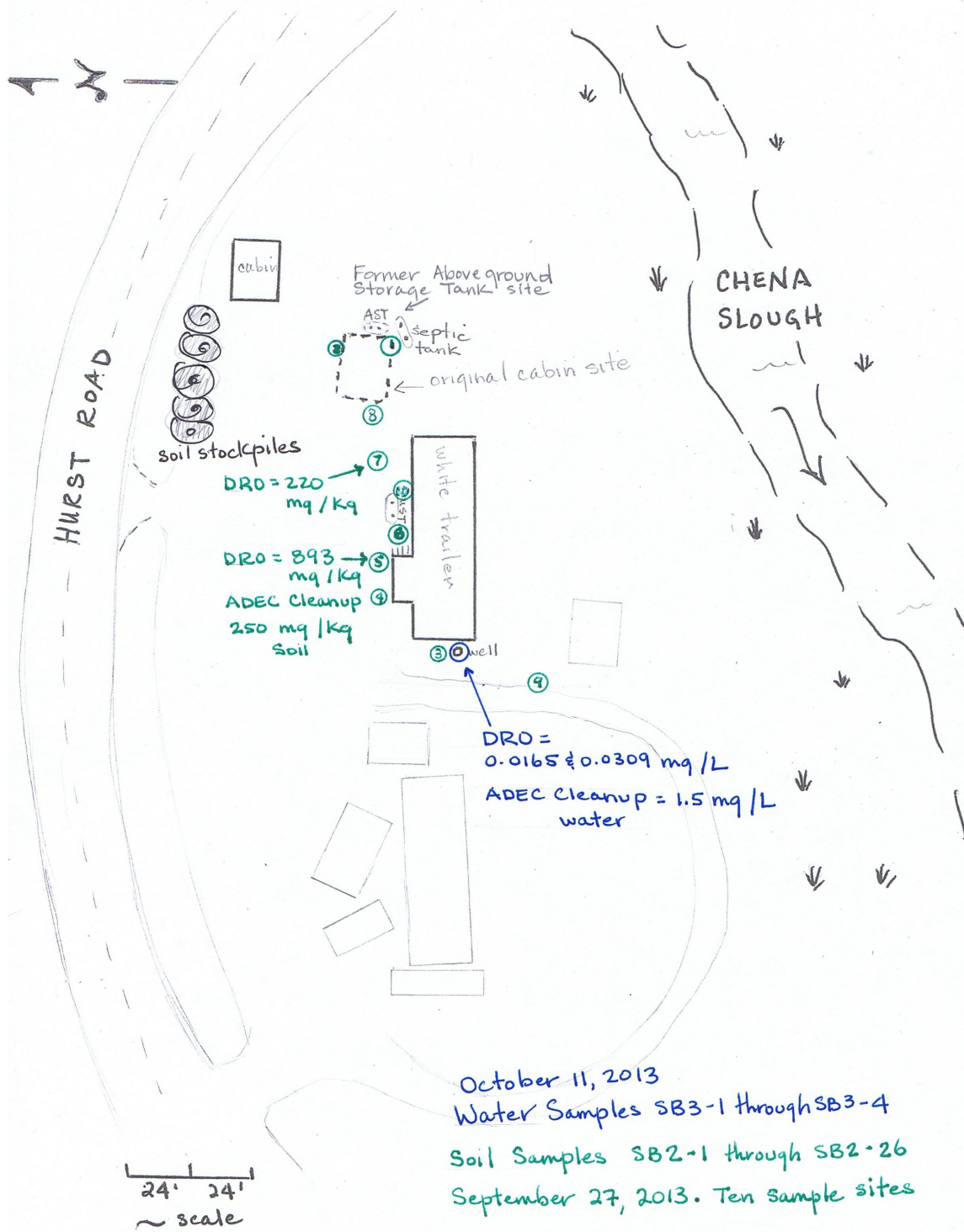


Figure 10. 3201 Hurst Rd soils sampling on 9/27/13 (ten sites) and well water sampling on 10/11/13

4.0 ANALYTICAL RESULTS (con't)

Residual Range Organics (RRO) were also detected but well below ADEC Cleanup Levels of 11,000 mg/Kg. The Volatile soils analyses (VOCs) using Method 8260 and the Semi-Volatile soils analyses using Method 8270 were performed by Pace Laboratory. Trichlorofluoromethane (Freon-11) was detected in one sample (#4) near the white trailer tip-out (Figure 10) at a concentration well below ADEC Cleanup Levels. Methylene Chloride was detected in the hole by the white trailer stairs at 0.477 mg/Kg which far exceeds an ADEC Cleanup Level of 0.016 mg/Kg. This highly volatile compound is a common lab contaminant as described in the laboratory Case Narrative. It was not found in any other soil or water samples but was found in the trip blank for the water samples which came from the lab and never left the iced cooler. Alaska Analytical said “ The Methylene Chloride found in Sample #5 and the well water trip blank (in addition to Toluene) are from lab contaminated glassware” (personnal communication).

Semi-Volatiles were non-detect in both soil and water.

Assessing the value of analytical results for cleanup purposes involves scrutinizing the sampling techniques, quality of the samples and the laboratory QA/QC. All laboratory results must be reviewed for quality, validity and usability. Appendix C contains the ADEC Laboratory Review Checklist for the soil and water samples collected on 9/27/13 and 10/11/13.

5.0 SOILS REMEDIATION

Amundsen Environmental Services proposed to remediate fuel oil-related hydrocarbon-contaminated soils found at 3201 Hurst Road by excavating out the accessible soil and transporting it to a thermal remediation facility. The plan was approved by the ADEC. Organic Incineration Technologies (OIT, Inc.) located some 8 miles south of the project site, was contacted and the required forms were submitted (Waste Analysis Form with the Alaska Analytical Laboratories Data from the September 27, 2013 sampling event, Certification of RCRA Exempt Status Form and a Transport Approval Form which was signed by Will Boger, ADEC Project Manager). These forms are located in Appendix E.

Soil removal was undertaken on October 7 and 8, 2013 and 5 dump truck loads of the contaminated soil were delivered to OIT (53.12 tons). The soils were thermally treated and post treatment tested by Alaska Analytical Laboratory to meet ADEC Level A Cleanup Standards and a Certificate of Thermal Treatment was awarded. OIT will dispose of the soils.

6.0 CONCLUSIONS

The cleanup of hydrocarbon-contaminated soils resulting from a truck accident on a cabin at 3201 Hurst Road, North Pole, Alaska and a subsequent heating fuel release to the property, has been accomplished. The soils were successfully remediated to below ADEC Level A Cleanup Standards at OIT, Inc. A Certificate of Thermal Treatment and final laboratory results from Alaska Analytical Laboratory are found in Appendix E. All accessible soils were removed. Hydrocarbons have likely migrated into the adjacent septic leach field long ago but are not readily accessible. Any other residual contamination from the spill event is deemed minimal and has low potential for migration to groundwater or surface water and poses no threat to human health, safety, welfare and the environment.

Appendix A

**Environmental Site Assessment
Site Characterization Work Plan
September 27, 2013**

(located in CD attachments)

Appendix B

Alaska Analytical Laboratory Results (AA1) from 9/16/13 (10 pages)
Pace Analytical Laboratory Results (Pace1) from 9/16/13 (23 pages)

Alaska Analytical (AA2) from 9/27/13 (29 pages)
Pace Analytical (Pace2) from 9/27/13 (43 pages)

Alaska Analytical (AA3) from 10/11/13 (14 pages)
Pace Analytical (Pace3) from 10/11/13 (38 pages)

(located in CD attachments)

Appendix C

ADEC Laboratory Data Review Checklist

(located in CD attachments)

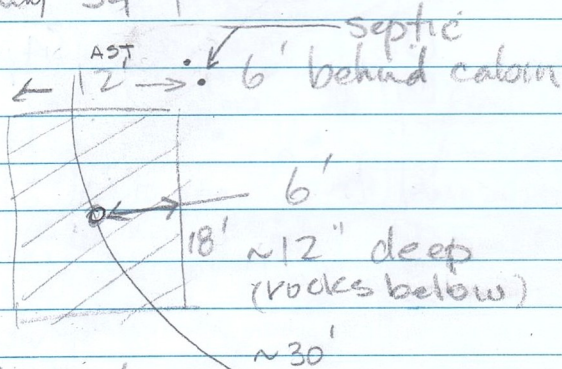
Appendix D

**Field Notes from 9/16/13, 9/27/13, 10/7/13
10/8/13, 10/11/13**

Sept 16/13 SPUD BURNETT
 3201 HURST RD

4:30 samples
 windy, sun 39° F

☒ cabin moved to this site



- odor hydrocarbons
- Sample site identified by SPUD as on travel path of hydrocarbons (fuel oil)

SBI-1	AK 101	GKO
SB 1-2	8260	VOC'S
SB 1-3	8270	PAH
SBI-4	AK 102 / 103	DRO / RRO

3 day rush

Cabin had just been moved onto blocking NE ~ 30'. E access road was now usable. Spud had used his skid steer to level the ground at the new cabin site

470F SPUD BURNETT Known Found
 Sept. 27/13 0 4.9
 100 99.1
 end

Sept. 27/13
 Sample #2
 PID #3
 PID #12
 Sample #12
 PID #12
 Sample #8
 PID #9
 Sample #7
 PID #8
 Sample #6
 PID #5
 Sample #4
 PID #4

First PIDs
 Final sample locations
 Final PIDs
 next page

VID #11 Sample #9 road
 Sample #3 well

45°F SPUD BURNETT Known Found
 Sept. 26/13 0 5.8
 100 99.2
 end

Sept. 26/13
 120 gal
 14 x 24
 12 x 20 compost
 9' well

no pids from
 cabin - too cold

PID TIME DEPTH READ RESULT

#1 blk soil 5:15 6" 6:13 >4000
 greasy HighVOC

#2 8' NW 5:17 4" 6:14 >4000

#3 9' NN tank 5:19 3" 6:15 >4000

#4 20' tank 5:21 3" 6:16 >4000

#5 gravel 30' tank 5:23 3" 6:19 >4000

#6 2.5' filler 5:25 3" 6:21 >4000
 white timber

#7 67' fuel tank 5:26 3" 6:23 >4000
 1" tip out (hole)

#8 6' corner 5:32 3" 6:30 >4000
 2" spill

#9 well end 5:40 6" 6:31 >4000

#10 edge road 5:45 6" 6:32 >4000

Oct 7/13
 3201 29°
 Hurst
 * N

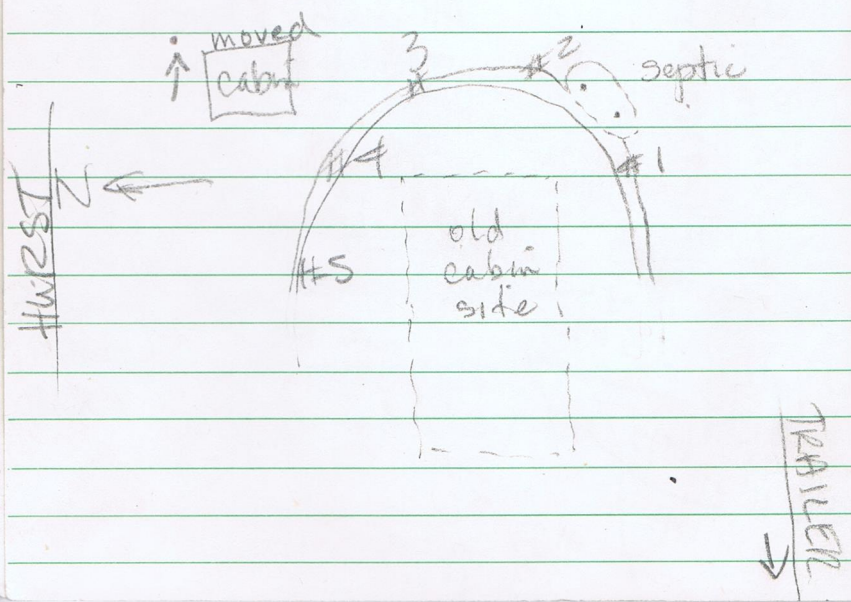
All results > 4000
 except #2 & #8

sidewalk
 #5 10' N
 2.5' bgs
 #6 11' N
 2.5' bgs
 #7 11:50
 5' west
 3' bgs
 #8 15' septic
 #9 6' N
 1 1/2 bgs
 #3 3' N
 2.5' bgs
 #2 1' N septic
 2' bgs
 11:45
 2' bgs
 end wall
 septic
 12' #1
 5' west
 3' bgs

5201 HURST Oct 8 40°

#1	3860.0	
#2	1309.6	Removed dirt (2')
#3	3950.1	from all areas
#4	74000	Sampled on Oct 7
#5	2310.2	Resampled #1-8
#6	> 4000	
#7	> 4000	
#8	1589	

#1	528	Can't take
#2	37	any more off
#3	51	due to septic
#4	109	tank
#5	79.1	



FINAL 2ND PIDS soil samples
 Sept 27/13 3201 Hurst Rd N.P
 (SB 2) ^{samples}

AST Sample # (1) 2A:30 GLO Dups " (VOC'S)
 " # 5-4 " 8260 " DRO/RPO
 Site #1 5' " # 5-6 " 102/103 " DRO/RPO
 PID: 39.5" # 7-8 " 8270 " (Semi VOC)
 Site " # 9-10 (4:50) 8021B (dups)

#2
 Sidewalk (NI) # 11 " 102/103 (DRO/RPO)
 Curbside 3' x
 PID 6A.3
 Site #3 Sample 12 (5:25) VOC 8260
 13 SEMI VOC 8270
 well 1.5' 14 102/103
 99.3 PID

Site #4 (5:35) 8260
 tipout 1.5' PID 905 8270
 102/103

Site #5 (5:40) 8260
 hole by stairs 102/103
 PID 1522/20 8270
 Site #6 (5:50) DRO/RPO
 east of stairs 39 ft 8021B
 Site #7 1.5' (23) 5:55 DRO/RPO

NE wbt transfer (PID 49)
 PID 620

Site #8 1.5' (24) 6:05 DRO/RPO
 pump fold cabin site PID 43.7

Site #9 road (25) 6:10 DRO/RPO
 PID 30.2 1' deep

Site #10 (26) 6:15 DRO/RPO
 white transfer fuel tank 1 1/2' + PID 173

3201 Hurst Rd N.Pole
 Oct. 11/13
 42° afternoon
 85% freezing last night

Pumping & thawing came in AM
 Sample prep ~ 2:40 Lab's say 3PM

SB-3-1 < A AK 102
 SB-3-2 < A AK 101
 SB-3-3 < A 524 VOC'S
 SB-3-4 < A 525 Semi VOC
 SB-3-4 < B

- Well re-frozen. Fairbanks Pumping
 came again. Removed entire
 well blockage. Waited ~ 1/2 hr
 (~8 gal)

- Bailed well with bailer for
 ~ 60 min. Water level was ~ 22' below
 casing lip. Water clear - no odor
 (a little musty)
 no color

Started sampling ~ 5PM
 Finished after 6PM

Appendix E

**OIT, Inc. Documentation, Analytical Results
and Certificate of Thermal Remediation
(14 pages)**

(located in CD attachments)