Underground Tanks at Volk Field, Camp Williams and Hardwood Range

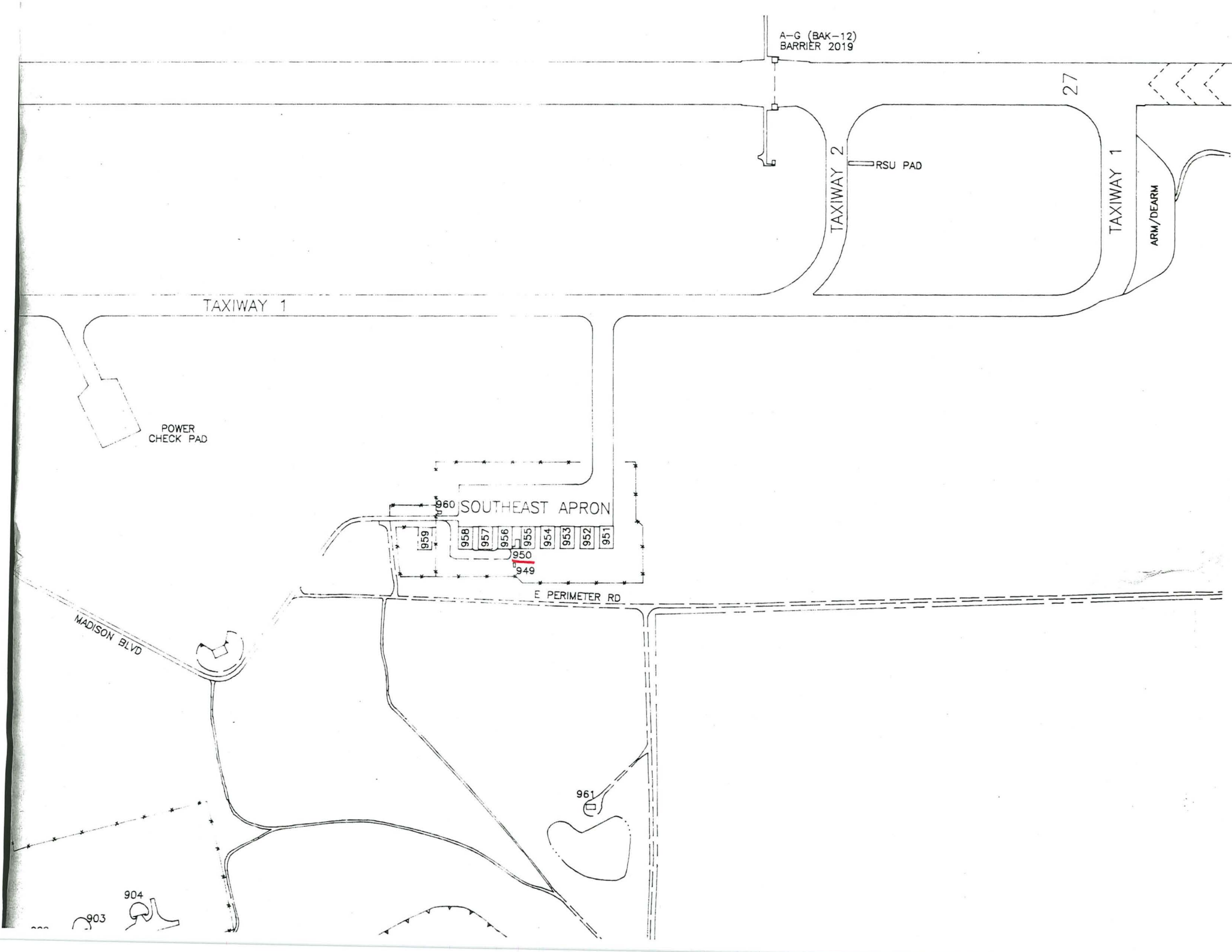
Bldg./Site No.	UID#	Location and Contaminant	Closure Status (as of 04/11/02)
Bldg. 12, site 1	03-29-000014	Camp Williams (2) 8000 gal. gasoline tanks	closed 02/21/97
Bldg. 12, site 2	03-29-152494	Camp Williams (1) 5000 gal. gasoline tanks	closed 03/12/98
Bldg. 15, site 1	03-29-001031	Camp Williams	closed 07/20/94
Bldg. 15, site 2	03-29-152484	Camp Williams Bldg. 15, SI 09/12/97; Rem. Design 05/01/00; closure request rec'd10/23/03; this site site had (1) 5000 gal. diesel; (1) 2000 gal.heating oil: and (1) 2000 gal. unleaded tanks removed	closed June 28, 2004
Bldg. 17	03-29-000349	Camp Williams, removed 6000gal. fuel tank,confine investigation to tank area	closed c/PAL exemp. 07/23/97
Bldg. 18	03-29-513838	Camp Williams, 2000 gal. heating oil	closed 05/22/96
Bldg. 19	03-29-513831	Camp Williams, 5000 heating oil	closed 09/11/96
Bldg. 23	03-29-001304	Camp Williams heating oil, diesel #2, 1500 gal. (add to BRRTS)	closed 09/29/97
Bldg. 28	03-29-099636	Camp Williams, 100 gal. leaded gasoline tank	closed 05/30/96
Bldg. 100		500 gal. tank, no detects	removed in 1991, NFRAPed
Bldg. 102		500 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 113		500 gal.#2 tank, no detects	removed in 1991, NFRAPed
Bldg. 115		2000 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 117		500 gal. #2 diesel tank, detects of TPH diesel at 267 ug/g	removed in 1991, NFRAPed
Bldg. 121		500 gal. tank, no detects	removed in 1991, NFRAPed
Bldg. 122		2000 gal. tank, no detects	removed in 1991, NFRAPed
Bldg. 125		500 gal. #2 diesel tank, detects of TPH diesel at 40,500 ug/g	removed in 1991, NFRAPed
Bldg. 126		300 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 127 and 128		560 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 129 and 130		560 gal.#2 diesel tank, detects of toluene 3.6 ng/g	removed in 1991, NFRAPed
Bldg. 131 and 132		560 gal. #2 diesel tank, detects of TPH diesel at 1,370 ug/g	removed in 1991, NFRAPed
Bldg. 134		500 gal.#2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 135		500 gal. #2 diesel tank, no detects but some soil staining	removed in 1991, NFRAPed
Bldg. 136		500 gal. #2 diesel tank, no detects but some soil staining	removed in 1991, NFRAPed
Bldg. 138		560 gal. #2 diesel tank, some contamination	removed in 1991, NFRAPed
Bldg. 302		500 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 309		500 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 313		500 gal. tank, no detects	removed in 1991, NFRAPed
Bldg. 316	03-29-113841	560 gal. #2 diesel tank, no detects	closed 10/09/91
Bldg. 324	03-29-099638	Volk Field, 10,000 gal. #2 diesel tank (waste oil)	closed 06/30/96
Bldg. 329	03-29-112003	Volk Field, 6000 gal. #2 diesel tank	closed 11/15/96

Bldg. 398	03-29-099646	Volk Filed, removed 10,036 gal. leaded gasoline tank	closed 05/30/96
Bldg. 398	03-29-099642	Volk Field, 500 gal. leaded gasoline	closed 05/30/96
Bldg. 398	03-29-099650	Volk Field, 10,000 gal. diesel fuel tank	closed 05/30/96
Bldg. 400	03-29-113840	1000 gal. #2 diesel tank, detects of TPA diesel at 2,400 ug/g	removed in 1991, NFRAPed
Bldg. 401		500 gal. #2 diesel tank, some stained soil	removed in 1991, NFRAPed
Bldg. 403	03-29-113839	Volk Field, 500 gal. #2 diesel tank	closed 02/21/97
Bldg. 414		500 gal. #2 diesel tank, some fuel oil stained soil	removed in 1991, NFRAPed
Bldg. 415		500 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 428		500 gal. #2 diesel tank	removed in 1991, NFRAPed
Bldg. 433		500 gal. #2 diesel tank, detects of TPH diesel at 8,920 ug/g	removed in 1991, NFRAPed
Bldg. 449	03-29-099648	Volk Filed, 6000 #2 diesel tank	closed 05/30/96
Bldg. 508		1000 gal. #2 diesel tank, detects of TPH diesel at 53.5 ug/g	removed in 1991, NFRAPed
Bldg. 509	03-29-099652	Volk Field, 1000 leaded gas tank	closed 05/30/96
Bldg. 510	03-29-099654	Volk Field, 4000 gal. leaded gasoline	closed 05-30-96
Bldg. 510	03-29-099656	Volk Field, 500 gal. #1 diesel fuel tank	closed 05-30-96
Bldg. 520		1000 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 522 & 523		1000 gal. #2 diesel tank, detects of TPH diesel at 288 ug/g	removed in 1991, NFRAPed
Bldg. 525		500 gal. #2 diesel tank, no detects	removed in 1991, NFRAPed
Bldg. 526		500 gal. #1 diesel tank, detects of TPH diesel at 240 ug/g and #2 500 gal. diesel tank	removed in 1991, NFRAPed
Bldg. 528	03-29-099658	Volk Filed, 500 gal. #1 diesel fuel tank	closed 05-30-96
Bldg. 530	03-29-099660	Volk Field, 500 gal. #1 diesel tank	closed 05/30/96
Bldg. 531	03-29-113842	Volk Field, 560 gal. #2 diesel tank	closed 10/30/91
Bldg. 601	03-29-111986	Volk Field 500 gal. #1 diesel tank	closed 10/15/96
Bldg. 613	03-29-001106	Volk Field, removed 300 gal. #2 diesel tank	closed c/gw use restr.07/23/97
Bldg. 616	03-29-152331	Volk Field, removed 300 gal. #2 diesel tank	closed c/gw use restr.06/23/94
Bldg. 907		450 gal. #2 diesel tank	removed in 1991, NFRAPed
Bldg. 908		500 gal. #1 diesel tank, some detects and 560 gal. #2 diesel tank	removed in 1991, NFRAPed
Bldg. 916		500 gal. #2 diesel tank, detects of TPH diesel at 139 ug/g, stained fuel oil soil	removed in 1991, NFRAPed
Bldg. 932	03-29-099662	Volk Field, removed 6000 gal. fuel oil tank	closed 05/30/96
Bldg. 950	03-29-099664	Volk Field, 500 gal. #1 diesel tank and 6000 gal. #2 diesel tank	closed 05/30/96
Bldg. 2000	03-29-099666	Volk Field, 300 gal. #2 diesel tank (550 gal. #1 diesel)	closed 05/30/96
A-4 Crash site	02-29-250442	A-4 Crash site	closed 02/11/94
Site 1	02-29-249438	Volk Field, Fire Training Area, estimated 266,500 gals. Fuel dumped, continue monitoring	in phytoremediation as of 05/2004
Site 2	02-29-250433	Volk Field, Former Landfil C, (municipal waste, hydrocarbons, fuels, demolition debris)	~~continue monitoring~~ Closed 7-20-01
Site 3	02-29-250434	Volk Field, noted as Sites 3/6, Chronic AST fuel spill area, continue monitoring	closed c/gw & soil restrict.12/09/04
Site 6	02-29-257894	Volk Field, JP-4 fuel spill (75 to 100 gals.) combined with Site 3 (continue monitoring)	closed c/gw & soil restrict.12/09/04

Site 4	02-29-250435	Volk Field, Transformer Fluid Disposal site (10 transformers emptied on ground 1967 or '68)	closed 05/08/97
Site 5	02-29-250436	Volk Field, KC97 crash site in 1978, 2000 to 5000 gal. of JP-4 released and burned ~50%	closed 05/08/97
Site 7	02-29-000038	Volk Field, Former Landfil A, continue monitoring	~~potential NFRAP~~ ~~Closed~~ 2-22-06 NFA
Site 8	02-29-250589	Volk Field, F-84 crash site in 1964 at end of east runway at Volk Field	closed 05/08/97
Site 9	02-29-250437	Volk Field, Former Landfill B	NFRAPed by close com.04/12/98
Site 11	02-29-250438	Electron Tube Disposal site	closed 01/22/98
Site 12	02-29-250439	Oiled Roads and Parking Lot sites	closed 01/22/98
Site 13	02-29-181505	Ethylene Glycol Discharge area, conduct gw monitoring	NFRAPed by close com. 03/12/2001
Site 15	02-29-250440	Sanitary Wastewater System Ponds	closed 01-01-98
Site 16	02-29-181504	Bromochloromethane spill	NFRAPed by close com. 03/12/2001
Site 17	02-29-250441	Transformer Fluid spill, monitor gw	closed 05/08/97
Site 18	03-29-000559	WANG Hardwood Range, 560 gal. diesel & 1000 gal. unlead gasmoved to Site 10 on 07/28/93	NFRAPed by close com. 11/15/96
Site 14	02-29-181499	WANG Hardwood Range, Small Solid Waste dump for household waste	NFRAPed by close com. 03/12/2001
Site 10	02-29-250590	WANG Hardwood Range, Munitions Burial site	~~open -planning to excavate munitions~~ NFA 4-12-01
A-10 Crash site	02-29-000245	WANG A-10 Crash site in Neceedah wetlands in 1991 (02-29-001053)	closed 07/16/97
A-10 Crash site	02-29-001053	A-10 crash site at Hardwood Range	closed ????
Alert Hanger Area	04-29-047788	50-100 gals/JP-4 leak from transport truck on 10--29-92	
Motor Pool		1,500 gal. #1 diesel tank, unknown	
Motor Pool		2,000 gal. waste oil tank, unknown	
Motor Pool		10,036 gal. tank, MOGAS regular, good	
Motor Pool		5,264 gal. tank, MOGAS regular, good	
AGE Fueling Station		1,200 gal. tank MOGAS regular, good	
Hardwood Gun Range		550 gal. tank MOGAS regular, good	
Hardwood Gun Range		550 gal. #1 diesel tank, unknown	
POL Area		25,000 gal. tank AVGAS, good	
POL Area		2,000 gal. waste fuel tank, unknown	
POL Area		17,062 gal. #2 diesel, good	
POL Area		9,994 gal. #2 diesel, good	
POL Area		11,750 gal. #2 diesel, good	
Bldg. 17		6,000 gal. #2 diesel, unknown	
Bldg. 116		500 gal. #2 diesel, unknown	
Bldg. 133		300 gal. #2 diesel tank, unknown	
Bldg. 137		560 gal. #2 diesel, unknown	
Bldg. 300		500 gal. #2 diesel, unknown	
Bldg. 325		1,000 #2 diesel, unknown	

Bldg. 331		550 gal. #2 diesel, unknown
Bldg. 503		4,000 gal. #2 diesel, unknown
Bldg. 504		6,000 gal. #2 diesel, unknown
Bldg. 517		550 gal. #2 diesel, unknown
Bldg. 601		500 gal. #1 diesel tank, unkown
Bldg. 933		500 gal. #1 diesel tank, unkown
Bldg. 2013		300 gal. #1 diesel tank, unknown
Bldg. 2016		300 gal. #1 diesel tank, unknown
Bldg. 2020		550 gal. #2 diesel, unknown
Camp William's		
Not on 1884 list		
On 1884 list		
Unsure of BRRT's #		

Unknown additions


A–G (BAK–12)
BARRIER 2019
27
TAXIWAY 2
RSU PAD
TAXIWAY 1
ARM/DEARM
TAXIWAY 1
POWER
CHECK PAD
960
SOUTHEAST APRON
959
958
957
956
955
954
953
952
951
950
949
E PERIMETER RD
MADISON BLVD
961
904
903

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary
Dale T. Urso, District Director

North Central District Headquarters
PO Box 818, 107 Sutliff Ave.
Rhinelander, WI 54501-0818
TELEPHONE 715-365-8900
FAX 715-365-8932
TDD 715-365-8957

May 30, 1996

NCD UID #: 03-29-099664

Mr. David Beck
Captain, WI Air National Guard
100 Independence Dr
Camp Douglas, WI 54618

Subject: Volk Field Bldg 950 500-Gal Diesel Fuel Tank, Camp Douglas, WI

Dear Captain Beck:

The Department of Natural Resources provided a notice to you that the degree and extent of diesel fuel contamination at the above-named site was required to be investigated and remediated. We have since been informed that the required investigation and remediation has been accomplished.

On May 22, 1996 the above-named site was reviewed by the North Central District Closeout Committee for a determination as to whether or not the case qualified for close out under ch. NR 726, Wis. Adm. Code.

Based on the investigative and remedial documentation provided to the Department, it appears that the diesel fuel contamination at the above-named site has been remediated in compliance with the requirements of chs. NR 700 to 724, Wis. Adm. Code. Therefore, the Department considers the case "closed," having determined that no further action is necessary at the site at this time. However, the case may be reopened pursuant to s. NR 726.09, Wis. Adm. Code, if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety or welfare or the environment.

If you have any questions, please call me at 715-365-8990.

Sincerely,
NORTH CENTRAL DISTRICT

Janet Kazda

Janet Kazda
North Central District Closeout Committee

cc: File
J P Walker, Dames & Moore, 2701 International Ln, Suite 210, Madison, Wi 53704

Bldg. 950

WISCONSIN DEPARTMENT OF NATURAL RESOURCES
NORTH CENTRAL DISTRICT
Case Summary and Close-Out

X

(FOR DEPARTMENT USE ONLY)

Reviewers	Approval Signature for Closure	Date
~~Chuck Fitzgerald*~~		
Chuck Weister	Chuck Weister	5/31/96
Scott Watson	Scott Watson	5/31/96
Connie Antonuk	Connie Antonuk	5/31/96

***only on sites with wells within 1,200 feet**

DNR PROJECT MANAGER: Don Grasser and/or Lisa Gutknecht
CLOSURE PREPARED BY: Don Grasser DATE: 4/17/96
COMPANY NAME: WDNR

IF PREPARED BY NON-DEPARTMENT STAFF, PLEASE COMPLETE THE FOLLOWING INFORMATION.

Affiliation with responsible party: _____
Address: _____
City: _____ State: ____ Zip: _____
Phone Number: ___ - ___

GENERAL SITE INFORMATION:

Case/FID#/UID#: 03-29-099664 (Building 950, 500 gal. diesel fuel tank)
(Assign)
Site Name: Volk Field, Camp Douglas
Address: 100 Independence Drive (various buildings on base)
City: Camp Douglas State: WI Zip: 54618
Legal Description: 1/4 ___, 1/4 ___, Sec ___, Tn 17, R 2 (E) (All or part of sections 14, 15, 16, 17, 20, 21, 22, 23, 24, and 28)
Tnshp/Vill/City: Township of Orange
County: Juneau

Site Contact: David A. Beck, Captain, Wisc. Air National Guard
Address: 100 Independence Drive
City: Camp Douglas State: WI Zip: 54618
Phone Number: 608-427-1441

Date of Incident: Various Date Reported: Various

Contamination Type (General Description): Diesel fuel

GENERAL SITE INFORMATION (CONT'):

Amount Released: Unknown

Department Permits Closed Out? Yes ___ No ___ Not Applicable X

Enforcement Actions Closed Out? Yes ___ No ___ Not Applicable X

Geologic Setting (General Description) Fine to course-grained sandstones with interbedded shales overlain by unconsolidated sand, silt and minor amounts of clay. Cambrian sandstone is at depth and exposed from uplift during Permian Period creating the bluffs at this location. Pre cambrian core underlying the sandstone - granites & undiff. igneous & meta. rock

Depth to Groundwater: ~~10 to 340 feet~~ 0 to 35 feet

9/93, RT

Was Contamination Present In (Soils, Groundwater, Other) Before Remediation: Yes

---

DEGREE OF CONTAMINATION FOR SOILS

WAS SOIL CONTAMINATION PRESENT? YES X NO___ (If no, continue to groundwater section)

Extent Defined (Yes, No):
Analysis (Lab, Field, No Data): **(If no data available, please explain)** See attachments
Number of Sample Points: 5 Number of Sampling Rounds: 1
Background Levels:
Analysis Attached (Yes), No):
Remedial Action Taken: DRO under tank, No detects DRO under pipeline ND - 6.2 mg/kg. < 100 ppm Standard.
Excavated Soils Final Disposal Method: Final Disposal Location: Soil Disposal Form Completed : Yes _____, No._____ (PLEASE ATTACH COPY)

SOIL (Complete below or attach data)

NOTE: If analytical methods other than those outlined in the current L.U.S.T. Analytical Guidance are used, please note the information below.

Contaminant	Pre-remediation Sample Date _____	Highest Field Data Sample Date _____	Post Remediation Sample Date ____	Applicable Standards	Detection Limits

Comments:

DEGREE OF CONTAMINATION FOR GROUNDWATER

WAS GROUNDWATER CONTAMINATION PRESENT? YES__ NO X (If no, continue to next section)

Extent Defined (Yes, No):
Analysis (Lab, Field): **(If no data available, please explain)**
Groundwater Monitoring: *Permanent Wells* : Yes__, No___, #_____; Abandoned Yes__, No__, #_____, Forms submitted Yes__, No___, #_____. *Temporary Wells*: Yes__, No___, #_____; Abandoned Yes__, No__, #_____, Forms submitted Yes__, No___, #_____.
Number of Sampling Rounds:
Has groundwater analysis been attached? Yes____, No___.
Remedial Action Taken:
Remedial Action Completed: Yes__, No__. (If no, please provide documentation) Has this site been remediated to current groundwater standards?: Yes__, No__ (If no, please provide documentation)

GROUNDWATER (Complete below or attach data)

NOTE: If analytical methods other than those outlined in the current L.U.S.T. Analytical Guidance are used, please note the information below.

Contaminant	Pre-remediation Sample Date _____	Highest Field Data Sample Date _____	Post Remediation Sample Date ___	Applicable Standards	Detection Limits

Comments:

_____

_____

Please Attach the Following Information:

Location Map and Site Map
Cross-section Map, If Applicable
Map of Public/Private Wells Within 1,200 Foot Radius

Narrative Summary of Case: (attach additional sheets as needed)

SITE: Volk Field, Camp Douglas, WI, Closure Requests (Summary by D. Grasser, WDNR)

LOCATION	UST TYPE	UID#	DETECT (mg/kg)	COMMENTS	REQUEST
Building 28	100 gal. leaded gas.	Assign	DRO/ND	Under tank	Closure
			DRO/ND	Under piping	
Building 324	Waste Oil	Assign	DRO/21	Under tank	Closure
			DRO/59	Under piping	
			PVOCs/NS	Under tank	
			PVOCs/ND	Stockpile soil	
Building 398	5000 gal. leaded gas.	Assign	GRO/ND	Under tank	Closure
			GRO/ND	Under piping	
	10036 gal. leaded gas	Assign	GRO/88	Under tank	Closure
			GRO/61	Under pump	
	10000 gal. diesel fuel	Assign	?	Under tank	Closure
			?	Under piping	
Building 449	6000 gal. fuel oil	Assign	DRO/ND	Under tank	Closure
			DRO/44.3	Under tank	
Building 509	1000 gal. leaded gas.	Assign	GRO/ND	Under tank	Closure
			PVOCs/ND	Under tank	
Building 510	4000 gal. fuel oil	Assign	DRO/11-39	Under tank	Closure
			DRO/ND-24	Under piping	
	500 gal. diesel fuel	Assign	DRO/7.6	Under tank	Closure
			DRO/12	Under piping	
			DRO/290 ug/l	GW in excav.	
			PVOCs/ND	GW in excav.	
Building 528	500 gal. diesel fuel	Assign	DRO/ND	Under tank	Closure
			DRO/BDL	Under tank	
Building 530	500 gal. fuel oil	Assign	DRO/ND	Under tank	Closure
Building 932	6000 gal. fuel oil	Assign	DRO/ND	Under tank	Closure
			DRO/ND	Under piping	
Building 950	500 gal. diesel fuel	Assign	DRO/ND	Under tank	Closure
			DRO/ND-6.2	Under piping	
Building 2000	550 gal. diesel fuel	Assign	DRO/ND-16.8	Under tank	Closure

ND = No Detect NS = Not Sampled BDL = Below Detection Limit

CONVERSATION - DETAILED REPORT

Date: 5/10/96 Time: 7:25 AM Call Duration: 00:00:49

VOLK FIELD, DAVE BECK
608-427-1441

Call Regarding: A-10 Crash Site and LUSTs at Hardwood Range
Call/Receive: Receive
Call Status: Left Message

NOTES:
Wants to know about the status of the above referenced cases, as well as any update on the Camp Douglas spill closeouts.

NCD Case Closeout
Buck Slip

NCD UID#: Assign for each DATE: 4/17/96

SITE NAME: Volk Field

ADDRESS: Camp Douglas, WI 54618

FROM Program Staff: Don Grasser

TO Program Supervisor: Connie Antonuk, NCD

COPIED TO LUST P.A.: YES ✓ NO ~~✓~~ (sent closeout forms + file to Janet Kazda - NCD)

Please (✓) any that have not been completed:

Extraction Well	___	Monitoring Wells	___
Contaminated Soils	___	Wastewater Permit	___
Air Permit	___	Private Well Notification	___
High Cap. Well Permit	___	Above PAL	___

Program Supervisor Approval:

_____ Not Approved _____ Approved

Signature: _____ Date: _____

Committee

TO: ___ Chuck Fitzgerald
___ Chuck Weister
___ Connie Antonuk
___ Scott Watson
___ Other

Based on my review, I recommend this case for closure.

Donald R. Grasser
Staff Signature

Comments to the Committee:

* I recommend closure of ~~Build~~ tanks at Building #'s 28, 324, 398, 449, 509, 510, 528, 530, 932, 950 & 2000. There are a total of 14 tanks to be closed.

* Other tanks at Buildings #'s 17 (UID 349), 329, 601, 613 (UID 1106), and 616 require additional investigation and/or remediation.

* Please note: 500 gal. diesel fuel tank @ Building #510 has DRO = 230 mg/L in GW in excavation, but no PVOCs. Also note: DRO, not GRO, sampling done for building 28 gas tank.

SITE: Volk Field, Camp Douglas, WI, Closure Requests (Summary by D. Grasser, WDNR)

LOCATION	UST TYPE	UID#	DETECT (mg/kg)	COMMENTS	REQUEST
Building 28	100 gal. leaded gas.	Assign	DRO/ND	Under tank	Closure
			DRO/ND	Under piping	
Building 324	Waste Oil	Assign	DRO/21	Under tank	Closure
			DRO/59	Under piping	
			PVOCs/NS	Under tank	
			PVOCs/ND	Stockpile soil	
Building 398	5000 gal. leaded gas.	Assign	GRO/ND	Under tank	Closure
			GRO/ND	Under piping	
	10036 gal. leaded gas	Assign	GRO/88	Under tank	Closure
			GRO/61	Under pump	
	10000 gal. diesel fuel	Assign	?	Under tank	Closure
			?	Under piping	
Building 449	6000 gal. fuel oil	Assign	DRO/ND	Under tank	Closure
			DRO/44.3	Under tank	
Building 509	1000 gal. leaded gas.	Assign	GRO/ND	Under tank	Closure
			PVOCs/ND	Under tank	
Building 510	4000 gal. fuel oil	Assign	DRO/11-39	Under tank	Closure
			DRO/ND-24	Under piping	
	500 gal. diesel fuel	Assign	DRO/7.6	Under tank	Closure
			DRO/12	Under piping	
			DRO/290 ug/l	GW in excav.	
			PVOCs/ND	GW in excav.	
Building 528	500 gal. diesel fuel	Assign	DRO/ND	Under tank	Closure
			DRO/BDL	Under tank	
Building 530	500 gal. fuel oil	Assign	DRO/ND	Under tank	Closure
Building 932	6000 gal. fuel oil	Assign	DRO/ND	Under tank	Closure
			DRO/ND	Under piping	
Building 950	500 gal. diesel fuel	Assign	DRO/ND	Under tank	Closure
			DRO/ND-6.2	Under piping	
Building 2000	550 gal. diesel fuel	Assign	DRO/ND-16.8	Under tank	Closure

ND = No Detect NS = Not Sampled BDL = Below Detection Limit

DAMES & MOORE
2701 INTERNATIONAL LANE, SUITE 210, MADISON, WI 53704
(608) 244-1788 FAX: (608) 244-7823

June 20, 1995

Mr. Don Grasser
Wisconsin Department of Natural Resources
Room 118
1681 Second Avenue, South
Wisconsin Rapids, WI 54494

RE: Proposed Work Plan
Leaking Underground Storage Tank
Site Investigations

Dear Mr. Grasser:

This document summarizes the recent fuel system removal activities at Volk Field, Camp Douglas, Wisconsin (Figure 1). Recommendations are presented with respect to site closures or additional site investigative activities, based upon results of analyses of soil samples, collected at the time of system removals. These recommendations are made pursuant to the interim guidance for soil quality (part of the proposed Wisconsin Administrative Code ch. NR 700), and in accordance with Wisconsin Department of Natural Resources (WDNR) guidance on investigations of leaking underground storage tanks. Because of the limited scope of the previous work performed at the site, adequate data do not exist for full compliance with the required components of a site investigation work plan. Those components will be provided at the time of submittal of the site investigation report.

At the time of fuel system removals, soil samples were collected and analyzed for diesel range organics (DRO) or gasoline range organics (GRO), as appropriate. Samples of stockpiled soil were analyzed for DRO, petroleum volatile organic compounds (PVOCs) and polynuclear aromatic hydrocarbons (PAHs). The Wisconsin interim Enforcement Standards (ESs) for soil quality contains guidance for GRO, DRO and PVOCs. Results of all laboratory analyses are presented in Table 1. Because the in-place samples were not analyzed for PVOCs, our recommendations are based solely on a comparison of DRO or GRO values to those contained in the guidance.

Closure Recommendations:

Building 28:

A 100-gallon underground leaded gasoline storage tank was removed at Building 28. One sample was collected from beneath both the piping run and the storage tank. Laboratory analyses of these samples yielded non-detects for DRO. Consequently, we request that a clean closure be granted for the Building 28 site.

Building 324:

A soil sample collected from beneath the pipeline, between the building and the waste oil tank, yielded 59 mg/kg (parts per million - ppm), of diesel range organics. Additionally, a sample collected at the west end of the tank excavation yielded 21 ppm of DRO; the sample collected at the east end of the excavation was non-detect. (The analytical report indicated that there was not a diesel pattern match in the samples collected from beneath the pipeline and at the west end of the tank. This is likely due to the fact that the contaminant is waste oil, rather than diesel fuel.)

The interim ES for DRO is 100 ppm. Although the samples collected from the excavation were not analyzed for PVOCs, these analyses were performed on the sample collected from the stockpiled soil. The analyses of this sample indicate that PVOCs are significantly lower than the interim ESs; consequently, the concentrations appear to be within the criteria for closure. Based upon this, we request that a clean closure be granted for Building 324.

Building 398:

Three underground storage tanks were removed from Building 398, including one 5,000 gallon leaded gasoline tank, one 10,036-gallon leaded gasoline tank, and one 10,000-gallon diesel fuel tank. Additionally, the associated piping and dispensers were removed. Samples were collected from beneath the tanks, piping and dispensers, and were analyzed for GRO or DRO, as appropriate. All samples except two yielded non-detects. The sample collected beneath the west end of the 10,000-gallon gasoline tank resulted in 88 mg/kg of GRO; the sample collected from beneath the west gasoline dispenser resulted in 61 mg/kg of GRO. Because no interim soil quality exceedances were detected, we recommend closure for the Building 398 site.

Building 449:

A single 6,000-gallon fuel oil tank was removed from the Building 449 site. At the time of excavation, two soil samples were collected: One at the west end of the tank bed, and one at the east end. The sample collected from the east end yielded non-detects for DRO compounds. The

sample from the west end yielded 44.3 mg/kg of DRO. Clean closure is recommended for this site.

Building 509:

A 1,000-gallon leaded gasoline storage tank was removed from Building 509. Samples were collected from the north and south ends of the tank bed. These samples resulted in non-detects for GRO and PVOCs. Consequently, we recommend clean closure for this site.

Building 510:

Work completed at Building 510 included the removal of a 4,000-gallon underground fuel oil storage tank, a 500-gallon underground diesel fuel storage tank, approximately 80 feet of piping associated with the fuel oil tank, and a short piping run from the diesel tank to an electrical generator. Four samples were collected from the fuel oil piping run, two samples were collected from each of the excavations for the two storage tanks, and one sample was collected along the diesel fuel supply line. DRO concentrations in these samples ranged from below the level of quantification to 39 ppm. A sample was collected of groundwater which had accumulated in the excavation. This sample yielded non-detects for PVOCs and 290 μg/L of DRO. Because no water quality or interim soil quality standards were exceeded, we recommend closure for the Building 510 site.

Building 528:

A 500-gallon diesel fuel storage tank was removed from Building 528. Soil samples were collected from the west and east ends of the tank excavation, which yielded non-detects and detects below the quantification limit, respectively, of DRO compounds. We therefore recommend clean closure for this tank.

Building 530:

A 500-gallon fuel oil storage tank was removed from Building 530. Soil samples were collected from the west and east ends of the tank bed, which yielded non-detects for DRO compounds. Clean closure is recommended for this tank.

Building 932:

One 6,000-gallon fuel oil storage tank was removed from Building 932, along with the transfer piping from the tank to the building. The ground surface above the tank had been capped with concrete, which was removed for the tank excavation. Four soil samples were collected from

beneath the former concrete slab, at the base of the tank excavation. Additionally, two samples were collected from beneath the piping run. All samples were analyzed for DRO, and yielded non-detects.

Building 950:

At the time of the excavation of a 500-gallon underground diesel storage tank and approximately 70 feet of fill line at Building 950, samples were collected at three locations along the piping run, and at either end of the tank bed. All samples were non-detect for DRO except the sample collected along the south end of the piping run. This sample yielded 6.2 ppm of DRO, which is significantly below the interim ES. Consequently, we recommend closure for the Building 950 site.

Building 2000:

A 550-gallon diesel fuel tank was removed from Building 2000, along with a short piping run to the building. Soil samples were collected from the north and south ends of the tank bed, which yielded 16.8 ppm and non-detects, respectively, for DRO. Clean closure is recommended for this tank.

Work Plan for Buildings 17, 329, 601, 613 and 616:

Building 17:

The following work was completed at Building 17:

- Excavation of a 6,000-gallon underground fuel oil storage tank (see Figure 2); and
- Excavation of a fill line extending to the boiler room.

One soil sample was collected from beneath the fill line at Building 317. This sample yielded 18 ppm of DRO, which is below the interim ES. Samples collected from the north and south ends of the tank excavation yielded 8,000 and 7,800 ppm, respectively, of DRO; a sample collected from the stockpiled soil yielded 3,800 ppm of DRO. Therefore, we recommend that the investigation of contamination at Building 17 be confined to the area of the tank.

Building 329:

The following work was completed at Building 329:

- Excavation of a 6,000-gallon underground diesel fuel storage tank (see Figure 3); and
- Excavation of approximately 30 feet of fill line.

At this location, samples were collected at the middle, north end, and south end of the excavation. The sample collected at the middle of the excavation yielded 280 ppm of DRO, which is in excess of the interim ES.

Building 601:

The following work was completed at Building 601:

- Excavation of a 500-gallon underground diesel fuel tank (see Figure 4); and
- Removal of a vent line and transfer line.

Two soil samples were collected from the tank excavation, at the north and south ends. The sample collected from the north end yielded non-detects for DRO compounds; however, the sample collected at the south end yielded 1,560 ppm of DRO. It is therefore recommended that additional investigation be conducted at this location.

Building 613: (on List)

Several tasks were completed at Building 613, including:

- Removal of a concrete pad;
- Excavation and removal of a 300-gallon diesel fuel tank (see Figure 5); and
- Removal of vent, fill and transfer line.

Six soil samples were forwarded for laboratory analyses, including one collected from the stockpiled soil, which was analyzed for DRO and PVOCs. Samples collected from the excavation were analyzed for DRO and PAHs. The results of the PAH analyses are presented in Table 2; DRO and PVOC analyses are in Table 1. Although no interim enforcement standards were exceeded for PVOCs or PAHs, three samples (stockpiled soil, S-10 and S-13), yielded DRO at concentrations in excess of the interim enforcement standards. Consequently, additional site investigation is recommended at this location.

Building 616:

The following tasks were completed at Building 616:

- Removal of approximately 30 sq. ft. of concrete;
- Excavation and removal of one 300-gallon diesel fuel tank (see Figure 6); and
- Removal of the product transfer line to the building.

A soil sample was collected from the south wall of the tank excavation and from the stockpiled soil. The sample collected from the excavation was analyzed for DRO, yielding 6,250 ppm. The stockpiled sample was analyzed for DRO and PVOCs, yielding concentrations below the interim enforcement standards. Due to the high DRO concentrations in the sample collected from the excavation, we recommend additional investigation at this location.

Site Investigation:

Dames & Moore recommends that a Geoprobe investigation be conducted at Buildings 17, 329, 601, 613 and 616. We recommend that this investigation be conducted using the Geoprobe sampling method. A Geoprobe permits multiple-depth soil and groundwater sampling without the advancement of a boring or the installation of a monitor well. A truck-mounted unit advances a sampling device to the desired depth, at which point a soil or groundwater sample is collected. The vehicle is equipped with a gas chromatograph, with which highly sensitive field screening can be conducted. At each of the sampling points indicated on Figures 2 through 6, Dames & Moore recommends that soil samples be collected at 2.5-foot intervals, beginning at a depth of 6 feet below ground surface. Based upon field screening, the sample yielding the highest concentrations will be forwarded to a WDNR-certified environmental analytical laboratory, for analyses of DRO, PVOCs and PAHs, in accordance with WDNR sampling guidance for underground diesel fuel storage tank investigations. If field screening indicates that the vertical extent of contamination has been reached at a point above the water table, a sample which field screening indicates is not contaminated will also be forwarded to the lab for verification purposes. Finally, at the sampling point at the center of the former tank bed (see Figures 2 through 6), sampling will proceed to the water table, or to a depth of 10 feet below the last field screening detect (whichever is shallowest). If the water table is encountered in that interval, a groundwater sample will be collected and forwarded to the laboratory for analyses. Alternatively, one soil sample will be collected at a depth of 10 feet below the last screening level detect, which will be forwarded to the analytical laboratory for DRO, PVOC and PAH analyses.

If field screening indicates that contaminants have likely reached the water table, we recommend that additional groundwater samples be collected to define the horizontal extent of groundwater contamination, as well as soil contamination. In this event, based upon field screening and

observations, a decision will be made in the field to collect an additional 3 groundwater samples at both sites for this purpose. Based upon the results of the groundwater sampling, the WDNR may require that permanent monitor wells be installed, for purposes of long-term monitoring.

Upon completion of the field sampling and analyses, a remedial action plan (RAP) will be prepared, which will assess options for soil and, if necessary, groundwater remediation.

If you have any questions about the work plan described above, or require additional site information, please call Dames & Moore at (608) 244-1788.

Sincerely,

DAMES & MOORE

J.P. Walker, P.E.
Project Manager

Robert J. Nauta, P.G.
Hydrogeologist

cc: Major Rick McKittrick - ANG/CRTC

rjn\ltr\gras0620.ltr

TABLES

TABLE 1
SOIL ANALYSES
(All concentrations in mg/kg)

SAMPLE LOCATION	DRO	GRO	BENZENE	ETHYL-BENZENE	TOLUENE	TOTAL XYLENES	MTBE	1,3,5-TRI METHYL BENZENE	1,2,4-TRI METHYL BENZENE
Building 17:									
Fill pipe	18								
South end of excavation	7800								
North end of excavation	8000								
Stockpiled soil	3800		N.D.	0.52	N.D.	0.72			
Building 28:									
Pipeline	N.D.								
North end of excavation	N.D.								
Building 324:									
Pipeline	59								
West end of excavation	21								
East end of excavation	N.D.								
Stockpiled soil	N.D.		N.D.	N.D.	N.D.	N.D.			
Building 329:									
Middle of excavation	280								
North end of excavation	12								
South end of excavation	N.D.								
Stockpiled soil	11		N.D.	N.D.	N.D.	N.D.			

TABLE 1 (cont.)
SOIL ANALYSES
(All concentrations in mg/kg)

SAMPLE LOCATION	DRO	GRO	BENZENE	ETHYL-BENZENE	TOLUENE	TOTAL XYLENES	MTBE	1,3,5-TRI METHYL BENZENE	1,2,4-TRI METHYL BENZENE
Building 398:									
2 ft. below elbow, remote fill		N.D.							
2 ft. below elbow, fill pipe		N.D.							
2 ft. below pipe		N.D.							
2 ft. below pipe, 1st 20 ft.		N.D.							
West end of 5000 gal. gasoline tank		N.D.							
East end of 5000 gal. gasoline tank		N.D.							
West end of 10000 gal. gasoline tank		88							
East end of 10000 gal. gasoline tank		N.D.							
3 ft. below pump		61							
Building 449:									
West end of tank	44.3								
East end of tank	N.D.								
Building 509:									
North end of tank		N.D.	N.D.	N.D.	N.D.	N.D.			
South end of tank		N.D.	N.D.	N.D.	N.D.	N.D.			

TABLE 1 (cont.)
SOIL ANALYSES
(All concentrations in mg/kg)

SAMPLE LOCATION	DRO	GRO	BENZENE	ETHYL-BENZENE	TOLUENE	TOTAL XYLENES	MTBE	1,3,5-TRI METHYL BENZENE	1,2,4-TRI METHYL BENZENE
Building 510:									
1st 20 ft. of pipeline	N.D.								
2nd 20 ft. of pipeline	5								
3rd 20 ft. of pipeline	4.2								
4th 20 ft. of pipeline	24								
W. end of 4000 gal. F.O. tank	39								
E. end of 4000 gal. F.O. tank	11								
Pipeline to generator	12								
W. end of 500 gal. D.O. tank	7.6								
Building 528:									
West end of tank	N.D.								
East end of tank	B.D.L.								
Building 530:									
West end of tank	N.D.								
East end of tank	N.D.								
Building 601:									
North end of tank	B.D.L.								
South end of tank	1560								

TABLE 1 (cont.)
SOIL ANALYSES
(All concentrations in mg/kg)

SAMPLE LOCATION	DRO	GRO	BENZENE	ETHYL-BENZENE	TOLUENE	TOTAL XYLENES	MTBE	1,3,5-TRI METHYL BENZENE	1,2,4-TRI METHYL BENZENE
Building 613:									
Stockpile	2070		N.D.	6.25	0.050	7.03	N.D.	4.28	0.048
Sample S-5	231								
Sample S-9	B.D.L.								
Sample S-10	3870								
Sample S-13	1260								
Sample S-16	812								
Building 616:									
Tank south wall	6250								
Stockpile	B.D.L.		N.D.	N.D.	N.D.	N.D.	0.018	0.048	0.076
Building 932:									
South side slab	N.D.								
West side slab	N.D.								
East side slab	N.D.								
North side slab	N.D.								
Below fill pipe	N.D.								
Below fill pipe	N.D.								

TABLE 1 (cont.)
SOIL ANALYSES
(All concentrations in mg/kg)

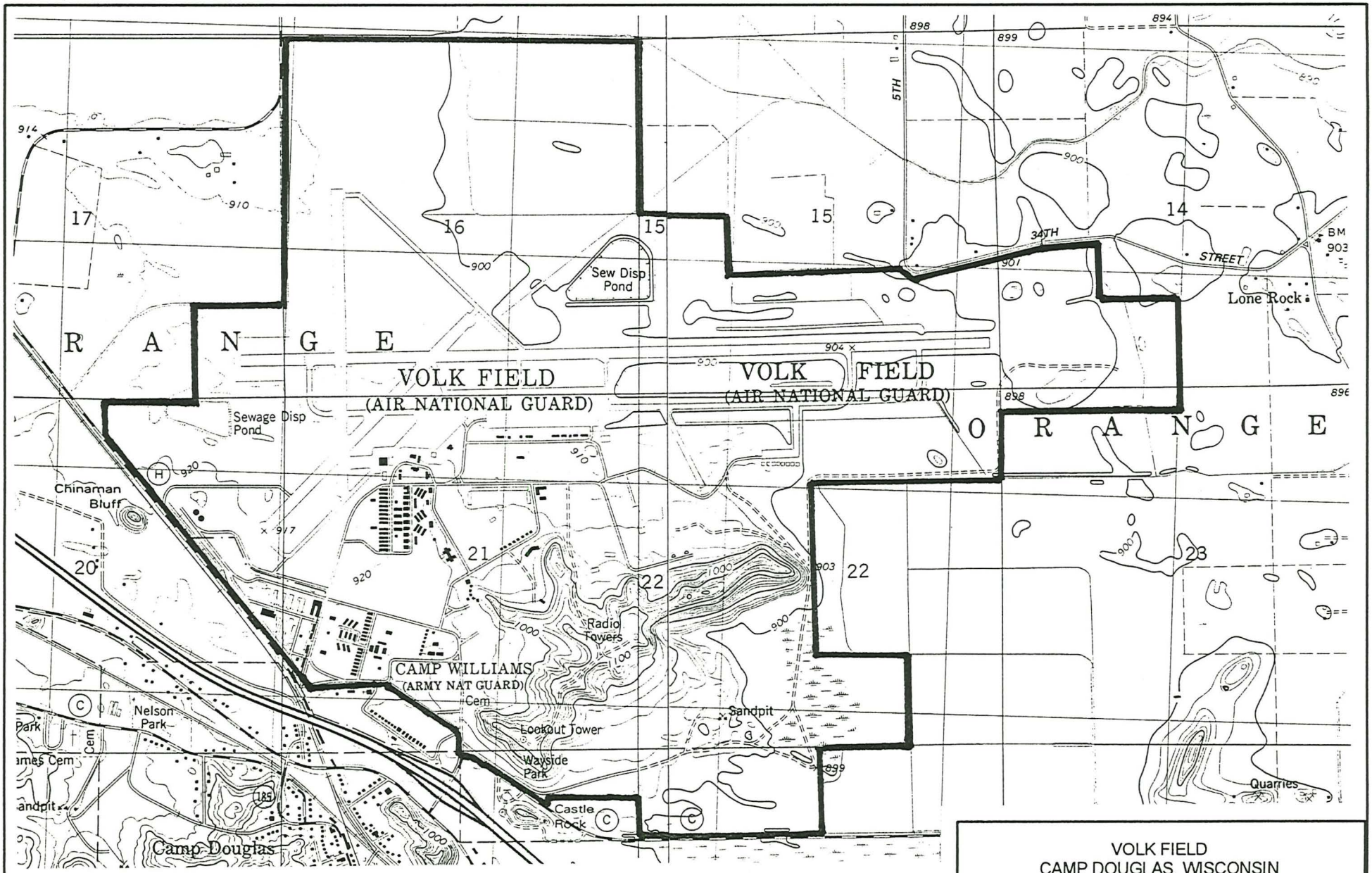
SAMPLE LOCATION	DRO	GRO	BENZENE	ETHYL-BENZENE	TOLUENE	TOTAL XYLENES	MTBE	1,3,5-TRI METHYL BENZENE	1,2,4-TRI METHYL BENZENE
Building 950:									
North end of pipeline	N.D.								
Middle of pipeline	N.D.								
South end of pipeline	6.2								
North end of excavation	N.D.								
South end of excavation	N.D.								
Building 2000:									
North end of tank	16.8								
South end of tank	N.D.								

N.D. Non-detect.
B.D.L. Peaks present, but at concentrations below detection limit.
Shaded cells indicate parameters not analyzed.

TABLE 2
PAH ANALYSES - BUILDING 613
All concentrations in mg/kg

PARAMETER	S-5	S-9	S-10	S-13	S-16
Naphthalene	0.03	ND	2.96	0.14	0.31
Acenaphthylene	0.03	ND	0.46	0.45	0.09
Acenaphthene	ND	ND	0.03	0.28	0.04
Fluorene	0.03	0.04	0.98	0.76	0.25
Phenanthrene	0.07	ND	1.19	1.04	0.36
Anthracene	ND	ND	0.31	0.11	0.03
Fluoranthene	0.02	ND	ND	0.73	1.9
Pyrene	0.04	ND	ND	0.46	1.5
Benzo(a)anthracene	ND	ND	0.03	0.04	0.07
Chrysene	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	ND	ND	0.02	0.03	0.01
Benzo(a)pyrene	ND	ND	0.03	ND	ND
Dibenzo(a,h)anthracene	ND	ND	ND	ND	ND
Benzoperylene	ND	ND	0.05	ND	ND
Indeno(1,2,3-cd)pyrene	ND	ND	ND	ND	ND
1-Methylnaphthalene	0.29	0.04	22.47	8.79	3.94
2-Methylnaphthalene	0.06	0.02	17.31	4.29	1.94

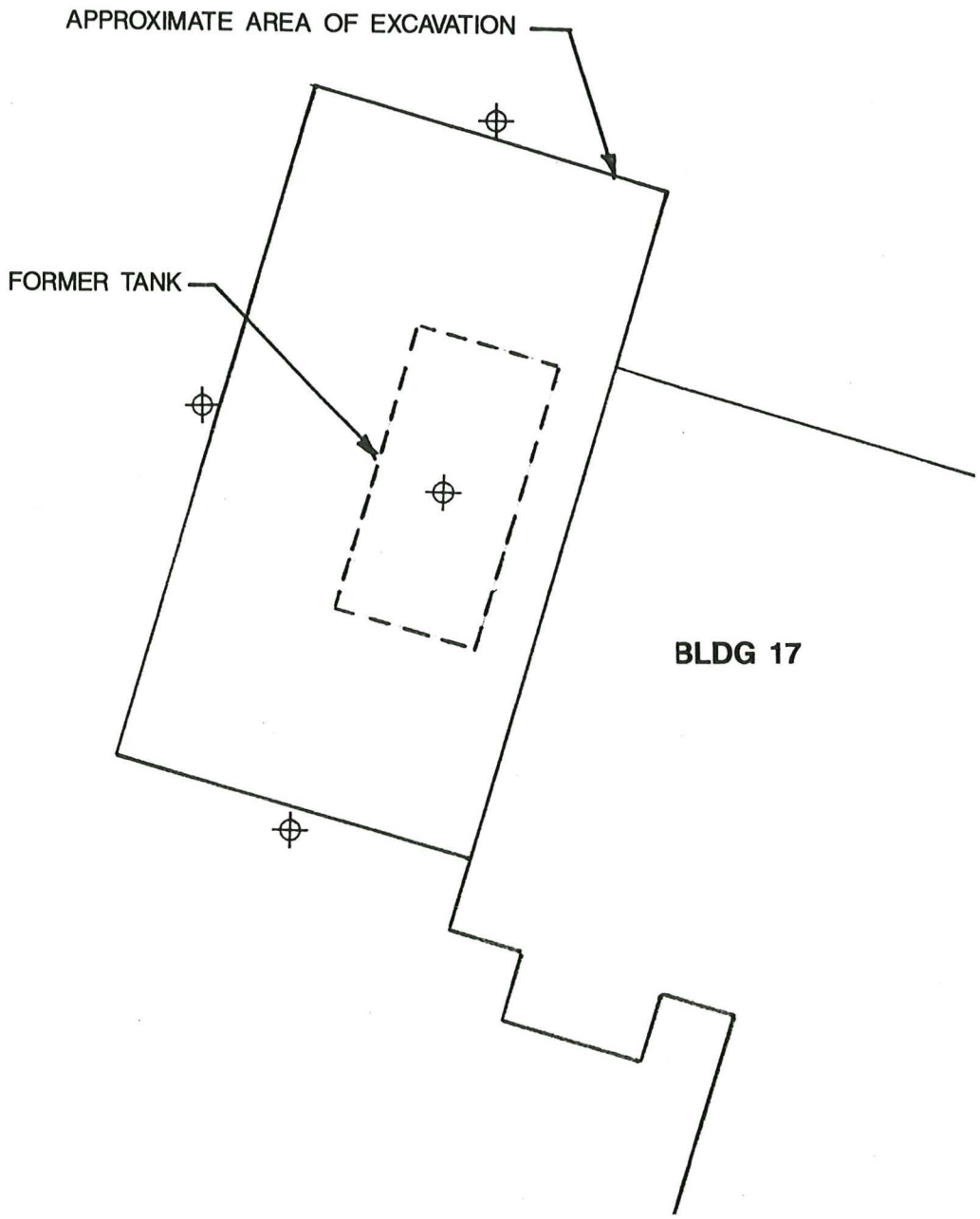
FIGURES



NORTH

SCALE: 1" = 2000'
MAP SOURCE: USGS 7.5 MINUTE QUADRANGLES - NEW LISBON NORTH, WISCONSIN (1983) AND CAMP DOUGLAS, WISCONSIN (1983).

VOLK FIELD CAMP DOUGLAS, WISCONSIN	
FIGURE 1 SITE LOCATION MAP	
DAMES & MOORE	DATE: JUNE 1995
DRAWN BY: RJN	JOB No: 21442-009

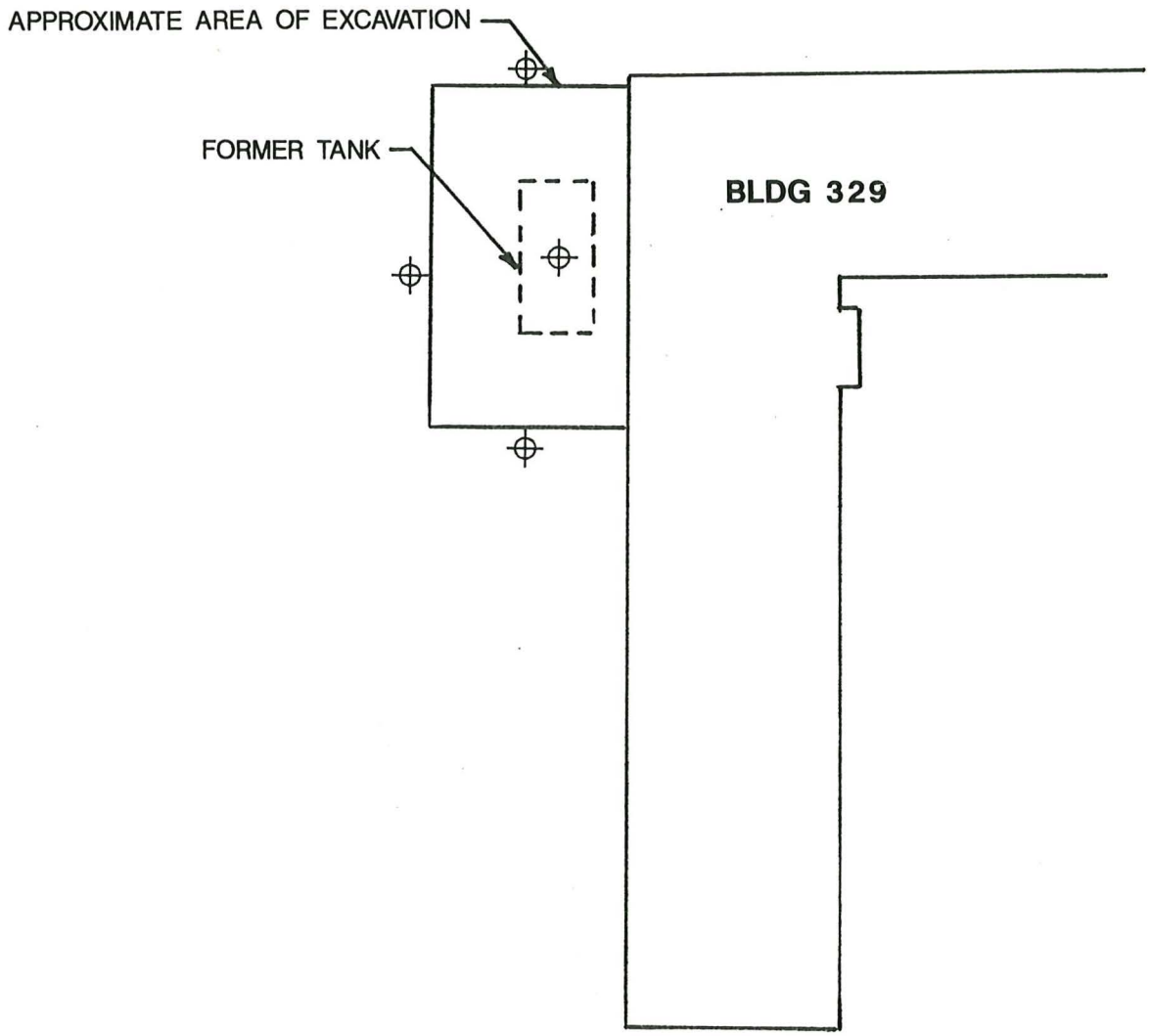


NORTH

⊕ RECOMMENDED INITIAL GEOPROBE SAMPLE LOCATION

SCALE: 1" = 10'

VOLK FIELD CAMP DOUGLAS, WISCONSIN	
FIGURE 2 INITIAL GEOPROBE SAMPLE LOCATIONS BUILDING 17	
DAMES & MOORE	DATE: JUNE 1995
DRAWN BY: RJN	JOB No: 21442-009

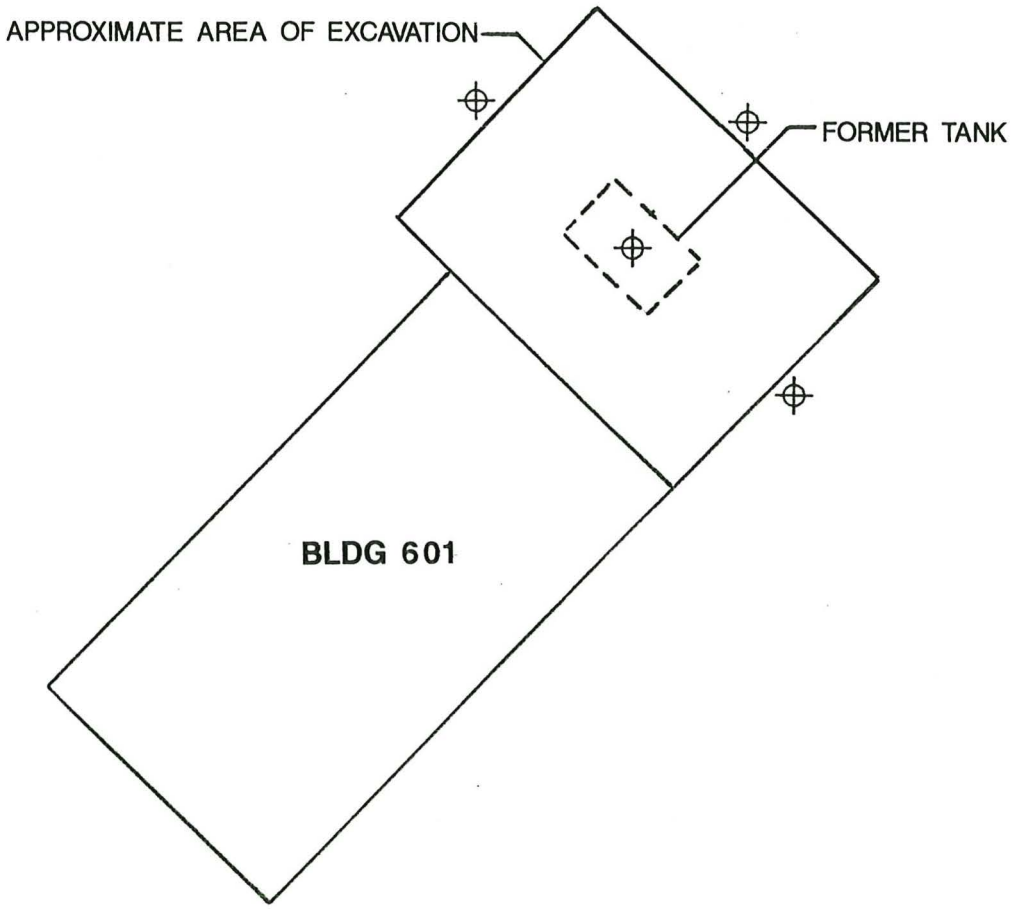


NORTH

⊕ RECOMMENDED INITIAL GEOPROBE SAMPLE LOCATION

SCALE: 1" = 20'

VOLK FIELD CAMP DOUGLAS, WISCONSIN	
FIGURE 3 INITIAL GEOPROBE SAMPLE LOCATIONS BUILDING 329	
DAMES & MOORE	DATE: JUNE 1995
DRAWN BY: RJN	JOB No: 21442-009

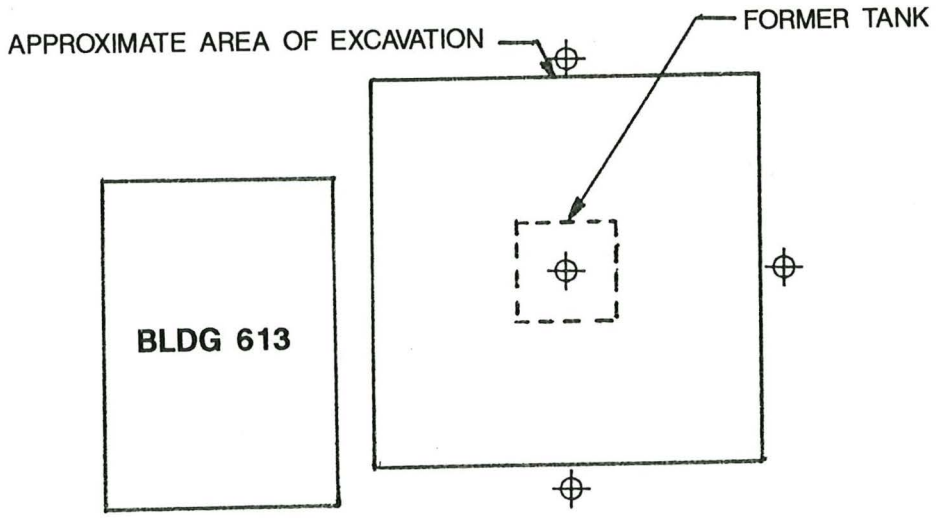


NORTH

RECOMMENDED INITIAL GEOPROBE SAMPLE LOCATION

SCALE: 1" = 10'

VOLK FIELD CAMP DOUGLAS, WISCONSIN	
FIGURE 4 INITIAL GEOPROBE SAMPLE LOCATIONS BUILDING 601	
DAMES & MOORE	DATE: JUNE 1995
DRAWN BY: RJN	JOB No: 21442-009

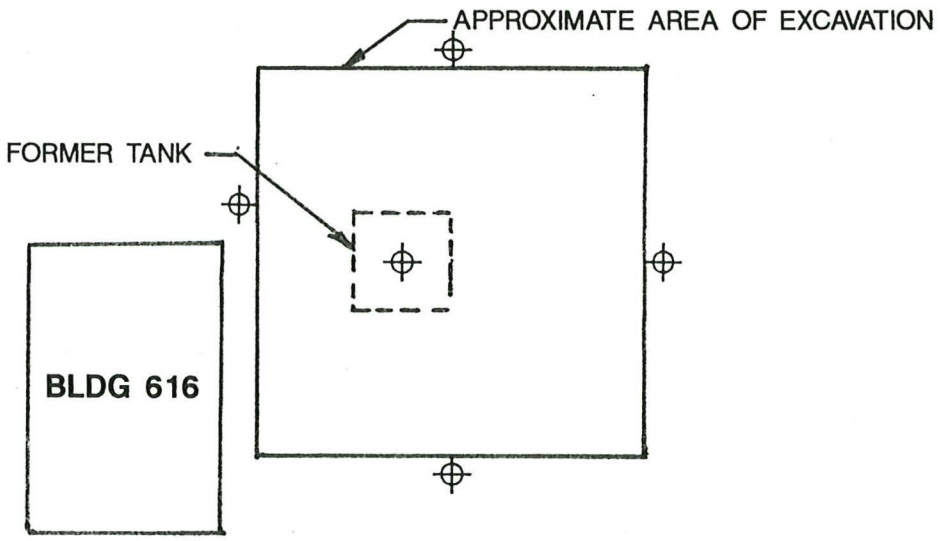


NORTH

⊕ RECOMMENDED INITIAL GEOPROBE SAMPLE LOCATION

SCALE: 1" = 10'

VOLK FIELD CAMP DOUGLAS, WISCONSIN	
FIGURE 5 INITIAL GEOPROBE SAMPLE LOCATIONS BUILDING 613	
DAMES & MOORE	DATE: JUNE 1995
DRAWN BY: RJN	JOB No: 21442-009



NORTH

⊕ RECOMMENDED INITIAL GEOPROBE SAMPLE LOCATION

SCALE: 1" = 10'

VOLK FIELD CAMP DOUGLAS, WISCONSIN	
FIGURE 6 INITIAL GEOPROBE SAMPLE LOCATIONS BUILDING 616	
DAMES & MOORE	DATE: JUNE 1995
DRAWN BY: RJN	JOB No: 21442-009

VOLK FIELD COMBAT READINESS TRAINING CENTER

WISCONSIN AIR NATIONAL GUARD
CAMP DOUGLAS, WI

4 Oct 94

MEMORANDUM FOR Wisconsin DNR, WI Rapids Office
ATTENTION: Mr. Dennis Fuster

25

FROM: CRTC/EM
100 Independence Drive
Volk Field ANGB, Camp Douglas, WI 54618-5001

SUBJECT: UST Project Progress
--Information Memorandum.

1. This letter is in response to your request for a status of UST projects at Volk Field and Hardwood Range. Currently, there is one UST to be removed in the Volk Field UST removal project with the potential for still one more tank to be added to the list (runway de-icer tank). The consultant has been preparing a work plan which will be finalized as soon as all tanks are removed and site conditions are known. It is believed that by mid-november the last tank will be removed. The de-icer tank, if it is to be removed, will be next spring. The work plan would not cover the de-icer tank and should be available to you this fall.

2. Work to be done at Hardwood Range is being contracted by the Air National Guard Readiness Center (ANGRC) in Washington, D.C.. The package for site assessment and work plans etc. are in the ANGRC Contracting Office. The consulting firm will probably be Warzyn. My contact at ANGRC is Ruth Lodder. She will probably be contacting you when they are ready to go to work on the project at Hardwood.

3. Contaminated soils from the Volk Field project are being remediated by the UST removal contractor. Soils that were excavated at Hardwood have been turned over to Soils Remediation Service, Butler, WI.

4. I realize that there are not yet any firm dates to give you, but I hope that this update will be of some help to you. If you have any questions, please call me at (608) 427-1441.

DAVID A. BECK, Capt, WIANG
Environmental Manager

WISCONSIN AIR NATIONAL GUARD
COMBAT READINESS TRAINING CENTER
Volk Field Air National Guard Base
Camp Douglas, Wisconsin 54618-5001

Telephone: (608) 427-1210
AUTOVON: 798-3210

215

REPLY TO ATTN OF: CRTC/EM

8 May 1992

SUBJECT: Additional Air Emissions Information

TO: Wisconsin DNR
Attn: Kieth Pierce

1. Per your request for additional information regarding Volk Field and its air emissions sources, the following types of information is being provided:

a. Read vapor pressures
b. Description of Underground Tank Project
c. Electrical Generator summary
d. Summary of Aerospace Ground Equipment (AGE)

2. Read vapor pressures were requested for both gasoline and JP-4. Gasoline read vapor pressures vary by season. From January through March, read vapor pressures average 15 psia. During the months of June to August, read vapor pressures average 10 psia. JP-4 that is received has an average read vapor pressure of 2.6 psia at 38 degrees centigrade. Diesel fuels have read vapor pressures of less than 1 psia.

3. We currently have a project in design to remove all existing UST's and replace those that are required with above-ground tank systems. The attached tank summary lists those tanks to be replaced, those which have already been removed, and those which are empty. Please let me know if this list is not satisfactory.

4. Electrical generators at Volk Field are powered by gasoline, diesel, liquid propane, and natural gas. There are some that have underground tanks and some with self-contained tanks. Others are portable generators or generators which are part of transportable lighting units. The attached summary indicates the locations, fuel types, rated horsepower, and whether there is an associated underground storage tank. Hopefully this summary will provide all necessary information.

5. Aerospace Ground-support Equipment is equipment specifically used in the servicing and support of aircraft. This equipment is powered by gasoline, diesel, or JP-4. The attached summary indicates the type of equipment and the fuel type. Please let me know if any additional information is required.

6. Once again if there are any additional requirements feel free to call me at (608) 427-1441.

DAVID A. BECK, 1LT, WIANG
Environmental Manager

3 Atch
1. UST summary
2. Generator summary
3. AGE summary

cc. Joe Ancell, WDNR

pc: Shanna Laube, Friendship

ITEM	FACILITY NUMBER LOCATION	CAPACITY U.S. GALLONS	FUEL TYPE	ANNOTATED TANK LIST		
1	97	6,000	FUEL OIL	REMOVE ONLY Empty		
2	20	100	* NOGAS - L	REMOVE + REPLACE	WITH 100 GALLON TANK OR LESS	
3	117	500	FUEL OIL	NOT IN CONTRACT already	removed	
4	125	500	FUEL OIL	NOT IN CONTRACT "	"	
5	122	540	FUEL OIL	NOT IN CONTRACT "	"	
6	134	500	FUEL OIL	NOT IN CONTRACT "	"	
7	300	560	FUEL OIL	REMOVE ONLY		
8	316	500	FUEL OIL	NOT IN CONTRACT already	Removed	
9	324	2,000	USED OIL	REMOVE + REPLACE WITH 75	GALLON SYSTEM EMPTY	
10	324-OW	1,000	OIL-WATER	REMOVE + REPLACE, OIL HOLDING	CAPACITY LESS THAN	110 GAL
11	320	6,000	FUEL OIL	REMOVE ONLY		
12	398	5,000	* NOGAS - L	REMOVE + REPLACE } TOTAL NEW	CAPACITY 15000 GAL	OR LESS
13	398	10,000	* NOGAS - L	REMOVE + REPLACE		
14	398	10,000	DIESEL	REMOVE + REPLACE TOTAL NEW	CAPACITY 10,000 GAL	OR LESS
15	400	1,000	FUEL OIL	NOT IN CONTRACT already	removed	
16	405	500	FUEL OIL	NOT IN CONTRACT	" "	
17	428	500	FUEL OIL	NOT IN CONTRACT	" "	
18	438	500	FUEL OIL	NOT IN CONTRACT	" "	
19	449	6,000	FUEL OIL	REMOVE + REPLACE FUEL SOURCE	WITH NG TO BOILER	
20	504	1,000	OIL-WATER	REMOVE + REPLACE, OIL HOLDING	CAPACITY LESS THAN	110 GAL
21	505	1,000	FUEL OIL	NOT IN CONTRACT	already removed	
22	507	1,000	* NOGAS - L	REMOVE + REPLACE WITH DIESEL	1000 GALLON OR LESS	
23	510-OW	500	OIL-WATER	REMOVE + REPLACE, OIL HOLDING	CAPACITY LESS THAN	110 GAL
24	510	4,000	FUEL OIL	REMOVE + REPLACEMENT REQUIREMENT	UNCLEAR	
25	510	500	DIESEL	REMOVE + REPLACE WITH DIESEL	500 GAL OR LESS	GEN
26	532	1,000	FUEL OIL	NOT IN CONTRACT	already removed	
27	526	500	FUEL OIL	NOT IN CONTRACT	already removed	
28	535	500	DIESEL	REMOVED FROM PROJECT		
29	530	500	DIESEL	REMOVE + REPLACE WITH DIESEL	500 GAL OR LESS	GEN
30	531	560	FUEL OIL	NOT IN CONTRACT already	removed	
31	601	500	DIESEL	REMOVE + REPLACE WITH DIESEL	500 GAL OR LESS	GEN
32	613	300	DIESEL	REMOVE + REPLACE WITH DIESEL	300 GAL OR LESS	GEN
33	616	300	DIESEL	REMOVE + REPLACE WITH DIESEL	300 GAL OR LESS	GEN
34	916	560	FUEL OIL	NOT IN CONTRACT already	removed	
35	932	6,000	FUEL OIL	REMOVE ONLY		GEN
36	933	500	DIESEL	REMOVED FROM PROJECT	already removed	
37	950	500	DIESEL	REMOVAL BY "ABANDONMENT IN	PLACE" Empty	

NG = natural Gas

EXISTING UNDERGROUND TANKS
Located within Hardwood Range boundaries

ITEM	FACILITY NUMBER LOCATION	CAPACITY U.S. GALLONS	FUEL TYPE			
~~38~~	~~3033~~	~~500~~	~~DIESEL~~	~~NOT IN CONTRACT~~		

not located at Volk Field

EXISTING UNDERGROUND TANKS
Located within the [illegible] boundaries

ITEM	FACILITY NUMBER LOCATION	CAPACITY U.S. GALLONS	FUEL TYPE			
~~39~~	~~3000~~	~~550~~	~~DIESEL~~	~~REMOVE + REPLACE WITH DIESEL~~	~~550 GAL OR LESS~~	GEN

[illegible] 7

ADDITIONAL TANKS REFERENCED
(But not in SOW)

a)	BLDG 807	300 GAL DIESEL	NOT IN CONTRACT
b)	BLDG 335	O/W SEP	NOT IN CONTRACT
c)	BLDG 2014	550 GAL USED OIL	NOT IN CONTRACT
d)	BLDG 533	500 GAL DIESEL	REMOVE & REPLACE WITH A DIESEL TANK 500 GAL OR LESS
e)	BLDG 934	500 GAL DIESEL	REMOVE & REPLACE WITH A DIESEL TANK 500 GAL OR LESS