FORT MCCOY UST REMOVAL INVENTORY 03/30/95

BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK	DNR SITE ID NUMBER
659	250	FUEL OIL	BARE STEEL	1943	1992	NO	897
1010	500	GASOLINE	UNKNOWN	?	1992	YES	907
1553	3,000	GASOLINE	BARE STEEL	1975	1992	NO	721
1557	340	GASOLINE	BARE STEEL	1964	1992	YES	
1562	500	FUEL OIL	BARE STEEL	1971	1992	NO	906
1565	500	FUEL OIL	FIBERGLASS	1977	1992	NO	905
1656	750	FUEL OIL	BARE STEEL	1972	1992	NO	900
1680	4,000	FUEL OIL	FIBERGLASS	1978	1992	NO	1003
1849	750	FUEL OIL	BARE STEEL	1943	1992	NO	895
1853	750	FUEL OIL	BARE STEEL	1943	1992	YES	896
2197	500	FUEL OIL	UNKNOWN	1977	1992	YES	904
2204	1,000	FUEL OIL	BARE STEEL	1943	1992	YES	
2541	1,000	FUEL OIL	BARE STEEL	1946	1992	YES	892
2569	1,000	FUEL OIL	BARE STEEL	1943	1992	NO	1004
2572	500	FUEL OIL	BARE STEEL	1977	1992	YES	894
2852	1,000	FUEL OIL	BARE STEEL	1961	1992	YES	
5007	550	DIESEL	COATED STEEL?	1985	1992	YES	
5014	?	FUEL OIL	BARE STEEL	1942	1992	NO	354
5030	750	FUEL OIL	BARE STEEL	1943	1992	YES	
5030	750	FUEL OIL	BARE STEEL	1943	1992	NO	909
5040	500	FUEL OIL	BARE STEEL	1943	1992	YES	908
6062	500	DIESEL	COATED STEEL	1976	1992	YES	891
6062	500	DIESEL	COATED STEEL	1976	1992	YES	891
6062	500	DIESEL	COATED STEEL	1976	1992	YES	891
6065	500?	DIESEL	UNKNOWN	1975	1992	YES	
6250	140	DIESEL	UNKNOWN	1976	1992	YES	893
10111	12,000	FUEL OIL	BARE STEEL	1973	1992	YES	903
10137	500	DIESEL	UNKNOWN	?	1992	YES	
242	1,500	UNUSED SOLV	COATED STEEL	1977	1992	YES	
242	5,000	DIESEL	COATED STEEL	1971	1992	YES	
242	5,000	GASOLINE	COATED STEEL	1971	1992	YES	
242	10,000	FUEL OIL	COATED STEEL	1971	1993	YES	
3050	25,000	FUEL OIL	BARE STEEL	1975	1993	NO	837
3050	25,000	FUEL OIL	BARE STEEL	1975	1993	NO	837
3050	10,000	DIESEL FUEL	BARE STEEL	1975	1993	YES	
3050	1,500	FUEL OIL	FIBERGLASS	1976	1993	NO	837
3050	10,000	UNLEADED GA	BARE STEEL	1975	1993	NO	837
3050	7,500	USED ENG OIL	BARE STEEL	1975	1993	NO	837
5050	500	FUEL OIL	BARE STEEL	1943	1993	YES	
2190	12,000	UNLEADED GA	BARE STEEL	1943	1994	NO	1130
2190	1,000	DIESEL FUEL	BARE STEEL	1943	1994	NO	1130
2190	1,000	UNLEADED GA	BARE STEEL	1943	1994	NO	1130
2190	12,000	DIESEL FUEL	BARE STEEL	1943	1994	NO	1130
2190	12,000	UNLEADED GA	BARE STEEL	1943	1994	NO	1130
1553	14,000	UNLEADED GA	BARE STEEL	1965	1994	NO	721

FORT MCCOY UST REMOVAL INVENTORY 03/30/95

BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK	DNR SITE ID NUMBER
1553	8,000	UNLEADED GA	COATED STEEL	1965	1994	NO	721
2177	1,000	LEADED GAS	BARE STEEL	UNK	1994	YES	

FORT MCCOY UST REMOVAL INVENTORY 03/30/95

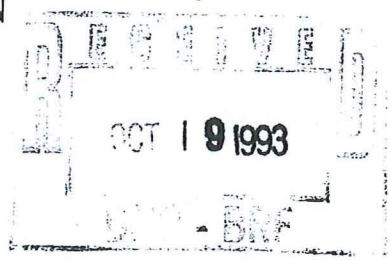
BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK	DNR SITE ID NUMBER
2114	860	FUEL OIL	BARE STEEL	1947	1978	UNK	
1754	1,500	FUEL OIL	COATED STEEL	1972	1986	UNK	
106	1,500	FUEL OIL	BARE STEEL	1943	1989	YES	
108	750	FUEL OIL	BARE STEEL	1943	1989	YES	
1266	12,000	WASTE OIL	BARE STEEL	1943	1989	NO	298
1266	12,000	WASTE OIL	BARE STEEL	1943	1989	NO	298
1358	12,000	GASOLINE	BARE STEEL	1943	1989	NO	299
1467	12,000	DIESEL	BARE STEEL	1943	1989	NO	300
1467	12,000	DIESEL	BARE STEEL	1943	1989	NO	300
1550	750	FUEL OIL	BARE STEEL	1943	1989	NO	305
1550	750	FUEL OIL	BARE STEEL	1943	1989	NO	305
1554	12,000	FUEL OIL	BARE STEEL	1943	1989	NO	301
1658	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1661	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1668	1,650	FUEL OIL	FIBERGLASS	1977	1989	NO	306
1668	1,650	FUEL OIL	FIBERGLASS	1977	1989	NO	306
1669	12,000	GASOLINE	BARE STEEL	1943	1989	NO	302
1669	12,000	DIESEL	BARE STEEL	1943	1989	NO	302
1857	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1859	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1862	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
1879	12,000	GASOLINE	BARE STEEL	1943	1989	NO	303
1879	12,000	GASOLINE	BARE STEEL	1943	1989	NO	303
1938	860	FUEL OIL	BARE STEEL	1951	1989	YES	
2011	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	304
2013	750	FUEL OIL	?	?	1989	YES	
2110	2,000	GASOLINE	?	?	1989	YES	
2113	4,000	FUEL OIL	BARE STEEL	1947	1989	YES	
2190	4,000	GASOLINE	BARE STEEL	1943	1989	YES	
2190	750	DIESEL	BARE STEEL	1943	1989	YES	
2190	750	DIESEL	BARE STEEL	1943	1989	YES	
2773	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES	
6062	1,000	FUEL OIL	COATED STEEL	1976	1989	YES	
10111	500	FUEL OIL	BARE STEEL	1943	1989	YES	
5014	250	GASOLINE	BARE STEEL	1942	1990	NO	354
457	750	FUEL OIL	BARE STEEL	1943	1991	NO	440
1152	1,500	GASOLINE	BARE STEEL	1970	1991	YES	
1152	1,000	DIESEL	BARE STEEL	1970	1991	NO	1002
1409	4,000	FUEL OIL	FIBERGLASS	1978	1991	YES	
1553	1,000	FUEL OIL	BARE STEEL	1943	1991	NO	721
1669	1,000	SOLVENT	BARE STEEL	1943	1991	YES	
1669	1,000	KEROSENE	BARE STEEL	1943	1991	YES	
2321	12,000	FUEL OIL	BARE STEEL	1943	1991	YES	
2846	1,500	FUEL OIL	BARE STEEL	1958	1991	YES	
105	750	FUEL OIL	BARE STEEL	1943	1992	YES	902

11-24-92.

SITE ASSESSMENT REPORT FOR UNDERGROUND STORAGE TANK

FORT McCOY
TOMAH, WISCONSIN

Bldg. #10137



PREPARED FOR:

J&D ENTERPRISES, INC.
5197 LAVAQUE ROAD, DULUTH, MINNESOTA 55803

PREPARED BY:

REMEDIATION SERVICES, INC.
102 SOUTH 29TH AVENUE WEST, SUITE 100, DULUTH, MINNESOTA 55806
(218) 722-6013

WCR

JULY 9, 1993

RSI
Remediation Services, Inc.
Environmental Consultants
102 S 29th Ave W, Suite 100 • Duluth, Minnesota 55806
Phone: (218) 722-6013 Fax: (218) 722-6319

July 9, 1993

Ms. Rani Douville
J&D Enterprises, Inc.
5197 LaVaque Road
Duluth, Minnesota 55803

RE: Site Assessment Report for Underground Storage Tank
Fort McCoy Military Reservation

Dear Ms. Douville:

Remediation Services, Inc. (RSI) has completed its services for the above-mentioned project. The scope of the project was to gather and interpret information obtained during the removal of twenty-nine UST systems from the above mentioned site.

Based on the laboratory analytical results of soils collected from the basin of the excavations, and the Document entitled *Site Assessment for Underground Storage Tanks Technical Guidance* (WD R PUBL-SW-175-92), it is the opinion of RSI that further environmental investigation of the soils and/or groundwater surrounding seven of these tanks is not needed, and can be classified as "Clean Closures". This report will serve to summarize information obtained during the closure of these tanks. A report summarizing the findings during the removal of the other twenty-two (22) USTs will follow under a separate cover within the next two weeks.

A copy of this report should be sent to the D R's central office in Madison. Please contact (608) 266-2111 for submittal information.

If you have any questions concerning this or any other aspect of the project, please call me at (218) 722-6013.

Sincerely,

REMEDIATION SERVICES, INC.

ROBERT J. MASLOWSKI
Project Manager

RJM:lmr

TABLE OF CONTENTS

SITE BACKGROUND INFORMATION

The scope of this project was to perform site assessments during the removal of twenty-nine (29) underground storage tank systems (UST), all of which were owned and operated by the United States Army (Table 1). The site of this project, known as the Fort McCoy Military Reservation is located between Sparta and Tomah, on Highway 21. The Fort itself encompasses approximately 60,000 acres.

The underground storage tanks (UST's) involved were used in several different capacities. The majority of the tanks (18) were used to store fuel oil used to heat occupied buildings. Eight tanks contained diesel fuel to power the backup generators or water pumping systems, and three of the tanks contained gasoline (two for backup systems, one for vehicle refueling).

The tanks ranged in age from 5 to 50 years according to information provided by the Federal Government. All of the product feed lines had been separated from the furnace or pump motors by Government personnel prior to the tank removal.

The site has been a military installation since the early 1940's. Prior to that, it was used for agricultural purposes. The Fort has provided basic military training as well as heavy weapons and specialized training. These activities have caused numerous releases of a wide range of substances. The Wisconsin Department of Natural Resources (WDNR) LUST (Leaking Underground Storage Tank) computerized tracking system has recorded 11 petroleum contaminated sites within the Fort boundary and also ranks the entire Fort McCoy property as a high priority site (Table 2).

Of the twenty-nine underground storage tank systems which were scheduled for site assessments, only seven can be identified as clean sites as determined by field analysis and confirmed through laboratory testing. As a result, only these seven sites will be addressed in this report (Table 3).

Existing UST's scheduled for removal are listed in Table 4.

UST systems installed from 1990 through 1992 are listed in Table 5. These systems conform to all spill containment and overfill protection requirements established to this date.

CONTRACTOR INFORMATION

Site assessment services for this project were provided by RSI (William Donovan-DILHR Certification #00101). Laboratory analytical services were provided by SERCO Laboratories, Inc. of St. Paul, Minnesota. J&D Enterprises, Inc. (J&D), of Duluth, Minnesota was the General Contractor for the project as well as the certified tank removal/tank cleaning contractor. The DILHR certified representative for J&D Enterprises was Mark McKinnon (#00305). A list of all contractors involved in this project will be provided upon request.

Mr. James Daniels, a UST/AST inspector for the DILHR visited the site on November 19, 1992 to observe the tank removal process and to ensure that only those persons certified by the State of Wisconsin were performing the required duties and that regulations were adhered to.

Persons representing Fort McCoy for this project are as follows:

Maureen Storandt, Contracting Officer, Building 2103
Donald Schonasky, Project Inspector, Building 2111
Kurt Brownell, Environmental Department, Building 2160

GEOLOGY

Bedrock geology at this site consists of Precambrian igneous rock underlying numerous Cambrian age sandstone formations. The surficial geology of the area consists of stratified sands from glacial outwash along with the remains of the eroded bedrock.

Fort McCoy Military Reservation lies in a section of Wisconsin known as the driftless area. This area escaped the erosional destruction of the glacial ice flows only to be dissected by numerous rivers and streams from the melting glacial ice. The Fort itself lies in the LaCrosse River valley.

A surface layer of grayish brown or black fine sands (depending on organic matter content) can be found throughout the county at varying thicknesses. Generally this is underlain by a loose, brownish yellow to light yellow fine sand to depths of 2′ to 8′ or greater. The excavations did not exceed this depth.

HYDROGEOLOGY

Depth to groundwater varies throughout the site, however, it is generally found within twenty feet of the surface and in many cases it can be found within four to six feet.

TANK ACTIVITIES AND EXCAVATION

Individual sites will be discussed in greater detail later in this report.

TANK CLEANING AND DISPOSAL

Prior to the removal of the tanks from the basin, the interior atmosphere of each tank was measured with an explosimeter. If the readings indicated that a tank was unsafe to remove, the tank was purged of petroleum vapors with liquid nitrogen.

Once the tanks were removed from the basin and placed on level ground, a 3 foot diameter hole was cut in one end. This allowed access to the

interior of the tank for the removal of any remaining residual product. The interior was then wiped dry with petroleum absorbent pads. All residual tank contents as well as cleaning materials were placed in 55 gallon drums for disposal. The cleaned tanks were transported by J&D on a flatbed trailer to a staging area where they were cut into scrap. The final scrap metal was transported to a storage area (DRMO) to await disposal. This area is maintained by Fort McCoy personnel.

Surplus Product Management

All usable product removed from the tanks was transported to J&D headquarters in Duluth, Minnesota.

Tank Sludge Management

Since two types of petroleum products were involved in this project, the tank bottoms were categorized as either diesel or gasoline, and the like products were combined. Approximately 30 gallons of gasoline tank sludge was disposed of at Waste Research & Reclamation (WR&R) in Eau Claire, Wisconsin. The diesel fuel tank sludge was combined with the heating oil sludge and the entire 275 gallons was disposed of at WR&R also. A copy of the UST Program Profile Sheets and Wisconsin DNR Manifest forms for the tank bottoms has been provided by J&D Enterprises, Inc. (Appendix A).

INDIVIDUAL TANK INFORMATION

Following is a brief narrative describing individual site characteristics, UST system conditions and soil vapor results. Photographs, figures, lab reports, tank inventory forms and soil sample collection procedures can be found in Appendix B.

Building No. 5007

This site is used primarily as a water supply building which houses a well and pump. This site lies in an open grassy area adjacent to a large open vehicle storage area. Topography is level with no surface water features in the vicinity.

A 1000 gallon coated steel UST was installed in 1985 to power a backup pump for the well. Recently a switch was made to propane. The tank appeared in excellent condition with the sacrificial anodes still intact. All piping was tight with no evidence of leakage. The tank was perched on a concrete slab and secured with two metal straps. This concrete slab was removed to facilitate soil sampling.

Four soil samples were collected and field-analyzed with a portable photoionization detector (MicroTIP Model MP-1000). One sample was collected from beneath each end of the tank and one from each sidewall. All four samples showed no detection of petroleum vapors.

Two laboratory samples were collected from beneath each end of the tank as required by ILHR-10 and DNR PUBL-SW-175-92. These samples were tested for Diesel Range Organics (DRO) using the Wisconsin Modified method. Results of the analysis show no detection above the laboratory detection limits.

Weather conditions were sunny and calm with temperature in the 40's.

Groundwater was not encountered during this excavation.

Soils encountered at this site consisted of a thin layer (< 6") of organic material overlying grayish brown poorly graded sands.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	PID READING
SS-1	9'	Grey/brown sand	Basin Floor South	0.0 ppm
SS-2	9'	Grey/brown sand	Basin Floor North	0.0 ppm
SS-3	8'	Grey/brown sand	South Wall	0.0 ppm
SS-4	8'	Grey/brown sand	North Wall	0.0 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
5007-TI-1	11/23/92	South Floor (9')	<10 ppm DRO
5007-TI-2	11/23/92	North Floor (9')	<10 ppm DRO

Building No. 1557

This site is adjacent to building number 1555 which is the main Fire Station for Fort McCoy. Building number 1557 is a well house for use by the Fire Department. A gasoline powered well pump was used for back up purposes.

Topography is mostly level however, the tank location was elevated above existing grade. The surrounding area is wooded. Weather conditions were mild with very low humidity. Temperatures were in the upper 30's.

The tank (a steel 340 gallon UST) was installed in 1954. Piping from the tank to the well house had been removed prior to the tank removal. It was apparent that due to the location of the tank, the length of the product line was approximately 6 feet and was consumed in the tank removal excavation. No above ground tank for propane or gas was noted, therefore the backup system may now be powered by natural gas.

The tank showed some signs of corrosion however no obvious holes were observed. No petroleum odors were detected as well.

Field analysis of soils showed no detection for samples collected from

the floor and two sidewalls. Laboratory samples analyzed for Gasoline Range Organics (GRO) collected from the floor of the excavation were below the analytical detection limits.

Soils encountered at this site consisted of light to dark brown sands to approximately 7' overlying white sands of unknown depth.

Groundwater was not encountered at any point in the excavation.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-1	6'	Grey sand	Basin Floor West	0.0 ppm
SS-2	6'	Grey sand	Basin Floor East	0,0 ppm
SS-3	5'	Grey sand	North Wall	0.0 ppm
SS-4	5'	Grey sand	South Wall	0.0 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
1557-IT-1	12/3/92	East Floor (6')	<10 ppm GRO
1557-IT-2	12/3/92	West Floor (6')	<10 ppm GRO

Building No. 2204

This site is located west of the main Fort and is known as the waste water treatment plant. Surrounding the tank location are the concrete treatment ponds. This tank was used for heating oil and was replaced by two temporary 265 gallon above ground storage tanks. Natural gas will eventually replace heating oil altogether.

Topography is level with no surface waters nearby. Weather conditions were cold with temperatures in the 30's. Light snow was observed.

A 1000 gallon steel UST was installed 1943 to store heating oil for use on site. It was found to be in fairly good condition. The short pipe run (< 6 feet of copper line) was consumed in the tank excavation. A concrete walkway lay above the tank and a portion had to be removed. No petroleum odors were noticed in the excavation.

Three soil samples were collected from the floor of the tank basin and field tested using a PID. All three samples showed no detection of petroleum vapors.

Due to the size and content of this tank, it is not Federally regulated and therefore a site assessment is not required by law. Fort McCoy has required that a minimum of one laboratory sample be collected from the floor of the excavation to confirm a clean site. This sample was tested for DRO with the results being below the laboratory detection limits.

Groundwater was not encountered during the excavation.

Soils encountered at this site consisted if a thicker layer of organic material (> 8") overlying poorly graded yellow to brown sands. Sampling depth did not go beyond 8 feet.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-1	7.5′	Lt brown sand	Basin Floor West	0.0 ppm
SS-2	7.5′	Lt brown sand	Mid Basin Floor	0.0 ppm
SS-3	7.5′	Lt brown sand	Basin Floor East	0.0 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
2204-IT-1	12/3/92	Floor (7.5′)	<10 ppm DRO

Building No. 2852

This site is in a section of the Fort which appears to be used for vehicle storage and maintenance. Topography of this area is mainly flat with class V gravel as the primary road surface. Several buildings surround the site.

A 1000 gallon steel UST was installed in 1952 to store heating oil for use on site. Natural gas had been installed previously, eliminating the need for temporary above ground tanks. The pipe trench for the copper product feed lines was consumed in the tank excavation. The tank appeared to be rusted heavily in some sections, however, no holes could be found. Piping connections were tight and no staining was observed near the pipe joints. Ambient temperature was 30 degrees Fahrenheit, with no wind, and very low humidity.

Three soil samples were collected from the floor of the excavation and field tested using a PID. These samples were collected from under each end of the tank as well as under the center. All three samples showed no detection of petroleum vapors.

Due to the size and content of this tank, it is not Federally regulated and therefore a site assessment is not required by law. Fort McCoy has authorized a minimum of one laboratory sample to be collected from the base of the excavation and analyzed to confirm a clean site. This sample was tested for DRO with the results being below the laboratory detection limits.

Groundwater was not encountered during this excavation.

Soils at this site consisted of a thin layer of organic material overlying brown sandy soils containing small amounts of organics at

depths of 7 to 8 feet.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-1	9′	White sand	Basin Floor East	0.0 ppm
SS-2	9′	White sand	Basin Floor West	0.0 ppm
SS-3	9′	White sand	Mid Basin Floor	0.0 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
2852-TI-1	11/25/92	Mid-Floor (8′)	<10 ppm DRO

Building No. 5030

This site is a private living quarters for command-type personnel. It is located in the northwest corner of the reservation on the banks of the Squaw Creek. Two buildings exist on site: the house; and a detached two car garage. The distance between the buildings is 80 feet. Topography is steep sloping to the northwest down to the creek.

A 500 gallon steel UST was installed in 1943 to store heating oil for consumption on site. It's location was approximately 8 to 10 feet from the south corner of the house. The vent pipe and the fill pipe openings were both directly above the tank. Upon excavation and removal from the tank basin, the tank appeared in relatively good condition. Some pitting was observed however no holes were found. No odors were noticed and soils were not visibly discolored.

Three soil samples were collected and field tested using a PID. One sample was collected from under each end of the tank and one from under the center. The depths of these samples were approximately 7 feet. Results of the field analysis showed no detection of petroleum vapors in any of the samples.

Due to the classification of this tank as non-Federally regulated, one soil sample was collected from beneath the center of the tank to determine if a petroleum release had occurred. This sample was collected at a depth of 7 feet and was analyzed for DRO.

Groundwater was not encountered during this excavation however the local flow direction is thought to be northwest toward the Squaw creek.

Soils encountered at this site consisted of a thin organic layer (< 6 inches) overlying grayish brown sands. At a depth of 6 to 7 feet, white to yellow sands were encountered. The excavation did not progress beyond that depth.

Unusual circumstances surrounding this site involved the assumed attachment of a remote fill pipe located approximately 75 feet from the tank to be removed. Once the tank was exposed, it became evident that a second tank was present on the site which incorporated the remote fill pipe as well as a normal fill pipe directly above the tank. A remote vent pipe was found to be attached to the house which ran beneath the sidewalk. This UST system was removed at a later date and will be addressed in detail in a separate report.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-1	7′	Grey sand	Basin Floor East	0.0 ppm
SS-2	7′	Yel/white sand	Basin Floor West	0.0 ppm
SS-3	7′	Yellow sand	Mid Basin Floor	0.0 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
5030-TI-1	11/25/93	Mid-Floor (7′)	<10 ppm DRO

Building No. 6065

This site is used as a water supply building housing a well and pump. It is located approximately several hundred feet from the main water reservoir that supplies the airport. This area is level with no nearby surface waters.

A 500 gallon steel UST was installed in 1975 to store diesel fuel to power a backup pump. It was located adjacent to the building with both the fill and vent pipes directly above the tank. No evidence of surface spillage was observed.

Three soil samples were collected from the floor of the excavation and field tested using a PID. Vapors were detected in all three samples however, the levels recorded did not exceed 10 ppm. Two soil samples were collected from under each end of the tank at a depth of 9 feet. These samples were analyzed for DRO. Results show no detection above the laboratory detection limits. Due to the classification of this tank as a Federally regulated UST, two soil samples were collected from beneath each end of the tank as required by ILHR-10.

Soils encountered at this site consisted of an thin layer of organic material overlying grey to white medium sands.

Groundwater was not encountered during the excavation.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-1	9′	Grey sand	Basin Floor North	8.1 ppm
SS-2	9′	White sand	Mid Basin Floor	4.7 ppm
SS-3	9′	White sand	Basin Floor South	2.3 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
6065-T1-1	11/19/92	North Floor (9′)	<10 ppm DRO
6065-T1-2	11/19/92	South Floor (9′)	<10 ppm DRO

Building No. 10137

This site is used primarily as a water supply building which houses a well and pump. This site lies in a section of the fort known as the hospital area. Building number 10111, which is adjacent to this site, was involved in extensive contaminated soil excavation from the removal of a UST.

Topography is level with no surface water features in the vicinity.

A 1000 gallon coated steel UST was installed in 1985 to power a backup pump for the well. The tank appeared in good condition with no obvious signs of a release. All piping was tight with no evidence of leakage.

Four soil samples were collected and field-analyzed with a PID. One sample was collected from beneath each end of the tank and one from each sidewall. All four samples showed no detection of petroleum vapors.

Two laboratory samples were collected from beneath each end of the tank and tested for DRO. Results of the analysis show no detection above the laboratory detection limits.

Weather conditions were sunny and calm with temperature in the 50′s.

Groundwater was not encountered during this excavation.

Soils encountered at this site consisted of a thin layer (<6 inches) of organic material overlying light brown, poorly graded sands. These sands remained consistent to a depth of 7.5′ feet.

Soil Vapor Readings

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-1	7.5′	light brown sand	West Floor	0.0 ppm

Soil Vapor Readings (continued)

SAMPLE #	DEPTH	SOIL TYPE	SAMPLE LOCATION	READING
SS-2	7.5′	light brown sand	East Floor	0.0 ppm
SS-3	5′	Grey/brown sand	North Wall	0.0 ppm
SS-4	5′	Grey/brown sand	South Wall	0.0 ppm

Laboratory Analysis

SAMPLE #	DATE COLLECTED	LOCATION	RESULT
10137-TI-1	11/24/92	West Floor (8′)	<10 ppm DRO
10137-TI-2	11/24/92	East Floor (8′)	<10 ppm DRO

SUMMARY

Based on qualitative and quantitative analysis of soil samples collected, it is the recommendation of RSI that additional sampling and investigation is not warranted for the above mentioned sites.

We appreciate the opportunity to have performed these site assessments for you. If you have any questions, please contact Robert J. Maslowski, or myself.

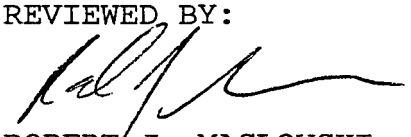
Sincerely,

REMEDIATION SERVICES, INC.

BILL DONOVAN
Environmental Geologist

BD:lmr

REVIEWED BY:



ROBERT J. MASLOWSKI
Project Manager

Table 1. Fort McCoy Underground Storage Tank Information for project #HA00018-2P

Building #	Tank Capacity	Tank Product	Tank Installed	Tank Removal
105	750	Fuel Oil	1943	12/02/92
659	750	Fuel Oil	1943	11/24/92
1010	500	Gasoline	Unknown	12/10/92
1553	3000	Leaded Gas	1965	12/10/92
1557	340	Gasoline	1964	12/02/92
1562	500	Diesel Fuel	1971	11/23/92
1565	500	Fuel Oil	1977	11/23/92
1656	750	Fuel Oil	1972	12/01/92
1680	4000	Fuel Oil	1978	12/02/92
1849	750	Fuel Oil	1943	11/30/92
1853	750	Fuel Oil	1943	12/01/92
2197	500	Fuel Oil	1977	12/09/92
2204	1000	Fuel Oil	1943	12/02/92
2541	1000	Fuel Oil	1946	11/30/92
2569	1000	Fuel Oil	1943	12/03/92
2572	500	Fuel Oil	1977	11/30/92
2852	1000	Fuel Oil	1961	11/25/92
5007	550	Diesel Fuel	1985	11/23/92
5014	500	Fuel Oil	1942	11/24/92
5030	500	Fuel Oil	1943	11/25/92
5040	750	Fuel Oil	1943	
6062	400	Diesel Fuel	1976	11/17/92
6062	400	Diesel Fuel	1976	11/17/92
6062	1000	Diesel Fuel	1976	11/17/92
6065	500	Diesel Fuel	1975	11/19/92
6250	140	Diesel Fuel	1976	11/19/92
10111	12000	Fuel Oil	1973	12/03/92
10137	500	Diesel Fuel	Unknown	11/24/92

Table 2. Active Leaking Underground Storage Tank Sites at Fort McCoy
(From WDNR L.U.S.T Computer Tracking System, August 13, 1992)

Priority Ranking: 1 - High 2 - Medium 3 - Low 4 - Unknown

District	ID#	Site Name	Date Reported	Priority
Western Dist.	128	(Fort McCoy Overall)	10/27/88	1
" "	298	Building 1266	10/27/88	4
" "	299	Building 1358	10/27/88	3
" "	300	Building 1467	10/27/88	3
" "	305	Building 1550	10/27/88	3
" "	301	Building 1554	10/27/88	2
" "	306	Building 1668	10/27/88	3
" "	302	Building 1669	10/27/88	1
" "	303	Building 1879	10/27/88	1
" "	304	Building 2011	10/27/88	4
" "	440	Building 457	10/12/90	4
" "	722	Building 457	01/31/92	4
" "	354*	Building 5014	07/11/90	3

* A UST was removed on 11/24/92

Table 3. Underground Storage Tank list of Clean Closures, Fort McCoy

BUILDING NUMBER	REMOVAL DATE	INSTALL DATE	TANK CONTENTS	TANK SIZE (GALLONS)	TANK DIMENSIONS
1557	12/2/92	1964	Gas	340g	36" x 60"
2204	12/2/92	1943	Fuel Oil	1000g	64" x 72"
2852	11/25/92	1961	Fuel Oil	1000g	64" x 72"
5007[1]	11/23/92	1985	Diesel	550g	48" x 72"
5030	11/25/92	1943	Fuel Oil	500g	48" x 72"
6065[1]	11/19/92	1975	Diesel	500g	48" x 72"
10137[1]	11/24/92	Unknown	Diesel Fuel	500g	Unknown

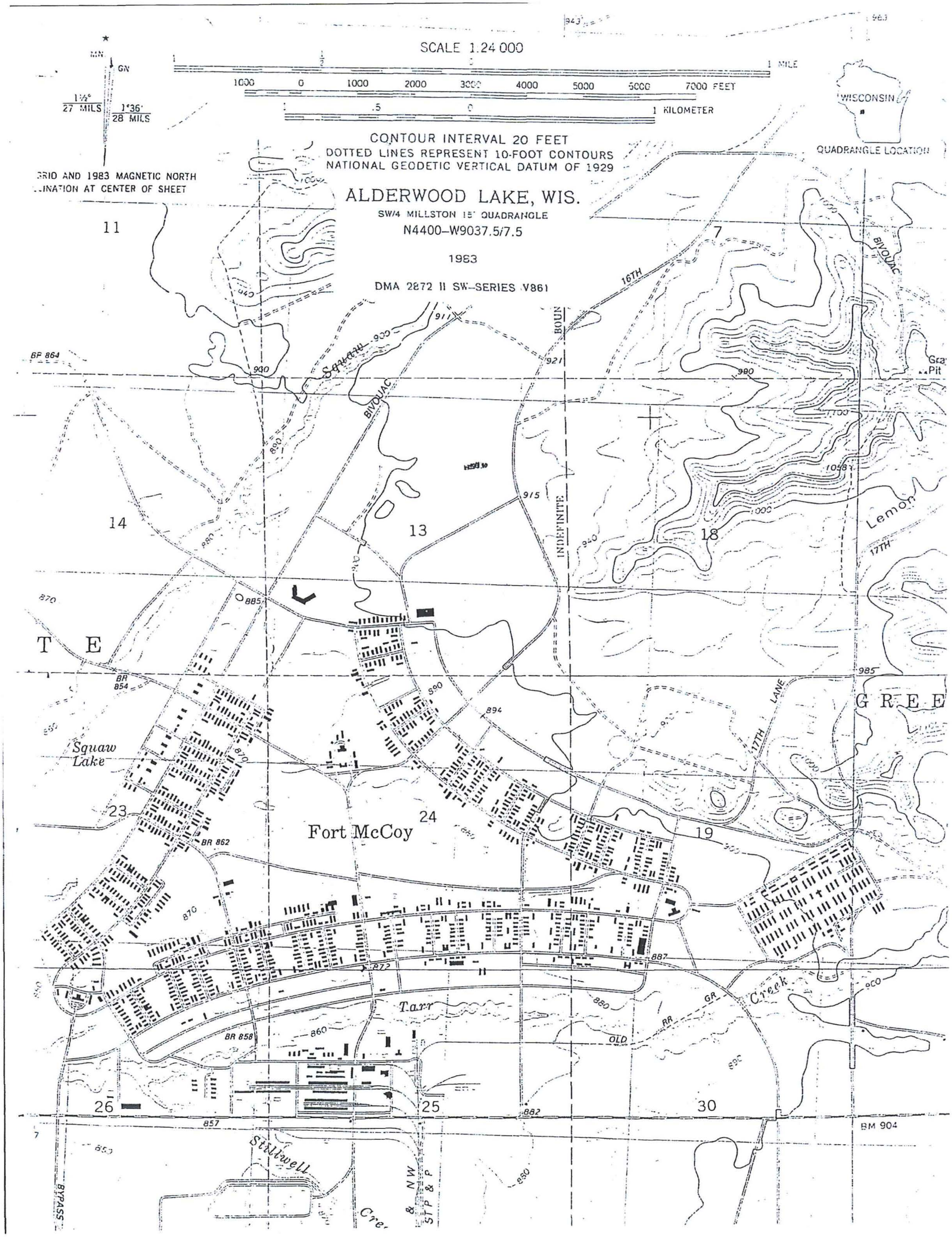
[1] Federally regulated tank

Table 4. Existing UST's scheduled for closure. Information provided by the Fort McCoy Environmental Department.

Bldg	Capacity	Product	Installed	Projected Removal
2190	12,000	gasoline	1943	1993
2190	12,000	gasoline	1943	1993
2190	1,000	diesel	1943	1993
2190	12,000	diesel	1943	1993
2190	1,000	gasoline	1943	1993
3050	10,000	gasoline	1975	1993
3050	7,500	used eng oil	1975	1993
3050	1,500	fuel oil	1976	1993
3050	25,000	fuel oil	1975	1993
3050	10,000	diesel	1975	1993
1553	8,000	gasoline	1975	1994
1553	14,000	gasoline	1965	1994
5050	500	fuel oil	1943	1994
6188	1,500	fuel oil	1952	1995
7051	1,000	fuel oil	1969	1995

Table 5. Recently installed UST systems. Information provided by Fort McCoy Environmental Department Personnel.

Location	Capacity	Product	Installed
Bldg 242	3-unknown	Unknown	1992
Bldg 1370	1-2,500	Diesel	1990
Airport	4-20,000	Jet fuel	1992


SCALE 1:24 000
1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER
CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
ALDERWOOD LAKE, WIS.
SW/4 MILLSTON 15' QUADRANGLE
N4400–W9037.5/7.5
1983
DMA 2872 II SW–SERIES V861
WISCONSIN
QUADRANGLE LOCATION
MN
GN
27 MILS
28 MILS
GRID AND 1983 MAGNETIC NORTH
INATION AT CENTER OF SHEET
Squaw
BIVOUAC
16TH
BOUN
INDEFINITE
Lemon
17TH
LANE
Squaw Lake
Fort McCoy
Creek
OLD
BYPASS
Stillwell
BM 904
11
14
13
18
7
23
24
19
26
25
30

APPENDIX A

RESCO
Remedial Environmental Services Co.
A Division of Waste Research & Reclamation Co., Inc.

PROFILE SHEET FOR UST PROGRAM

A. General Information EPA Number WIF32100 20563

Business Name (Tank owner) Dept of the Army Fort McCoy
Site Address Building 2103 Headquarters Fort McCoy
City, State, Zip Ft. McCoy, WI 54656-5000

Contact Maureen Storandt Contracting Phone (608) 388-2924

Contractor:
Name J & D Enterprises of Duluth, Inc.
Address 5197 Lavaque Road
City, State, Zip Duluth, MN 55803

Contact Rani Douville Phone (218) 729-9105

Bill to Generator ____ Contractor XX

B. Underground Tank Size Capacity (Gal.) Various sizes from contract DAKF61-92-C-0050

Date tank was taken out of service 11-16-92 to 12-16-92
Material currently in tank - Unleaded gasoline ____

(Check one)
Leaded gasoline ____
Diesel fuel X
Heating oil #1,#2 X
Heating oil #5,#6 ____
Waste oil ____
Other ____

* Does the sludge contain PCB's? YES ____ NO XX
Tank will be disposed of at WR&R: YES ____ NO XX
Transportation, of sludge, will be by:
Contractor XX
WR&R ____

Total gallons (projected) to be disposed of at WR&R: 275

Certification: I, the undersigned, the generator, or an employee of the generator, and having proper authority granted by the generator, hereby certify the information above is a true representation of the waste. I have examined and am familiar with the information submitted in this form. To the best of my knowledge it is true and correct, and that all known and suspected hazards have been disclosed.

Generator Signature [signature] Date 6-9-93
CONTRACTING OFFICER'S REPRESENTATIVE

WRR will accept this specific material for processing and disposal. Please contact Jim Wilkie at (715) 836-8796 prior to shipment for labeling and shipping information. *If the material contains PCB's when it arrives at our plant, it will not be accepted.

RESCO
Remedial Environmental Services Co.
A Division of Waste Research & Reclamation Co., Inc.

PROFILE SHEET FOR UST PROGRAM

A. General Information EPA Number WI 3210020563

Business Name (Tank owner) Dept of the Army Fort McCoy
Site Address Bldg 2103, Headquarters Fort McCoy
City, State, Zip Fort McCoy, WI 54656-5000

Contact Maureen Storandt Phone (608) 388-2924

Contractor:
Name J & D Enterprises of Duluth, Inc.
Address 5197 Lavague Road
City, State, Zip Duluth, MN 55803

Contact Rani Douville Phone (218) 729-9105

Bill to Generator ____ Contractor XX

B. Underground Tank Size Capacity (Gal.) Various sizes from contract DAKF61-92-C-0050

Date tank was taken out of service 11-16-92 to 12-16-92
Material currently in tank - Unleaded gasoline X
(Check one) Leaded gasoline X
Diesel fuel ____
Heating oil #1,#2 ____
Heating oil #5,#6 ____
Waste oil ____
Other ____

* Does the sludge contain PCB's? YES ____ NO XX
Tank will be disposed of at WR&R: YES ____ NO XX
Transportation, of sludge, will be by:
Contractor XX
WR&R ____

Total gallons (projected) to be disposed of at WR&R: 30

Certification: I, the undersigned, the generator, or an employee of the generator, and having proper authority granted by the generator, hereby certify the information above is a true representation of the waste. I have examined and am familiar with the information submitted in this form. To the best of my knowledge it is true and correct, and that all known and suspected hazards have been disclosed.

Generator Signature [signature] Date 6-9-93
CONTRACTING OFFICER'S REPRESENTATIVE

WRR will accept this specific material for processing and disposal. Please contact Jim Wilkie at (715) 836-8796 prior to shipment for labeling and shipping information. *If the material contains PCB's when it arrives at our plant, it will not be accepted.

STATE OF WISCONSIN

Chapter 144, Wis. Stats.
Form 4400-66P Rev. 10-92

WISCONSIN DEPT. OF NATURAL RESOURCES

State of Wisconsin
Department of Natural Resources
Bureau of Solid and Hazardous Waste Mgt.
Box 8094
Madison, Wisconsin 53708

FOR DNR USE ONLY

Please print or type. Form designed for use on elite (12-pitch) typewriter.

Form Approved. OMB No. 2050-0039. Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: [illegible]
Manifest Document No.: 93 6 2 0
2. Page 1 of
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
DEPARTMENT OF THE ARMY FORT MCCOY
BLDG 2162, headquarters fort mccoy
FORT MC COY, WISCONSIN 54656-5000

4. Generator's Phone [illegible]

5. Transporter 1 Company Name: J & D ENTERPRISES OF DULUTH, INC.
6. US EPA ID Number: MND981774952

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
WASTE RESEARCH & RECLAMATION CO., INC.
5200 STATE ROAD 93
EAU CLAIRE, WISCONSIN 54701

10. US EPA ID Number: WID990829475

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. RQ-WASTE GASOLINE, 3, UN1203, PGII	001	DM	00310	P	[illegible]
b. RQ-WASTE FUEL OIL, 3, UN1993, pgIII	005	DM	02000	P	[illegible]
c.					
d.					

J. Additional Descriptions for Materials Listed Above [illegible]
K. Handling Codes for Wastes Listed Above [illegible]

15. Special Handling Instructions and Additional Information

24 HR. EMERGENCY PHONE 218-726-0191

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national governmental regulations and according to the requirements of the Wisconsin Department of Natural Resources. If I am a large quantity generator, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment;

OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)
Kevin [illegible]	[signature]	6 / 18 / 93

17. TRANSPORTER 1 Acknowledgement of Receipt of Materials

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)
Scott Ostberg	Scott Ostberg	6 / 18 / 93

18. TRANSPORTER 2 Acknowledgement of Receipt of Materials

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)

19. Discrepancy Indication Space

20. FACILITY OWNER OR OPERATOR: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name & Position Title	Signature	Date (Month Day Year)
Jim Halvorsen Foreman	[signature]	6 / 18 / 93

EPA Form 8700-22 (Rev. 9-88) Previous editions are obsolete.

Copy Distribution: 1 — Generator send to Wis. DNR; 2 — Generator retain; 3 — Facility send to Wis. DNR; 4 — Facility retain; 5 — Facility send to Generator; 6 — Transporter retain

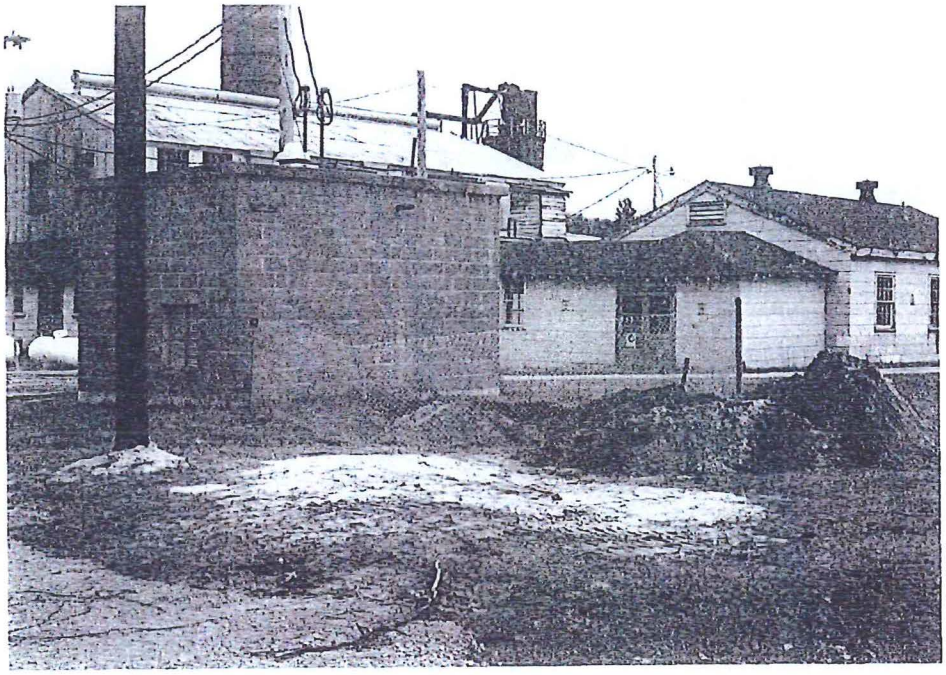
Copies 1 & 3 mail to Wis. DNR at above address.

Emergency 24 Hour Assistance Telephone Number
In Wisconsin (608) 266-3232
Outside Wisconsin (800) 424-8802

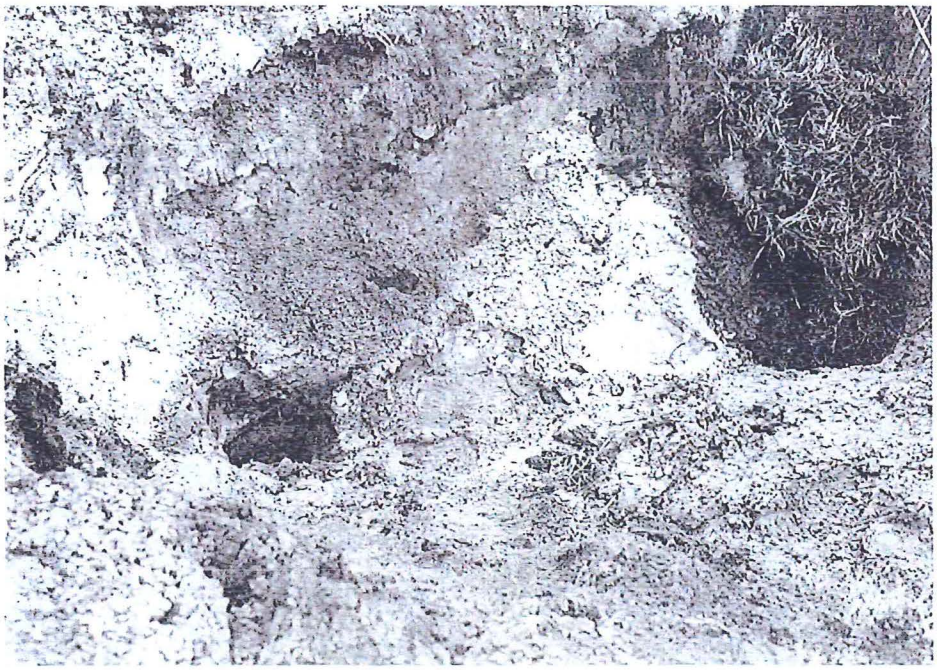
COPY 6– TRANSPORTER RETAIN

APPENDIX B

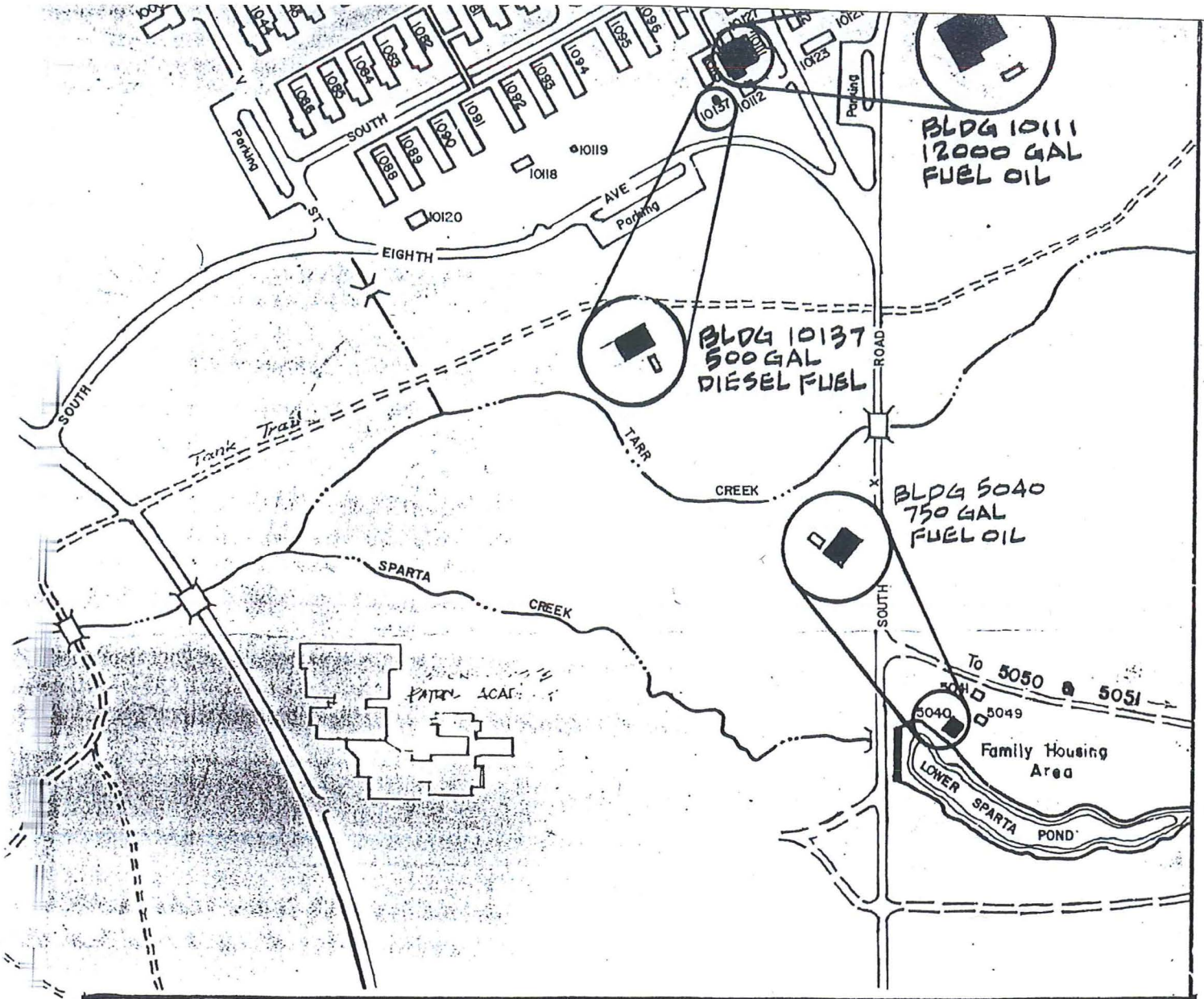
BUILDING NUMBER 10137



Excavation site at Building No. 10137



Final extent of excavation at Building No. 10137



REV. NO.	DATE:	DESCRIPTION	BY

PROJ. NO. HA 00018-2P DATE JUN 1992

O. & M.

SAFETY:

FIRE CHIEF:

USER REP:

PHY SEC:

USAISC:

DIRECTORATE OF ENGINEERING AND HOUSING

FORT McCOY, WISCONSIN

REMOVE UNDERGROUND TANKS FORT McCOY, WI.

CHECKED BY: DBG

PREPARED BY: D. GUNDLACH

DRAWN BY: L. DRAKE

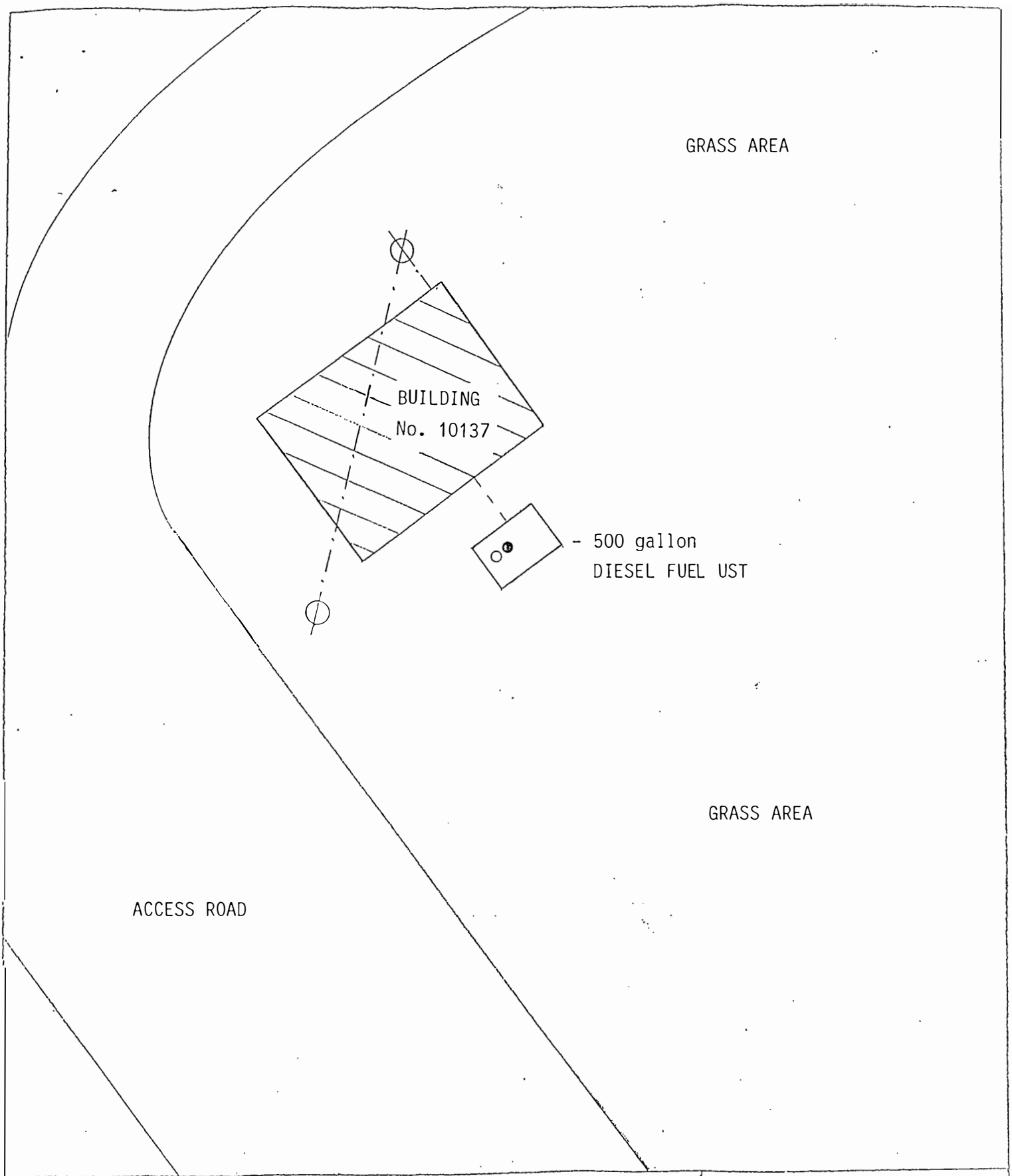
DBG
PROJECT MANAGER

CHIEF ENGINEERING SERVICES

SCALE: NOTED

DRAWING NO: 47-018-2407

SHEET: 1 OF 1



RSI
Environmental Consultants

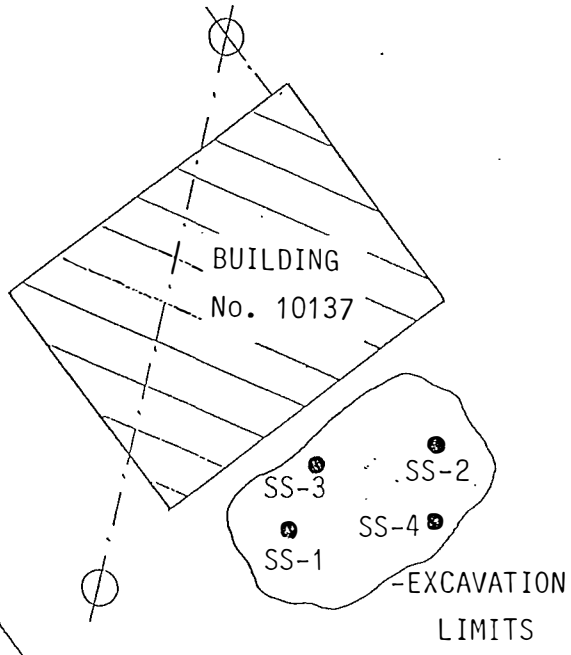
PROJECT: Fort McCoy UST Removal
PROJECT NO.:HA00018-2P
LEGEND: o Fill Pipe
● Vent Pipe
— · — · — Above Ground Electric

N
W E
S

SCALE
0 10

FIELD TEST SAMPLE
IDENTIFICATION KEY

SS-1 - West Floor (7.5')0.0ppm
SS-2 - East Floor (7.5')0.0ppm
SS-3 - North Wall (5')0.0ppm
SS-4 - South Wall (5')0.0ppm

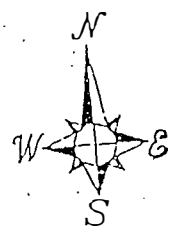


GRASS AREA

ACCESS ROAD

RSI Environmental Consultants

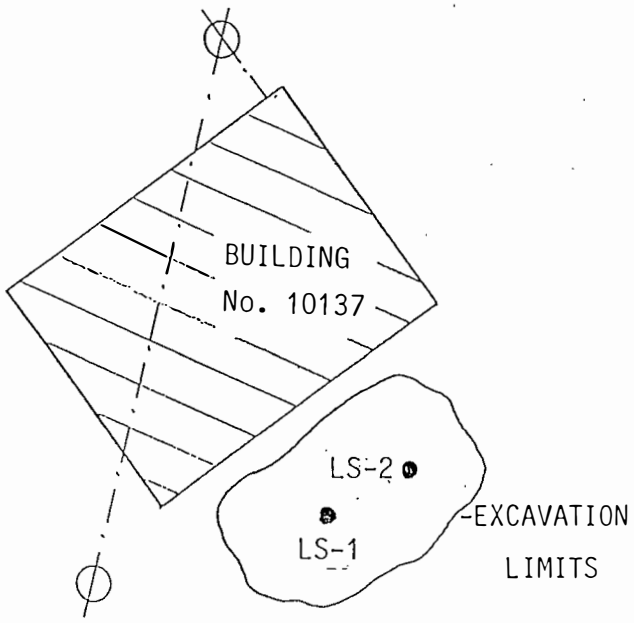
PROJECT: Fort McCoy UST Removal
PROJECT NO.: HA00018-2P
Field Test Sample Collection Points
Building No.10137
LEGEND: — · — Above Ground Electric



SCALE
0 10

LABORATORY SAMPLE
IDENTIFICATION KEY

LS-1 - 10137-T1-1, West Floor (8')
LS-2 - 10137-T1-2, East Floor (8')



GRASS AREA

ACCESS ROAD

RSI
Environmental Consultants

PROJECT: Fort McCoy UST Removal
PROJECT NO.: HA00018-2P
Laboratory Sample Collection Points
Building No. 10137
LEGEND: —·— Above Ground Electric

N
W E
S

SCALE
0 10

SERCO Laboratories

1931 West County Road C2, St. Paul, Minnesota 55113 Phone (612) 636-7173 FAX (612) 636-7178

SERCO SAMPLE NO:	119272	119282	119292	119302
SAMPLE DESCRIPTION:	5007-TI-1	5007-TI-2	10137-TI 1	10137-TI 2
ANALYSIS:				
Diesel Range Organics C10-C28, dry weight, mg/kg	<10	<10	<10	<10
Analytical Method for MOD DRO	MOD DRO	MOD DRO	MOD DRO	MOD DRO
Date of Extraction for MOD DRO	11/25/92	11/25/92	11/25/92	11/25/92
Date of Analysis for MOD DRO	12/08/92	12/08/92	12/08/92	12/08/92
Total Solids, percent	92.6	86.4	96.1	96.1

SERCO SAMPLE NO:	119312	119692	119702
SAMPLE DESCRIPTION:	Detect. Limits Not Dry Weight	Parameter Numbers	Water Detect Limit
ANALYSIS:			
Diesel Range Organics C10-C28, dry weight, mg/kg	10	-	-
Diesel Range Organics, C10-C28, ug/L	-	78919	100
Acenaphthene, ug/L	-	34205	1.5
Acenaphthylene, ug/L	-	34200	14
Anthracene, ug/L	-	34220	0.17
Benzo(a)anthracene, ug/L	-	34526	0.010
Benzo(a)pyrene, ug/L	-	34247	0.039
Benzo(b)fluoranthene, ug/L	-	34230	0.011
Benzo(ghi)perylene, ug/L	-	34521	0.017
Benzo(k)fluoranthene, ug/L	-	34242	0.010
Chrysene, ug/L	-	34320	0.052
Dibenzo(ah)anthracene, ug/L	-	34556	0.011
Fluoranthene, ug/L	-	34376	0.077
Fluorene, ug/L	-	34381	0.60
Indeno(1,2,3-cd)pyrene, ug/L	-	-	0.017

< means "not detected at this level". 1 mg = 1000 ug.

MEMBER

State of -onsin
Department of Natural Resources

CHAIN OF CUSTODY RECORD
LUST PROGRAM
Form 4400-151 11-91

Page 1 of 2

Note: This form is required by the Department of Natural Resources for leaking underground storage tank sites in compliance with ch. NR 500-540, NR 158 and NR 419, Wis. Adm. Code.

Sample Collector(s)	Title/Work Station/Company	Telephone Number (include area code)
BILL DONOVAN	ENVIRONMENTAL GEOLOGIST / RST	218-722-6013
Property Owner	**Property Address**	**Telephone Number (include area code)**
DON SCHONASKY, CONST. INSP.	FORT McCOY, WI	~~218~~ 608-280-3466

I hereby certify that I received, properly handled, and disposed of these samples as noted below:

Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By (Signature) B. Donovan	Date/Time 11/25/92 2:30 P	Received for Laboratory By (Signature) SERCO 2:30 P 11/25/92

Receipt on ice
Temperature of temperature blank: _____

If samples were received on ice and there was ice remaining, you may report the temperature as "received on ice". If all of the ice was melted, the temperature of the melt may be substituted for a temperature blank.

Field ID Number	Date Collected	Time Collected	Sample Type[1]	Sample Device	Preserv. Type	Location/Description (see footnote 2)	Analysis Type	Lab ID Number	No./Type of Containers	Sample Condition: Cracked /Broken	Sample Condition: Improperly Sealed	Sample Condition: Good Condition	Sample Condition: Other Comments
1565-T1-1	11/23/92	1:30	SOIL		~	MID FLOOR 6.5'	DRO DRY WT		3				
1565-T1-GW	11/23/92	1:45	GW		~		DRO, PAH PVOC		1				
1562-T1-1	11/23/92	2:00	SOIL		~	SOUTH FLOOR 6'	DRO DRY WT		3				
1562-T1-2	11/23/92	2:00	SOIL		~	NORTH FLOOR 6'			3				
1562-T1-GW	11/23/92	2:15	GW		~		DRO PAH PVOC		1				
5007-T1-1	11/23/92	4:00	SOIL		~	SOUTH FLOOR 9'	DRO DRY WT		3				
5007-T1-2	11/23/92	4:00	SOIL		~	NORTH FLOOR 9'			3				
10137-T1-1	11/~~24~~/92	~~1:45~~	SOIL		~	WEST FLOOR 8'			3				
10137-T1-2	11/24/92	1:45	SOIL		~	EAST FLOOR 8'			3				

[1] Specify groundwater, surface water, soil, leachate, sludge, etc.

[2] Sample description must clearly correlate the sample ID to the sampling location.

DEPARTMENT USE/OPTIONAL FOR SOIL SAMPLERS

Disposition of unused portion of sample Laboratory should:

- [x] Dispose
- [x] Return
- [ ] Retain for ____ days
- [ ] Other

DEPARTMENT USE ONLY

Split samples: Offered? ☐ Yes ☐ No (Check one)

Accepted? ☐ Yes ☐ No (Check one)

Accepted By: _____

For Office Use Only:
Tank ID #

PETROLEUM PRODUCT TANK INVENTORY

P.O. Box 7969
Madison, WI 53707
Telephone (608) 267-5280

This form is to be completed pursuant to Section 101.142, Wis. Stats., to register all underground tanks in Wisconsin that have stored or currently store petroleum or regulated substances. Please see the reverse side for additional information on this program. An underground storage tank is defined as any tank with at least 10 percent of its total volume (included piping) located below ground level. A separate form is needed for each tank. Send each completed form to the agency designated in the top right corner.

This registration applies to a tank that is (check one):
1. ☐ In Use
2. ☐ Abandoned With Product
3. ☐ Abandoned No Product (empty) or With Water
4. ☒ Abandoned - Tank Removed
5. ☐ Abandoned - Filled With Inert Material
7. ☐ Out of Service
8. ☐ Changed Ownership (indicate new owner in section A. 4. below)

Fire Department Providing Fire Coverage Where Tank is Located is In:
☒ City ☐ Village ☐ Town of
Tomah, WI

A. IDENTIFICATION: (Please Print)

1. Installation Name: Fort McCoy
Installation Street Address: Bldg 10137
☐ City ☒ Village ☐ Town of: Fort McCoy,
State: WI | Zip Code: 54656 | County: Monroe

2. Mailing Name if Different Than #1: Fort McCoy
Mailing Address if Different Than #1: Contracting, Building 2103
☐ City ☒ Village ☐ Town of: Fort McCoy
State: WI | Zip Code: 54656 | County: Monroe

3. Name of Contact Person: Maureen Storandt
Street Address: Building 2103
☐ City ☐ Town ☒ Village of: Ft. McCoy | State: WI | Zip Code: 54656
County: Monroe | Telephone No. (include area code): 608-388-2924

4. Owner Name if Different Than #3: Dept of the Army
Street Address: Headquarters
☐ City ☐ Town ☒ Village of: Ft. McCoy | State: WI | Zip Code: 54656
County: Monroe | Telephone No. (include area code): 608-388-2924

5. Tank Age (date installed, if known: or years old): Unknown
6. Tank Capacity (gallons): 500
7. Tank Manufacturer's Name (if known): Unknown

B. TYPE OF USER (check one):

1. ☐ Gas Station
2. ☐ Bulk Storage
3. ☐ Utility
4. ☐ Mercantile
5. ☐ Industrial
6. ☒ Government
7. ☐ School
8. ☐ Residential
9. ☐ Agricultural
10. ☐ Other (specify):

C. TANK CONSTRUCTION:

1. ☒ Bare Steel
2. ☐ Cathodically Protected and Coated Steel (a. ☐ Sacrificial Anodes or b. ☐ Impressed Current)
3. ☐ Coated Steel
4. ☐ Fiberglass
5. ☐ Other (specify):
6. ☐ Relined
7. ☐ Steel - Fiberglass Reinforced Plastic Composite
9. ☐ Unknown

Approval 1. ☐ Nat'l Std 2. ☐ UL 3. ☐ Other: N/A
Is Tank Double Walled? ☐ Yes ☒ No
Overfill Protection Provided? ☐ Yes ☒ No If yes, identify type:
Spill Containment? ☐ Yes ☒ No

Tank leak detection method. 1. ☐ Automatic tank gauging 2. ☐ Vapor monitoring 3. ☐ Groundwater monitoring 4. ☐ Inventory control and tightness testing 5. ☐ Interstitial monitoring 6. ☒ Not required at present

D. PIPING CONSTRUCTION

1. ☒ Bare Steel 2. ☐ Cathodically Protected and Coated or Wrapped Steel (a. ☐ Sacrificial Anodes or b. ☐ Impressed Current) 3. ☐ Coated Steel 4. ☐ Fiberglass 5. ☐ Other (specify): 9. ☐ Unknown

Piping System Type: 1. ☐ Pressurized piping with: a. ☐ auto shutoff; b. ☐ alarm; or c. ☐ flow restrictor 2. ☐ Suction piping with check valve at tank 3. ☐ Suction piping with check valves at pump and inspectable N/A

Piping leak detection method. used if pressurized or check valve at tank: 1. ☐ Vapor monitoring 2. ☐ Interstitial monitoring 3. ☐ Groundwater monitoring 4. ☐ Tightness testing 5. ☐ Line Leak Detector 6. ☒ Not Required

Approval: 1. ☐ Nat'l Std 2. ☐ UL 3. ☐ Other: N/A
Double Walled: ☐ Yes ☒ No

E. TANK CONTENTS

1. ☒ Diesel
2. ☐ Leaded
3. ☐ Unleaded
4. ☐ Fuel Oil
5. ☐ Gasohol
6. ☐ Other
7. ☐ Empty
8. ☐ Sand/Gravel/Slurry
9. ☐ Unknown
10. ☐ Premix
11. ☐ Waste Oil
12. ☐ Propane
13. ☐ Chemical *
14. ☐ Kerosene
15. ☐ Aviation

* If # 13 is checked, indicate the chemical name(s) or number(s) of the chemical or waste.

If Tank Abandoned, Give Date (mo/day/yr): 11-24-92
Has a site assessment been completed? (see reverse side for details) ☒ Yes ☐ No

If installation of a new tank is being reported, indicate who performed the installation inspection:
1. ☐ Fire Department 2. ☐ DILHR 3. ☐ Other (identify) N/A

Signature of Person Completing Report: Rani Douville
Date Signed: 6-11-93

SBD-7437 (R. 09/89) Rani Douville, J & D Enterprises

BACKGROUND FOR TANK INVENTORY

On May 4, 1984, legislation commonly known as the Ground Water Protection Act was signed into law. This legislation required the creation of an inventory of underground petroleum product storage tanks. A record of this information was necessitated by numerous reported incidents of ground water contamination by petroleum products. Many tanks have been installed, used and forgotten. These installations can threaten the ground water.

This underground tank inventory is being established to help identify the need for future actions required to clear up potential problems before they occur. Your help in identifying abandoned, "in use" and "new use" tank locations will greatly assist this effort to protect Wisconsin's ground water.

SITE ASSESSMENT INFORMATION

Requirements for a site assessment at the closure or change in service for a federally regulated underground storage tank were outlined in federal rules published in the September 23,1988 Federal Register, 40 CFR 280 and 281.

The requirements in § 280.72 state:

> (a) Before permanent closure or a change-in-service is completed, owners and operators must measure for the presence of a release where contamination is most likely to be present at the UST site. In selecting sample types, sample locations, and measurement methods, owners and operators must consider the method of closure, the nature of the stored substance, the type of backfill, the depth to ground water, and other factors appropriate for identifying the presence of a release. The requirements of this section are satisfied if one of the external release detection methods allowed in § 280.43 (e) and (f) is operating in accordance with the requirements in § 280.43 at the time of closure, and indicates no release has occurred.

The external release detection methods in § 280.43 (e) and (f) are summarized below:

> "(e) *Vapor monitoring."* This sub section refers to the testing or monitoring for vapors within the soil gas of the tank's excavation zone. It further requires seven (7) conditions to be met to qualify the testing program as a valid vapor monitoring system.
>
> *"(f) Ground-water monitoring."* This sub section refers to the testing or monitoring for liquids on the ground water below the tank. It establishes the requirements for an acceptable system that effectively monitors the ground water for the presence of regulated substances and insures the integrity of the monitoring wells so the wells themselves do not become conduits for ground water contamination.

Complete written guidelines on the conduct of a site assessment can be obtained from the DILHR Bureau of Petroleum Inspection & Fire Protection at the following address:

Bureau of Petroleum Inspection and Fire Protection
P.O. Box 7969
Madison, WI 53707

Site assessments are to be submitted to both the DILHR office and to the DNR at the following addresses:

Bureau of Petroleum Inspection & Fire Protection
P.O. Box 7969
Madison, WI 53707

Bureau of Solid and Hazardous Waste Management
P.O. Box 7921
Madison, WI 53707

DEPARTMENT OF THE ARMY
HEADQUARTERS, FORT McCOY
OFFICE OF THE COMMANDER
SPARTA, WISCONSIN 54656

RECEIVED
SEP 27 1993
DNR - BRF

REPLY TO
ATTENTION OF

Environmental Management Division

Mr. Tim Baker
Area Hydrogeologist
Wisconsin Department of Natural Resources
910 Highway 54 East
Black River Falls, Wisconsin 54615

Dear Mr. Baker:

Enclosed are two site assessment reports and an addendum to the reports for the removal of 29 underground storage tanks (USTs) at Fort McCoy. Nineteen of the removal sites appear to be clean closures and ten sites need additional investigation.

Laboratory results indicate contamination at Buildings 659, 1553, 1562, 1565, 1656, 1680, 1849, 2869, 5014, and 5030 (1 of 2 tanks). Remediation Services Incorporated of Duluth, Minnesota will perform remedial investigations at these sites later this year, with the exception of Building 1553 (PX gas station). Building 1553 is presently being investigated by Braun Intertec Environmental Incorporated of Mendota Heights, Minnesota.

No further work is planned at the 19 sites which laboratory results show to be clean. These sites are located adjacent to Buildings 105, 1010, 1853, 2197, 2541, 2572, 5040, 6062 (3 tanks), 6250, 5007, 1557, 2204, 2852, 5030 (1 of 2 tanks), 6065, and 10137. We request that the Wisconsin Department of Natural Resources declare these 19 tank removals clean closures.

If you have any questions or comments regarding Fort McCoy's UST program, please contact Mr. Kurt Brownell of the Environmental Management Division at (608) 388-4789.

Sincerely,

Steven Detiame LTC Acting Cdr
for Scott W. Hyatt
Colonel, U.S. Army
Commanding

Enclosures

Copy Furnished (wo/encls):

Commander, Headquarters U.S. Army Reserve Command, ATTN: AFRC-ENS-E (Debbie Richert), 3800 North Camp Creek Parkway Southwest, Atlanta, Georgia 30331-5099

Called 10/4/93 & requested copy of reports
(talked to Debbie, Kurt was out)

FORT MC COY UNDERGROUND STORAGE TANK INVENTORY

not complete listing

BLDG #	TANK CAP GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	TANK STATUS	PROJECTED REMOVAL YEAR
1370	2,500	DIESEL FUEL	FIBERGLASS	1990	IN USE	N/A
105	750	FUEL OIL	BARE STEEL	1943	IN USE	1992
659	250	FUEL OIL	BARE STEEL	1943	IN USE	1992
1010	500	DIESEL FUEL	UNKNOWN	?	ABAN	1992
1553	3,000	LEADED GAS	BARE STEEL	1975	ABAN	1992
1557	340	GASOLINE	BARE STEEL	1964	IN USE	1992
1562	500	FUEL OIL	BARE STEEL	1971	IN USE	1992
1565	500	FUEL OIL	FIBERGLASS	1977	IN USE	1992
1656	750	FUEL OIL	BARE STEEL	1972	IN USE	1992
1680	4,000	FUEL OIL	FIBERGLASS	1978	IN USE	1992
1849	750	FUEL OIL	BARE STEEL	1943	IN USE	1992
1853	750	FUEL OIL	BARE STEEL	1943	IN USE	1992
2197	500	FUEL OIL	UNKNOWN	1977	IN USE	1992
2204	1,000	FUEL OIL	BARE STEEL	1943	IN USE	1992
2541	1,000	FUEL OIL	BARE STEEL	1946	IN USE	1992
2569	1,000	FUEL OIL	BARE STEEL	1943	IN USE	1992
2572	500	FUEL OIL	BARE STEEL	1977	IN USE	1992
2852	1,000	FUEL OIL	BARE STEEL	1961	IN USE	1992
5007	550	DIESEL FUEL	COATED STEEL?	1985	IN USE	1992
5014	?	FUEL OIL	BARE STEEL	1942	IN USE	1992
5030	750	FUEL OIL	BARE STEEL	1943	IN USE	1992
5040	500	FUEL OIL	BARE STEEL	1943	IN USE	1992
6062	500	DIESEL FUEL	COATED STEEL	1976	IN USE	1992
6062	500	DIESEL FUEL	COATED STEEL	1976	IN USE	1992
6062	500	DIESEL FUEL	COATED STEEL	1976	IN USE	1992
6065	500?	DIESEL FUEL	UNKNOWN	1975	ABAN	1992
6250	140	DIESEL FUEL	UNKNOWN	1976	IN USE	1992
10111	12,000	FUEL OIL	BARE STEEL	1973	ABAN	1992
10137	500	DIESEL FUEL	UNKNOWN	?	ABAN	1992
242	1,500	UNUSED SOLVENT	COATED STEEL	1977	IN USE	1993
242	10,000	FUEL OIL	COATED STEEL	1971	IN USE	1993
242	5,000	DIESEL FUEL	COATED STEEL	1971	IN USE	1993
242	5,000	UNLEADED GAS	COATED STEEL	1971	IN USE	1993
2190	500	DIESEL	BARE STEEL	1943	ABAN 1979	1993
2190	12,000	UNLEADED GAS	BARE STEEL	1943	ABAN	1993
2190	12,000	UNLEADED GAS	BARE STEEL	1943	IN USE	1993
2190	12,000	DIESEL FUEL	BARE STEEL	1943	IN USE	1993
2190	1,000	UNLEADED GAS	BARE STEEL	1943	IN USE	1993
2190	1,000	DIESEL FUEL	BARE STEEL	1943	IN USE	1993
3050	25,000	FUEL OIL	BARE STEEL	1975	IN USE	1993
3050	25,000	FUEL OIL	BARE STEEL	1975	IN USE	1993
3050	10,000	DIESEL FUEL	BARE STEEL	1975	IN USE	1993
3050	1,500	FUEL OIL	FIBERGLASS	1976	ABAN	1993
3050	10,000	UNLEADED GAS	BARE STEEL	1975	IN USE	1993
3050	7,500	USED ENG OIL	BARE STEEL	1975	IN USE	1993
5050	500	FUEL OIL	BARE STEEL	1943	IN USE	1994
6188	1,500	FUEL OIL	BARE STEEL	1952	IN USE	1995
7051	1,500	FUEL OIL	BARE STEEL	1969	IN USE	1995
1553	8,000	UNLEADED GAS	COATED STEEL	1965	IN USE	1998
1553	14,000	UNLEADED GAS	BARE STEEL	1965	IN USE	1998

2 tanks removed this location (5030)

INVENTORY OF FORT MCCOY UST REMOVALS

BLDG NUMBER	TANK CAPACITY GAL	TANK PRODUCT	TANK CONSTRUCTION INFORMATION	TANK INSTALL DATE	REMOVAL YEAR	CLEAN CLOSURE YES/NO/UNK
2114	860	FUEL OIL	BARE STEEL	1947	1978	UNK
1754	1,500	FUEL OIL	COATED STEEL	1972	1986	UNK
106	1,500	FUEL OIL	BARE STEEL	1943	1989	YES
108	750	FUEL OIL	BARE STEEL	1943	1989	YES
1266	12,000	WASTE OIL	BARE STEEL	1943	1989	NO
1266	12,000	WASTE OIL	BARE STEEL	1943	1989	NO
1358	12,000	GASOLINE	BARE STEEL	1943	1989	NO
1467	12,000	DIESEL	BARE STEEL	1943	1989	NO
1467	12,000	DIESEL	BARE STEEL	1943	1989	NO
1550	750	FUEL OIL	BARE STEEL	1943	1989	YES
1550	750	FUEL OIL	BARE STEEL	1943	1989	YES
1554	12,000	FUEL OIL	BARE STEEL	1943	1989	NO
1658	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
1661	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
1668	1,650	FUEL OIL	FIBERGLASS	1977	1989	YES
1668	1,650	FUEL OIL	FIBERGLASS	1977	1989	YES
1669	12,000	GASOLINE	BARE STEEL	1943	1989	NO
1669	12,000	DIESEL	BARE STEEL	1943	1989	NO
1857	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
1859	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
1862	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
1879	12,000	GASOLINE	BARE STEEL	1943	1989	NO
1879	12,000	GASOLINE	BARE STEEL	1943	1989	NO
1938	860	FUEL OIL	BARE STEEL	1951	1989	YES
2011	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
2013	750	FUEL OIL	?	?	1989	YES
2110	2,000	GASOLINE	?	?	1989	YES
2113	4,000	FUEL OIL	BARE STEEL	1947	1989	YES
2190	4,000	GASOLINE	BARE STEEL	1943	1989	YES
2190	750	DIESEL	BARE STEEL	1943	1989	YES
2190	750	DIESEL	BARE STEEL	1943	1989	YES
2773	4,000	WASTE OIL	FIBERGLASS	1978	1989	YES
6062	1,000	FUEL OIL	COATED STEEL	1976	1989	YES
10111	500	FUEL OIL	BARE STEEL	1943	1989	YES
457	750	FUEL OIL	BARE STEEL	1943	1991	NO
1152	1,500	GASOLINE	BARE STEEL	1970	1991	YES
1152	1,000	DIESEL	BARE STEEL	1970	1991	NO
1409	4,000	FUEL OIL	FIBERGLASS	1978	1991	YES
1553	1,000	FUEL OIL	BARE STEEL	1943	1991	NO
1669	1,000	SOLVENT	BARE STEEL	1943	1991	YES
1669	1,000	KEROSENE	BARE STEEL	1943	1991	YES
2321	12,000	FUEL OIL	BARE STEEL	1943	1991	YES
2846	1,500	FUEL OIL	BARE STEEL	1958	1991	YES