Foth & Van Dyke

LETTER REPORT

RECEIVED

JAN 2 1 1992

D.N.R. SED Hqtrs.
Milwaukee, WI

Transit Department - Kinnickinnic Garage (Tank Nos. T-4, T-5, T-6, T-7, and T-9) Compliance Upgrade

Scope ID: 91M13

Milwaukee County
Department of Public Works

January 1992

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D.N.R. SED Hqtrs.
Milwaukee, WI

Foth & Van Dyke

Two Park Plaza, Suite 950
10850 West Park Place
Milwaukee, WI 53224-3619
414/359-2500
FAX: 414/359-2519

Engineers
Architects
Planners
Scientists

January 17, 1992

Foth & Van Dyke

Two Park Plaza, Suite 950
10850 West Park Place
Milwaukee, WI 53224-3619
414/359-2500
FAX: 414/359-2519

Mr. Robert L. Knighten, Civil Engineer
Milwaukee County
Department of Public Works
Engineering, Environmental & Energy Services
Courthouse Annex, Room 314
907 North 10th Street
Milwaukee, WI 53233

Dear Mr. Knighten:

RE: Transit Department - Kinnickinnic Bus Garage
(Tanks T-4, T-5, T-6, T-7 and T-9) Compliance Upgrade

Presented herein are the results of compliance upgrade site assessments prepared in reference to five underground storage tanks (USTs) (Nos. T-4, T-5, T-6, T-7 and T-9) located at Milwaukee County Transit - Kinnickinnic Bus garage at 1710 South Kinnickinnic Avenue, Milwaukee, Wisconsin. The purpose of these assessments was to evaluate whether soil and/or groundwater contamination was evident within the underground storage tank excavation. The methods and results of our assessment are included within the following report.

Background Information

The five fiberglass USTs have been in place for approximately 11 years and consist of the following:

- T-4 1,000 gallon engine oil tank
- T-5 2,000 gallon waste oil tank
- T-6 4,000 gallon unleaded gasoline tank
- T-7 550 gallon transmission oil tank
- T-9 550 gallon antifreeze tank

The tanks are used to service mass transit vehicles owned by Milwaukee County and were compliance upgraded in 1991.

Regional and Local Geology and Hydrogeology

The geology of Milwaukee County, Wisconsin is characterized by quaternary aged unconsolidated glacial deposits (i.e., clayey, silty tills, and sand and gravel outwash) ranging in thickness from 35 to 200 feet overlying a thick (greater than 2,000 feet) sequence of Silurian, Ordovician, and Cambrian aged dolomite, shale, and sandstone. Precambrian granitic rocks underlie the sedimentary sequence. Subsurface conditions encountered at the site consisted of silts and silty clays to a maximum assessed depth of 4 feet. Topographic and sedimentological evidence seem to indicate that soils in the local area were derived from glacial drift and consist of glacial till and windblown glacial silt (loess).

Groundwater was encountered within the excavation. Well construction reports for the immediate area were obtained from the Wisconsin Geologic and Natural History Survey (WGNHS) and indicate that depth to groundwater within the vicinity of the site ranges from 12 to 48 feet below the ground surface. (See Attachment 1 for well construction reports).

Compliance Upgrade

Midwest Petroleum Service, Inc. was contracted to perform the compliance upgrade of the USTs at this location. Foth & Van Dyke conducted site assessment activities for the five USTs on October 30, 1991. No petroleum odors were observed near the excavation, however, soil staining was observed in the southern end of the excavation.

Soil Sampling

Soil samples were collected from native soils at four separate locations around the USTs near the limits of the excavation (see Attachment 2 for soil sampling locations). Sample No. MC-SS-TK-02NW was collected on the north end of the excavation, Sample No. MC-SS-TK-01EW on the east end, Sample No. MC-SS-TK-04SW on the south end and Sample No. MC-SS-TK-03WW on the west end.

No samples were collected beneath the fuel supply piping, as it was located within the excavation. A stainless steel sample spoon was used to collect the soil samples which were placed in 120-ml glass sample containers. The containers were filled completely with no headspace and placed on ice according to approved sampling techniques. The samples were thermally preserved during transportation and were sent with proper chain-of-custody/analysis request documentation, via courier service, to National Environmental Testing, Inc. (NET) located in Watertown, Wisconsin. (See Attachment 3 for chain-of-custody/analysis request documentation).

Sample Analysis

The soil samples were analyzed for total petroleum hydrocarbons-infrared (TPH-IR) and TPH-gasoline range organics (TPH-GRO). Laboratory analyses revealed that the soil samples exhibited GRO concentrations ranging from <5 ppm to 6.8 ppm at the (04SW) location. TPH-IR concentrations range from 11 ppm at the (01EW) location to 50 ppm at the (02NW) location. (See Attachment 4 for analytical results).

Groundwater was encountered in the excavation. A sample was collected in order to obtain approval from Milwaukee Metropolitan Sewerage District (MMSD) for the contractor to pump the water to an existing sanitary sewer.

The water sample was analyzed for benzene, ethylbenzene, toluene and xylene (BETX), total suspended solids and oil and grease. The only parameter found to exceed a Wisconsin Department of Natural Resources (WDNR) enforcement standard was benzene (16 ppb) which exceeded the 5 ppb enforcement standard (see Attachment 4 for analytical results.)

MMSD granted approval to discharge the water and approximately 1,500 gallons were pumped to the sanitary sewer (see Attachment 5 for approved application).

Conclusions and Recommendations

- Groundwater was encountered within the excavation, sampled and benzene levels (16 ppb) were found to exceed the WDNR enforcement standard (5 ppb). Approximately 1,500 gallons were pumped to the sanitary sewer following MMSD approval.

- No petroleum odors were observed near the excavation, however, soil staining was observed at the southern end of the excavation.

- Analytical results revealed that soil samples collected from within the excavation exhibited GRO concentrations of <5 ppm to 6.8 ppm and TPH-IR concentrations of 11 ppm to 50 ppm

Based on the conclusions presented above, petroleum contamination of soil, above WDNR guideline levels may be present within the excavation although the levels are relatively low. In addition, approximately 1,500 gallons of water was pumped from the excavation. Therefore, Foth & Van Dyke recommends that the sump located in the tank bed be sampled in order to determine if further contamination, above WDNR enforcement standards, is present.

If you have any questions, please feel free to contact our office.

Sincerely,

FOTH & VAN DYKE

Brian A. Hahn
Project Geologist

Bonnie J. Gundrum, CHMM
Section Manager

BAH:BJG:ccc:kll

Attachments

ATTACHMENT 1

Well Construction Reports

WELL CONSTRUCTION REPORT
WISCONSIN STATE BOARD OF HEALTH
WELL DRILLING DIVISION

OCT 11 1939

Note: Section 32 of the Wisconsin Well Drilling Sanitary Code, having the force and effect of law, provides that within thirty days after completion of every well the driller shall submit a report covering all essential details of construction to the State Board of Health on a form provided by the Board.

Owner Joseph Mariona Driller Lehrke Bros.

Street or RFD 1306-A So. Howell Post Office 545-So. 85th W. Allis.

Post Office Milwaukee, Wis. Date Oct. 8, 1939 Permit No. 44

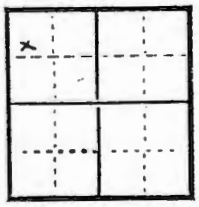
LOCATION OF PREMISES

Milwaukee County LAKE Town

Describe further by subdivision, plat, district, lake, lot,

block, nearest principal highway, etc., whichever apply.

The square below represents a section of land divided into 40 acre tracts. Mark the position of the premises in the section.



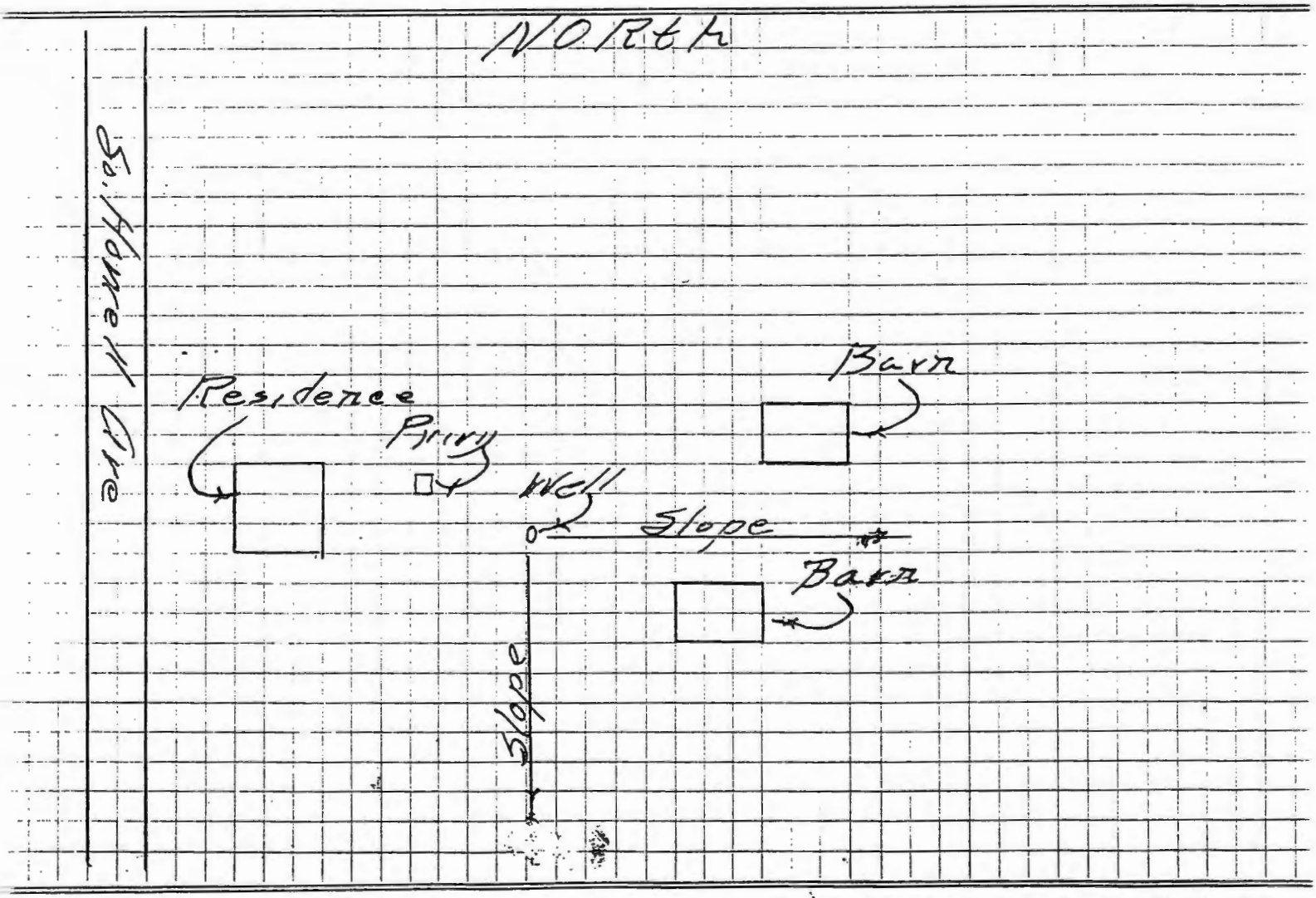
Sec. 4

Twp. 6

Range 22 { E / W

DIAGRAM OF PREMISES

See discussion and illustration in Part III Well Drilling Code. In making the diagram in the space below consider 10 ft. as the distance between lines. Be sure to indicate NORTH.



Additional copies of this form may be obtained in lots of 12 for 25¢. Send remittance with order to State Board of Health, Well Drilling Division, Madison, Wis.

Wel 6

WELL CONSTRUCTOR'S REPORT TO WISCONSIN STATE BOARD OF HEALTH

See Instructions on Reverse Side

NE SWSW Sec 4 T6N R-

RECEIVED
ML-509
NOV 12 1964
SANITARY ENGINEERING

1. County Milwaukee — Town ☐ Village ☐ City ☒ Milwaukee (Check one and give name)

2. Location 2114 S. Hillbert St. Milwaukee
Name of street and number of premise or Section, Town and Range numbers

3. Owner ☐ or Agent ☐ POLY PLASTIC BOTTLE CO.
Name of individual, partnership or firm

4. Mail Address 2114 S. Hilbert St., Milwaukee, Wis.
Complete address required

5. From well to nearest: Building 15 ft; sewer - ft; drain - ft; septic tank - ft; dry well or filter bed - ft; abandoned well ft.

6. Well is intended to supply water for: Industrial Purposes

7. DRILLHOLE:

Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)
16	0	20			
10	20	30			

8. CASING AND LINER PIPE OR CURBING:

Dia. (in.)	Kind and Weight	From (ft.)	To (ft.)
16	Steel	0	20
10	Steel	20	95

9. GROUT:

Kind	From (ft.)	To (ft.)
Cement	0	20

10. FORMATIONS:

Kind	From (ft.)	To (ft.)
Glacial Drift	0	95
Niagara Limestone	95	300

11. MISCELLANEOUS DATA:

Yield test: 8 Hrs. at 65 GPM.

Depth from surface to water-level: 12- ft.

Water-level when pumping: 27- ft.

Water sample was sent to the state laboratory at: Madison (City) on Nov. 2 19 64

Construction of the well was completed on: Nov. 1 19 64

The well is terminated 18 inches ☒ above, below ☐ the permanent ground surface.

Was the well disinfected upon completion? Yes x No

Was the well sealed watertight upon completion? Yes x No

See Well Driller's file 1-17-64

Signature [signature] Registered Well Driller

MILAEGER WELL AND PUMP CO. INC.
1245 N.62nd St., Milwaukee, Wis. 53213
Complete Mail Address

Please do not write in space below

Rec'd No.

Ans'd cc. M. E. Petersen, Hist. Soc.

Interpretation 3/16/65

	10 ml	10 ml	10 ml	10 ml	10 ml
Gas—24 hrs.					
48 hrs.					
Confirm					
B. Coli					

Examiner

WELL LOG *and* REPORT

In this column indicate the kind of casing, liner, shoe and other accessories used.	WELL DIAGRAM Use a red line to show casing or liner pipe. Use black for drill or borehole.	In this column state the kind of formations penetrated, their thickness in feet and if water bearing.	Record of FINAL Pumping test
Std. Wt. Steel pipe Drillers Special	Inches 2 3 4 5 6 8 10 12 14 16 18 — Diameter — Depth	Red Clay + Top Soil -12'	Duration of test Hours 5
	12		
	19		Pumping rate G.P.M. 20
	25	Blue Clay-46'	
			Depth of pump in well. Ft. 80
	50		
	58		Standing water-level (from surface) Ft. 48
	75		
		Stony Blue Clay -71'	Water-level when pumping Ft. 55
	100		Water. End of test. Clear ✓ Cloudy ____ Turbid ____
	129		
Forged Steel Drive Shoe	135		
	136	Sand -6'	Was the well sterilized? Yes ✓ No ____
	150		
	164	Limestone -28' (Waterbearing)	To which laboratory was sample sent? Kenosha Date 10-9-39
	200		
	400		Was the well sealed on completion? Yes ✓ No ____ Duplex Seal
=Casing pipe			How high did you leave the casing-pipe above grade? 1'
=Drillhole	800		Well was completed Date Oct. 6-39
=Mud Grout	1200		Well Driller Lehike Bros. Signature

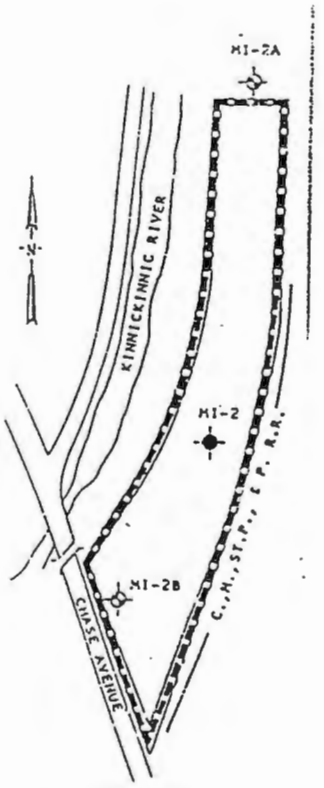
Draw the diagram to show the right half only

Baran Site Test Boring MI-2A
NW¼, SW¼, SE¼, SE¼, SE¼, SE¼, SE¼, Sec. 5, T6N, R22E
Elevation = 593.6'
Depth to Water = 13'

BORING NO. MI-2A
LOCATION BARAN SITE, NORTH
GROUND SURFACE ELEVATION 593.6 WATER LEVEL EL. 580.6

ELEVATION	DEPTH	SAMPLE QUALITY: AVERAGE CORE LENGTH FT. (0, 1.0, 2.0)	SAMPLE QUALITY: RECOVERY/RQD % (0, 50, 100)	SYMBOL	TESTS	DESCRIPTION	PENETRATION FT/MIN. (0, 1.0)
593.6	0					MOIST, MEDIUM STIFF, BROWN TO BLACK, SILTY CLAY, GRAVEL, BRICKS AND BOULDERS. (FILL)	
					5		
	10				6	SATURATED, LOOSE, BLACK FOUNDRY SAND, CINDERS AND GRAVEL. (FILL)	
		AT DRILLING.	HOLLOW STEM AUGER 0-30.1 FT		0	WET, VERY SOFT, DARK GREY TO BLACK, ORGANIC SILTY CLAY WITH SOME FINE SAND.	
	20				11		
					30	MOIST, VERY STIFF TO HARD, BROWN SILTY CLAY WITH SOME FINE SAND AND TRACE OF GRAVEL.	
	30		TRICONE		100 8"	GREY TO BROWN, WEATHERED DOLOMITE WITH BOULDERS.	
		NO CORING 32.5 TO 57.5FT.				NIAGARAN GROUP 30.1 TO 57.5 FT.	
	40					LIGHT TO MEDIUM GREY, THICK BEDDED, HARD DOLOMITE, WITH VUGS TO 1-1/2".	
550							
	50					VUGS TO 1-1/2"	
536.1						VUGS TO 1/2"	
						TOTAL DEPTH 57.5 FT.	

No DNR Well Construction Report Received



BARAN SITE
SCALE: 1" = 400'

BORING NO. MI-2A BY FOUNDATION ENGINEERING, INC. 4/29/76. BACKFILLED WITH CEMENT GROUT 4/29/76.

County ..... Twp. ..... Sec. M1-356-D

(Office Record—Do not fill in)

N.E. SE. SE. Sec. 5 - 6N R22E

TO THE WISCONSIN STATE BOARD OF HEALTH, WELL DRILLING DIVISION, MADISON, WIS.

WELL LOG, PREMISES DIAGRAM, and REPORT

For Official Record of the Board.

(TO BE USED FOR THAT PURPOSE ONLY)

Owner FILER & STOWELL CO.
(If a joint ownership give name of responsible official. Also name of each individual holding an interest. Use a separate sheet and attach hereto.)

Address 147 E. BEACHER ST
(City, village, township, county)
MILWAUKEE WIS.

Driller GRAY WELL DRILLING CO

Address 161 W. WISCONSIN AVE
MILWAUKEE WIS

Date of Report MARCH 1ST 1937

Registration No. 284

Give below the location of the property on which well is drilled.

If incorporated village or city: ..... Name ..... Lot ..... Blk. ..... Street and No.

If unincorporated hamlet ..... Name ..... County ..... Twp. ..... Highway

If Lake Shore Plat ..... Name of Plat ..... Lake ..... Lot ..... Blk. ..... Street

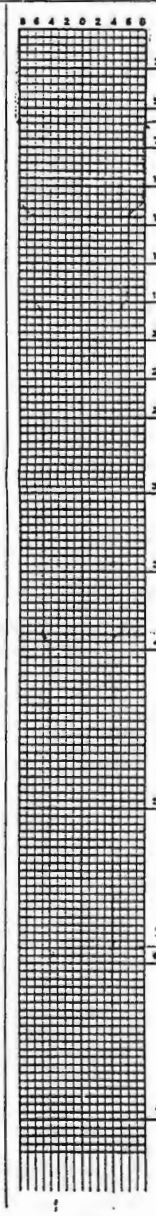
If Farm ..... County ..... Twp. ..... Sec. ..... Highway

If School ..... County ..... Twp. ..... Sec. ..... District

If other public building ..... Kind ..... County ..... Twp. ..... Sec.

Miscellaneous ..... Kind ..... County ..... Twp. ..... Sec.

WELL LOG and REPORT

Screens, Seals Grouts, etc.	Well Diagram (Each vertical line equals 1")	Kind of Casing, liner, shoe, etc. (Each horizontal line equals 5')	Formations State if dry or water bearing	Record of FINAL Pumping Test
			0-56'. Sandy muck + clay. 56-400 limestone 400-580. Shale. 580-925. Limestone 925-1150. St. Peter sand stone. (960-1010 creamy white sand. 1010-1050. white sand. 1050-1150 white sand 1150-1175. white sand red streaks + red marl. 1290. fine white sand. 1290-1450 shale + white sand.	Duration of test. Hours ✓ Pumping Rate. G. P. M. 600 Depth of pump in well. Ft. 100 Standing water-level (from surface.) Ft. Flowing Water level when pumping Ft. 80 sp cap = 7.5 gpm Water. End of test. Check: Clear ✓ Cloudy ___ Turbid ___ Was well sterilized before test? Yes ✓ No ___ Date ___ To which Laboratory was sample sent? Own Date ___ Was the well sealed on completion? Yes ✓ No ___ How high did you leave casing above grade? 24 inch Well was completed Feb 1st 1937 Well Driller: Gray Well Drilling Co. Signature. (Be sure to complete the report on the reverse side)

MI-MIG-1

FILER & STOWELL CO. WELL, MILWAUKEE, WIS
147 East Beecher St.
Gray Well Drilling Co., Contractors, 1937
Geology from driller's log and other wells. F. T. Thwaites
NE¼ SE¼ SE¼, Sec. 5, T.6N., R.22E.

Alt. = 592 ± .5'

Formation	Depth	Interval	Thickness	Description	Casing
DRIFT	56	0-56	56	Drift-sandy muck and clay	16" drive pipe 56
NIAGARA	344	56-400	344	Dolomite, light gray, some pink	15" hole 114; 12" hole 175; 10" hole 390
RICHMOND	180	400-580	180	Shale, blue-gray, dolomitic; some thin layers of dolomite	8¼" casing 590
GALENA-PLATTEVILLE	345	580-925	345	Dolomite, light gray, some layers toward bottom gray and blue-gray	6" hole
ST PETER	225	925-960	35	Sandstone, medium, white, dolomitic	
		960-1010	50	Sandstone, medium, creamy-white	
		1010-1050	40	Sandstone, medium, white	
		1050-1150	100	Sandstone, medium to fine, white	
EAU CLAIRE	200	1150-1175	25	Sandstone, medium to fine, white and red; layers of shale, red, dolomitic (marl)	
		1175-1290	115	Sandstone, fine, white, dolomitic	
		1290-1350	60	Sandstone, fine, light gray and pink, dolomitic	
MT SIMON	100	1350-1450	100	Sandstone, medium to fine, light gray, some pink	

Indicate position of premises in the Section

Show Directi

Well overflows with casing 24" above grade. Specific capacity at 600 g.p.m. 7.5 g.p.m.

WELL CONSTRUCTION REPORT
WISCONSIN STATE BOARD OF HEALTH
WELL DRILLING DIVISION

Note: Section 32 of the Wisconsin Well Drilling Sanitary Code, having the force and effect of law, provides that within thirty days after completion of every well the driller shall submit a report covering all essential details of construction to the State Board of Health on a form provided by the Board.

Owner F. W. Woolworth Co. Driller Layne-Northwest Co.

Street or RFD 10th & Mitchell Sts. Post Office Milwaukee, Wis.

Post Office _____ Date Sept. 22, 1939 Permit No. 29

LOCATION OF PREMISES

Milwaukee (County) Milwaukee (Town)

Describe further by subdivision, plat, district, lake, lot, block, nearest principal highway, etc., whichever apply.

The square below represents a section of land divided into 40 acre tracts. Mark the position of the premises in the section.

NW

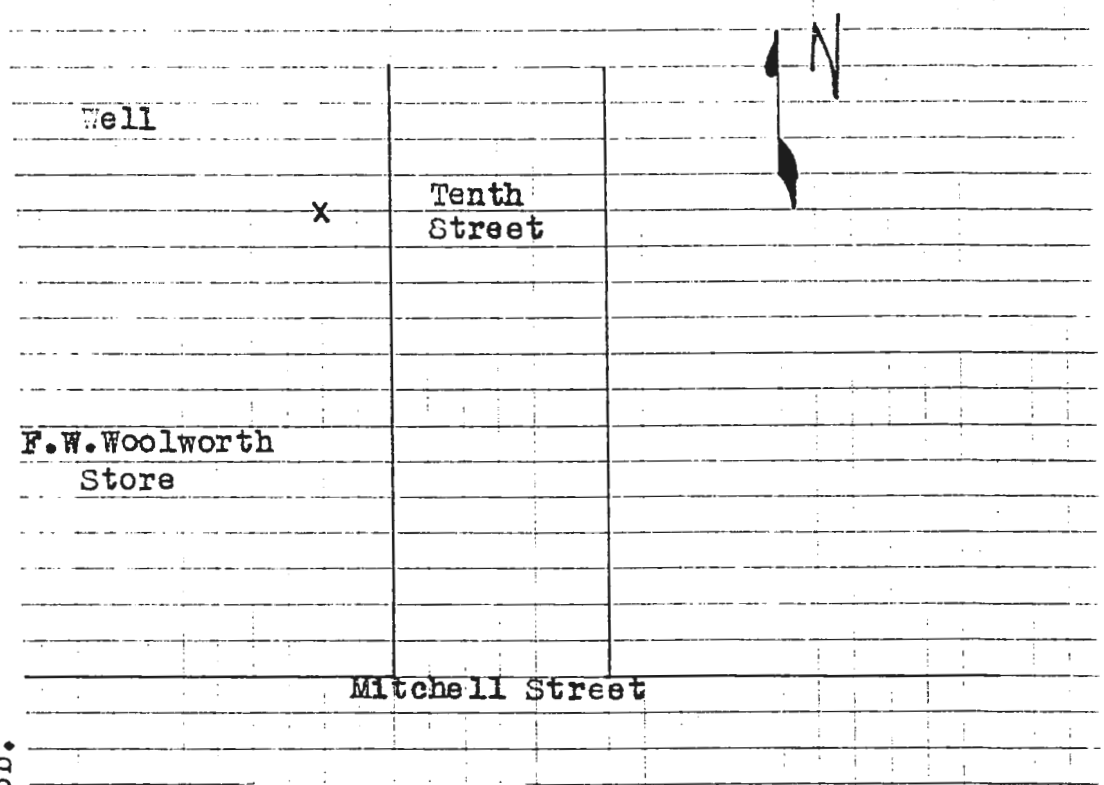
Sec. 5

Twp. 6 N

Range 22 E W

DIAGRAM OF PREMISES

II Well Drilling Code. In making the diagram in the space below consider 5 ft. as the cate NORTH.



Yours very truly,

LAYNE-NORTHWEST COMPANY

Geo. M. Galloway

Field Engineer

ained in lots of ... order to State Board of Health, Well

February ..., 19..

Local Mr. Worth:

In reply to your letter of February 19, we wish to advise that the bottom of the 10" drive pipe is located 190' from the top of the sidewalk.

Upon the completion of this well the casing was cut off below the sidewalk, the top of the casing being 14' below the top of the sidewalk.

The reason for this is that this installation with the pump is built in the basement of this large building.

We trust that this clears up any questions you may have relative to this job.

WELL LOG *and* REPORT

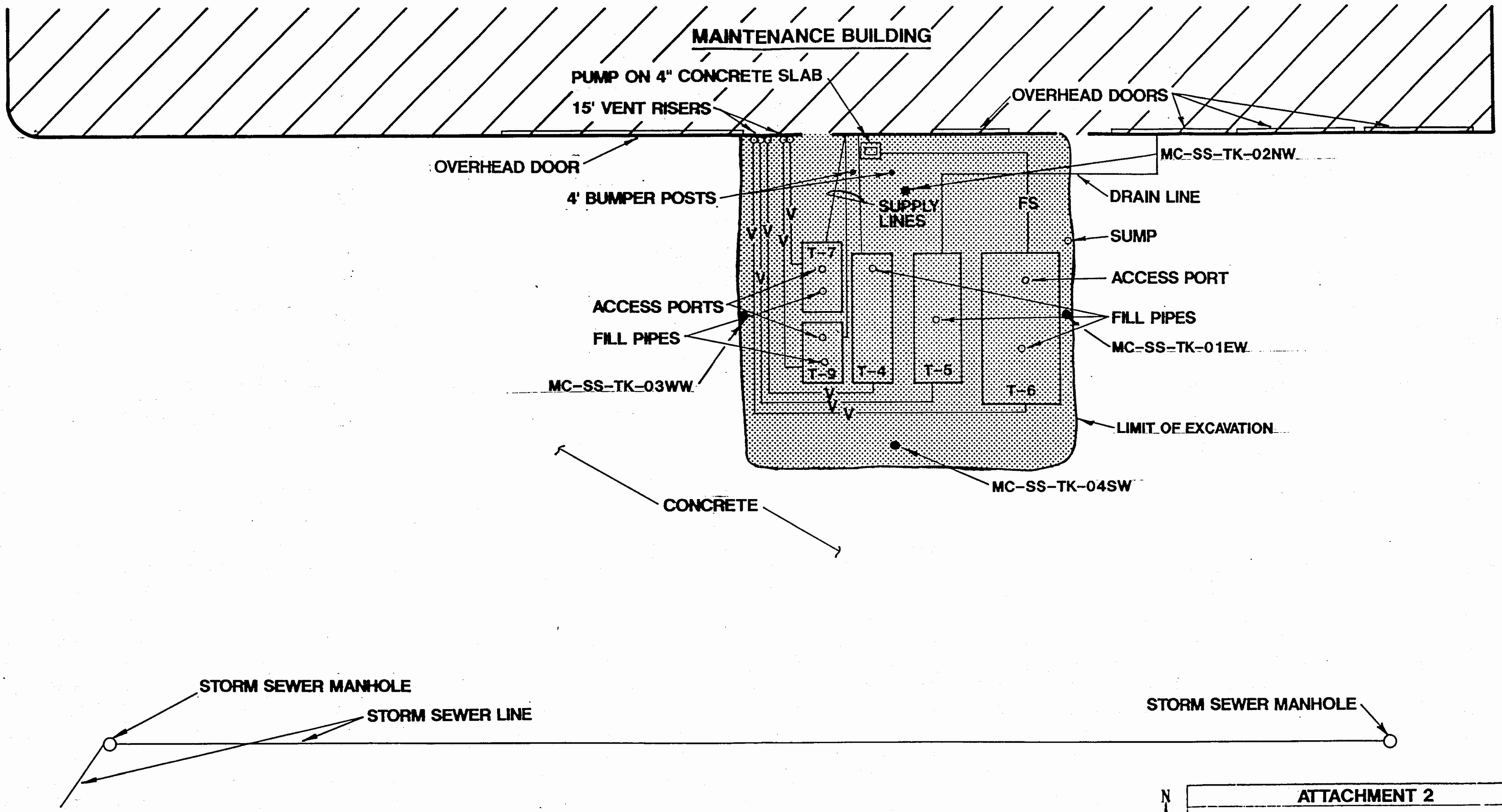
In this column indicate the kind of casing, liner, shoe and other accessories used.	WELL DIAGRAM Use a red line to show casing or liner pipe. Use black for drill or borehole.	In this column state the kind of formations penetrated, their thickness in feet and if water bearing.	Record of FINAL Pumping test
95' of 10" Steel Drive Pipe with forged steel drive shoe attached.	Inches 2 3 4 5 6 8 10 12 14 16 18 — Diameter — Depth		
	14	Clay	Duration of test Hours 8
	25 28	Gravel & Mud	Pumping rate G.P.M. 180
	50		Depth of pump in well. Ft. 240
	75 85	Shale	Standing water-level (from surface) Ft. 43
	100 109	Shale and gravel	Water-level when pumping Ft. 200
	150		Water. End of test. Clear X Cloudy ____ Turbid ____
	200	Hard limestone Brown, Gray and Whie	Was the well sterilized? Yes X No ____
	400 529		To which laboratory was sample sent? ____ Date ____
109' -11" of 8" Steel Liner through Shale	539 629 639	Shale	Was the well sealed on completion? Yes X No ____
	800 890	Brown Limestone	How high did you leave the casing-pipe above grade? 1'
	1095	Sandstone	Well was completed Date 9/29/39
	1200		Well Driller LAYNE-NORTHWEST CO

Draw the diagram to show the right half only

Signature [illegible]

ATTACHMENT 2

Soil Sampling Locations



NOTE: Underground piping and utilities shown are based on field surveys only. Contractor is responsible for verifying and protecting all underground utilities during excavation and construction.

TRANSIT-KINNICKINNIC

N

ATTACHMENT 2

1710 S. KINNICKINNIC

MILWAUKEE

SCALE: 1"=10'-0"	DATE: APRIL, 1990
PREPARED BY: FOTH & VAN DYKE	BY: B.J.Z.

ATTACHMENT 3

Chain-of-Custody/Analysis Request Documentation

91.3512

ORTEK CHAIN OF CUSTODY/ANALYSIS REQUEST FORM

Company Name: Foth + Van Dyke

Project No./Client: Milwaukee County

Sampling Location: Transit KK

Sampler: Brian Hahn

No.: 2533

ORTEK Batch No.

Bottle Size/Preservative: 120 ml; GRO; TRPH

Date	Time	Sample I.D./Description	No. of Bottles					Total	*Sample Type	ANALYSIS REQUESTED										Remarks	Lab Use Only ID Number
10/30	1235	MC. SS. TK. 01 EW		X				1	Grab	X	X										
	1237	MC. SS. TK. 02 NW		X				1		X	X										
	1239	MC. SS. TK. 03 WW		X				1		X	X										
	1242	MC. SS. TK. 04 SW		X				1		X	X										

COMMENTS/SPECIAL INSTRUCTIONS:

☐ If Pb > 5ppm do TCLP

*Sample Type: S - Soil; ~~SE - Sediment~~; SO - Solid; SW - Surface Water; DW - Drinking Water; WW - Wastewater; GW - Groundwater; H- Hazardous Liquid; A - Air; O - Oil; X - Other _____

Date Received: _____

Date Due: _____ ☐RUSH (approved by lab)

Quotation #: _____

Purchase Order #: _____

Results To: Foth + Van Dyke

1808 W. Park Place

2 Park Plaza, Suite 150

Billing Address: Milwaukee, WI 53224

Attention: Brian Hahn

Phone: 359-2500 FAX 359-2519

To Be Completed by Client

Seal Intact Upon Receipt by Sampling Co.: ☐Yes ☐No

Packed By: _____

Sealed For Shipping By: _____ Seal # _____

CUSTODY TRANSFERS

	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
1.	Brian Hahn	10/30/91	2:45	Jerry Schmitz	10-30-91	2:45
2.	Jerry Schmitz	10-30-91	5:05	Dennis May	10-30	

Received for Laboratory: _____

Shipping Details - To Be Completed By ORTEK

Seal Intact Upon Receipt by Laboratory ☐Yes ☐No

Method of Shipment: Courier Service

Contents Temperature _____ ° C Refrig. # _____

ORTEK

2496 West Mason Street

Green Bay, WI 54307-2435

(414) 498 - 2222

ATTACHMENT 4

Analytical Results

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

ANALYTICAL REPORT

Mr. Brian Hahn
FOTH & VAN DYKE
Two Park Plaza Suite 950
10850 West Park Place
Milwaukee, WI 53224-3619

11/19/1991
Job No: 91.3512
Account No: 30405
Purchase Order:
Page 1

Job Description: Transit KK

Date Taken: SEE BELOW

Date Received: 10/30/1991

35320	MC-SS-TK-01EW Transit KK		10/30/1991	
	Solids, Total	93.		%
	TPH (IR)	11.		mg/kg
	PVOC - NONAQUEOUS			
	GRO	<5.0		mg/kg
35321	MC-SS-TK-02NW Transit KK		10/30/1991	
	Solids, Total	88.		%
	TPH (IR)	50.		mg/kg
	PVOC - NONAQUEOUS			
	GRO	<5.0		mg/kg
35322	MC-SS-TK-03WW Transit KK		10/30/1991	
	Solids, Total	93.		%
	TPH (IR)	12.		mg/kg
	PVOC - NONAQUEOUS			
	GRO	<5.0		mg/kg

David W. Havick, Manager
Watertown Division
Certification No. 128053530

NATIONAL ENVIRONMENTAL TESTING, INC.

NET Midwest, Inc.
Watertown Division
602 Commerce Drive
P.O. Box 288
Watertown, WI 53094
Tel: (414) 261-1660
Fax: (414) 261-8120

ANALYTICAL REPORT

Mr. Brian Hahn
FOTH & VAN DYKE
Two Park Plaza Suite 950
10850 West Park Place
Milwaukee, WI 53224-3619

11/19/1991
Job No: 91.3512
Account No: 30405
Purchase Order:
Page 2

Job Description: Transit KK

Date Taken: SEE BELOW

Date Received: 10/30/1991

35323 MC-SS-TK-04SW Transit KK 10/30/1991

Solids, Total	86.	%
TPH (IR)	45.	mg/kg
PVOC - NONAQUEOUS		
GRO	6.8	mg/kg

David W. Havick, Manager
Watertown Division
Certification No. 128053530

ATTACHMENT 5

Approved Application

Milwaukee Metropolitan Sewerage District

LEAVE BLANK - FOR MMSD USE ONLY	
MMSD I.D.	
DATE RECEIVED	

This form must be completed by all Users identified in subsec. 11.02(12), MMSD Rules, prior to commencing discharge into the District sewerage system.

NOTICE OF INTENT TO DISCHARGE INDUSTRIAL WASTEWATER

SECTION I - To Be Completed By User

1. COMPANY NAME: Foth + Van Dyke + Assoc.

2. DIVISION NAME: (If applicable) _____

3. FACILITY ADDRESS:
   a. STREET ADDRESS 1710 S. Kinnickinnic Avenue
   b. CITY, STATE, AND ZIP CODE Milwaukee, WI

4. MAILING ADDRESS:
   a. STREET OR P.O. BOX 2 Park Plaza, Suite 950, 10850 W. Park Place
   b. CITY, STATE, AND ZIP CODE Milwaukee, WI 53224

5. BRIEF DESCRIPTION OF BUSINESS: Milwaukee County Bus Garage

6. NAME, TITLE, AND TELEPHONE NUMBER OF INDUSTRY REPRESENTATIVE:
   a. NAME Robert Knighten
   b. TITLE Civil Engineer
   c. TELEPHONE NUMBER (715) 278-4891

7. DATE WHEN DISCHARGE IS EXPECTED TO BEGIN: ASAP

8. FOUR-DIGIT SIC (STANDARD INDUSTRIAL CLASSIFICATION) CODE FOR FACILITY: 9124

9. REASON FOR FILING NOTICE OF INTENT:
   a. ___ PURCHASE OF AN EXISTING FACILITY.
   b. ___ CONSTRUCTION OF A NEW FACILITY.
   c. X PROPOSING TO DISCHARGE FROM A FACILITY WHERE THERE IS CURRENTLY NO DISCHARGE.
   d. ___ SIGNIFICANTLY ALTERING THE VOLUME OR CHARACTERISTICS OF AN EXISTING DISCHARGE.

10. VOLUME OF:

Existing Discharge		Proposed Discharge
	GAL/DAY PROCESS WASTEWATER	
	GAL/DAY DOMESTIC WASTEWATER	
	GAL/DAY COOLING WATER	
Groundwater		15000 gallons

11. DESCRIBE PROCESS(ES) THAT WILL RESULT IN THE DISCHARGE OF AN INDUSTRIAL PROCESS WASTEWATER: _____

12. LIST ALL CHEMICALS/POLLUTANTS THAT MIGHT BE PRESENT IN YOUR PROPOSED DISCHARGE:
Benzene, Ethylbenzene, Toluene, Xylene, Possibly trimethyl Benzene.

13. DESCRIBE ANY WASTEWATER PRETREATMENT METHODS AND FACILITIES TO BE USED: N/A

14. I AM FAMILIAR WITH THE DISCHARGE STANDARDS, MONITORING AND REPORTING REQUIREMENTS, AND OTHER PROVISIONS OF CHAPTER 11 OF THE DISTRICT RULES AND REGULATIONS:

Brian Atwood — Signature

10/22/91 — Date

Project Geologist — Title

SECTION II - To Be Completed By MMSD

APPROVAL TO COMMENCE PROPOSED DISCHARGE IS HEREBY

___ GRANTED

___ GRANTED, SUBJECT TO ATTACHED SPECIAL CONDITIONS.

___ REJECTED, FOR REASONS AS SPECIFIED IN THE ATTACHED.

_____ Signature _____ Date

CHEM-BIO CORPORATION

ENVIRONMENTAL LABORATORIES

10/17/91 LABORATORY REPORT

F264 8467724 W04
CA/* / / /

FOTH & VAN DYKE-MILWAUKEE OFFICE
10850 W. PARK PLACE 2 PARK PLAZA/STE 950
MILWAUKEE ,WI 53224
ATTN: BOB SPANBAUER

SAMPLE 91282-F04303 MC-TK-S1-GW/GROUNDWATER/PROJECT: 91M13 MILWAUKEE COUNTY/KK GARAGE
DATE COLLECTED 10/08/91 DATE RECEIVED 10/09/91
PRESERVED: YES TEMPERATURE: 08.4 DEG. C
INTEGRITY: MEETS STANDARD

TEST NAME	RESULT	UNITS	ANALYZED	METHOD	LIMIT
TOTAL SUSPENDED SOLIDS	49000	PPB	10/10/91	STD METH 2540-D	
BENZENE	16	PPB	10/16/91	SW846 8020	!
ETHYL BENZENE	<1.0	PPB	10/16/91	SW846 8020	!
TOLUENE	1.1	PPB	10/16/91	SW846 8020	!
XYLENE	2.0	PPB	10/16/91	SW846 8020	!
OIL AND GREASE (GRAV.)	<2000	PPB	10/14/91	EPA 413.1	!

PLEASE CONTACT CLIENT SERVICES WITH ANY QUESTIONS. WATER SAMPLES ARE DISPOSED OF 30 DAYS AFTER RECEIPT ; NON-WATER SAMPLES WILL BE RETURNED 6 WEEKS AFTER RECEIPT. N/T = NOT TESTED, N/A = NOT APPLICABLE, N/D = NOT DETECTED
@ = ELEVATED DETECTION LIMIT DUE TO MATRIX INTERFERENCE. # = ELEVATED DETECTION LIMIT DUE TO SAMPLE CONCENTRATION.
$ = ELEVATED DETECTION LIMIT DUE TO SAMPLE VOLUME. + = ELEVATED DETECTION LIMIT DUE TO EXTRACT VOLUME.
! = REPRINT IL EPA CERTIFICATION # 100243; AIHA ACCREDITED. APPROVAL gmc WRS

ORTEK CHAIN OF CUSTODY/ANALYSIS REQUEST FORM

No.: 0536

Company Name: Foth + Van Dyke

Project No./Client: [illegible]

Sampling Location: AA [illegible]

Sampler: [illegible]

Bottle Size/Preservative: 1 qt amber, 1 qt poly, 40 ml

BETX - 6[illegible], Oil + Grease [illegible], Total [illegible]

ORTEK Batch No.

Date	Time	Sample I.D./Description	No. of Bottles						Total	*Sample Type	ANALYSIS REQUESTED										Remarks	Lab Use Only ID Number
10/7	[illegible]	MC-1A-[illegible]-GW	1	1	3				5	GW	X	X	X									

COMMENTS/SPECIAL INSTRUCTIONS:

☐ If Pb > 5ppm do TCLP

*Sample Type: SW - Surface Water; DW - Drinking Water; WW - Wastewater; GW - Groundwater; H- Hazardous Liquid; A - Air; O - Oil; X - Other _____; S - Soil; SE - Sediment; SO - Solid

Date Received: _____

Date Due: _____ ☐RUSH (approved by lab)

Quotation #: _____

Purchase Order #: _____

To Be Completed by Client

Seal Intact Upon Receipt by Sampling Co.: ☐Yes ☐No

Packed By: _____

Sealed For Shipping By: _____ Seal # _____

Results To: Foth + Van Dyke, [illegible] Place, [illegible], [illegible] W. Park Place, [illegible]

Attention: [illegible]

Billing Address: [illegible]

Phone: [illegible] FAX [illegible]

CUSTODY TRANSFERS

	Relinquished by:	Date:	Time:	Received by:	Date:	Time:
1.	[illegible]	[illegible]		[illegible]	10-7-91	11:[illegible]
2.						

Received for Laboratory: _____

Shipping Details - To Be Completed By ORTEK

Seal Intact Upon Receipt by Laboratory ☐Yes ☐No

Method of Shipment: [illegible]

Contents Temperature _____ ° C Refrig. # _____

ORTEK
2496 West Mason Street
Green Bay, WI 54307-2435
(414) 498 - 2222

Milwaukee
Metropolitan
Sewerage
District

January 8, 1992

Foth & Van Dyke
Two Park Plaza
Suite 950
10850 West Park Place
Milwaukee, WI 53224-3619

Attn: Brian Hahn

Dear Mr. Hahn:

This letter confirms our conversation about discharging purge water to the sanitary sewer. It is okey to discharge purge well water to the sanitary sewer for the Milwaukee County Bus garage, additional water must be approved by the Milwaukee Metropolitan Sewerage District thru a Notice of Intent Form.

If you have any questions, please call me at 225-2164.

Sincerely

Harvey J. Matyas

Harvey J. Matyas
Senior Industrial Waste Engineer