FID# 268188910
BRRTS# 02-68-535535

RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists

July 27, 2005

Mr. James Delwiche
Wisconsin Dept. of Natural Resources
141 NW Barstow St, Room 180
Waukesha WI 53188

RE: Klinke Cleaners
Fox Run Shopping Center
Waukesha, Wisconsin

Dear Mr. Delwiche:

Recently, we have had discussions about the wells installed this past winter at the above site by Drake Environmental, Inc. ("Drake"), on behalf of the buyer of the facility. RSV has now received Drake's report, and has surveyed well locations and elevations.

Depth to Water & Groundwater Flow

The well locations are shown on Figure 1; groundwater elevations are summarized in Table 1. All four wells are constructed of flush-threaded 2-inch PVC with 15-foot screens. The screens of wells MW-3, MW-5 and MW-6, located behind the building (north side), and MW-2 (immediately south of the building), intersect the water table at depths ranging from 8.5 to 9.5 feet below ground surface ("bgs"). Wells MW-1 and MW-4, located in the front parking lot approximately 170 feet south of the building, intersect the water table at depths of 23 to 25 feet bgs.

Based on stratigraphic logs for the wells (provided by Drake, included in Attachment A), RSV constructed three stratigtaphic sections in the locations shown on Figure 2. Section A – A' is a west-to-east section, extending across the rear alley, through wells MW-6, MW-3 and MW-5. Section B – B' is a southwest-to-northeast section through wells MW-4, MW-2 and MW-5. Section C – C' is a northwest-to-southeast section, through wells MW-5, MW-2 and MW-1. The sections are shown on Figures 3, 4 and 5.

The logs of the wells indicate complex stratigraphic conditions, with little continuity from location-to-location. Generally, fine- to coarse-grained sands and silts were logged at all locations except MW-4, where clay was logged through the entire depth with the exception of a silt lens logged from 8 to 10 feet bgs. MW-1, which along with MW-4 has a deep water table (relative to the remaining four wells), yielded a sequence of medium- to coarse-grained sand. Consequently, the presence of clay at MW-4 does not appear to be the cause of the significantly deeper water table at that location.

The presence of a perched groundwater unit in the area of wells MW-2, MW-3, MW-5 and MW-6 is a possibility. The original Drake borings (October 2004) were advanced to a depth of 16 feet bgs in the locations shown on Figure 6. Subsequent borings by RSV (May 2, 2005) were advanced to a depth of 12 feet bgs. As Figure 3 shows, clay was encountered at a depth of 13 feet in the boring for well MW-5, and was still present at the

total logged depth of 16 feet. Although clay was not encountered in the other borings in this area, it is possible that it is present at a depth of greater than 16 feet, thereby creating the conditions for perched groundwater.

The possibility of a perched groundwater unit is also supported by groundwater flow in the shallow wells. As Figure 7 shows, water levels indicate a northerly groundwater flow direction in this area; however, wells MW-3, MW-5 and MW-6 are immediately (i.e., within approximately 3 feet) adjacent to buried utilities, including gas and sewer, which may be influencing shallow groundwater flow. Regional groundwater flow is likely to the southeast, toward the Fox River[1].

Groundwater Quality

Subsequent to well installation, groundwater samples were collected by Drake and analyzed for volatile organic compounds. Results of these analyses are summarized in Table 2. The highest PCE concentration in the groundwater samples (64,000 µg/L) occurs at MW-3, which is within the area of impacted soil. Groundwater samples collected from MW-5 and MW-6 yielded lower concentrations, of 28 and 4.7 µg/L, respectively. Groundwater from well MW-2, located upgradient, with respect to the assumed perched unit, yielded 0.99 µg/L. Finally, samples from wells MW-1 and MW-4 yielded 1.8 and 1.3 µg/L of PCE, respectively. Based on the water levels from the four shallow wells, MW-1 and MW-4 would be at upgradient locations, also reinforcing the assumption that the shallow wells represent perched conditions, and that regional groundwater flow is in a southerly or southeasterly direction.

Recommendations

RSV makes the following three recommendations with respect to the site groundwater investigation:

1. The Drake wells can be used for the Klinke site investigation. While RSV may not have recommended as many wells as are present, we believe that they all can be useful in our study.
2. The presence of a perched groundwater unit should be verified, and groundwater at depth should be monitored in the source area. Consequently, RSV recommends one piezometer adjacent to existing well MW-3.
3. The migration of contaminants along buried utilities north of the building should be investigated. Wells MW-3, MW-5 and MW-6 are useful in this evaluation; however, additional groundwater samples should also be collected from within the utility trench(es). RSV recommends that this be completed utilizing a Geoprobe and temporary wells.

Finally, the wells were installed from outside the guidelines of the DERF program; however, Drake's client requests reimbursement if they are to be used. Related issues include bidding for drilling and laboratory contractors, as well as for consulting services.

[1] Based on USGS topographic map and groundwater flow summarized in *Groundwater Resources of Waukesha County, Wisconsin*, Joseph B. Gonthier, USGS, 1975.

Additionally, the "owner" of the wells is not eligible for program participation. RSV requests opinions from the Department of Natural Resources regarding these and any other related issues.

Sincerely,

RSV ENGINEERING, INC.

Robert J. Nauta, P.G.
Senior Hydrogeologist

cc: Mr. Richard Klinke

TABLE 1
KLINKE CLEANERS
FOX RUN SHOPPING CENTER
WAUKESHA, WISCONSIN
GROUNDWATER ELEVATIONS

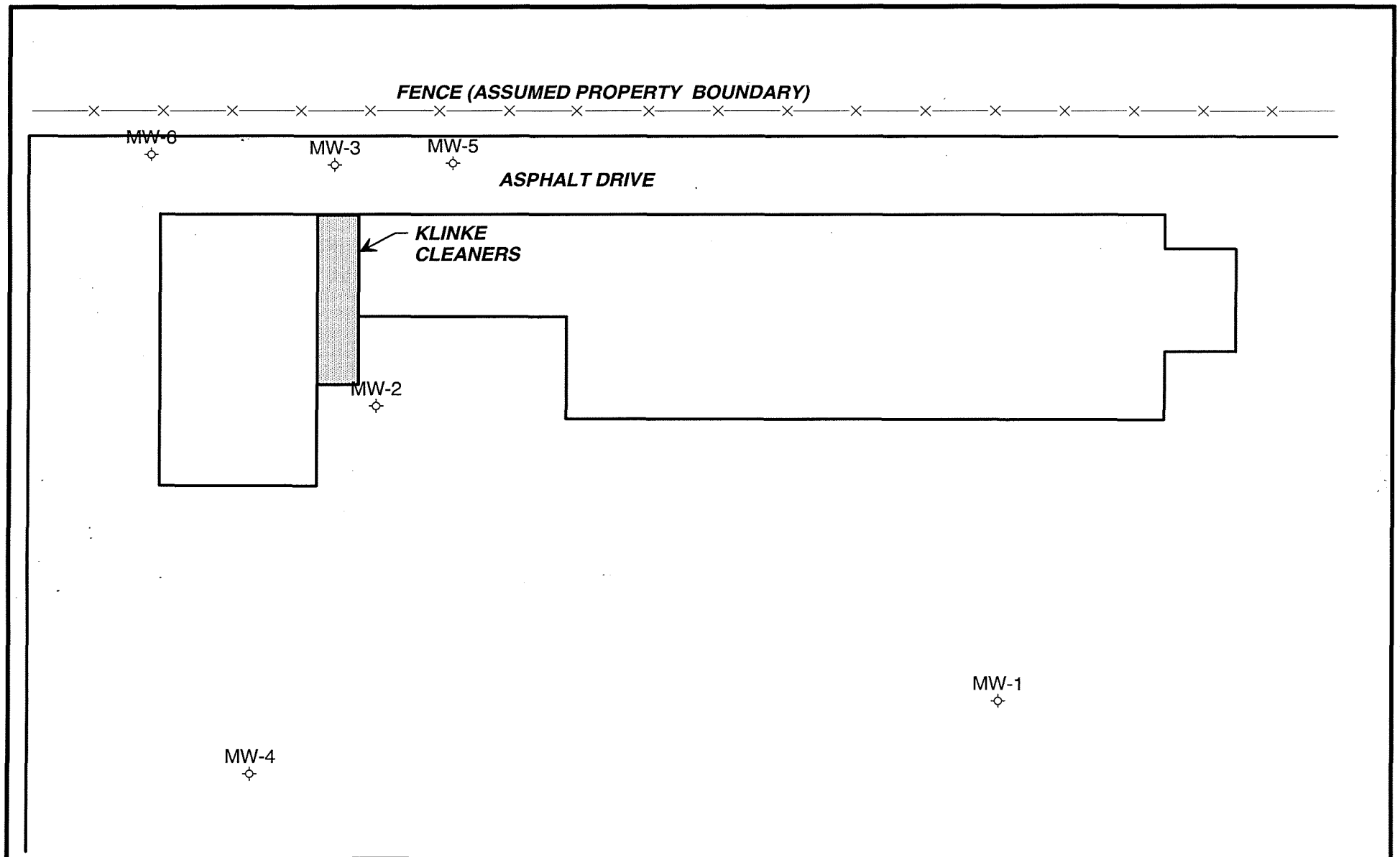
WELL	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
TOC[1]	101.39	100.21	99.66	100.44	99.78	100.00
DTW[2]	24.44	8.50	8.55	23.37	9.54	8.90
WATER LEVEL[3]	76.95	91.71	91.11	77.07	90.24	91.10

[1] Top of casing in feet (local datum).
[2] Depth to water in feet from top of casing.
[3] Water level in feet.

TABLE 2
KLINKE CLEANERS
FOX RUN SHOPPING CENTER
WAUKESHA, WISCONSIN
GROUNDWATER SAMPLE ANALYSES
All concentrations in µg/L

PARAMETER	WELL					
	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6
Chloroform	<0.37	<0.37	<180	<0.37	<0.37	0.49
cis-1,2-Dichloroethene	<0.83	<0.83	<420	<0.83	2.8	<0.83
Tetrachloroethene	1.8	0.99	64000	1.3	28	4.7
Toluene	0.78	<0.67	<340	<0.67	<0.67	<0.67

Full SW846 8260B analysis was run on each sample; only detected compounds are listed.



SCALE IN FEET
0 20 40 60 80

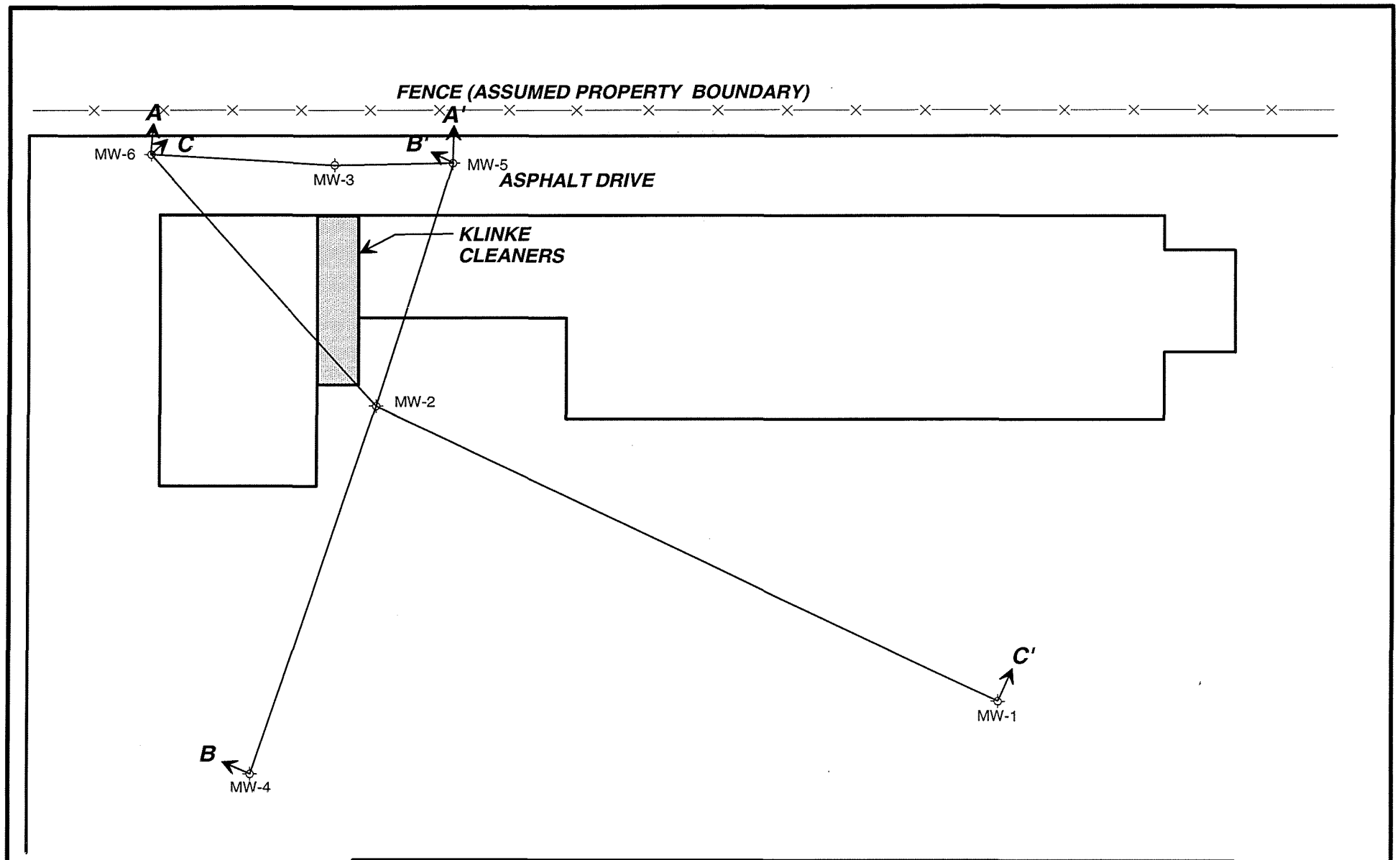
NORTH

RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists
112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
WELL LOCATIONS

FIGURE
1

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	WELLS



SCALE IN FEET
0 20 40 60 80

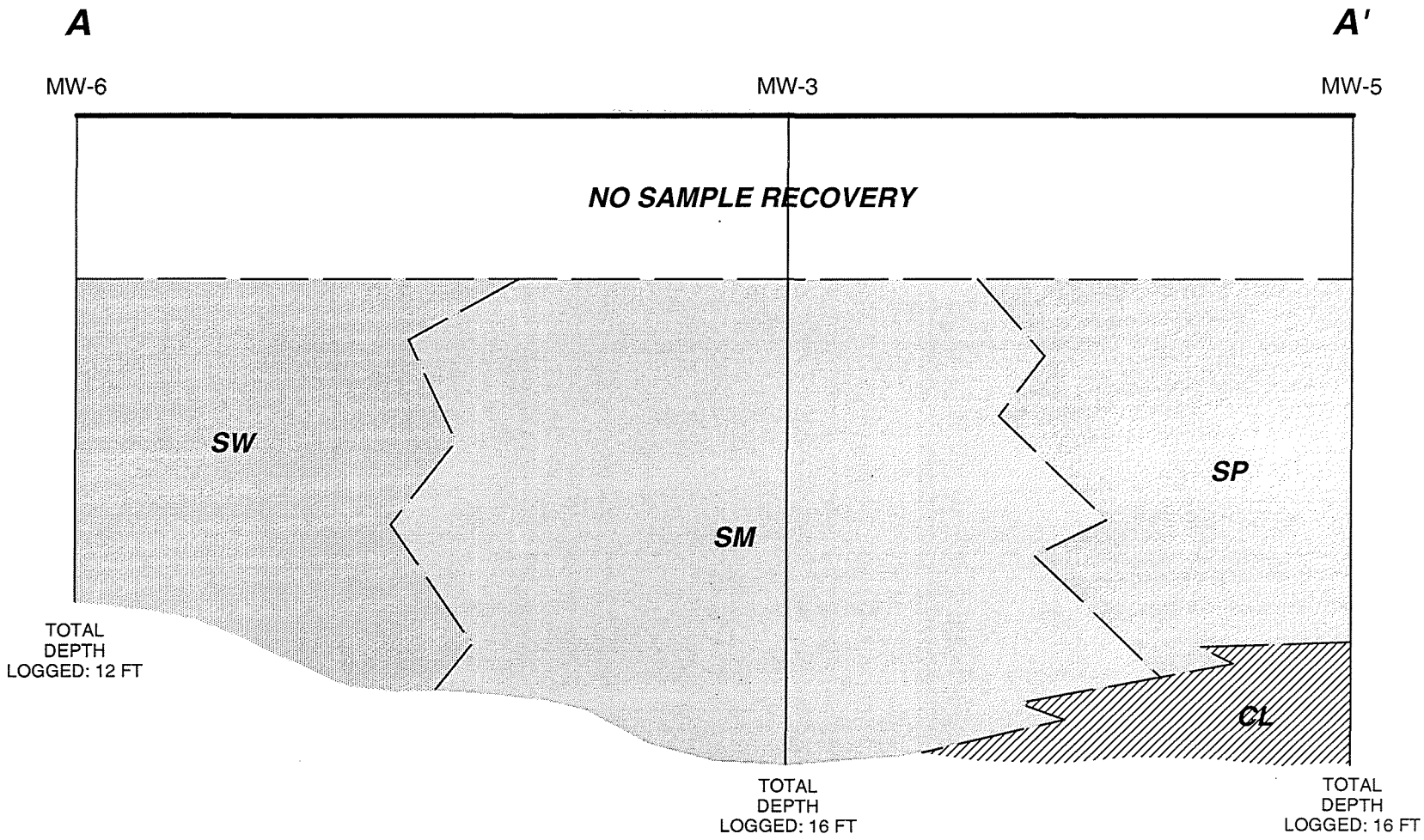
NORTH

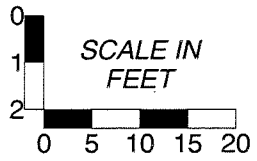
RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists
112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
GEOLOGIC SECTION LOCATIONS

FIGURE
2

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	SECTIONS





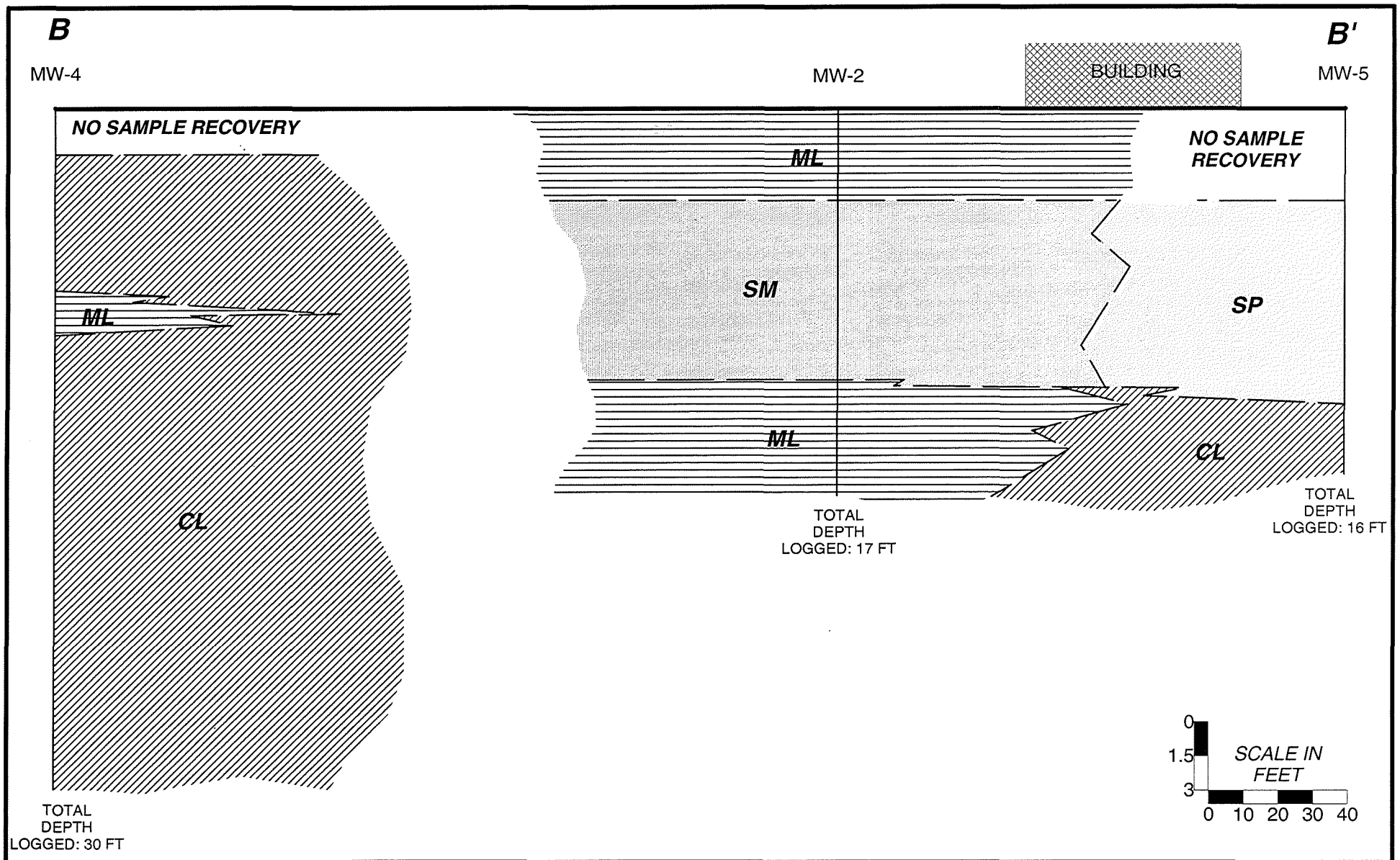
NOTE: STRATIGRAPHIC DATA BASED ON WORK COMPLETED BY DRAKE ENVIRONMENTAL, INC.

RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists
112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
GEOLOGIC SECTION A - A'

FIGURE 3

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	SECTION A



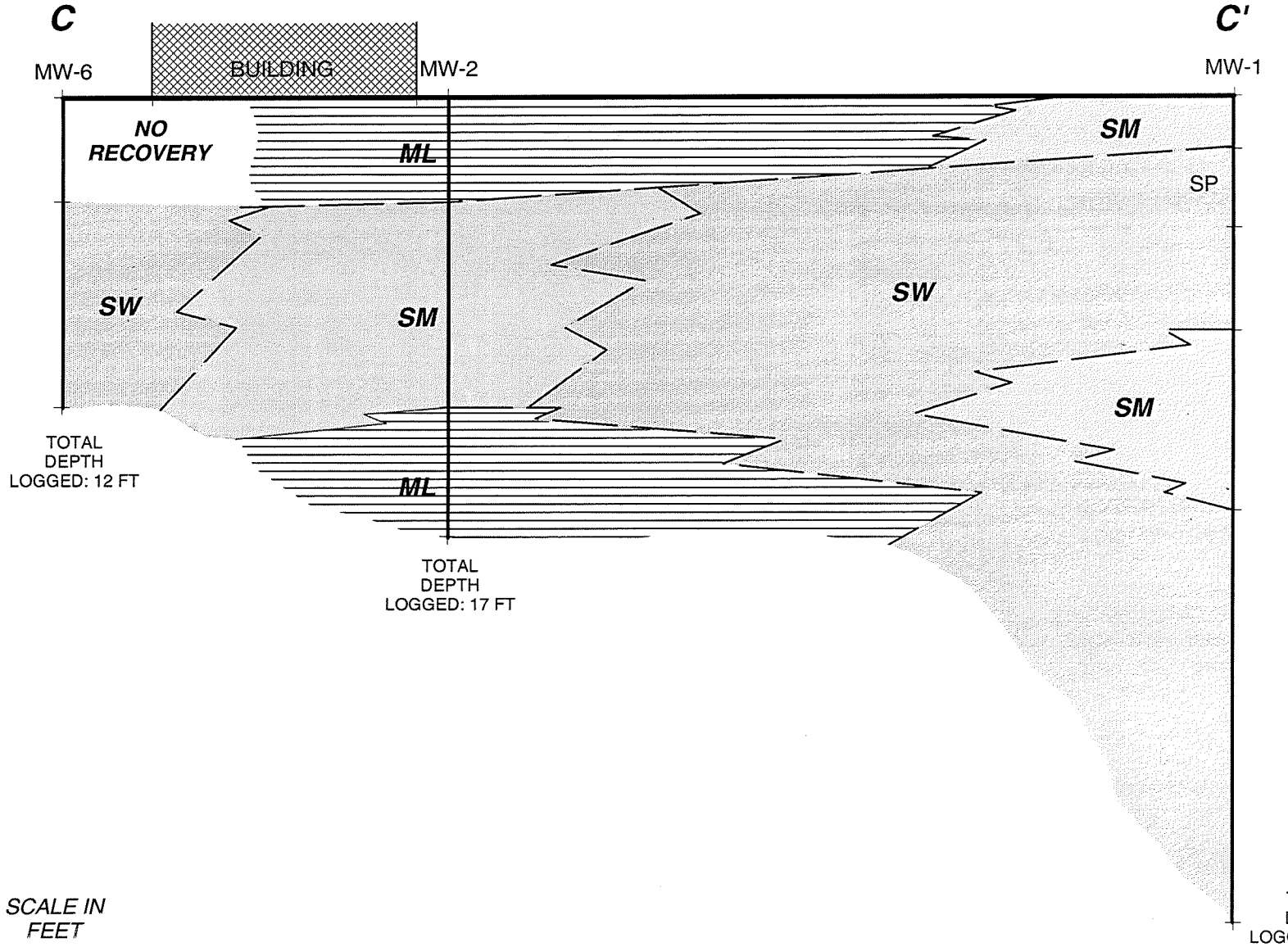
NOTE: STRATIGRAPHIC DATA BASED ON WORK COMPLETED BY DRAKE ENVIRONMENTAL, INC.

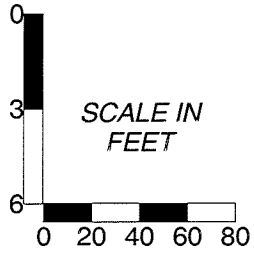
RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists
112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
GEOLOGIC SECTION B - B'

FIGURE 4

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	SECTION B





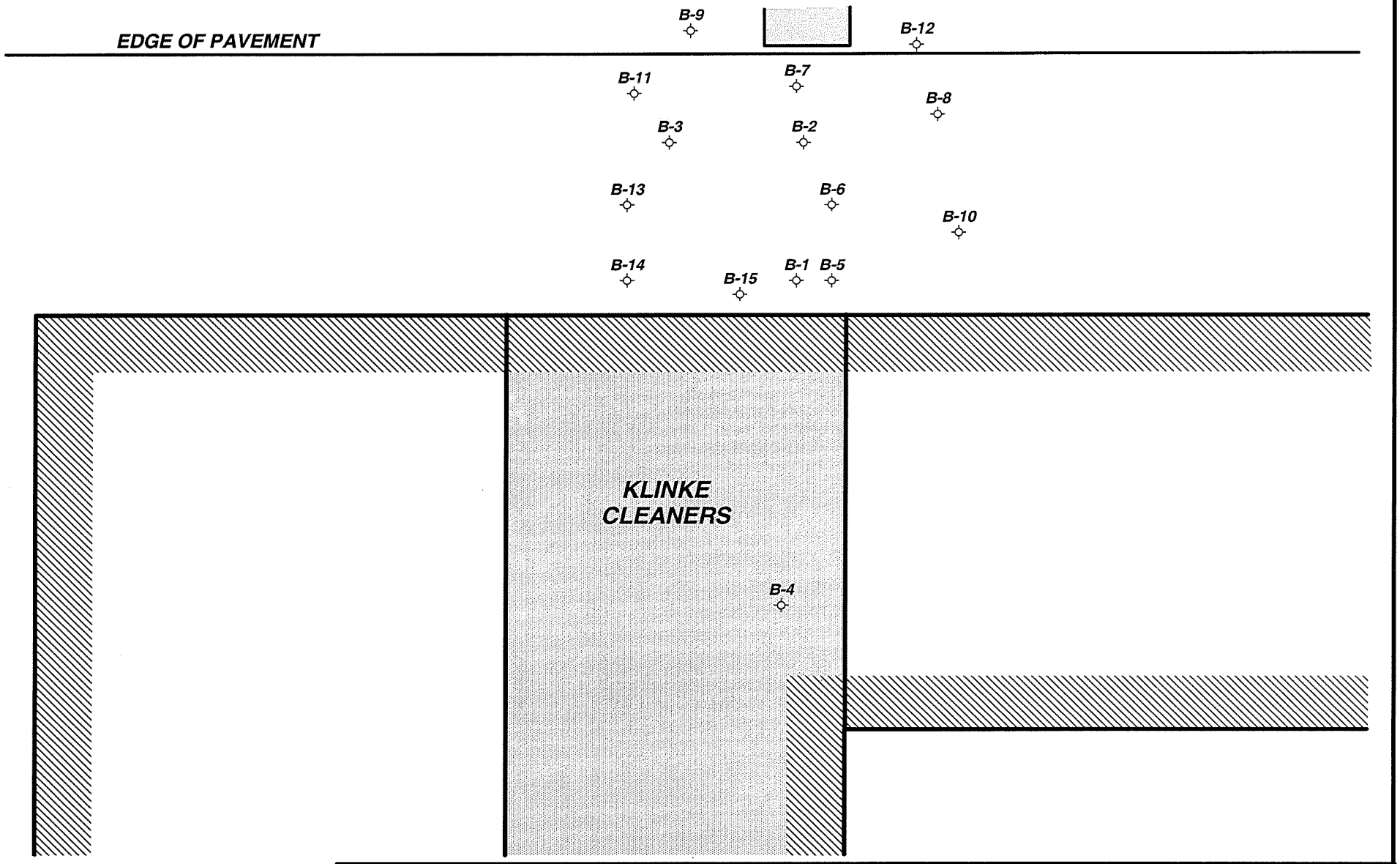
NOTE: STRATIGRAPHIC DATA BASED ON WORK COMPLETED BY DRAKE ENVIRONMENTAL, INC.

RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists
112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
GEOLOGIC SECTION C - C'

FIGURE 5

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	SECTION C



RSV ENGINEERING, INC.

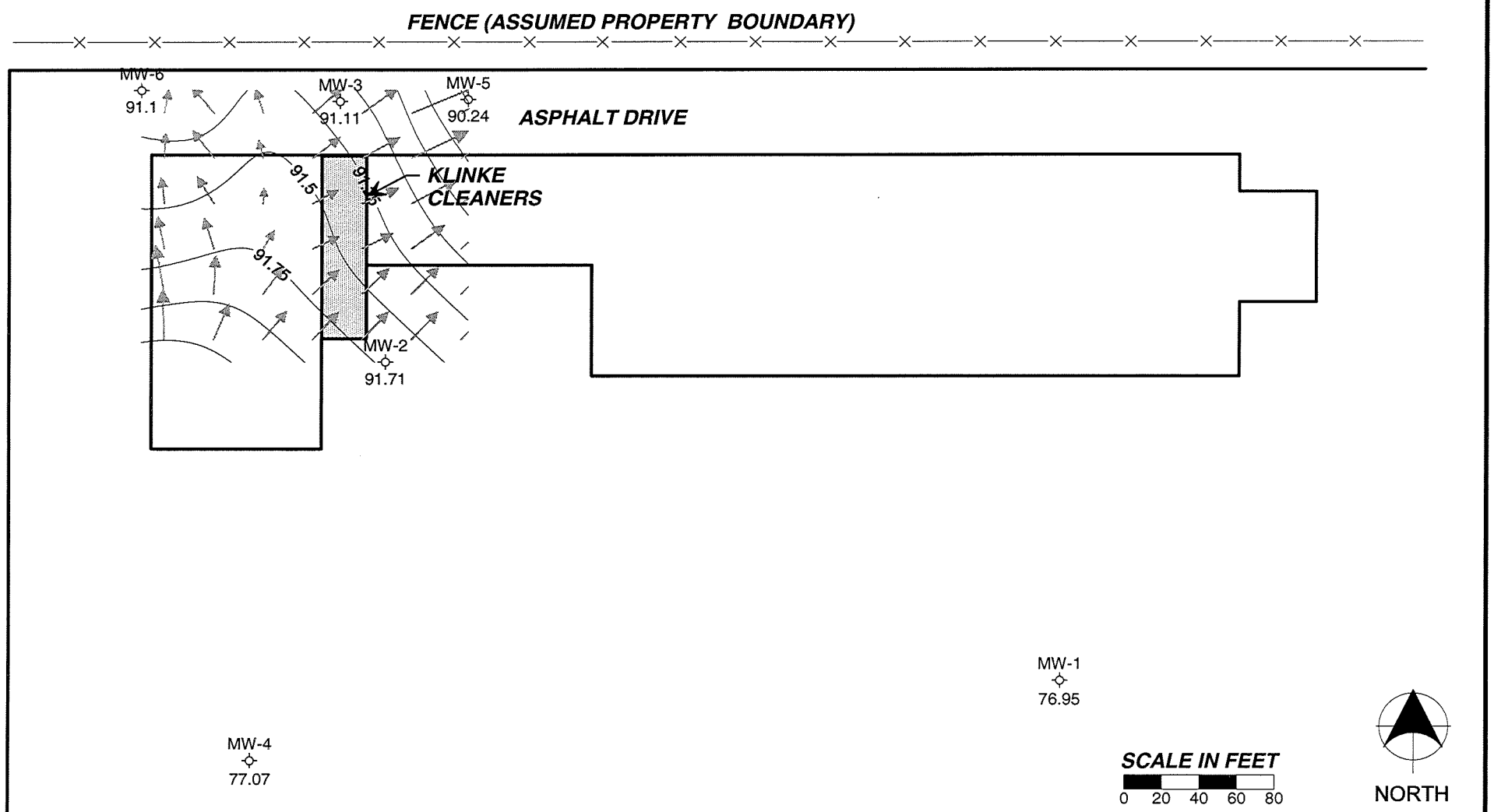
Engineers • Land Surveyors • Environmental Scientists

112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
SOIL BORING LOCATIONS

FIGURE 6

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	SITE MAP



MW-3 91.11 WELL WITH GROUNDWATER ELEVATION (FEET, LOCAL DATUM)

— 91.5 — GROUNDWATER CONTOUR

GROUNDWATER FLOW DIRECTION

RSV ENGINEERING, INC.
Engineers • Land Surveyors • Environmental Scientists
112 S. MAIN STREET JEFFERSON, WISCONSIN 53549 (920)674-3411

KLINKE CLEANERS
FOX RUN - WAUKESHA, WISCONSIN
SHALLOW GROUNDWATER FLOW

FIGURE 7

DRAWN BY	PROJ. No.	DATE	FILE NAME
RN	05-529	14 JUN 05	WATER TABLE

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Page 1 of 2

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Fox Run Shopping Center	~	MW-1

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Rick Last Name: Firm: GESTRA	02/25/2005 (m m d d y y y y)	02/25/2005 (m m d d y y y y)	HSA

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _ _	MW-1	_____ Feet MSL	_____ Feet MSL	7.5 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E
SE 1/4 of SE 1/4 of Section 2, T 6 N, R 19 E
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E _____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Waukesha		Waukesha

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			2	Brown Silty Sand w/pebbles	SM			0						
			4	Brown Silty Sand w/pebbles	SM			0						
				Medium Sand w/pebbles	SP									
			6	Light Brown Fine/Medium Sand	SW			0						
			8	Light Brown Fine/Medium Sand	SW			0						
				Light Brown Fine/Medium Sand	SW									
			10	Silty Sand 10-10.5'	SM			0						
			12	Silty Sand	SM			0						
				Silty Sand	SM			0						
			14	Silty Sand	SM			0						
			16	Coarser Sand w/pebbles										
				Coarser Sand w/pebbles	SP			0						
			18	Coarser Sand w/pebbles	SP			0						
			20	Coarser Sand w/pebbles	SP			0						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Drake Environmental Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

MW-1

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
				SAA	SP			0						
		22		SAA	SP			0						
		24		SAA	SP			0						
		26		SAA	SP			0						
		28		SAA	SP			0						
		30		SAA	SP			0						
		32		EOB @ 32' BGS										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☑ Other ☐ _____

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Fox Run Shopping Center		MW-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Rich/Adam Last Name: Firm: GESTRA	02/25/2005 (m m d d y y y y)	02/25/2005 (m m d d y y y y)	HSA

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _ _		_____ Feet MSL	_____ Feet MSL	7.5 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E
SE 1/4 of SE 1/4 of Section 2, T 6 N, R 19 E

Lat ° ' "
Long ° ' "

Local Grid Location
_____ Feet ☐ N _____ Feet ☐ E
_____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Waukesha		Waukesha

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			2	yellow orange silty fine sand	ML			1						
			4	semi moist light brown silty sand / fine sand	ML			ND						
			6	semi moist light brown silty fine sand	SM			ND						
			8	moist very fine light brown uniform sand	SM			ND						
			10	very moist to wet light brown/grey sand	SM			ND						
			12	very wet fine sand some fines	SM			ND						
			14	silty grey clay	ML			ND						
			16	silty grey clay	ML			ND						
			18	same	ML			ND						
				Blind Drill										
			20	Blind Drill	/			/						
				EOB @ 20' BGS										

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Data Environmental, Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Page 1 of 1

Facility/Project Name: Fox Run Shopping Center	License/Permit/Monitoring Number	Boring Number: MW-3	
Boring Drilled By: Name of crew chief (first, last) and Firm — First Name: Rick/Adam Last Name: Firm: GESTRA	Date Drilling Started: 02/25/2005	Date Drilling Completed: 02/25/2005	Drilling Method: HSA
WI Unique Well No.	DNR Well ID No.	Well Name: MW-3	Final Static Water Level: ____ Feet MSL	Surface Elevation: ____ Feet MSL	Borehole Diameter: 7.5 inches
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ State Plane ____ N, ____ E	Lat ____ ° ____ ' ____ " Long ____ ° ____ ' ____ "	Local Grid Location: ____ Feet ☐ N ☐ S ____ Feet ☐ E ☐ W	
SE 1/4 of SE 1/4 of Section 8, T 6 N, R 19 E			
Facility ID	County: Waukesha	County Code	Civil Town/City/ or Village: Waukesha		

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	no sample recivery	/			/						
			2	no sample recovery										
				no sample recovery	/			/						
			4	no sample recovery										
				Dark Brown stiff silty Clay	SM			ND						
			6	Light Brown Fine Sand										
				very fine sand, moist	SM			3ppm						
			8	with little fines										
				Light gray, moist very fine	SM			217 ppm						
			10	grained sand										
				very moist light gray fine	SM			205 ppm						
			12	sand with little silt										
				SAA	SM			101 ppm						
			14											
				SAA	SM			ND						
			16											
				Blind Drill	/			/						
			18											
				Blind Drill	/			/						
			20											
				Set well @ 20' BGS	/			/						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: _____ Firm: Drake Environmental Inc

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Facility/Project Name: Fox Run Shopping Center	License/Permit/Monitoring Number	Boring Number: MW-4
Boring Drilled By: Name of crew chief (first, last) and Firm — First Name: Adam/Rick Last Name: — Firm: GESTRA	Date Drilling Started: 02/25/2005 (mm/dd/yyyy)	Date Drilling Completed: 02/25/2005 (mm/dd/yyyy) — Drilling Method: HSA
WI Unique Well No.: _____ — DNR Well ID No.: _____ — Well Name: MW-4	Final Static Water Level: _____ Feet MSL	Surface Elevation: _____ Feet MSL — Borehole Diameter: 7.5 inches
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ — State Plane _____ N, _____ E — SE 1/4 of NE 1/4 of Section 8, T 6 N, R 19E	Lat 0 ' " — Long 0 ' "	Local Grid Location: _____ Feet ☐ N ☐ S — _____ Feet ☐ E ☐ W
Facility ID	County: Waukesha	County Code: _____ — Civil Town/City/ or Village: Waukesha

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0	No Recovery	/			/						
			2	Grey silty clay w/pebbles	CL			0						
			4	Grey Silty clay w/pebbles	CL			0						
			6	Gray Silty Clay w/ pebbles	CL			0						
			8	Light Brown to light grey Clayey Silt	ML			0						
			10	Grey Clay	CL			0						
			12	SAA	CL			0						
			14	Grey Brown silty clay w/sand pebbles	CL			0						
			16	SAA	CL			0						
			18	SAA	CL			0						
			20	SAA	CL			0						
			22											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature: _____ Firm: Dale Environmental, Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

MW-4

Sample: Number and Type	Sample: Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Soil Properties: Moisture Content	Soil Properties: Liquid Limit	Soil Properties: Plasticity Index	Soil Properties: P 200	RQD/ Comments
				SAA	CL			0						
		24												
				SAA	CL			0						
		26												
				SAA	CL			0						
		28												
				SAA	CL			0						
		30												
				EOB @ 30' BGS										

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Page 1 of 1

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
Fox Run Shopping Center		MW-5

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
First Name: Adam Last Name: Rick Firm: GEOTEK	07,25,2005 (m m d d y y y y)	07,25,2005 (m m d d y y y y)	HSA

WI Unique Well No.	DNR Well ID No.	Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
_ _ _ _ _ _ _	_ _ _	MW-5	_____ Feet MSL	_____ Feet MSL	7.5 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane _____ N, _____ E
SE 1/4 of SE 1/4 of Section 20, T 6 N, R 19 E

Lat ° ' "
Long ° ' "

Local Grid Location ☐ N ☐ E
_____ Feet ☐ S _____ Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Waukesha		Waukesha

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0											
			2	no Recovery	/			/						
				no Recovery	/			/						
			4											
			6	Light tan medium/fine grained Sand w/fines	SP			19						
			8	Light tan extremely fine grained Sand	SP			10						
				SAA Moist	SP			2						
			10											
				SAA	SP			1						
			12											
				SAA	SP									
			14	Stiff moist grey clay	CL			MD						
				Stiff Moist grey Clay	CL			MD						
			16											
				Blind Drill	/			/						
			18											
				Blind Drill	/			/						
			20											

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Dale Environmental Inc.

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Revelopment ☒ Other ☐ _____

Page 1 of 1

Facility/Project Name: Fox Run Shopping Center	License/Permit/Monitoring Number	Boring Number: MW-6	
Boring Drilled By: Name of crew chief (first, last) and Firm — First Name: Adam / Last Name: Rick — Firm: GESTRA	Date Drilling Started: 02/25/2005	Date Drilling Completed: 02/25/2005	Drilling Method: HSA
WI Unique Well No.	DNR Well ID No.	Well Name: MW-6	Final Static Water Level: _____ Feet MSL	Surface Elevation: _____ Feet MSL	Borehole Diameter: 7.5 inches
Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐ — State Plane _____ N, _____ E		Lat ° ' " — Long ° ' "	Local Grid Location: _____ Feet ☐ N ☐ S _____ Feet ☐ E ☐ W
SE 1/4 of SE 1/4 of Section 3, T 6 N, R 19 E			
Facility ID	County: Waukesha	County Code	Civil Town/City/ or Village: Waukesha

Sample Number and Type	Sample Length Att. & Recovered (in)	Blow Counts	Depth in Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
			0											
			2	Blind Drill	/			/						
			4	Blind Drill	/			/						
			6	Dry light brown medium Sand	SW			ND						
			8	SAA	SW			ND						
			10	SAA	SW			ND						
			12	SAA	SW			ND						
			14	Blind Drill	/			/						
			16	Blind Drill	/			/						
			18	Blind Drill	/			/						
			20	Blind Drill	/			/						

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm: Dale Environmental, Inc

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Klink Cleaners	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: MW-1
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 02/25/2005 (m m d d y y y y)
Type of Well — Well Code 1	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 9, T. 6 N, R. 19 ☒E ☐W	Well Installed By: Name (first, last) and Firm: GESTRA
Distance from Waste/Source _____ ft.	Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known
		Gov. Lot Number

A. Protective pipe, top elevation .0 ft. MSL
B. Well casing, top elevation -.50 ft. MSL
C. Land surface elevation 0 ft. MSL
D. Surface seal, bottom -1 foot ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

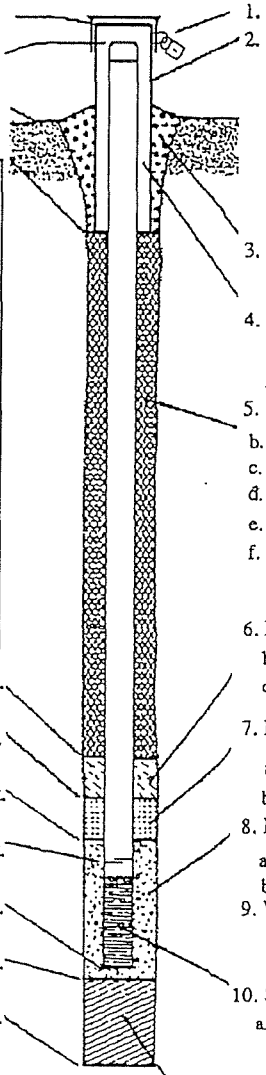
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ _____

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
_____

E. Bentonite seal, top _____ ft. MSL or -1.0 ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top _____ ft. MSL or -15.27 ft.
H. Screen joint, top _____ ft. MSL or -16.27 ft.
I. Well bottom _____ ft. MSL or -31.27' ft.
J. Filter pack, bottom _____ ft. MSL or -31.27' ft.
K. Borehole, bottom _____ ft. MSL or -31.27' ft.
L. Borehole, diameter 7.5 in.
M. O.D. well casing 2.5 in.
N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 7.5 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; Other ☐ _____
4. Material between well casing and protective pipe: Bentonite ☒ 30; Other ☐ _____
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. _____ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☒3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft^3
8. Filter pack material: Manufacturer, product name & mesh size
a. TIMMCO
b. Volume added 8 bags ft^3
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ _____
b. Manufacturer TIMMCO
c. Slot size: 0.010 in.
d. Slotted length: 15 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Drake Environmental, Inc.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Klink Cleaners	Local Grid Location of Well: ft. ☐N. ☐S. ft. ☐E. ☐W.	Well Name: MW-2
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID	St. Plane ft. N, ft. E. S/C/N	Date Well Installed: 02/25/2005 (m m d d y y y y)
Type of Well / Well Code	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 8, T. 6 N, R. 19 ☒E ☐W	Well Installed By: Name (first, last) and Firm: GESTER
Distance from Waste/Source ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 0.0 ft. MSL

B. Well casing, top elevation -.50' ft. MSL

C. Land surface elevation 0.0 ft. MSL

D. Surface seal, bottom -1 foot ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☐ No
Describe

17. Source of water (attach analysis, if required):

E. Bentonite seal, top ____ ft. MSL or -1.0 ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top ____ ft. MSL or -1.79 ft.

H. Screen joint, top ____ ft. MSL or -2.79 ft.

I. Well bottom ____ ft. MSL or -17.79 ft.

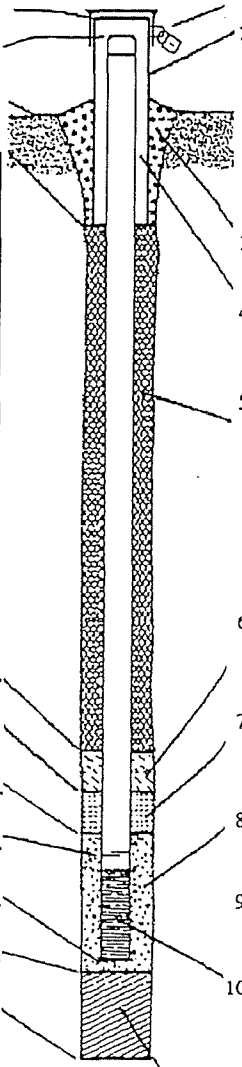
J. Filter pack, bottom ____ ft. MSL or -17.79 ft.

K. Borehole, bottom ____ ft. MSL or -17.79 ft.

L. Borehole, diameter 7.5 in.

M. O.D. well casing 2.5 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 7.5 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe:

3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐

4. Material between well casing and protective pipe: Bentonite ☒ 30 Other ☐

5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2 Bags Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☒3/8 in. ☐1/2 in. Bentonite chips ☐ 32
c. Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a.
b. Volume added ____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. Timco
b. Volume added 6 Bags ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
b. Manufacturer Timco
c. Slot size: 0.010 in.
d. Slotted length: 15 ft.

11. Backfill material (below filter pack): None ☒ 14 Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature | Firm: Duke Environmental

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Kline Cleaners	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: MW-3
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 12/25/2005 (m m d d y y y y)
Type of Well: Well Code ____/____	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 8, T. 6 N, R. 19 ☒E ☐W	Well Installed By: Name (first, last) and Firm: GESTRA
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known / Gov. Lot Number	

A. Protective pipe, top elevation .0 ft. MSL
B. Well casing, top elevation -.50 ft. MSL
C. Land surface elevation 0 ft. MSL
D. Surface seal, bottom -1 foot ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50 / Hollow Stem Auger ☒ 41 / Other ☐

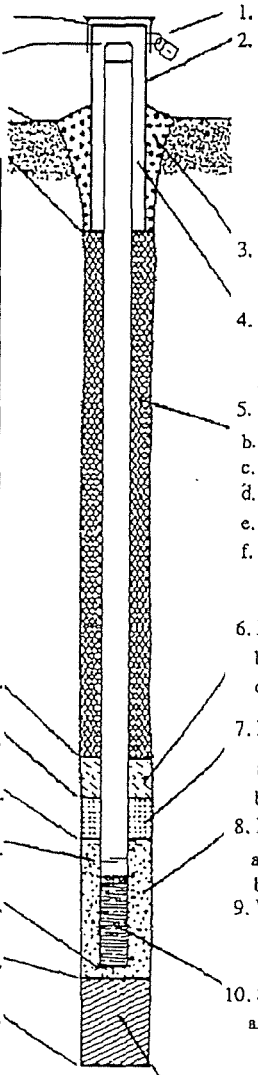
15. Drilling fluid used: Water ☐ 02 / Air ☐ 01 / Drilling Mud ☐ 03 / None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No

Describe _____

17. Source of water (attach analysis, if required):

E. Bentonite seal, top ____ ft. MSL or -1.0 ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top ____ ft. MSL or -2.40 ft.
H. Screen joint, top ____ ft. MSL or -3.40 ft.
I. Well bottom ____ ft. MSL or -18.40 ft.
J. Filter pack, bottom ____ ft. MSL or -18.40 ft.
K. Borehole, bottom ____ ft. MSL or -18.40 ft.
L. Borehole, diameter 7.5 in.
M. O.D. well casing 2.5 in.
N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 7.5 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04 / Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Other ☐
4. Material between well casing and protective pipe: Bentonite ☒ 30 / Other ☐
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. ____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2 Bags Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☒3/8 in. ☐1/2 in. Bentonite chips ☐ 32
c. _____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. Timmco
b. Volume added 2 Bags ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐
b. Manufacturer Timmco
c. Slot size: 0.010 in.
d. Slotted length: 15 ft.
11. Backfill material (below filter pack): None ☒ 14 / Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Duke Environmental

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Klinke Cleaners	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: MW-4
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID	St. Plane _____ ft. N, _____ ft. E, S/C/N	Date Well Installed: 02/25/2005 (m m d d y y y y)
Type of Well — Well Code ____/____	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 3, T. 6 N, R. 19 ☒E ☐W	Well Installed By: Name (first, last) and Firm: GETRA
Distance from Waste/Source _____ ft. — Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 0.00 ft. MSL

B. Well casing, top elevation -.50 ft. MSL

C. Land surface elevation 0 ft. MSL

D. Surface seal, bottom -1.0 ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ _____

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
_____

E. Bentonite seal, top ____ ft. MSL or -1.0 ft.

F. Fine sand, top ____ ft. MSL or ____ ft.

G. Filter pack, top ____ ft. MSL or -13.22 ft.

H. Screen joint, top ____ ft. MSL or -14.22 ft.

I. Well bottom ____ ft. MSL or -29.22 ft.

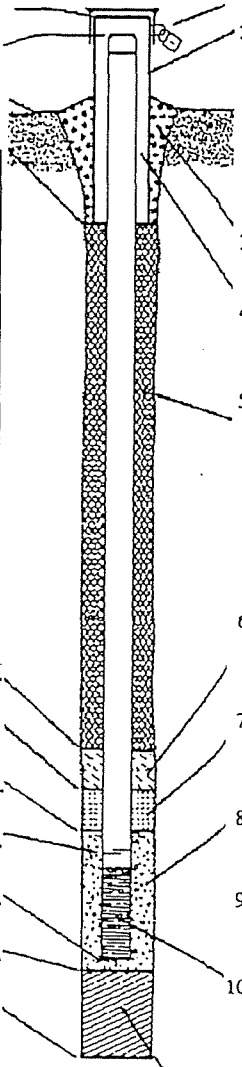
J. Filter pack, bottom ____ ft. MSL or -29.22 ft.

K. Borehole, bottom ____ ft. MSL or -29.22 ft.

L. Borehole, diameter 7.5 in.

M. O.D. well casing 2.5 in.

N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 7.5 in.
b. Length: 3 ft.
c. Material: Steel ☒ 04 Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____

3. Surface seal: Bentonite ☐ 30 Concrete ☒ 01 Other ☐ _____

4. Material between well casing and protective pipe: Bentonite ☒ 30 Other ☐ _____

5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 6 bags Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08

6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☒3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____

7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. Unimin
b. Volume added 6 bags ft³

9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ _____

10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ _____
b. Manufacturer Unimin
c. Slot size: 0.010 in.
d. Slotted length: 5 ft.

11. Backfill material (below filter pack): None ☒ 14 Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Drake Environmental

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐ Remediation/Redevelopment ☒ Other ☐ ________

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: KLINKE CLEANERS	Local Grid Location of Well: ______ ft. ☐ N. ☐ S. ______ ft. ☐ E. ☐ W.	Well Name: MW-4B
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ___ ° ___ ' ___ " Long. ___ ° ___ ' ___ " or	Wis. Unique Well No. ______ / DNR Well ID No. ___
Facility ID ________	St. Plane ______ ft. N, ______ ft. E. S/C/N	Date Well Installed 03/14/2005 (m m d d y y y y)
Type of Well: Well Code 11 / MW	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 8, T. 6 N, R. 19 ☒ E ☐ W	Well Installed By: Name (first, last) and Firm: ________ GESTRA
Distance from Waste/Source ______ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient; s ☐ Sidegradient; d ☐ Downgradient; n ☐ Not Known / Gov. Lot Number ______	

A. Protective pipe, top elevation ___0.___ ft. MSL

B. Well casing, top elevation ___-.50_ ft. MSL

C. Land surface elevation ____0_ ft. MSL

D. Surface seal, bottom __-1.0_ ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

14. Drilling method used: Rotary ☐ 5 0; Hollow Stem Auger ☒ 4 1; Other ☐ ________

15. Drilling fluid used: Water ☐ 0 2; Air ☐ 0 1; Drilling Mud ☐ 0 3; None ☒ 9 9

16. Drilling additives used? ☐ Yes ☒ No

Describe ________

17. Source of water (attach analysis, if required): ________

E. Bentonite seal, top ______ ft. MSL or _-1.0_ ft.

F. Fine sand, top ______ ft. MSL or ___.___ ft.

G. Filter pack, top ______ ft. MSL or _13__ ft.

H. Screen joint, top ______ ft. MSL or _14__ ft.

I. Well bottom ______ ft. MSL or __29_ ft.

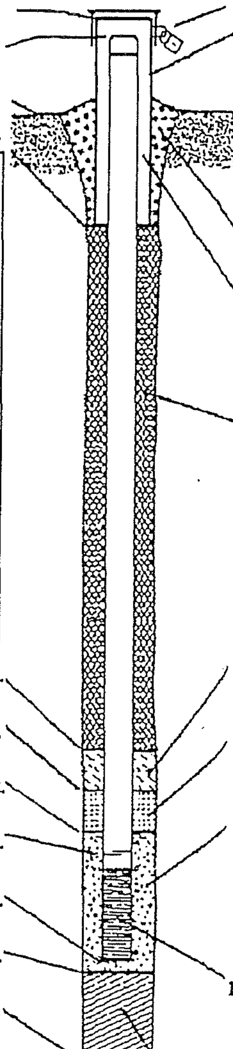
J. Filter pack, bottom ______ ft. MSL or __29_ ft.

K. Borehole, bottom ______ ft. MSL or __29_ ft.

L. Borehole, diameter _7.5_ in.

M. O.D. well casing _2.5_ in.

N. I.D. well casing _2.0_ in.



1. Cap and lock? ☐ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: _7.5_ in.
b. Length: _1_ ft.
c. Material: Steel ☒ 0 4; Other ☐
d. Additional protection? ☐ Yes ☒ No
If yes, describe: ________

3. Surface seal: Bentonite ☐ 3 0; Concrete ☒ 0 1; Other ☐

4. Material between well casing and protective pipe: Bentonite ☒ 3 0; Other ☐

5. Annular space seal:
a. Granular/Chipped Bentonite ☒ 3 3
b. ____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 3 5
c. ____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 3 1
d. ____ % Bentonite . . . . . . Bentonite-cement grout ☐ 5 0
e. 6 bag/ Ft^3 volume added for any of the above
f. How installed: Tremie ☐ 0 1; Tremie pumped ☐ 0 2; Gravity ☒ 0 8

6. Bentonite seal: a. Bentonite granules ☐ 3 3
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 3 2
c. ________ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. ________
b. Volume added ________ ft^3

8. Filter pack material: Manufacturer, product name & mesh size
a. Timaco
b. Volume added 2 bag/ ft^3

9. Well casing: Flush threaded PVC schedule 40 ☒ 2 3; Flush threaded PVC schedule 80 ☐ 2 4; Other ☐

10. Screen material: PVC
a. Screen type: Factory cut ☒ 1 1; Continuous slot ☐ 0 1; Other ☐
b. Manufacturer Timaco
c. Slot size: 0.010 in.
d. Slotted length: _15_ ft.

11. Backfill material (below filter pack): None ☒ 1 4; Other ☐

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature	Firm
[signature]	DRAKE ENVIRONMENTAL, INC.

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 7-98

Facility/Project Name: Ichinke Cleaners	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: MW-5
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 02/25/2005 (m m d d y y y y)
Type of Well / Well Code ____/____	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 8, T. 6 N, R. 19 ☒E ☐W	Well Installed By: Name (first, last) and Firm: GESTRA
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 0.00 ft. MSL
B. Well casing, top elevation -.50 ft. MSL
C. Land surface elevation 0 ft. MSL
D. Surface seal, bottom -1.0 ft. MSL or ____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

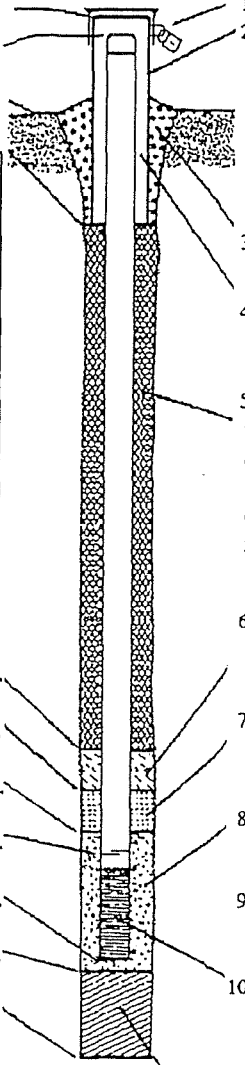
14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ _____

15. Drilling fluid used: Water ☐ 02 Air ☐ 01
Drilling Mud ☐ 03 None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
_____

E. Bentonite seal, top ____ ft. MSL or -1.00 ft.
F. Fine sand, top ____ ft. MSL or ____ ft.
G. Filter pack, top ____ ft. MSL or -2.69 ft.
H. Screen joint, top ____ ft. MSL or -3.69 ft.
I. Well bottom ____ ft. MSL or -18.69 ft.
J. Filter pack, bottom ____ ft. MSL or -18.91 ft.
K. Borehole, bottom ____ ft. MSL or -18.91 ft.
L. Borehole, diameter 7.5 in.
M. O.D. well casing 2.5 in.
N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 7.5 in.
b. Length: -1- ft.
c. Material: Steel ☒ 04 / Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 / Concrete ☒ 01 / Other ☐ _____
4. Material between well casing and protective pipe: Bentonite ☒ 30 / Other ☐ _____
5. Annular space seal: a. Granular/Chipped Bentonite ☐ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2 Bags Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01 / Tremie pumped ☐ 02 / Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐1/4 in. ☐3/8 in. ☐1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. Timmco
b. Volume added 2 Bags ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 / Flush threaded PVC schedule 80 ☐ 24 / Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11 / Continuous slot ☐ 01 / Other ☐ _____
b. Manufacturer Timmco
c. Slot size: 0.010 in.
d. Slotted length: -5- ft.
11. Backfill material (below filter pack): None ☒ 14 / Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Drake Environmental

Please complete both Forms 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 7-98

Facility/Project Name: Kimle Cleaners	Local Grid Location of Well: _____ ft. ☐N. ☐S. _____ ft. ☐E. ☐W.	Well Name: MW-6
Facility License, Permit or Monitoring No.	Local Grid Origin ☐ (estimated: ☐) or Well Location ☐ Lat. ° ' " Long. ° ' " or	Wis. Unique Well No. / DNR Well ID No.
Facility ID	St. Plane _____ ft. N, _____ ft. E. S/C/N	Date Well Installed: 02/25/2005 (m m d d y y y y)
Type of Well / Well Code ____/____	Section Location of Waste/Source: SE 1/4 of SE 1/4 of Sec. 2, T. 6 N, R. 19 ☐E ☐W	Well Installed By: Name (first, last) and Firm: GESTRA
Distance from Waste/Source _____ ft. / Enf. Stds. Apply ☐	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known	Gov. Lot Number

A. Protective pipe, top elevation 0.00 ft. MSL
B. Well casing, top elevation -.50 ft. MSL
C. Land surface elevation 0 ft. MSL
D. Surface seal, bottom -1.0 ft. MSL or _____ ft.

12. USCS classification of soil near screen:
GP ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP ☐
SM ☒ SC ☐ ML ☐ MH ☐ CL ☐ CH ☐
Bedrock ☐

13. Sieve analysis performed? ☐ Yes ☒ No

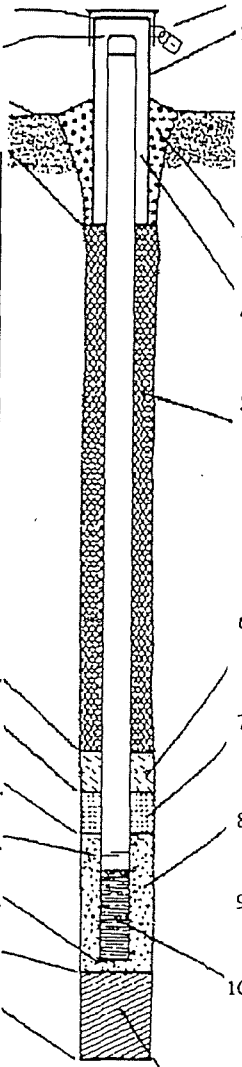
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ _____

15. Drilling fluid used: Water ☐ 02; Air ☐ 01; Drilling Mud ☐ 03; None ☒ 99

16. Drilling additives used? ☐ Yes ☒ No
Describe _____

17. Source of water (attach analysis, if required):
_____

E. Bentonite seal, top _____ ft. MSL or -1.0 ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top _____ ft. MSL or -2.71 ft.
H. Screen joint, top _____ ft. MSL or -3.71 ft.
I. Well bottom _____ ft. MSL or -10.71 ft.
J. Filter pack, bottom _____ ft. MSL or -18.71 ft.
K. Borehole, bottom _____ ft. MSL or -18.71 ft.
L. Borehole, diameter 7.5 in.
M. O.D. well casing 2.5 in.
N. I.D. well casing 2.0 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 7.5 in.
b. Length: 1 ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☒ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30; Concrete ☒ 01; Other ☐ _____
4. Material between well casing and protective pipe: Bentonite ☒ 30; Other ☐ _____
5. Annular space seal: a. Granular/Chipped Bentonite ☒ 33
b. _____ Lbs/gal mud weight . . . Bentonite-sand slurry ☐ 35
c. _____ Lbs/gal mud weight . . . . . Bentonite slurry ☐ 31
d. _____ % Bentonite . . . . . Bentonite-cement grout ☐ 50
e. 2 Bags Ft³ volume added for any of the above
f. How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☒ 08
6. Bentonite seal: a. Bentonite granules ☐ 33
b. ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite chips ☒ 32
c. _____ Other ☐ _____
7. Fine sand material: Manufacturer, product name & mesh size
a. _____
b. Volume added _____ ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. Timmco
b. Volume added 6 Bags ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ _____
10. Screen material: PVC
a. Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ _____
b. Manufacturer Timmco
c. Slot size: 0.010 in.
d. Slotted length: 15 ft.
11. Backfill material (below filter pack): None ☒ 14; Other ☐ _____

I hereby certify that the information on this form is true and correct to the best of my knowledge.

Signature _____ Firm Drake Environmental

Please complete both Form 4400-113A and 4400-113B and return them to the appropriate DNR office and bureau. Completion of these reports is required by chs. 160, 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291, 292, 293, 295, and 299, Wis. Stats., failure to file these forms may result in a forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on these forms is not intended to be used for any other purpose. NOTE: See the instructions for more information, including where the completed forms should be sent.