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November 2, 2022

Mr. John T. Hunt
Remediation and Redevelopment Program
Wisconsin Department of Natural Resources
101 Ogden Road
Peshtigo, WI 54157

Subject: BP Gas Station (Former Clark Gas Station # 562)
4751 N. Santa Monica Blvd., Milwaukee, WI

DATCP-FID # 416189 DNR-FID # 241 574 850

BRRTS #: 03-41-000450 Start: 09-28-1989 End: 05-26-2010

BRRTS #: 03-41-589630 Start: 04-20-2022 End: Active/Open

Addendum to the Site Investigation Work Plan (SIWP)

Dear Mr. Hunt:

The site investigation work plan (SIWP) was submitted to the WDNR on September 9, 2022. On October 14, 2022, the WDNR required to address the following items.

1. Submit a figure showing the location of former area of the residual soil and groundwater contamination of the closed BRRTS # 03-41-000450 in relation to the proposed soil borings/monitoring wells for the open BRRTS # 03-41-589630 and location of the GEC-TSSA soil samples exceeding the NR 720 residual contaminant levels (RCLs).

2. Provide a narrative on how the locations of the four soil borings/wells will aid to determine the degree and extent of the contamination from the recent release, evaluate the new discharge in relation to the residual contamination from the closed BRRTS # 03-41-000450, and explain the applicability of the location of the proposed soil boring at 30 feet away from S-1 and S-11 on the scaled figure.

3. Provide the soil disposal document as noted in the TSSA report, and

4. Installation of the proposed well MW-4 at the location of the former monitoring well MW-1

Removal of Two 6,000 Gallons USTs on April 1, 1990

Based on the site investigation scoping report submitted to the DNR, it appears that a gas station was active on the site during 1960s. Two 6,000 gallons capacity USTs were installed east-west at the northwest corner of the canopy. The installation date of the tanks is unknown.

Two pump islands were located to the west of Santa Monica Blvd. The third pump island was located to the east of the building. The tank registration forms are included in **Appendix A**.

Id.	Installed	Gallons	Content	Make	Date Removed
57460	Unknown	6000	UL Gasoline	Coated Steel	04/01/1990
57461	Unknown	6000	UL Gasoline	Coated Steel	04/01/1990

Removal of Approximately 1,176 Tons of Contaminated Soils in 1990

Omega Environmental Services, Inc. conducted the removal of approximately 1,176 tons (1,176.39 tons) of the contaminated soils between March 13-19, 1990. The soils were disposed of at Parkview Landfill, Menomonee Falls, Wisconsin (**Source:** WDNR Database for BRRTS # 03-41-000450).

Installation of Two 12-K Gals. USTs and Four Sumps on April 1, 1990

Two 12K USTs were installed north-south on April 1, 1990 in the former tank bed after the removal of the two 6K USTs and disposal of approximately 1,176 tons of the petroleum contaminated soils.

The four tank sump wells (S-1, S-2, S-3, and S-4) were installed at the NW, NE, SE, and SW corners of the tank bed, respectively (**Table 1** and **Figure1: Figure 6 of Sigma**). The tank registration forms are included in **Appendix A**.

Id.	Installed	Gallons	Content	Make	Date Removed
112903	04/01/1990	12000	UL Gasoline	Coated Steel	03/21/2022
113159	04/01/1990	12000	UL Gasoline	Coated Steel	03/21/2022

Removal of Two 12K Gals. USTs of April 1, 1990 in March 2022

General Engineering Corporation (GEC) of Portage, Wisconsin, supervised the removal of the two 12K USTs of April 1, 1990. The two USTs and three pump islands were removed on March 21, 2022. The site sampling map and five photos have been included in **Appendix B**. The excavation was approximately 55 feet long (north-south), 35 feet wide (east-west), and 14 feet deep.

OM Enterprises, Inc. has summarized the GEC's TSSA soil sampling data in **Table 1**. The highest concentration of benzene (0.056 ppm) in the tank bed was detected in sample S-1 (north-northeast wall) at approximately 9.5 feet below the grade.

The highest concentration of benzene (0.299 ppm) in the piping/dispenser areas was detected in sample S-11 (northeast pump island) at approximately 3 feet below the grade.

Soil Disposal (727 Tons) and Confirmatory Soil Sampling

Approximately 727 tons (23.31 tons on 3/21/22 + 377.39 tons on 3/22/22 + 326.32 tons on 3/23/22) of the contaminated soils were hauled to the waste management landfill, Menomonee Falls, Wisconsin in March 2022. The invoice and disposal proof are included in **Appendix C**.

It appears that the excavation was approximately 60 feet long (north-south), 55 feet wide (east-west), and 14 feet deep. It appears that GEC did not collect the confirmatory wall and bottom soil samples following the removal of approximately 727 tons of the contaminated soils. Therefore, we do not have the data about the residual soil contaminants in the excavated areas of 2022.

Installation of Existing UST System in 2022

One manifold tank-21K (15-K + 6K) was installed in the former tank bed on March 24, 2022. The third pump (west) of 1990 was replaced by two pumps (NW and SW). A tank sump well was installed at the southwest corner of the tank bed.

The existing tanks have been summarized below and tank registration form are included in **Attachment A**.

Id.	Installed	Gallons	Content	Make	Date Removed
238503	03/24/2022	15000	UL Gasoline	Fiberglass	N/A (Active)
238505	03/24/2022	6000	UL Gasoline	Fiberglass	N/A (Active)

Notification of Petroleum Contamination (BRRTS # 03-41-000450)

Foth and Van Dyke of Milwaukee notified the petroleum contamination to the WDNR in September 1889 (**Appendix D**).

Soil Borings and Monitoring Wells (BRRTS # 03-41-000450)

Ten soil borings (B-1 through B-10) were advanced in June 1992. Six out of the ten soil boring were converted into six 2 inches diameter groundwater monitoring wells MW-1 through MW-6 (**Table 2**).

Two soil borings (B-11 and B-12) were advanced in April 1993. The soil boring B-11 was converted into a 2 inches diameter groundwater monitoring well MW-7 (**Table 2**).

Two soil borings (B-13 and B-14) were advanced between June and October of 1995. The soil borings were converted into 2 inches diameter groundwater monitoring wells MW-8 and MW-9, respectively (**Table 2**). The well construction reports have been included in **Appendix E**.

The soil quality data has been summarized in **Table 3:** Table 2 of Sigma. The soil quality data will be included in the SIR of the BRRTS # 03-41-589630. The detected concentrations of benzene are as follows.

Boring	**Depth** (~ ft.)	**Conc. (ppb)**	**Location**
B-2/MW-2	7-9	74	NE Corner of Bldg. (**Figure: 2**)
B-7/MW-5	11-12.5	2100	4771 N Santa Monica Blvd. (**Figure: 2**)
B-10/B-10	7-9	13,000	N of Q-1 (6" dia. 25 ft. RW, **Figure: 2**)

Sigma submitted "Report of A Subsurface Investigation" to the WDNR on March 25, 1994 (**Source:** Page 1251 to……., the WDNR site file).

OM Enterprises, Inc. believes that the above soil borings were not in the areas of the BRRTS # 03-41-589630.

Soil and Groundwater Remediations (BRRTS # 03-41-000450)

OM Enterprises, Inc. reviewed the following documents posted on the web site of the closed BRRTS # 03-41-000450.

1. A Remedial Alternative Analysis, Sigma, July 1994: Page 1241 to.....
2. Project Manual for Installation of A Soil Vapor Extraction / Groundwater Extraction and Treatment System, Sigma, September 1995: Page 1008 to.....
3. Remedial System Installation and Start-up Report, Sigma, May 1997: Page 819 to....
4. Status Report for the Soil and Groundwater Remediation System, Sigma, February 1998: Pag 617 to.....
5. Status Report for the Soil and Groundwater Remediation System, Sigma, October 1999: Page 494 to.....
6. Status Report for the Soil and Groundwater Remediation System, Sigma, May 2000: Page 368 to

Based on the review of the site file, it appears that soil excavation was not selected as a remedial alternative for the remediation of the petroleum impacted soils. The WDNR approved the soil vapor extraction (SVE) and groundwater remedial system for the site remediation. The treated water was discharged into the MMSD sewer system and contaminated granular carbon was hauled to the Waste Management landfill in Menomonee Falls, Wisconsin.

Two vapor extraction wells (VE-1 and VE-2), each 9 ft. deep and 6" in diameter were installed on October 9, 1995 (**Figure 2**, **Table 2**, and **Appendix E**).

Four recovery wells (Q-1 through Q-4), each ~ 22-25 ft. deep and 6" in diameter were also installed on October 9, 1995 (**Figure 2**, **Table 2**, and **Appendix E**).

Closure Packet for BRRTS # 03-41-000450

Sigma submitted the closure request in September 2002 (**Appendix F**). The groundwater quality data will be included in the SIR of the BRRTS # 03-41-589630.

The concentration of benzene at the time of the submittal of the closure request is as follows. The locations are shown on **Figure 3: Figure 1 of Sigma**.

Id.	Date	Conc.	Location	Comment
S-1	10/30/2001	48	Tank Bed	*Appears located in new release area*
S-2	07/23/2001	650	Tank Bed	*Appears located in new release area*
S-3	7/23/2001	1100	Tank Bed	*Appears located in new release area*
S-4	10/23/2001	30	Tank Bed	*Appears located in new release area*
MW-1	10/22/2001	< 22	N of Tank Bed	*Appears located in new release area*
MW-2	10/22/2001	290	NE Corner of Bldg.	Not located in new release area
MW-3	7/23/2001	< 0.45	NE of Canopy	Not located in new release area
MW-4	10/22/2001	< 0.45	SW Corner of Canopy	Not located in new release area
MW-5	10/22/2001	870	4771 N Santa Monica	Not located in new release area
MW-6	10/22/2001	560	NW Corner of Lot	Not located in new release area
MW-7	10/22/2001	< 0.45	NW Corner of Lot	Not located in new release area
MW-8	10/22/2001	< 11	NW Corner of Lot	Not located in new release area
MW-9	10/22/2001	< 0.45	NW Corner of Lot	
Q-1	7/23/2001	< 4.5	NW of Bldg. & N of Shed	Not located in new release area
Q-2	7/23/2001	590	N of Q-1	Not located in new release area
Q-3	7/23/2001	20	NW of Tank Bed	Not located in new release area
Q-4	7/23/2001	120	NE of MW-1	*Appears located in new release area*

The four former abandoned sump wells (S-1 through S-4), MW-1, and Q-1 appear to be in the new release area (BRRTS # 03-41-589630). The approximate locations and concentrations at the time of closure have been shown on **Figure 4**.

Proposed Boring/Wells and Issues of Abandoned Well MW-1

OM Enterprises, Inc. proposed to advance four soil borings/monitoring wells as shown on **Figure 5** and summarized below.

Boring Id.	Borings Depth (~ft.)	Wells Depth (~ft.)	Screen (ft.)	Approximate Location	Rationale/ Comments
B-1	17.5	MW-1 (17.5)	10	East of Canopy	Delineate Plume
B-2	17.5	MW-2 (17.5)	10	South Lot Line	Delineate Plume
B-3	17.5	MW-3 (17.5)	10	West of Canopy	Delineate Plume
B-4	17.5	MW-4 (17.5)	10	North of Canopy	Delineate Plume

The locations of the soil borings/monitoring wells are not to the scale and cannot be placed to the scale because of the following conditions known and unforeseen circumstances encountered during the exploration activities.

1. The driller cannot start the drilling without the clearance from the Digger's Hotline.

2. The driller must maintain the Digger's Hotline required underground and aboveground separation distances from the utility lines.

3. The driller retains a private locator because the Digger's Hotline does not locate the private utilities.

4. The driller changes the locations of the borings depending on the results of the private locators.

5. The on-site building and other structures (canopy, shed, pole, etc.) affect the locations of the proposed drill holes.

6. Sometimes the unforeseen encountered conditions during the drilling require to change the locations of the drill holes

The area of the site has been paved with the concrete after the construction of the new building and installation of the new UST system.

MW-1:

The monitoring well MW-1 has been proposed in the landscape area. The proposed well MW-1 is located very close to the NE pump island (S-11 sample location). The well will be moved to the north to cover the sample location of S-1. If the well is contaminated, we may consider drilling hole in the public right of way.

MW-2:

The monitoring well MW-2 has also been proposed in the landscape area. We believe that the well define the plume. If the plume is not defined, we may consider drilling in the right of way of the county park.

MW-3:

The monitoring well MW-3 has been proposed in the asphalt area. There is no room to install a well between the building and canopy. There is a sump well (~ 15 feet deep) at the southwest corner of the tank bed. The depth to the groundwater in the sump well was ~ 10 feet below the grade in August 2022. If the sump well is contaminated, MW-3 would be helpful to define the plume.

MW-4 at Abandoned Well MW-1

Sentinel Environmental Services LLC abandoned the well on June 2, 2009. The well abandonment forms have been included in **Appendix G**. The Wisconsin Administrative Code § NR 141.25 (2) (d) requires cutting the well casing at least 30 inches below the grade. OM Enterprises, Inc. opened the well. The PVC has not been cut. The PVC is filled with the bentonite.

The owner wanted to use the well for the new release. The monitoring well was exposed during the development of the site in 2022. The bentonite of the top of the sand was removed during the excavation to install the new tank. OM Enterprises, Inc. talked to the driller. The driller will pull the PVC pipe; remove the residual bentonite, if any; and install the monitoring well MW-4 at the same location. Benzene in the soil was not detected in B-1 during the investigation in 1992. The concentration of benzene in the groundwater of MW-1 was detected at < 22 ppb on October 22, 2001 (last sampling).

Need of Additional Well at NW Corner

The NW corner of the site was impacted by the previous release/closed BRRTS of this former Clark Site as well as by the two closed BRRTS activities of the northside property (gas station and dry cleaning). The insurance company would not pay for the costs associated with the previous release. Therefore, OM Enterprises, Inc. would not advance borings in the areas away from the insurance covered release areas.

Summary and Conclusions

1. Two 6,000 gallons capacity USTs and approximately 1,176 tons of the contaminated soils were removed between March 1990 and April 1990

2. Two 12K USTs were installed on April 1, 1990 in the former tank bed after the removal of the two 6K USTs and disposal of approximately 1,176 tons of the petroleum contaminated soils.

3. Two USTs and three pump islands were removed on March 21, 2022. The highest concentration of benzene (0.056 ppm) in the tank bed was detected in sample S-1 (north-northeast wall) at approximately 9.5 feet below the grade. The highest concentration of benzene (0.299 ppm) in the piping/dispenser areas was detected in sample S-11 (northeast pump island) at approximately 3 feet below the grade.

4. Approximately 727 tons of the contaminated soils were hauled in March 2022. GEC did not collect the confirmatory wall and bottom soil samples following the removal of approximately 727 tons of the contaminated soils. Therefore, we do not have the data about the residual soil contaminants.

5. One manifold tank-21K (15-K + 6K) was installed in the former tank bed on March 24, 2022. The third pump (west) of 1990 was replaced by two pumps (NW and SW). A tank sump well was installed at the southwest corner of the tank bed.

6. Fourteen soil borings were advanced for the closed BRRTS # 03-41-000450 between in June 1992 and October 1995. Nine soil boring were converted into the groundwater monitoring wells.

7. Benzene was detected at 74 ppb in B-2/MW-2 at 7'-9'; 2100 ppb in B-7/MW-5 at 11'-12.5'; and 13000 ppb in B-10 at 7-9' below the grades.

8. The WDNR approved the soil vapor extraction (SVE) and groundwater remedial system for the site remediation. Two vapor extraction wells (VE- and VE-2) and four recovery wells (Q-1 through Q-4) were installed. The following concentrations of benzene were present in the tank bed at the time of the closure of the closed BRRTS # 03-41-000450.

Sump Well	**Date Sampled**	**Conc. (ppb)**
S-1	10/30/2001	48
S-2	07/23/2001	650
S-3	7/23/2001	1100
S-4	10/23/2001	30

9. The locations of the soil borings/monitoring wells are not to the scale and cannot be placed to the scale because of the known and unforeseen circumstances encountered during the exploration activities.

10. The area of the site has been paved with the concrete after the construction of the new building and installation of the new UST system.

11. The monitoring well MW-1 has been proposed in the landscape area. The well will be moved to the north to cover the sample location of S-1. If the well is contaminated, we may consider drilling hole in the public right of way.

12. The monitoring well MW-2 has also been proposed in the landscape area. We believe that the well define the plume.

13. The monitoring well MW-3 has been proposed in the asphalt area. If the tank sump well is contaminated, MW-3 would be helpful to define the plume.

14. The Wisconsin Administrative Code § NR 141.25 (2) (d) requires cutting the well casing at least thirty inches below the grade. The PVC has not been cut. The PVC is filled with the bentonite. There is no bentonite surrounding the well casing. The driller will pull the PVC pipe; remove the residual bentonite, if any; and install the monitoring well MW-4 at the same location.

15. The insurance company would not pay for the costs associated with the previous release. Therefore, OM Enterprises, Inc. would not advance borings in the areas away from the insurance covered release areas.

Thank you for your cooperation.

Sincerely,
O M ENTERPRISES, INC.
Raghu B. Singh
Raghu B. Singh, Ph. D.
Environmental Professional
40 CFR § 312.10 (b)

Encls:

Table 1: Summary of Petroleum Volatile Organic Compounds (PVOCs and Naphthalene of Tank System Site Assessment (TSSA) Soil Samples Collected by General Engineering Corporation on March 21, 2022 and March 23, 2022.

Table 2:	Summary of Soil Borings, Monitoring Wells, Tank Sump Wells, Vapor Extraction Wells, and Recovery Wells for BRRTS # 03-41-000450 (Closed: 05-26-2010)
Table 3:	Table 2 of Sigma: Soil Sample Analytical Results
Figure 1:	Figure 6 of Sigma: Groundwater and Soil Remediation System Groundwater Contour Map (October 2001)
Figure 2:	Figure 1 of Sigma: Soil Quality Map
Figure 3:	Figure 1 of Sigma: Soil Quality Map
Figure 4:	Benzene Concentration (ppb) at Closure of BRRTS # 03-41-000450
Figure 5:	Location of Proposed Soil Borings and Monitoring Wells
Appendix A:	WDATCP-Tank Registration Forms
Appendix B:	General Engineering Corporation (GEC) Map and Photos of UST Removal, 2022 (BRRTS # 03-41-589630)
Appendix C:	Proof for Disposal of Approximately 727 Tons Contaminated Soils in 2022 (BRRTS # 03-41-589630)
Appendix D:	Foth & Van Dyke Notification of Contamination to the WDNR, September 1989 (Closed BRRTS # 03-41-000450)
Appendix E:	Monitoring Wells, Vapor Extraction Wells, and Recovery Wells Construction Reports (Closed BRRTS # 03-41-000450)
Appendix F:	Closure Request of Sigma of September 12, 2002 for Closed BRRTS # 03-41-000450
Appendix G:	Well Abandonment Forms of Sentinel Environmental of February 16, 2010 for Closed BRRTS # 03-41-000450

CC: Mr. Amin Bhimani/Responsible Party / AYSS786@gmail.com

Table 1

Summary of Petroleum Volatile Organic Compounds (PVOCs) and Naphthalene of Tank System Site Assessment (TSSA)

Soil Samples Collected by General Engineering Corporation on March 21, 2022 and March 23, 2022

BP Gas Station (Former Clark Gas Station)

4751 N Santa Monica Blvd., Milwaukee, WI 53211

DATCP-Tank-FID # 416189 **LUST-FID # 241574850** **LUST-BRRTS # 03-41-589630**

Contaminants of Concern	Not-To-Exceed D-C RCL (mg/kg) Non-Industrial *RR-106, October 2018	Not-To-Exceed D-C RCL (mg/kg) Industrial *RR-106, October 2018	RCL-GW (mg/kg) DF=2 Soil to GW *RR-106, October 2018	Sample	S-1	S-2	S-3	S-4	S-5	S-6	S-7	S-8
				Location	N/NE Wall	N/NW Wall	E/NE Wall	E/SE Wall	W/SW Wall	W/NW Wall	W/SW Wall	SW Dispenser
				Depth (ft.)	8	8	8	8	8	8	8	3
				Soil	FILL	FILL	FILL	FILL	FILL	FILL	FILL	FILL
				PID (ppm)	9.5	332	7	2	2	579	2	2
Benzene	1.6	7.07	**0.0051**	ppm	**0.056**	< 0.025	< 0.025	0.040 "J"	< 0.025	< 0.025	< 0.025	< 0.025
Ethylbenzene	8.02	35.4	1.57	ppm	0.034 "J"	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	0.033 "J"	< 0.025
MTBE	63.8	282	0.027	ppm	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
Naphthalene	5.52	24.1	**0.6582**	ppm	0.112	< 0.025	< 0.025	< 0.025	< 0.025	0.053	0.07	0.052 "J"
Toluene	818	818	1.1072	ppm	0.055 "J"	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	< 0.025
1,2,4-TMB	219	219	**1.3787**	ppm	0.098	< 0.025	0.055 "J"	0.036 "J"	< 0.025	< 0.025	< 0.025	0.041 "J"
1,3,5-TMB	182	182		ppm	0.113	< 0.025	0.0257 "J"	< 0.025	< 0.025	< 0.025	< 0.025	0.040"J"
m & p-Xylenes			3.96	ppm	0.168	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
o-Xylene	260	260		ppm	0.072	< 0.025	< 0.025	< 0.025	< 0.025	0.036 "J"	0.036 "J"	0.037 "J"
				Solids %	90.00	91.30	85.60	84.60	91.20	90.30	83.10	88.30

Note:

* denotes the Wis. Admin. Code § 720 RCL Quick Reference Table: Contaminated Soil, October 2018 (RR-106)

"J" denotes the concentration between the method of detection (MOD) and method of quantification (MOQ).

Concentration in bold color indicate the concentration exceeding RCLs-GW (Soil to GW)

Table 1

Summary of Petroleum Volatile Organic Compounds (PVOCs) and Naphthalene of Tank System Site Assessment (TSSA)

Soil Samples Collected by General Engineering Corporation on March 21, 2022 and March 23, 2022

BP Gas Station (Former Clark Gas Station)

4751 N Santa Monica Blvd., Milwaukee, WI 53211

DATCP-Tank-FID # 416189 **LUST-FID # 241574850** **LUST-BRRTS # 03-41-589630**

Contaminants of Concern	Not-To-Exceed D-C RCL (mg/kg) Non-Industrial	Not-To-Exceed D-C RCL (mg/kg) Industrial	RCL-GW (mg/kg) DF=2 Soil to GW	Sample	S-9 S	S-10 S	S-11					
	*RR-106, October 2018			Location	Prod. Line T	SE Dispenser	NE Dispenser					
				Depth (ft.)	3	3	3					
				Soil	FILL	FILL	FILL					
				PID (ppm)	2	3	3					
Benzene	1.6	7.07	**0.0051**	ppm	< 0.025	< 0.025	**0.299**					
Ethylbenzene	8.02	35.4	1.57	ppm	< 0.025	< 0.025	0.282					
MTBE	63.8	282	0.027	ppm	< 0.025	< 0.025	< 0.025					
Naphthalene	5.52	24.1	**0.6582**	ppm	< 0.025	0.098	0.37					
Toluene	818	818	1.1072	ppm	0.034 "J"	0.128	**1.13**					
1,2,4-TMB	219	219	**1.3787**	ppm	0.033 "J"	0.072	0.86					
1,3,5-TMB	182	182		ppm	0.0281 "J"	0.079	0.293					
m & p-Xylenes			3.96	ppm	0.067 "J"	0.12	2.01					
o-Xylene	260	260		ppm	0.0316 "J"	0.082	0.32					
				Solids %	88.20	84.50	71.80					

Note:

* denotes the Wis. Admin. Code § 720 RCL Quick Reference Table: Contaminated Soil, October 2018 (RR-106)

"J" denotes the concentration between the method of detection (MOD) and method of quantification (MOQ).

Concentration in bold color indicate the concentration exceeding RCLs-GW (Soil to GW)

Table 2

Summary of Soil Borings, Monitoring Wells, Tank Sump Wells, Vapor Extraction Wells, and Recovery Wells

BP Gas Station (Former Clark # 562)
4751 N Santa Monica Blvd., Milwaukee, WI 53211

BRRTS # 03-41-000450 (Closed: 05-26-2010)

(Page 1 of 1)

Installed Date	Abandoned Date	Boring Id.	Well Id.	Well Depth (~ ft.)	Screen (ft.)	Inside Dia. (inch)	Location Location
6/25/1992	6/2/2009	B-1	MW-1	14.00	10.00	2.00	N of Tank Bed
6/25/1992	6/2/2009	B-2	MW-2	15.00	10.00	2.00	NE Corner of Building
6/25/1992	6/2/2009	B-3	MW-3	15.00	10.00	2.00	NE of Canopy
6/26/1992	6/2/2009	B-4	MW-4	15.00	10.00	2.00	SW Corner of Canopy
6/26/1992	6/26/1992	B-5	N/A	N/A	N/A	N/A	SE of Canopy
6/26/1992	6/26/1992	B-6	N/A	N/A	N/A	N/A	SW Corner: 4771 N. Santa Monica
9/29/1992	6/2/2009	B-7	MW-5	15.00	10.00	2.00	4771 N Santa Monica Bed.
9/29/1992	9/29/1992	B-8	N/A	N/A	N/A	N/A	W ROW of Santa Monica
9/30/1992	6/2/2009	B-9	MW-6	14.50	10.00	2.00	NW Corner of Lot
9/30/1992	9/30/1992	B-10	N/A	N/A	N/A	N/A	N of Q-1
4/13/1993	6/2/2009	B-11	MW-7	14.50	10.00	2.00	NW Corner of Lot
4/13/1993	4/13/1993	B-12	N/A	N/A	N/A	N/A	NW of MW-6
6/29/1995	6/2/2009	B-13	MW-8	15.00	10.00	2.00	NW Corner of Lot
10/9/1995	6/2/2009	B-14	MW-9	15.00	10.00	2.00	NW Corner of Lot
10/9/1995	6/2/2009	VE-1	VE-1	9.00	3.00	6.00	NW Corner of Canopy
10/9/1995	6/2/2009	VE-2	VE-2	9.00	3.00	6.00	N of Canopy
10/9/1995	6/2/2009	Q-1	Q-1	25.00	18.00	6.00	NW of Bldg. & N of Shed
10/9/1995	6/2/2009	Q-2	Q-2	24.00	18.00	6.00	N of Q-1
10/9/1995	Not Located*	Q-3	Q-3	22.00	15.00	6.00	NW of Tanks Removed in 2021
10/9/1995	6/2/2009	Q-4	Q-4	25.00	18.00	6.00	NE of MW-1
4/1/1990	3/21/2021	S-1	Tank Sump Well of USTs Removed in 2021				NW Corner of Former Tank Bed
4/1/1990	3/21/2021	S-2	Tank Sump Well of USTs Removed in 2021				NE Corner of Former Tank Bed
4/1/1990	3/21/2021	S-3	Tank Sump Well of USTs Removed in 2021				SE Corner of Former Tank Bed
4/1/1990	3/21/2021	S-4	Tank Sump Well of USTs Removed in 2021				SW Corner of Former Tank Bed

Note:

* Well abandonment form was not located.

Two 6-K tanks (E-W), removed on 04-01-1990, were located at the NW corner of the canopy.

Two 12-K tanks (N-S), removed on 03-21-2021, were located to the north of the canopy.

S-1, S-2, S-3, and S-4 denotes the tank sump wells installed at the four corners of the tanks bed removed in 2021

VE denotes the vapor extraction wells advanced for the soil remediation.

Q-1 through Q-4 denotes the 6" diameter recovery wells to pump water for on-site carbon treatment.

Table 2
Soil Sample Analytical Results
Clark Retail Enterprises
Station #0562
Milwaukee, Wisconsin

Date Sampled / Soil Boring I.D.	Photo-Ionization Detector (i.u.i.)	Petroleum Volatile Organic Compounds (µg/kg)					(mg/kg)	
		Benzene	Ethyl-benzene	Toluene	Total Xylene	Methyl-tert butyl ether	GRO	Total Lead
NR 720 RCL	---	*5.5*	*2,900*	*1,500*	*4,100*	---	*100*	*50*
NR 746 Table 1	---	***8,500***	***4,600***	***38,000***	***42,000***	---	---	---
NR 746 Table 2	---	*1,100*	---	---	---	---	---	---
June-92								
B-1/7-9'	4,084.0	<6.0	310	270	*4,200*	<6.0	*400*	3.4
B-1/9-11'	109.0	NA	NA	NA	NA	NA	*190*	NA
B-2/7-9'	3,975.0	*74*	250	760	1,900	<2.4	64	3.8
B-2/9-11'	15.0	NA	NA	NA	NA	NA	98	NA
B-3/7-9'	1,965.0	<1.2	3.6	7.1	7.1	<1.2	39	<1.2
B-3/9-11'	112.0	NA	NA	NA	NA	NA	35	NA
B-4/7-9'	0.0	<1.1	<1.1	2.2	3.3	<1.1	<6.0	2.1
B-4/9-11'	0.0	NA	NA	NA	NA	NA	<6.0	NA
B-5/7-9'	0.0	<1.2	<1.2	<1.2	<1.2	<1.2	<5.8	18
B-5/9-11'	0.0	NA	NA	NA	NA	NA	<5.0	NA
September-92								
B-6/6-8'	36.1	<5.0	21	<5.0	33	<5.4	<5.3	<1.1
B-6/8-10'	163.0	NA	NA	NA	NA	NA	70	NA
B-7/11-12.5'	876.0	*2,100*	***8,600***	*20,000*	***51,000***	200	*700*	1.6
B-7/13.5-15'	184.0	NA	NA	NA	NA	NA	95	NA
B-8/7-9'	0.0	<2.0	<2.0	<3.0	<3.0	<2.0	<6.2	<1.2
B-8/9-11'	0.0	NA	NA	NA	NA	NA	<6.1	NA
B-9/7-9'	2,161.0	<1.0	13	2	70	<1.0	11	<1.1
B-9/14.5-16'	871.0	NA	NA	NA	NA	NA	54	NA
B-10/7-9'	>2,500	***13,000***	***49,000***	***130,000***	*27,000*	<5.9	*2,400*	2.3
B-10/9-11'	1,010.0	NA	NA	NA	NA	NA	38	NA
April-93								
B-11/6-8'	2.6	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	3.6
B-12/6-8'	3.7	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	<LOQ	4.5

Note:

<LOQ = Less than the Laboratory Level of Quantification
NA = Not Analyzed
i.u.i. = Instrument Units as Isobutylene
74 = Exceeds NR 720 Generic RCL
13,000 = Exceeds NR 746 Table 1 Value

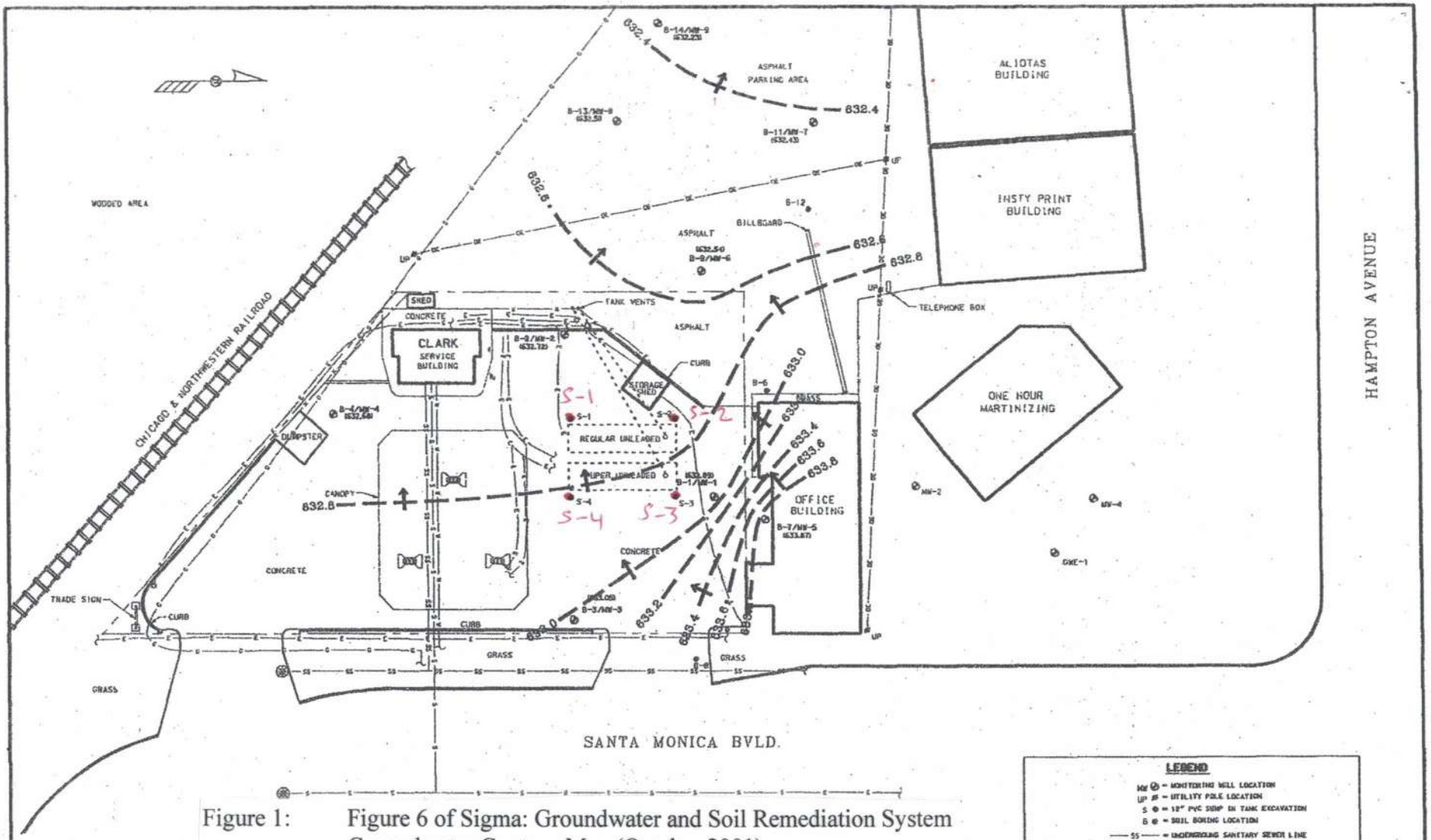


Figure 1: Figure 6 of Sigma: Groundwater and Soil Remediation System Groundwater Contour Map (October 2001)

NOTES:
1. KNOWN UTILITIES, STRUCTURES AND PIPING ADJACENT TO OR EXPECTED TO BE ENCOUNTERED IN THE WORK ARE SHOWN ON THE DRAWINGS. THE LOCATIONS SHOWN ARE TAKEN FROM EXISTING RECORDS AND SITE OBSERVATIONS; HOWEVER, IT IS EXPECTED THAT THERE MAY BE SOME DISCREPANCIES AND OMISSIONS IN THE LOCATIONS AND QUANTITIES OF UTILITIES AND STRUCTURES SHOWN. THOSE SHOWN ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY, AND NO RESPONSIBILITY IS ASSUMED BY EITHER THE OWNER OR THE ENGINEER FOR THEIR ACCURACY OR COMPLETENESS.

2. SITE PLAN DRAWING SHOWS EXISTING SITE CONDITIONS PROVIDED FOR CONTRACTORS INFORMATION. THERE IS NO WORK TO BE COMPLETED BY THE CONTRACTOR SHOWN ON THIS DRAWING.

LEGEND

- MW ⊕ = MONITORING WELL LOCATION
- UP ⊗ = UTILITY POLE LOCATION
- S ⊕ = 12" PVC SUMP IN TANK EXCAVATION
- B ⊕ = SOIL BORING LOCATION
- SS = UNDERGROUND SANITARY SEWER LINE
- S = UNDERGROUND STORM SEWER LINE
- G = UNDERGROUND NATURAL GAS LINE
- W = UNDERGROUND WATER LINE
- OE = OVERHEAD ELECTRIC LINE
- PROPERTY LINE
- GROUNDWATER CONTOUR LINE. CONTOUR INTERVAL = .2'
- ( ) = STATIC GROUNDWATER LEVEL (OCT. 2001)
- GROUNDWATER FLOW DIRECTION

SIGMA ENVIRONMENTAL SERVICES, INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154
PHONE : (414) 768 - 7144
1-800-732-4671

NO	DATE	REVISIONS	BY	APVD

0 10 20 40

	NAME:	DATE:
DRAWN BY:	BEB	3-4-97
DESIGNED BY:		
CHECKED BY:		
APPROVED BY:		

CLARK REFINING AND MARKETING, INC. - STATION #562
GROUNDWATER AND SOIL REMEDIATION SYSTEM
GROUNDWATER CONTOUR MAP (OCTOBER 2001)

DRAWING NUMBER C0562-43

FIGURE 6

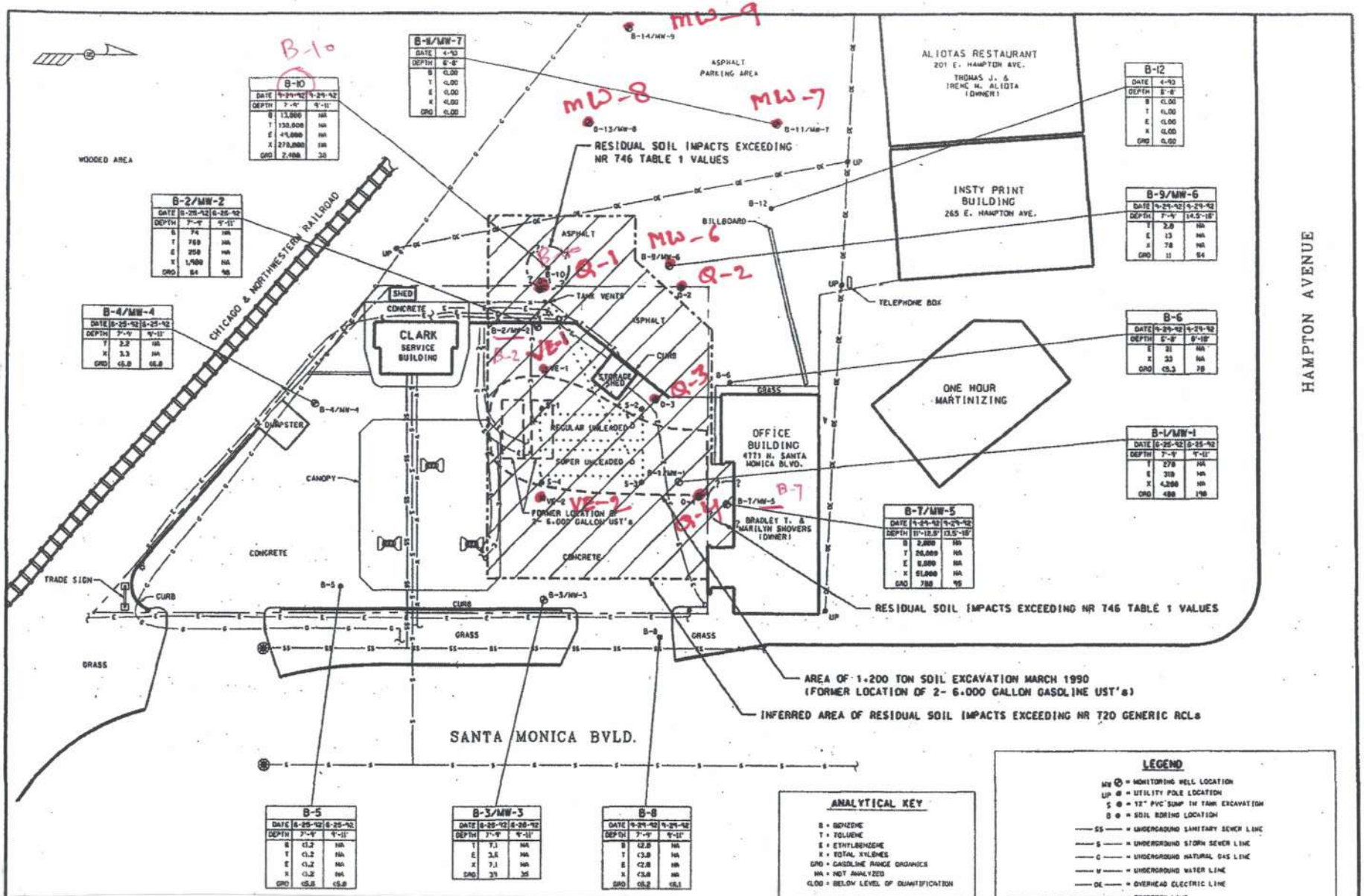


Figure 2: Figure 1 of Sigma: Soil Quality Map

SIGMA ENVIRONMENTAL SERVICES, INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154
PHONE : (414) 768 - 7144
1-800-732-4671

GRAPHIC SCALE 0 10 20 40

NO	DATE	REVISIONS	BY	APVD

	NAME:	DATE:
DRAWN BY:	BEB	4-11-03
DESIGNED BY:	DGB	4-14-03
CHECKED BY:	DGB	4-14-03
APPROVED BY:	DGB	4-14-03

CLARK RETAIL ENTERPRISES, INC. - STATION #562
4751 N. SANTA MONICA BLVD., MILWAUKEE, WISCONSIN
SOIL QUALITY MAP

DRAWING NUMBER
C0562-44

FIGURE 1

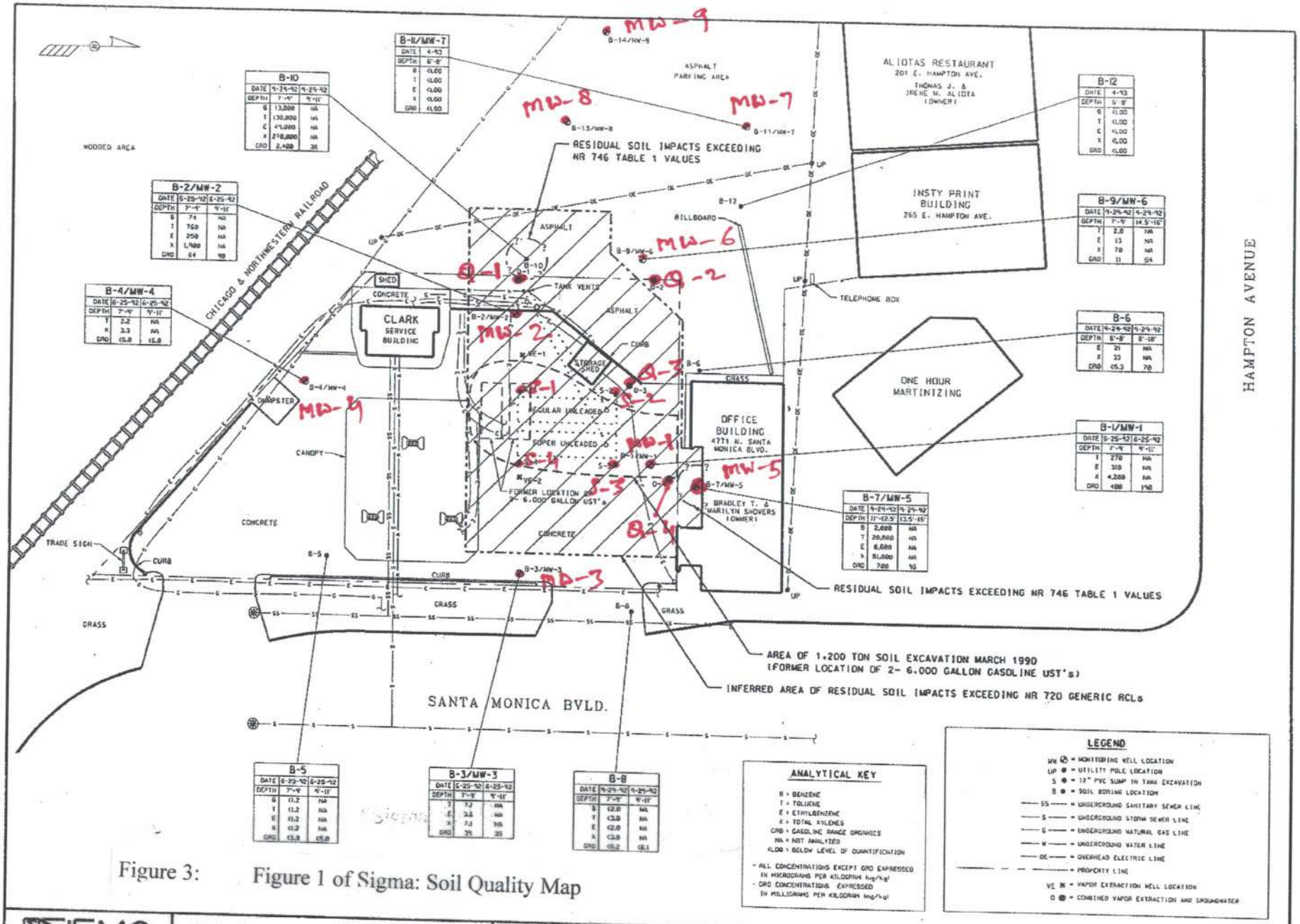


Figure 3: Figure 1 of Sigma: Soil Quality Map

SIGMA ENVIRONMENTAL SERVICES, INC.
220 EAST RYAN ROAD
OAK CREEK, WISCONSIN 53154
PHONE : (414) 768 - 7144
1-800-732-4671

GRAPHIC SCALE 0 10 20 40

NO	DATE	REVISIONS	BY	APVD

	NAME:	DATE:
DRAWN BY:	BEB	4-11-03
DESIGNED BY:	DGB	4-14-03
CHECKED BY:	DGB	4-14-03
APPROVED BY:	DGB	4-14-03

CLARK RETAIL ENTERPRISES, INC. - STATION #562
4751 N. SANTA MONICA BLVD., MILWAUKEE, WISCONSIN
SOIL QUALITY MAP

DRAWING NUMBER C0562-44

FIGURE 1

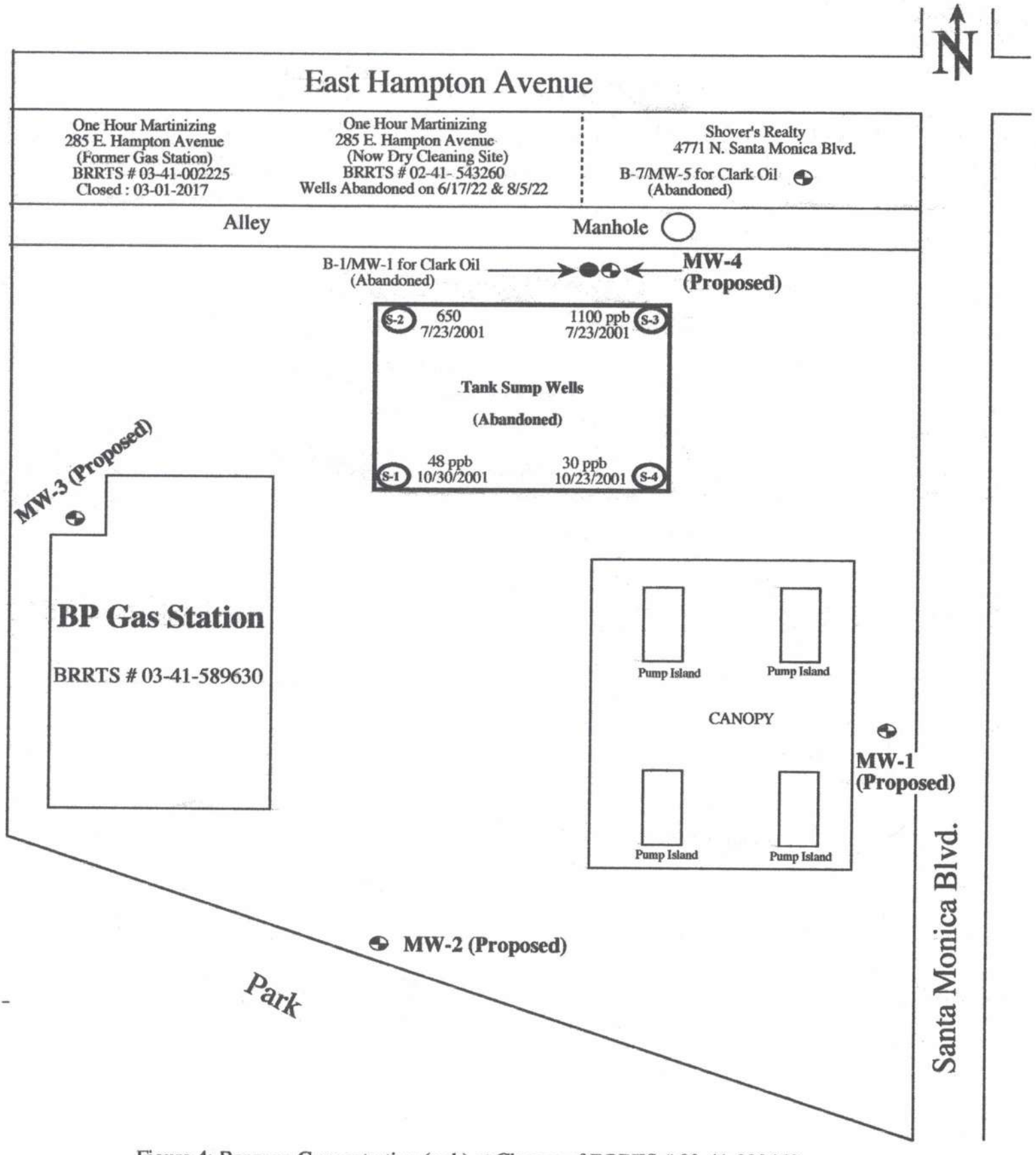


Figure 4: Benzene Concentration (ppb) at Closure of BRRTS # 03-41-000450

Site	Consultant	NOT TO SCALE	Project #	Legend
Clark Gas Station 4751 N Santa Monica Blvd. Milwaukee, WI 53211	OM Enterprises, Inc. 124 W Scott Street Fond du Lac, WI 54935	0' 15' 30'	3062 Date 07/24/2022	Monitoring Well Soil Boring

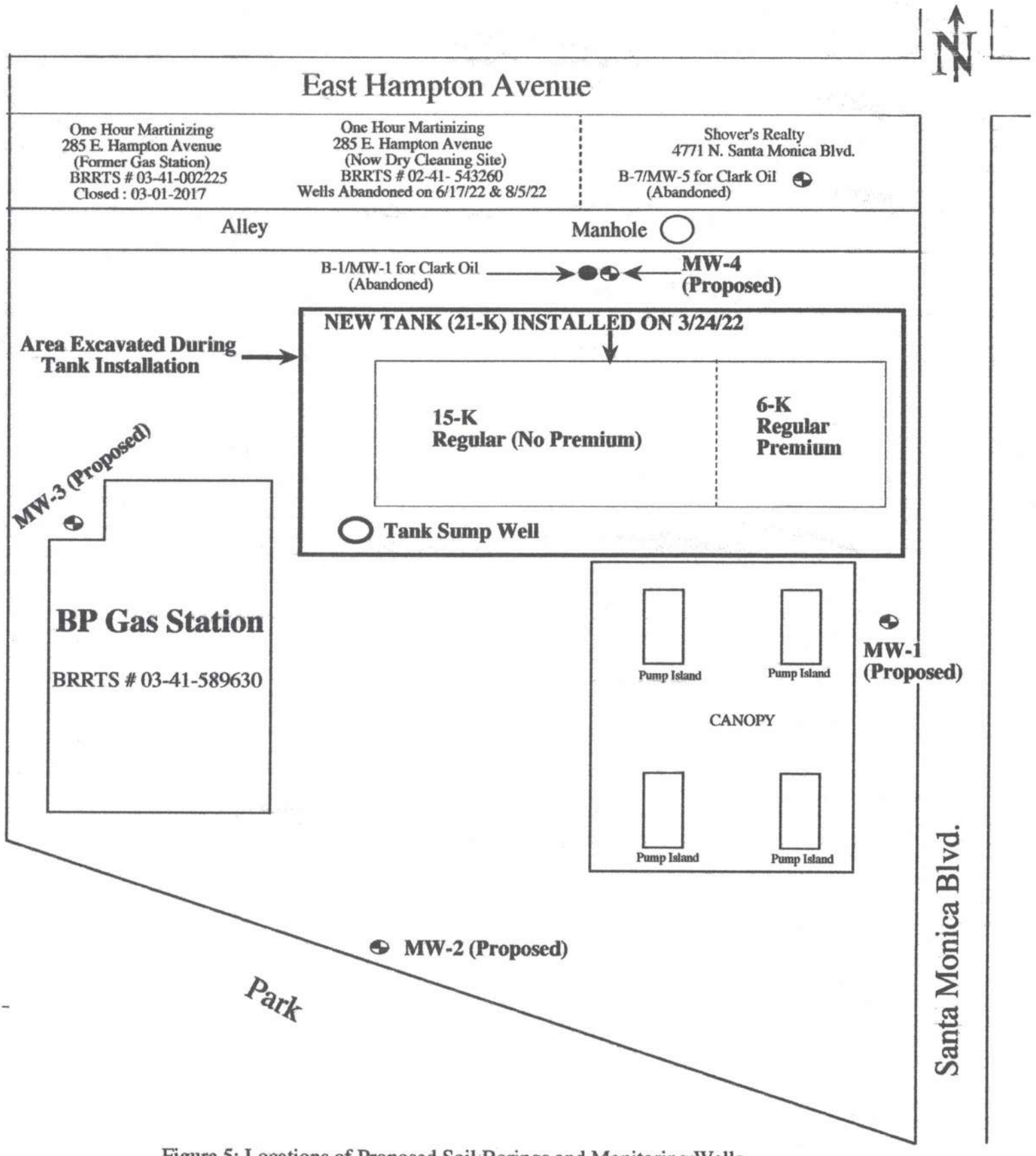


Figure 5: Locations of Proposed Soil Borings and Monitoring Wells

Site	Consultant	NOT TO SCALE	Project #	Legend
Clark Gas Station 4751 N Santa Monica Blvd. Milwaukee, WI 53211	OM Enterprises, Inc. 124 W Scott Street Fond du Lac, WI 54935	0' 15' 30'	3062 Date 07/24/2022	Monitoring Well Soil Boring

Appendix A
WDATCP-Tank Registration Forms

Tank Search Public Access

Number of matching records: 6

10/27/2022 4:56 AM

Tank Type	Tank ID	Facility ID	Street Address	Tank Status	Tank Contents	Tank Size (Gal)	Facility Owner
County: Milwaukee County, FDID: 4020							
Underground Storage Tank	57460	416189	4751 N Santa Monica Blvd	Closed/Removed	Unleaded Gasoline	6,000	Clark Of Milwaukee Inc
Underground Storage Tank	57461	416189	4751 N Santa Monica Blvd	Closed/Removed	Unleaded Gasoline	6,000	Clark Of Milwaukee Inc
Underground Storage Tank	112903	416189	4751 N Santa Monica Blvd	Closed/Removed	Unleaded Gasoline	12,000	Clark Of Milwaukee Inc
Underground Storage Tank	113159	416189	4751 N Santa Monica Blvd	Closed/Removed	Unleaded Gasoline	12,000	Clark Of Milwaukee Inc
Underground Storage Tank	238503	416189	4751 N Santa Monica Blvd	Install Pending	Unleaded Gasoline	15,000	Clark Of Milwaukee Inc
Underground Storage Tank	238505	416189	4751 N Santa Monica Blvd	Install Pending	Unleaded Gasoline	6,000	Clark Of Milwaukee Inc

To go back to your search results please click the back arrow in the above Toolbar

Tank Details

Site and Owner

Site Info

Facility ID: 416189
Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
Site Anniversary Date: April 28

County & Municipality

Milwaukee County
City of Milwaukee
Fire Dept ID: 4020

Dispenser Has Sumps: N

Owner

Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
WI 53211

Underground Storage Tank - ID: 57460, WANG ID: 402004399, Closed/Removed as of 1990-04-01

Install Date:		**Capacity In Gallons:**	6,000	**Contents:**	Unleaded Gasoline
Tank Occupancy:	Retail Fuel Sales	**Marketer:**	Y	**CAS Number**	
Federally Regulated:	Yes	**Spill Protection:**	Not Installed	**Overfill Protection:**	Not Installed
Overfill Prot Type:	Not Installed	**Containment Sump Installed:**	N	**Lining Inspected Date:**	
Corrosion Protect Type:		**Date Of Lining:**		**Underground Piping:**	N
Leak Detection:	Unknown	**Wall Type:**	Single		
Leak Test Method:					
Construction Material:	Coated Steel				

PIPING -

Flex Connectors:		**UST Mainfolded:**		**Related Tank ID:**	
Type:		**Aboveground Piping:**	N	**Aboveground Pipe Cons:**	
Construction Material:		**Corrosion Protect Type:**		**Leak Detection:**	
Catastrophic Leak Detection:				**Leak Test Method:**	
				Pipe Wall Type:	
				Piping System Type:	

Inspection Test Dates

Test Type	Test Date	Test Expire Date

Inspections

FacilityId	Inspection Type	Inspection Date
416189	Annual	05/09/2016
416189	Annual	07/11/2017
416189	Annual	11/28/2018
416189	Annual	07/08/2020
416189	Annual	08/04/2021

To go back to your search results please click the back arrow ⊖ in the above Toolbar

Tank Details

Site and Owner

Site Info

Facility ID: 416189
Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
Site Anniversary Date: April 28

County & Municipality

Milwaukee County
City of Milwaukee
Fire Dept ID: 4020

Dispenser Has Sumps: N

Owner

Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
WI 53211

Underground Storage Tank - ID: 57461, WANG ID: 402004400, Closed/Removed as of 1990-04-01

Install Date:		**Capacity In Gallons:**	6,000	**Contents:**	Unleaded Gasoline
Tank Occupancy:	Retail Fuel Sales	**Marketer:**	Y	**CAS Number**	
Federally Regulated:	Yes	**Spill Protection:**	Not Installed	**Overfill Protection:**	Not Installed
Overfill Prot Type:	Not Installed	**Containment Sump Installed:**	N	**Lining Inspected Date:**	
Corrosion Protect Type:		**Date Of Lining:**		**Underground Piping:**	N
Leak Detection:	Unknown	**Wall Type:**	Single		
Leak Test Method:					
Construction Material:	Coated Steel				

PIPING -

Flex Connectors:		**UST Mainfolded:**		**Related Tank ID:**	
Type:		**Aboveground Piping:**	N	**Aboveground Pipe Cons:**	
Construction Material:		**Corrosion Protect Type:**		**Leak Detection:**	
Catastrophic Leak Detection:				**Leak Test Method:**	
				Pipe Wall Type:	
				Piping System Type:	

Inspection Test Dates

Test Type	Test Date	Test Expire Date

Inspections

FacilityId	Inspection Type	Inspection Date
416189	Annual	05/09/2016
416189	Annual	07/11/2017
416189	Annual	11/28/2018
416189	Annual	07/08/2020
416189	Annual	08/04/2021

To go back to your search results please click the back arrow ⊖ in the above Toolbar

Tank Details

Site and Owner

Site Info

Facility ID: 416189
Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
Site Anniversary Date: April 28

County & Municipality

Milwaukee County
City of Milwaukee
Fire Dept ID: 4020

Dispenser Has Sumps: N

Owner

Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
WI 53211

Underground Storage Tank - ID: 112903, WANG ID: 402005373, Closed/Removed as of 2022-03-21

Install Date:	04/01/1990	**Capacity In Gallons:**	12,000	**Contents:**	Unleaded Gasoline
Tank Occupancy:	Retail Fuel Sales	**Marketer:**	Y	**CAS Number**	
Federally Regulated:	Yes	**Spill Protection:**	Installed	**Overfill Protection:**	Installed
Overfill Prot Type:	90alrm95auto	**Containment Sump Installed:**	N	**Lining Inspected Date:**	
Corrosion Protect Type:	Sacrificial Anodes	**Date Of Lining:**		**Underground Piping:**	N
Leak Detection:	Automatic Tank Gauge	**Wall Type:**	Single		
Leak Test Method:	Monthly Monitoring				
Construction Material:	Coated Steel				

PIPING -

Flex Connectors:		**UST Mainfolded:**		**Related Tank ID:**	
Type:		**Aboveground Piping:**	N	**Aboveground Pipe Cons:**	
Construction Material:		**Corrosion Protect Type:**		**Leak Detection:**	
Catastrophic Leak Detection:				**Leak Test Method:**	
				Pipe Wall Type:	
				Piping System Type:	

Inspection Test Dates

Test Type	Test Date	Test Expire Date

Inspections

FacilityId	Inspection Type	Inspection Date
416189	Annual	05/09/2016
416189	Annual	07/11/2017
416189	Annual	11/28/2018
416189	Annual	07/08/2020
416189	Annual	08/04/2021

To go back to your search results please click the back arrow in the above Toolbar

Tank Details

Site and Owner

Site Info

Facility ID: 416189
Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
Site Anniversary Date: April 28

County & Municipality

Milwaukee County
City of Milwaukee
Fire Dept ID: 4020

Dispenser Has Sumps: N

Owner

Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
WI 53211

Underground Storage Tank - ID: 113159, WANG ID: 402005374, Closed/Removed as of 2022-03-21

Install Date:	04/01/1990	**Capacity In Gallons:**	12,000	**Contents:**	Unleaded Gasoline
Tank Occupancy:	Retail Fuel Sales	**Marketer:**	Y	**CAS Number**	
Federally Regulated:	Yes	**Spill Protection:**	Installed	**Overfill Protection:**	Installed
Overfill Prot Type:	90alrm95auto	**Containment Sump Installed:**	N	**Lining Inspected Date:**	
Corrosion Protect Type:	Sacrificial Anodes	**Date Of Lining:**		**Underground Piping:**	N
Leak Detection:	Automatic Tank Gauge	**Wall Type:**	Single		
Leak Test Method:	Monthly Monitoring				
Construction Material:	Coated Steel				

PIPING -

Flex Connectors:		**UST Mainfolded:**		**Related Tank ID:**	
Type:		**Aboveground Piping:**	N	**Aboveground Pipe Cons:**	
Construction Material:		**Corrosion Protect Type:**		**Leak Detection:**	
Catastrophic Leak Detection:				**Leak Test Method:**	
				Pipe Wall Type:	
				Piping System Type:	

Inspection Test Dates

Test Type	Test Date	Test Expire Date

Inspections

FacilityId	Inspection Type	Inspection Date
416189	Annual	05/09/2016
416189	Annual	07/11/2017
416189	Annual	11/28/2018
416189	Annual	07/08/2020
416189	Annual	08/04/2021

To go back to your search results please click the back arrow ⊖ in the above Toolbar

Tank Details

Site and Owner

Site Info

Facility ID: 416189
Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
Site Anniversary Date: April 28

County & Municipality

Milwaukee County
City of Milwaukee
Fire Dept ID: 4020

Dispenser Has Sumps: N

Owner

Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
WI 53211

Underground Storage Tank - ID: 238503, WANG ID: , Install Pending

Install Date:	03/24/2022	**Capacity In Gallons:**	15,000	**Contents:**	Unleaded Gasoline
Tank Occupancy:	Retail Fuel Sales	**Marketer:**	Y	**CAS Number**	
Federally Regulated:	Yes	**Spill Protection:**	Installed	**Overfill Protection:**	Installed
Overfill Prot Type:	90alrm95auto	**Containment Sump Installed:**	N	**Lining Inspected Date:**	
Corrosion Protect Type:		**Date Of Lining:**		**Underground Piping:**	N
Leak Detection:	Interstitial Monitor - Electronic	**Wall Type:**	Double		
Leak Test Method:	Monthly Monitoring				
Construction Material:	Fiberglass or Poly				

PIPING -

Flex Connectors:		**UST Mainfolded:**		**Related Tank ID:**	
Type:		**Aboveground Piping:**	N	**Aboveground Pipe Cons:**	
Construction Material:		**Corrosion Protect Type:**		**Leak Detection:**	
Catastrophic Leak Detection:				**Leak Test Method:**	
				Pipe Wall Type:	
				Piping System Type:	

Inspection Test Dates

Test Type	Test Date	Test Expire Date

Inspections

FacilityId	Inspection Type	Inspection Date
416189	Annual	05/09/2016
416189	Annual	07/11/2017
416189	Annual	11/28/2018
416189	Annual	07/08/2020
416189	Annual	08/04/2021

To go back to your search results please click the back arrow in the above Toolbar

Tank Details

Site and Owner

Site Info

Facility ID: 416189
Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
Site Anniversary Date: April 28

County & Municipality

Milwaukee County
City of Milwaukee
Fire Dept ID: 4020

Dispenser Has Sumps: N

Owner

Clark Of Milwaukee Inc
4751 N Santa Monica Blvd
Milwaukee
WI 53211

Underground Storage Tank - ID: 238505, WANG ID: , Install Pending

Install Date:	03/24/2022	**Capacity In Gallons:**	6,000	**Contents:**	Unleaded Gasoline
Tank Occupancy:	Retail Fuel Sales	**Marketer:**	Y	**CAS Number**	
Federally Regulated:	Yes	**Spill Protection:**	Installed	**Overfill Protection:**	Installed
Overfill Prot Type:	90alrm95auto	**Containment Sump Installed:**	N	**Lining Inspected Date:**	
Corrosion Protect Type:		**Date Of Lining:**		**Underground Piping:**	N
Leak Detection:	Interstitial Monitor - Electronic	**Wall Type:**	Double		
Leak Test Method:	Monthly Monitoring				
Construction Material:	Fiberglass or Poly				

PIPING -

Flex Connectors:		**UST Mainfolded:**		**Related Tank ID:**	
Type:		**Aboveground Piping:**	N	**Aboveground Pipe Cons:**	
Construction Material:		**Corrosion Protect Type:**		**Leak Detection:**	
Catastrophic Leak Detection:				**Leak Test Method:**	
				Pipe Wall Type:	
				Piping System Type:	

Inspection Test Dates

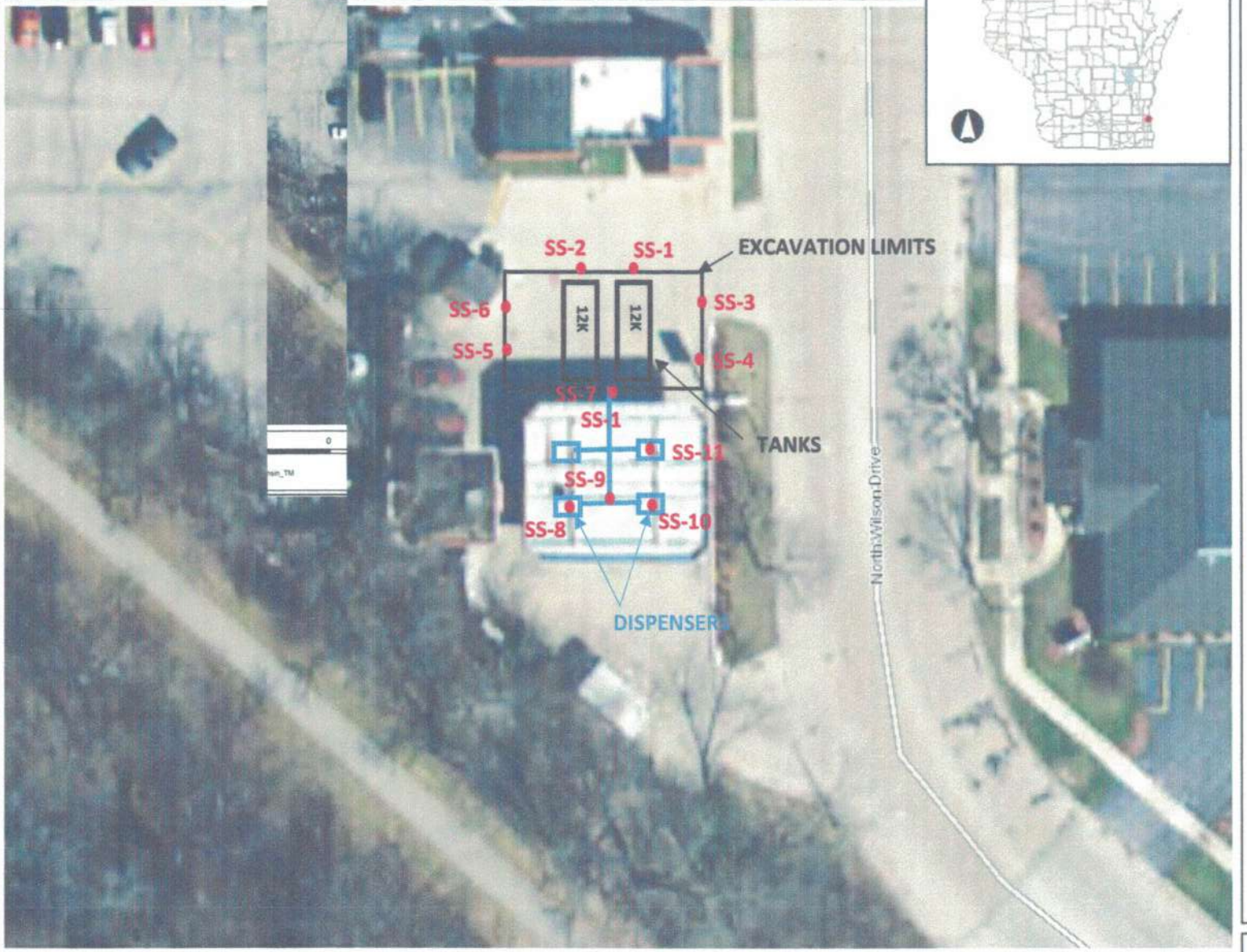
Test Type	Test Date	Test Expire Date

Inspections

FacilityId	Inspection Type	Inspection Date
416189	Annual	05/09/2016
416189	Annual	07/11/2017
416189	Annual	11/28/2018
416189	Annual	07/08/2020
416189	Annual	08/04/2021

Appendix B
General Engineering Corporation (GEC) Map and Photos of UST Removal, 2022 (BRRTS # 03-41-589630)

SITE SAMPLING MAP



Legend

- Major Roads
  - County Road
  - Interstate HWY
  - State HWY
  - US HWY
- Local Roads
- 24K Intermittent Stream
- 24K In Water Flow Labels
  - 1
  - 2
  - 3; 4; 5
  - 6; 7; 8; 9
- 24K River/Stream
  - <all other values>
  - 1
  - 2
  - 3; 4; 5
  - 6; 7; 8; 9
- Waterbody Shoreline
- 24K Waterbody
- Open Water - 24K-Great lakes

0.0 0 0.01 0.0 Miles

NAD_1983_HARN_Wisconsin_TM

1: 495

Notes

SANTA MONICA CLARK
4751 NORTH SANTA MONICA BLVD
MILWAUKEE, WI 53211

PHOTOGRAPH OF THE FIRST 12,000-GALLON TANK AFTER REMOVAL

PHOTOGRAPH OF THE SECOND 12,000-GALLON UST JUST AFTER REMOVAL FROM THE EXCAVATION

PHOTOGRAPH OF THE EXCAVATION AFTER REMOVAL OF TANKS

PHOTOGRAPH OF THE TANK BED AFTER OVER EXCAVATION

PHOTOGRAPH OF THE FORMER DISPENSER AREA

Appendix C
Proof for Disposal of Approximately 727 Tons Contaminated Soils in 2022 (BRRTS # 03-41-589630)

INVOICE

WASTE MANAGEMENT

Customer ID: 8-99196-03009
Customer Name: GENERAL ENGINEERING
Service Period: 03/16/22 - 03/31/22
Invoice Date: 04/01/2022
Invoice Number: 0064091-2286-5

How To Contact Us	Your Payment Is Due	Your Total Due
Visit wm.com to sign up for paperless billing or pay your invoices. Visit wmsolutions.com to manage your waste streams and access additional disposal documentation. Customer Service: **(800) 963-4776**	**04/30/2022** If full payment of the invoiced amount is not received within your contractual terms, you may be charged a monthly late charge of 2.5% of the unpaid amount, with a minimum monthly charge of $5, or such late charge allowed under applicable law, regulation or contract.	**$20,504.06**

Previous Balance	+	Payments	+	Adjustments	+	Current Invoice Charges	=	Total Account Balance Due
15,115.58		(15,115.58)		0.00		20,504.06		**20,504.06**

IMPORTANT MESSAGES

Effective January 1, 2022, our environmental and waste water management charges will be increased or added to your account as specified on your invoice. If you have a disposal agreement, this change may require your consent. For more information about these charges, call our Technical Service Center at 1-800-963-4776.

✂ ---------- *Please detach and send the lower portion with payment --- (no cash or staples)* ----------

WASTE MANAGEMENT

WASTE MANAGEMENT OF WISCONSIN, INC.

PO BOX 42390
PHOENIX, AZ 85080
(800) 963-4776
TSCMIDWEST@WM.COM

Invoice Date	Invoice Number	Customer ID (Include with your payment)
04/01/2022	0064091-2286-5	**8-99196-03009**
Payment Terms	**Total Due**	**Amount**
Total Due by 04/30/2022	$20,504.06	

2286000089919603009000640910000205040600002050406 7

I0401L23

GENERAL ENGINEERING
916 SILVER LAKE DR
PORTAGE WI 53901-1015

Remit To: **WM CORPORATE SERVICES, INC.**
AS PAYMENT AGENT
PO BOX 4648
CAROL STREAM, IL 60197-4648

THINK GREEN®

Printed on

DETAILS OF SERVICE - continued

Details for Service Location:
General Engineering, 916 Silver Lake Dr, Portage WI 53901-1015

Customer ID: **8-99196-03009**

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
ENVIRONMENTAL FEE TON			24.42	TON	1.75	42.74
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**686.21**
Vehicle#: 48	03/22/22	2057862				
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			22.84	TON	24.00	548.16
FUEL SURCHARGE TON			22.84	TON	1.10	25.12
ENVIRONMENTAL FEE TON			22.84	TON	1.25	28.55
Profile # BIO136932WI			22.84	TON	1.75	39.97
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
						641.80
Vehicle#: 72	03/22/22	2057866				
ENVIRONMENTAL FEE TON						0.00
Unspecified material, bioremediated, daily cover,			19.95	TON	1.75	34.91
WASTE WATER MANAGEMENT TON			19.95	TON	24.00	478.80
FUEL SURCHARGE TON			19.95	TON	1.10	21.95
Profile # BIO136932WI			19.95	TON	1.25	24.94
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
						560.60
Vehicle#: 57	03/22/22	2057870				
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			20.35	TON	24.00	488.40
FUEL SURCHARGE TON			20.35	TON	1.10	22.39
ENVIRONMENTAL FEE TON			20.35	TON	1.25	25.44
Profile # BIO136932WI			20.35	TON	1.75	35.61
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
						571.84
Vehicle#: 9	03/22/22	2057907				
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			20.02	TON	24.00	480.48
FUEL SURCHARGE TON			20.02	TON	1.10	22.02
ENVIRONMENTAL FEE TON			20.02	TON	1.25	25.03
Profile # BIO136932WI			20.02	TON	1.75	35.04
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
						562.57
Vehicle#: 85	03/22/22	2057913				
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			19.54	TON	24.00	468.96
FUEL SURCHARGE TON			19.54	TON	1.10	21.49
ENVIRONMENTAL FEE TON			19.54	TON	1.25	24.43
Profile # BIO136932WI			19.54	TON	1.75	34.20
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
						549.08
Vehicle#: 72	03/22/22	2057915				
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			20.31	TON	24.00	487.44
FUEL SURCHARGE TON			20.31	TON	1.10	22.34
ENVIRONMENTAL FEE TON			20.31	TON	1.25	25.39
Profile # BIO136932WI			20.31	TON	1.75	35.54
						0.00

WASTE MANAGEMENT

Customer ID: 8-99196-03009
Customer Name: GENERAL ENGINEERING
Service Period: 03/16/22 - 03/31/22
Invoice Date: 04/01/2022
Invoice Number: 0064091-2286-5

DETAILS OF SERVICE - continued

Details for Service Location:
General Engineering, 916 Silver Lake Dr, Portage WI 53901-1015

Customer ID: 8-99196-03009

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**570.71**
Vehicle#: 57	03/22/22	2057917				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			20.24	TON	24.00	485.76
WASTE WATER MANAGEMENT TON			20.24	TON	1.10	22.26
FUEL SURCHARGE TON			20.24	TON	1.25	25.30
ENVIRONMENTAL FEE TON			20.24	TON	1.75	35.42
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**568.74**
Vehicle#: 48	03/22/22	2057920				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			22.34	TON	24.00	536.16
WASTE WATER MANAGEMENT TON			22.34	TON	1.10	24.57
FUEL SURCHARGE TON			22.34	TON	1.25	27.93
ENVIRONMENTAL FEE TON			22.34	TON	1.75	39.10
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**627.76**
Vehicle#: 85	03/22/22	2057971				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			24.37	TON	24.00	584.88
WASTE WATER MANAGEMENT TON			24.37	TON	1.10	26.81
FUEL SURCHARGE TON			24.37	TON	1.25	30.46
ENVIRONMENTAL FEE TON			24.37	TON	1.75	42.65
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**684.80**
Vehicle#: 72	03/22/22	2057973				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			19.25	TON	24.00	462.00
WASTE WATER MANAGEMENT TON			19.25	TON	1.10	21.18
FUEL SURCHARGE TON			19.25	TON	1.25	24.06
ENVIRONMENTAL FEE TON			19.25	TON	1.75	33.69
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**540.93**
Vehicle#: 57	03/22/22	2057975				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			21.34	TON	24.00	512.16
WASTE WATER MANAGEMENT TON			21.34	TON	1.10	23.47
FUEL SURCHARGE TON			21.34	TON	1.25	26.68
ENVIRONMENTAL FEE TON			21.34	TON	1.75	37.35
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**599.66**

DETAILS OF SERVICE - continued

Details for Service Location:
General Engineering, 916 Silver Lake Dr, Portage WI 53901-1015

Customer ID: 8-99196-03009

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
Vehicle#: 48	03/22/22	2057977				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			20.61	TON	24.00	494.64
WASTE WATER MANAGEMENT TON			20.61	TON	1.10	22.67
FUEL SURCHARGE TON			20.61	TON	1.25	25.76
ENVIRONMENTAL FEE TON			20.61	TON	1.75	36.07
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**579.14**
Vehicle#: 9	03/22/22	2057980				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			21.99	TON	24.00	527.76
WASTE WATER MANAGEMENT TON			21.99	TON	1.10	24.19
FUEL SURCHARGE TON			21.99	TON	1.25	27.49
ENVIRONMENTAL FEE TON			21.99	TON	1.75	38.48
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**617.92**
Vehicle#: 74	03/23/22	2058084				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			20.54	TON	24.00	492.96
WASTE WATER MANAGEMENT TON			20.54	TON	1.10	22.59
FUEL SURCHARGE TON			20.54	TON	1.25	25.68
ENVIRONMENTAL FEE TON			20.54	TON	1.75	35.95
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**577.18**
Vehicle#: 57	03/23/22	2058089				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			23.32	TON	24.00	559.68
WASTE WATER MANAGEMENT TON			23.32	TON	1.10	25.65
FUEL SURCHARGE TON			23.32	TON	1.25	29.15
ENVIRONMENTAL FEE TON			23.32	TON	1.75	40.81
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**655.29**
Vehicle#: 59	03/23/22	2058092				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			20.34	TON	24.00	488.16
WASTE WATER MANAGEMENT TON			20.34	TON	1.10	22.37
FUEL SURCHARGE TON			20.34	TON	1.25	25.43
ENVIRONMENTAL FEE TON			20.34	TON	1.75	35.60
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**571.56**
Vehicle#: 74	03/23/22	2058127				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			22.89	TON	24.00	549.36
WASTE WATER MANAGEMENT TON			22.89	TON	1.10	25.18
FUEL SURCHARGE TON			22.89	TON	1.25	28.61
ENVIRONMENTAL FEE TON			22.89	TON	1.75	40.06
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**643.21**

WASTE MANAGEMENT

Customer ID: 8-99196-03009
Customer Name: GENERAL ENGINEERING
Service Period: 03/16/22 - 03/31/22
Invoice Date: 04/01/2022
Invoice Number: 0064091-2286-5

DETAILS OF SERVICE - continued

Details for Service Location:
General Engineering, 916 Silver Lake Dr, Portage WI 53901-1015

Customer ID: 8-99196-03009

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
Vehicle#: 57	03/23/22	2058130				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			22.63	TON	24.00	543.12
WASTE WATER MANAGEMENT TON			22.63	TON	1.10	24.89
FUEL SURCHARGE TON			22.63	TON	1.25	28.29
ENVIRONMENTAL FEE TON			22.63	TON	1.75	39.60
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**635.90**
Vehicle#: 59	03/23/22	2058139				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			21.02	TON	24.00	504.48
WASTE WATER MANAGEMENT TON			21.02	TON	1.10	23.12
FUEL SURCHARGE TON			21.02	TON	1.25	26.28
ENVIRONMENTAL FEE TON			21.02	TON	1.75	36.79
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**590.67**
Vehicle#: 9	03/23/22	2058147				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			19.99	TON	24.00	479.76
WASTE WATER MANAGEMENT TON			19.99	TON	1.10	21.99
FUEL SURCHARGE TON			19.99	TON	1.25	24.99
ENVIRONMENTAL FEE TON			19.99	TON	1.75	34.98
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**561.72**
Vehicle#: 74	03/23/22	2058172				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			21.59	TON	24.00	518.16
WASTE WATER MANAGEMENT TON			21.59	TON	1.10	23.75
FUEL SURCHARGE TON			21.59	TON	1.25	26.99
ENVIRONMENTAL FEE TON			21.59	TON	1.75	37.78
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**606.68**
Vehicle#: 57	03/23/22	2058175				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			22.08	TON	24.00	529.92
WASTE WATER MANAGEMENT TON			22.08	TON	1.10	24.29
FUEL SURCHARGE TON			22.08	TON	1.25	27.60
ENVIRONMENTAL FEE TON			22.08	TON	1.75	38.64
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**620.45**
Vehicle#: 68	03/23/22	2058180				0.00
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,			18.69	TON	24.00	448.56

DETAILS OF SERVICE - continued

Details for Service Location:
General Engineering, 916 Silver Lake Dr, Portage WI 53901-1015

Customer ID: 8-99196-03009

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
WASTE WATER MANAGEMENT TON			18.69	TON	1.10	20.56
FUEL SURCHARGE TON			18.69	TON	1.25	23.36
ENVIRONMENTAL FEE TON			18.69	TON	1.75	32.71
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						**525.19**
Vehicle#: 9	03/23/22	2058191				
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			19.18	TON	24.00	460.32
FUEL SURCHARGE TON			19.18	TON	1.10	21.10
ENVIRONMENTAL FEE TON			19.18	TON	1.25	23.98
Profile # BIO136932WI			19.18	TON	1.75	33.57
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						0.00
Vehicle#: 74	03/23/22	2058221				**538.97**
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			14.75	TON	24.00	354.00
FUEL SURCHARGE TON			14.75	TON	1.10	16.23
ENVIRONMENTAL FEE TON			14.75	TON	1.25	18.44
Profile # BIO136932WI			14.75	TON	1.75	25.81
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
Vehicle#: 57	03/23/22	2058231				**414.48**
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			20.08	TON	24.00	481.92
FUEL SURCHARGE TON			20.08	TON	1.10	22.09
ENVIRONMENTAL FEE TON			20.08	TON	1.25	25.10
Profile # BIO136932WI			20.08	TON	1.75	35.14
Generator SANTA MONICA CLARK						0.00
Manifest#: na						0.00
Ticket Total						0.00
Vehicle#: 59	03/23/22	2058311				**564.25**
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			19.97	TON	24.00	479.28
FUEL SURCHARGE TON			19.97	TON	1.10	21.97
ENVIRONMENTAL FEE TON			19.97	TON	1.25	24.96
Profile # BIO136932WI			19.97	TON	1.75	34.95
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
Vehicle#: 74	03/23/22	2058316				**561.16**
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			18.21	TON	24.00	437.04
FUEL SURCHARGE TON			18.21	TON	1.10	20.03
ENVIRONMENTAL FEE TON			18.21	TON	1.25	22.76
Profile # BIO136932WI			18.21	TON	1.75	31.87
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						0.00
Vehicle#: 57	03/23/22	2058318				**511.70**
PO#:WALTS SANTA MONICA P						0.00
Unspecified material, bioremediated, daily cover,						0.00
WASTE WATER MANAGEMENT TON			20.14	TON	24.00	483.36
			20.14	TON	1.10	22.15

WASTE MANAGEMENT

Customer ID: **8-99196-03009**
Customer Name: GENERAL ENGINEERING
Service Period: 03/16/22 - 03/31/22
Invoice Date: 04/01/2022
Invoice Number: 0064091-2286-5

DETAILS OF SERVICE - continued

Details for Service Location:
General Engineering, 916 Silver Lake Dr, Portage WI 53901-1015

Customer ID: **8-99196-03009**

Description	Date	Ticket	Quantity	Unit of Measure	Rate	Amount
FUEL SURCHARGE TON			20.14	TON	1.25	25.18
ENVIRONMENTAL FEE TON			20.14	TON	1.75	35.25
Profile # BIO136932WI						0.00
Generator SANTA MONICA CLARK						0.00
Manifest#: NA						0.00
Ticket Total						**565.94**
Total Current Charges						**20,504.06**

Appendix D
Foth & Van Dyke Notification of Contamination to the WDNR, September 1989 (Closed BRRTS # 03-41-000450)

1693-

Foth & Van Dyke

LETTER REPORT

UNDERGROUND STORAGE TANK
INVESTIGATION/SITE ASSESSMENT

at

CLARK STATION NO. 562
4751 NORTH SANTA MONICA AVENUE
WHITEFISH BAY, WISCONSIN

Scope I.D. 89C47

RECEIVED
SEP 28 1989
D.N.R. SED Hqtrs.
Milwaukee, WI

Prepared for:

CLARK OIL & REFINING CORPORATION
9451 North 107th Street
Milwaukee, Wisconsin 53202

CLARK OIL & REFINING CORPORATION
8182 Maryland Avenue
St. Louis, Missouri 63105-3721

SEPTEMBER 19, 1989

Foth & Van Dyke

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

Engineers
Architects
Planners
Scientists
Economists

September 19, 1989

Mr. Lindy Lindberg
Clark Oil & Refining Corporation
9451 North 107th Street
Milwaukee, Wisconsin 53224

89C47

Mr. Jeffrey Bingham
Environmental Project Coordinator
Clark Oil & Refining Corporation
8182 Maryland Avenue
St. Louis, Missouri 63105-3721

Gentlemen:

RE: UNDERGROUND STORAGE TANK INVESTIGATION/SITE ASSESSMENT
STATION NO. 562
4751 NORTH SANTA MONICA AVENUE
WHITEFISH BAY, WISCONSIN

EXECUTIVE SUMMARY

On August 28, 1989, a total of three borings were drilled and sampled by a Foth & Van Dyke geologist; two to a depth of 13 feet and one to a depth of 4 feet, at the Clark Oil Station located at Hampton Avenue and Santa Monica in Whitefish Bay, Wisconsin. Soil contamination was detected in the field using a photoionization meter which detects organic vapors. Composite soil samples were therefore collected from each boring and were submitted for analysis of Total Petroleum Hydrocarbons (TPH) and Benzene, Ethylbenzene, Toluene, and Xylene (BETX) and a waste characterization profile was obtained on a composite soil sample from the site.

Although regulations do not currently exist for this type of contamination in soil, proposed Wisconsin Department of Natural Resources (WDNR) guidelines establish 10 parts-per-million (ppm) of TPH and/or 10 ppm of BETX for a cleanup standard. Soils with contamination in excess of the 10 ppm guideline will require treatment or disposal at a licensed landfill.

50 years

The analytical results for the Hampton Avenue and Santa Monica Clark Oil Station indicate significant contamination (minimum 182.6 ppm BETX) in both of the 13-foot borings. The 4-foot soil boring drilled adjacent to one of the islands detected 13 ppm gasoline.

PURPOSE AND SCOPE OF INVESTIGATION

Purpose of Investigation

The purpose of this investigation was to determine whether there is evidence of soil contamination at the site.

Scope of Investigation

The scope of the investigation included the following:

- Survey of the site using a metal detector to determine location of underground storage tanks and pipes.
- Drilling of two soil borings to a depth of 13 feet and one soil boring to a depth of 4 feet with samples collected from each boring and monitored in the field using an organic vapor detector.
- Laboratory analysis of one soil sample from each boring for Total Petroleum Hydrocarbons (TPH), and Benzene, Ethylbenzene, Toluene, and Xylene (BETX).
- Laboratory analysis of a composite soil sample from the site for a waste characterization profile (necessary for disposal of contaminated soils at a licensed landfill).

SITE DESCRIPTION AND BACKGROUND

The site consists of the Clark Oil Station No. 562, located at Hampton Avenue and Santa Monica in Whitefish Bay, Wisconsin. Figure No. 1 shows the location of the tanks on the site.

REGIONAL/LOCAL GEOLOGY

The geology of this portion of Milwaukee County, Wisconsin is characterized by Pleistocene glacial deposits associated with the Lake Michigan Glacial Lobe. The deposits range in thickness from 50 to 200 feet and consist of lacustrine

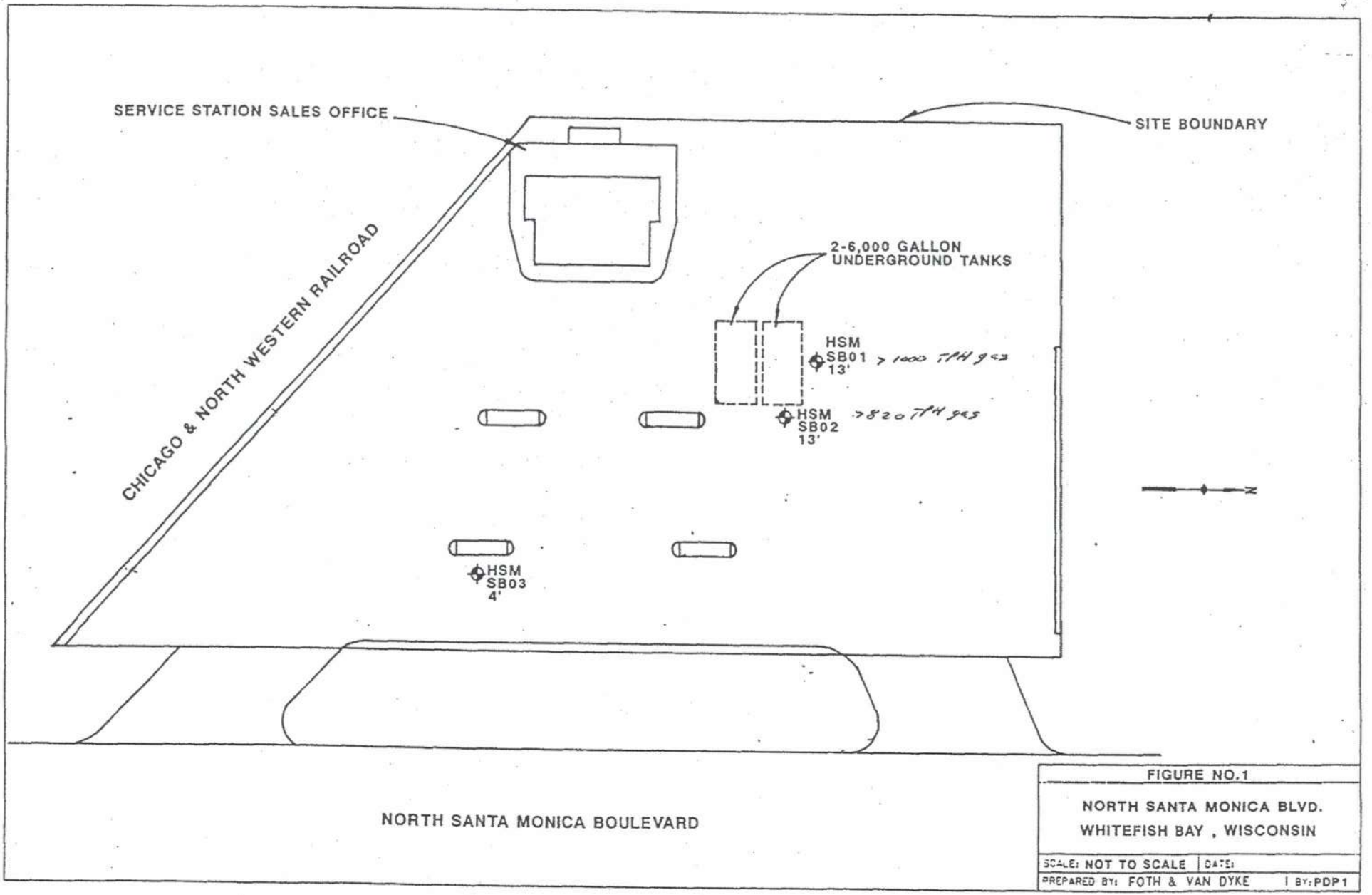


FIGURE NO.1

NORTH SANTA MONICA BLVD.
WHITEFISH BAY , WISCONSIN

SCALE: NOT TO SCALE | DATE:

PREPARED BY: FOTH & VAN DYKE | BY:PDP1

silt and clay, fluvial sand and gravel, and clayey, silty till. Glacial deposits in the region are underlain by a thick (>2,000 feet) sequence of Silurian, Ordivician, and Cambrian aged dolomites, shales, and sandstones.

FINDINGS OF INVESTIGATION

Investigation Activities

On August 28, 1989, a field crew was mobilized to the site. One 4-foot soil boring and two 13-foot soil borings were drilled, and one composite soil sample was collected from each boring and submitted to a laboratory for analysis of TPH and BETX. Sample locations are shown in Figure No. 1 and were based on the results of a magnetic survey conducted to locate underground storage tanks and pipes. The borings were drilled by Wisconsin Test Drilling using a D-50 drill rig and 4.25-inch I.D. hollow stem augers. Samples were collected utilizing a decontaminated 2-inch O.D. split-spoon sampler, and were monitored in the field using a Photovac TIP 1 Photoionization Detector (PID).

The maximum PID reading (see attached boring logs) was 1,370 parts per million (ppm) in Boring No. HSMSB02. The Wisconsin Department of Natural Resources recommends using 10 ppm as a guideline for classification of soils. PID readings in excess of 10 ppm indicate soil contamination.

Since contamination was detected at the site, a composite sample was collected from all of the borings and submitted to the laboratory for a waste characterization profile. This information, along with the BETX and TPH values from each contaminated boring, will be necessary in order to dispose of the contaminated soils at a licensed landfill. Foth & Van Dyke has submitted the necessary paperwork to Waste Management for disposal of the soils at Metro Landfill. Approval from the landfill is expected within 1 to 2 weeks.

Boring logs were maintained by a qualified geologist and equipment decontamination procedures were followed to minimize the possibility of cross-contamination between samples and boreholes. All downhole drilling equipment (i.e. augers, bits, drill rods, etc.) was steam cleaned between borings. Split-spoon samplers and stainless steel sampling equipment were decontaminated between samples as follows:

- Tap Water/Trisodium Phosphate Detergent (TSP) Wash.
- Tap Water Rinse.
- Reagent Grade Methyl Alcohol Rinse.
- Distilled Water Rinse.
- Air Dried.

Investigation Results

Soil analytical results are summarized in Table No. 1. Both of the 13-foot borings contained BETX and Gasoline concentrations in excess of WDNR cleanup standards (10,000 ppb total BETX or gasoline). The minimum contaminant level detected in these two borings was 182,600 ppb total BETX. Boring No. HSMSB03 also detected BETX and gasoline in the soil, but contaminant levels are significantly lower than in the borings near the tanks. The maximum contamination detected in Boring No. HSMSB03 was 13,000 ppb gasoline.

The analytical results from this site investigation indicate that soils excavated from the tank pit during tank removal operations will require disposal at a licensed landfill.

TABLE NO. 1

Soil Analytical Results
Clark Oil Station No. 562
4751 North Santa Monica Avenue
Whitefish Bay, Wisconsin

Parameter (parts per billion)	HSMSB01-C	HSMSB02-C	HSMSB03-C
Benzene	8,900	ND	ND
Ethylbenzene	9,700	250,000	53
Toluene	54,000	960,000	67
Xylene	110,000	2,800,000	1,200
Total BETX	182,600	4,010,000	1,320
TPH Gasoline	>1,000,000	>820,000	13,000

ND: Not Detected
WDNR Cleanup Standards - >10,000 ppb Total BETX or Gasoline

LIMITATIONS OF INVESTIGATION

Our investigation was performed using the degree of care and skill ordinarily exercised, under similar circumstances, by reputable Engineers and Geologists practicing in this or similar localities. No other warranty, expressed or implied, is made as to the conclusions and professional advice included in this report.

The interpretations and conclusions contained in this report are based on the results of laboratory tests and analysis intended to detect the presence and concentration of certain chemical constituents in samples taken from the subject property. Such testing and analysis have been conducted by an independent laboratory which is certified by the State of Wisconsin to conduct such test analysis, and which used methodologies mandated by the Environmental Protection Agency in the performance of such test and analysis. Consultant has no involvement in , or control over, such testing and analysis and has no non-laboratory means of confirming the occurrence of such laboratory results. Consultant, therefore, disclaims any responsibility for any inaccuracy in such laboratory results.

This report is issued with the understanding that it is the responsibility of the owner, or his representative, to ensure that the information and recommendations contained herein are brought to the attention of the regulatory agencies.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they be due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings of the report may be investigated wholly or partially by changes outside our control.

The opportunity to be of service is appreciated. If you have any questions, please call.

Respectfully submitted,

FOTH & VAN DYKE

Liz Porter

Liz Porter
Project Geologist

EMP:kll

Enclosure

Engineers
Architects
Planners
Scientists
Economists

Foth & Van Dyke

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

September 27, 1989

Ms. Bernice Aument
Wisconsin Dept. of Natural Resources
Southeast District Office
2300 North Martin Luther King Drive
Milwaukee, WI 53212

89C46
89C47

Dear Ms. Aument:

RE: INITIAL SITE ASSESSMENTS AT TWO MILWAUKEE AREA CLARK STATIONS

Enclosed please find copies of Foth & Van Dyke's initial site assessments on the following Clark Oil Stations:

1. Clark Oil Station No. 365
   13th and Layton Avenue
   Milwaukee, Wisconsin

2. Clark Oil Station No. 562
   4751 North Santa Monica Avenue
   Whitefish Bay, Wisconsin

As the reports indicate, evidence of contamination was encountered at both sites.

Contaminated soils from the Clark Oil Station at 13th and Layton have been approved for disposal at Metro Landfill. The two underground storage tanks were removed from the site on September 22, 1989, and excavation and transport of the soils began on September 25, 1989. Foth & Van Dyke is monitoring the excavation and will be collecting samples from the sides and base of the excavation pit. A follow-up report on this site will be submitted once the results of the excavation samples are available.

Removal of the underground storage tanks and excavation of the contaminated soils are also planned at the Santa Monica station. The timetable for this remediation has not yet been established, but the permitting process for disposal of the contaminated soils at Metro Landfill has already been initiated.

Bureau for Remediation and Redevelopment
Activity Detail Report - Case Tracking

Activity Number: 03-41-000450
Activity Type: LUST
Activity Name: CLARK OIL STATION #562
Activity Address:
Region: Southeast Region
County: Milwaukee
Location Name: CLARK OIL STATION #562
Location Address: 4751 N SANTA MONICA BLVD
Municipality: WHITEFISH BAY
Priority: High
Score: 38.00
Comments:

Transferred to: ☑ DCOM ☐ Waste ☐ DATCP
DCOM Number: 53211104351
FID: 241574850
EPA ID:
Start Date: 09/28/1989 **End Date:** OPEN
Project Manager:
LUST Trust Eligible: FEDERAL

Activity Geo Location:
Legal Desc: None Found
Latitude: None Found **Longitude:** None Found

SHWIMS Geo Location:
Legal Desc: None Found
Latitude: None Found **Longitude:** None Found

☐ VPLE	☑ Co-Contamination	☑ PECFA Eligible	☐ PECFA 80K Failure
☐ Gen Prop	☑ Tracked by DCOM	☐ PECFA 80K	

Who:

Contact Type: RESPONSIBLE PARTY
Name:
Title:
Company: CLARK RETAIL ENTERPRISES
Address: ATTN ERIC LARSON
601 S MAIN ST
ANN ARBOR, MI 48104

Phone: (734) 669-6155 **Ext:**
Fax: (734) 668-9631
E-Mail: eric.larson@clarkretail.com

Contact Type: CONSULTANT
Name:
Title:
Company: SIGMA ENVIRONMENTAL SERVICES INC
Address: 220 E RYAN RD
OAK CREEK, WI 53154

Phone: (414) 768-7144 **Ext:**
Fax: (414) 768-7158
E-Mail:

Impacts:
Soil Contamination
Groundwater Contamination
Free Product
Co-contamination

Risk:
Medium Risk Assigned: 03/12/2003

Substances:
Gasoline - Leaded
Gasoline - Unleaded

Actions:
1 Notification 09/28/1989

Actions:

37	SI Report Received (w/out Fee) SI REPORT RECV'D	07/08/1991
36	Site Investigation Workplan Approved SI WORK PLAN APPV'D	08/18/1992
43	Status Report Received QRTLY/MTHLY STATUS RPT	11/10/1992
37	SI Report Received (w/out Fee)/2 SI REPORT RECV'D	11/19/1992
37	SI Report Received (w/out Fee)/3 SI REPORT RECV'D	05/24/1994
43	Status Report Received/2 QRTLY/MTHLY STATUS RPT	03/16/1995
3	Notice of Noncompliance (NON) NTC OF NON COMPLIENCE	04/05/1995
39	Remedial Action Options Report received (w/out Fee) RA WORK PLAN RECV'D	08/02/1995
40	Remedial Action Options Report Approved RA WORK PLAN APPV'D	08/29/1995
99	Miscellaneous RE-SCORE TO 38.00	09/05/1995
99	Miscellaneous/2 REC'D LETTER ABOUT REMEDIAL SYSTEMS OPERATION	02/04/1997
43	Status Report Received/3	05/07/1997
80	Closure Not Approved	05/30/1997
43	Status Report Received/4	07/25/1997
43	Status Report Received/5	04/20/1998
92	O&M Report Received (w/out Fee)	12/03/1999
43	Status Report Received/6	12/03/1999
43	Status Report Received/7 SOIL & GW REMEDIATION SYSTEM	08/14/2000
79	Closure Review Request Received with Fee REC'D CK#37131 $750.00 - REC'D GIS PKT GIVEN TO MW 9/20/02 JH PICKED UP 10/11/02	09/17/2002
700	Date Groundwater Registry Fee Received REC'D CK # 37132 $250.00	09/18/2002
90	Start FIFO Review JH GIS PKT COMPLETE (MW)	10/07/2002
91	End FIFO Review JH ADDITIONAL INFO REQUEST FOR CLOSURE DETERMINATION	11/05/2002
76	Activity Transferred to DCOM	03/12/2003

Department of Natural Resources

LEAKING UNDERGROUND STORAGE TANK (Case Tracking)
Form 4400-146 Rev. 2-93

UID Number: 450 | FID Number: 241574850 | PMN Number:

County: 41
Site Name: Clark Oil Station #562
Address: 4751 N. Santa Monica

Municipality:
Legal Descript.: ___ 1/4 ___ 1/4 sec. ___ T ___ N R ___ E/W
Lat.: ___ Long.: ___

Initial Contact Date: 9.28.89
Date RPLetter Sent: ___/___/___
Date Closure Approved: ___/___/___

Person/Firm Reporting:
Phone Number: ( )

Priority Screening
___ 1 = High
___ 2 = Medium
___ 3 = Low
___ 4 = Unknown

Scoring Criteria
1.
2.
3.
4.
5.
Score: 24 Init.: JF Date: 10.6.94
38 JF
Case Status

Funding Source
___ 1 = RP
___ 2 = LTF
___ 3 = EF
___ 4 = Other

Effective Date
___/___/___
___/___/___
___/___/___
___/___/___

LUST Trust Eligible
___ 1 = Federal
___ 2 = Non-Federal

	Start Date	End Date
___ (F) Free Product Removal	___/___/___	___/___/___
___ (E) RP Emergency Response	___/___/___	___/___/___
___ (R) LTF Emergency Response	___/___/___	___/___/___
___ (L) Long Term Monitoring	___/___/___	___/___/___

Responsible Party Maureen Turman
Company Name: Clark Refining + Marketing Inc
Contact Person: 1307 Butterfield Rd Suite 424
Address: Downers Grove IL 60515
Phone Number: 708. 434-5300 ext 6
CC's:

Impacts
Enter "P" for potential and "K" for known
P (1) Fire/Explosion Threat
___ (2) Contaminated Private Well(s) ___ # of Wells
___ (3) Contaminated Public Well
K (4) Groundwater Contamination
K (5) Soil Contamination
___ (6) Other:
___ (7) Surface Water Impacts
___ (9) Floating Product

Consultant
Company Name: Sigma
Contact Name:
Address:
Telephone: ( )

Substances	# Tank(s)	Size
X (1) Leaded Gas		
X (2) Unleaded Gas		
___ (3) Diesel		
___ (4) Fuel Oil		
___ (5) Unkwn Hydrocrbn		
___ (8) Other		
___ (12) Waste Oil		

Clark Oil #562 24157A850 ERR-LUST

TRACKING UP-DATE FORM FOR PROJECT MANAGER

ID#	FID#	ACTION	ACTION DATE	ACTION COMMENTS
		37	5/24/94	
		39	8/2/95	
		40	8/29/95	

ACTION CODES

02 = RP Letter Sent*
03 = Notice of Noncompliance*
04 = Enforcement Conference*
14 = Notice of Violation*
18 = Admin. Order Issued*
19 = Admin. Order Modified
20 = Admin. Order Cancelled
21 = Contest Case Hearing*
23 = Referral to DOJ*
30 = Notice to Proceed*
31 = Tnk Cls/SA Workplan Rec'd
32 = Tnk Cls/SA Workplan Appvd
33 = Tank Cls/SA Report Rec'd
34 = Tank Cls/SA Report Appvd
35 = SI Workplan Rec'd*
36 = SI Workplan Appvd*
37 = SI Report Rec'd
38 = SI Report Appvd*
39 = RA Workplan Rec'd*
40 = RA Workplan Appvd*
41 = RA Report Rec'd*
42 = RA Report Appvd*
43 = Status Reports*
44 = Form 4 Received
45 = Form 4 Approved
46 = Form 4 Denied
47 = PECFA Reimbursement
48 = Free Product Recovery*
49 = Alternate Water Supplied*

60 = Consent Order +

NOTE: * = EPA Reporting Requirements

ATTACHMENT

Boring Logs

Foth & Van Dyke & Associates, Inc.

LOG OF TEST BORING NO.: HSMSB01

CLIENT: CLARK OIL
PROJECT: HAMPTON & SANTA MONICA
PROJECT NUMBER: 89C47
LOCATION:

SURFACE ELEVATION:
BORING DEPTH: 13.0 FT.
DATE: 08-28-89

DEPTH FR LND SURF	SAMP DEPTH INTERVAL	TYPE	#	N	REC (in)	DESCRIPTION OF MATERIAL	CLASS	UNCONFINED STRENGTH	MOISTURE	PID	DRILLING AND SAMPLING NOTES
0.0						REBAR CONCRETE 0.5"					
	2.5-4.0	SS	1	21	18	M. DENSE, M. TO C. SAND & GRAVEL FILL, SOME WOOD BROWN TO RED, STRONG ODOR	hf		DRY	67.0	
5.0	5.0-6.5	SS	2	21	18	M. DENSE, TAN F. SAND W/ TR. SILT, STRONG ODOR-FILL	hf		DRY	400.	
	7.5-9.0	SS	3	19		M. DENSE, TAN TO GRAY CLAYEY SAND W/ SOME SILT, V. STRONG ODOR	sc		SL. MOIST	750.	
10.0	10.0-12.0	SS	4	10	24	STIFF TAN CLAY, SOME F. SAND	cl		SL.MOIST	849.	
	12.0-13.0	SS	5	6	12	AS ABOVE E.O.B. 13.0'			SL. MOIST	350.	T=1520 ID NO. HSMSB01-C TIP=85.0 ppm IN AUGER
15.0											
20.0											
25.0											
30.0											
35.0											
40.0											
45.0											
50.0											
55.0											

START DATE: 08-28-89
COMPLETION DATE: 08-28-89
LOGGED BY: B. HACKENBERG
DRILLING METHOD: 4.25" HSA
DRILLING CONTRACTOR: WISCONSIN TEST DRILLING

WATER LEVEL INFORMATION
DEPTH AT COMPLETION: DRY
LATER TIME/DEPTH:
LATER TIME/DEPTH:
CAVE-IN DEPTH:
DRILLING LOSSES:

Foth & Van Dyke & Associates, Inc.

LOG OF TEST BORING NO.: HSMSB02

CLIENT: CLARK OIL
PROJECT: HAMPTON & SANTA MONICA
PROJECT NUMBER: 89C47
LOCATION:

SURFACE ELEVATION:
BORING DEPTH: 13.0 FT.
DATE: 08-28-89

DEPTH FR LND SURF	SAMP DEPTH INTERVAL	TYPE	#	N	REC (in)	DESCRIPTION OF MATERIAL	CLASS	UNCONFINED STRENGTH	MOISTURE	PID	DRILLING AND SAMPLING NOTES
0.0						REBAR CONCRETE 0.5"					
	2.5-4.0	SS	1	5	18	LOOSE, M. TO C. SAND & GRAVEL FILL BROWN, ODOR, FEW GLASS SHARDS	hf		DRY	65.0	
5.0											
	5.0-6.5	SS	2	21	18	M. DENSE, TAN F. SAND, STRONG ODOR	hf		DRY	352.	
	7.5-9.0	SS	3	19	18	M. DENSE, GRAY SILTY SAND, V. STRONG ODOR	sm		SL. MOIST	1300	
10.0											
	10.0-12.0	SS	4	8	24	LOOSE, GRAY SILTY F. SAND W/ SOME CLAY, V. STRONG ODOR	sm		SL.MOIST	1370	
	12.0-13.0	SS	5	9	12	AS ABOVE			SL. MOIST	1296	T=1610 ID NO. HSMSB02-C
15.0						E.O.B. 13.0'					
20.0											
25.0											
30.0											
35.0											
40.0											
45.0											
50.0											
55.0											

START DATE: 08-28-89
COMPLETION DATE: 08-28-89
LOGGED BY: B. HACKENBERG
DRILLING METHOD: 4.25" HSA
DRILLING CONTRACTOR: WISCONSIN TEST DRILLING

WATER LEVEL INFORMATION
DEPTH AT COMPLETION: DRY
LATER TIME/DEPTH:
LATER TIME/DEPTH:
CAVE-IN DEPTH:
DRILLING LOSSES:

Foth & Van Dyke & Associates, Inc.

LOG OF TEST BORING NO.: HSMSB03

CLIENT: CLARK OIL
PROJECT: HAMPTON & SANTA MONICA
PROJECT NUMBER: 89C47
LOCATION:

SURFACE ELEVATION:
BORING DEPTH: 4.0 FT.
DATE: 08-28-89

DEPTH FR LND SURF	SAMP DEPTH INTERVAL	TYPE	#	N	REC (in)	DESCRIPTION OF MATERIAL	CLASS	UNCONFINED STRENGTH	MOISTURE	PID	DRILLING AND SAMPLING NOTES
0.0						REBAR CONCRETE 0.5"					
	0.5-2.0	SS	1	15		SOFT, BROWN CLAY & C. GRAVEL, ODOR SOME GLASS SHARDS, FILL	hf	0.25	DRY	20.0	
	2.0-4.0	SS	2	17	18	M. DENSE, TAN TO WHITE SAND & GRAVEL	hf		DRY	0.0	T=1650 ID NO. HSMSB03-C
5.0						E.O.B. 4.0'					
10.0											
15.0											
20.0											
25.0											
30.0											
35.0											
40.0											
45.0											
50.0											
55.0											

START DATE: 08-28-89
COMPLETION DATE: 08-28-89
LOGGED BY: B. HACKENBERG
DRILLING METHOD: 4.25" HSA
DRILLING CONTRACTOR: WISCONSIN TEST DRILLING

WATER LEVEL INFORMATION
DEPTH AT COMPLETION:
LATER TIME/DEPTH:
LATER TIME/DEPTH:
CAVE-IN DEPTH:
DRILLING LOSSES:

FID: 241-57495-0 ERP #4450 41

State of Wisconsin
Department of Natural Resources

TOXIC AND HAZARDOUS SPILL REPORT

Form 4400-91 Rev. 6-86

State Div. Emergency Gov't. (608) 266-3232
U.S. Nat'l. Response Center (800) 424-8802
Chemtrec/Pesticides/Chlorine (800) 424-9300

Spill ID Number 890928-06
Y Y M M D D 0-99

Date of Incident	Day of Week	Time of Incident		Reported By (Name)	Telephone Number
UNK			☐ A.M. ☐ P.M.		( )
Date Reported	**Day of Week**	**Time Reported**		**Agency or Firm Reporting**	**Reported thru Div. Emergen. Gov't.**
9/28/89	Thurs.		☐ A.M. ☐ P.M.	Foth & Van Dyke	☐ Yes ☐ No

Substance Involved	Quantity	Units	Person or Firm Responsible
			Clark Oil Company
Substance Involved	**Quantity**	**Units**	**Contact Name** / **Telephone Number**
			( )

Physical Characteristics

☐ Solid ☐ Liquid Color _____

☐ Semisolid ☐ Gas Odor _____

Cause of Incident: LUST

Exact Location Description (intersection, mileage, etc.): ~~4751~~ 4751 N. Santa Monica Ave. Whitefish Bay

County Location	¼¼, ¼, Section, Town, Range
Milwaukee	___, ___, ___, T___N, R___

DNR Dist	DNR Area	Groundwaters Affected
SED	Milw	☐ Yes ☐ No ☒ Potential

Surface Waters Affected	Name of Surface Water
☐ Yes ☐ No ☒ Potential	

Date District Notified	Day of Week	Time District Notified
9/28/89		☐ A.M. ☐ P.M.

District Person Notified	Telephone Number
	( )

Date Investigated	Day of Week	Time Investigated
		☐ A.M. ☐ P.M.

Person Investigating	Telephone Number
	( )

Action Taken By DNR

☐ No Action Taken ☐ Investigation ☐ Supervise/Conduct Cleanup

☐ Spiller Required To Take Action; Type _____

☐ Contractor Hired By DNR; Name _____

☐ Amount Recovered _____

☐ 29.29 Enforcement

Other Agencies on Scene

Local _____

State _____

Federal _____

Address — Street or Route	City, State, Zip Code
9451 N. 107th Street	Milwaukee, WI 53202

Action Taken By Spiller

☐ No Action Taken ☐ No Notification ☒ Investigate

☐ Containment; Type _____

☐ Cleanup; Method _____

☐ Amount Recovered _____

☐ Monitor _____

☒ Contractor Hired; Name Foth & Van Dyke

☐ Other Action _____

RECEIVED NOV 2 1989 BUREAU OF SOLID & HAZARDOUS WASTE MANAGEMENT

Spill Location

☐ Industrial Facility/Paper Mill/Chem. Co.
☒ Gas/Service Station/Garage, Auto Dealer, Repair Shop
☐ Ag Coop/Facility/Cheese Factory/Creamery
☐ Other Small Business (bank, grocery, insurance co., etc.)
☐ Public Property (city, county, state, church, school, etc.)
☐ Utility Co., Power Generating/Transfer Facility
☐ Private Property (home/farm)
☐ Pipeline, Terminal, Tank Farm, Oil Jobber/Wholesaler
☐ Transportation Accident, Fuel Supply Tank Spill
☐ Transportation Accident, Load Spill
☐ Construction, Excavation, Wrecking, Quarry, Mine
☐ Other _____

Spilled Substance Destination

☐ Air
☒ Soil
☐ Groundwater
☐ Surface Water
☐ Storm Sewer
☐ Sanitary Sewer
☐ Contained/Recovered
☐ Other _____

L.U.S.T.

Person Filing This Report (print name): Skip Baker

Signature: Skip Baker Date Signed: 11/17/89

Additional Comments:

9/28/89 soil borings were collected to evaluate site condition: significant contamination was discovered

CENTRAL OFFICE COORDINATOR

Appendix E
Monitoring Wells, Vapor Extraction Wells, and Recovery Wells Construction Reports (Closed BRRTS # 03-41-000450)

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A
3-89

Facility/Project Name: Clark #562
Gas Location: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.
Well Name: B-1/MW-1
Facility License, Permit or Monitoring Number: ____
Wis. Unique Well Number: [redacted] DNR Well Number: [redacted]

Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12
Section Location: NE 1/4 of NE 1/4 of Section 5; T 7 N, R 22 ☒ E ☐ W
Date Well Installed: 06/25/97
Distance Well is From Waste/Source Boundary: 35.0 ft.
Well Installed By: (Person's Name and Firm): OSI ENVIRONMENTAL
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No
Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☐ Downgradient ☐ Not Known

A. Protective pipe, top elevation ____ ft. MSL
B. Well casing, top elevation ____ ft. MSL
C. Land surface elevation ____ ft. MSL
D. Surface seal, bottom ____ 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 attached? ☐ 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: N/A
17. Source of water (attach analysis): N/A

E. Bentonite seal, top ____ ft. MSL or 10 ft.
F. Fine sand, top ____ ft. MSL or 20 ft.
G. Filter pack, top ____ ft. MSL or 30 ft.
H. Well screen, top ____ ft. MSL or 40 ft.
I. Well screen, bottom ____ ft. MSL or 140 ft.
J. Filter pack, bottom ____ ft. MSL or 140 ft.
K. Borehole, bottom ____ ft. MSL or 165 ft.
L. Borehole, diameter 8.5 in.
M. O.D. well casing 2.5 in.
N. I.D. well casing 2 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe: Flush Mount.
a. Inside diameter: 10.0 in.
b. Length: 1.0 ft.
c. Material: Alum. 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; Annular space seal ☐; Other ☐ ____
5. Annular space seal: Granular Bentonite ☐ 33; ____ Lbs/gal mud weight ... Bentonite-sand slurry ☐ 35; ____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31; ____ % Bentonite .... Bentonite-cement grout ☐ 50; ____ ft³ volume added for any of the above
How installed: Tremie ☐ 01; Tremie pumped ☐ 02; Gravity ☐ 08
6. Bentonite seal: Bentonite granules ☐ 33; ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32; Other ☐ ____
7. Fine sand material: Manufacturer, product name and mesh size: #100 FILTER SAND
Volume added ____ ft³
8. Filter pack material: Manufacturer, product name and mesh size: #30 FILTER SAND
Volume added ____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23; Flush threaded PVC schedule 80 ☐ 24; Other ☐ ____
10. Screen material: TIMCO
Screen type: Factory cut ☒ 11; Continuous slot ☐ 01; Other ☐ ____
Manufacturer: TIMCO
Slot size: 0.010 in.
Slotted length: 9.6 ft.
11. Backfill material (below filter pack): None ☐; #30 FILTER SAND. Other ☒

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature: Gene Kleis Firm: [redacted]

Please complete and return both sides of this form as required by sec. [illegible] and 160, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with ch. [illegible] Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance [illegible]

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 3-89

Facility/Project Name: Clark 562
Facility License, Permit or Monitoring Number:
Gun Location: ft. N. S. / ft. E. W.
Well Name: B-2/mw-2
Wis. Unique Well Number: DNR Well Number:
Type of Well: Water Table Observation Well 11 / Piezometer 12
Section Location: NE 1/4 of NE 1/4 of Section 5, T 7 N, R 22 E W
Date Well Installed: 06/25/92 (m m d d y y)
Distance Well is From Waste/Source Boundary: 25.0 ft.
Well Installed By: (Person's Name and Firm): - OSI ENVIRonmental -
Is Well A Point of Enforcement Std. Application? Yes / No
Location of Well Relative to Waste/Source: Upgradient / Sidegradient / Downgradient / Not Known

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

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

13. Sieve analysis attached? Yes / No

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

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

16. Drilling additives used? Yes / No
Describe N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.
F. Fine sand, top _____ ft. MSL or 2.5 ft.
G. Filter pack, top _____ ft. MSL or 3.5 ft.
H. Well screen, top _____ ft. MSL or 5.0 ft.
I. Well screen, bottom _____ ft. MSL or 15.0 ft.
J. Filter pack, bottom _____ ft. MSL or 15.2 ft.
K. Borehole, bottom _____ ft. MSL or 17.2 ft.
L. Borehole, diameter 8.5 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.

1. Cap and lock? Yes / No
2. Protective cover pipe: Flush Mount
a. Inside diameter: 10. in.
b. Length: 1.1 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 / Annular space seal / Other
5. Annular space seal: Granular Bentonite 33 / Bentonite-sand slurry 35 / Bentonite slurry 31 / Bentonite-cement grout 50 / volume added for any of the above
How installed: Tremie 01 / Tremie pumped 02 / Gravity 08
6. Bentonite seal: Bentonite granules 33 / 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32 / Other
7. Fine sand material: Manufacturer, product name and mesh size: #100 FILTER SAND
Volume added: ft³
8. Filter pack material: Manufacturer, product name and mesh size: #30 FILTER SAND
Volume added: ft³
9. Well casing: Flush threaded PVC schedule 40 23 / Flush threaded PVC schedule 80 24 / Other
10. Screen material: TIMCO
Screen type: Factory cut 11 / Continuous slot 01 / Other
Manufacturer: TIMCO
Slot size: 0.010 in.
Slotted length: 9.6 ft.
11. Backfill material (below filter pack): None / Other #30 FILTER SAND

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

Signature: Jane Kleist Firm: Sigma

These complete and return both sides of this form as required by Chs. [illegible] and 160, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with s. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance with s. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation.

APPENDIX H

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 6-89

Facility/Project Name: Claeys 562
Facility License, Permit or Monitoring Number:

Gun Location: ft. N. S. / ft. E. W.

Well Name: B-3/MW-3
Wis. Unique Well Number: DNR Well Number:

Type of Well: Water Table Observation Well 11 / Piezometer 12

Section Location: NE 1/4 of NE 1/4 of Section 5, T 7 N, R 22 E W

Date Well Installed: 11/03/97

Distance Well is From Waste/Source Boundary: 35.0 ft.

Well Installed By: (Person's Name and Firm): OSI Environmental

Is Well A Point of Enforcement Std. Application? Yes / No

Location of Well Relative to Waste/Source: Upgradient / Sidegradient / Downgradient / Not Known

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom _____ 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 attached? 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 N/A

17. Source of water (attach analysis):
N/A

E. Bentonite seal, top _____ ft. MSL or 10 ft.
F. Fine sand, top _____ ft. MSL or 25 ft.
G. Filter pack, top _____ ft. MSL or 35 ft.
H. Well screen, top _____ ft. MSL or 50 ft.
I. Well screen, bottom _____ ft. MSL or 150 ft.
J. Filter pack, bottom _____ ft. MSL or 150 ft.
K. Borehole, bottom _____ ft. MSL or 170 ft.
L. Borehole, diameter 8.5 in.
M. O.D. well casing 2.25 in.
N. I.D. well casing 2.00 in.

1. Cap and seal? Yes / No
2. Protective cover pipe
a. Inside diameter: 10.0 in.
b. Length: 1.5 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 / Annular space seal / Other
5. Annular space seal: Granular Bentonite 33 / Bentonite-sand slurry 35 / Bentonite slurry 31 / Bentonite-cement grout 50
gal/lb water/lb dry mix
ft³ volume added for any of the above
How installed: Tremie 01 / Tremie pumped 02 / Gravity 08
6. Bentonite seal: Bentonite granules 33 / 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32 / Other
7. Fine sand material: Manufacturer, product name and mesh size: #100 FILTER SAND
Volume added: _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size: #30 FILTER SAND
Volume added: _____ ft³
9. Well casing: Flush threaded PVC schedule 40 23 / Flush threaded PVC schedule 80 24 / Other
10. Screen material: Timco
Screen type: Factory cut 11 / Continuous slot 01 / Other
Manufacturer: Timco
Slot size: 0.01 in.
Slotted length: 9.6 ft.
11. Backfill material (below filter pack): None / #30 FILTER Other

I hereby certify that the information on this form is true and correct to the best of my knowledge.
Signature: [signature] Firm: [illegible]

Please complete and return both pages of this form as required by chs. [illegible] Wis. Stats., and ch. [illegible] Wis. Adm. Code. In accordance with ch. 144, Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation.

APPENDIX H

...sconsin
...t of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 3-89

Project Name: Clark #562
License, Permit or Monitoring Number:

Grid Location: ___ ft. ☐ N. ☐ S. ___ ft. ☐ E. ☐ W.

Well Name: B-4 / MW-4
Wis. Unique Well Number: [redacted] DNR Well Number: [redacted]

Well Water Table Observation Well ☒ 11
Piezometer ☐ 12

Section Location: NE 1/4 of NE 1/4 of Section 5
T 7 N, R 22 ☒ E ☐ W

Date Well Installed: 06/26/92 (m m d d y y)

Well is from Waste/Source Boundary: 35.0 ft.

Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☐ Downgradient ☒ Not Known

Well Installed By: (Person's Name and Firm): OSI Environmental

Point of Enforcement Std. Application? ☒ Yes ☐ No

...ve pipe, top elevation ___ ft. MSL
...sing, top elevation ___ ft. MSL
...rface elevation ___ ft. MSL
...seal, bottom ___ ft. MSL or ___ ft.

...classification of soil near screen:
... ☐ GM ☐ GC ☐ GW ☐ SW ☐ SP
... ☐ SC ☐ ML ☐ MH ☐ CL ☐ CH
...rock

...analysis attached? ☐ Yes ☒ No

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

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

...ing additives used? ☐ Yes ☒ No
...ype: N/A
...e of water (attach analysis): N/A

...ite seal, top ___ ft. MSL or 1.0 ft.
...d, top ___ ft. MSL or 2.5 ft.
...k, top ___ ft. MSL or 3.5 ft.
...een, top ___ ft. MSL or 5.0 ft.
...een, bottom ___ ft. MSL or 15.0 ft.
...k, bottom ___ ft. MSL or 15.0 ft.
...e, bottom ___ ft. MSL or 17.0 ft.

...e diameter 8.5 in.
...ell casing 2.25 in.
...l casing 2.00 in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 10.0 in.
b. Length: 4.0 ft.
c. Material: Steel ☐ 04
A ... 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
Annular space seal ☐
Other ☐
5. Annular space seal: Granular Bentonite ☐ 33
Lbs/gal mud weight Bentonite-sand slurry ☐ 35
Lbs/gal mud weight Bentonite slurry ☒ 31
% Bentonite Bentonite-cement grout ☐ 50
ft³ volume added for any of the above
How installed: Tremie ☐ 01
Tremie pumped ☐ 02
Gravity ☐ 03
6. Bentonite seal: Bentonite granules ☐ 33
☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32
Other ☐
7. Fine sand material: Manufacturer, product name and mesh size: #100 FILTER SAND
Volume added ___ ft³
8. Filter pack material: Manufacturer, product name and mesh size: #30 FILTER SAND
Volume added ___ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23
Flush threaded PVC schedule 80 ☐ 24
Other ☐
10. Screen material: Timco
Screen type: Factory cut ☒ 11
Continuous slot ☐ 01
Other ☐
Manufacturer: Timco
Slot size: 0.01 in.
Slotted length: 9.6 ft.
11. Backfill material (below filter pack): None ☐
#30 FILTER SAND Other ☒

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

Jane Kleszyk — Firm: [redacted]

...plete and return both sides of this form as required by chs. ... and 161, Wis. Stats. and ch. NR 141, Wis. Adm. Code. In accordance with ... Stats., failure to file this form may result in a forfeiture of not less than $10. nor more than $5,000 for each day of violation. In accordance ... Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation.

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 3-89

Facility/Project Name: Clark 562

Gun Location: ____ ft. ☐ N. ☐ S. ____ ft. ☐ E. ☐ W.

Well Name: B-7/mw-5

Facility License, Permit or Monitoring Number: _____

Wis. Unique Well Number: _____ DNR Well Number: _____

Type of Well: Water Table Observation Well ☒ 11 Piezometer ☐ 12

Section Location: NE 1/4 of NE 1/4 of Section 5 T 7 N, R 22 ☒ E ☐ W

Date Well Installed: 09/29/92 (m m d d y y)

Distance Well is from Waste/Source boundary: 30' ft.

Well installed by: (Person's Name and Firm): OSI ENVIRONMENTAL

Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No

Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☒ Downgradient ☐ Not Known

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom _____ 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 attached? ☐ 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): _____

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top _____ ft. MSL or _____ ft.
H. Well screen, top _____ ft. MSL or _____ ft.
I. Well screen, bottom _____ ft. MSL or _____ ft.
J. Filter pack, bottom _____ ft. MSL or _____ ft.
K. Borehole, bottom _____ ft. MSL or _____ ft.
L. Borehole, diameter _____ in.
M. O.D. well casing _____ in.
N. I.D. well casing _____ in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 4.0 in.
b. Length: 4.0 ft.
c. Material: Al 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 Annular space seal ☐ Other ☐ ____
5. Annular space seal: Granular Bentonite ☐ 33
____ Lbs/gal mud weight ... Bentonite-sand slurry ☐ 35
____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
____ % Bentonite .... Bentonite-cement grout ☐ 50
____ ft³ volume added for any of the above
How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: Bentonite granules ☐ 33 ☐ 1/4 in. ☒ 3/8 in. ☐ 1/2 in. Bentonite pellets ☒ 32 Other ☐ ____
7. Fine sand material: Manufacturer, product name and mesh size #100 FLINT SAND
Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size #30 Flint Sand
Volume added _____ ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐ ____
10. Screen material: PVC
Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐ ____
Manufacturer: Vinco
Slot size: 0.010 in.
Slotted length: 2.0 ft.
11. Backfill material (below filter pack): None ☒ Other ☐ Natural

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

Signature: [signature] Firm: Sigma

Please complete and return all sections of this form as required by sec. ... and 1... Wis. Stats. and ch. ... Wis. Adm. Code. In accordance with ... Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance

State of Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 3-99

Facility/Project Name: Clark 562

Gun Location: ft. N. S. / ft. E. W.

Well Name: B-9/MW-6

Facility License, Permit or Monitoring Number:

Wis. Unique Well Number: DNR Well Number:

Type of Well: Water Table Observation Well 11 / Piezometer 12

Section Location: NE 1/4 of NE 1/4 of Section 5, T 7 N, R 22 E W

Date Well Installed: 09/30/92

Distance Well is from Waste/Source Boundary: 45.0' ft.

Well Installed by: (Person's Name and Firm): OSI Environmental

Was Well A Point of Enforcement Std. Application? Yes / No

Location of Well Relative to Waste/Source: Upgradient / Sidegradient / Downgradient / Not Known

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom _____ ft. MSL or _____ ft.
E. USCS classification of soil near screen:
GP GM GC GW SW SP
SM SC ML MH CL CH
Bedrock
F. Sieve analysis attached? Yes / No
G. Drilling method used: Rotary 50 / Hollow Stem Auger 41 / Other
H. Drilling fluid used: Water 02 / Air 01 / Drilling Mud 03 / None 99
I. Drilling additives used? Yes / No
Describe N/A
J. Source of water (attach analysis): N/A

K. Bentonite seal, top _____ ft. MSL or 0.5 ft.
L. Fine sand, top _____ ft. MSL or 2.1 ft.
M. Filter pack, top _____ ft. MSL or 3.0 ft.
N. Well screen, top _____ ft. MSL or 4.5 ft.
O. Well screen, bottom _____ ft. MSL or 14.5 ft.
P. Filter pack, bottom _____ ft. MSL or 14.5 ft.
Q. Borehole, bottom _____ ft. MSL or 16.0 ft.
R. Borehole, diameter 8.3 in.
S. O.D. well casing 2.5 in.
T. I.D. well casing 2.1 in.

1. Cap and lock? Yes / No
2. Protective cover pipe:
a. Inside diameter: 12.0 in.
b. Length: 4.0 ft.
c. Material: Alt Steel 02 / 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 / Annular space seal / Other
5. Annular space seal: Granular Bentonite 33 / ____ Lbs/gal mud weight ... Bentonite-sand slurry 35 / ____ Lbs/gal mud weight ..... Bentonite slurry 31 / ____ % Bentonite .... Bentonite-cement grout 50 / ____ ft³ volume added for any of the above
How installed: Tremie 01 / Tremie pumped 02 / Gravity 08
6. Bentonite seal: Bentonite granules 33 / 1/4 in. 3/8 in. 1/2 in. Bentonite pellets 32 / Other
7. Fine sand material: Manufacturer, product name and mesh size #100 Flint Sand
Volume added _____ ft³
8. Filter pack material: Manufacturer, product name and mesh size #30 Flint Sand
Volume added _____ ft³
9. Well casing: Flush threaded PVC schedule 40 23 / Flush threaded PVC schedule 80 24 / Other
10. Screen material: PVC
Screen type: Factory cut 11 / Continuous slot 01 / Other
Manufacturer: Timco
Slot size: 0.010 in.
Slotted length: 1.6 ft.
11. Backfill material (below filter pack): None / Other: Native

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

Name: Steve Klenk Firm: Signature:

Complete and return copy/ies of this form as required by sec. [illegible] and 161, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with s. 161, Wis. Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5,000 for each day of violation. In accordance

Wisconsin
Department of Natural Resources

MONITORING WELL CONSTRUCTION
Form 4400-113A 6-99

Project Name: Plant #0562

Gun Location: ft. N. S. ft. E. W.

Well Name: B-11 / MW 7

Facility ID: License, Permit or Monitoring Number:

Well Unique Well Number: DNR Well Number:

Type of well: Water Table Observation Well ☒ Piezometer ☐

Section Location: NE 1/4 of NE 1/4 of Section 5, T 7 N, R 22 ☐ E ☐ W

Date well installed: 04 / 13 / 93

Well is from waste/source boundary: 100+ ft.

Well installed by: (Person's Name and Firm): OSI ENVIRONMENTAL

Is well point of environmental significance? ☒ Yes ☐ No

Location of Well Relative to Waste/Source: ☐ Upgradient ☐ Sidegradient ☒ Downgradient ☐ Not Known

Protective pipe, top elevation: _____ ft. MSL
Well casing, top elevation: _____ ft. MSL
Surface elevation: _____ ft. MSL
Water seal, bottom: _____ ft. MSL or 10 ft.

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

Sieve analysis attached? ☐ Yes ☒ No

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

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

Drilling additives used? ☐ Yes ☒ No

Describe: _____

Source of water (attach analysis): _____

Water seal, top: _____ ft. MSL or 10 ft.
Filter pack, top: _____ ft. MSL or 25 ft.
Screen, top: _____ ft. MSL or 30 ft.
Screen, bottom: _____ ft. MSL or 45 ft.
Well, bottom: _____ ft. MSL or 145 ft.
Borehole, bottom: _____ ft. MSL or 145 ft.
Borehole, bottom: _____ ft. MSL or 145 ft.

Borehole diameter: 8 3 in.
Well casing: 2 2 5 in.
Well casing: 2 - in.

1. Cap and lock: ☒ Yes ☐ No
2. Protective cover pipe:
   a. Inside diameter: 8.0 in.
   b. Length: 4.0 ft.
   c. Material: Al — Steel ☐ 04 Other ☒
   d. Additional protection? ☐ Yes ☒ No
   If yes, describe: _____
3. Surface seal: Bentonite ☐ 30 Concrete ☐ 01 Other ☒ Asphalt
4. Material between well casing and protective pipe: Bentonite ☐ 30 Annular space seal ☐ Other ☒ N/A
5. Annular space seal: Granular Bentonite ☒ 33
   _____ Lbs/gal mud weight ... Bentonite-sand slurry ☐ 35
   _____ Lbs/gal mud weight ..... Bentonite slurry ☐ 31
   _____ % Bentonite ..... Bentonite-cement grout ☐ 50
   _____ ft³ volume added for any of the above
   How installed: Tremie ☐ 01 Tremie pumped ☐ 02 Gravity ☒ 08
6. Bentonite seal: Bentonite granules ☒ 33
   ☐ 1/4 in. ☐ 3/8 in. ☐ 1/2 in. Bentonite pellets ☐ 32 Other ☐
7. Fine sand material: Manufacturer, product name and mesh size: #100 FLINT SAND
   Volume added: 1.8 ft³
8. Filter pack material: Manufacturer, product name and mesh size: #30 FLINT SAND
   Volume added: 9.0 ft³
9. Well casing: Flush threaded PVC schedule 40 ☒ 23 Flush threaded PVC schedule 80 ☐ 24 Other ☐
10. Screen material: PVC
    Screen type: Factory cut ☒ 11 Continuous slot ☐ 01 Other ☐
    Manufacturer: Timco
    Slot size: 0.010 in.
    Slotted length: 19.6 ft.
11. Backfill material (below filter pack): None ☒ Other ☐

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

Signature: Steve Kluck | Firm: Sigma

Submission of this form is required by ch. NR 141, Wis. Stats. and ch. NR 141, Wis. Adm. Code. Failure to ...

APPENDIX H

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐ _____

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: Clark Refining + Marketing / Clark #562
Facility License, Permit or Monitoring Number: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12
Distance Well Is From Waste/Source Boundary: _____ ft.
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No

Local Grid Location of Well: _____ ft. ☐ N ☐ S. _____ ft. ☐ E. ☐ W.
Grid Origin Location: Lat. _____ Long. _____ or
St. Plane _____ ft. N. _____ ft. E.
Section Location of Waste/Source: ___ 1/4 of ___ 1/4 of Sec. ___, T. ___ N. R. ___ ☐ E. ☐ W.
Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known

Well Name: MW-8
Wis. Unique Well Number: _____ DNR Well Number: _____
Date Well Installed: 06/29/95 (m m / d d / y y)
Well Installed By: (Person's Name and Firm)
Ken Stuckert
Brohn Environmental

A. Protective pipe, top elevation _____ ft. MSL
B. Well casing, top elevation _____ ft. MSL
C. Land surface elevation _____ ft. MSL
D. Surface seal, bottom _____ 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 attached? ☐ 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):
_____

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or _____ ft.
G. Filter pack, top _____ ft. MSL or _____ ft.
H. Screen joint, top _____ ft. MSL or 5.0 ft.
I. Well bottom _____ ft. MSL or 15.0 ft.
J. Filter pack, bottom _____ ft. MSL or 15.0 ft.
K. Borehole, bottom _____ ft. MSL or 15.0 ft.
L. Borehole, diameter ____ in.
M. O.D. well casing ____ in.
N. I.D. well casing ____ in.

1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 8.0 in.
b. Length: 1.0 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; Annular space seal ☐ ____; Other ☐ ____
_____
5. Annular space seal: a. Granular 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 pellets ☒ 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 and mesh size
a. _____
b. Volume added _____ 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 _____
c. Slot size: 0.___ in.
d. Slotted length: 10.0 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 _____

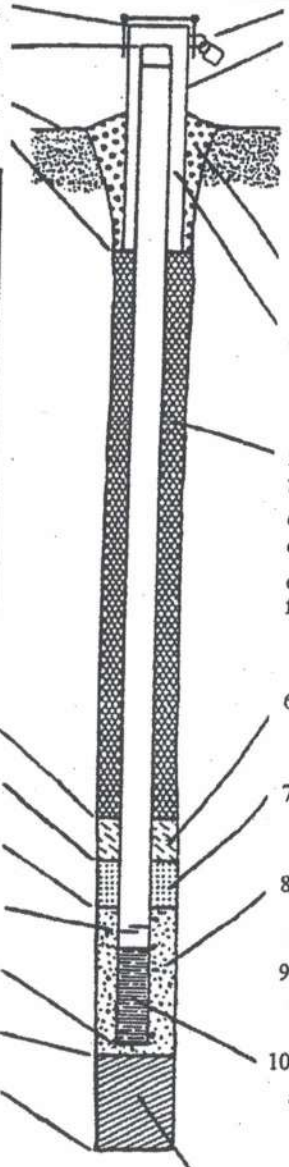
Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs. 144, 147 and 160, Wis. Stats., and ch. NR 141, Wis. Ad. Code. In accordance with ch.144, Wis Stats., failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch. 147, Wis. Stats., failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: ... for DNR use only. See instructions for more information including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: **Clark Station #0562**	Local Grid Location of Well: ☒ N. **56.0** ft. ☐ S. — **93.0** ft. ☐ E. ☒ W.	Well Name: **B14/MW-9**
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. **43 6 11** Long. **87 54 25** or	Wis. Unique Well Number / DNR Well Number:
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	St. Plane _____ ft. N, _____ ft. E.	Date Well Installed: **1 0 / 0 9 / 9 5** (m m d d y y)
Distance Well Is From Waste/Source Boundary: **100** ft.	Section Location of Waste/Source: **NE** 1/4 of **NE** 1/4 of Sec. **5**, T. **7** N, R. **22** ☒ E. ☐ W.	Well Installed By: (Person's Name and Firm) **Midwest Engineering**
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☒ Sidegradient; d ☐ Downgradient n ☐ Not Known	



A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or **1.0** ft.

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

13. Sieve analysis attached? ☐ 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): _____

E. Bentonite seal, top _____ ft. MSL or **1.0** ft.

F. Fine sand, top _____ ft. MSL or **3.0** ft.

G. Filter pack, top _____ ft. MSL or **4.0** ft.

H. Screen joint, top _____ ft. MSL or **5.0** ft.

I. Well bottom _____ ft. MSL or **15.0** ft.

J. Filter pack, bottom _____ ft. MSL or **15.0** ft.

K. Borehole, bottom _____ ft. MSL or **15.0** ft.

L. Borehole, diameter **8.0** in.

M. O.D. well casing **2.25** in.

N. I.D. well casing **2.00** in.

1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: **8.0** in.
b. Length: **1.0** ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

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

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

5. Annular space seal: a. Granular 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. _____ 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 pellets ☒ 32
c. _____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. **Badger, Fine Sand, #40-60**
b. Volume added **0.5** ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **Red Flint, Flint Sand #20**
b. Volume added **5.6** 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 **Badger**
c. Slot size: **0.010** in.
d. Slotted length: **10.0** 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 **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs 144,147 & 160, Wis Stats, and ch NR 141, Wis Ad Code. In accordance with ch 144, Wis Stats, failure to file this form may result in a forfeiture of not less than $10, nor more than $5000 for each day of violation. In accordance with ch 147, Wis Stats, failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

CL0562

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: **Clark Station #0562**

Facility License, Permit or Monitoring Number: _____

Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12

Distance Well Is From Waste/Source Boundary: 5 ft.

Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No

Local Grid Location of Well: 26.0 ft. ☒ N. ☐ S. 17.0 ft. ☒ E. ☐ W.

Grid Origin Location: Lat. 43 6 11 Long. 87 54 25 or

St. Plane _____ ft. N, _____ ft. E.

Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 5, T. 7 N, R. 22 ☒ E. ☐ W.

Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☐ Downgradient n ☒ Not Known

Well Name: **VE-1**

Wis. Unique Well Number: DNR Well Number:

Date Well Installed: 10/09/95 (m m d d y y)

Well Installed By: (Person's Name and Firm): **Midwest Engineering**

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

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

13. Sieve analysis attached? ☐ 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): _____

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or 3.0 ft.

G. Filter pack, top _____ ft. MSL or 5.0 ft.

H. Screen joint, top _____ ft. MSL or 6.0 ft.

I. Well bottom _____ ft. MSL or 9.0 ft.

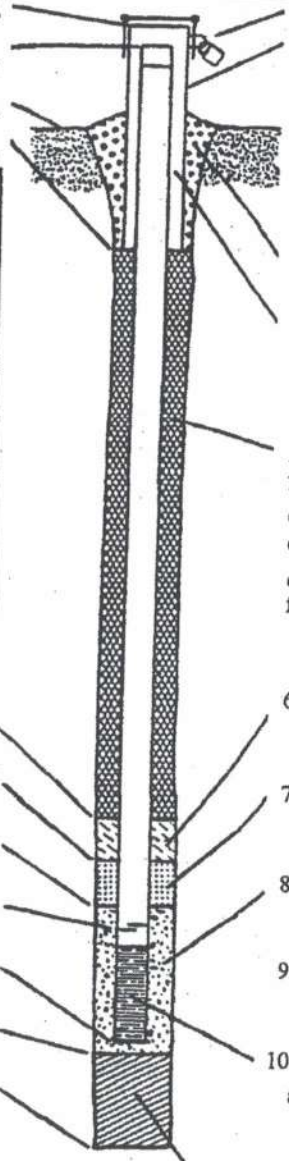
J. Filter pack, bottom _____ ft. MSL or 10.0 ft.

K. Borehole, bottom _____ ft. MSL or 10.0 ft.

L. Borehole, diameter 18.0 in.

M. O.D. well casing 6.25 in.

N. I.D. well casing 6.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 18.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

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

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

5. Annular space seal: a. Granular 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. _____ 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 pellets ☐ 32
c. _____ Other ☐

7. Fine sand material: Manufacturer, product name & mesh size
a. **Badger, Fine Sand, #40-60**
b. Volume added 1.2 ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **Red Flint, Flint Sand #20**
b. Volume added 5.8 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 **Badger**
c. Slot size: 0 ___ in.
d. Slotted length: 3.0 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: **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

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CL0562

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: **Clark Station #0562**	Local Grid Location of Well: 26.0 ft. ☒ N. ☐ S. 53.0 ft. ☒ E. ☐ W.	Well Name: **VE-2**
Facility License, Permit or Monitoring Number:	Grid Origin Location: Lat. 43 6 11 Long. 87 54 25 or St. Plane ____ ft. N, ____ ft. E.	Wis. Unique Well Number / DNR Well Number:
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 5, T. 7 N, R. 22 ☒ E. ☐ W.	Date Well Installed: 10/09/95 (m m d d y y)
Distance Well Is From Waste/Source Boundary: 5 ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☐ Sidegradient; d ☐ Downgradient n ☒ Not Known	Well Installed By: (Person's Name and Firm) **Midwest Engineering**
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No		

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

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

13. Sieve analysis attached? ☐ 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): ____

E. Bentonite seal, top _____ ft. MSL or _____ ft.

F. Fine sand, top _____ ft. MSL or 3.0 ft.

G. Filter pack, top _____ ft. MSL or 5.0 ft.

H. Screen joint, top _____ ft. MSL or 6.0 ft.

I. Well bottom _____ ft. MSL or 9.0 ft.

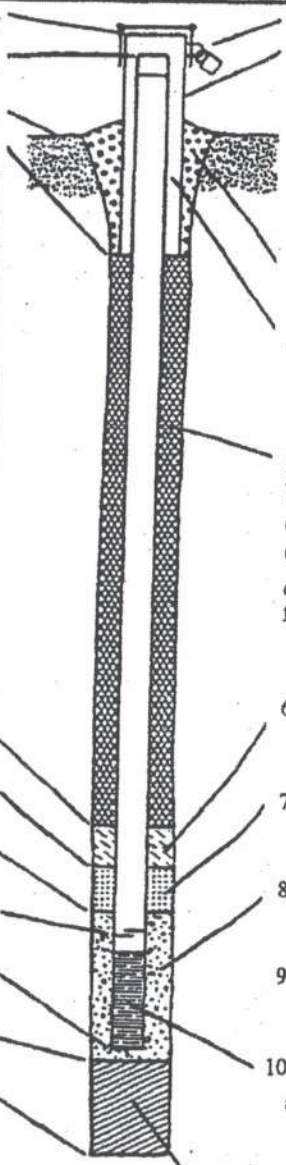
J. Filter pack, bottom _____ ft. MSL or 10.0 ft.

K. Borehole, bottom _____ ft. MSL or 10.0 ft.

L. Borehole, diameter 18.0 in.

M. O.D. well casing 6.25 in.

N. I.D. well casing 6.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 18.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04; Other ☐ ____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: ____

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

4. Material between well casing and protective pipe: Bentonite ☒ 30; Annular space seal ☐ ____; Other ☐ ____

5. Annular space seal: a. Granular 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. ____ 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 pellets ☐ 32
c. ____ Other ☐ ____

7. Fine sand material: Manufacturer, product name & mesh size
a. **Badger, Fine Sand, #40-60** ____
b. Volume added 1.2 ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **Red Flint, Flint Sand #20** ____
b. Volume added 5.8 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 **Badger**
c. Slot size: 0 ___ in.
d. Slotted length: 3.0 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: **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: **Clark Station #0562**

Facility License, Permit or Monitoring Number:

Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12

Distance Well Is From Waste/Source Boundary: 45 ft.

Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No

Local Grid Location of Well: 27.0 ft. ☒ N. ☐ S. 10.0 ft. ☐ E. ☒ W.

Grid Origin Location: Lat. 43 6 11 Long. 87 54 25 or

St. Plane _____ ft. N, _____ ft. E.

Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 5, T. 7 N, R. 22 ☒ E. ☐ W.

Location of Well Relative to Waste/Source: u ☒ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known

Well Name: **Q-1**

Wis. Unique Well Number: DNR Well Number:

Date Well Installed: 10/09/95 (m m d d y y)

Well Installed By: (Person's Name and Firm): **Midwest Engineering**

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

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

13. Sieve analysis attached? ☐ 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):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 1.0 ft.

G. Filter pack, top _____ ft. MSL or 6.0 ft.

H. Screen joint, top _____ ft. MSL or 7.0 ft.

I. Well bottom _____ ft. MSL or 25.0 ft.

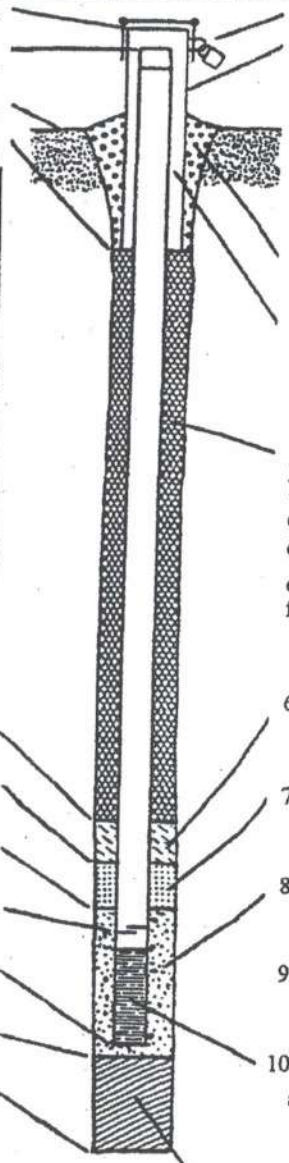
J. Filter pack, bottom _____ ft. MSL or 25.0 ft.

K. Borehole, bottom _____ ft. MSL or 25.0 ft.

L. Borehole, diameter 18.0 in.

M. O.D. well casing 6.25 in.

N. I.D. well casing 6.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 18.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04; Other ☐ ▒▒

d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

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

4. Material between well casing and protective pipe: Bentonite ☒ 30; Annular space seal ☐ ▒▒; Other ☐ ▒▒

5. Annular space seal: a. Granular 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. _____ 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 pellets ☐ 32
c. _____ Other ☐ ▒▒

7. Fine sand material: Manufacturer, product name & mesh size
a. **Badger, Fine Sand, #40-60** ▒▒
b. Volume added 5.6 ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **Red Flint, Flint Sand #20** ▒▒
b. Volume added 15.6 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 **Badger**
c. Slot size: 0 ___ in.
d. Slotted length: 15.0 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: Randy Kurz

Firm: **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

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State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: **Clark Station #0562**

Facility License, Permit or Monitoring Number:

Type of Well: Water Table Observation Well ☒ 11 / Piezometer ☐ 12

Distance Well Is From Waste/Source Boundary: 45 ft.

Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No

Local Grid Location of Well: 71.0 ft. ☒ N. ☐ S. — 10.0 ft. ☐ E. ☒ W.

Grid Origin Location: Lat. 43 6 11 Long. 87 54 25 or

St. Plane _____ ft. N, _____ ft. E.

Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 5, T. 7 N, R. 22 ☒ E. ☐ W.

Location of Well Relative to Waste/Source: u ☒ Upgradient s ☐ Sidegradient d ☐ Downgradient n ☐ Not Known

Well Name: **Q-2**

Wis. Unique Well Number: DNR Well Number:

Date Well Installed: 10/09/95 (m m / d d / y y)

Well Installed By: (Person's Name and Firm): **Midwest Engineering**

A. Protective pipe, top elevation _____ ft. MSL

B. Well casing, top elevation _____ ft. MSL

C. Land surface elevation _____ ft. MSL

D. Surface seal, bottom _____ ft. MSL or 1.0 ft.

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

13. Sieve analysis attached? ☐ 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):

E. Bentonite seal, top _____ ft. MSL or 1.0 ft.

F. Fine sand, top _____ ft. MSL or 3.5 ft.

G. Filter pack, top _____ ft. MSL or 5.0 ft.

H. Screen joint, top _____ ft. MSL or 6.0 ft.

I. Well bottom _____ ft. MSL or 24.0 ft.

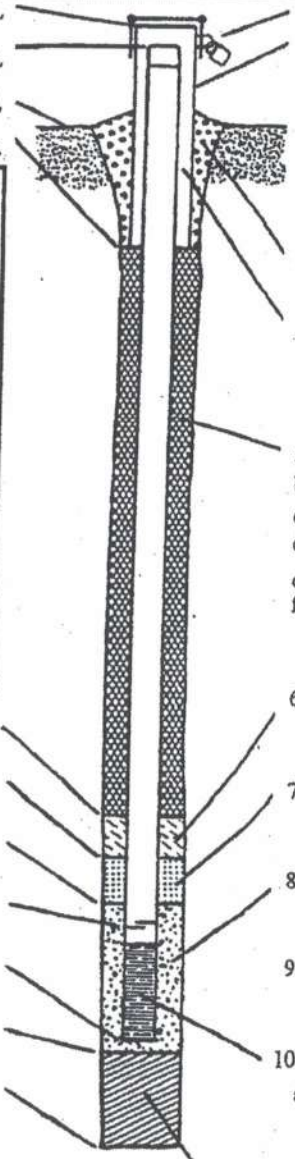
J. Filter pack, bottom _____ ft. MSL or 25.0 ft.

K. Borehole, bottom _____ ft. MSL or 25.0 ft.

L. Borehole, diameter 18.0 in.

M. O.D. well casing 6.25 in.

N. I.D. well casing 6.00 in.



1. Cap and lock? ☒ Yes ☐ No

2. Protective cover pipe:
a. Inside diameter: 18.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04 / Other ☐ ____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____

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

4. Material between well casing and protective pipe: Bentonite ☒ 30 / Annular space seal ☐ ____ / Other ☐ ____

5. Annular space seal: a. Granular 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. _____ 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 pellets ☐ 32
c. _____ Other ☐ ____

7. Fine sand material: Manufacturer, product name & mesh size
a. **Badger, Fine Sand, #40-60**
b. Volume added 5.6 ft³

8. Filter pack material: Manufacturer, product name & mesh size
a. **Red Flint, Flint Sand #20**
b. Volume added 15.6 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 **Badger**
c. Slot size: 0 ___ in.
d. Slotted length: 15.0 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: **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs 144,147 & 160, Wis Stats, and ch NR 141, Wis Ad Code. In accordance with ch 144, Wis Stats, failure to file this form may result in a forfeiture of not less than $10, nor more than $10,000 for each day of violation. In accordance with ch 147, Wis Stats, failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

CL0562

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION
Form 4400-113A Rev. 4-90

Facility/Project Name: **Clark Station #0562**	Local Grid Location of Well: 60.0 ft. ☒ N. ☐ S. 22.0 ft. ☒ E. ☐ W.	Well Name: **Q-3**
Facility License, Permit or Monitoring Number: _____	Grid Origin Location: Lat. 43 6 11 Long. 87 54 25 or St. Plane _____ ft. N, _____ ft. E.	Wis. Unique Well Number: _____ DNR Well Number: _____
Type of Well: Water Table Observation Well ☒ 11; Piezometer ☐ 12	Section Location of Waste/Source: NE 1/4 of NE 1/4 of Sec. 5, T. 7 N, R. 22 ☒ E. ☐ W.	Date Well Installed: 10/09/95 (m m d d y y)
Distance Well Is From Waste/Source Boundary: 15 ft.	Location of Well Relative to Waste/Source: u ☐ Upgradient s ☒ Sidegradient; d ☐ Downgradient n ☐ Not Known	Well Installed By: (Person's Name and Firm) **Midwest Engineering**
Is Well A Point of Enforcement Std. Application? ☒ Yes ☐ No		

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

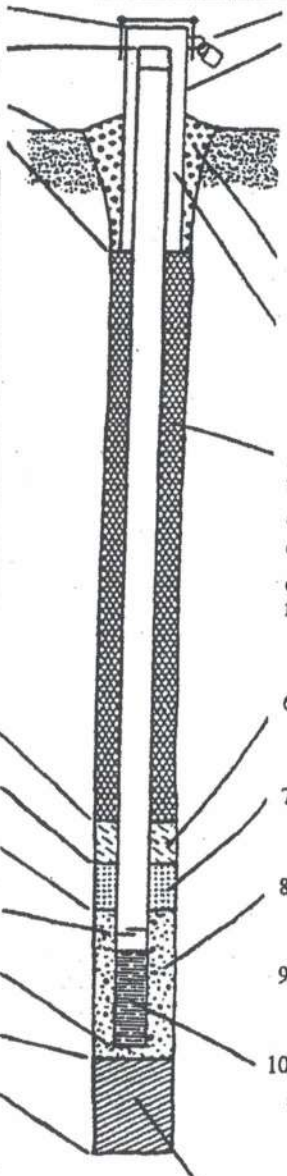
14. Drilling method used: Rotary ☐ 50; Hollow Stem Auger ☒ 41; Other ☐ _____

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): _____

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or 3.0 ft.
G. Filter pack, top _____ ft. MSL or 6.0 ft.
H. Screen joint, top _____ ft. MSL or 7.0 ft.
I. Well bottom _____ ft. MSL or 22.0 ft.
J. Filter pack, bottom _____ ft. MSL or 25.0 ft.
K. Borehole, bottom _____ ft. MSL or 25.0 ft.
L. Borehole, diameter 18.0 in.
M. O.D. well casing 6.25 in.
N. I.D. well casing 6.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 18.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04; Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30; Concrete ☐ 01; Asphalt Other ☒
4. Material between well casing and protective pipe: Bentonite ☒ 30; Annular space seal ☐; Other ☐ _____
5. Annular space seal: a. Granular 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. _____ 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 pellets ☐ 32
c. _____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. **Badger, Fine Sand, #40-60**
b. Volume added 5.6 ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. **Red Flint, Flint Sand #20**
b. Volume added 15.6 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 **Badger**
c. Slot size: 0 in.
d. Slotted length: 15.0 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: **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

Please complete both sides of this form and return to the appropriate DNR office listed at the top of this form as required by chs 144,147 & 160, Wis Stats, and ch NR 141, Wis Ad Code. In accordance with ch 144, Wis Stats, failure to file this form may result in a forfeiture of not less than $10, nor more than $1,000 for each day of violation. In accordance with ch 147, Wis Stats, failure to file this form may result in a forfeiture of not more than $10,000 for each day of violation. NOTE: Shaded areas are for DNR use only. See instructions for more information including where the completed form should be sent.

CL0562

State of Wisconsin
Department of Natural Resources

Route to: Solid Waste ☐ Haz. Waste ☐ Wastewater ☐
Env. Response & Repair ☐ Underground Tanks ☒ Other ☐

MONITORING WELL CONSTRUCTION

Form 4400-113A Rev. 4-90

Facility/Project Name
Clark Station #0562

Facility License, Permit or Monitoring Number

Type of Well Water Table Observation Well ☒ 11
Piezometer ☐ 12

Distance Well Is From Waste/Source Boundary
15 ft.

Is Well A Point of Enforcement Std. Application?
☒ Yes ☐ No

Local Grid Location of Well
73.0 ft. ☒ N. ☐ S. 50.0 ft. ☒ E. ☐ W.

Grid Origin Location
Lat. 43 6 11 Long. 87 54 25 or
St. Plane _____ ft. N, _____ ft. E.

Section Location of Waste/Source
NE 1/4 of NE 1/4 of Sec. 5, T. 7 N, R. 22 ☒ E. ☐ W.

Location of Well Relative to Waste/Source
u ☐ Upgradient s ☒ Sidegradient
d ☐ Downgradient n ☐ Not Known

Well Name
Q-4

Wis. Unique Well Number **DNR Well Number**

Date Well Installed 10/09/95 (m m d d y y)

Well Installed By: (Person's Name and Firm)
Midwest Engineering

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

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

13. Sieve analysis attached? ☐ Yes ☒ No

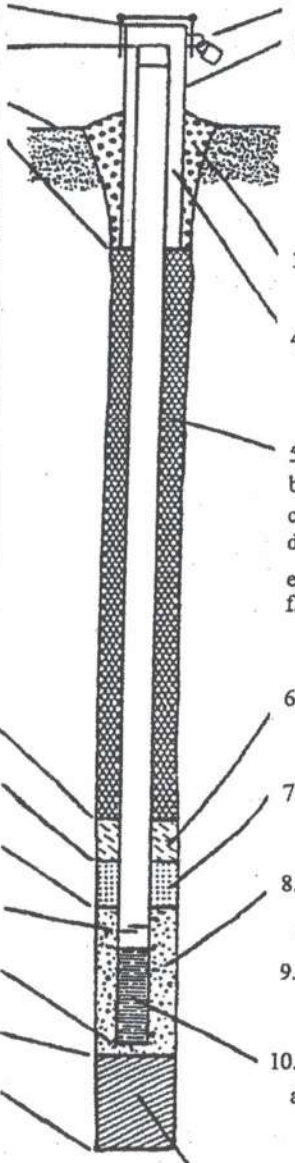
14. Drilling method used: Rotary ☐ 50
Hollow Stem Auger ☒ 41
Other ☐ _____

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):
_____

E. Bentonite seal, top _____ ft. MSL or _____ ft.
F. Fine sand, top _____ ft. MSL or 3.0 ft.
G. Filter pack, top _____ ft. MSL or 6.0 ft.
H. Screen joint, top _____ ft. MSL or 7.0 ft.
I. Well bottom _____ ft. MSL or 25.0 ft.
J. Filter pack, bottom _____ ft. MSL or 25.0 ft.
K. Borehole, bottom _____ ft. MSL or 25.0 ft.
L. Borehole, diameter 18.0 in.
M. O.D. well casing 6.25 in.
N. I.D. well casing 6.00 in.



1. Cap and lock? ☒ Yes ☐ No
2. Protective cover pipe:
a. Inside diameter: 18.0 in.
b. Length: 1.0 ft.
c. Material: Steel ☒ 04
Other ☐ _____
d. Additional protection? ☐ Yes ☐ No
If yes, describe: _____
3. Surface seal: Bentonite ☐ 30
Concrete ☐ 01
Asphalt Other ☒
4. Material between well casing and protective pipe:
Bentonite ☒ 30
Annular space seal ☐
Other ☐ _____
5. Annular space seal: a. Granular 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. _____ 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 pellets ☐ 32
c. _____ Other ☐
7. Fine sand material: Manufacturer, product name & mesh size
a. Badger, Fine Sand, #40-60
b. Volume added 5.6 ft³
8. Filter pack material: Manufacturer, product name & mesh size
a. Red Flint, Flint Sand #20
b. Volume added 15.6 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 Badger
c. Slot size: 0 ___ in.
d. Slotted length: 15.0 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 **Sigma Environmental Services, Inc.**
102 Progress Drive, Saukville, WI 53080 (414) 284-6824

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CL0562

Appendix F
Closure Request of Sigma of September 12, 2002 for Closed BRRTS # 03-41-000450

186-

Letter Of Transmittal

Type of Submittal:
X LUST ___ ERP ___ VPLE ___ other (describe)

To: Program Assistant/BRR Program
Wisconsin Department of Natural Resources Box12436
2300 N. Dr. Martin Luther King Jr. Dr.
Milwaukee, WI 53212

From: Name Mary E. Clifford
Company Sigma Environmental Services, Inc.

Address 220 East Ryan Road
Oak Creek, Wisconsin 53154
Phone (414) 768-7144
Date 9/13/02

FOR: Site Name Clark Station # 0562
Address 4751 N. Santa Monica Blvd.
Milwaukee, Wisconsin 53211

RECEIVED
SEP 17 2002
By VS

Check type(s) of documents enclosed. Submittals are tracked & filed based on information you provide. Include FID & BRRTS numbers assisgned to this site. Identify the intent of documents(s) you are submitting in order to speed processing. Please attach required fees to this form.

FID# 241574850
BRRTS# 03-41-000450

Are you requesting Department Review? Y☐ N☐

√	TYPE OF DOCUMENT/REPORT	FEE	DNR CODE (office use only)
	Notification of Release	none	01
	Tank Closure/Site Assessment *where release(s) have been detected**	none	33
	Site Investigation Workplan	$500 if review is requested	35,135~
	Site Investigation ___groundwater impacts above ES ___no groundwater impacts or gw impacts below ES *(if petroleum constituents only, case will be transferred to Department of Commerce)*	$750 if review is requested	37, 137~, 76, 96
	Request to Transfer Case to Department of Commerce	none	76
	Off-Site Determination Request	$500 mandatory	638~
	Remedial Action Options Plan	$750 if review is requested	39,143~
	NR 720.19 Site Specific Clean-Up Goal Proposal	$750 if review is requested	67,68~
	NR 718 Landspreading Request	$500 mandatory	61~
	"Notification to Treat or Dispose" of Contaminated Soil/Water	none	99
	Injection/Infiltration Request	$500 mandatory	63~
	Quarterly Report or Update	$500 if review is requested	43, 43~
	O&M Form 4400-194	$300 if review is requested	92, 192~
	Remedial Action Options Report	$750 if review is requested	41, 41~
X	Closure Review Request	$750 mandatory	79~
	NR700.11 Simple Site Closure Request	$250 mandatory	183~
	"Draft Deed Affidavit" or "Restriction required for close-out"	none	99
	"Well Abandonment Forms"	none	99
	Remedial Design Report	$750 if review is requested	147, 148~
	Construction Documentation Reports	$250 if review is requested	151, 152~
	Long Term Monitoring Plan	$300 if review is requested	24, 25~
	Voluntary Party Liability Exemption (VPLE) Application	$250 mandatory	662
	VPLE "Phase I/II Assessments" or "Additional Reports"	computed hourly	99
	Tax Cancellation Agreement	$500 mandatory	654
	Negotiated Agreement	$1000 mandatory	630
	Lender Assessment	$500 mandatory	686
	Negotiation and Cost Recovery (municipalities only)	fee for each service, mandatory	90~
	General Liability Clarification Request	$500 mandatory	684
	Lease Letter Request - Single Property	$500 mandatory	646
	Lease Letter Request - Multiple Properties	$1000 mandatory	646
	Request for Other Technical Assistance	$500 mandatory	90~
	Other (please describe) _____		

*Closure reports for sites where no releases have been detected should be sent directly to "Clean Closures" c/o DNR Remediation a& Redevelopment Program, P.O. Box 7921, Madison WI 53707

WDNR BRRTS CASE #: 0 3 - 4 1 - 0 0 0 4 5 0 WDNR SITE NAME: Clark Station # 0562

I certify that, to the best of my knowledge, the information presented on and attached to this form is true and accurate. This recommendation for case closure is based upon all available data as of 9/12/2002 (date). I have read the Case Summary and Close Out Form Instructions and all required information has been included.

Form Completed By:

X Closeout Review Fee Attached
___ GW Registry Fee Attached

D R 9-16-02
(Signature) **(Date)**

Printed Name: Dave G. Bauer Company Name: Sigma Environmental Services, Inc.

Email address: dbauer@thesigmagroup.com

If not site owner, relationship to site owner: environmental consultant

Address: 220 East Ryan Road

Telephone Number: (414) 768-7144 FAX Number: (414) 768-7158

Environmental Consultant (if different then above):

Address:

Telephone Number: ( ) FAX Number: ( )

1. SITE LOCATION & ZONING

WDNR Site Name: Clark Station #0562

Complete Site Address: 4751 Santa Monica Boulevard 53211

WDNR BRRTS CASE #: 0 3 - 4 1 - 0 0 0 4 5 FID #: 2 4 1 5 7 4 8 5 0

PECFA Claim #: 5 3 2 1 1 - 1 0 4 3 - 5 1

Responsible Party Name: Clark Retail Enterprises, Inc.

Complete Responsible Party Address: 601 South Main Street, Ann Arbor, Michigan 48104

Site Legal Description: NE ¼, NE ¼, Sec 5, T 7 N, R 22 (E/W) Town: Milwaukee

County: Milwaukee Latitude: ___ ° ___ ' ___ ___ . ___ " Longitude: ___ ° ___ ' ___ ___ . ___ "

GIS Coordinates obtained: ___ on site using GPS Locator converted or projected onto WMTM '91
X using RR GIS Registry on screen digitizing to get WMTM coordinates

Date of Incident/Discovery: August 28, 1989 Contaminant Type (s): Petroleum Constituents

Quantity Released: Post Remedial Zoning Classification: Commerical
(Do not abbreviate zoning terms)

WDNR BRRTS CASE #: 0 3 - 4 1 - 0 0 0 4 5 0 WDNR SITE NAME: Clark Station # 0562

2. RECEPTORS

Identify **all** pre-remedial and actual reports, the potential risk and their locations (i.e., both on and off site utility corridors, basements or sumps of nearby buildings, direct contact threat from soil, water supplies, surface waters, sediments, etc.) (For definition refer to s. NR 700.03 (47), Wis. Adm. Code.):

There are no recorded pre-remedial reports. Utilities are located onsite on the southern and eastern property line. Direct contact treat does not appear to be present onsite.

Have the remedial actions abated the potential or actual impacts to these receptors? ____ Yes __X__ No
If no, provide details in case summary.
If yes, please identify the nature of the remaining risk and the receptor at risk: _____

3. SOIL INVESTIGATION INFORMATION

Extent Defined? __X__ Yes ____ No If not, explain why? _____

Soil Type(s): sand and clayey sand Depth of Contamination: 6-13 feet bgs

Type of Bedrock: not encountered Depth to Bedrock: N/A

Is any contaminated soil (unsaturated or saturated) in contact with the bedrock? ____ Yes __X__ No

List **all** contaminants found in soil (regardless of ch. NR 720 standards/attach table if necessary)
Ethylbenzene, xylenes, benzene, toluene. Refer to Subsurface reports dated August 1992, June 1993, and March 1994

Measurable Free Product? ____ Yes __X__ No Depth/Location: _____

4. SOIL REMEDIATION INFORMATION

Remedial Action Completed? __X__ Yes ____ No s. NR 720.19 Analysis? ____ Yes __X__ No If yes, attach supporting documentation

Were Immediate or Interim Actions Conducted? ____ Yes __X__ No If yes, what action was taken?

Brief description of Remedial Action Taken: Soil vapor extraction

Were soils excavated? __X__ Yes ____ No Quantity: 1200 tons Disposal Method: disposed of at Parkview Landfill, Menomonee Falls

Final confirmation Sample Collection Methods: composite grab samples were collected from the sidewalls and bottom of excavation

Final Soil/Drill Cuttings Disposal Location: Parkview Landfill, Menomonee Falls, Wisconsin

Estimated volume and depth of in situ soils exceeding ch. NR 720 Table RCLs or site specific RCLs: 400 ft^3, 7-9 feet bgs(B-1 and B-2), pre-remediation

Estimated volume and depth of in situ soils exceeding ch. NR 746 Table 1 or Table 2 or site specific RCLs: 400 ft^3, (B-10:7-9,B-7: 7-9), pre-remediation

5. GROUNDWATER INFORMATION

Extent of Contamination Defined? __X__ Yes ____ No ____ N/A Remedial Action Completed? __X__ Yes ____ No ____ N/A

Brief Description of Remedial Action Taken: vacuum enhanced groundwater recovery

# of Sample Rounds: 21 Depth(s) to Groundwater/Flow Direction(s): 7-11 feet bgs, west to southwest, see attached report

Field Analyses? __X__ Yes ____ No Lab Analyses? __X__ Yes ____ No # of Sampling points: 17

f:\sigma\forms\wdnr\cs-sum.frm

WDNR BRRTS CASE #: 0 3 - 4 1 - 0 0 0 4 5 0 WDNR SITE NAME: Clark Station # 0562

NR 141 Monitoring Wells Sampled: 9 # Temporary Groundwater Sampling Points Sampled: 0

Recovery Sumps Sampled: 8 # Municipal Wells Sampled: 0 # Private Wells Sampled: 0

List all contaminants found in groundwater (regardless of ch. NR 720 standards/attach table if necessary)
Benzene, ethylbenzene, toluene, xylenes, trimethlybenzenes, methyl tert butyl benzene. Refer to attached report

Has DNR Been Notified of Substances in Groundwater w/o Standards? _____ Yes X No If Yes, How Many? _____

What Substances? _____

Any Potable Wells Within 1,200 Feet of Site? _____ Yes X No Have They Been Sampled? _____ Yes _____ No
[NOTE: Wells are to be included on map described in Item B8]

Have Well Owners/Occupants Been Notified of Results? _____ Yes _____ No Are notification letters attached?

Preventive Action Limit Currently Exceeded? X Yes _____ No If Yes, identify location(s) _____

Enforcement Standard Currently Exceeded? X Yes _____ No If Yes, identify location(s) _____

Measurable Free Product Detected? X Yes _____ No X pre-remediation? _____ post-remediation?

Was Free Product remediated? X Yes _____ No Explain: Vacuum enhanced groundwater recovery and natural attenuation, see attached report

6. OTHER CONTAMINATED MEDIA INFORMATION

Have other media been impacted (either on-site or off-site)? _____ Yes X No

Briefly describe type and extent of all contamination found in media other than soil or groundwater: _____

Remedial Action Completed? _____ Yes X No _____ N/A

Brief description of remedial action taken: _____

# of Sample Rounds: _____ Field Analyses? _____ Yes _____ No Lab Analyses? _____ Yes _____ No

# of Sampling Points: _____ Table of analytical results for all contaminants attached? _____ Yes _____ No

7. PATHWAY TO CLOSURE PROPOSED AND ASSOCIATED SITE INFORMATION:

Soil

___ <s. NR 720.09/720.11 Generic RCLs
___ s. NR 720.19(2) Soil Performance Standards (SPS)
___ s. NR 720.19(3) Site Specific Standards (SSRCLs)

Groundwater

___ <s. NR 140.10 Table 1 and Table 2 Values
___ s. NR 140.28(2) PAL Exemption
___ s. NR 726.05(2)(b), > ES Natural Attenuation

WDNR BRRTS CASE #: 0 3 - 4 1 - 0 0 0 4 5 0 WDNR SITE NAME: Clark Station # 0562

Petroleum Storage Tank Soil Options for Closure

___ s. NR 746.07 Soil Screening Levels/Post Investigation
_X_ s. NR 746.08 Soil Screening Levels/Post Remediation

Petroleum Storage Tank Groundwater Options for Closure

___ s. NR746.07 > PAL < ES Low Permeability Site/Post Investigation
___ s. NR746.07 > ES, Permeable Site, Post Investigation
___ s. NR 746.08 > ES, Low Permeability Site, Post Remediation
_X_ s. NR 746.08 > ES, Permeable Site, Post Remediation

A. Enforcement actions closed out? _____ Yes _____ No _____ N/A Permits closed out? _____ Yes _____ No _____ N/A

B. Proposed post remediation land use: _____ Residential _X_ Commercial _____ Industrial _____ Other Specify: _____

C. Does remedy include Soil Performance Standards (SPS)? _____ Yes _X_ No
Type: _____ Cap _____ Soil _____ Building _____ Natural Attenuation of Groundwater _____ Other
Specify: _____

Will the proposed post remediation land use be consistent with the maintenance of the SPS? _____ Yes _____ No
Why? _____

Proof of ch. NR 714 public notice attached? _____ Yes _____ No (Proof can either be the actual entire page of the newspaper with the notice OR a "Proof of Publication" from the newspaper publisher.)

Maps and photos attached documenting the cap area, construction, and/or the integrity of the cap? ___Yes ___No ___N/A

A maintenance plan is attached for the performance standard per ss. NR 720.19(2) and 724.13(2), Wis. Adm. Code?
___Yes ___No

D. Does remedy include SSRCLs? ___Yes _X_No
Is post-remedial land use industrial? ___Yes ___No

Is zoning change required or completed? ___Yes ___No
If yes, have you attached verification of the zoning for affected properties? ___Yes ___No

Complete assumptions and calculations for SSRCLs attached with justificiation? ___Yes ___No

If using EPA Soil Screening Level Model as justification for closure of sites with residual contaminated soils, are the numbers used: (circle one) site specific inputs or defaults and are calculations and results attached? ___Yes ___No

E. Does remedy include natural attenuation of groundwater only? (i.e., there is no residual soil contamination?) ___Yes ___No
Mann-Kendall/Mann-Whitney U Results attached? _X_Yes ___No (required for ch. NR 746 permeable sites)

F. Describe how the following pathways are protected:
1) Direct Contact Pathway: The majority of the site is covered by asphalt or concrete, see attached report.
2) Groundwater: The impact plume margin is generally decreasing and is excepted to continue by natural attenuation, see attached report.

8. PROPOSED INSTITUTIONAL CONTROLS (See PUB. RR-606)

___ Unrestricted
___ Deed Restriction (required for industrial cleanup level/ and when performance standard requires maintenance plan)
___ Deed Notice
___ For public street or highway right of way contamination, provide notice as required (See item (E) in the case summary checklist)
_X_ RR GIS Registry of Closed Sites
___ Other

Copy of Draft Deed Document(s) attached? _X_Yes ___No (see RR web site: http://www.dnr.state.wi.us/org/aw/rr/index.html)

WDNR BRRTS CASE #: 0 3 - 4 1 - 0 0 0 4 5 0 WDNR SITE NAME: Clark Station # 0562

FOR DEPARTMENT USE ONLY

PROJECT MANAGER: _____ **Date Reviewed:** _____

FIRST REVIEW DATE: _____ **[ ] Approved** **[ ] Denied**

_____	_____	_____	_____
(Signature)	(Signature)	(Signature)	(Signature)

SECOND REVIEW DATE: _____ **[ ] Approved** **[ ] Denied**

_____	_____	_____	_____
(Signature)	(Signature)	(Signature)	(Signature)

COMMITTEE RECOMMENDATION:

____ **Closure Approved With:**

- _____ No Restrictions
- _____ Listing on GIS Registry
- _____ Zoning Verification
- _____ Deed Restriction
- _____ Deed Notice
- _____ Site Specific Close Out Letter
- _____ Well Abandonment Documentation
- _____ Soil Disposal Documentation
- _____ Public Notice of soil performance standard remedy
- _____ NR 140 Exemption For: _____
- _____ Specific Comments: _____

____ **Closure Denied, Needs More:**

- _____ Investigation
- _____ Groundwater Monitoring
- _____ Soil Remediation
- _____ Groundwater Remediation
- _____ Documentation of Soil Landspreading or Biopile Destiny
- _____ Specific Comments: _____

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1921

SIGMA
ENVIRONMENTAL SERVICES INC.
220 East Ryan Road
Oak Creek, WI 53154-4533
414-768-7144
FAX: 414-768-7158

September 12, 2002

Project Reference # CL0562

Mr. John Hnat
Hydrogeologist
WDNR-Southeast Region
2300 N. DR. Martin Luther King Blvd.
P.O Box 12436
Milwaukee, WI 53212-0436

RE: **CASE SUMMARY AND CLOSE OUT REQUEST**
Clark Station #0562
4751 Santa Monica Boulevard
Milwaukee, WI
BRRTS # 03-41-000450
FID # 241574850

Dear Ms. Stovel:

Sigma Environmental Services, Inc. (Sigma) has provided environmental consulting services for the implementation of soil and groundwater remediation activities at the Clark Retail Enterprises, Inc. (Clark) site located at 4751 Santa Monica Boulevard, Milwaukee, Wisconsin. Based on the information available to date, and in accordance with the requirements of Chapters NR 726 and NR 746 of the Wisconsin Administrative Code (WAC), Sigma on behalf of Clark, is requesting that the site be considered for case closure. As petroleum hydrocarbon impacts remain in the groundwater at concentrations above the established enforcement standards for select Petroleum Volatile Organic Compounds (PVOCs), it is understood that registration on the GIS database will be required. A check for $250 has been submitted to the Wisconsin Department of Natural Resources-Southeast District.

Enclosed please find the necessary documentation required for obtaining site closure. If there are any questions or comments concerning this request, please contact Sigma at (414) 768-7144.

Sincerely,

SIGMA ENVIRONMENTAL SERVICES, INC.

Mary E. Clifford
Staff Scientist

David G. Bauer, P.G.
Project Manager/ Hydrogeologist

Randy E. Boness, P.G.
Senior Project Manager

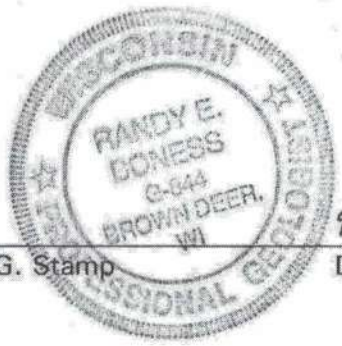
Enclosures

Cc: **Eric Larson – Clark Retail Enterprises, Inc.**

CERTIFICATIONS

"I, Randy E. Boness, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Signature and title Senior Geologist



P.G. Stamp

9-16-02
Date

"I, Dave G. Bauer, hereby certify that I am a hydrogeologist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Signature and title Hydrogeologist

P.G. Stamp

9.16.02
Date

"I, Mary E. Clifford, hereby certify that I am a scientist as that term is defined in s. NR 712.03 (1), Wis. Adm. Code, and that, to the best of my knowledge, all of the information contained in this document is correct and the document was prepared in compliance with all applicable requirements in chs. NR 700 to 726, Wis. Adm. Code."

Signature and title Staff Scientist

9/16/02
Date

CASE SUMMARY

Responsible Party: Clark Retail Enterprises, Inc.
601 S. Main Street
Ann Arbor, MI 48104
Attn: Eric Larson
Telephone: (734) 669-6155
FAX: (734) 668-9631
E-mail: eric.larson@clarkretail.com

Case Summary and Chronology of Events

August 1989 through January 1990

Foth and Van Dyke (FVD) conducted a preliminary site assessment to determine if a release from the underground storage tank (UST) systems had occurred. FVD's assessment included drilling 3 soil boring onsite and collecting composite samples for laboratory analysis. Based on laboratory result, a petroleum release had occurred at the site. In the fall of 1986, tightness testing was performed on the tanks and product piping. The regular unleaded UST systems passed however, the super unleaded tank failed. Subsequent excavation around the product lines did not indicate a release. On January 5, 1990, Clark Oil relined the super unleaded tank and placed it back in service.

March 1990

Omega Environmental Services, Inc. (Omega) conducted soil removal activities of 1200 tons of petroleum impacted soil during the removal and upgrade of two 6,000 gallon unleaded gasoline underground storage tanks (UST) on March 13 to 16, 1990. Approximately 1176.39 tons of contaminated soil was removed and diposed of at Parkview Landfill, Menomonee Falls, Wisconsin from the tank excavation and continued north and west to the property lines. Representative composite grab soil samples were collected from the sidewalls and bottom of the excavation.

After the excavation was complete, the entire excavation was lined with 6 millimeter polyethylene plastic. Two (2) EPA approved steel 12,000 gallon, cathodically protected USTs were installed in the excavation and leak tested. Based on site activities Omega recommended no further action.

January 1992

The Wisconsin Department of Natural Resources (WDNR) notified Clark that additional investigation was necessary to determine the horizontal and vertical extent of contamination to the soil and/or groundwater.

June 1992 through April 1993

Sigma conducted subsurface investigation activities on-site and off-site to determine the extent and character of petroleum impacts beneath the site. The investigation included drilling 12 soil borings (GP-1 through GP-12) and installing seven groundwater monitoring wells (MW-1 through MW-7). Based on the laboratory results, field screening results and physical observations, and estimated 2,000 cubic yards of petroleum impacted soil exists on and off-site. The laboratory analysis indicated that predominant soil impacts appeared to be related to releases from the two gasoline USTs that were removed in 1990. Soil boring and monitoring well locations are included in Figure 1.

Volatile organic compounds (VOCs) above NR 140 Enforcement Standards (ES) or Preventative Action Limit (PAL) were detected in groundwater monitoring wells MW-1, MW-2, MW-3, MW-5, and MW-6. Soluble lead was detected in monitoring well MW-1 and MW-2 at concentrations above NR 140 ESs. Based on a review of the subsurface investigation data it was determined that remediation of both soil and groundwater was necessary. Groundwater quality results are present as Table 1. Refer to "Report of a Subsurface Investigation at Clark Station #562 ..." for further in formation.

July 1994 through June 1995

Sigma completed a preliminary remedial alternative analysis for the site and Analysis For Clark Refining and Marketing, Inc...", dated July 1994). Three remedial alternatives were identified and evaluated based upon their technical feasibility, remediation efficiency and cost-effectiveness. Sigma recommended soil vapor extraction (SVE) with groundwater air sparge.

Based on review of the WDNR records of the remediation work at the One Hour Martinizing site directly north of the Clark site and discussion with the WDNR, the air sparge technology did not appear to be the most effective option for remedation. Sigma then proposed a SVE/groundwater extraction and treatment system as the most effective alternative. For further infromation refer to "Remedial Action Plan and Proposed Design for the Clark Station #0562...".

June 1995

Offsite monitoring well MW-8 was installed on June 29, 1995 west of the Clark property. Select PVOC concentrations were detected above NR 140 ESs during the July 1995 and August 1995 sampling events. Groundwater quality results are presented as Table 1.

October 1995 through February 1997

Construction of the remediation system consisting of Vacuum Enhanced Groundwater Recovery (VEGR) in conjunction with Soil Vapor Extraction (SVE) was initiated in October 1995. The system consisted of four vacuum enhanced extraction wells (Q-1 through Q-4) to extract both soil vapor and groundwater from the subsurface and two AVE wells (VE-1 and VE-2) connected to the SVE unit to extract vapors from the vadose zone.

The four dual extraction wells (Q-1 through Q-4), two SVE wells (VE-1 and VE-2), and an additional monitoring well (MW-9) were installed October 4 through October 11, 1995. The parking lot was saw cut and a trench was excavated for the installation of the system piping from October to December 1995. Well locations are included in Figure 1.

During the trench excavation, soil was field screened using a Photoionization Detector (PID). The soil in the trench appeared to be impacted based on the PID readings. Therefore, approximately 170 yd^3 contaminated soil was sent to the Orchard Ridge Recycling and Disposal Facility in Menomonee Falls, Wisconsin (Waste Profile # ORC-BIO/57989).

Installation of the remediation equipment within the treatment building was initiated in May 1996. The system was designed to discharge effluent groundwater from the remediation system to the sanitary sewer (MMSD) on a temporary basis until a storm sewer WPDES permit was received.

On October 11, 1996 groundwater samples were collected from the entire monitoring well network (MW-1 through MW-9) and analyzed for PVOC's. These samples were analyzed to provide a baseline of groundwater quality prior to the system start-up. Groundwater results are presented in Table 1.

On October 21, 1996, the SVE system was activated. The system operated intermittently during the first three months of operation because of an electrical problem in the control panel. The problem was repaired and the system began full operation in February 1997.

For more detailed information on the remediation system operation at Clark Station #0562 refer to "Remediation System Installation and Start-up Report" for Clark Station #0562..., dated May 1997.

April 1997 though December 1997

Since remediation system start-up in October 1996, the system removed approximately 647.5 pounds of VOC's and 32.2 pounds of benzene while the groundwater extraction and treatment system has removed approximately 6.6 pounds of PVOC's. During the period of April 15, 1997

through December 31, 1997, the SVE system removed approximately 10.2 pounds of benzene and 466.5 pounds on VOC's while the groundwater extraction and treatment system removed approximately 3.96 pounds of PVOC's.

Quarterly groundwater sampling for GRO, PVOCs, and lead was preformed for monitoring wells MW-1 through MW-9. Sampling events were conducted on May 21 and August 28, 1997. Analytical reports indicate benzene, toluene, ethylbenzene, and xylene (BTEX) concentrations remained above NR 140 ESs at monitoring wells, MW-1, MW-2, MW-5, and MW-8 while benzene and xylene were reported above NR 140 ESs at monitoring well MW-6. Groundwater quality results are presented as Table 1. For further information refer to "Status Report for the Soil and Groundwater Remediation System at Clark Station #0562..." dated February 1998.

January 1998 to April 1999

The active remediation systems were shut down between September 29, 1998 and March 25, 1999 to monitor groundwater quality and evaluate the site conditions based on COMM 47 guidelines. Based on the results of COMM 47 evaluation, continued operation of the active remediation systems was warranted to minimize contaminant plum expansion.

Since remediation system start-up in October 1996, the system removed approximately 1033.8 pounds of VOCs and approximately 96.7 pounds of benzene. During the reported period of January 1, 1998 through April 30, 1999, the SVE system removed approximately 38.7 pounds of benzene and 218.5 pounds of VOCs while the groundwater extraction and treatment system removed approximately 1.08 pounds of PVOCs.

Periodic groundwater sampling activities were performed on February 18, 1998, May 19, 1998, July 23, 1998, November 24, 1998, and March 24, 1999. Results for the groundwater monitoring for the March 24, 1999 sampling event show NR 140 ES excxeedances for one or more of the following compounds; benzene, toluene, ethylbenzene, and xylene (BTEX) in monitoring wells MW-1, MW-2, MW-5, MW-6 and MW-8. Groundwater results are presented in Table 1. Refer to "Status Report for the Soil and Groundwater Remediation System at Clark Station #0562..." dated October 1999 for more information.

May 1999 through April 2000

During the recording period of May 1, 1999 through April 30, 2000, the SVE system removed approximately 2.9 pounds of VOCs. Since the remediation start-up in October 1996, the system removed approximately 1036.7 pounds of VOCs and 96.7 pounds of benzene. The groundwater extraction

and treatment system removed approximately 2.4 pounds of PVOC's during the recording period and approximately 10.2 pounds of PVOC's since the remediation start-up in October 1996.

Periodic groundwater sampling for PVOCs was performed on one of more groundwater monitoring wells on July 20, 1999, October 11, 1999 and February 28, 2000. Results of groundwater monitoring for the February 28, 2000 sampling event indicated NR 140 ES exceedances for one or more of the following compounds, benzene, toluene, ethylbenzene, xylene (BTEX) and trimethylbenzene in monitoring wells MW-1, MW-2, MW-5, and MW-6. Groundwater results are presented on Table 1 and Figure 2.

Based on an evaluation of COMM 46 Risk Factors, Sigma recommended active remediation system shutdown and implementation of a groundwater natural attenuation monitoring program was appropriate for the site. Sigma also recommended implementing a quarterly groundwater monitoring program at the site to verify that natural attenuation is occurring and that contaminant plum continues to remain stable and recede.

The groundwater monitoring program consisted of quarterly monitoring of PVOCs, geochemical and biochemical indicators of natural attenuation at monitoring wells MW-1, MW-2, MW-5, MW-6 and MW-8, and annual monitoring of the above listed compounds at monitoring wells MW-3, MW-4, MW-7 and MW-9. For more information refer to "Status Report for the Soil and Groundwater Remediation System at Clark Station #0562..." dated May 2000.

May 2000

A groundwater sampling event occurred at monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8 on May 24, 2000. Select BTEX compounds and/or trimethylbenzene concentrations were detected above NR 140 ESs at monitoring wells MW-1, MW-2, MW-5, MW-6, and MW-8. Groundwater results are presented on Table 1 and Figure 2.

July 2000

The SVE system and groundwater extraction and treatment system was shut down July 2000. The system was cleaned after shut down on July 24, 2000. Activities at the site will now consist of quarterly groundwater monitoring for natural attenuation.

October 2000 through October 2001

Four groundwater sampling events were completed at the site on October 5, 2000, April 2, 2001, July 23, 2001, and October 22, 2001. Groundwater samples were collected at all groundwater monitoring wells for the four

above referenced groundwater sampling events with the exception of the October 5, 2000 groundwater sampling event. Groundwater samples were analyzed for PVOCs along with select *in-situ* field measurements.

Static groundwater measurements were used to calculate groundwater elevations and flow directions. During the sampling events occurring October 2000 through October 2001 depth to water measurements varied across the site from 7.26 feet below ground surface (bgs) to 10.93 feet bgs with an average depth of 8.98 feet bgs. The October 2001 sampling event indicates that groundwater flow direction is generally west to southwest across the site. The hydraulic gradient for the October 2001 sampling event is approximately 0.0076 feet per foot, consistent with previous sampling events. Table 2 provides a summary of historical groundwater elevations. Groundwater contour maps for the October 5, 2000, April 2, 2001, July 23, 2001, and October 22, 2001 are presented as Figure 3, 4, 5 and 6, respectively.

Select PVOC concentrations were detected above NR 140 ESs during the last four sampling events. Concentrations of benzene were detected above NR 140 ESs at monitoring well MW-1, MW-2, MW-5, and MW-6 at all four sampling events with the exception of benzene concentrations at monitoring well MW-1 during the October 2000 and April 2001 sampling events. Ethylbenzene was detected above NR 140 ES concentrations at monitoring well MW-1 during the July and October 2001 sampling and at monitoring wells MW-5 and MW-8 during last four sampling events. Toluene concentrations above NR 140 ESs were detected at monitoring well MW-1 during the October 2000 and April, July and October 2001 sampling events. Concentrations of total xylenes above the NR 140 ESs were detected at monitoring well MW-1 during the October 2000, July and October 2001 sampling events and at monitoring well MW-8 during the October 2000 and October 2001 sampling events. Total trimethylbenzene concentrations were detected above NR 140 ESs at monitoring well MW-1, MW-2, MW-5, and MW-8 for the sampling events occurring from October 2000 to October 2001. Groundwater quality results are presented on Table 1 and Figure 2. Groundwater laboratory results for the sampling events occurring April 2001, July 2001 and October 2001 are included as Attachment A.

In-situ field measurements were collected at select monitoring wells during the October 2000, April 2001, July 2001, and October 2001 sampling events to further evaluate if intrinsic bioremediation of hydrocarbon impacts to groundwater is feasible and on-going. A review of the in-situ field measurements during the October 2001 sampling event indicate subsurface conditions are favorable for intrinsic bioremediation. Dissolved oxygen levels and reduction-oxidation potential were both detected in impacted monitoring

wells MW-1 and MW-5 at lower levels than were indicated in non-impacted monitoring well MW-9 indicating that microbial consumption has depleted the oxygen present in the groundwater. The presence of ferrous iron in impacted monitoring wells MW-1 and MW-5 indicates microbes are utilizing iron (III) as an alternate electron acceptor and further supports the fact that intrinsic bioremediation is on-going. Table 3 presents at summary of the *in-situ* field measurements for groundwater.

Mann Kendall statistical analysis was completed on monitoring wells MW-1, MW-2, MW-5, MW-6, and MW-8 one or more of the following PVOCs, benzene, ethylbenzene, toluene, total xylenes, and total trimethylbenzenes. Concentrations of PVOCs were found to be decreasing or stable at all monitoring wells analyzed with the exception of ethylbenzene at monitoring well MW-1 and trimethylbenzenes at monitoring wells MW-5 and MW-8. Mann Kendall analysis is presented as Attachment B.

Justification for Site Closure

The Clark site located at 4751 Santa Monica Boulevard has been in operation as a gasoline station since the early 1960's. The site is approximately 0.4 acres in size and is located in a mixed residential/commercial area of Milwaukee, Wisconsin. The site is bordered by the Chicago & Northwestern Railraod to the southwest, a Martinizing Dry Cleaners (formerly a Mobil Station) to the north, and a parking lot on the southeast corner of the intersection of Hampton Avenue and Santa Monica Boulevard. (refer to "A Subsurface Investigation for Clark Station #562..." dated March 1994).

Remedial strategies at the site were warranted to restore soil and groundwater qualities to practical levels as determined by the Wisconsin Department of Natural Resources. Given the Clark Station's hydrogeologic setting and the results of the subsurface investigation, a soil vapor extraction and vacuum enhanced groundwater recovery and treatment system was installed to address impacted soil and groundwater. The system was in operation from October 22, 1996 through July 2000 with a temporary system shut down from September 29, 1998 and March 25, 1999 to monitor groundwater quality and evaluate the site conditions based on COMM 47 guidelines. The SVE system removed a total of approximately 1036.7 pounds of VOC's and approximately 96.7 pounds of benzene. While the groundwater extraction and treatment system removed a total of approximately 10.2 pound of PVOC's. The system was shutdown in July 2000 to implement a groundwater natural attenuation monitoring program.

Since the remediation system shut down in July 2000 a total of four groundwater monitoring events have occurred. Groundwater flow is consistently to the west with a varying north to south component present.

Post remedial groundwater quality monitoring has documented stable and/or decreasing concentrations of benzene, ethylbenzene, toluene, total xylenes, and trimethylbenzene at monitoring wells MW-1, MW-2, MW-5, MW-6, and MW-8 with the exception of ethylbenzene concentrations at monitoring well MW-1 and trimethlybenzene concentrations at monitoring wells MW-5 and MW-8. While monitoring wells MW-3, MW-4, MW-7 and MW-9 continue to have no detected concentrations of PVOCs.

Evaluation of NR 746 Risk Screening Criteria

In accordance with NR 746.06, the following risk criteria (***and how each applies to the site***) were used to determine whether the site may be closed as provided in NR 746.07:

- Presence or absence of NR 746 Environmental factors (EFs) or the satisfactory response to any EF present.

  Upon evaluation of the site environmental data generated, none of the environmental factors as outlined in NR 746 appear to be present at the site. Specifically, 1) there is no documented expansion of the plume margin (with the exception of ethylbenzene concentrations at MW-1 and trimethylbenzene concentrations at MW-5 and MW-8 2), no verified contaminant concentrations in a private or public potable well that attains or exceeds the preventative action limit, 3) no contamination within bedrock or within 1 meter of bedrock, 4) no petroleum product that is not in the dissolved phase (floating product) is present with a thickness of 0.01 feet or more, and has been verified by more than one sampling event, and 5) no documented contamination discharges to a surface water or wetland.

- No soil contamination is present at the site that exceeds any of the indicators of petroleum product listed NR 746.06 Table 1.

  Laboratory analysis of soil samples reveal that concentrations (before remediation) of ethylbenzene and xylene at soil borings B-7 and B-10 were detected above the NR 746.06 Table 1 values for soil screening along with bezene and toluene at soil boring B-10. However, post remediation system operation soil samples have not been collected, therefore current levels of contaminants are not known. The site is primarily concrete and/or asphalt paved, limiting exposure routes to any soil impacts that may remain on site.

- There is no soil contamination within 4 feet of the ground surface that exceeds NR 746.06 Table 2 direct contact values.

During site investigation activities, field screening of shallow soil samples with a photoionization detector indicated elevated levels of petroleum hydrocarbons however, laboratory analysis of shallow soil samples (within 4 feet of the surface) was not performed. The site is primarily concrete and/or asphalt paved, limiting exposure routes to soil that may remain on site.

- For substances not listed in NR 746.06 Table 2 that are present within 4 feet of the ground surface and have been approved by the agency with administrative authority of the site as contaminants of concern as defined in s. NR 720.03(2), any potential human health risk from direct contact has been addressed.

  During site investigation activities, field screening of shallow soil samples with a photoionization detector indicated elevated levels of petroleum hydrocarbons however, laboratory analysis of shallow soil samples (within 4 feet of the surface) was not performed. The site is primarily concrete and/or asphalt paved, limiting exposure routes to soil that may remain on site.

- Except for the substances listed in Table 2, there is no human health risk from direct contact for a substance listed in Table 1 if the substances's concentration is below the Table 1 soil screening level.

  During site investigation activities, field screening of shallow soil samples with a photoionization detector indicated elevated levels of petroleum hydrocarbons however, laboratory analysis of shallow soil samples (within 4 feet of the surface) was not performed. The site is primarily concrete and/or asphalt paved, limiting exposure routes to soil that may remain on site.

- No release of a petroleum product to the soil or groundwater at the site has occurred within the last 10 years.

  Historical data indicates that the site has been operating as a Clark station since the early 1960's. In 1989, a release was confirmed and reported to the WDNR at the site and two 6,000 gallon unleaded gasoline UST were subsequently removed from the site and replaced with two 12,000 gallon gasoline USTs in 1990.

- There is no evidence of migration of petroleum product contamination within a utility corridor or within a permeable material or soil along which vapors, free product or contaminated water may flow.

No evidence of migration of petroleum product contamination within a utility corridor is present based on the groundwater analytical results of groundwater monitoring wells, MW-3 and MW-4 located near underground utilities. Based on a review of the site conditions and adjacent properties, utility corridors are present adjacent to the site, along the eastern and southern property boundaries. Specifically, natural gas, storm sewer, and sanitary sewer utility line run adjacent to the property along N. Santa Monica Boulevard. In addition a natural gas utility line runs along the south property boundary.

- There is no evidence of migration or imminent migration of petroleum product contamination to building foundation drain tile, sumps or other points of entry into a basement or other enclosed structure where petroleum vapors could collect and create odors or an adverse impact on indoor air quality or where the contaminants may pose an explosion hazard

  There is no current evidence to support contaminant/vapor migration to other structures in the vicinity of the site.

- No enforcement standard is attained or exceeded in any groundwater within 1000 feet of a well operated by a public utility, as defined in s. 196.01(5), Stats., or within 100 feet of any other well used to provide water for human consumption.

  No public wells were identified within 1000 feet of the site and no private wells were identified within 100 feet of the site (refer to "Subsurface Investigation for Clark Station #562..." dated March 1994).

Based on the available site specific information NR 746.06 risk criteria have been evaluated and substantially met for this site; consequently it is our professional opinion that minimal risk to human health and/or the environment is present with respect to the release that occurred at the Clark Station #1363. A review of groundwater quality data indicates that dissolved petroleum hydrocarbons have impacted groundwater, however, empirical evidence indicates that natural attenuation is occurring beneath the site and will continue to effectively remediate the site to the extent possible.

Conclusion and Recommendation

The implementation of an aggressive remediation program has significantly reduced subsurface impacts to the extent practicable, and based on current information no significant risk to human health and/or the environment currently exists as a result of the past gasoline release at the site. The groundwater impact plume is generally stable and down gradient monitoring

wells are not impacted at concentration greater then NR 140 ESs or PALs. Biodegradation is active and will continue to reduce dissolved impacts remaining on-site. Sigma therefore recommends the Wisconsin Department of Natural Resources require No Further Action and grant Case Closure. Upon approval of Case Closure, the monitoring well network will be abandoned in accordance with NR 141. As groundwater impacts remain at concentrations above the established enforcement standards, it is understood that the WDNR and COMM will require the site and adjacent properties to be listed on the WDNR Geographic Information Systems database.

Table 1 (con't)

GROUNDWATER QUALITY RESULTS

CLARK STATION #0562

SUMPS

	Sample Location and Date																		
	S-1													S-2					
COMPOUND	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/30/2001	10/05/2000	04/02/2001	07/23/2001	ES	PAL
Benzene	**120**	36	**64**	1.8	**32**	**14**	**9**	<0.27	**42**	**105**	**38**	**100**	48	**280**	**460**	**650**	5	0.5
Ethylbenzene	160	30	95	5	150	35	23	0.38	2.2	5.5	36	37	35	35	100	1900	700	140
Toluene	57	17	27	1.6	15	2.2	7.6	0.53	8.4	1.5	15	250	210	250	450	8500	1000	200
Total Xylenes	1,200	380	680	40	550	134	20	3	39	3	144	270	221	370	1,030	9,600	10000	1000
1,3,5-Trimethylbenzene	**290**	27	**96**	12	**110**	13	5	<0.27	8	1	30	15	100	25	63	760	480	96
1,2,4-Trimethylbenzene	**1,300**	200	**880**	57	**790**	280	240	5	8	44	330	200	61	120	550	**3,200**	480	96
Methyl Tert Butyl Ether	<50	<10	<50	8.2	3.3	<0.44	<0.64	<0.32	3.0	1.5	6.6	130	56	42.0	25	**300**	60	12

Key:

All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

S-1 = Sumps located within the tank basin. Installed with tank installation

Q-1 = Groundwater extraction wells

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

TABLE 1 (Cont'd)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-9

COMPOUND	Sampling Date																		ES	PAL
	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2001	04/02/2001	07/23/2001	10/22/2001			
Benzene	<1.0	<1.0	<1.0	<1.0	Not	<1.0	NT	NT	<0.26	NT	<0.27	NT	NT	NT	<0.29	<0.45	<0.45		5	0.5
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	Sampled	<1.0	NT	NT	<0.24	NT	<0.32	NT	NT	NT	<0.57	<0.82	<0.82		700	140
Toluene	<1.0	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.21	NT	<0.27	NT	NT	NT	<0.13	<0.68	<0.68		1000	200
Total Xylenes	<1.0	<1.0	<1.0	<1.0		<3.0	NT	NT	<0.97	NT	<0.43	NT	NT	NT	<0.63	<2.47	<2.47		10000	1000
1,3,5-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.54	NT	<0.27	NT	NT	NT	<0.29	<0.94	<0.94		---	---
1,2,4-Trimethylbenzene	<1.0	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.86	NT	<0.27	NT	NT	NT	<0.34	<0.92	<0.92		---	---
Total Trimethylbenzene	<2.0	<2.0	<2.0	<2.0		<2.0	NT	NT	<1.40	NT	<0.54	NT	NT	NT	<0.63	<1.86	<1.86		480	96
Methyl Tert Butyl Ether	<10.0	<10.0	<10.0	<10.0		<10	NT	NT	<0.22	NT	<0.32	NT	NT	NT	<0.20	<0.43	<0.43		60	12
Gasoline Range Organics	<0.1	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		---	---
Lead - Soluble	<1.5	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT		15	1.5

Key: All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

BOLD = Concentrations above NR 140 ES

TABLE 1 (Cont.)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-8

COMPOUND	Sampling Date																			ES	PAL
	07/18/1995	08/30/1995	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	**2,260**	**1,190**	**2,100**	**444**	**331**	**127**	72	<25	<50	18	<6.5	<13	<6.8	<0.27	<1.3	<8.8	<7.2	<22	<11	5	0.5
Ethylbenzene	**2,130**	**1,300**	**3,280**	**1,660**	**2,350**	**2,380**	200	**2,100**	**2,000**	**1,700**	**1,400**	**1,600**	**2,100**	88	470	**1,900**	**1,600**	**2,500**	**1,700**	700	140
Toluene	**8,340**	**3,720**	**16,700**	**1,710**	**1,610**	676	79	280	**1,200**	390	930	490	470	2	13	750	49	270	110	1,000	200
Total Xylenes	**10,340**	5,780	**17,600**	8,110	8,200	6,480	4,800	8,700	**11,000**	5,900	6,800	8,700	8,900	147	2,260	**10,200**	9,200	**11,600**	7,900	10,000	1,000
1,3,5-Trimethylbenzene	349	199	681	211	563	632	420	330	460	270	260	520	330	6	110	450	750	890	350	---	---
1,2,4-Trimethylbenzene	1,650	840	2,470	916	1,500	2,550	1,500	980	1,600	1,200	1,200	2,100	1,900	70	390	2,000	3,300	4,000	2,000	---	---
Total Trimethylbenzene	**1,999**	**1,039**	**3,151**	**1,127**	**2,063**	**3,182**	**1,920**	**1,310**	**2,060**	**1,470**	**1,460**	**2,620**	**2,230**	76	**500**	**2,450**	**4,050**	**4,890**	**2,350**	480	96
Methyl Tert Sulyl Ether	<250	<50	<10	<10	72	<125	<50	<250	<500	<5.5	<5.5	<11	<8.0	<0.32	<1.1	<9.0	<5.0	<22	<11	60	12
Gasoline Range Organics	43,600	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	4	NT	<1.5	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key: All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1998

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

BOLD = Concentrations above NR 140 ES

TABLE 1 (Cont.)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-2

COMPOUND	Sampling Date																				ES	PAL
	04/28/1993	06/29/1994	10/31/1994	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	ND	16	<0.6	5.6	10.5	2.8	2.7	<1.0	3.1	<1.0	<0.26	<0.26	<0.26	<0.27	<0.27	<0.26	<0.35	<0.29	<0.45	<0.45	5	0.5
Ethylbenzene	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.24	<0.24	<0.24	<0.32	<0.32	<0.24	<0.37	<0.57	<0.82	<0.82	700	140
Toluene	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.21	0.2	<0.21	<0.27	<0.27	0.2	<0.38	<0.13	<0.68	<0.68	1,000	200
Total Xylenes	ND	<3.0	<1.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<0.97	<0.97	<0.97	<0.43	<0.43	<0.97	<0.76	<0.63	<2.47	<2.47	10,000	1,000
1,3,5-Trimethylbenzene	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.54	<0.54	<0.54	<0.27	<0.27	<0.54	<0.37	<0.29	<0.94	<0.94	—	—
1,2,4-Trimethylbenzene	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.86	<0.86	<0.86	<0.22	<0.22	<0.86	<0.37	<0.34	<0.92	<0.92	480	96
Total Trimethylbenzene	ND	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<1.40	<1.40	<1.40	<0.49	<0.49	<1.40	<0.74	<0.63	<1.86	<1.86	480	96
Methyl Tert Butyl Ether	ND	250	130	50.5	11.4	11.2	29.5	<50	<10	15.0	11.0	14.0	4.7	5.4	3.8	4.4	4.1	1.2	2.7	1.3	60	12
Gasoline Range Organics	<0.1	0.16	0.07	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	—	—
Lead - Soluble	<5.0	<3.0	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key: All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

NT = Not Tested

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BOLD = Concentrations exceed NR 140 ES

TABLE 1 (Cont.)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-6

COMPOUND	Sampling Date																					ES	PAL
	07/16/1992	04/26/1993	06/29/1994	10/31/1994	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	**10,000**	**9,000**	**16,000**	**19,000**	**12,000**	**7,890**	**2,480**	**824**	**1,100**	**380**	**430**	**2,300**	**3,000**	**630**	**3,600**	**1,300**	**4,200**	**110**	**130**	**99**	**560**	5	0.5
Ethylbenzene	300	90	**930**	**1,200**	**2,340**	474	140	398	54	29	81	58	62	130	190	140	110	49	68	240	180	700	140
Toluene	250	180	310	320	277	60.8	127	62.9	<10	13	<10	<5.2	19	8	13	5	27	2.2	38	4.6	11	1,000	200
Total Xylenes	1,580	370	4,400	4,610	8,500	1,320	431	942	<30	1100	92	11	24	141	54	5.4	<48	16.8	225	281	39.3	10,000	1,000
1,3,5-Trimethylbenzene	<250	ND	300	380	1,000	265	141	83	24	210	64	<14	<14	80	<5.4	<2.7	<27	0.4	2.1	<1.9	<4.7	---	---
1,2,4-Trimethylbenzene	<250	ND	1,200	1,400	3,410	822	365	1,140	23	490	280	28	<22	58	38	19	<43	19	11	400	130	---	---
Total Trimethylbenzene	<500	ND	**1,500**	**1,780**	**4,410**	**1,087**	**506**	**1,203**	47	**700**	**344**	28	<36	138	38	19	<70	19	13	400	130	480	96
Methyl Tert Butyl Ether	<250	NT	**340**	**150**	<10	27.1	34	<125	<50	<50	<100	30	15	2.1	6.8	6.9	<11	0.69	<0.20	<0.86	<2.1	60	12
Gasoline Range Organics	16	16	29	31	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	<4.0	<5.0	<3.0	<2.0	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key:
All results in micrograms per liter (ug/l) except GRO that is in milligrams per liter (mg/l)
Groundwater recovery system started on October 21, 1996
Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)
Shaded = Exceeds WDNR Enforcement Standard
ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
NT = Not Tested
--- = No Establish Standard
FP = Free Product in well
BOLD = Concentrations exceed NR 140

TABLE 1 (Cont.)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-5

COMPOUND	Sampling Date																					ES	PAL
	07/16/1992	04/26/1993	09/29/1994	10/31/1994	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	6,900	2,600	3,600	5,400	4,480	4,300	65.7	3,340	4,800	3,800	750	1,800	1,800	1,300	1,800	1,800	880	1,100	910	680	870	5	0.5
Ethylbenzene	2,200	630	1,200	1,800	2,060	1,650	1,680	1,620	2,100	1,900	430	1,000	1,500	1,000	1,400	1,400	660	1,300	1,200	1,400	1,900	700	140
Toluene	1,800	5,700	3,200	3,400	1,110	644	965	830	500	1,000	59	210	430	210	410	320	130	160	122	140	260	1,000	200
Total Xylenes	12,700	3,700	6,600	9,100	8,040	6,200	5,700	6,530	7,600	7,100	820	2,970	5,040	3,510	4,960	4,700	2,600	4,340	4,050	4,100	6,200	10,000	1,000
1,3,5-Trimethylbenzene	1,300	340	200	300	368	288	305	433	550	400	81	240	310	210	240	250	180	280	230	310	370	---	---
1,2,4-Trimethylbenzene	2,100	410	730	1,000	1,320	964	1,160	1,600	1,700	1,300	250	800	1,100	700	960	890	550	890	880	1,000	1,500	---	---
Total Trimethylbenzene	3,400	750	930	1,300	1,688	1,252	1,465	2,033	2,250	1,700	331	1,040	1,410	910	1,200	1,140	730	1,170	1,110	1,310	1,870	480	96
Methyl Tert Butyl Ether	<1,000	NT	<100	120	<10	<10	282	<250	<500	<500	<100	9.8	22	<5.5	<8.0	<8.4	<2.2	14	4.2	22	<8.6	60	12
Gasoline Range Organics	51	31	25	36	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	4	<5.0	3.4	4.2	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key: All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

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PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

NT = Not Tested

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BOLD = Concentrations exceed NR 140 ES

TABLE 1 (Cont.)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-2

COMPOUND	Sampling Date																					ES	PAL
	07/16/1992	04/26/1993	06/29/1994	10/31/1994	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/01/1998	07/23/1998	11/24/1998	03/30/1999	07/29/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	29,000	15,000	15,000	FP	FP	NS	FP	892	Not	190	59	1,400	120	150	320	1,500	1,000	340	27	21	290	5	0.5
Ethylbenzene	1,500	1,400	1,200		(0.04')			808	Sampled	170	48	480	120	460	360	330	210	260	120	110	160	700	140
Toluene	35,000	34,000	28,000					7,400	Could not	2,500	740	1,400	520	820	840	660	460	340	160	83	120	1,000	200
Total Xylenes	8,000	14,000	23,000					22,100	locate	5,700	1,500	9,100	6,600	12,000	12,100	10,000	7,000	6,900	4,200	3,800	4,400	10,000	1,000
1,3,5-Trimethylbenzene	<1.0	1,300	800					1,820	due to	1,500	360	850	1,200	1,200	1,200	1,100	1,000	1,200	1,300	1,300	1,600	---	---
1,2,4-Trimethylbenzene	8	1,500	3,500					5,780	snow	3,500	650	2,400	2,900	3,700	4,100	3,100	2,500	3,000	3,100	2,500	3,400	---	---
Total Trimethylbenzene	8	2,800	4,300					8,600		5,000	1,010	3,250	4,100	4,900	5,300	4,200	3,500	4,200	4,400	3,800	5,000	480	96
Methyl Tert Butyl Ether	68	ND	<200					<500		<250	<100	8.5	<11	<5.5	<16	<8.4	<4.4	16.0	<4.0	16.0	<11	60	12
Gasoline Range Organics	86	81	106					NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	11	80	<3.0					NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key: All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

Shaded = Exceeds WDNR Enforcement Standard

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BOLD = Concentrations exceed NR 140 ES

TABLE 1 (Cont.)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-3

COMPOUND	Sampling Date																					ES	PAL
	07/16/1992	04/26/1993	06/29/1994	10/31/1994	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	900	ND	350	210	2.9	1.0	<1.0	<1.0	Not	<1.0	NT	NT	1.4	NT	<0.27	NT	NT	NT	<0.29	<0.45	NT	5	0.5
Ethylbenzene	750	ND	510	170	<1.0	<1.0	<1.0	<1.0	Sampled	3.3	NT	NT	<0.24	NT	<0.32	NT	NT	NT	<0.57	<0.82	NT	700	140
Toluene	<5.0	ND	34	13	<1.0	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.21	NT	<0.27	NT	NT	NT	<0.13	<0.68	NT	1,000	200
Total Xylenes	3,200	7	1,100	245.4	<1.0	<3.0	<3.0	<3.0		<3.0	NT	NT	<0.97	NT	<0.43	NT	NT	NT	<0.63	<2.47	NT	10,000	1,000
1,3,5-Trimethylbenzene	<50	ND	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.54	NT	<0.27	NT	NT	NT	<0.29	<0.94	NT	---	---
1,2,4-Trimethylbenzene	<50	ND	8	2.5	<1.0	<1.0	<1.0	<1.0		4.3	NT	NT	<0.86	NT	<0.27	NT	NT	NT	<0.34	<0.92	NT	---	---
Total Trimethylbenzenes	<100	ND	8	2.5	<2.0	<2.0	<2.0	<2.0		4.3	NT	NT	<1.40	NT	<0.54	NT	NT	NT	<0.63	<1.86	NT	480	96
Methyl Tert Butyl Ether	<50	ND	<5.0	8.8	<10	<10	<10	<10		<10	NT	NT	1.6	NT	<0.32	NT	NT	NT	0.64	<0.43	NT	60	12
Gasoline Range Organics	7	<0.1	3.5	1.1	ND	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	<4.0	<5.0	<3.0	<2.0	ND	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key: All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

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PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

NT = Not Tested

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BOLD = Concentrations exceed NR 140 ES

TABLE 1 (cont'd)
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-6

COMPOUND	Sampling Date																					ES	PAL
	07/16/1992	04/26/1993	06/29/1994	10/31/1994	10/11/1995	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/29/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	<1.0	ND	1	<0.6	<1.0	<1.0	<1.0	<1.0	Not	<1.0	NT	NT	<0.26	NT	<0.27	NT	NT	NT	<0.29	<0.45	<0.45	5	0.5
Ethylbenzene	<1.0	ND	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	Sampled	<1.0	NT	NT	<0.24	NT	<0.32	NT	NT	NT	<0.57	<0.82	<0.82	700	140
Toluene	<1.0	ND	11	<1.0	2.2	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.21	NT	<0.27	NT	NT	NT	<0.13	<0.68	<0.68	1000	200
Total Xylenes	<1.0	ND	28	<1.0	7.3	<3.0	<3.0	<3.0		<3.0	NT	NT	<0.97	NT	<0.43	NT	NT	NT	<0.63	<2.47	<2.47	10000	1000
1,3,5-Trimethylbenzene	<1.0	ND	2.8	<1.0	1.5	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.54	NT	<0.27	NT	NT	NT	<0.29	<0.94	<0.94	---	---
1,2,4-Trimethylbenzene	<1.0	ND	10	<1.0	4.3	<1.0	<1.0	<1.0		<1.0	NT	NT	<0.86	NT	<0.27	NT	NT	NT	<0.34	<0.92	<0.92	---	---
Total Trimethylbenzene	<2.0	ND	13	<2.0	5.8	<2.0	<2.0	<2.0		<2.0	NT	NT	<1.4	NT	<0.54	NT	NT	NT	<0.63	<1.86	<1.86	480	96
Methyl Tert Butyl Ether	3	ND	<1.0	<1.0	<10	<10	<10	<10		<10	NT	NT	<0.22	NT	<0.32	NT	NT	NT	<0.20	<0.43	<0.43	60	12
Gasoline Range Organics	0	<0.1	0.11	<50	NT	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	<4.0	<5.0	<3.0	<2.0	NT	NT	NT	NT		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key:

All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

BOLD = Concentrations exceed NR 140 ES

TABLE 1
GROUNDWATER QUALITY RESULTS
CLARK STATION #0562
MONITORING WELL MW-1

COMPOUND	Sampling Date																				ES	PAL
	07/16/1992	04/26/1993	08/29/1994	10/31/1994	10/11/1996	02/21/1997	05/21/1997	08/28/1997	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/22/2001		
Benzene	8,100	2,800	FP	FP	FP	FP	FP	417	240	<200	<250	71	170	68	38	62	46	27	28	<56	<22	5.0	0.5
Ethylbenzene	3,100	1,100			(0.25')	(0.59)		2,000	2,100	1,400	1,100	390	520	450	790	140	230	540	420	1,000	740	700	140
Toluene	10,000	20,000						13,100	4,500	21,000	14,000	6,900	4,000	8,700	11,000	990	3,200	3,500	3,200	9,500	6,000	1,000	200
Total Xylenes	16,900	9,000						17,800	24,000	24,000	22,000	12,100	11,800	13,500	15,500	4,600	6,900	10,900	9,500	14,400	12,800	10,000	1,000
1,3,5-Trimethylbenzene	<100	1,000						1,370	1,700	1,500	1,800	1,100	1,500	1,500	1,300	1,800	1,300	1,600	1,600	1,900	1,600	---	---
1,2,4-Trimethylbenzene	1,300	1,000						5,450	5,300	5,000	4,900	2,700	3,700	3,700	3,700	2,800	1,700	2,500	2,600	3,400	2,900	---	---
Total Trimethylbenzenes	1,300	2,000						6,820	7,000	6,500	6,700	3,800	5,200	5,200	5,000	4,600	3,000	4,100	4,200	5,300	4,500	480	96
Methyl Tert Butyl Ether	1,500	NT						<500	<250	<2000	<100	<11	18	<22	<32	<8.0	<4.4	10	<5.0	<54	<22	60	12
Gasoline Range Organics	40	54						NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	---	---
Lead - Soluble	69	70						NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	15	1.5

Key:
All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)
Groundwater recovery system started on October 21, 1996
Remediation system shutdown Spring of 2000 (before 5/24/2000 sampling)
Shaded = Exceeds WDNR Enforcement Standard
ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard
PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit
NT = Not Tested
--- = No Establish Standard
FP = Free Product in well
BOLD = Concentrations above NR 140 ES

Table 1 (con't)

GROUNDWATER QUALITY RESULTS

CLARK STATION #0562

SUMPS

	Sample Location and Date																	
	S-3			S-4														
COMPOUND	10/05/2000	04/02/2001	07/23/2001	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	02/28/2000	05/24/2000	10/05/2000	04/02/2001	07/23/2001	10/30/2001	ES	PAL
Benzene	46	220	1100	67	55	30	1.2	21	2.8	1.5	1.1	2	0.91	5.5	140	30	5	0.5
Ethylbenzene	2.7	53	4400	18	1.6	4.2	0.46	37	<0.24	<0.24	0.63	0.33	<0.37	1.9	9.2	32	700	140
Toluene	23	220	18000	1.3	31	9.1	<0.21	0.83	0.29	<0.21	<0.27	0.35	<0.38	0.23	440	200	1000	200
Total Xylenes	35	500	21200	5.3	<3.0	8.3	<0.97	11	<0.97	<0.97	<0.43	0.37	<0.76	<1.20	113	240	10000	1000
1,3,5-Trimethylbenzene	6.2	14	1000	<1.0	<1.0	<1.0	<.054	<0.54	<0.54	<0.54	<0.27	<0.54	<0.37	<0.29	<2.3	7.5	480	96
1,2,4-Trimethylbenzene	7.7	99	4100	3.2	2.3	<1.0	<0.86	3	<0.86	<0.86	<0.22	<0.86	<0.37	0.54	<2.3	30	480	96
Methyl Tert Butyl Ether	13	13	720	<50	<10	<10	<0.22	1.3	<0.22	<0.22	<0.32	<0.22	<0.36	2.7	200	59	60	12

Key:

All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

S-1 = Sumps located within the tank basin. Installed with tank installation

Q-1 = Groundwater extraction wells

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

Table 1 (con't)

GROUNDWATER QUALITY RESULTS

CLARK STATION #0562

RECOVERY WELLS

	Sample Location and Date									
	Q-1									
COMPOUND	02/18/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	04/02/2001	07/23/2001	ES	PAL
Benzene	<25	35	84	<0.26	110	8	NT	<4.5	5	0.5
Ethylbenzene	32	22	61	<0.24	170	11	NT	100	700	140
Toluene	170	18	7.6	<0.21	120	1.6	NT	15	1000	200
Total Xylenes	6,500	86	181	<0.97	3,100	117	NT	592	10000	1000
1,3,5-Trimethylbenzene	1,200	17	20	<0.54	600	23	NT	72	480	96
1,2,4-Trimethylbenzene	1,800	27	30	<0.86	1,600	86	NT	1,000	480	96
Methyl Tert Butyl Ether	<130	78	57	<0.22	8	100	NT	<4.3	60	12

Key:

All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

S-1 = Sumps located within the tank basin. Installed with tank installation

Q-1 = Groundwater extraction wells

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

Table 1 (con't)

GROUNDWATER QUALITY RESULTS

CLARK STATION #0562

RECOVERY WELLS

	Sample Location and Date												
	Q-2									Q-3			
COMPOUND	02/18/1998	05/19/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	04/02/2001	07/23/2001	04/02/2001	07/23/2001	ES	PAL
Benzene	700	400	7,500	5,100	4,800	1,200	4,100	1,200	590	230	20	5	0.5
Ethylbenzene	13	41	640	490	350	260	720	220	140	42	16	700	140
Toluene	54	270	<100	69	38	54	150	8	6.9	45	14	1000	200
Total Xylenes	360	3,500	1,300	921	537	376	1,491	12	<12.4	395	243	10000	1000
1,3,5-Trimethylbenzene	11	530	<100	<14	<27	<5.4	9.4	<2.9	<4.7	6.1	16	480	96
1,2,4-Trimethylbenzene	140	1,100	440	85	73	87	72	13	9	180	140	480	96
Methyl Tert Butyl Ether	91	<100	<1000	34	16	22	87	<2.0	<2.1	5.3	<0.43	60	12

Key:

All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

Shaded = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

S-1 = Sumps located within the tank basin. Installed with tank installation

Q-1 = Groundwater extraction wells

NT = Not Tested

— = No Establish Standard

FP = Free Product in well

Table 1 (cont'd)

GROUNDWATER QUALITY RESULTS

CLARK STATION #0562

RECOVERY WELLS

	Sample Location and Date									
	Q-4									
Compound	02/18/1998	07/23/1998	11/24/1998	03/24/1999	07/20/1999	10/11/1999	04/02/2001	07/23/2001	ES	PAL
Benzene	**3.9**	**1,500**	**890**	**360**	**290**	**740**	**180**	**120**	5	0.5
Ethylbenzene	2	270	530	320	670	300	210	340	700	140
Toluene	1	420	720	520	**8,000**	260	**1,800**	790	1000	200
Total Xylenes	22	2,000	3,510	2,420	8,400	1,190	3,200	3,020	10000	1000
1,3,5-Trimethylbenzene	5.4	230	**100**	74	**430**	35	170	150	480	96
1,2,4-Trimethylbenzene	8.3	<25	**390**	250	**1,400**	190	**720**	**940**	480	96
Methyl Tert Butyl Ether	**67**	**<250**	3	14	<22	10	<4.0	<4.3	60	12

Key:

All results in micrograms per liter (ug/l), except GRO that is in milligrams per liter (mg/l)

Groundwater recovery system started on October 21, 1996

bold = Exceeds WDNR Enforcement Standard

ES = Wisconsin Administrative Code, Chapter NR 140 Enforcement Standard

PAL = Wisconsin Administrative Code, Chapter NR 140 Preventive Action Limit

S-1 = Sumps located within the tank basin. Installed with tank installation

Q-1 = Groundwater extraction wells

NT = Not Tested

--- = No Establish Standard

FP = Free Product in well

TABLE 2
ELEVATION SURVEY DATA
CLARK STATION #0562
4751 NORTH SANTA MONICA BOULEVARD
MILWAUKEE, WI

Well Number	Date	TOC Elevation	Static water Level (From TOC)	Water Table Elevation (ft)
MW-1	10/22/2001	643.13	10.24	632.89
	07/23/2001	643.13	9.41	633.72
	04/02/2001	643.13	9.2	633.93
	10/05/2000	643.13	9.1	634.03
	05/24/2000	643.13	9.13	634.00
	02/28/2000	643.13	11.37	631.76
	10/11/1999	643.13	10.22	632.91
	07/20/1999	643.13	8.71	634.42
	03/24/1999	643.13	10	633.13
	11/24/1998	643.13	10.57	632.56
	07/23/1998	643.13	9.86	633.27
	05/19/1998	643.13	9.12	634.01
	02/18/1998	643.13	10.56	632.57
	08/28/1997	643.13	9.55	633.58
	07/01/1997	643.13	8.38	634.75
	05/21/1997	643.13	—	
	02/21/1997	643.13	11.53	631.60
	10/11/1996	643.13	10.85	632.28
	10/31/1994	100.45	10.00	90.45
	06/29/1994	100.45	10.05	90.40
	04/02/1993	100.45	7.58	92.87
	02/05/1993	100.45	10.31	90.14
	10/12/1992	100.45	10.78	89.67
	07/16/1992	100.45	9.96	90.49
MW-2	10/22/2001	643.65	10.93	632.72
	07/23/2001	643.65	9.88	633.77
	04/02/2001	643.65	8.82	634.83
	10/05/2000	643.65	9.51	634.14
	05/24/2000	643.66	9.01	634.65
	02/28/2000	643.65	11.86	631.79
	10/11/1999	643.65	10.96	632.69
	07/20/1999	643.65	9.30	634.35
	03/24/1999	643.65	9.55	634.10
	11/24/1998	643.65	11.07	632.58
	07/23/1998	643.65	10.45	633.20
	05/19/1998	643.65	8.45	635.20
	02/18/1998	NT	NT	NT
	08/28/1997	643.65	10.09	633.56
	07/01/1997	643.65	7.81	635.84
	05/21/1997	643.65	—	
	02/21/1997	643.65	—	
	10/11/1996	643.65	11.33	632.32
	10/31/1994	100.96	12.08	88.88
	06/29/1994	100.96	10.57	90.39
	04/02/1993	100.96	6.98	93.98
	02/05/1993	100.96	10.48	90.48
	10/12/1992	100.96	11.39	89.57
	07/16/1992	100.96	10.44	90.52
MW-3	10/22/2001	642.61	9.56	633.05
	07/23/2001	642.61	8.68	633.93
	04/02/2001	642.61	8.48	634.13
	10/05/2000	642.61	8.52	634.09
	05/24/2000	642.61	8.47	634.14
	02/28/2000	642.61	—	
	10/11/1999	642.61	9.58	633.03
	07/20/1999	642.61	8.04	634.57
	03/24/1999	642.61	9.30	633.31
	11/24/1998	642.61	10.06	632.55
	07/23/1998	642.61	10.21	632.40
	05/19/1998	642.61	8.21	634.40
	02/18/1998	642.61	9.52	633.09
	08/28/1997	642.61	9.01	633.60
	07/01/1997	642.61	7.74	634.87
	05/21/1997	642.61	9.17	633.44
	02/21/1997	642.61	10.28	632.33
	10/11/1996	642.61	9.83	632.78
	10/31/1994	99.93	10.68	89.25
	06/29/1994	99.93	9.05	90.88
	04/02/1993	99.93	6.74	93.19
	02/05/1993	99.93	9.74	90.19
	10/12/1992	99.93	10.11	89.82
	07/16/1992	99.93	9.34	90.59

KEY:
TOC = Top of well casing
ft = feet below ground surface
Note: Site was surveyed to a USGS benchmark on July 3, 1997

TABLE 2 (Cont.)
ELEVATION SURVEY DATA
CLARK STATION #0562
4751 NORTH SANTA MONICA BOULEVARD
MILWAUKEE, WI

Well Number	Date	TOC Elevation	Static water Level (From TOC)	Water Table Elevation (ft)
MW-4	10/22/2001	643.25	10.57	632.68
	07/23/2001	643.25	9.57	633.68
	04/02/2001	643.25	8.31	634.94
	10/05/2000	643.25	8.95	634.30
	05/24/2000	643.25	7.99	635.26
	02/28/2000	643.25	---	
	10/11/1999	643.25	10.5	632.75
	07/20/1999	643.25	8.85	634.40
	03/24/1999	643.25	9.53	633.72
	11/24/1998	643.25	10.55	632.70
	07/23/1998	643.25	7.16	636.09
	05/19/1998	643.25	5.15	638.10
	02/18/1998	643.25	10.43	632.82
	08/28/1997	643.25	9.53	633.72
	07/01/1997	643.25	7.89	635.36
	05/21/1997	643.25	8.37	634.88
	02/21/1997	643.25	10.58	632.67
	10/11/1996	643.25	10.67	632.58
	10/31/1994	100.53	11.30	89.23
	06/29/1994	100.53	10.04	90.49
	04/02/1993	100.53	5.79	94.74
	02/05/1993	100.53	9.72	90.81
	10/12/1992	100.53	10.96	89.57
	07/16/1992	100.53	9.98	90.55
MW-5	10/22/2001	643.99	10.12	633.87
	07/23/2001	643.99	9.42	634.57
	04/02/2001	643.99	9.39	634.60
	10/05/2000	643.99	9.40	634.59
	05/24/2000	643.99	9.64	634.35
	02/28/2000	643.99	11.20	632.79
	10/11/1999	643.99	10.19	633.80
	07/20/1999	643.99	9.07	634.92
	03/24/1999	643.99	10.11	633.88
	11/24/1998	643.99	10.63	633.36
	07/23/1998	643.99	9.87	634.12
	05/19/1998	643.09	9.56	633.53
	02/18/1998	643.09	10.61	632.48
	08/28/1997	643.09	9.75	633.34
	07/01/1997	643.09	8.98	634.11
	05/21/1997	643.09	10.53	632.56
	02/21/1997	643.09	11.04	632.05
	10/11/1996	643.09	10.50	632.59
	10/31/1994	100.46	11.40	89.06
	06/29/1994	100.46	10.19	90.27
	04/02/1993	100.46	8.43	92.03
	02/05/1993	100.46	10.56	89.90
	10/12/1992	100.46	10.90	89.56
	07/16/1992	100.46	---	---
MW-6	10/22/2001	642.36	9.82	632.54
	07/23/2001	642.36	8.99	633.37
	04/02/2001	642.36	8.25	634.11
	10/05/2000	642.36	8.20	634.16
	05/24/2000	642.36	8.20	634.16
	02/28/2000	642.36	10.56	631.80
	10/11/1999	642.36	9.83	632.53
	07/20/1999	642.36	8.50	633.86
	03/24/1999	642.36	9.25	633.11
	11/24/1998	642.36	9.88	632.48
	07/23/1998	642.36	9.32	633.04
	05/19/1998	642.36	7.82	634.54
	02/18/1998	642.36	9.43	632.93
	08/28/1997	642.36	9.05	633.31
	07/01/1997	642.36	9.18	633.18
	05/21/1997	642.36	8.63	633.73
	02/21/1997	642.36	10.15	632.21
	10/11/1996	642.36	9.99	632.37
	10/31/1994	99.66	10.64	89.02
	06/29/1994	99.66	5.47	94.19
	04/02/1993	99.66	6.42	93.24
	02/05/1993	99.66	9.35	90.31
	10/12/1992	99.66	10.20	89.46
	07/16/1992	99.66	--	---

KEY:
TOC = Top of well casing
ft = feet below ground surface
Note: Site was surveyed to a USGS benchmark on July 3, 1997

Table 2 (Cont.)
ELEVATION SURVEY DATA
CLARK STATION #0562
4751 NORTH SANTA MONICA BOULEVARD
MILWAUKEE, WI

Well Number	Date	TOC Elevation	Static water Level (From TOC)	Water Table Elevation (ft)
MW-7	10/22/2001	642.12	9.69	632.43
	07/23/2001	642.12	8.87	633.25
	04/02/2001	642.12	8.24	633.88
	10/05/2000	642.12	8.55	633.57
	05/24/2000	642.12	8.1	634.02
	02/28/2000	642.12	10.44	631.68
	10/11/1999	642.12	9.72	632.40
	07/20/1999	642.12	8.46	633.66
	03/24/1999	642.12	9.17	632.95
	11/24/1998	642.12	9.73	632.39
	07/23/1998	642.12	9.16	632.96
	05/19/1998	642.12	7.99	634.13
	02/18/1998	642.12	9.57	632.55
	08/28/1997	642.12	8.95	633.17
	07/01/1997	642.12	7.24	634.88
	05/21/1997	642.12	8.60	633.52
	02/21/1997	642.12	9.91	632.21
	10/11/1996	642.12	9.81	632.31
	10/31/1994	99.41	10.44	88.97
	06/29/1994	99.41	9.35	90.06
	04/02/1993	99.41	6.62	92.79
	02/05/1993	99.41	---	---
	10/12/1992	99.41	---	---
	07/16/1992	99.41	---	---
MW-8	10/22/2001	641.68	9.17	632.51
	07/23/2001	641.68	8.27	633.41
	04/02/2001	641.68	7.39	634.29
	10/05/2000	641.68	7.87	633.81
	05/24/2000	641.68	7.22	634.46
	02/28/2000	641.68	9.89	631.79
	10/11/1999	641.68	9.21	632.47
	07/20/1999	641.68	7.81	633.87
	03/24/1999	641.68	8.45	633.23
	11/24/1998	641.68	9.20	632.48
	07/23/1998	641.68	8.64	633.04
	05/19/1998	641.68	7.21	634.47
	02/18/1998	641.68	9.05	632.63
	08/28/1997	641.68	8.37	633.31
	07/01/1997	641.68	6.21	635.47
	05/21/1997	641.68	8.15	633.53
	02/21/1997	641.68	9.37	632.31
	10/11/1996	641.68	9.35	632.33
	08/30/1995	641.68	8.72	632.96
MW-9	10/22/2001	641.37	8.94	632.43
	07/23/2001	641.37	7.99	633.38
	04/02/2001	641.37	7.26	634.11
	10/05/2000	641.37	7.71	633.66
	05/24/2000	641.37	7.08	634.29
	02/28/2000	641.37	9.65	631.72
	10/11/1999	641.37	9.00	632.37
	07/20/1999	641.37	7.67	633.70
	03/24/1999	641.37	8.39	632.98
	11/24/1998	641.37	8.95	632.42
	07/23/1998	641.37	9.34	632.03
	05/19/1998	641.37	7.09	634.28
	02/18/1998	641.37	8.80	632.57
	08/28/1997	641.37	8.15	633.22
	07/01/1997	641.37	6.18	635.19
	05/21/1997	641.37	8.00	633.37
	02/21/1997	641.37	9.08	632.29
	10/11/1996	641.37	9.14	632.23

KEY:
TOC = Top of well casing
ft = feet below ground surface
Note: Site was surveyed to a USGS benchmark on July 3, 1997

Table 2 (cont.)
ELEVATION SURVEY DATA
CLARK STATION #0562
4751 NORTH SANTA MONICA BOULEVARD
MILWAUKEE, WI

Well Number	Date	TOC Elevation	Static water Level (From TOC)	Water Table Elevation (ft)
Q-1	02/18/1998	642.3	18.21	624.09
	05/19/1998	642.30	NT	NT
	07/23/1998	642.30	17.52	624.78
	11/24/1998	642.30	9.84	632.46
	03/24/1999	642.30	8.31	633.99
	07/20/1999	642.30	8.17	634.13
	10/11/1999	642.30	9.78	632.52
	02/28/2000	642.30	11.81	630.49
	05/24/2000	642.30	NT	NT
	10/05/2000	642.30	NT	NT
	04/02/2001	642.30	NT	NT
	07/23/2001	642.30	7.21	635.09
	10/22/2001	642.30	NT	NT
Q-2	02/18/1998	642.40	10.86	631.54
	05/19/1998	642.40	6.73	635.67
	07/23/1998	642.40	10.91	631.49
	11/24/1998	642.40	9.95	632.45
	03/24/1999	642.40	9.28	633.12
	07/20/1999	642.40	8.53	633.87
	10/11/1999	642.40	9.87	632.53
	02/28/2000	642.40	10.96	631.44
	05/24/2000	642.40	NT	NT
	10/05/2000	642.40	NT	NT
	04/02/2001	642.40	8.33	634.07
	07/23/2001	642.40	8.99	633.41
	10/22/2001	642.40	9.81	632.59
Q-3	02/18/1998	643.04	NT	NT
	05/19/1998	643.04	NT	NT
	07/23/1998	643.04	9.85	633.19
	11/24/1998	643.04	NT	NT
	03/24/1999	643.04	NT	NT
	07/20/1999	643.04	NT	NT
	02/28/2000	643.04	NT	NT
	05/24/2000	643.04	NT	NT
	10/05/2000	643.04	NT	NT
	04/02/2001	643.04	8.92	634.12
	07/23/2001	643.04	9.28	633.76
	10/22/2001	643.04	NT	NT
Q-4	02/18/1998	642.62	19.20	623.42
	05/19/1998	642.62	NT	NT
	07/23/1998	642.62	21.35	621.27
	11/24/1998	642.62	10.24	632.38
	03/24/1999	642.62	9.72	632.90
	07/20/1999	642.62	8.45	634.17
	10/11/1999	642.62	9.81	632.81
	02/28/2000	642.62	11.81	630.81
	05/24/2000	642.62	NT	NT
	10/05/2000	642.62	NT	NT
	04/02/2001	642.62	8.87	633.75
	07/23/2001	642.62	8.92	633.70
	10/22/2001	642.62	9.74	632.88

KEY:
TOC = Top of well casing
ft = feet below ground surface
Note: Site was surveyed to a USGS benchmark on July 3, 1997

Table 3
Conductivity, Dissolved Oxygen, pH and Redox Potential Readings
Clark Station #0562
4751 North Santa Monica Boulevard, Milwaukee, WI

Well Number	Depth to Water	Conductivity uS	pH	Redox Potential mV	Dissolved Oxygen mg/l	Ferrous Iron (mg/l)	Temp Deg. C	Date Measured
MW-1	10.85	NT	NT	NT	NT	NT	NT	10/21/1996
	11.53	NT	NT	NT	NT	NT	NT	02/21/1997
	NT	NT	NT	NT	NT	NT	NT	05/21/1997
	9.55	1941	7.27	NT	0.33	NT	15.1	08/28/1997
	10.56	3930	7.1	-7.1	0.22	3	9.0	02/18/1998
	9.12	3510	7.2	+45.7	0.42	3	13.1	05/19/1998
	9.86	2410	6.9	+35.1	0.31	3.1	14.6	07/23/1998
	10.57	3190	NT	-75.4	0.2	2.2	12.6	11/24/1998
	10	NT	NT	NT	0.2	NT	NT	03/24/1999
	8.71	NT	NT	NT	0.19	NT	NT	07/20/1999
	10.22	NT	NT	NT	0.2	NT	NT	10/11/1999
	11.37	NT	NT	NT	0.18	NT	NT	02/28/2000
	9.13	NT	NT	NT	0.27	NT	NT	05/24/2000
	9.1	NT	NT	NT	0.17	NT	NT	10/05/2000
	9.2	NT	NT	NT	0.16	NT	NT	04/02/2001
	9.41	NT	NT	-79.8	0.24	NT	NT	07/23/2001
	10.24	NT	7	-171.6	0.16	2.8	16.2	10/22/2001
MW-2	11.33	NT	NT	NT	NT	NT	NT	10/21/1996
	NT	NT	NT	NT	NT	NT	NT	02/21/1997
	NT	NT	NT	NT	NT	NT	NT	05/21/1997
	10.09	2100	7.09	NT	0.47	NT	13.2	08/28/1997
		Not tested, unable to find due to snow cover				NT	NT	02/18/1998
	8.45	2310	7.1	+47.6	0.61	2	13.6	05/19/1998
	10.45	2320	7	+35.4	0.41	2.5	14.6	07/23/1998
	11.07	2880	7.1	-62.3	0.18	2.5	12.2	11/24/1998
	9.55	NT	NT	NT	0.19	NT	NT	03/24/1999
	9.3	NT	NT	NT	0.18	NT	NT	07/20/1999
	10.96	NT	NT	NT	0.19	NT	NT	10/11/1999
	11.86	NT	NT	NT	0.19	NT	NT	02/28/2000
	9.01	NT	NT	NT	0.35	NT	NT	05/24/2000
	9.51	NT	NT	NT	0.18	NT	NT	10/05/2000
	8.82	NT	NT	NT	0.19	NT	NT	04/02/2001
	9.88	NT	NT	-88.6	0.21	NT	NT	07/23/2001
	10.93	NT	7	-84.1	0.2	2.6	16.4	10/22/2001
MW-3	9.83	NT	7.6	NT	1.2	NT	13.0	10/21/1996
	10.28	NT	6.9	NT	1.33	NT	NT	02/21/1997
	9.17	3160	8	-22.7	3.92	NT	9.3	05/21/1997
	9.01	1996	7.27	NT	2.95	NT	13.5	08/28/1997
	9.52	NT	NT	NT	NT	NT	NT	02/18/1998
	8.21	4310	6.8	+221.8	2.35	0	10.3	05/19/1998
	10.21	3990	7.2	+188.4	1.89	0	14.5	07/23/1998
	10.06	NT	NT	NT	NT	NT	NT	11/24/1998
	9.3	NT	NT	NT	0.5	NT	NT	03/24/1999
	8.04	NT	NT	NT	0.88	NT	NT	07/20/1999
	9.58	NT	NT	NT	0.4	NT	NT	10/11/1999
	NT	NT	NT	NT	NT	NT	NT	02/28/2000
	8.47	NT	NT	NT	3.94	NT	NT	05/24/2000
	8.52	NT	NT	NT	0.36	NT	NT	10/05/2000
	8.48	NT	NT	NT	0.52	NT	NT	04/02/2001
	8.68	NT	NT	21.8	0.43	NT	NT	07/23/2001
	9.56	NT	NT	NT	0.29	NT	NT	10/22/2001

KEY:
mg/l = milligrams per liter
NT = Not Tested
mV = millivolts
Deg. C = Degrees Celcius
* Note - Depth of groundwater measured form the top of the well casing

Table 3 (Cont.)
Conductivity, Dissolved Oxygen, pH and Redox Potential Readings
Clark Station #0562
4751 North Santa Monica Boulevard, Milwaukee, WI

Well Number	Depth to Water	Conductivity uS	pH	Redox Potential mV	Dissolved Oxygen mg/l	Ferrous Iron (mg/l)	Temp Deg. C	Date Measured
MW-4	10.67	NT	7.1	NT	4.5	NT	11.5	10/21/1996
	10.58	NT	6.7	NT	2.3	NT	8.6	02/21/1997
	8.37	3670	7.7	-2.5	5.08	NT	8.3	05/21/1997
	9.53	1400	7.1	NT	1.34	NT	12.2	08/28/1997
	10.43	NT	NT	NT	NT	NT	NT	02/18/1998
	5.15	3910	7.4	+75.9	1.21	1.5	11.9	05/19/1998
	7.16	2430	6.9	+79.1	0.92	2	14.1	07/23/1998
	10.55	NT	NT	NT	NT	NT	NT	11/24/1998
	9.53	NT	NT	NT	0.22	NT	NT	03/24/1999
	8.65	NT	NT	NT	0.65	NT	NT	07/20/1999
	10.5	NT	NT	NT	0.64	NT	NT	10/11/1999
	NT	NT	NT	NT	NT	NT	NT	02/28/2000
	7.99	NT	NT	NT	2.72	NT	NT	05/24/2000
	8.95	NT	NT	NT	0.8	NT	NT	10/05/2000
	8.31	NT	NT	NT	0.47	NT	NT	04/02/2001
	9.57	NT	NT	36.9	0.45	NT	NT	07/23/2001
	10.57	NT	7	39.1	0.28	1.6	16.3	10/22/2001
MW-5	10.50	NT	7.0	NT	0	NT	13.5	10/21/1996
	11.04	NT	7.8	NT	0.3	NT	11.2	02/21/1997
	10.53	1694	7.8	-24.3	0.58	NT	11.0	05/21/1997
	9.75	2490	7	NT	0.35	NT	14.1	08/28/1997
	10.61	2400	7.4	-25.7	0.25	3	9.1	02/18/1998
	9.56	2900	7	-64.5	0.35	5	12.1	05/19/1998
	9.87	3140	6.9	-71.7	0.22	5.3	15.2	07/23/1998
	10.63	1838	6.9	-105.5	0.19	1.5	11.7	11/24/1998
	10.11	NT	NT	NT	0.19	NT	NT	03/24/1999
	9.07	NT	NT	NT	0.22	NT	NT	07/20/1999
	10.19	NT	NT	NT	0.22	NT	NT	10/11/1999
	11.2	NT	NT	NT	0.21	NT	NT	02/28/2000
	9.64	NT	NT	NT	0.24	NT	NT	05/24/2000
	9.4	NT	NT	NT	0.17	NT	NT	10/05/2000
	9.39	NT	NT	NT	0.26	NT	NT	04/02/2001
	9.42	NT	NT	-74.3	0.17	NT	NT	07/23/2001
	10.12	NT	7	-126.4	0.22	3.4	16.4	10/22/2001
MW-6	9.99	NT	7.2	NT	0	NT	14.2	10/21/1996
	10.15	NT	6.7	NT	0.3	NT	9.6	02/21/1997
	8.63	2170	7.3	+43.7	0.26	NT	10.3	05/21/1997
	9.05	4450	6.99	NT	0.3	NT	13.9	08/28/1997
	9.43	5590	7.3	+19.7	0.43	4	NT	02/18/1997
	7.62	6320	7.2	-34.1	0.45	2	12.4	05/19/1998
	9.32	6980	7.4	-29.1	0.26	2	15.6	07/23/1998
	9.88	4100	7	-100	0.21	2	11.7	11/24/1998
	9.25	NT	NT	NT	0.2	NT	NT	03/24/1999
	8.5	NT	NT	NT	0.8	NT	NT	07/20/1999
	9.83	NT	NT	NT	0.78	NT	NT	10/11/1999
	10.56	NT	NT	NT	0.9	NT	NT	02/28/2000
	8.2	NT	NT	NT	0.29	NT	NT	05/24/2000
	8.63	NT	NT	NT	0.38	NT	NT	10/05/2000
	8.25	NT	NT	NT	0.34	NT	NT	04/02/2001
	8.99	NT	NT	-38.9	0.76	NT	NT	07/23/2001
	9.82	NT	7	-175.7	0.15	2	16.1	10/22/2001

KEY:
mg/l = milligrams per liter
NT = Not Tested
mV = millivolts
Deg. C = Degrees Celcius
* Note - Depth of groundwater measured form the top of the well casing

Table 3 (Cont.)
Conductivity, Dissolved Oxygen, pH and Redox Potential Readings
Clark Station #0562
4751 North Santa Monica Boulevard, Milwaukee, WI

Well Number	Depth to Water	Conductivity uS	pH	Redox Potential mV	Dissolved Oxygen mg/l	Ferrous Iron (mg/l)	Temp Deg. C	Date Measured
MW-7	9.81	NT	7.2	NT	1.2	NT	14.7	10/21/1996
	9.91	NT	6.5	NT	0.7	NT	9.8	02/21/1997
	8.6	1870	7.2	+83.6	3.39	NT	10.4	05/21/1997
	8.95	4140	6.88	NT	0.32	NT	15.5	08/28/1997
	9.57	624	7.3	+29.6	0.86	1	NT	02/18/1998
	7.99	6990	6.8	+46.1	0.42	1	11.9	05/19/1998
	9.16	5420	7.6	+30.1	0.16	1.5	15.6	07/23/1998
	9.73	1210	7	+47.6	1.3	0	NT	11/24/1998
	9.17	NT	NT	NT	0.8	NT	NT	03/24/1999
	8.46	NT	NT	NT	0.92	NT	NT	07/20/1999
	9.72	NT	NT	NT	0.88	NT	NT	10/11/1999
	10.44	NT	NT	NT	0.94	NT	NT	02/28/2000
	8.1	NT	NT	NT	0.29	NT	NT	05/24/2000
	8.55	NT	NT	NT	0.4	NT	NT	10/05/2000
	8.24	NT	NT	NT	0.43	NT	NT	04/02/2001
	8.87	NT	NT	17.5	0.39	NT	NT	07/23/2001
	9.69	NT	7	24.6	0.29	2.2	15.8	10/22/2001
MW-8	9.35	NT	7.5	NT	0	NT	13.3	10/21/1996
	9.37	NT	6.8	NT	0.4	NT	8.3	02/21/1997
	8.15	3420	8.1	+113.7	0.45	NT	8.7	05/21/1997
	8.37	1734	7.27	NT	0.3	NT	12.7	08/28/1997
	9.05	NT	6.9	+23.8	0.39	3	9.9	02/18/1998
	7.21	4320	7.2	+27.3	0.28	1	12.4	05/19/1998
	8.64	4210	7.6	+20.1	0.29	1	15.1	07/23/1998
	9.2	2110	7.1	-103.8	0.18	4	11.9	11/24/1998
	8.45	NT	NT	NT	0.22	NT	NT	03/24/1999
	7.81	NT	NT	NT	0.54	NT	NT	07/20/1999
	9.21	NT	NT	NT	0.6	NT	NT	10/11/1999
	9.89	NT	NT	NT	0.56	NT	NT	02/28/2000
	7.22	NT	NT	NT	0.33	NT	NT	05/24/2000
	7.87	NT	NT	NT	0.44	NT	NT	10/05/2000
	7.39	NT	NT	NT	0.22	NT	NT	04/02/2001
	8.27	NT	NT	-51.4	0.29	NT	NT	07/23/2001
	9.17	NT	7	-168.7	0.19	2.6	15.4	10/22/2001
MW-9	9.14	NT	7.4	NT	1.4	NT	13.2	10/21/1996
	9.08	NT	6.8	NT	0.8	NT	7.9	02/21/1997
	8.00	3.08	8.00	+107.7	6.77	NT	8.5	05/21/1997
	8.15	1596	7.63	NT	3.97	NT	14.8	08/28/1997
	8.8	NT	NT	NT	NT	NT	NT	02/18/1998
	7.09	5380	7.2	+99.7	0.21	0.5	12.4	05/19/1998
	9.34	4620	7	+97.6	0.42	1	14.9	07/23/1998
	8.95	NT	NT	NT	NT	NT	NT	11/24/1998
	8.39	NT	NT	NT	0.17	NT	NT	03/24/1999
	7.67	NT	NT	NT	0.91	NT	NT	07/20/1999
	9	NT	NT	NT	0.28	NT	NT	10/11/1999
	9.65	NT	NT	NT	0.95	NT	NT	02/28/2000
	7.08	NT	NT	NT	2.68	NT	NT	05/24/2000
	7.71	NT	NT	NT	1	NT	NT	10/05/2000
	7.26	NT	NT	NT	0.31	NT	NT	04/02/2001
	7.99	NT	NT	8.2	0.36	NT	NT	07/23/2001
	8.94	NT	7	48.5	0.34	1.2	15.7	10/22/2001

KEY:
mg/l = milligrams per liter
NT = Not Tested
mV = millivolts
Deg. C = Degrees Celcius
* Note - Depth of groundwater measured form the top of the well casing

Table 3 (Cont.)
Conductivity, Dissolved Oxygen, pH and Redox Potential Readings
Clark Station #0562
4751 North Santa Monica Boulevard, Milwaukee, WI

Well Number	Depth to Water	Conductivity mV	pH	Redox Potential mV	Dissolved Oxygen mg/l	Ferrous Iron (mg/l)	Date Measured
Q-1	18.21	1920	6.1	+110.6	0.78	0.8	02/18/1998
	Not tested unable to remove well covers						05/19/1998
	17.52	2640	7.2	+131.2	0.32	0	07/23/1998
	9.84	3200	7	-79.7	0.25	2	11/24/1998
	8.31	NT	NT	NT	0.22	NT	03/24/1999
	8.17	NT	NT	NT	0.43	NT	07/20/1999
	9.78	NT	NT	NT	0.42	NT	10/11/1999
	11.81	NT	NT	NT	0.34	NT	02/28/2000
	8.3	NT	NT	NT	0.24	NT	10/05/2000
	NT	NT	NT	NT	NT	NT	04/02/2001
	7.21	NT	NT	-19.7	0.25	NT	07/23/2001
	9.63	NT	NT	NT	0.16	NT	10/22/2001
Q-2	10.86	3310	7.2	-77.2	0.25	5	02/18/1998
	6.73	4310	7.3	-40.1	0.45	2	05/19/1998
	10.91	1210	6.9	+120.1	0.56	0	07/23/1998
	9.95	1880	7.2	-88.5	0.25	6.5	11/24/1998
	9.28	NT	NT	NT	0.21	NT	03/24/1999
	8.53	NT	NT	NT	0.4	NT	07/20/1999
	9.87	NT	NT	NT	0.37	NT	10/11/1999
	10.96	NT	NT	NT	0.38	NT	02/28/2000
	8.68	NT	NT	NT	0.28	NT	10/05/2000
	8.33	NT	NT	NT	0.22	NT	04/02/2001
	8.99	NT	NT	-26.7	0.31	NT	07/23/2001
	9.81	NT	NT	NT	0.18	NT	10/22/2001
Q-3	Not tested, under dumpster, could not be moved						02/18/1998
	Not tested unable to remove well covers						05/19/1998
	9.85	3410	7.2	+88.4	0.48	0	07/23/1998
	NT	NT	NT	NT	NT	NT	11/24/1998
	NT	NT	NT	NT	NT	NT	03/24/1999
	NT	NT	NT	NT	NT	NT	07/20/1999
	NT	NT	NT	NT	NT	NT	10/11/1999
	NT	NT	NT	NT	NT	NT	02/28/2000
	9.1	NT	NT	NT	0.18	NT	10/05/2000
	8.92	NT	NT	NT	0.24	NT	04/02/2001
	9.28	NT	NT	-35.6	0.22	NT	07/23/2001
	'Not tested, under dumpster, could not be moved						10/22/2001
Q-4	19.2	297	6.8	-22.8	0.55	1	02/18/1998
	Not tested unable to remove well covers						05/19/1998
	21.35	4250	7.1	+5.21	0.48	0	07/23/1998
	10.24	2970	7.1	-101.2	0.18	4	11/24/1998
	9.72	NT	NT	NT	0.19	NT	03/24/1999
	8.45	NT	NT	NT	0.19	NT	07/20/1999
	9.81	NT	NT	NT	0.2	NT	10/11/1999
	11.81	NT	NT	NT	0.2	NT	02/28/2000
	8.8	NT	NT	NT	0.22	NT	10/05/2000
	8.87	NT	NT	NT	0.19	NT	04/02/2001
	8.92	NT	NT	-39.1	0.28	NT	07/23/2001
	9.74	NT	NT	NT	0.27	NT	10/22/2001

KEY:
mg/l = milligrams per liter
NT = Not Tested
mV = millivolts
* Note - Depth of groundwater measured form the top of the well casing

Appendix G
Well Abandonment Forms of Sentinel Environmental of February 16, 2010 for Closed BRRTS # 03-41-000450

SENTINEL ENVIRONMENTAL SERVICES, LLC

February 16, 2010

Greg Michael
Department of Commerce
9316 N. 107th St.
Milwaukee, WI 53224

RE: Well Abandonment Form Submittal/Final Closure Request
Former Clark #562
4751 N. Santa Monica Blvd.
Milwaukee, WI 53211
BRRTS No. 03-41-000450
PECFA No. 53211-1043-51

Dear Mr. Michael:

Sentinel Environmental Services, LLC was contacted by Mr. Amin Bhimani (responsible party) to complete conditional closure items for the site. The scope of work included well abandonment, granular activated carbon disposal, and permanent remediation system shut down.

All site wells were properly abandoned on 06/02/09. There were 9-2" monitoring wells and 5-6" remediation wells. The remediation wells included 3 dual phase (SVE/Pump) and 2 single phase (SVE only). Pumps and piping required removal at the 3 dual phase well locations. As I had no site map to identify remediation wells, they are identified on the abandonment forms by proximity to monitoring wells or permanent site features. Well abandonment forms are attached for your records.

The site remediation system was permanently shut down on 11/02/09. There were 5 drums of granular activated carbon (GAC) that required disposal at Waste Management under profile #MW103425W1. GAC lab results and profile information are included for your records. The remediation building contained an SVE with groundwater pump and treat system. All components of the system were removed and disposed as scrap.

Please review these conditional closure items as completed and consider this site for final closure. If you have any questions I can be reached at 262-375-8110 or 262-844-6220 (cell).

Sincerely,
Sentinel Environmental Services, LLC

David M. Lennon

David M. Lennon, P.E.
Project Manager

cc: Amin Bhimani, 700 W. Wisconsin Ave., Milwaukee, WI 53233

Attachments

P.O. Box 865, Grafton, WI 53024
Office: 262-375-8110 • Fax: 262-375-1972

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼	¼	Section	Township	Range	
NE	NE	05	07 N	22	☒ E ☐ W

or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well: _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-1

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): Unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
14.5	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
Unknown	Unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet): 8.36

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	14.5	0.32 ft3	

3/8" Bentonite Chips

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		

Lattitude / Longitude (Degrees and Minutes) ___ ___ ° ___ ___ . ___ ___ ___ 'N / ___ ___ ° ___ ___ . ___ ___ ___ 'W — Method Code (see instructions)

¼ / ¼ or Gov't Lot #	¼	Section	Township	Range
NE	NE	05	07 N	22 ☒ E ☐ W

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-2

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
16	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet): 8.46

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	16	0.35 Ft³	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼ NE	¼ NE	Section 05	Township 07 N	Range 22 ☒ E ☐ W

or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well: _ _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-3

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
14	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet): 7.86

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☑ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	14	0.31 ft³	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼ NE ¼ NE | Section 05 | Township 07 N | Range 22 ☒ E ☐ W | or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

Reason For Removal From Service: Site Closed | WI Unique Well # of Replacement Well: _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-4

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): 8.25

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	15	0.33 ft3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼ NE ¼ NE | Section 05 | Township 07 N | Range 22 ☒ E ☐ W | or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

Reason For Removal From Service: Site Closed | WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-5

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15	2
Lower Drillhole Diameter (in.)	Casing Depth (ft.)
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): 8.65

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	15	0.33 ft 3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024 | Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

_ _ ° _ _ . _ _ _ 'N
_ _ ° _ _ . _ _ _ 'W

¼ / ¼	¼	Section	Township	Range
or Gov't Lot # NE	NE	05	07 N	22 ☒ E ☐ W

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well: _ _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-6

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
14	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet): 8.10

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	14	0.31 ft 3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

_ _ ° _ _ . _ _ _ 'N
_ _ ° _ _ . _ _ _ 'W

¼ / ¼ NE ¼ NE or Gov't Lot # | Section 05 | Township 07 N | Range 22 ☒ E ☐ W

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

Reason For Removal From Service: Site Closed | WI Unique Well # of Replacement Well: _ _ _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-7

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
13	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): 7.84

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

Material Used To Fill Well / Drillhole	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	13	0.29 ft3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024 | Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

Notice: Completion of this report is required by chs. 160, 281, 283, 289, 291-293, 295, and 299, Wis. Stats., and ch. NR 141, Wis. Adm. Code. In accordance with chs. 281, 289, 291-293, 295, and 299, Wis. Stats., failure to file this form may result in a forfeiture of between $10-25,000, 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. Return form to the appropriate DNR office and bureau. See instructions on reverse for more information.

☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _	

Latitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ ¼ NE ¼ NE | Section 05 | Township 07 N | Range 22 ☒ E ☐ W | or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

Reason For Removal From Service: Site Closed | WI Unique Well # of Replacement Well: _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-8

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): Unknown

If a Well Construction Report is available, please attach.

Construction Type:
☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type:
☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
15.5	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
Unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): 6.63

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout
☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

Material	From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips	Surface	15.5	0.34 ft3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024 | Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _ _ _	

Latitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

_ _ ° _ _ . _ _ _ _ 'N

_ _ ° _ _ . _ _ _ _ 'W

¼ ¼ NE ¼ NE | Section 05 | Township 07 N | Range 22 ☒ E ☐ W | or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

Reason For Removal From Service: Site Closed | WI Unique Well # of Replacement Well: _ _ _ _ _ _ _

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: MW-9

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
12	2
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): 6.92

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material

☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials

☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.) ☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " " ☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:

☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	12	0.26 ft³	

3/8" Bentonite Chips

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received | Noted By | Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼ NE ¼ NE | Section 05 | Township 07 N | Range 22 ☒ E ☐ W | or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

Reason For Removal From Service: Site Closed | WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Former Clark #567

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: SVE (W. of MW-3)

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
9.5	6
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? | Depth to Water (feet): 7.48

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	9.5	1.9 ft3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		

Lattitude / Longitude (Degrees and Minutes) ___ ° ___ . ___ 'N ___ ° ___ . ___ 'W — Method Code (see instructions)

¼ ¼ or Gov't Lot #	Section	Township	Range
NE ¼ NE	05	07 N	22 ☒ E ☐ W

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: SVE (near MW-2)

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
9.5	6
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet): 8.12

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☐ Yes	☐ No	☒ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	9.5	1.9 Ft 3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By
Comments	

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		

Latitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼ NE ¼ NE — Section 05 — Township 07 N — Range 22 ☒ E ☐ W — or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: SVE (near MW-6)

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
22	6
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)? — Depth to Water (feet): 7.78

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☒ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	22	4.3 ft³	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By
Comments	

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dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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☐ **Verification Only of Fill and Seal**

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

1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee		

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

__ __ ° __ __ . __ __ __ 'N
__ __ ° __ __ . __ __ __ 'W

¼ / ¼ or Gov't Lot #	¼	Section	Township	Range
NE	NE	05	07 N	22 ☒ E ☐ W

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee — Well ZIP Code: 53211

Subdivision Name — Lot #

Reason For Removal From Service: Site Closed — WI Unique Well # of Replacement Well:

2. Facility / Owner Information

Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: SVE (near MW-5)

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee — State: WI — ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify):

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
25	6
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☒ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
Did sealing material rise to surface?	☒ Yes	☐ No	☐ N/A
Did material settle after 24 hours?	☐ Yes	☒ No	☐ N/A
If yes, was hole retopped?	☐ Yes	☐ No	☒ N/A
If bentonite chips were used, were they hydrated with water from a known safe source?	☐ Yes	☐ No	☒ N/A

Required Method of Placing Sealing Material
☐ Conductor Pipe-Gravity ☐ Conductor Pipe-Pumped ☐ Screened & Poured (Bentonite Chips) ☒ Other (Explain): Gravity

Sealing Materials
☐ Neat Cement Grout ☐ Clay-Sand Slurry (11 lb./gal. wt.)
☐ Sand-Cement (Concrete) Grout ☐ Bentonite-Sand Slurry " "
☐ Concrete ☐ Bentonite Chips

For Monitoring Wells and Monitoring Well Boreholes Only:
☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
3/8" Bentonite Chips			
Surface	25	4.9 ft3	

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 — Telephone Number: (262) 375-8110

City: Grafton — State: WI — ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon — Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By

Comments:

State of Wis., Dept. of Natural Resources
dnr.wi.gov

Well / Drillhole / Borehole Filling & Sealing

Form 3300-005 (R 4/08)

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1. Well Location Information

County	WI Unique Well # of Removed Well	Hicap #
Milwaukee	_ _ _ _ _ _	

Lattitude / Longitude (Degrees and Minutes) — Method Code (see instructions)

_ _ ° _ _ . _ _ _ _ 'N
_ _ ° _ _ . _ _ _ _ 'W

¼ / ¼ NE ¼ NE | Section 05 | Township 07 N | Range 22 ☒ E ☐ W | or Gov't Lot #

Well Street Address: 4751 N. Santa Monica Blvd.

Well City, Village or Town: Milwaukee | Well ZIP Code: 53211

Subdivision Name | Lot #

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Facility Name: Former Clark #562

Facility ID (FID or PWS): 241574850

License/Permit/Monitoring #: SVE (near storage shed)

Original Well Owner: Clark Oil

Present Well Owner: Amin Bhimani

Mailing Address of Present Owner: 700 W. Wisconsin Ave., Ste #3

City of Present Owner: Milwaukee | State: WI | ZIP Code: 53233

3. Well / Drillhole / Borehole Information

☒ Monitoring Well ☐ Water Well ☐ Borehole / Drillhole

Original Construction Date (mm/dd/yyyy): unknown

If a Well Construction Report is available, please attach.

Construction Type: ☒ Drilled ☐ Driven (Sandpoint) ☐ Dug ☐ Other (specify): _____

Formation Type: ☒ Unconsolidated Formation ☐ Bedrock

Total Well Depth From Ground Surface (ft.)	Casing Diameter (in.)
24	6
Lower Drillhole Diameter (in.)	**Casing Depth (ft.)**
unknown	unknown

Was well annular space grouted? ☐ Yes ☒ No ☐ Unknown

If yes, to what depth (feet)?	Depth to Water (feet)
	8.15

4. Pump, Liner, Screen, Casing & Sealing Material

Pump and piping removed?	☒ Yes	☐ No	☐ N/A
Liner(s) removed?	☐ Yes	☐ No	☒ N/A
Screen removed?	☐ Yes	☒ No	☐ N/A
Casing left in place?	☒ Yes	☐ No	☐ N/A
Was casing cut off below surface?	☒ Yes	☐ No	☐ N/A
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☒ Bentonite Chips ☐ Bentonite - Cement Grout ☐ Granular Bentonite ☐ Bentonite - Sand Slurry

5. Material Used To Fill Well / Drillhole

From (ft.)	To (ft.)	No. Yards, Sacks Sealant or Volume (circle one)	Mix Ratio or Mud Weight
Surface	24	4.7 ft3	

3/8" Bentonite Chips

6. Comments

7. Supervision of Work

Name of Person or Firm Doing Filling & Sealing	License #	Date of Filling & Sealing (mm/dd/yyyy)
Sentinel Env. Services, LLC	940910	06/02/09

Street or Route: P.O. Box 865 | Telephone Number: (262) 375-8110

City: Grafton | State: WI | ZIP Code: 53024

Signature of Person Doing Work: Dave Lennon | Date Signed: 02/16/10

DNR Use Only

Date Received	Noted By
Comments	