10/29/96
246100800 ERR-LUST
03-46-003301 h

THIRD QUARTER 1996 GROUND-WATER QUALITY MONITORING

FORMER CEDARBURG LIGHT AND WATER COMMISSION POWER PLANT W61 N617 MEQUON AVENUE CEDARBURG, WISCONSIN

(WDNR FID #246100800 ERR-LUST) (PECFA CLAIM #53012-2017-17)

October 25, 1996

Northern Environmental℠
Hydrologists • Engineers • Geologists

1214 West Venture Court
Mequon, WI 53092
Fax 1-414-241-8222
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October 25, 1996
(CLW131246.700)

Mr. Dale Lythjohan
Cedarburg Light and Water Commission
N30 W5926 Lincoln Boulevard
Post Office Box 767
Cedarburg, Wisconsin 53012

RE: Third Quarter 1996 Ground-Water Quality Monitoring, Former Cedarburg Light and Water Commission Power Plant, W61 N617 Mequon Avenue, Cedarburg, Wisconsin (WDNR FID #246100800ERR-LUST) (PECFA Claim #53012-2017-17)

Dear Mr. Lythjohan:

Northern Environmental Technologies, Incorporated (Northern Environmental) completed the third round of the Wisconsin Department of Natural Resources (WDNR)-approved four rounds of quarterly ground-water quality monitoring at the former Cedarburg Light and Water Commission Power Plant, W61 N617 Mequon Avenue, Cedarburg, Wisconsin (the Property). The Property is in the Southeast Quarter of the Northeast Quarter of Section 27, Township 10 North, Range 21 East in Ozaukee County, Wisconsin (latitude 43 degrees, 18 minutes, 22 seconds north, longitude 87 degrees, 59 minutes, 40 seconds west) (Figure 1) (USGS, 1976).

BACKGROUND INFORMATION

The Property was formerly an electrical generating plant owned and operated by the Cedarburg Light and Water Commission. Two 20,000-gallon capacity diesel fuel underground storage tanks (USTs) were reportedly cleaned and abandoned in place at the Property during April 1986. One 1000-gallon gasoline/diesel UST was also cleaned, removed, and disposed at that time. A closure assessment was not required when the USTs were decommissioned.

During 1993, the Cedarburg Light and Water Commission retained Northern Environmental to drill and sample boreholes on the Property as part of an environmental assessment (Northern Environmental, 1993). Diesel range organics (DRO) and gasoline range organics (GRO) were detected in soil samples. Northern Environmental completed a site investigation during April 1994. Contaminated ground water was discovered. A report was prepared that described the investigation and presented the results (Northern Environmental, 1994). The WDNR requested that an additional monitoring well be installed south of the power plant. The well (MW500) was drilled and installed during December 1994. No DRO or petroleum volatile organic

compounds (PVOCs) were detected in the soil sample collected from the monitoring well borehole. No volatile organic compounds (VOCs) or DRO were detected in water from the new well.

In an unrelated remedial action, Mercury Marine, Incorporated removed polychlorinated biphenyl-contaminated sediments from Ruck Pond during 1994. DRO-contaminated soil was discovered in stream bank excavations abutting the Property. The WDNR and Cedarburg Light and Water Commission were notified. Northern Environmental collected soil samples from the excavations to assess the extent of contamination. The soil samples were laboratory analyzed for DRO and PVOCs. High concentrations of DRO are present in soil beneath the cooling towers on the bank of Ruck Pond.

Additional ground-water quality monitoring was performed during January and June 1995. Ground-water samples from MW200 contained trichloroethene and tetrachloroethene above the Chapter NR 140, Wisconsin Administrative Code (NR 140, Wis. Adm. Code) enforcement standards (ES). Benzene concentrations above the NR 140, Wis. Adm. Code preventive action limit (PAL) were detected in samples from MW300. A report was prepared describing the excavation sampling and additional ground-water monitoring (Northern Environmental, 1995).

The WDNR approved long-term ground-water monitoring as an appropriate remedial response (Vance, 1996). The WDNR requested that the monitoring wells be sampled quarterly for one year with sampling frequency reduced to once per year thereafter depending on results (Vance, 1996). This letter describes the third round of quarterly ground-water quality sampling.

METHODS OF INVESTIGATION

Ground-water samples were collected from the four monitoring wells on September 13, 1996 to monitor ground-water quality at the Property. Before purging and sampling the monitoring wells, Northern Environmental personnel measured the depth to water in each well to evaluate ground-water flow direction. The depth to water measurements were converted to elevations relative to a site datum. The monitoring wells were purged before sampling in accordance with WDNR requirements (NR 141, Wis. Adm. Code).

Ground-water samples were collected by gently lowering new bottom-filling disposable polyethylene bailers into the wells until the bailer was completely submerged. Water samples were transferred from the bailers into appropriate sample containers using new bottom-emptying devices. The samples were preserved with hydrochloric acid, labeled, and chilled until delivery to U.S. Analytical Laboratory (Combined Locks, Wisconsin) (WDNR Certification #445027660) for analysis. The ground-water samples were laboratory analyzed for DRO using the WDNR Modified Method and VOCs using Environmental Protection Agency Method 8021.

Quality assurance/quality control (QA/QC) samples were also collected in accordance with WDNR guidelines. QA/QC samples consisted of one trip blank, one field blank, and one duplicate sample. The trip blank (labeled "Trip Blank") was obtained from the laboratory and accompanied the investigative samples throughout the chain-of-custody. The field blank (sample labeled FB-1246) was prepared with laboratory-grade deionized water using the same

techniques and equipment as the investigative samples. The duplicate sample (sample labeled Dup-1246) was collected from MW200. QA/QC samples were analyzed for VOCs using the before mentioned method. Ground-water sample laboratory reports and the associated chain-of-custody record are provided in Attachment A.

SUMMARY OF FINDINGS

DRO and VOCs were not detected in monitoring well MW500. DRO was present in the ground-water sample from MW200. Tetrachloroethene concentrations exceeded the ES, and trichlorethene and benzene exceeded the PAL in MW200. Tetrachloroethene exceeded the PAL in MW300 and MW400. All other VOCs were either not detected or were below their respective PALs. Ground-water sample laboratory analysis results are summarized in Table 2.

June 10, 1996 water table conditions are depicted in Figure 2. Ground-water flow was predominantly eastward across the Property under an approximate hydraulic gradient of 0.01 foot per foot. Water table elevation data is summarized in Table 1.

CONCLUSIONS AND RECOMMENDATIONS

Benzene, tetrachloroethene, and trichloroethene were present in monitoring wells MW200 and MW300. Tetrachloroethene in MW200 was the only compound exceeding the ES. Ground-water quality during this round of sampling is generally consistent with previous results. The final round of the WDNR-approved water quality monitoring will be performed during December 1996. The ground-water quality data collected over the past year will then be evaluated to determine a new ground-water monitoring sampling schedule.

The results of this study are based upon professional interpretation of the information available to Northern Environmental given site conditions and the time and budget constraints of this project. Northern Environmental does not warrant that this report represents an exhaustive study of all possible impacts at the study area. The items investigated as part of this investigation do represent the most likely sources of environmental impacts associated with the described UST systems, and are consequently believed to adequately address WDNR requirements and the needs of the client at the present time.

We trust this information meets your needs. Please feel free to contact us if you have any questions or comments.

Sincerely,
Northern Environmental Technologies, Incorporated

Christopher C. Hatfield
Hydrogeologist

Gary S. Graham
Senior Project Manager

CCH/kmr
Enclosures
cc: Ms. Kaye Vance (Cook and Franke, S.C.)
Mr. John Feeney (Wisconsin Department of Natural Resources)

REFERENCES

Northern Environmental Technologies, Incorporated, "Phase I Environmental Site Assessment, Cedarburg Light and Water Commission Former Power Plant, W61 N617 Mequon Avenue, Cedarburg, Wisconsin," February 4, 1993.

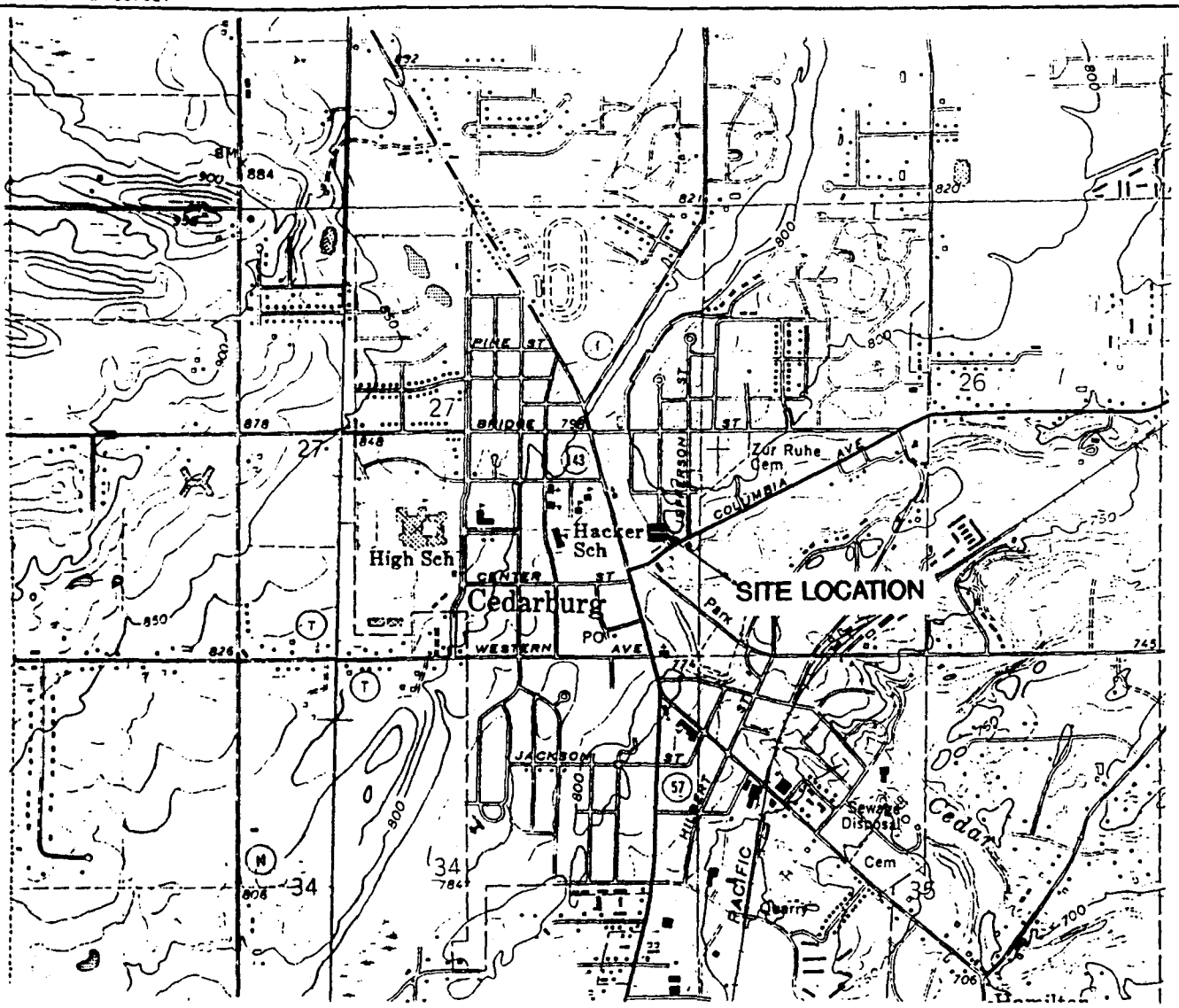
Northern Environmental Technologies, Incorporated, "Site Investigation Results, Former Cedarburg Light and Water Commission Power Plant, W61 N617 Mequon Avenue, Cedarburg, Wisconsin," October 19, 1995.

Northern Environmental Technologies, Incorporated, "Site Investigation Results, Former Power Plant, W61 N617 Mequon Avenue, Cedarburg, Wisconsin," April 15, 1994.

United States Geological Survey, *Cedarburg, Wisconsin, 7.5 Minute Quadrangle Topographic Map*, 1959, Photorevised 1971 and 1976.

Vance, Kaye (Cedarburg City Attorney), letter to John Feeney (Wisconsin Department of Natural Resources), February 13, 1996.

Wisconsin Department of Natural Resources, "Ground-Water Monitoring Well Requirements," *Wisconsin Administrative Code,* Chapter NR 141, June 1991.



SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

1 .5 0 1 KILOMETRE

CONTOUR INTERVAL 10 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

N

BASE MAP SOURCE: USGS CEDARBERG AND FIVE CORNERS, WI 7.5 MIN QUADRANGLE

REV	PROJECT: CLW131246	DATE 10/25/96

Northern Environmental
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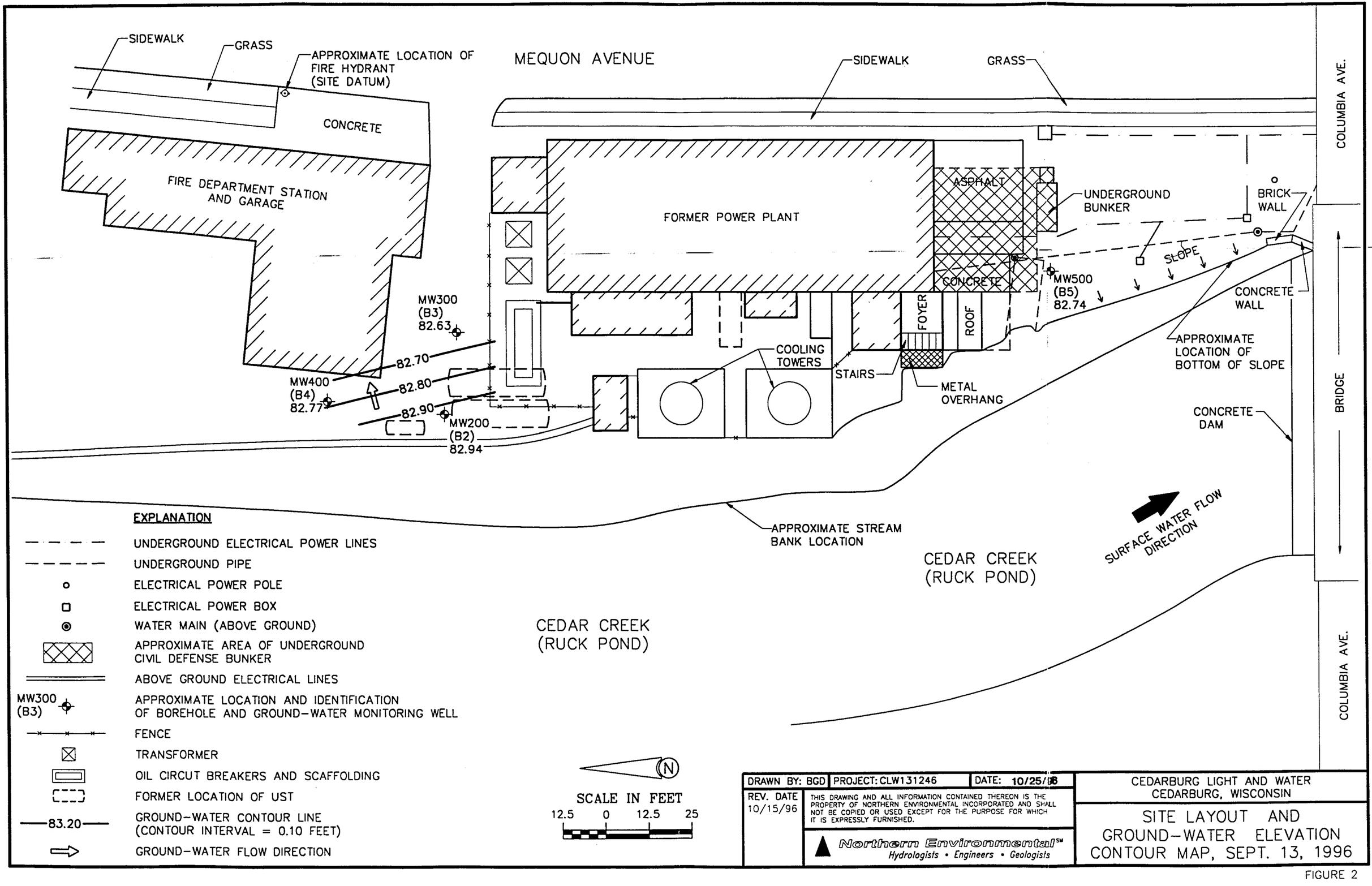
CEDARBURG LIGHT & WATER COMMISSION
CEDARBURG, WISCONSIN

SITE LOCATION AND LOCAL TOPOGRAPHY

FIGURE 1



DRAWN BY: BGD	PROJECT: CLW131246	DATE: 10/25/96
REV. DATE 10/15/96	THIS DRAWING AND ALL INFORMATION CONTAINED THEREON IS THE PROPERTY OF NORTHERN ENVIRONMENTAL INCORPORATED AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH IT IS EXPRESSLY FURNISHED.	

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CEDARBURG LIGHT AND WATER
CEDARBURG, WISCONSIN

SITE LAYOUT AND GROUND-WATER ELEVATION CONTOUR MAP, SEPT. 13, 1996

FIGURE 2

Table 1 Ground-Water Elevation Data, Former Power Plant, Cedarburg, Wisconsin

Well ID	Elevation Ground Surface (feet)	Elevation of Reference Point* (feet)	Date	Depth to Water Below Reference Point* (feet)	Water Table Elevation (feet)
MW200	96.46	95.94	10/18/93	12.71	83.23
			10/25/93	12.78	83.16
			10/28/93	12.94	83.00
			01/07/94	13.30	82.64
			02/14/94	14.21	81.73
			12/28/94	13.02	82.92
			01/18/95	12.90	83.04
			06/08/95	12.53	83.41
			03/21/96	12.81	83.13
			06/10/96	11.49	84.45
			09/13/96	13.00	82.94
MW300	97.22	96.54	10/18/93	14.02	82.52
			10/25/93	14.01	82.53
			10/28/93	13.98	82.56
			01/07/94	14.41	82.13
			02/14/94	15.16	81.38
			12/28/94	14.01	82.53
			01/18/95	12.91	83.63
			06/08/95	13.42	83.12
			03/21/96	13.76	82.78
			06/10/96	12.31	84.23
			09/13/96	13.91	82.63
MW400	95.56	95.28	10/18/93	12.60	82.68
			10/25/93	12.58	82.70
			10/28/93	12.55	82.73
			01/07/94	12.87	82.41
			02/14/94	13.62	81.66
			12/28/94	12.50	82.78
			01/18/95	12.38	82.90
			06/08/95	12.03	83.25
			03/21/96	12.28	83.00
			06/10/96	10.96	84.32
			09/13/96	12.51	82.77
MW500	95.53**	95.56	12/28/94	12.54	83.02
			01/03/95	12.42	83.14
			01/18/95	12.42	83.14
			06/08/95	12.62	82.94
			03/21/96	12.62	82.94
			06/10/96	11.42	84.14
			09/13/96	12.82	82.74

NOTE: Elevations are referenced to site datum

* = Reference point is the top of the monitoring well casing
** = Elevation of top of protective metal casing

CLW131246.1246T5-1
October 15, 1996

Table 2 Ground-Water Analysis Results, Former Power Plant, Cedarburg, Wisconsin

Well I.D.	Date	Concentrations of Detected Analytes (µg/l)																		
		DRO	GRO	Benzene	Ethyl-benzene	Toluene	Total Xylenes	MTBE	n-butyl-benzene	chloro-ethane	1,1-Dichloro-ethane	cis-1,2-Di-chloro-ethene	Naphthalene	Tetra-chloro-ethene	Trichloro-ethene	1,2,4-Tri-methyl-benzene	1,3,5-Tri-methyl-benzene	1,2-Dichloro-benzene	1,1,1-Trichloro-ethane	Lead
MW200	10/28/93	720	110	<0.6	<1.0	35	5.6	<1.0	6.1	23	7.4	3.5	5.7	5.4	7.6	5.7	3.2	<1.0	<0.2	17
	01/13/94	<5.0	<10.0	<0.6	<1.0	2.4	1.8	<1.0	3.0	26	3.6	1.2	7.1	1.4	1.6	2.1	1.5	1.6	<0.2	22
	01/18/95	2000	28	<2.0	<1.0	<1.0	<2.0	<1.0	<2.0	2.2	4.9	22	0.44	19	29	<2.0	<2.0	0.19	4.9	4
	*01/18/95	NA	NA	0.28	<1.0	<1.0	<2.5	<1.0	<2.0	3.1	4.1	22	<2.0	20	30	<1.0	<1.0	<1.0	5.0	NA
	06/08/95	810	NA	<.26	<.32	<.69	<1.23	.46	<.45	9.4	6.6	8.4	<.41	42	17.5	<.57	<.57	.33	2.9	<1
	03/21/96	510	NA	0.28	<0.32	<0.69	<1.23	0.29	<0.45	6.1	4.1	5.5	<0.41	11	5.8	<0.57	<0.57	0.69	0.65	NA
	*03/21/96	NA	NA	0.28	<0.32	<0.69	<1.23	0.34	0.69	6.6	4.0	4.8	0.68	9.5	5.1	<0.57	<0.57	0.76	<0.63	NA
	06/10/96	270	NA	0.27	<0.32	<0.69	<1.23	<0.22	<0.45	6.2	5.9	6.9	<0.41	56	14	<0.57	<0.57	0.43	2.8	NA
	*06/10/96	NA	NA	0.29	<0.32	<0.69	<1.23	<0.22	<0.45	6.8	5.9	6.8	<0.41	51	14	<0.57	<0.57	0.51	2.8	NA
	09/13/96	350	NA	0.48	<0.32	<0.69	<1.23	<0.22	<0.45	2.6	4.7	3.9	<0.41	15	4.7	<0.57	<0.57	0.93	0.97	NA
	*09/13/96	NA	NA	0.52	<0.32	<0.69	<1.23	<0.22	<0.45	2.6	4.9	4.1	<0.41	15	4.8	<0.57	<0.57	1.0	1.0	NA
MW300	10/28/93	<100	<100	1.2		1.5	<2.5		<2.0	3.3	5.0	3.4	<2.0	3.9	<1.0	<1.0	<1.0			2
	01/13/94	<5.0	<10.0	1.3	<1.0	<1.0	<2.5	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0
	01/18/95	150	<11.0	0.80	<1.0	<1.0	<2.5	<1.0	<2.0	2.3	1.1	0.90	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	1.0
	06/08/95	<100	NA	0.36	<.32	<.69	<1.23	<.22	<.45	0.93	0.9	0.67	<.41	1.82	0.33	<.57	<.57	<.11	<.63	1.0
	03/21/96	400	NA	1.1	<0.32	<0.69	0.62	<0.22	<0.45	3.9	<0.37	0.32	4.9	1.5	<0.18	<0.57	<0.57	0.31	<0.63	NA
	06/10/96	<100	NA	0.41	<0.32	<0.69	<1.23	<0.22	<0.45	1.3	0.75	0.75	1.7	2.1	0.45	<0.57	<0.57	0.12	<0.63	NA
	09/13/96	<100	NA	0.34	<0.32	<0.69	<1.23	<0.22	<0.45	1.5	0.63	0.59	0.56	3.2	0.49	<0.57	<0.57	0.14	<0.63	NA
MW400	10/28/93	<100	<100	<0.6	<1.0	<1.0	<2.5	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0
	01/13/94	<5.0	<10.0	<0.6	<1.0	<1.0	<2.5	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0
	01/18/95	120	<11.0	<0.6	<1.0	<1.0	<2.5	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	1.0
	06/08/95	<100	NA	<.26	<.32	<.69	<1.23	0.33	<.45	<.5	<.27	<.29	<.41	<.56	<.18	<.57	<.57	<.11	<.63	2
	03/21/96	<100	NA	<0.26	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.37	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
	06/10/96	<100	NA	<0.28	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.27	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
	09/13/96	<100	NA	<0.26	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.27	<0.29	<0.41	0.68	<0.18	<0.57	<0.57	<0.11	<0.63	NA
MW500	01/18/95	<100	<11	<0.6	<1.0	<1.0	<2.5	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	<1.0
	06/08/95	<100	NA	<.26	<.32	<.69	<1.23	<.22	<.45	<.5	<.27	<.29	<.41	<.56	<.18	<.57	<.57	<.11	<.63	2
	03/21/96	<100	NA	<0.26	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.37	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
	06/10/96	<100	NA	<0.28	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.27	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
	09/13/96	<100	NA	<0.28	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.27	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
Field Blank	01/18/95	NA	NA	<0.6	<1.0	<1.0	<2.5	<1.0	<2.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<0.2	NA
	06/08/95	NA	NA	<.26	<.32	<.69	<1.23	<.22	<.45	<.5	<.27	<.29	<.41	<.56	<.18	<.57	<.57	<.11	<.63	NA
	03/21/96	NA	NA	<0.26	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.37	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
	06/10/96	<100	NA	<0.28	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.27	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
Trip Blank	06/10/96	<100	NA	<0.28	<0.32	<0.69	<1.23	<0.22	<0.45	<0.5	<0.27	<0.29	<0.41	<0.56	<0.18	<0.57	<0.57	<0.11	<0.63	NA
WDNR NR 140 Enforcement Standard (ES)		NS	NS	5	700	343	620	60	NS	400	850	70	40	5	5	NS	NS	600	200	15
WDNR NR 140 Preventive Action Limit (PAL)		NS	NS	0.5	140	68.6	124	12	NS	80	85	7	8	0.5	0.5	NS	NS	60	40	1.5

NOTE:

Only those VOCs detected are summarized in this table
µg/l = micrograms per liter
DRO = diesel range organics
GRO = gasoline range organics
MTBE = methyl-tertiary-butyl-ether
NA = not analyzed
* = duplicate sample
<x = analyte not detected to the laboratory detection limit of x
NS = no water quality standard

XXX = Wisconsin Administrative Code NR 140 Preventive Action Limit (PAL) Exceedance

XXX = Wisconsin Administrative Code NR 140 Enforcement Standard (ES) Exceedance

CLW131246.1246t5-2
October 24, 1996

ATTACHMENT A

LABORATORY REPORTS AND ASSOCIATED CHAIN-OF-CUSTODY RECORD

U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 02-Oct-96

Project #: CLW131246
Project : Cedarburg
Sample ID: MW200
Lab Code: 5014513A
Sample Type: Water
Sample Date: 13-Sep-96

Test	Result	MDL	PQL	Unit	pH	Date Ext/Digested	Date Analyzed:	Analyzed By:	QC Code
MODIFIED DRO WDNR SEP 95	350	30	96	UG/L	2.5	19-Sep-96	19-Sep-96	C. Rotar	1

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

QC SUMMARY

CODE:

1 pH adjusted below two.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 03-Oct-96
Analyzed By: G.Shah

Project #: CLW131246
Project : Cedarburg
Sample ID: MW200
Lab Code: 5014513A
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 25-Sep-96

ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	0.48	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	0.6	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	2.6	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	0.93	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	< 0.13	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	4.7	0.084	0.27
cis 1,2-Dichloroethene	3.9	0.092	0.29
trans-1,2-dichloroethene	0.28	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	0.16	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	< 0.41	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	15	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	0.97	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	4.7	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	1.7	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	107	% Rec.
1,4-Dichlorobutane Surrogate	84	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 02-Oct-96
Sample ID: MW200 Lab Code: 5014513A

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	F	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	F	P	F	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	F	F	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	P	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-Dichloropropane	P	P	P	P	P	P	P
2,2-Dichloropropane	P	F	F	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	P	P	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	F	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	P	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	P	P	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	F	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 02-Oct-96

Project #: CLW131246
Project : Cedarburg
Sample ID: MW300
Lab Code: 5014513B
Sample Type: Water
Sample Date: 13-Sep-96

Test	Result	MDL	PQL	Unit	pH	Date Ext/Digested	Date Analyzed:	Analyzed By:	QC Code
MODIFIED DRO WDNR SEP 95	< 100	30	96	UG/L	2.4	19-Sep-96	20-Sep-96	C. Rotar	1

MDL = Method Detection Limit

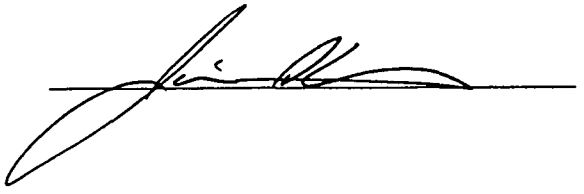
PQL = Practical Quantitation Limit

QC SUMMARY

CODE:

1 pH adjusted below two.

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 02-Oct-96
Analyzed By: G.Shah

Project #: CLW131246
Project : Cedarburg
Sample ID: MW300
Lab Code: 5014513B
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 25-Sep-96

ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	0.34	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	< 0.49	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	1.5	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	0.14	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	< 0.13	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	0.63	0.084	0.27
cis 1,2-Dichloroethene	0.59	0.092	0.29
trans-1,2-dichloroethene	< 0.23	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	< 0.08	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	0.56	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	3.2	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	< 0.63	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	0.49	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	< 0.54	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	108	% Rec.
1,4-Dichlorobutane Surrogate	87	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 02-Oct-96
Sample ID: MW300 Lab Code: 5014513B

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	F	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	F	P	F	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	F	F	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	P	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-Dichloropropane	P	P	P	P	P	P	P
2,2-Dichloropropane	P	F	F	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	P	P	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	F	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	P	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	P	P	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	F	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 02-Oct-96

Project #: CLW131246
Project : Cedarburg
Sample ID: MW400
Lab Code: 5014513C
Sample Type: Water
Sample Date: 13-Sep-96

Test	Result	MDL	PQL	Unit	pH	Date Ext/Digested	Date Analyzed:	Analyzed By:	QC Code
MODIFIED DRO WDNR SEP 95	< 100	30	96	UG/L	2.5	19-Sep-96	20-Sep-96	C. Rotar	1

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

QC SUMMARY

CODE:

1 pH adjusted below two.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 24-Sep-96
Analyzed By: R. Everson

Project #: CLW131246
Project : Cedarburg
Sample ID: MW400
Lab Code: 5014513C
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 19-Sep-96

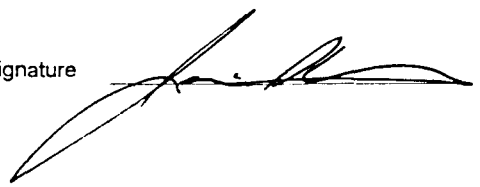
ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	< 0.26	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	< 0.49	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	< 0.5	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	< 0.11	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	< 0.13	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	< 0.27	0.084	0.27
cis 1,2-Dichloroethene	< 0.29	0.092	0.29
trans-1,2-dichloroethene	< 0.23	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	< 0.08	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	< 0.41	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	0.68	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	< 0.63	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	< 0.18	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	< 0.54	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	108	% Rec.
1,4-Dichlorobutane Surrogate	89	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature



U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 24-Sep-96
Sample ID: MW400 Lab Code: 5014513C

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	F	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	F	P	P	P
4-Chlorotoluene	P	P	P	F	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	F	P	P	P
Dibromochloromethane	P	P	P	F	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	F	P	P	P
Dichlorodifluoromethane	P	F	P	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	F	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	F	P	P	P	P	P
1,2-Dichloropropane	P	P	P	F	P	P	P
1,3-Dichloropropane	P	P	P	F	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	F	P	P	P
Hexachlorobutadiene	P	P	P	F	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	F	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	F	P	P	P
1,2,4-Trichlorobenzene	P	P	P	F	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	F	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	F	F	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 02-Oct-96

Project #: CLW131246
Project : Cedarburg
Sample ID: MW500
Lab Code: 5014513D
Sample Type: Water
Sample Date: 13-Sep-96

Test	Result	MDL	PQL	Unit	pH	Date Ext/Digested	Date Analyzed:	Analyzed By:	QC Code
MODIFIED DRO WDNR SEP 95	< 100	30	96	UG/L	2.5	19-Sep-96	20-Sep-96	C. Rotar	1

MDL = Method Detection Limit

PQL = Practical Quantitation Limit

QC SUMMARY

CODE:

1 pH adjusted below two.

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U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 24-Sep-96
Analyzed By: R. Everson

Project #: CLW131246
Project : Cedarburg
Sample ID: MW500
Lab Code: 5014513D
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 19-Sep-96

ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	< 0.26	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	< 0.49	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	< 0.5	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	< 0.11	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	< 0.13	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	< 0.27	0.084	0.27
cis 1,2-Dichloroethene	< 0.29	0.092	0.29
trans-1,2-dichloroethene	< 0.23	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	< 0.08	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	< 0.41	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	< 0.56	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	< 0.63	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	< 0.18	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	< 0.54	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	108	% Rec.
1,4-Dichlorobutane Surrogate	86	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 24-Sep-96
Sample ID: MW500 Lab Code: 5014513D

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	F	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	F	P	P	P
4-Chlorotoluene	P	P	P	F	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	F	P	P	P
Dibromochloromethane	P	P	P	F	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	F	P	P	P
Dichlorodifluoromethane	P	F	P	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	F	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	F	P	P	P	P	P
1,2-Dichloropropane	P	P	P	F	P	P	P
1,3-Dichloropropane	P	P	P	F	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	F	P	P	P
Hexachlorobutadiene	P	P	P	F	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	F	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	F	P	P	P
1,2,4-Trichlorobenzene	P	P	P	F	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	F	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	F	F	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 03-Oct-96
Analyzed By: G.Shah

Project #: CLW131246
Project : Cedarburg
Sample ID: Dup-1246
Lab Code: 5014513E
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 26-Sep-96

ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	0.52	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	0.7	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	2.6	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	1	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	0.14	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	4.9	0.084	0.27
cis 1,2-Dichloroethene	4.1	0.092	0.29
trans-1,2-dichloroethene	0.3	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	0.12	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	< 0.41	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	15	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	1	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	4.8	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	1.8	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	106	% Rec.
1,4-Dichlorobutane Surrogate	87	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 02-Oct-96
Sample ID: Dup-1246 Lab Code: 5014513E

ANALYTE	INITAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	P	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	F	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	F	P	F	P	P
2-Chlorotoluene	P	P	P	P	P	P	P
4-Chlorotoluene	P	P	P	P	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	P	P	P	P
Dibromochloromethane	P	P	P	P	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	P	P	P	P
Dichlorodifluoromethane	P	F	F	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	P	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	P	P	P	P	P	P
1,2-Dichloropropane	P	P	P	P	P	P	P
1,3-Dichloropropane	P	P	P	P	P	P	P
2,2-Dichloropropane	P	F	F	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	P	P	P	P
Hexachlorobutadiene	P	P	P	P	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	P	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	F	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	P	P	P	P
1,2,4-Trichlorobenzene	P	P	P	P	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	P	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	P	P	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	F	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 24-Sep-96
Analyzed By: R. Everson

Project #: CLW131246
Project : Cedarburg
Sample ID: Trip
Lab Code: 5014513F
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 18-Sep-96

ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	< 0.26	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	< 0.49	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	< 0.5	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	< 0.11	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	< 0.13	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	< 0.27	0.084	0.27
cis 1,2-Dichloroethene	< 0.29	0.092	0.29
trans-1,2-dichloroethene	< 0.23	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	< 0.08	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	< 0.41	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	< 0.56	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	< 0.63	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	< 0.18	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	< 0.54	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	108	% Rec.
1,4-Dichlorobutane Surrogate	92	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 24-Sep-96
Sample ID: Trip Lab Code: 5014513F

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	F	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	F	P	P	P
4-Chlorotoluene	P	P	P	F	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	F	P	P	P
Dibromochloromethane	P	P	P	F	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	F	P	P	P
Dichlorodifluoromethane	P	F	P	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	F	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	F	P	P	P	P	P
1,2-Dichloropropane	P	P	P	F	P	P	P
1,3-Dichloropropane	P	P	P	F	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	F	P	P	P
Hexachlorobutadiene	P	P	P	F	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	F	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	F	P	P	P
1,2,4-Trichlorobenzene	P	P	P	F	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	F	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	F	F	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory
1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

Method 8021 Volatile Organic Compounds

BRIAN KRANZ
NORTHERN ENVIRONMENTAL
1214 W VENTURE COURT
MEQUON WI 53092

Report Date: 24-Sep-96
Analyzed By: R. Everson

Project #: CLW131246
Project : Cedarburg
Sample ID: FB-1246
Lab Code: 5014513G
Sample Type: Water
Sample Date: 13-Sep-96
Date Analyzed: 19-Sep-96

ANALYTE	RESULT	MDL UG/L	PQL UG/L
Benzene	< 0.26	0.082	0.26
Bromobenzene	< 0.24	0.075	0.24
Bromodichloromethane	< 0.11	0.035	0.11
n-Butylbenzene	< 0.45	0.14	0.45
sec-Butylbenzene	< 0.49	0.15	0.49
tert-Butylbenzene	< 0.4	0.12	0.4
Carbon Tetrachloride	< 0.5	0.16	0.5
Chlorobenzene	< 0.27	0.086	0.27
Chloroethane	< 0.5	0.39	1.3
Chloroform	< 0.22	0.07	0.22
Chloromethane	< 1	0.88	3.1
2-Chlorotoluene	< 0.65	0.21	0.65
4-Chlorotoluene	< 0.19	0.06	0.19
1,2-Dibromo-3-Chloropropane	< 1	0.83	2.7
Dibromochloromethane	< 0.09	0.028	0.09
1,2-Dichlorobenzene	< 0.11	0.035	0.11
1,3-Dichlorobenzene	< 0.83	0.23	0.83
1,4-Dichlorobenzene	< 0.13	0.039	0.13
Dichlorodifluoromethane	< 5.4	1.7	5.4
1,1-Dichloroethene	< 0.37	0.12	0.37
1,2-Dichloroethane	< 0.86	0.27	0.86
1,1-Dichloroethane	< 0.27	0.084	0.27
cis 1,2-Dichloroethene	< 0.29	0.092	0.29
trans-1,2-dichloroethene	< 0.23	0.072	0.23
1,2-Dichloropropane	< 0.15	0.046	0.15
1,3-DCP, Tetrachloroethene	< 0.56	0.17	0.56

ANALYTE	RESULT	MDL UG/L	PQL UG/L
2,2-Dichloropropane	< 1	0.63	2.2
Di-isopropyl Ether	< 0.38	0.12	0.38
Ethylbenzene	< 0.32	0.1	0.32
EDB (1,2-Dibromoethane)	< 0.08	0.025	0.08
Hexachlorobutadiene	< 0.35	0.11	0.35
Isopropylbenzene	< 0.36	0.11	0.36
p-Isopropyltoluene	< 0.46	0.15	0.46
Methylene Chloride	< 4	0.29	0.91
MTBE	< 0.22	0.069	0.22
Naphthalene	< 0.41	0.13	0.41
n-Propylbenzene	< 0.41	0.13	0.41
1,1,2,2-Tetrachloroethane	< 0.31	0.099	0.31
Tetrachloroethene	< 0.56	0.17	0.56
Toluene	< 0.69	0.22	0.69
1,2,3-Trichlorobenzene	< 1	0.31	1.1
1,2,4-Trichlorobenzene	< 0.91	0.26	0.91
1,1,1-Trichloroethane	< 0.63	0.2	0.63
1,1,2-Trichloroethane	< 0.17	0.055	0.17
Trichloroethene	< 0.18	0.055	0.18
Trichlorofluoromethane	< 1.4	1.4	4.4
1,2,4-Trimethylbenzene	< 0.57	0.18	0.57
1,3,5-Trimethylbenzene	< 0.57	0.18	0.57
Vinyl Chloride	< 0.54	0.17	0.54
m&p-Xylene	< 0.9	0.28	0.9
o-Xylene	< 0.33	0.1	0.33

Fluorobenzene Surrogate	108	% Rec.
1,4-Dichlorobutane Surrogate	89	% Rec.
Sample pH	1.6	

MDL = Method Detection Limit
PQL = Practical Quantitation Limit
NA = Not Applicable

Authorized Signature

U.S. Oil Co., Inc.

Analytical Laboratory

1090 Kennedy Ave. Kimberly, WI 54136
414-735-8295

WI DNR Certified Lab #445027660

QC Summary

Method 8021 Volatile Organic Compounds

Project #: CLW131246 Report Date: 24-Sep-96
Sample ID: FB-1246 Lab Code: 5014513G

ANALYTE	INITIAL CALIBRATION	KNOWN STANDARD	MATRIX SPIKE	REPLICATE SPIKE	BLANK	PID SURROGATE	HALL SURROGATE
Benzene	P	P	P	P	P	P	P
Bromobenzene	P	P	P	P	P	P	P
Bromodichloromethane	P	P	P	F	P	P	P
n-Butylbenzene	P	P	P	P	P	P	P
sec-Butylbenzene	P	P	P	P	P	P	P
tert-Butylbenzene	P	P	P	P	P	P	P
Carbon Tetrachloride	P	P	P	P	P	P	P
Chlorobenzene	P	P	P	P	P	P	P
Chloroethane	P	P	P	P	P	P	P
Chloroform	P	P	P	P	P	P	P
Chloromethane	P	F	P	P	P	P	P
2-Chlorotoluene	P	P	P	F	P	P	P
4-Chlorotoluene	P	P	P	F	P	P	P
1,2-Dibromo-3-Chloropropane	P	F	P	F	P	P	P
Dibromochloromethane	P	P	P	F	P	P	P
1,2-Dichlorobenzene	P	P	P	P	P	P	P
1,3-Dichlorobenzene	P	P	P	P	P	P	P
1,4-Dichlorobenzene	P	P	P	F	P	P	P
Dichlorodifluoromethane	P	F	P	P	P	P	P
1,1-Dichloroethane	P	P	P	P	P	P	P
1,2-Dichloroethane	P	P	P	F	P	P	P
1,1-Dichloroethene	P	F	P	P	P	P	P
cis-1,2-Dichloroethene	P	P	P	P	P	P	P
trans-1,2-Dichloroethene	P	F	P	P	P	P	P
1,2-Dichloropropane	P	P	P	F	P	P	P
1,3-Dichloropropane	P	P	P	F	P	P	P
2,2-Dichloropropane	P	F	P	F	P	P	P
Di-Isopropyl Ether	P	P	P	P	P	P	P
Ethylbenzene	P	P	P	P	P	P	P
EDB (1,2-Dibromoethane)	P	P	P	F	P	P	P
Hexachlorobutadiene	P	P	P	F	P	P	P
Isopropylbenzene	P	P	P	P	P	P	P
p-Isopropyltoluene	P	P	P	P	P	P	P
Methylene Chloride	P	F	P	P	P	P	P
MTBE	P	P	P	P	P	P	P
Naphthalene	P	P	P	P	P	P	P
n-Propylbenzene	P	P	P	P	P	P	P
1,1,2,2-Tetrachloroethane	P	P	P	F	P	P	P
Tetrachloroethene	P	P	P	P	P	P	P
Toluene	P	P	P	P	P	P	P
1,2,3-Trichlorobenzene	P	P	P	F	P	P	P
1,2,4-Trichlorobenzene	P	P	P	F	P	P	P
1,1,1-Trichloroethane	P	P	P	P	P	P	P
1,1,2-Trichloroethane	P	P	P	F	P	P	P
Trichloroethene	P	P	P	P	P	P	P
Trichlorofluoromethane	P	F	F	P	P	P	P
1,2,4-Trimethylbenzene	P	P	P	P	P	P	P
1,3,5-Trimethylbenzene	P	P	P	P	P	P	P
Vinyl Chloride	P	F	P	P	P	P	P
m & p-Xylene	P	P	P	P	P	P	P
o-Xylene	P	P	P	P	P	P	P

P = Passed QC limits. F = Failed QC limits. NA = Not Applicable

VOC analysis detected unidentified peaks.

Authorized Signature

[redacted]

CHAIN OF CUSTODY RECORD REQUEST FOR ANALYSIS

P. 1 of 1 [redacted]

No: 6897

Northern Environmental℠

☒ 1214 W. Venture Ct.
Mequon, WI 53092
414-241-3133
FAX 414-241-8222

☐ 372 West County Road D
New Brighton, MN 55112
612-635-9100
FAX 612-635-0643

☐ 954 Circle Drive
Green Bay, WI 54304
414-592-8400
FAX 414-592-8444

☐ 330 South 4th Avenue
Park Falls, WI 54552
715-762-1544
FAX 715-762-1844

☐ 324 East Main Street
Waupun, WI 53963
414-324-8600
FAX 414-324-3023

☐ 749 Lakewood Lane
Marquette, MI 49855
906-249-4300
FAX 906-249-4311

Check office originating request

5014513

Project No: CLW131246	Task No:
Project Location (city): CEDARBURG	
Project Manager: GSG	
Sampler (name): BRIAN KRANZ	
Sampler (signature): Brian Kranz	
Sampling Date(s): 9-13-96	
Reports to be Sent to: BRK	
Laboratory: U.S. OIL	
Wisconsin DNR Certification #: 445027660	
Laboratory Contact: JIM S.	
Price Quote:	

TURNAROUND TIME REQUIRED

☒ Normal ☐ Rush

Date Needed ______

Sample Integrity - To be completed by receiving lab
Seal intact upon receipt ☒ yes ☐ no
Method of Shipment Courier
Contents Temperature On Ice °C Refrigerator No:

ANALYSES REQUESTED

Lab ID No.	Sample No.	Collection Date	Collection Time	No. of Containers, Size & Type	Water	Soil	Other	Preservative	DRO (WI Modified Method)	GRO (WI Modified Method)	BETX (EPA Method 8020)	PVOC (EPA Method 8020)	VOC (EPA Method 8021)	PAH (EPA Method)	Pb (EPA Method)										
	MW200	9-13		3-40ML/1-LT	X			HCL	X				X					5014513A							
	MW300	↓		↓	X			↓	X				X					B							
	MW400	↓		↓	X			↓	X				X					C							
	MW500	↓		↓	X			↓	X				X					D							
	DUP-1246	9-13		2-40ML	X			HCL					X					E							
	TRIP	↓		↓	X			↓					X					F							
	FB-1246	↓		↓	X			↓					X					G							

Packed for Shipping by: BRK

Shipment Date: 9-17-96

Comments:

Relinquished By: Brian Kranz	Date:	Relinquished By: [signature]	Date: 9/17/96	Relinquished By:	Date:
Company: N.E.	Time:	Company: US Oil	Time: 4:25 PM	Company:	Time:
Received By: [signature]	Date: 9/17/96	Received By: [signature]	Date: 9/17/96	Received By:	Date:
Company: U.S. Oil	Time: 9:45AM	Company: USO	Time: 425	Company:	Time: