Date Received_____
(Leave blank)

Request for Coverage Under
Wisconsin Pollutant Discharge Elimination System (WPDES)
Wastewater Discharge Permit (WI-0046566-06) for
Contaminated Groundwater from Remedial Action Operations

(Revised 8 / 2012)

Please type or print required information, except for the signature.

I. GENERAL INFORMATION

A: FACILITY LOCATION INFORMATION		
Name of Facility / Project Madison Kipp Corporation	Official Representative Onsite Alina Satkoski	Title Environmental and Safety Coordinator
(Address or Highway / Road with Distance and Direction from nearest City) 201 Waubesa Street	Telephone No.: 608-242-5200	Fax # 608-770-9401
City, State, Zip Code Madison, Wisconsin 53704	County Dane	Email Address asatkoski@madison-kipp.com

B: Individual, parent company, or organization with direct control over the facility. Enter full official legal name of the owner or parent company, if there is one, the mailing address, and the name and title of the official representative (responsible party) signing this application <u>if he/she is located at address of parent company</u>.		
Parent Company/Owner Madison Kipp Corporation	Company Contact Alina Satkoski	Title Environmental and Safety Coordinator
Mailing Address - PO Box, Street, or Route P.O. Box 8043	Telephone No.: 608-242-5200	Fax # 608-770-9401
City, State, Zip Code Madison, Wisconsin, 53704	Email Address asatkoski@madison-kipp.com	

C: Consulting Firm for Groundwater		
Company Name ARCADIS	Company Contact Jennine Trask, PE	Title Certified Project Manager
Mailing Address - PO Box, Street, or Route 126 N. Jefferson Street, Suite 400	Telephone No.: 414-276-7742	Fax # 414-276-7603
City, State, Zip Code Milwaukee, Wisconsin 53202	Email Address jennine.trask@arcadis-us.com	

D. **Name of Person to Receive Discharge Monitoring Report Forms** from Department:

E. **Any Other Necessary Contact Person** (name, phone, email)

Michael Schmoller, WDNR

F. **DNR Environmental Response & Repair Project Number, and DNR Project Manager name:**

BRRTS No. 02-13-001569, Facility ID 113125320, WDNR Project Manager Michael Schmoller

II. SPECIFIC INFORMATION ON PROJECT

A. Pollutants

1. The suspected **sources of the pollutants** (estimate of material release quantity and contributing activities)

Historical chemical usage at the Site included PCE and oil potentially containing PCBs, and current chemical usage includes chlorine, hydraulic oils, caustic solutions and Stoddard solvent. Chlorinated solvents, including PCE; petroleum hydrocarbons, hydraulic oil, and gasoline; PAHs and PCBs have been found to be present in soil and groundwater.

2. Check **all fuel and waste types** suspected in the contamination at this site:

- ☐ Unleaded Gasoline
- ☐ Leaded Gasoline
- ☒ Diesel Fuel
- ☐ Heating Oil
- ☐ Jet Fuel
- ☒ Waste Oil
- ☒ Solvents
- ☒ Other: Polychlorinated Biphenyl
- ☐ Pesticides
- ☐ Fertilizers

3. Check **all pollutants identified at this site**:

- ☒ BETX (Benzene, Ethylbenzene, Toluene, Xylene)
- ☒ PAHs (Polynuclear aromatic hydrocarbons)
- ☒ VOCs (Volatile Organic Chemicals)
- ☐ Pesticides/Fertilizers
- ☐ Total Recoverable Lead *
- ☒ Other Polychlorinated Biphenyls

* Include upstream receiving water hardness analysis if lead is detected.

B. Treatment

1. **Describe the existing treatment system**:

This system will be constructed in winter 2014. One extraction well will pump groundwater at 45 gpm into a 2,000 gal holding tank. Water will then be mixed at the dosage specified in section 2 below in a 550 gal mixing tank. The water will then be pumped through an air stripper for treatment, followed by discharge to a storm structure.

Treatment Techniques Used

- ☒ Pump & Treat
  - ☒ Air stripping
  - ☐ GAC (Granular Activated Carbon)
- ☐ Augmented Insitu Bioremediation (with chemicals or nutrient addition)
- ☐ Other (describe)

2. **If any cleaning, softening or descaling of the treatment system**

a. Identify any additives that are proposed or being used for cleaning, softening, or descaling of the treatment system. Provide Material Safety Data Sheets, and describe dosage.

Hecla 1 anti-scalant at 30-60 ppm, approximately 2-4 gallons per day. MSDS attached.

b. Describe what is done to clean, soften or descale, and how often it is done.

Hecla 1 will be introduced upstream of the air stripper at a continuous rate.

c. Where is the reject water from cleaning and descaling discharged?

☒ same discharge point as treated effluent ☐ sanitary sewer ☐ other (please describe)

3. **Anticipated operating schedule** during the new permit term (2012 – 2017)

Continuous 24/7 operation beginning February, 2015.

4. **Anticipated flowrate** (in gpm), and total volume of treated water to be discharged per month:

45 gpm flowrate. 1,944,000 gallons monthly treated discharge.

5. **Effluent discharge point location**:

Storm structure AS5940-0049. See attached Figure 1 - Site Layout.

6. Is an **air permit** from the DNR air management program required? If not, why not.

An air permit is not required. Contaminants in the vapor phase will be treated using vapor granular activated carbon and monitored in accordance with NR 445.

III. DISCHARGE MANAGEMENT PLAN UPDATE

Include the following information:

1. A **summary** of analytical results for contaminants **detected** at the site.

   See attached Table 1 Summary of Groundwater Analytical Results 2012 to 2014.

2. Results from the most recent **volatile organic compounds (VOC) scan**, including methods used and detection levels.

   A full round of water samples was collected from 36 Site monitoring wells and 4 multiport wells in April 2014. Groundwater samples were submitted for VOCs analyzed using United States Environmental Protection Agency (U.S. EPA) SW-846 Method 8260B. A summary of the April 2014 groundwater results is included in the attached Table 1 Summary of Groundwater Analytical Results 2012 to 2014. The groundwater results are compared to the ch.NR 140 preventive action limits (PALs) and enforcement standards (ESs).

3. Results from an analysis of the **poly-nuclear aromatic hydrocarbons (PAHs)** shown on the right, including methods used and detection levels (unless PAH data are already submitted)

   The lab needs to reach the lowest detection level achievable for each parameter because of the low limit for total PAHs. EPA test method SW-846 8310 is recommended.

benzo(a)anthracene	dibenzo(a,h)anthracene
benzo(a)pyrene	fluoranthene
benzo(b)fluoranthene	indeno(1,2,3-cd)pyrene
benzo(g,h,i)perylene	naphthalene
benzo(k)fluoranthene	phenanthrene
chrysene	pyrene

   See Table 1 Summary of Groundwater Analytical Results 2012 to 2014 (attached).

4. **Contaminants proposed for periodic monitoring** and demonstration of why any monitoring required in the permit should be exempted due to low level of contaminants in the wastewater discharge.

   See Table 1 Summary of Groundwater Analytical Results 2012 to 2014 (attached).

5. **Information to support request for any alternate effluent limit** for discharges to groundwater (Part 5 of permit) or request for temporary exemption for in-situ discharges (Part 6 of permit).

   Not Applicable

6. **Plans and specifications for the proposed treatment system** identifying sampling points. For supplier furnished package treatment units, only a flow diagram, design summary, and unit sizing calculations are

required.

Please see attached Figure 1: Site Layout for proposed discharge location. For a flow diagram and design summary, see attached Groundwater Extraction and Treatment System Drawings. Air stripper modeling is summarized in Table 2 – Air Stripper Removal Efficiency. Additionally, a Basis of Design was submitted to the WDNR on April 1, 2014.

7. **General description of operations**, identifying operational tasks, who is responsible to do that task, and how frequently the task is done (particularly needed at pump & treat systems).

   Madison-Kipp will complete the following Operational Monitoring and Maintenance tasks:

   - Cleaning of air stripper trays per manufacturer's recommendations.
   - Oil and grease equipment motors per manufacturer's recommendations.
   - Replace anti-scalant drums as needed.
   - Daily monitoring of system components.
   - Collection of treated effluent for monitoring per WPDES requirements.

8. A **site plan** that identifies general land uses, underground storage tanks and pipelines, groundwater monitoring and recovery wells, contaminant plume definition and zone of influence, other known spills in the area, septic tanks and drain fields, separation distances to potable water supply wells and residences, and other pertinent information.

   See attached Figures 2-11 for existing well locations and contaminant plumes.

9. A **detailed map** of the discharge location, showing if discharge is direct or via a storm sewer or other conveyance. Indicate distance from site to discharge location and other impacted water bodies or wetlands.

   - If a city storm sewer is used, approval from the municipality is required.
   - If a new outfall structure is proposed, the plans should identify the outfall and incorporate appropriate erosion control methods. A permit for riprap projects (available at most DNR offices) should be obtained.
   - Wetland discharges are not allowed unless they meet wetland protection requirements of Ch. NR 103, Wis. Admin. Code.

   See attached Figure 1: Site Layout for proposed discharge location. The groundwater extraction and treatment system discharge will discharge to storm structure AS5940-0049. This discharges to the Stark Weather Creek, flowing to Lake Monona in the Rock River Basin. This discharge has been conditionally approved to this location by the Dane County Department of Health as non-stormwater discharge.

III. SIGNATURES

A. Signature of person completing the form, attesting to the accuracy and completeness of the statements made.

Rebecca A Rabbenmolt — Name
Remediation Specialist — Title
11/25/14 — Date Signed
ARCADIS — Address
126 N. Jefferson St Suite 400 milwaukee Wisconsin 53202 — Address
rebecca.rabbenmolt@arcadis-us.com — Email
414-277-6208 — Telephone Number

B. This application must be signed by the official representative of the permitted facility (responsible party) who is: the owner, the sole proprietor for a sole proprietorship, a general partner for a partnership, or by a ranking elected official or other duly authorized representative for a unit of government, or an executive officer of at least the level of vice president for a corporation, having overall responsibility for the operation of the facility. If the application is not signed, or is found to be incomplete, it will be returned.

Anthony C. Kobunski — Typed or Printed Name of Official Representative
President + CEO — Title
Signature of Official Representative
11/25/14 — Date Signed

Submit this General Permit Request for Coverage:

Department of Natural Resources,
Water Permits Central Intake - WT/3,
P.O. Box 7185,
Madison, WI 53707-7185.

The decision on whether to cover this discharge under the remediation general permit will be made by regional DNR wastewater staff. Upon receipt in Madison, this application will be forwarded to the appropriate regional staff person.

A copy of the submittal should also be sent to the Department Remediation & Redevelopment Project Manager.
Watershed Central:\General Permits\Reissue Docs\Grw Remediation\Request For Coverage 2012.doc

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WPDES Section II.
Part B. Treatment
2. Descaling

Hecla 1 MSDS

MATERIAL SAFETY DATA SHEET

HECLA 1

Latest Revision Date...12/10/12 Print Date.....12/10/12

SECTION 1 MANUFACTURER INFORMATION

QUES INDUSTRIES, INC.
5420 W. 140TH STREET
CLEVELAND, OHIO 44142
PH (216) 267-8989 FAX (216) 267-8998

FOR CHEMICAL EMERGENCY
CALL INFOTRAC @ 1-800-535-5053
24 HRS/DAY, 7 DAYS/WEEK

SECTION 2 PRODUCT IDENTIFICATION

PRODUCT NUMBER..... Q HECLA1
TRADE NAME OR CHEMICAL NAME... HECLA 1
SYNONYMS..... NA
CHEMICAL FAMILY..... Polymer Blend
NFPA - HEALTH HAZARD..... 2
FIRE HAZARD..... 0
REACTIVITY HAZARD..... 0
NFPA SCALE..... 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant
KEY..... NA= Not Applicable ND= Not Determined

SECTION 3 HAZARDOUS INGREDIENTS

CHEMICAL NAME(S)	CAS NUMBER	% WT	TLV-TWA	PEL	SEC.313	CARCINOGEN?
None	NA	NA	NA	NA	No	NA

SECTION 4 SHIPPING DATA

D.O.T. PROPER SHIPPING NAME... NA
D.O.T. HAZARD CLASS..... NA
D.O.T. LABELS REQUIRED..... NA
UN/NA I.D. NUMBER..... NA
PACKAGING GROUP..... NA
NON-BULK SHIPPING NAME..... Compound, Industrial Process Water Treating, Liquid
BULK SHIPPING NAME..... Same

SECTION 5 PHYSICAL DATA

BOILING/FREEZING POINT @760 mmHg... ND / ND
pH..... 5.1
VAPOR PRESSURE mm Hg @20° C..... ND
VAPOR DENSITY (Air = 1)..... >1
PERCENT VOLATILE BY WEIGHT (%)..... 50
SPECIFIC GRAVITY @20°C..... 1.25
SOLUBILITY IN WATER..... Complete
EVAPORATION RATE..... (BuAc=1) <1
APPEARANCE AND ODOR..... Clear yellow to amber liquid with mild odor.

SECTION 6 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Test Method)..... NA
AUTOIGNITION TEMPERATURE..... NA
FLAMMABILITY LIMITS IN AIR (% V)... NA

SECTION 6 FIRE AND EXPLOSION HAZARD DATA CONT'D

EXTINGUISHING MEDIA..... Not combustible

SPECIAL FIRE FIGHTING PROCEDURES... NA

UNUSUAL FIRE & EXPLOSION HAZARDS... Cool drums exposed to heat or fire to prevent steam rupture.

SECTION 7 REACTIVITY DATA

PRODUCT STABILITY..... Stable

Conditions to Avoid..... None Known

CHEMICAL INCOMPATIBILITY..... Strong Oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS... None known

HAZARDOUS POLYMERIZATION..... Will Not Occur

SECTION 8 HEALTH HAZARD DATA

SKIN CONTACT... Prolonged or repeated contact may cause irritation.

EYE CONTACT.... May cause eye irritation upon contact.

INHALATION..... High concentration of mists or vapors may cause respiratory system irritation.

INGESTION..... Harmful if swallowed.

SECTION 9 EMERGENCY AND FIRST AID PROCEDURES

SKIN.....Remove contaminated clothing and flush exposed skin with soap and water. If irritation persists or develops, get medical attention. Launder contaminated clothing before reuse.

EYES.....Immediately flush eyes with large amounts of water for 15 minutes and get medical attention.

INGESTION....If swallowed, get medical attention immediately. Never give anything by mouth to an unconscious person.

INHALATION...Move to fresh air. Aid in breathing, if necessary, and get medical attention.

SECTION 10 ENVIRONMENTAL DATA

SPILL OR LEAK PROCEDURES... Avoid skin contact. Neutralize and absorb with sand or inert material. Place in suitable container for disposal. Flush neutralized residues to sanitary sewer.

WASTE DISPOSAL METHOD..... Dispose of in accordance with all federal, state and local regulations.

HAZARDOUS WASTE 40CFR261... NA

CONTAINER DISPOSAL..... Empty containers may contain residuals. Thoroughly clean, then offer for recycling , reuse, or disposal in accordance with governmental regulations.

SECTION 11 SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION.....NIOSH/MSHA approved filter type mask for dusts, fumes and mists as needed to maintain P.E.L.

VENTILATION.....Local and/or mechanical exhaust to maintain exposure below P.E.L.

PROTECTIVE CLOTHING.....Neoprene gloves, apron, boots - as necessary to prevent skin contact.

EYE PROTECTION.....Chemical goggles.

OTHER PRECAUTIONS.....Safety shower and eyewash fountains should be easily accessible.

SECTION 12 SUPPLIER INFORMATION

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of manufacturer. The data on this sheet relates only to the specific material designated herein. Manufacturer assumes no legal responsibility for use or reliance upon this data.

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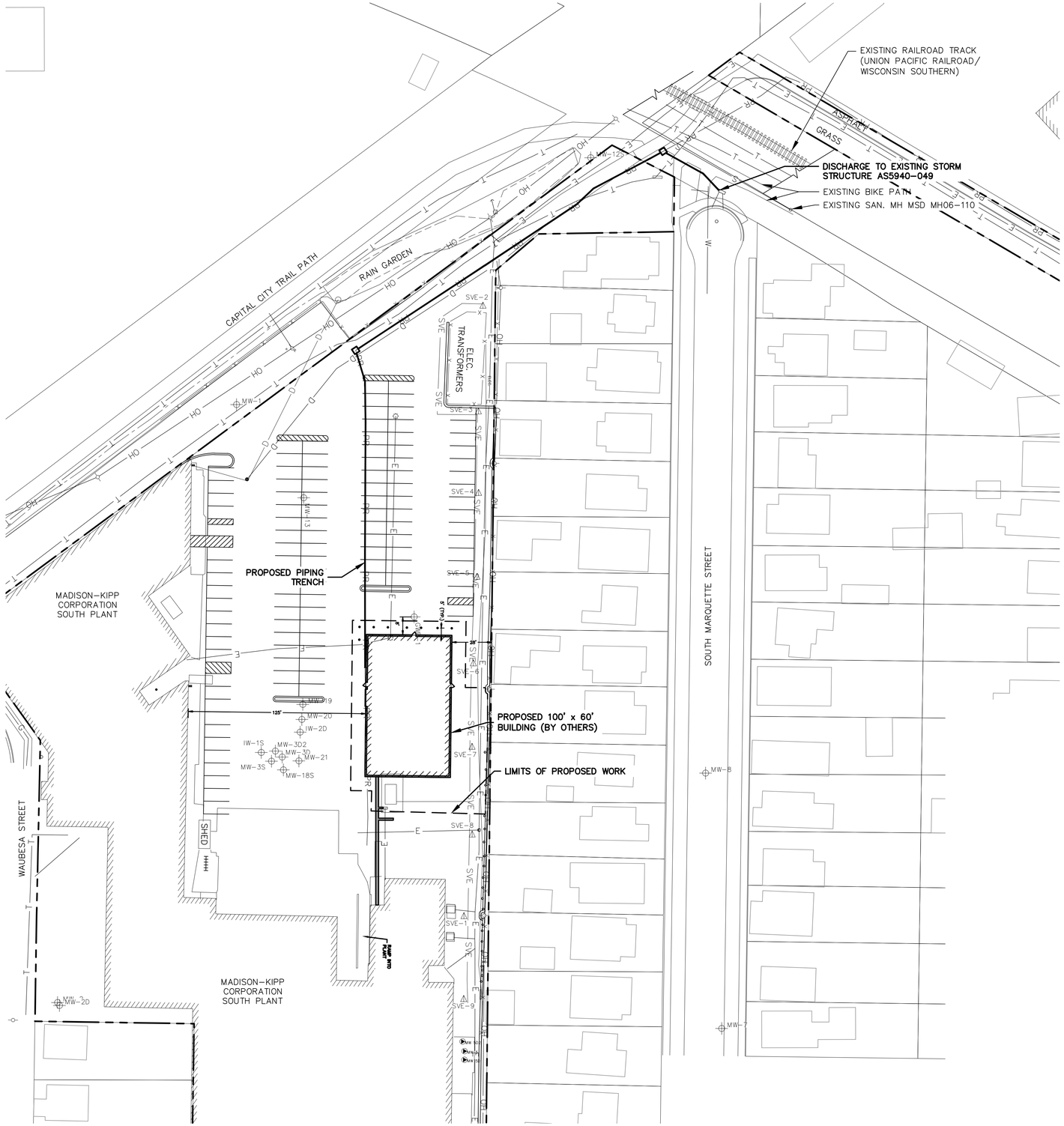
WPDES Section II.
Part B. Treatment
3. Discharge Location

Figure 1 – Site Layout



LEGEND:

- PROPOSED BUILDING (BY OTHERS)
- EXISTING MADISON-KIPP PROPERTY BOUNDARY
- X/X — DETAIL REFERENCE NUMBER / DRAWING REFERENCE NUMBER
- EXISTING MONITORING WELL
- EXISTING SVE WELL
- EXISTING FENCE
- PR — EXISTING PROPANE (OUT OF SERVICE)
- D — EXISTING STORM DRAIN
- E — EXISTING ELECTRIC
- OH — EXISTING OVERHEAD ELECTRIC
- W — EXISTING WATER
- G — EXISTING GAS
- FO — EXISTING FIBER OPTIC/CATV
- T — EXISTING TELEPHONE
- S — EXISTING SANITARY SEWER

NOTES:

1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO THE START OF WORK.
2. EROSION AND SEDIMENT CONTROL LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED BASED ON ACTUAL FIELD CONDITIONS. ADDITIONAL EROSION CONTROL MEASURES MAY BE NECESSARY TO PREVENT EROSION AND SEDIMENTATION.
3. TRUCK TRAFFIC SHALL ENTER FROM WAUBESA STREET. CONTRACTOR SHALL USE A STREET SWEEPER FOR TRAFFIC AREAS INCLUDING LIMITS OF PROPOSED WORK (ASPHALT PARKING), ASPHALT DRIVEWAY AND WAUBESA STREET. SWEEPING SHALL OCCUR AT A MINIMUM DAILY AND MORE FREQUENTLY AT THE DIRECTION OF THE ENGINEER/EROSION CONTROL INSPECTOR.
4. TEMPORARY CONTROLS SHALL BE MAINTAINED BY THE CONTRACTOR. DAMAGED OR DISTURBED CONTROLS SHALL BE REPLACED THE SAME WORKING DAY.
5. PAVEMENT RESTORATION SHALL BE COMPLETED BY THE OWNER UPON COMPLETION OF SITE WORK. IN THE EVENT SCHEDULE OR INCLEMENT WEATHER PREVENT RESTORATION OF PARKING AREAS., THE OWNER SHALL MAINTAIN EROSION CONTROLS UNTIL RESTORATION IS COMPLETE.
6. ACCESS TO THE GROUNDWATER EXTRACTION AND TREATMENT SYSTEM AREA WILL BE AVAILABLE FOR REGULATORY METER READING AND SAMPLE COLLECTION OF THE TREATED EFFLUENT BY WISCONSIN DEPARTMENT OF NATURAL RESOURCES AND DEPARTMENT OF HEALTH AS NEEDED.

0 40' 80'
GRAPHIC SCALE

MADISON-KIPP CORPORATION
MADISON, WISCONSIN
MADISON-KIPP BUILDING DESIGN

SITE LAYOUT

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FIGURE
1

CITY:SYRACUSE-NY DIV/GROUP:ENV DB:V.YATES LD:S.MURPHY PIC: PM:J.TRASK TM:R.ROBBENNOLT LYR:ON=*;OFF=*REF*
G:\ENVCAD\SYRACUSE\ACTIVE\W0013680\01900000\DWG\REPORT\DISCHARGE-PERMIT\W13680G01.dwg LAYOUT: 1 SAVED: 10/22/2014 2:53 PM ACADVER: 18.1S (LMS TECH) PAGESETUP: PDF-DL PLOTSTYLETABLE: PLTCONT.CTB PLOTTED: 10/22/2014 2:53 PM BY: STEINBERGER, GEORGE
XREFS: IMAGES: PROJECTNAME: ----
W13368X00
W13368X01
W13368X02

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WPDES Section III.
1. Summary of Detections

Table 1 – Summary of Groundwater Analytical Results from 2012 to 2014

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	Proposed for Periodic Monitoring			Preventive	Enforcement	GWE-1	MP-13								
Sample Interval (feet bls)							44-48						67-71		
Sample Date				Action Limit	Standard	1/20/2014	12/6/2012	1/19/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/6/2012	1/19/2013	4/17/2013
VOCs (µg/L)	**VOCs (µg/L)**	**Limit**	**Frequency**												
1,1,1,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	50	Monthly Average	7	70	<1.3 U	<0.25	<0.25	<0.5	<0.25	<0.25	<0.50 U	<1.3	<1.3	<2.5
1,1,1-Trichloroethane	1,1,1-Trichloroethane	50	Monthly Average	40	200	<1.0 U	<0.2	<0.2	<0.4	<0.2	<0.2	<0.40 U	<1	<1	<2
1,1,2-Trichloroethane	1,1,2-Trichloroethane	50	Monthly Average	0.5	5	<1.4 U	<0.28	<0.28	<0.56	<0.28	<0.28	<0.56 U	<1.4	<1.4	<2.8
1,1-Dichloroethene	1,1-Dichloroethene	50	Monthly Average	0.7	7	<1.6 U	**0.92 J**	**1.1**	<0.62	**0.85 J**	**1.1**	**1.3 J**	**2.8 J**	**3.1 J**	<3.1
1,2,4-Trimethylbenzene	--	--	--	96	480	<0.70 U	<0.14	<0.14	<0.28	<0.14	<0.14	<0.28 U	<0.7	<0.7	<1.4
1,2-Dibromoethane	--	--	--	0.005	0.05	<1.8 U	<0.36	<0.36	<0.72	<0.36	<0.36	<0.72 U	<1.8	<1.8	<3.6
1,2-Dichlorobenzene	--	--	--	60	600	<1.4 U	<0.27	<0.27	<0.54	<0.27	<0.27	<0.54 U	<1.4	<1.4	<2.7
1,2-Dichloroethane	1,2-Dichloroethane	180	Monthly Average	0.5	5	<1.4 U	<0.28	<0.28	<0.56	<0.28	<0.28	<0.56 U	<1.4	<1.4	<2.8
1,2-Dichloropropane	--	--	--	0.5	5	<1.0 U	<0.2	<0.2	<0.4	<0.2	<0.2	<0.40 U	<1	<1	<2
1,3,5-Trimethylbenzene	--	--	--	96	480	<0.90 U	<0.18	<0.18	<0.36	<0.18	<0.18	<0.36 U	<0.9	<0.9	<1.8
2-Chlorotoluene	--	--	--	--	--	<1.1 U	<0.21	<0.21	<0.42	<0.21	<0.21	<0.42 U	<1.1	<1.1	<2.1
4-Chlorotoluene	--	--	--	--	--	<1.0 U	<0.2	<0.2	<0.4	<0.2	<0.2	<0.40 U	<1	<1	<2
Benzene	Benzene	50	Monthly Average	0.5	5	<0.37 U	0.34 J	0.38 J	0.38 J	0.34 J	0.46 J	<0.15 U	<0.37	**1.1 J**	<0.74
Bromobenzene	--	--	--	--	--	<1.3 U	<0.25	<0.25	<0.5	<0.25	<0.25	<0.50 U	<1.3	<1.3	<2.5
Bromodichloromethane	--	--	--	0.06	0.6	<0.85 U	<0.17	<0.17	<0.34	<0.17	<0.17	<0.34 U	<0.85	<0.85	<1.7
Bromoform	Bromoform	120	Monthly Average	0.44	4.4	<1.4 U	<0.28	<0.28	<0.56	<0.28	<0.28	<0.56 U	<1.4	<1.4	<2.8
Bromomethane	Methyl bromide	120	Monthly Average	1	10	<1.6 U	<0.31	<0.31	<0.62	<0.31	<0.31	<0.62 U	<1.6	<1.6	<3.1
Carbon Tetrachloride	Carbon tetrachloride	150	Monthly Average	0.5	5	<1.3 U	<0.26	<0.26	<0.52	<0.26	<0.26	<0.52 U	<1.3	<1.3	<2.6
CFC-12	Dichlorofluoromethane	--	--	200	1,000	<1.0 U	<0.2	<0.2	<0.4	<0.2	<0.2	<0.40 U	<1	<1	<2
Chlorodibromomethane	Dichlorobromomethane	120	Monthly Average	6	60	<1.6 U	<0.32	<0.32	<0.64	<0.32	<0.32	<0.64 U	<1.6	<1.6	<3.2
Chloroform	Chloroform	120	Monthly Average	0.6	6	<1.0 U	<0.2	<0.2	<0.4	<0.2	<0.2	<0.40 U	<1	<1	<2
Chloromethane	Methyl chloride	120	Monthly Average	3	30	<0.90 U	<0.18	<0.18	<0.36	<0.18	<0.18	<0.36 U	<0.9	<0.9	<1.8
cis-1,2-Dichloroethene	--	--	--	7	70	**1,400**	**540**	**450**	**460**	**430**	**480**	**450**	**3,500**	**3,100**	**3,200**
Cymene	--	--	--	--	--	<0.85 U	<0.17	<0.17	<0.34	<0.17	<0.17	<0.34 U	<0.85	<0.85	<1.7
Dichloromethane	--	--	--	0.5	5	<3.4 U	<0.68	<0.68	<1.4	<0.68	<0.68	<1.4 U	<3.4	<3.4	<6.8
Ethylbenzene	--	--	--	140	700	<0.65 U	<0.13	<0.13	<0.26	<0.13	<0.13	<0.26 U	<0.65	<0.65	<1.3
Isopropylbenzene	--	--	--	--	--	<0.70 U	<0.14	<0.14	<0.28	<0.14	<0.14	<0.28 U	<0.7	<0.7	<1.4
Methyl-tert-butylether	Methyl tert-butyl ether		NE	12	60	<1.2 U	<0.24	<0.24	<0.48	<0.24	<0.24	<0.48 U	<1.2	<1.2	<2.4
Naphthalene	Naphthalene	70	Monthly Average	10	100	<0.80 U	<0.16	<0.16	<0.32	<0.16	<0.16	<0.32 U	<0.8	<0.8	<1.6
N-Butylbenzene	--	--	--	--	--	<0.65 U	<0.13	<0.13	<0.26	<0.13	<0.13	<0.26 U	<0.65	<0.65	<1.3
N-Propylbenzene	--	--	--	--	--	<0.65 U	<0.13	<0.13	<0.26	<0.13	<0.13	<0.26 U	<0.65	<0.65	<1.3
sec-Butylbenzene	--	--	--	--	--	<0.75 U	<0.15	<0.15	<0.3	<0.15	<0.15	<0.30 U	<0.75	<0.75	<1.5
Styrene (Monomer)	--	--	--	10	100	<0.50 U	<0.1	<0.1	<0.2	<0.1	<0.1	<0.20 U	<0.5	<0.5	<1
tert-Butylbenzene	--	--	--	--	--	<0.70 U	<0.14	<0.14	<0.28	<0.14	<0.14	<0.28 U	<0.7	<0.7	<1.4
Tetrachloroethene	Tetrachloroethene	50	Monthly Average	0.5	5	**3,200**	**640**	**760**	**680**	**720**	**800**	**750**	**3,800**	**4,300**	**3,800**
Toluene	--	--	--	160	800	<0.55 U	<0.11	<0.11	<0.22	<0.11	<0.11	<0.22 U	<0.55	<0.55	<1.1
Total Xylenes	--	--	--	400	2,000	<0.34 U	<0.068	<0.068	<0.14	<0.068	<0.068	<0.14 U	<0.34	<0.34	<0.68
trans-1,2-Dichloroethene	--	--	--	20	100	**21**	**7.3**	**6.7**	**6.9**	**6.9**	**8.4**	**8.5**	**60**	**56**	**52**
trans-1,3-Dichloropropene	--	--	--	0.04	0.4	<1.1 U	<0.21	<0.21	<0.42	<0.21	<0.21	<0.42 U	<1.1	<1.1	<2.1
Trichloroethene	Trichloroethene	50	Monthly Average	0.5	5	**610**	**230**	**200**	**230**	**220**	**290**	**300**	**1,100**	**1,000**	**940**
Vinyl chloride	Vinyl chloride	10	Monthly Average	0.02	0.2	**56**	**15**	**17**	**13**	**13**	**17**	**14**	**150**	**180**	**130**
PCBs (µg/L)															
Aroclor 1016	--	--	--	0.003	0.03	<0.023	<0.16	NA	NA	NA	NA	NA	<0.16	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	Proposed for Periodic Monitoring			Preventive	Enforcement	GWE-1	MP-13								
Sample Interval (feet bls)							44-48						67-71		
Sample Date				Action Limit	Standard	1/20/2014	12/6/2012	1/19/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/6/2012	1/19/2013	4/17/2013
PCBs (µg/L) (continued)															
Aroclor 1232	--	--	--	0.003	0.03	<0.037	<0.085	NA	NA	NA	NA	NA	<0.085	NA	NA
Aroclor 1242, Dissolved	--	--	--	0.003	0.03	<0.04	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	--	--	--	0.003	0.03	<0.04	<0.12	NA	NA	NA	NA	NA	<0.12	NA	NA
Aroclor 1254, Dissolved	--	--	--	0.003	0.03	<0.026	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)															
1-Methylnaphthalene	--	--	--	--	--	NA	<1.1	NA	NA	NA	NA	NA	<1.1	NA	NA
2-Methylnaphthalene	--	--	--	--	--	NA	<0.14	NA	NA	NA	NA	NA	<0.14	NA	NA
Acenaphthene	--	--	--	--	--	NA	<0.4	NA	NA	NA	NA	NA	<0.38	NA	NA
Anthracene	--	--	--	600	3000	NA	<0.36	NA	NA	NA	NA	NA	<0.34	NA	NA
Benzo(a)anthracene	--	--	--	--	--	NA	<0.049	NA	NA	NA	NA	NA	<0.046	NA	NA
Benzo(a)pyrene	Benzo(a)pyrene	0.1	Monthly Average	0.02	0.2	NA	<0.062	NA	NA	NA	NA	NA	<0.059	NA	NA
Benzo(b)fluoranthene	--	--	--	0.02	0.2	NA	<0.064	NA	NA	NA	NA	NA	<0.061	NA	NA
Benzo(g,h,i)perylene	--	--	--	--	--	NA	<0.47	NA	NA	NA	NA	NA	<0.44	NA	NA
Benzo(k)fluoranthene	--	--	--	--	--	NA	<0.082	NA	NA	NA	NA	NA	<0.078	NA	NA
Chrysene	--	--	--	0.02	0.2	NA	<0.16	NA	NA	NA	NA	NA	<0.15	NA	NA
Dibenzo(a,h)anthracene	--	--	--	--	--	NA	<0.071	NA	NA	NA	NA	NA	<0.067	NA	NA
Fluoranthene	--	--	--	80	400	NA	<0.36	NA	NA	NA	NA	NA	<0.34	NA	NA
Fluorene	--	--	--	80	400	NA	<0.42	NA	NA	NA	NA	NA	<0.4	NA	NA
Indeno(1,2,3-cd)pyrene	--	--	--	--	--	NA	<0.093	NA	NA	NA	NA	NA	<0.088	NA	NA
Naphthalene	--	--	--	10	100	NA	<0.33	NA	NA	NA	NA	NA	<0.32	NA	NA
Phenanthrene	--	--	--	--	--	NA	<0.39	NA	NA	NA	NA	NA	<0.37	NA	NA
Pyrene	--	--	--	50	250	NA	<0.53	NA	NA	NA	NA	NA	<0.51	NA	NA
Metals (µg/L)															
Arsenic, Dissolved	--	--	--	1	10	NA	0.16 J	0.19 J	NA	NA	NA	NA	0.20 J	0.15 J	NA
Arsenic, Total	--	--	--	1	10	NA	0.21 J	0.20 J	NA	NA	NA	NA	0.16 J	0.17 J	NA
Barium, Dissolved	--	--	--	400	2,000	NA	180	190	NA	NA	NA	NA	26 B	24	NA
Barium, Total	--	--	--	400	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	--	--	--	0.5	5	NA	<0.1	<0.1	NA	NA	NA	NA	<0.1	<0.1	NA
Cadmium, Total	--	--	--	0.5	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	--	--	--	10	100	NA	<0.64	<0.64	NA	NA	NA	NA	<0.64	<0.64	NA
Chromium, Total	--	--	--	10	100	NA	3.4 J	1.3 J	NA	NA	NA	NA	6.8	2.1 J	NA
Copper, Dissolved	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	--	--	--	150	300	12 JB	**860**	85 J	NA	NA	NA	NA	43 JB	<37	NA
Iron, Total	--	--	--	150	300	**35 JB**	**1,300**	**360**	NA	NA	NA	NA	61 JB	<37	NA
Lead, Dissolved	--	--	--	1.5	15	NA	0.23 J	0.39 J	NA	NA	NA	NA	<0.16	<0.16	NA
Lead, Total	--	--	--	1.5	15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	--	--	--	60	300	**61**	**360**	**280**	NA	NA	NA	NA	10	3	NA
Manganese, Total	--	--	--	60	300	**64**	**340**	**290**	NA	NA	NA	NA	10	3.3	NA
Mercury, Dissolved	--	--	--	0.2	2	NA	<0.071	<0.071	NA	NA	NA	NA	<0.071	<0.071	NA
Mercury, Total	--	--	--	0.2	2	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID						GWE-1	MP-13									
Sample Interval (feet bls)	Proposed for Periodic Monitoring			Preventive	Enforcement		44-48						67-71			
Sample Date				Action Limit	Standard	1/20/2014	12/6/2012	1/19/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/6/2012	1/19/2013	4/17/2013
Metals (µg/L) (continued)																
Nickel, Total	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium, Dissolved	--	--	--	10	50	NA	0.27 J	0.29 J	NA	NA	NA	NA	<0.25	0.34 J	NA	
Selenium, Total	--	--	--	10	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver, Dissolved	--	--	--	10	50	NA	<0.069	<0.069	NA	NA	NA	NA	<0.069	<0.069	NA	
Silver, Total	--	--	--	10	50	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Zinc, Dissolved	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Zinc, Total	--	--	--	--	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Other (mg/L)																
Chloride	--	--	--		0.25	NA	**420**	**410**	NA	NA	NA	NA	**270**	**250**	NA	
Total Dissolved Solids	--	--	--	--	--	1,100	1,400	1,400	NA	NA	NA	NA	1,100	1,100	NA	
Total BTEX (µg/L)	--	750	Daily Maximum	--	--	ND	0.34	0.38	0.38	0.34	0.46	ND	ND	1.1	ND	
Total PAHs (µg/L)	--	0.1	Monthly Average	--	--	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected concentrations were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-13 (continued)																		
Sample Interval (feet bls)	67-71 (continued)			81-85						102-106						121-125		
Sample Date	7/22/2013	10/7/2013	4/16/2014	12/6/2012	1/19/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/18/2013	4/17/2013	7/22/2013	4/16/2014	10/7/2013	12/4/2012	1/18/2013	4/17/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<1.3	<1.3	<1.3 U	<2.5	4.8 J	<5	<2.5	<1.3	<2.5 U	<1.3	<0.5	<1.3	<1.3	<1.3 U	<1.3	<0.5	<1.3	<5
1,1,1-Trichloroethane	<1	<1	<1.0 U	<2	<2	<4	<2	<1	<2.0 U	<1	<0.4	<1	<1	<1.0 U	<1	<0.4	<1	<4
1,1,2-Trichloroethane	<1.4	<1.4	<1.4 U	<2.8	<2.8	<5.6	<2.8	<1.4	<2.8 U	<1.4	<0.56	<1.4	<1.4	<1.4 U	<1.4	<0.56	<1.4	<5.6
1,1-Dichloroethene	<1.6	<1.6	<1.6 U	<3.1	<3.1	<6.2	<3.1	<1.6	<3.1 U	<1.6	<0.62	<1.6	<1.6	<1.6 U	<1.6	<0.62	<1.6	<6.2
1,2,4-Trimethylbenzene	<0.7	<0.7	<0.70 U	<1.4	<1.4	<2.8	<1.4	<0.7	<1.4 U	<0.7	<0.28	<0.7	<0.7	<0.70 U	<0.7	<0.28	<0.7	<2.8
1,2-Dibromoethane	<1.8	<1.8	<1.8 U	<3.6	<3.6	<7.2	<3.6	<1.8	<3.6 U	<1.8	<0.72	<1.8	<1.8	<1.8 U	<1.8	<0.72	<1.8	<7.2
1,2-Dichlorobenzene	<1.4	<1.4	<1.4 U	<2.7	<2.7	<5.4	<2.7	<1.4	<2.7 U	<1.4	<0.54	<1.4	<1.4	<1.4 U	<1.4	<0.54	<1.4	<5.4
1,2-Dichloroethane	<1.4	<1.4	<1.4 U	<2.8	<2.8	<5.6	<2.8	<1.4	<2.8 U	<1.4	<0.56	<1.4	<1.4	<1.4 U	<1.4	<0.56	<1.4	<5.6
1,2-Dichloropropane	<1	<1	<1.0 U	<2	<2	<4	<2	<1	<2.0 U	<1	<0.4	<1	<1	<1.0 U	<1	<0.4	<1	<4
1,3,5-Trimethylbenzene	<0.9	<0.9	<0.90 U	<1.8	<1.8	<3.6	<1.8	<0.9	<1.8 U	<0.9	<0.36	<0.9	<0.9	<0.90 U	<0.9	<0.36	<0.9	<3.6
2-Chlorotoluene	<1.1	<1.1	<1.1 U	<2.1	<2.1	<4.2	<2.1	<1.1	<2.1 U	<1.1	<0.42	<1.1	<1.1	<1.1 U	<1.1	<0.42	<1.1	<4.2
4-Chlorotoluene	<1	<1	<1.0 U	<2	<2	<4	<2	<1	<2.0 U	<1	<0.4	<1	<1	<1.0 U	<1	<0.4	<1	<4
Benzene	<0.37	<0.37	<0.37 U	<0.74	<0.74	<1.5	<0.74	<0.37	<0.74 U	<0.37	<0.15	<0.37	<0.37	<0.37 U	<0.37	<0.15	<0.37	<1.5
Bromobenzene	<1.3	<1.3	<1.3 U	<2.5	<2.5	<5	<2.5	<1.3	<2.5 U	<1.3	<0.5	<1.3	<1.3	<1.3 U	<1.3	<0.5	<1.3	<5
Bromodichloromethane	<0.85	<0.85	<0.85 U	<1.7	<1.7	<3.4	<1.7	<0.85	<1.7 U	<0.85	<0.34	<0.85	<0.85	<0.85 U	<0.85	<0.34	<0.85	<3.4
Bromoform	<1.4	<1.4	<1.4 U	<2.8	<2.8	<5.6	<2.8	<1.4	<2.8 U	<1.4	<0.56	<1.4	<1.4	<1.4 U	<1.4	<0.56	<1.4	<5.6
Bromomethane	<1.6	<1.6	<1.6 U	<3.1	<3.1	<6.2	<3.1	<1.6	<3.1 U	<1.6	<0.62	<1.6	<1.6	<1.6 U	<1.6	<0.62	<1.6	<6.2
Carbon Tetrachloride	<1.3	<1.3	<1.3 U	<2.6	<2.6	<5.2	<2.6	<1.3	<2.6 U	<1.3	<0.52	<1.3	<1.3	<1.3 U	<1.3	<0.52	<1.3	<5.2
CFC-12	<1	<1	<1.0 U	<2	<2	<4	<2	<1	<2.0 U	<1	<0.4	<1	<1	<1.0 U	<1	<0.4	<1	<4
Chlorodibromomethane	<1.6	<1.6	<1.6 U	<3.2	<3.2	<6.4	<3.2	<1.6	<3.2 U	<1.6	<0.64	<1.6	<1.6	<1.6 U	<1.6	<0.64	<1.6	<6.4
Chloroform	<1	<1	<1.0 U	<2	<2	<4	<2	<1	<2.0 U	<1	<0.4	<1	<1	<1.0 U	<1	<0.4	<1	<4
Chloromethane	<0.9	<0.9	<0.90 U	<1.8	<1.8	<3.6	<1.8	<0.9	<1.8 U	<0.9	<0.36	<0.9	<0.9	<0.90 U	<0.9	<0.36	<0.9	<3.6
cis-1,2-Dichloroethene	**2,300**	**1,500**	**1,300**	**1,900**	**1,800**	**2,700**	**1,700**	**1,200**	**2,200**	**1,100**	**690**	**720**	**660**	**770**	**600**	**910**	**1,000**	**930**
Cymene	<0.85	<0.85	<0.85 U	<1.7	<1.7	<3.4	<1.7	<0.85	<1.7 U	<0.85	<0.34	<0.85	<0.85	<0.85 U	<0.85	<0.34	<0.85	<3.4
Dichloromethane	<3.4	<3.4	<3.4 U	<6.8	<6.8	<14	<6.8	<3.4	<6.8 U	<3.4	<1.4	<3.4	<3.4	<3.4 U	<3.4	<1.4	<3.4	<14
Ethylbenzene	<0.65	<0.65	<0.65 U	<1.3	<1.3	<2.6	<1.3	<0.65	<1.3 U	<0.65	<0.26	<0.65	<0.65	<0.65 U	<0.65	<0.26	<0.65	<2.6
Isopropylbenzene	<0.7	<0.7	<0.70 U	<1.4	<1.4	<2.8	<1.4	<0.7	<1.4 U	<0.7	<0.28	<0.7	<0.7	<0.70 U	<0.7	<0.28	<0.7	<2.8
Methyl-tert-butylether	<1.2	<1.2	<1.2 U	<2.4	<2.4	<4.8	<2.4	<1.2	<2.4 U	<1.2	<0.48	<1.2	<1.2	<1.2 U	<1.2	<0.48	<1.2	<4.8
Naphthalene	<0.8	<0.8	<0.80 U	<1.6	<1.6	<3.2	<1.6	<0.8	<1.6 U	<0.8	<0.32	<0.8	<0.8	<0.80 U	<0.8	<0.32	<0.8	<3.2
N-Butylbenzene	<0.65	<0.65	<0.65 U	<1.3	<1.3	<2.6	<1.3	<0.65	<1.3 U	<0.65	<0.26	<0.65	<0.65	<0.65 U	<0.65	<0.26	<0.65	<2.6
N-Propylbenzene	<0.65	<0.65	<0.65 U	<1.3	<1.3	<2.6	<1.3	<0.65	<1.3 U	<0.65	<0.26	<0.65	<0.65	<0.65 U	<0.65	<0.26	<0.65	<2.6
sec-Butylbenzene	<0.75	<0.75	<0.75 U	<1.5	<1.5	<3	<1.5	<0.75	<1.5 U	<0.75	<0.3	<0.75	<0.75	<0.75 U	<0.75	<0.3	<0.75	<3
Styrene (Monomer)	<0.5	<0.5	<0.50 U	<1	<1	<2	<1	<0.5	<1.0 U	<0.5	<0.2	<0.5	<0.5	<0.50 U	<0.5	<0.2	<0.5	<2
tert-Butylbenzene	<0.7	<0.7	<0.70 U	<1.4	<1.4	<2.8	<1.4	<0.7	<1.4 U	<0.7	<0.28	<0.7	<0.7	<0.70 U	<0.7	<0.28	<0.7	<2.8
Tetrachloroethene	**2,800**	**2,000**	**1,600**	**5,600**	**6,800**	**7,900**	**6,800**	**5,400**	**7,900**	**1,800**	**1,100**	**1,400**	**1,500**	**1,600**	**1,900**	**1,500**	**2,600**	**7,000**
Toluene	<0.55	<0.55	<0.55 U	<1.1	<1.1	<2.2	<1.1	<0.55	<1.1 U	<0.55	<0.22	<0.55	<0.55	<0.55 U	<0.55	<0.22	<0.55	<2.2
Total Xylenes	<0.34	<0.34	<0.34 U	<0.68	<0.68	<1.4	<0.68	<0.34	<0.68 U	<0.34	<0.14	<0.34	<0.34	<0.34 U	<0.34	<0.14	<0.34	<1.4
trans-1,2-Dichloroethene	**37**	**27**	**23**	**29**	**38**	**48**	**29**	19	**39**	15	9.5	6.6	6	9.8	7	12	17	12 J
trans-1,3-Dichloropropene	<1.1	<1.1	<1.1 U	<2.1	<2.1	<4.2	<2.1	<1.1	<2.1 U	<1.1	<0.42	<1.1	<1.1	<1.1 U	<1.1	<0.42	<1.1	<4.2
Trichloroethene	**630**	**510**	**440**	**940**	**1,100**	**1,200**	**900**	**660**	**1,100**	**440**	**330**	**500**	**450**	**580**	**490**	**340**	**460**	**600**
Vinyl chloride	**110**	**92**	**83**	**64**	**120**	**99**	**75**	**48**	**87**	**33**	**23**	**20**	**19**	**23**	**20**	**36**	**54**	**13**
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.15	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-13 (continued)																	
Sample Interval (feet bls)	67-71 (continued)			81-85						102-106						121-125		
Sample Date	7/22/2013	10/7/2013	4/16/2014	12/6/2012	1/19/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/18/2013	4/17/2013	7/22/2013	4/16/2014	10/7/2013	12/4/2012	1/18/2013	4/17/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	NA	<0.083	NA	NA	NA	NA	NA	<0.083	NA	NA	NA	NA	NA	<0.084	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	<0.12	NA	NA	NA	NA	NA	<0.12	NA	NA	NA	NA	NA	<0.12	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	<1.1	NA	NA
2-Methylnaphthalene	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	<0.14	NA	NA
Acenaphthene	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	<0.37	NA	NA	NA	NA	NA	<0.38	NA	NA
Anthracene	NA	NA	NA	<0.34	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.34	NA	NA
Benzo(a)anthracene	NA	NA	NA	<0.046	NA	NA	NA	NA	NA	<0.045	NA	NA	NA	NA	NA	<0.046	NA	NA
Benzo(a)pyrene	NA	NA	NA	<0.059	NA	NA	NA	NA	NA	<0.058	NA	NA	NA	NA	NA	<0.059	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	<0.061	NA	NA	NA	NA	NA	<0.06	NA	NA	NA	NA	NA	<0.061	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	<0.44	NA	NA	NA	NA	NA	<0.43	NA	NA	NA	NA	NA	<0.44	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	<0.078	NA	NA	NA	NA	NA	<0.076	NA	NA	NA	NA	NA	<0.078	NA	NA
Chrysene	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.15	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	<0.067	NA	NA	NA	NA	NA	<0.066	NA	NA	NA	NA	NA	<0.067	NA	NA
Fluoranthene	NA	NA	NA	<0.34	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.34	NA	NA
Fluorene	NA	NA	NA	<0.4	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA	<0.4	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	<0.088	NA	NA	NA	NA	NA	<0.087	NA	NA	NA	NA	NA	<0.088	NA	NA
Naphthalene	NA	NA	NA	<0.32	NA	NA	NA	NA	NA	<0.31	NA	NA	NA	NA	NA	<0.32	NA	NA
Phenanthrene	NA	NA	NA	<0.37	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.37	NA	NA
Pyrene	NA	NA	NA	<0.51	NA	NA	NA	NA	NA	<0.49	NA	NA	NA	NA	NA	<0.51	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	NA	<0.15	<0.15	NA	NA	NA	NA	0.21 J	0.20 J	NA	NA	NA	NA	0.38 J	0.27 J	NA
Arsenic, Total	NA	NA	NA	0.17 J	<0.15	NA	NA	NA	NA	0.24 J	0.32 J	NA	NA	NA	NA	0.18 J	0.29 J	NA
Barium, Dissolved	NA	NA	NA	24 B	23	NA	NA	NA	NA	65 B	45	NA	NA	NA	NA	72 B	57	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	0.17 J	<0.1	NA	NA	NA	NA	<0.1	<0.1	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	<0.64	<0.64	NA	NA	NA	NA	<0.64	<0.64	NA	NA	NA	NA	<0.64	<0.64	NA
Chromium, Total	NA	NA	NA	2.0 J	0.79 J	NA	NA	NA	NA	4.2 J	2.6 J	NA	NA	NA	NA	**12**	1.4 J	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	43 JB	<37	NA	NA	NA	NA	<37	<37	NA	NA	NA	NA	120 B	<37	NA
Iron, Total	NA	NA	NA	62 JB	<37	NA	NA	NA	NA	46 JB	<37	NA	NA	NA	NA	**230 B**	<37	NA
Lead, Dissolved	NA	NA	NA	<0.16	<0.16	NA	NA	NA	NA	0.20 J	<0.16	NA	NA	NA	NA	0.23 J	0.30 J	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	13	6.3	NA	NA	NA	NA	**86**	**97**	NA	NA	NA	NA	**67**	54	NA
Manganese, Total	NA	NA	NA	14	6.1	NA	NA	NA	NA	**83**	**100**	NA	NA	NA	NA	**63**	51	NA
Mercury, Dissolved	NA	NA	NA	<0.071	<0.071	NA	NA	NA	NA	<0.071	<0.071	NA	NA	NA	NA	<0.071	<0.071	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-13 (continued)																	
Sample Interval (feet bls)	67-71 (continued)			81-85						102-106						121-125		
Sample Date	7/22/2013	10/7/2013	4/16/2014	12/6/2012	1/19/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/18/2013	4/17/2013	7/22/2013	4/16/2014	10/7/2013	12/4/2012	1/18/2013	4/17/2013
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	<0.25	<0.25	NA	NA	NA	NA	0.54 J	0.36 J	NA	NA	NA	NA	0.56 J	0.43 J	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	<0.069	<0.069	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	**220**	**200**	NA	NA	NA	NA	**290**	**180**	NA	NA	NA	NA	**310**	**240**	NA
Total Dissolved Solids	NA	NA	NA	990	910	NA	NA	NA	NA	1,100	970	NA	NA	NA	NA	1,100	1,000	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-13 (continued)															MP-14			
Sample Interval (feet bls)	121-125 (continued)			135-139						163-167						70-75			
Sample Date	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/17/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/16/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013
VOCs (µg/L)																			
1,1,1,2-Tetrachloroethane	<2.5	1.1	<5.0 U	<0.5	<1.3	<2.5	<2.5	<1.3	<2.5 U	<1.3	<0.25	<0.5	<0.25	<0.25	<0.50 U	<0.25	<0.25	<0.25	<0.25
1,1,1-Trichloroethane	<2	<0.2	<4.0 U	<0.4	<1	<2	<2	<1	<2.0 U	<1	<0.2	<0.4	<0.2	<0.2	<0.40 U	<0.2	<0.2	<0.2	<0.2
1,1,2-Trichloroethane	<2.8	<0.28	<5.6 U	<0.56	<1.4	<2.8	<2.8	<1.4	<2.8 U	<1.4	<0.28	<0.56	<0.28	<0.28	<0.56 U	<0.28	<0.28	<0.28	<0.28
1,1-Dichloroethene	<3.1	<0.31	<6.2 U	**1.5 J**	<1.6	<3.1	<3.1	<1.6	<3.1 U	<1.6	**0.97 J**	<0.62	<0.31	<0.31	<0.62 U	<0.31	<0.31	<0.31	<0.31
1,2,4-Trimethylbenzene	<1.4	<0.14	<2.8 U	<0.28	<0.7	<1.4	<1.4	<0.7	<1.4 U	<0.7	<0.14	<0.28	<0.14	<0.14	<0.28 U	<0.14	<0.14	<0.14	<0.14
1,2-Dibromoethane	<3.6	<0.36	<7.2 U	<0.72	<1.8	<3.6	<3.6	<1.8	<3.6 U	<1.8	<0.36	<0.72	<0.36	<0.36	<0.72 U	<0.36	<0.36	<0.36	<0.36
1,2-Dichlorobenzene	<2.7	<0.27	<5.4 U	<0.54	<1.4	<2.7	<2.7	<1.4	<2.7 U	<1.4	<0.27	<0.54	<0.27	<0.27	<0.54 U	<0.27	<0.27	<0.27	<0.27
1,2-Dichloroethane	<2.8	<0.28	<5.6 U	<0.56	<1.4	<2.8	<2.8	<1.4	<2.8 U	<1.4	<0.28	<0.56	<0.28	<0.28	<0.56 U	<0.28	<0.28	<0.28	<0.28
1,2-Dichloropropane	<2	<0.2	<4.0 U	<0.4	<1	<2	<2	<1	<2.0 U	<1	<0.2	<0.4	<0.2	<0.2	<0.40 U	<0.2	<0.2	<0.2	<0.2
1,3,5-Trimethylbenzene	<1.8	<0.18	<3.6 U	<0.36	<0.9	<1.8	<1.8	<0.9	<1.8 U	<0.9	<0.18	<0.36	<0.18	<0.18	<0.36 U	<0.18	<0.18	<0.18	<0.18
2-Chlorotoluene	<2.1	<0.21	<4.2 U	<0.42	<1.1	<2.1	<2.1	<1.1	<2.1 U	<1.1	<0.21	<0.42	<0.21	<0.21	<0.42 U	<0.21	<0.21	<0.21	<0.21
4-Chlorotoluene	<2	<0.2	<4.0 U	<0.4	<1	<2	<2	<1	<2.0 U	<1	<0.2	<0.4	<0.2	<0.2	<0.40 U	<0.2	<0.2	<0.2	<0.2
Benzene	<0.74	0.29 J	<1.5 U	0.41 J	**1.1 J**	<0.74	<0.74	<0.37	<0.74 U	<0.37	<0.074	<0.15	<0.074	<0.074	<0.15 U	<0.074	<0.074	<0.074	<0.074
Bromobenzene	<2.5	<0.25	<5.0 U	<0.5	<1.3	<2.5	<2.5	<1.3	<2.5 U	<1.3	<0.25	<0.5	<0.25	<0.25	<0.50 U	<0.25	<0.25	<0.25	<0.25
Bromodichloromethane	<1.7	<0.17	<3.4 U	<0.34	<0.85	<1.7	<1.7	<0.85	<1.7 U	<0.85	<0.17	<0.34	<0.17	<0.17	<0.34 U	<0.17	<0.17	<0.17	<0.17
Bromoform	<2.8	<0.28	<5.6 U	<0.56	<1.4	<2.8	<2.8	<1.4	<2.8 U	<1.4	<0.28	<0.56	<0.28	<0.28	<0.56 U	<0.28	<0.28	<0.28	<0.28
Bromomethane	<3.1	<0.31	<6.2 U	<0.62	<1.6	<3.1	<3.1	<1.6	<3.1 U	<1.6	<0.31	<0.62	<0.31	<0.31	<0.62 U	<0.31	<0.31	<0.31	<0.31
Carbon Tetrachloride	<2.6	<0.26	<5.2 U	<0.52	<1.3	<2.6	<2.6	<1.3	<2.6 U	<1.3	<0.26	<0.52	<0.26	<0.26	<0.52 U	<0.26	<0.26	<0.26	<0.26
CFC-12	<2	<0.2	<4.0 U	<0.4	<1	<2	<2	<1	<2.0 U	<1	<0.2	<0.4	<0.2	<0.2	<0.40 U	<0.2	<0.2	<0.2	<0.2
Chlorodibromomethane	<3.2	<0.32	<6.4 U	<0.64	<1.6	<3.2	<3.2	<1.6	<3.2 U	<1.6	<0.32	<0.64	<0.32	<0.32	<0.64 U	<0.32	<0.32	<0.32	<0.32
Chloroform	<2	<0.2	<4.0 U	<0.4	<1	<2	<2	<1	<2.0 U	<1	<0.2	<0.4	<0.2	<0.2	<0.40 U	<0.2	<0.2	<0.2	<0.2
Chloromethane	<1.8	<0.18	<3.6 U	<0.36	<0.9	<1.8	<1.8	<0.9	<1.8 U	<0.9	<0.18	<0.36	<0.18	<0.18	<0.36 U	<0.18	<0.18	<0.18	<0.18
cis-1,2-Dichloroethene	**760**	**650**	**720**	**1,100**	**910**	**540**	**420**	**380**	**370**	**970**	**730**	**460**	**200**	**170**	**180**	<0.12	<0.12	<0.12	<0.12
Cymene	<1.7	<0.17	<3.4 U	<0.34	<0.85	<1.7	<1.7	<0.85	<1.7 U	<0.85	<0.17	<0.34	<0.17	<0.17	<0.34 U	<0.17	<0.17	<0.17	<0.17
Dichloromethane	<6.8	<0.68	<14 U	<1.4	<3.4	<6.8	<6.8	<3.4	<6.8 U	<3.4	<0.68	<1.4	<0.68	<0.68	<1.4 U	<0.68	<0.68	<0.68	<0.68
Ethylbenzene	<1.3	<0.13	<2.6 U	<0.26	<0.65	<1.3	<1.3	<0.65	<1.3 U	<0.65	<0.13	<0.26	<0.13	<0.13	<0.26 U	<0.13	<0.13	<0.13	<0.13
Isopropylbenzene	<1.4	<0.14	<2.8 U	<0.28	<0.7	<1.4	<1.4	<0.7	<1.4 U	<0.7	<0.14	<0.28	<0.14	<0.14	<0.28 U	<0.14	<0.14	<0.14	<0.14
Methyl-tert-butylether	<2.4	<0.24	<4.8 U	<0.48	<1.2	<2.4	<2.4	<1.2	<2.4 U	<1.2	<0.24	<0.48	<0.24	<0.24	<0.48 U	<0.24	<0.24	<0.24	<0.24
Naphthalene	<1.6	<0.16	<3.2 U	<0.32	<0.8	<1.6	<1.6	<0.8	<1.6 U	<0.8	<0.16	<0.32	<0.16	<0.16	<0.32 U	<0.16	<0.16	<0.16	<0.16
N-Butylbenzene	<1.3	<0.13	<2.6 U	<0.26	<0.65	<1.3	<1.3	<0.65	<1.3 U	<0.65	<0.13	<0.26	<0.13	<0.13	<0.26 U	<0.13	<0.13	<0.13	<0.13
N-Propylbenzene	<1.3	<0.13	<2.6 U	<0.26	<0.65	<1.3	<1.3	<0.65	<1.3 U	<0.65	<0.13	<0.26	<0.13	<0.13	<0.26 U	<0.13	<0.13	<0.13	<0.13
sec-Butylbenzene	<1.5	<0.15	<3.0 U	<0.3	<0.75	<1.5	<1.5	<0.75	<1.5 U	<0.75	<0.15	<0.3	<0.15	<0.15	<0.30 U	<0.15	<0.15	<0.15	<0.15
Styrene (Monomer)	<1	<0.1	<2.0 U	<0.2	<0.5	<1	<1	<0.5	<1.0 U	<0.5	<0.1	<0.2	<0.1	<0.1	<0.20 U	<0.1	<0.1	<0.1	<0.1
tert-Butylbenzene	<1.4	<0.14	<2.8 U	<0.28	<0.7	<1.4	<1.4	<0.7	<1.4 U	<0.7	<0.14	<0.28	<0.14	<0.14	<0.28 U	<0.14	<0.14	<0.14	<0.14
Tetrachloroethene	**6,300**	**6,500**	**6,700**	**1,900**	**2,300**	**3,800**	**4,200**	**6,500**	**5,200**	**1,400**	**930**	**840**	**510**	**680**	**870**	**0.71 J**	<0.17	<0.17	<0.17
Toluene	<1.1	<0.11	<2.2 U	<0.22	<0.55	<1.1	<1.1	<0.55	<1.1 U	<0.55	<0.11	<0.22	<0.11	<0.11	<0.22 U	<0.11	<0.11	<0.11	<0.11
Total Xylenes	<0.68	<0.068	<1.4 U	<0.14	<0.34	<0.68	<0.68	<0.34	<0.68 U	<0.34	<0.068	<0.14	<0.068	<0.068	<0.14 U	<0.068	<0.068	<0.068	<0.068
trans-1,2-Dichloroethene	12	9.7	10 J	17	15	8.5 J	5.4 J	<1.3	<2.5 U	15	13	7.5	3.3	2.6	3.3	<0.25	<0.25	<0.25	<0.25
trans-1,3-Dichloropropene	<2.1	<0.21	<4.2 U	<0.42	<1.1	<2.1	<2.1	<1.1	<2.1 U	<1.1	<0.21	<0.42	<0.21	<0.21	<0.42 U	<0.21	<0.21	<0.21	<0.21
Trichloroethene	**510**	**550**	**710**	**450**	**430**	**310**	**260**	**310**	**320**	**370**	**250**	**200**	**92**	**96**	**110**	<0.19	<0.19	<0.19	<0.19
Vinyl chloride	**9.3**	**8.1**	**6.2 J**	**50**	**42**	**11**	**8.1**	**5.8**	**4.0 J**	**41**	**27**	**6.8**	**0.74**	**0.72**	**0.56 J**	<0.1	<0.1	<0.1	<0.1
PCBs (µg/L)																			
Aroclor 1016	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-13 (continued)															MP-14			
Sample Interval (feet bls)	121-125 (continued)			135-139						163-167						70-75			
Sample Date	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/17/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/16/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013
PCBs (µg/L) (continued)																			
Aroclor 1232	NA	NA	NA	<0.083	NA	NA	NA	NA	NA	<0.083	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	<0.12	NA	NA	NA	NA	NA	<0.12	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																			
1-Methylnaphthalene	NA	NA	NA	<1	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	<0.32	NA	NA	NA	NA	NA	<0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	<0.044	NA	NA	NA	NA	NA	<0.044	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	<0.056	NA	NA	NA	NA	NA	<0.056	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	<0.058	NA	NA	NA	NA	NA	<0.058	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	<0.42	NA	NA	NA	NA	NA	<0.42	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	<0.074	NA	NA	NA	NA	NA	<0.074	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	<0.064	NA	NA	NA	NA	NA	<0.064	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	<0.32	NA	NA	NA	NA	NA	<0.32	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	<0.084	NA	NA	NA	NA	NA	<0.084	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	<0.3	NA	NA	NA	NA	NA	<0.3	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	<0.48	NA	NA	NA	NA	NA	<0.48	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																			
Arsenic, Dissolved	NA	NA	NA	<0.15	<0.15	NA	NA	NA	NA	<0.15	<0.15	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	0.15 J	<0.15	NA	NA	NA	NA	0.15 J	<0.15	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	66 B	42	NA	NA	NA	NA	70 B	45	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	<0.64	<0.64	NA	NA	NA	NA	<0.64	<0.64	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	9.6	**34**	NA	NA	NA	NA	<0.64	1.2 J	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	43 JB	<37	NA	NA	NA	NA	52 JB	49 JB	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	86 JB	**150**	NA	NA	NA	NA	**200 B**	<37	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	0.58	0.86	NA	NA	NA	NA	<0.16	<0.16	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	43	17	NA	NA	NA	NA	**100**	**66**	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	42	19	NA	NA	NA	NA	**100**	**66**	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	<0.071	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-13 (continued)															MP-14			
Sample Interval (feet bls)	121-125 (continued)			135-139						163-167						70-75			
Sample Date	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/17/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	12/4/2012	1/16/2013	4/17/2013	7/22/2013	10/7/2013	4/16/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013
Metals (µg/L) (continued)																			
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	0.55 J	0.34 J	NA	NA	NA	NA	0.61 J	0.38 J	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																			
Chloride	NA	NA	NA	**300**	**220**	NA	NA	NA	NA	**320**	**180**	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	1,100	960	NA	NA	NA	NA	1,100	850	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	0.29	ND	0.41	1.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:

100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.

100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.

< = Constituent not detected above noted laboratory detection limit.

* = LCS or LCSD exceeds the control limits.

B = Compound was found in the blank and the sample.

J = Result is between the method detection limit and the limit of quantitation.

µg/L = Micrograms per liter.

mg/L = Milligrams per liter.

LCS = Laboratory control sample.

LCSD = Laboratory control sample duplicate.

NA = Not analyzed.

NE = Not established.

ND = Total detected PCBs were reported less than the laboratory detection limit.

PAHs = Polyaromatic Hydrocarbons.

PCBs = Polychlorinated Biphenyls.

Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.

Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.

VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-14 (continued)																		
Sample Interval (feet bls)	70-75 (continued)		100-105						135-140						170-178				
Sample Date	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013
VOCs (µg/L)																			
1,1,1,2-Tetrachloroethane	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.5	<0.25	<0.5	<0.25 U	<0.25	<0.25	<0.5	<0.25	<0.5
1,1,1-Trichloroethane	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4
1,1,2-Trichloroethane	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.56	<0.28	<0.56	<0.28 U	<0.28	<0.28	<0.56	<0.28	<0.56
1,1-Dichloroethene	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.62	<0.31	<0.62	<0.31 U	<0.31	<0.31	<0.62	<0.31	<0.62
1,2,4-Trimethylbenzene	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.28	<0.14	<0.28	<0.14 U	<0.14	<0.14	<0.28	<0.14	<0.28
1,2-Dibromoethane	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.72	<0.36	<0.72	<0.36 U	<0.36	<0.36	<0.72	<0.36	<0.72
1,2-Dichlorobenzene	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.54	<0.27	<0.54	<0.27 U	<0.27	<0.27	<0.54	<0.27	<0.54
1,2-Dichloroethane	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.56	<0.28	<0.56	<0.28 U	<0.28	<0.28	<0.56	<0.28	<0.56
1,2-Dichloropropane	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4
1,3,5-Trimethylbenzene	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.36	<0.18	<0.36	<0.18 U	<0.18	<0.18	<0.36	<0.18	<0.36
2-Chlorotoluene	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.42	<0.21	<0.42	<0.21 U	<0.21	<0.21	<0.42	<0.21	<0.42
4-Chlorotoluene	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4
Benzene	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.15	<0.074	<0.15	<0.074 U	<0.074	<0.074	<0.15	<0.074	<0.15
Bromobenzene	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.5	<0.25	<0.5	<0.25 U	<0.25	<0.25	<0.5	<0.25	<0.5
Bromodichloromethane	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.34	<0.17	<0.34	<0.17 U	<0.17	<0.17	<0.34	<0.17	<0.34
Bromoform	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.56	<0.28	<0.56	<0.28 U	<0.28	<0.28	<0.56	<0.28	<0.56
Bromomethane	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.62	<0.31	<0.62	<0.31 U	<0.31	<0.31	<0.62	<0.31	<0.62
Carbon Tetrachloride	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.52	<0.26	<0.52	<0.26 U	<0.26	<0.26	<0.52	<0.26	<0.52
CFC-12	<0.2	<0.20 U	<0.2	<0.2	<0.2	0.72 J	<0.2	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4
Chlorodibromomethane	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.64	<0.32	<0.64	<0.32 U	<0.32	<0.32	<0.64	<0.32	<0.64
Chloroform	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4	<0.20 U	<0.2	<0.2	<0.4	<0.2	<0.4
Chloromethane	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.36	<0.18	<0.36	<0.18 U	<0.18	<0.18	<0.36	<0.18	<0.36
cis-1,2-Dichloroethene	<0.12	<0.12 U	<0.12	<0.12	<0.12	<0.12	<0.12	<0.12 U	<0.12	**17**	**27**	**29**	**27**	**12**	<0.12	<0.12	**22**	**21**	**22**
Cymene	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.34	<0.17	<0.34	<0.17 U	<0.17	<0.17	<0.34	<0.17	<0.34
Dichloromethane	<0.68	<0.68 U	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.68	<0.68	<1.4	<0.68	<1.4	<0.68 U	<0.68	<0.68	<1.4	<0.68	<1.4
Ethylbenzene	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.26	<0.13	<0.26	<0.13 U	<0.13	<0.13	<0.26	<0.13	<0.26
Isopropylbenzene	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.28	<0.14	<0.28	<0.14 U	<0.14	<0.14	<0.28	<0.14	<0.28
Methyl-tert-butylether	<0.24	<0.24 U	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.24	<0.24	<0.48	<0.24	<0.48	<0.24 U	<0.24	<0.24	<0.48	<0.24	<0.48
Naphthalene	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.32	<0.16	<0.32	<0.16 U	<0.16	<0.16	<0.32	<0.16	<0.32
N-Butylbenzene	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.26	<0.13	<0.26	<0.13 U	<0.13	<0.13	<0.26	<0.13	<0.26
N-Propylbenzene	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.26	<0.13	<0.26	<0.13 U	<0.13	<0.13	<0.26	<0.13	<0.26
sec-Butylbenzene	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.3	<0.15	<0.3	<0.15 U	<0.15	<0.15	<0.3	<0.15	<0.3
Styrene (Monomer)	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.2	<0.1	<0.2	<0.10 U	<0.1	<0.1	<0.2	<0.1	<0.2
tert-Butylbenzene	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.28	<0.14	<0.28	<0.14 U	<0.14	<0.14	<0.28	<0.14	<0.28
Tetrachloroethene	<0.17	<0.17 U	**1.5**	<0.17	<0.17	<0.17	**1.7**	<0.17 U	**1.7**	**430**	**820**	**920**	**970**	**350**	**1.2**	**9.2**	**520**	**520**	**640**
Toluene	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.22	<0.11	<0.22	<0.11 U	<0.11	<0.11	<0.22	<0.11	<0.22
Total Xylenes	<0.068	<0.068 U	<0.068	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.068	<0.068	<0.14	<0.068	<0.14	<0.068 U	<0.068	<0.068	<0.14	<0.068	<0.14
trans-1,2-Dichloroethene	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.5	<0.25	<0.5	<0.25 U	<0.25	<0.25	<0.5	<0.25	<0.5
trans-1,3-Dichloropropene	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.42	<0.21	<0.42	<0.21 U	<0.21	<0.21	<0.42	<0.21	<0.42
Trichloroethene	<0.19	<0.19 U	<0.19	<0.19	<0.19	<0.19	<0.19	<0.19 U	0.24 J	**31**	**53**	**51**	**53**	**23**	<0.19	**0.78**	**42**	**37**	**37**
Vinyl chloride	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.2	<0.1	**0.53 J**	<0.10 U	<0.1	<0.1	<0.2	<0.1	<0.2
PCBs (µg/L)																			
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-14 (continued)																		
Sample Interval (feet bls)	70-75 (continued)		100-105						135-140						170-178				
Sample Date	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013
PCBs (µg/L) (continued)																			
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																			
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																			
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-14 (continued)																		
Sample Interval (feet bls)	70-75 (continued)		100-105						135-140						170-178				
Sample Date	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013	4/14/2014	1/21/2013	4/16/2013	7/16/2013	7/22/2013	10/8/2013
Metals (µg/L) (continued)																			
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																			
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-14 (continued)	MP-15																
Sample Interval (feet bls)	170-178 (continued)	88-92					100-105					120-125					142-146	
Sample Date	4/14/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.50 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.5	<0.50 U	<0.5	<0.5	<1.3	<1.3	<1.3 U	<0.25	<0.25
1,1,1-Trichloroethane	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.4	<0.40 U	<0.4	<0.4	<1	<1	<1.0 U	<0.2	<0.2
1,1,2-Trichloroethane	<0.56 U	<0.28	**2.2**	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.56	<0.56 U	<0.56	<0.56	<1.4	<1.4	<1.4 U	<0.28	<0.28
1,1-Dichloroethene	<0.62 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.62	<0.62 U	<0.62	<0.62	<1.6	<1.6	<1.6 U	<0.31	<0.31
1,2,4-Trimethylbenzene	<0.28 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.28	<0.28 U	<0.28	<0.28	<0.7	<0.7	<0.70 U	<0.14	<0.14
1,2-Dibromoethane	<0.72 U	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.72	<0.72 U	<0.72	<0.72	<1.8	<1.8	<1.8 U	<0.36	<0.36
1,2-Dichlorobenzene	<0.54 U	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.54	<0.54 U	<0.54	<0.54	<1.4	<1.4	<1.4 U	<0.27	<0.27
1,2-Dichloroethane	<0.56 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.56	<0.56 U	<0.56	<0.56	<1.4	<1.4	<1.4 U	<0.28	<0.28
1,2-Dichloropropane	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.4	<0.40 U	<0.4	<0.4	<1	<1	<1.0 U	<0.2	<0.2
1,3,5-Trimethylbenzene	<0.36 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.36	<0.36 U	<0.36	<0.36	<0.9	<0.9	<0.90 U	<0.18	<0.18
2-Chlorotoluene	<0.42 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.42	<0.42 U	<0.42	<0.42	<1.1	<1.1	<1.1 U	<0.21	<0.21
4-Chlorotoluene	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.4	<0.40 U	<0.4	<0.4	<1	<1	<1.0 U	<0.2	<0.2
Benzene	<0.15 U	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.15	<0.15 U	<0.15	<0.15	<0.37	<0.37	<0.37 U	<0.074	<0.074
Bromobenzene	<0.50 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.5	<0.50 U	<0.5	<0.5	<1.3	<1.3	<1.3 U	<0.25	<0.25
Bromodichloromethane	<0.34 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.34	<0.34 U	<0.34	<0.34	<0.85	<0.85	<0.85 U	<0.17	<0.17
Bromoform	<0.56 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.56	<0.56 U	<0.56	<0.56	<1.4	<1.4	<1.4 U	<0.28	<0.28
Bromomethane	<0.62 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.62	<0.62 U	<0.62	<0.62	<1.6	<1.6	<1.6 U	<0.31	<0.31
Carbon Tetrachloride	<0.52 U	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.52	<0.52 U	<0.52	<0.52	<1.3	<1.3	<1.3 U	<0.26	<0.26
CFC-12	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.4	<0.40 U	<0.4	<0.4	<1	<1	<1.0 U	<0.2	<0.2
Chlorodibromomethane	<0.64 U	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.64	<0.64 U	<0.64	<0.64	<1.6	<1.6	<1.6 U	<0.32	<0.32
Chloroform	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.4	<0.40 U	<0.4	<0.4	<1	<1	<1.0 U	<0.2	<0.2
Chloromethane	<0.36 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.36	<0.36 U	<0.36	<0.36	<0.9	<0.9	<0.90 U	<0.18	<0.18
cis-1,2-Dichloroethene	**19**	**7.5**	**23**	**14**	**20**	**23**	**9.3**	**37**	**68**	**76**	**96**	**200**	**230**	**250**	**220**	**230**	**9.7**	**75**
Cymene	<0.34 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.34	<0.34 U	<0.34	<0.34	<0.85	<0.85	<0.85 U	<0.17	<0.17
Dichloromethane	<1.4 U	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.68	<0.68	<0.68	<1.4	<1.4 U	<1.4	<1.4	<3.4	<3.4	<3.4 U	<0.68	<0.68
Ethylbenzene	<0.26 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.26	<0.26 U	<0.26	<0.26	<0.65	<0.65	<0.65 U	<0.13	<0.13
Isopropylbenzene	<0.28 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.28	<0.28 U	<0.28	<0.28	<0.7	<0.7	<0.70 U	<0.14	<0.14
Methyl-tert-butylether	<0.48 U	2.3	0.84 J	<0.24	3.3	3.5	2.2	1.3	<0.24	<0.48	<0.48 U	<0.48	<0.48	<1.2	<1.2	<1.2 U	2	<0.24
Naphthalene	<0.32 U	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.32	<0.32 U	<0.32	<0.32	<0.8	<0.8	<0.80 U	<0.16	<0.16
N-Butylbenzene	<0.26 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.26	<0.26 U	<0.26	<0.26	<0.65	<0.65	<0.65 U	<0.13	<0.13
N-Propylbenzene	<0.26 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.26	<0.26 U	<0.26	<0.26	<0.65	<0.65	<0.65 U	<0.13	<0.13
sec-Butylbenzene	<0.30 U	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.3	<0.30 U	<0.3	<0.3	<0.75	<0.75	<0.75 U	<0.15	<0.15
Styrene (Monomer)	<0.20 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.2	<0.20 U	<0.2	<0.2	<0.5	<0.5	<0.50 U	<0.1	<0.1
tert-Butylbenzene	<0.28 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.28	<0.28 U	<0.28	<0.28	<0.7	<0.7	<0.70 U	<0.14	<0.14
Tetrachloroethene	**630**	**130**	**160**	**130**	**220**	**300**	**230**	**440**	**660**	**690**	**890**	**1,100**	**1,900**	**2,100**	**1,800**	**2,000**	**170**	**580**
Toluene	<0.22 U	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.22	<0.22 U	<0.22	<0.22	<0.55	<0.55	<0.55 U	<0.11	<0.11
Total Xylenes	<0.14 U	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.068	<0.068	<0.068	<0.14	<0.14 U	<0.14	<0.14	<0.34	<0.34	<0.34 U	<0.068	<0.068
trans-1,2-Dichloroethene	<0.50 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	0.51 J	<0.5	1.2 J	1.3 J	1.7 J	<1.3	<1.3	<1.3 U	<0.25	0.86 J
trans-1,3-Dichloropropene	<0.42 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.42	<0.42 U	<0.42	<0.42	<1.1	<1.1	<1.1 U	<0.21	<0.21
Trichloroethene	**33**	**11**	**15**	**12**	**19**	**24**	**16**	**41**	**65**	**72**	**92**	**160**	**210**	**220**	**190**	**210**	**14**	**78**
Vinyl chloride	<0.20 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.2	<0.20 U	<0.2	**1**	**1.9 J**	<0.5	<0.50 U	<0.1	**0.39 J**
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-14 (continued)	MP-15																	
Sample Interval (feet bls)	170-178 (continued)	88-92					100-105					120-125					142-146		
Sample Date	4/14/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	
PCBs (µg/L) (continued)																			
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
PAHs (µg/L)																			
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Metals (µg/L)																			
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-14 (continued)	MP-15																	
Sample Interval (feet bls)	170-178 (continued)	88-92					100-105					120-125					142-146		
Sample Date	4/14/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	
Metals (µg/L) (continued)																			
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Other (mg/L)																			
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-15 (continued)								MP-16									
Sample Interval (feet bls)	142-146 (continued)			177-187					80-84					106-116				
Sample Date	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.25	<0.5	<0.50 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U
1,1,1-Trichloroethane	<0.2	<0.4	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U
1,1,2-Trichloroethane	<0.28	<0.56	<0.56 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U
1,1-Dichloroethene	<0.31	<0.62	<0.62 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31 U
1,2,4-Trimethylbenzene	<0.14	<0.28	<0.28 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U
1,2-Dibromoethane	<0.36	<0.72	<0.72 U	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36	<0.36 U
1,2-Dichlorobenzene	<0.27	<0.54	<0.54 U	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27	<0.27 U
1,2-Dichloroethane	<0.28	<0.56	<0.56 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U
1,2-Dichloropropane	<0.2	<0.4	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U
1,3,5-Trimethylbenzene	<0.18	<0.36	<0.36 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18 U
2-Chlorotoluene	<0.21	<0.42	<0.42 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21 U
4-Chlorotoluene	<0.2	<0.4	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U
Benzene	<0.074	<0.15	<0.15 U	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.074	<0.074 U
Bromobenzene	<0.25	<0.5	<0.50 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U
Bromodichloromethane	<0.17	<0.34	<0.34 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17 U
Bromoform	<0.28	<0.56	<0.56 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U
Bromomethane	<0.31	<0.62	<0.62 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31 U
Carbon Tetrachloride	<0.26	<0.52	<0.52 U	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26	<0.26 U
CFC-12	<0.2	<0.4	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2 *	<0.2	<0.20 U	<0.2	<0.2	<0.2 *	<0.2	<0.20 U
Chlorodibromomethane	<0.32	<0.64	<0.64 U	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32	<0.32 U
Chloroform	<0.2	<0.4	<0.40 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U
Chloromethane	<0.18	<0.36	<0.36 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18 U
cis-1,2-Dichloroethene	**110**	**140**	**140**	**9.5**	6.7	6	**16**	**17**	<0.12	<0.12	<0.12	<0.12	<0.12 U	2.6	5.8	**9.5**	**10**	5.4
Cymene	<0.17	<0.34	<0.34 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17 U
Dichloromethane	<0.68	<1.4	<1.4 U	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.68	<0.68	<0.68	<0.68	<0.68 U
Ethylbenzene	<0.13	<0.26	<0.26 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U
Isopropylbenzene	<0.14	<0.28	<0.28 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U
Methyl-tert-butylether	<0.24	<0.48	<0.48 U	2.5	1.6	0.86 J	0.90 J	<0.24 U	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.24	<0.24	<0.24	<0.24	<0.24 U
Naphthalene	<0.16	<0.32	<0.32 U	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16	<0.16 U
N-Butylbenzene	<0.13	<0.26	<0.26 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U
N-Propylbenzene	<0.13	<0.26	<0.26 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U
sec-Butylbenzene	<0.15	<0.3	<0.30 U	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15	<0.15 U
Styrene (Monomer)	<0.1	<0.2	<0.20 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.10 U
tert-Butylbenzene	<0.14	<0.28	<0.28 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U
Tetrachloroethene	**640**	**840**	**970**	**240**	**140**	**110**	**100**	**73**	**0.76 J**	<0.17	<0.17	**0.76 J**	**0.56 J**	**23**	**330**	**90**	**94**	**330**
Toluene	<0.11	<0.22	<0.22 U	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.11	<0.11 U
Total Xylenes	<0.068	<0.14	<0.14 U	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.068	<0.068	<0.068	<0.068	<0.068 U
trans-1,2-Dichloroethene	0.97 J	1.4 J	1.5 J	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U
trans-1,3-Dichloropropene	<0.21	<0.42	<0.42 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21 U
Trichloroethene	**100**	**130**	**130**	**17**	**12**	**7.7**	**12**	**12**	<0.19	<0.19	<0.19	<0.19	<0.19 U	**3.8**	**44**	**12**	**13**	**30**
Vinyl chloride	**0.58**	**0.76 J**	<0.20 U	<0.1	<0.1	<0.1	**0.34 J**	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.10 U
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-15 (continued)								MP-16									
Sample Interval (feet bls)	142-146 (continued)			177-187					80-84					106-116				
Sample Date	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-15 (continued)								MP-16									
Sample Interval (feet bls)	142-146 (continued)			177-187					80-84					106-116				
Sample Date	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/15/2013	7/22/2013	10/8/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-16 (continued)										MW-1						MW-2D	
Sample Interval (feet bls)	140-144					175-179					14-24'	14-24'	14-24'	14-24'	14-24'	14-24'	39-44'	39-44'
Sample Date	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	4/11/2012	1/15/2013	4/21/2013	7/18/2013	10/9/2013	4/22/2014	4/11/2012	1/15/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.5
1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.4
1,1,2-Trichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.56
1,1-Dichloroethene	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	**0.94 J**	**0.84 J**	<0.31	<0.31	0.62 J	<0.31 U	<0.29	<0.62
1,2,4-Trimethylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.22	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.22	<0.28
1,2-Dibromoethane	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.72
1,2-Dichlorobenzene	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.54
1,2-Dichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.56
1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.4
1,3,5-Trimethylbenzene	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.36
2-Chlorotoluene	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.42
4-Chlorotoluene	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.4
Benzene	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.12	<0.15
Bromobenzene	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.5
Bromodichloromethane	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.34
Bromoform	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.56
Bromomethane	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.62
Carbon Tetrachloride	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<0.52
CFC-12	<0.2	<0.2	<0.2 *	<0.2	<0.20 U	<0.2	<0.2	<0.2 *	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.4
Chlorodibromomethane	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.64
Chloroform	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.25	<0.4
Chloromethane	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.36
cis-1,2-Dichloroethene	1.9	1.2	<0.12	<0.12	1.4	1.9	0.99 J	<0.12	<0.12	<0.12 U	**38**	**41**	**23**	**25**	**27**	**25**	<0.22	<0.24
Cymene	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.34
Dichloromethane	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.68	<0.68	<0.68	<0.68	<0.68 U	**8.5**	<0.68	<0.68	<0.68	<0.68	<0.68 U	**8.1**	<1.4
Ethylbenzene	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.14	<0.26
Isopropylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.28
Methyl-tert-butylether	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<0.48
Naphthalene	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.32
N-Butylbenzene	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.26
N-Propylbenzene	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.26
sec-Butylbenzene	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.3
Styrene (Monomer)	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.2
tert-Butylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.28
Tetrachloroethene	**14**	**11**	**23**	**37**	**38**	**13**	**6.7**	**2.2**	**3.7**	**3.8**	**23**	**22**	**10**	**11**	**18**	**19**	**610**	**720**
Toluene	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.15	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.15	<0.22
Total Xylenes	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.3	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.3	<0.14
trans-1,2-Dichloroethene	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	<0.25 U	**0.77 J**	**0.78 J**	<0.25	<0.25	<0.25	<0.25 U	<0.27	<0.5
trans-1,3-Dichloropropene	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.42
Trichloroethene	**2.1**	**2**	**3**	**6.1**	**6.1**	**2.2**	**1.2**	0.42 J	**0.98**	**0.87**	**24**	**25**	**23**	**18**	**23**	**28**	**5.4**	**5.1**
Vinyl chloride	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	<0.10 U	**0.86**	**0.63**	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.2
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	NA	<0.18

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-16 (continued)										MW-1						MW-2D	
Sample Interval (feet bls)	140-144					175-179					14-24'	14-24'	14-24'	14-24'	14-24'	14-24'	39-44'	39-44'
Sample Date	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	4/11/2012	1/15/2013	4/21/2013	7/18/2013	10/9/2013	4/22/2014	4/11/2012	1/15/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.091	NA	NA	NA	NA	NA	<0.096
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	<0.14
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	<1.1
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.14
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA	<0.38
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	<0.34
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.048	NA	NA	NA	NA	NA	<0.046
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.061	NA	NA	NA	NA	NA	<0.059
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.063	NA	NA	NA	NA	NA	<0.061
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.46	NA	NA	NA	NA	NA	<0.44
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.081	NA	NA	NA	NA	NA	<0.078
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.15
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.07	NA	NA	NA	NA	NA	<0.068
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	<0.34
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.41	NA	NA	NA	NA	NA	<0.4
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.091	NA	NA	NA	NA	NA	<0.089
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.32
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	<0.37
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.52	NA	NA	NA	NA	NA	<0.51
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.73 J	NA	NA	NA	NA	NA	0.30 J
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	230	NA	NA	NA	NA	NA	71
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.18 J	NA	NA	NA	NA	NA	<0.1
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.64	NA	NA	NA	NA	NA	3.0 J
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**320**	NA	NA	NA	NA	NA	<37
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.27 J	NA	NA	NA	NA	NA	<0.16
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**700**	NA	NA	NA	NA	NA	0.86 J
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MP-16 (continued)										MW-1						MW-2D	
Sample Interval (feet bls)	140-144					175-179					14-24'	14-24'	14-24'	14-24'	14-24'	14-24'	39-44'	39-44'
Sample Date	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	1/22/2013	4/16/2013	7/23/2013	10/9/2013	4/15/2014	4/11/2012	1/15/2013	4/21/2013	7/18/2013	10/9/2013	4/22/2014	4/11/2012	1/15/2013
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.25	NA	NA	NA	NA	NA	4.8
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA	<0.069
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-2D (continued)				MW-2S						MW-3D						
Sample Interval (feet bls)	39-44'	39-44'	39-44'	39-44'	19-29'	19-29'	19-29'	19-29'	19-29'	19-29'	48-53'	48-53'	48-53'	48-53'	48-53'	48-53'	48-53'
Sample Date	4/20/2013	7/18/2013	10/10/2013	4/17/2014	4/11/2012	1/14/2013	4/20/2013	7/18/2013	10/10/2013	4/17/2014	4/12/2012	11/30/2012	1/16/2013	4/16/2013	7/16/2013	10/10/2013	4/18/2014
VOCs (µg/L)																	
1,1,1,2-Tetrachloroethane	<0.5	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<1.3	<0.25	<0.25	<0.5	<0.25	<0.50 U
1,1,1-Trichloroethane	<0.4	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<1	<0.2	<0.2	<0.4	<0.2	<0.40 U
1,1,2-Trichloroethane	<0.56	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<1.4	<0.28	<0.28	<0.56	<0.28	<0.56 U
1,1-Dichloroethene	<0.62	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.29	<1.6	<0.31	<0.31	<0.62	<0.31	<0.62 U
1,2,4-Trimethylbenzene	<0.28	<0.14	<0.14	<0.14 U	<0.22	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.22	<0.7	<0.14	<0.14	<0.28	<0.14	<0.28 U
1,2-Dibromoethane	<0.72	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<1.8	<0.36	<0.36	<0.72	<0.36	<0.72 U
1,2-Dichlorobenzene	<0.54	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<1.4	<0.27	<0.27	<0.54	<0.27	<0.54 U
1,2-Dichloroethane	<0.56	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<1.4	<0.28	<0.28	<0.56	<0.28	<0.56 U
1,2-Dichloropropane	<0.4	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<1	<0.2	<0.2	<0.4	<0.2	<0.40 U
1,3,5-Trimethylbenzene	<0.36	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.9	<0.18	<0.18	<0.36	<0.18	<0.36 U
2-Chlorotoluene	<0.42	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<1.1	<0.21	<0.21	<0.42	<0.21	<0.42 U
4-Chlorotoluene	<0.4	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<1	<0.2	<0.2	<0.4	<0.2	<0.40 U
Benzene	<0.15	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074 U	0.39 J	<0.37	0.32 J	0.27 J	<0.15	0.36 J	<0.15 U
Bromobenzene	<0.5	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<1.3	<0.25	<0.25	<0.5	<0.25	<0.50 U
Bromodichloromethane	<0.34	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.85	<0.17	<0.17	<0.34	<0.17	<0.34 U
Bromoform	<0.56	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<1.4	<0.28	<0.28	<0.56	<0.28	<0.56 U
Bromomethane	<0.62	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<1.6	<0.31	<0.31	<0.62	<0.31	<0.62 U
Carbon Tetrachloride	<0.52	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<1.3	<0.26	<0.26	<0.52	<0.26	<0.52 U
CFC-12	<0.4	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<1	<0.2	<0.2	<0.4	<0.2	<0.40 U
Chlorodibromomethane	<0.64	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<1.6	<0.32	<0.32	<0.64	<0.32	<0.64 U
Chloroform	<0.4	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2	<0.2	<0.2	<0.20 U	**0.93 J**	<1	**0.89 J**	<0.2	<0.4	**0.85 J**	<0.40 U
Chloromethane	<0.36	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.9	<0.18	<0.18	<0.36	<0.18	<0.36 U
cis-1,2-Dichloroethene	<0.24	<0.12	<0.12	<0.12 U	<0.22	<0.12	<0.12	<0.12	<0.12	<0.12 U	**350**	**520**	**290**	**210**	**200**	**180**	**170**
Cymene	<0.34	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.85	<0.17	<0.17	<0.34	<0.17	<0.34 U
Dichloromethane	<1.4	<0.68	<0.68	<0.68 U	**8.6**	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.63	<3.4	<0.68	<0.68	<1.4	<0.68	<1.4 U
Ethylbenzene	<0.26	<0.13	<0.13	<0.13 U	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.14	<0.65	<0.13	<0.13	<0.26	<0.13	<0.26 U
Isopropylbenzene	<0.28	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.7	<0.14	<0.14	<0.28	<0.14	<0.28 U
Methyl-tert-butylether	<0.48	<0.24	<0.24	<0.24 U	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<1.2	<0.24	<0.24	<0.48	<0.24	<0.48 U
Naphthalene	<0.32	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.8	<0.16	<0.16	<0.32	<0.16	<0.32 U
N-Butylbenzene	<0.26	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.65	<0.13	<0.13	<0.26	<0.13	<0.26 U
N-Propylbenzene	<0.26	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.65	<0.13	<0.13	<0.26	<0.13	<0.26 U
sec-Butylbenzene	<0.3	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.75	<0.15	<0.15	<0.3	<0.15	<0.30 U
Styrene (Monomer)	<0.2	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.5	<0.1	<0.1	<0.2	<0.1	<0.20 U
tert-Butylbenzene	<0.28	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.7	<0.14	<0.14	<0.28	<0.14	<0.28 U
Tetrachloroethene	**910**	**580**	**440**	**450**	**1.2**	**1.3**	**1.3**	**0.81 J**	**1.1**	**1.3**	**1,100**	**1,800**	**660**	**740**	**920**	**620**	**730**
Toluene	<0.22	<0.11	<0.11	<0.11 U	<0.15	<0.11	<0.11	<0.11	<0.11	<0.11 U	<0.15	<0.55	<0.11	<0.11	<0.22	<0.11	<0.22 U
Total Xylenes	<0.14	<0.068	<0.068	<0.068 U	<0.3	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.3	<0.34	<0.068	<0.068	<0.14	<0.068	<0.14 U
trans-1,2-Dichloroethene	<0.5	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25 U	5.9	7.7	6	4.2	4.8	5.2	6.4
trans-1,3-Dichloropropene	<0.42	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<1.1	<0.21	<0.21	<0.42	<0.21	<0.42 U
Trichloroethene	**6.4**	**4.1**	**3**	**2.5**	<0.18	<0.19	<0.19	<0.19	<0.19	<0.19 U	**160**	**250**	**140**	**120**	**130**	**100**	**130**
Vinyl chloride	<0.2	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.5	<0.1	<0.1	<0.2	<0.1	<0.20 U
PCBs (µg/L)																	
Aroclor 1016	NA	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-2D (continued)				MW-2S						MW-3D						
Sample Interval (feet bls)	39-44'	39-44'	39-44'	39-44'	19-29'	19-29'	19-29'	19-29'	19-29'	19-29'	48-53'	48-53'	48-53'	48-53'	48-53'	48-53'	48-53'
Sample Date	4/20/2013	7/18/2013	10/10/2013	4/17/2014	4/11/2012	1/14/2013	4/20/2013	7/18/2013	10/10/2013	4/17/2014	4/12/2012	11/30/2012	1/16/2013	4/16/2013	7/16/2013	10/10/2013	4/18/2014
PCBs (µg/L) (continued)																	
Aroclor 1232	NA	NA	NA	NA	NA	<0.091	NA	NA	NA	NA	NA	NA	<0.096	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																	
1-Methylnaphthalene	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	<0.048	NA	NA	NA	NA	NA	NA	<0.049	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	<0.062	NA	NA	NA	NA	NA	NA	<0.062	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	<0.064	NA	NA	NA	NA	NA	NA	<0.064	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	<0.46	NA	NA	NA	NA	NA	NA	<0.46	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	<0.081	NA	NA	NA	NA	NA	NA	<0.082	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	<0.07	NA	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	<0.42	NA	NA	NA	NA	NA	NA	<0.42	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	<0.092	NA	NA	NA	NA	NA	NA	<0.093	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	<0.53	NA	NA	NA	NA	NA	NA	<0.53	NA	NA	NA	NA
Metals (µg/L)																	
Arsenic, Dissolved	NA	NA	NA	NA	NA	0.51 J	NA	NA	NA	NA	NA	0.23 J	0.18 J	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.32 J	0.18 J	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	41	NA	NA	NA	NA	NA	68	66	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	0.13 J	0.15 J	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	2.6 J	NA	NA	NA	NA	NA	2.4 J	0.77 J	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.7 J	0.70 J	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<37	<37	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**400**	79 JB	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.16	0.29 J	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28	**170**	**350**	**430 B**	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	42	**170**	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-2D (continued)				MW-2S						MW-3D						
Sample Interval (feet bls)	**39-44'**	**39-44'**	**39-44'**	**39-44'**	**19-29'**	**19-29'**	**19-29'**	**19-29'**	**19-29'**	**19-29'**	**48-53'**	**48-53'**	**48-53'**	**48-53'**	**48-53'**	**48-53'**	**48-53'**
Sample Date	**4/20/2013**	**7/18/2013**	**10/10/2013**	**4/17/2014**	**4/11/2012**	**1/14/2013**	**4/20/2013**	**7/18/2013**	**10/10/2013**	**4/17/2014**	**4/12/2012**	**11/30/2012**	**1/16/2013**	**4/16/2013**	**7/16/2013**	**10/10/2013**	**4/18/2014**
Metals (µg/L) (continued)																	
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	**4.1**	NA	NA	NA	NA	NA	<0.25	<0.25	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																	
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**350**	**590**	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1,700	2,000	NA	NA	NA	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39	ND	0.32	0.27	ND	0.36	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-3D2							MW-3D3							MW-3S			
Sample Interval (feet bls)	76-81'	76-81'	76-81'	76-81'	76-81'	76-81'	76-81'	214-224'	214-224'	214-224'	214-224'	214-224'	214-224'	214-224'	19-29'	19-29'	19-29'	19-29'
Sample Date	4/12/2012	11/30/2012	1/16/2013	4/16/2013	7/16/2013	10/10/2013	4/16/2014	7/24/2012	11/27/2012	1/18/2013	4/19/2013	7/16/2013	10/7/2013	4/16/2014	4/12/2012	11/30/2012	1/15/2013	4/16/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<1.6	<1.3	<0.5	<0.25	<0.25	<0.25	<1.3 U	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<1.6	<1.3	<0.25	<0.25
1,1,1-Trichloroethane	<1.3	<1	<0.4	<0.2	<0.2	<0.2	<1.0 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<1.3	<1	<0.2	<0.2
1,1,2-Trichloroethane	<1.5	<1.4	<0.56	<0.28	<0.28	<0.28	<1.4 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<1.5	<1.4	<0.28	<0.28
1,1-Dichloroethene	<1.5	<1.6	<0.62	<0.31	<0.31	<0.31	<1.6 U	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<1.5	<1.6	<0.31	<0.31
1,2,4-Trimethylbenzene	<1.1	<0.7	<0.28	<0.14	<0.14	<0.14	<0.70 U	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<1.1	<0.7	<0.14	<0.14
1,2-Dibromoethane	<2.3	<1.8	<0.72	<0.36	<0.36	<0.36	<1.8 U	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36 U	<2.3	<1.8	<0.36	<0.36
1,2-Dichlorobenzene	<1.1	<1.4	<0.54	<0.27	<0.27	<0.27	<1.4 U	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27 U	<1.1	<1.4	<0.27	<0.27
1,2-Dichloroethane	<1.4	<1.4	<0.56	<0.28	<0.28	<0.28	<1.4 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<1.4	<1.4	<0.28	<0.28
1,2-Dichloropropane	<1.8	<1	<0.4	<0.2	<0.2	<0.2	<1.0 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<1.8	<1	<0.2	<0.2
1,3,5-Trimethylbenzene	<1.2	<0.9	<0.36	<0.18	<0.18	<0.18	<0.90 U	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<1.2	<0.9	<0.18	<0.18
2-Chlorotoluene	<1.1	<1.1	<0.42	<0.21	<0.21	<0.21	<1.1 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<1.1	<1.1	<0.21	<0.21
4-Chlorotoluene	<1.1	<1	<0.4	<0.2	<0.2	<0.2	<1.0 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<1.1	<1	<0.2	<0.2
Benzene	<0.6	<0.37	<0.15	<0.074	<0.074	<0.074	<0.37 U	<0.074	<0.074	0.30 J	<0.074	<0.074	<0.074	<0.074 U	<0.6	**1.5 J**	0.28 J	**0.6**
Bromobenzene	<1.6	<1.3	<0.5	<0.25	<0.25	<0.25	<1.3 U	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<1.6	<1.3	<0.25	<0.25
Bromodichloromethane	<1.2	<0.85	<0.34	<0.17	<0.17	<0.17	<0.85 U	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<1.2	<0.85	<0.17	<0.17
Bromoform	<2.3	<1.4	<0.56	<0.28	<0.28	<0.28	<1.4 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<2.3	<1.4	<0.28	<0.28
Bromomethane	<2.5	<1.6	<0.62	<0.31	<0.31	<0.31	<1.6 U	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<2.5	<1.6	<0.31	<0.31
Carbon Tetrachloride	<1.4	<1.3	<0.52	<0.26	<0.26	<0.26	<1.3 U	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26 U	<1.4	<1.3	<0.26	<0.26
CFC-12	<1.3	<1	<0.4	<0.2	<0.2	<0.2	<1.0 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<1.3	<1	<0.2	<0.2
Chlorodibromomethane	<1.3	<1.6	<0.64	<0.32	<0.32	<0.32	<1.6 U	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32 U	<1.3	<1.6	<0.32	<0.32
Chloroform	<1.3	<1	<0.4	<0.2	<0.2	<0.2	<1.0 U	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	**3.7 J**	**5**	**1**	**2.7**
Chloromethane	<1.2	<0.9	<0.36	<0.18	<0.18	<0.18	<0.90 U	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<1.2	<0.9	<0.18	<0.18
cis-1,2-Dichloroethene	**440**	**420**	**320**	**45**	**10**	**21**	**210**	2.2	6.8	**15**	4	1.2	<0.12	<0.12 U	**89**	**98**	**13**	<0.12
Cymene	<1.2	<0.85	<0.34	<0.17	<0.17	<0.17	<0.85 U	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<1.2	<0.85	<0.17	<0.17
Dichloromethane	<3.2	<3.4	<1.4	<0.68	<0.68	<0.68	<3.4 U	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68 U	<3.2	<3.4	<0.68	<0.68
Ethylbenzene	<0.7	<0.65	<0.26	<0.13	<0.13	<0.13	<0.65 U	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.7	<0.65	<0.13	<0.13
Isopropylbenzene	<1.1	<0.7	<0.28	<0.14	<0.14	<0.14	<0.70 U	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<1.1	<0.7	<0.14	<0.14
Methyl-tert-butylether	<1.4	<1.2	<0.48	<0.24	<0.24	<0.24	<1.2 U	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24 U	<1.4	<1.2	<0.24	<0.24
Naphthalene	<1.2	<0.8	<0.32	<0.16	<0.16	<0.16	<0.80 U	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16 U	<1.2	<0.8	<0.16	<0.16
N-Butylbenzene	<1.1	<0.65	<0.26	<0.13	<0.13	<0.13	<0.65 U	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<1.1	<0.65	<0.13	<0.13
N-Propylbenzene	<0.95	<0.65	<0.26	<0.13	<0.13	<0.13	<0.65 U	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.95	<0.65	<0.13	<0.13
sec-Butylbenzene	<0.95	<0.75	<0.3	<0.15	<0.15	<0.15	<0.75 U	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.95	<0.75	<0.15	<0.15
Styrene (Monomer)	<1.3	<0.5	<0.2	<0.1	<0.1	<0.1	<0.50 U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<1.3	<0.5	<0.1	<0.1
tert-Butylbenzene	<1.2	<0.7	<0.28	<0.14	<0.14	<0.14	<0.70 U	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<1.2	<0.7	<0.14	<0.14
Tetrachloroethene	**2,600**	**2,800**	**1,200**	**850**	**440**	**150**	**1,800**	**6.6**	**1.7**	**1.3**	**0.63 J**	<0.17	<0.17	<0.17 U	**1,600**	**2,400**	**420**	**20**
Toluene	<0.75	<0.55	<0.22	<0.11	<0.11	<0.11	<0.55 U	<0.11	<0.11	0.21 J	0.53	2.8	<0.11	<0.11 U	<0.75	<0.55	<0.11	<0.11
Total Xylenes	<1.5	<0.34	<0.14	<0.068	<0.068	<0.068	<0.34 U	<0.068	<0.068	<0.068	<0.068	<0.068	<0.068	<0.068 U	<1.5	<0.34	<0.068	<0.068
trans-1,2-Dichloroethene	6.4	5.6	4.9	<0.25	<0.25	0.52 J	3.1 J	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	**5.4**	**6**	0.58 J	<0.25
trans-1,3-Dichloropropene	<1.8	<1.1	<0.42	<0.21	<0.21	<0.21	<1.1 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<1.8	<1.1	<0.21	<0.21
Trichloroethene	**190**	**190**	**110**	**24**	**8.7**	**9.8**	**120**	**1.1**	**1.1**	0.40 J	<0.19	0.31 J	0.5	<0.19 U	**120**	**160**	**25**	<0.19
Vinyl chloride	<0.65	<0.5	<0.2	<0.1	<0.1	<0.1	<0.50 U	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.65	<0.5	<0.1	<0.1
PCBs (µg/L)																		
Aroclor 1016	NA	NA	<0.17	NA	NA	NA	NA	NA	NA	<0.18	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-3D2							MW-3D3							MW-3S			
Sample Interval (feet bls)	76-81'	76-81'	76-81'	76-81'	76-81'	76-81'	76-81'	214-224'	214-224'	214-224'	214-224'	214-224'	214-224'	214-224'	19-29'	19-29'	19-29'	19-29'
Sample Date	4/12/2012	11/30/2012	1/16/2013	4/16/2013	7/16/2013	10/10/2013	4/16/2014	7/24/2012	11/27/2012	1/18/2013	4/19/2013	7/16/2013	10/7/2013	4/16/2014	4/12/2012	11/30/2012	1/15/2013	4/16/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	<0.093	NA	NA	NA	NA	NA	NA	<0.096	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	<0.13	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	<0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	<0.049	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	<0.062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	<0.064	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	<0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	<0.082	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	<0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	<0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	<0.42	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	<0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	<0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	<0.39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	<0.53	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	0.28 J	0.15 J	NA	NA	NA	NA	NA	0.91 J	**1.5**	NA	NA	NA	NA	NA	0.45 J	NA	NA
Arsenic, Total	NA	0.21 J	0.19 J	NA	NA	NA	NA	NA	0.93 J	**1.4**	NA	NA	NA	NA	NA	0.49 J	NA	NA
Barium, Dissolved	NA	43	42	NA	NA	NA	NA	NA	85	81	NA	NA	NA	NA	NA	88	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	<0.1	0.10 J	NA	NA	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	4.0 J	4.4 J	NA	NA	NA	NA	NA	<0.64	**0.81 J**	NA	NA	NA	NA	NA	<0.64	NA	NA
Chromium, Total	NA	4.1 J	4.1 J	NA	NA	NA	NA	NA	0.83 J	**2.2 J**	NA	NA	NA	NA	NA	<0.64	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	<37	<37	NA	NA	NA	NA	NA	**4,200**	**4,900**	NA	NA	NA	NA	NA	<37	NA	NA
Iron, Total	NA	<37	<37	NA	NA	NA	NA	NA	**4,400**	**5,000**	NA	NA	NA	NA	NA	**37 J**	NA	NA
Lead, Dissolved	NA	<0.16	0.16 J	NA	NA	NA	NA	NA	<0.16	<0.16	NA	NA	NA	NA	NA	<0.16	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	3.4	19	NA	**340 B**	NA	NA	NA	**820**	**690**	**570**	**620 B**	NA	NA	NA	**26**	NA	NA
Manganese, Total	NA	1.6 J	17	NA	NA	NA	NA	NA	**870**	**670**	NA	NA	NA	NA	NA	**34**	NA	NA
Mercury, Dissolved	NA	<0.071	NA	NA	NA	NA	NA	NA	0.17 JB	<0.071	NA	NA	NA	NA	NA	0.072 J	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-3D2							MW-3D3							MW-3S			
Sample Interval (feet bls)	76-81'	76-81'	76-81'	76-81'	76-81'	76-81'	76-81'	214-224'	214-224'	214-224'	214-224'	214-224'	214-224'	214-224'	19-29'	19-29'	19-29'	19-29'
Sample Date	4/12/2012	11/30/2012	1/16/2013	4/16/2013	7/16/2013	10/10/2013	4/16/2014	7/24/2012	11/27/2012	1/18/2013	4/19/2013	7/16/2013	10/7/2013	4/16/2014	4/12/2012	11/30/2012	1/15/2013	4/16/2013
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	0.39 J	0.42 J	NA	NA	NA	NA	NA	<0.25	<0.25	NA	NA	NA	NA	NA	0.74 J	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	<0.069	<0.069	NA	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	NA	<0.069	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	**100**	**260**	NA	NA	NA	NA	NA	**2.5**	**3**	NA	NA	NA	NA	NA	**730**	**1,400**	NA
Total Dissolved Solids	NA	730	1,000	NA	NA	NA	NA	NA	410	300	NA	NA	NA	NA	NA	2,500	2,700	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.51	0.53	2.8	ND	ND	ND	1.5	0.28	0.6
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:

100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.

100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.

< = Constituent not detected above noted laboratory detection limit.

* = LCS or LCSD exceeds the control limits.

B = Compound was found in the blank and the sample.

J = Result is between the method detection limit and the limit of quantitation.

µg/L = Micrograms per liter.

mg/L = Milligrams per liter.

LCS = Laboratory control sample.

LCSD = Laboratory control sample duplicate.

NA = Not analyzed.

NE = Not established.

ND = Total detected PCBs were reported less than the laboratory detection limit.

PAHs = Polyaromatic Hydrocarbons.

PCBs = Polychlorinated Biphenyls.

Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.

Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.

VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-3S (continued)				MW-4D						MW-4D2						MW-4S		
Sample Interval (feet bls)	19-29'	19-29'	19-29'	19-29'	65-70'	65-70'	65-70'	65-70'	65-70'	65-70'	91-96'	91-96'	91-96'	91-96'	91-96'	91-96'	35-50'	35-50'	35-50'
Sample Date	7/16/2013	10/10/2013	4/16/2014	4/22/2014	4/10/2012	1/16/2013	4/18/2013	7/17/2013	10/8/2013	4/17/2014	4/10/2012	1/16/2013	4/18/2013	7/18/2013	10/7/2013	4/17/2014	4/10/2012	1/15/2013	4/18/2013
VOCs (µg/L)																			
1,1,1,2-Tetrachloroethane	<0.5	<0.5	<1.3 U	NA	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25
1,1,1-Trichloroethane	<0.4	<0.4	<1.0 U	NA	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2
1,1,2-Trichloroethane	<0.56	<0.56	<1.4 U	NA	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28
1,1-Dichloroethene	<0.62	<0.62	<1.6 U	NA	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31
1,2,4-Trimethylbenzene	<0.28	<0.28	<0.70 U	NA	<0.22	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.22	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.22	<0.14	<0.14
1,2-Dibromoethane	<0.72	<0.72	<1.8 U	NA	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36
1,2-Dichlorobenzene	<0.54	<0.54	<1.4 U	NA	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27
1,2-Dichloroethane	<0.56	<0.56	<1.4 U	NA	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28
1,2-Dichloropropane	<0.4	<0.4	<1.0 U	NA	<0.36	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2
1,3,5-Trimethylbenzene	<0.36	<0.36	<0.90 U	NA	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18
2-Chlorotoluene	<0.42	<0.42	<1.1 U	NA	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21
4-Chlorotoluene	<0.4	<0.4	<1.0 U	NA	<0.21	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2
Benzene	**0.70 J**	**1**	<0.37 U	NA	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074
Bromobenzene	<0.5	<0.5	<1.3 U	NA	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25
Bromodichloromethane	<0.34	<0.34	<0.85 U	NA	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17
Bromoform	<0.56	<0.56	<1.4 U	NA	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28
Bromomethane	<0.62	<0.62	<1.6 U	NA	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31
Carbon Tetrachloride	<0.52	<0.52	<1.3 U	NA	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26
CFC-12	<0.4	<0.4	<1.0 U	NA	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2
Chlorodibromomethane	<0.64	<0.64	<1.6 U	NA	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32
Chloroform	**2.8**	**3.7**	**3.4 J**	NA	<0.25	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2
Chloromethane	<0.36	<0.36	<0.90 U	NA	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18
cis-1,2-Dichloroethene	**14**	**58**	<0.60 U	NA	<0.22	<0.12	<0.12	<0.12	<0.12	<0.12 U	<0.22	<0.12	<0.12	<0.12	<0.12	<0.12 U	<0.22	<0.12	<0.12
Cymene	<0.34	<0.34	<0.85 U	NA	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17
Dichloromethane	<1.4	<1.4	<3.4 U	NA	<0.63	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.63	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.63	<0.68	<0.68
Ethylbenzene	<0.26	<0.26	<0.65 U	NA	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.14	<0.13	<0.13
Isopropylbenzene	<0.28	<0.28	<0.70 U	NA	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14
Methyl-tert-butylether	<0.48	<0.48	<1.2 U	NA	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<0.24	<0.24
Naphthalene	<0.32	<0.32	<0.80 U	NA	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16
N-Butylbenzene	<0.26	<0.26	<0.65 U	NA	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13
N-Propylbenzene	<0.26	<0.26	<0.65 U	NA	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13
sec-Butylbenzene	<0.3	<0.3	<0.75 U	NA	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15
Styrene (Monomer)	<0.2	<0.2	<0.50 U	NA	<0.26	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1
tert-Butylbenzene	<0.28	<0.28	<0.70 U	NA	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14
Tetrachloroethene	**840**	**1,000**	**630**	NA	<0.22	<0.17	**0.51 J**	<0.17	<0.17	**0.58 J**	**0.73 J**	**1.2**	**0.92 J**	**1.2**	**0.84 J**	**1.5**	**0.96 J**	**1.4**	**1.8**
Toluene	<0.22	<0.22	<0.55 U	NA	<0.15	<0.11	<0.11	0.36 J	<0.11	<0.11 U	0.40 J	<0.11	0.45 J	0.39 J	<0.11	<0.11 U	0.20 J	<0.11	<0.11
Total Xylenes	<0.14	<0.14	<0.34 U	NA	<0.3	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.3	<0.068	<0.068	<0.068	<0.068	<0.068 U	<0.3	<0.068	<0.068
trans-1,2-Dichloroethene	<0.5	4.9	<1.3 U	NA	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25
trans-1,3-Dichloropropene	<0.42	<0.42	<1.1 U	NA	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21
Trichloroethene	**26**	**100**	**6.9**	NA	<0.18	<0.19	<0.19	<0.19	<0.19	<0.19 U	<0.18	<0.19	<0.19	<0.19	<0.19	<0.19 U	<0.18	<0.19	<0.19
Vinyl chloride	<0.2	<0.2	<0.50 U	NA	<0.13	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1
PCBs (µg/L)																			
Aroclor 1016	NA	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.17	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-3S (continued)				MW-4D						MW-4D2						MW-4S		
Sample Interval (feet bls)	19-29'	19-29'	19-29'	19-29'	65-70'	65-70'	65-70'	65-70'	65-70'	65-70'	91-96'	91-96'	91-96'	91-96'	91-96'	91-96'	35-50'	35-50'	35-50'
Sample Date	7/16/2013	10/10/2013	4/16/2014	4/22/2014	4/10/2012	1/16/2013	4/18/2013	7/17/2013	10/8/2013	4/17/2014	4/10/2012	1/16/2013	4/18/2013	7/18/2013	10/7/2013	4/17/2014	4/10/2012	1/15/2013	4/18/2013
PCBs (µg/L) (continued)																			
Aroclor 1232	NA	NA	NA	NA	NA	<0.093	NA	NA	NA	NA	NA	<0.087	NA	NA	NA	NA	NA	<0.091	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	<0.12	NA	NA	NA	NA	NA	<0.13	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																			
1-Methylnaphthalene	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	<1.1	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.14	NA
Acenaphthene	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA	<0.4	NA
Anthracene	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.35	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	<0.049	NA	NA	NA	NA	NA	<0.049	NA	NA	NA	NA	NA	<0.048	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	<0.062	NA	NA	NA	NA	NA	<0.063	NA	NA	NA	NA	NA	<0.061	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	<0.064	NA	NA	NA	NA	NA	<0.065	NA	NA	NA	NA	NA	<0.064	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	<0.47	NA	NA	NA	NA	NA	<0.47	NA	NA	NA	NA	NA	<0.46	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	<0.082	NA	NA	NA	NA	NA	<0.083	NA	NA	NA	NA	NA	<0.081	NA
Chrysene	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.15	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.07	NA
Fluoranthene	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.35	NA
Fluorene	NA	NA	NA	NA	NA	<0.42	NA	NA	NA	NA	NA	<0.42	NA	NA	NA	NA	NA	<0.42	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	<0.093	NA	NA	NA	NA	NA	<0.094	NA	NA	NA	NA	NA	<0.092	NA
Naphthalene	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.33	NA
Phenanthrene	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA	<0.38	NA
Pyrene	NA	NA	NA	NA	NA	<0.53	NA	NA	NA	NA	NA	<0.54	NA	NA	NA	NA	NA	<0.53	NA
Metals (µg/L)																			
Arsenic, Dissolved	NA	NA	NA	<0.23 U	NA	<0.15	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.15	NA
Arsenic, Total	NA	NA	NA	<0.23 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	0.52 J	NA	56	NA	NA	NA	NA	NA	78	NA	NA	NA	NA	NA	120	NA
Barium, Total	NA	NA	NA	32	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	<0.15 U	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA
Cadmium, Total	NA	NA	NA	<0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	**120**	NA	NA	**87**	NA	1.9 J	NA	NA	NA	NA	NA	2.9 J	NA	NA	NA	NA	NA	2.8 J	NA
Chromium, Total	NA	NA	NA	**86**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	0.83 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	<12 U	NA	<37	NA	NA	NA	NA	NA	<37	NA	NA	NA	NA	NA	<37	NA
Iron, Total	NA	NA	NA	**530**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	<0.091 U	NA	<0.16	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.16	NA
Lead, Total	NA	NA	NA	0.16 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	5.3 B	NA	NA	**110,000**	NA	**5.5**	NA	NA	NA	NA	NA	24	NA	NA	NA	NA	NA	32	NA
Manganese, Total	NA	NA	NA	**130,000**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	0.082 J	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	0.98 JB	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-3S (continued)				MW-4D						MW-4D2						MW-4S		
Sample Interval (feet bls)	19-29'	19-29'	19-29'	19-29'	65-70'	65-70'	65-70'	65-70'	65-70'	65-70'	91-96'	91-96'	91-96'	91-96'	91-96'	91-96'	35-50'	35-50'	35-50'
Sample Date	7/16/2013	10/10/2013	4/16/2014	4/22/2014	4/10/2012	1/16/2013	4/18/2013	7/17/2013	10/8/2013	4/17/2014	4/10/2012	1/16/2013	4/18/2013	7/18/2013	10/7/2013	4/17/2014	4/10/2012	1/15/2013	4/18/2013
Metals (µg/L) (continued)																			
Nickel, Total	NA	NA	NA	5.0 B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	7.6	NA	0.86 J	NA	NA	NA	NA	NA	2.0 J	NA	NA	NA	NA	NA	6.4	NA
Selenium, Total	NA	NA	NA	9	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	0.41 J	NA	<0.069	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA	<0.069	NA
Silver, Total	NA	NA	NA	0.43 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	<5.9 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	93	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																			
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	0.7	1	ND	ND	ND	ND	ND	0.36	ND	ND	0.4	ND	0.45	0.39	ND	ND	0.2	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-4S (continued)			MW-5D							MW-5D2							MW-5D3
Sample Interval (feet bls)	35-50'	35-50'	35-50'	75-80'	75-80'	75-80'	75-80'	75-80'	75-80'	75-80'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	225-235'
Sample Date	7/18/2013	10/8/2013	4/17/2014	4/12/2012	11/28/2012	1/17/2013	4/19/2013	7/18/2013	10/4/2013	4/15/2014	4/12/2012	11/30/2012	1/17/2013	4/19/2013	7/18/2013	10/9/2013	4/15/2014	7/24/2012
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.25 U	<0.31	<1.3	<0.5	<0.5	<1.3	<1.3	<0.25 U	<0.31	NA	<0.25	<0.25	<0.5	<0.25	<0.50 U	<0.25
1,1,1-Trichloroethane	<0.2	<0.2	<0.20 U	<0.26	<1	<0.4	<0.4	<1	<1	<0.20 U	<0.26	NA	<0.2	<0.2	<0.4	<0.2	<0.40 U	<0.2
1,1,2-Trichloroethane	<0.28	<0.28	<0.28 U	<0.3	<1.4	<0.56	<0.56	<1.4	<1.4	<0.28 U	<0.3	NA	<0.28	<0.28	<0.56	<0.28	<0.56 U	<0.28
1,1-Dichloroethene	<0.31	<0.31	<0.31 U	<0.29	<1.6	<0.62	<0.62	<1.6	<1.6	<0.31 U	<0.29	NA	<0.31	<0.31	<0.62	<0.31	<0.62 U	<0.31
1,2,4-Trimethylbenzene	<0.14	<0.14	<0.14 U	<0.22	<0.7	<0.28	<0.28	<0.7	<0.7	<0.14 U	<0.22	NA	<0.14	<0.14	<0.28	<0.14	<0.28 U	<0.14
1,2-Dibromoethane	<0.36	<0.36	<0.36 U	<0.45	<1.8	<0.72	<0.72	<1.8	<1.8	<0.36 U	<0.45	NA	<0.36	<0.36	<0.72	<0.36	<0.72 U	<0.36
1,2-Dichlorobenzene	<0.27	<0.27	<0.27 U	<0.21	<1.4	<0.54	<0.54	<1.4	<1.4	<0.27 U	<0.21	NA	<0.27	<0.27	<0.54	<0.27	<0.54 U	<0.27
1,2-Dichloroethane	<0.28	<0.28	<0.28 U	<0.28	<1.4	<0.56	<0.56	<1.4	<1.4	<0.28 U	<0.28	NA	<0.28	<0.28	<0.56	<0.28	<0.56 U	<0.28
1,2-Dichloropropane	<0.2	<0.2	<0.20 U	<0.36	<1	<0.4	<0.4	<1	<1	<0.20 U	<0.36	NA	<0.2	<0.2	<0.4	<0.2	<0.40 U	<0.2
1,3,5-Trimethylbenzene	<0.18	<0.18	<0.18 U	<0.23	<0.9	<0.36	<0.36	<0.9	<0.9	<0.18 U	<0.23	NA	<0.18	<0.18	<0.36	<0.18	<0.36 U	<0.18
2-Chlorotoluene	<0.21	<0.21	<0.21 U	<0.21	<1.1	<0.42	<0.42	<1.1	<1.1	<0.21 U	<0.21	NA	<0.21	<0.21	<0.42	<0.21	<0.42 U	<0.21
4-Chlorotoluene	<0.2	<0.2	<0.20 U	<0.21	<1	<0.4	<0.4	<1	<1	<0.20 U	<0.21	NA	<0.2	<0.2	<0.4	<0.2	<0.40 U	<0.2
Benzene	<0.074	<0.074	<0.074 U	0.29 J	**1.1 J**	**1.2**	**0.88 J**	**1.5 J**	**2.8**	0.30 J	<0.12	NA	<0.074	<0.074	<0.15	<0.074	<0.15 U	<0.074
Bromobenzene	<0.25	<0.25	<0.25 U	<0.31	<1.3	<0.5	<0.5	<1.3	<1.3	<0.25 U	<0.31	NA	<0.25	<0.25	<0.5	<0.25	<0.50 U	<0.25
Bromodichloromethane	<0.17	<0.17	<0.17 U	<0.23	<0.85	<0.34	<0.34	<0.85	<0.85	<0.17 U	<0.23	NA	<0.17	<0.17	<0.34	<0.17	<0.34 U	<0.17
Bromoform	<0.28	<0.28	<0.28 U	<0.45	<1.4	<0.56	<0.56	<1.4	<1.4	<0.28 U	<0.45	NA	<0.28	<0.28	<0.56	<0.28	<0.56 U	<0.28
Bromomethane	<0.31	<0.31	<0.31 U	<0.49	<1.6	<0.62	<0.62	<1.6	<1.6	<0.31 U	<0.49	NA	<0.31	<0.31	<0.62	<0.31	<0.62 U	<0.31
Carbon Tetrachloride	<0.26	<0.26	<0.26 U	<0.28	<1.3	<0.52	<0.52	<1.3	<1.3	<0.26 U	<0.28	NA	<0.26	<0.26	<0.52	<0.26	<0.52 U	<0.26
CFC-12	<0.2	<0.2	<0.20 U	<0.26	<1	<0.4	<0.4	<1	<1	<0.20 U	<0.26	NA	<0.2	<0.2	<0.4	<0.2	<0.40 U	<0.2
Chlorodibromomethane	<0.32	<0.32	<0.32 U	<0.25	<1.6	<0.64	<0.64	<1.6	<1.6	<0.32 U	<0.25	NA	<0.32	<0.32	<0.64	<0.32	<0.64 U	<0.32
Chloroform	<0.2	<0.2	<0.20 U	<0.25	<1	**1.0 J**	<0.4	<1	<1	<0.20 U	<0.25	NA	<0.2	<0.2	<0.4	<0.2	<0.40 U	<0.2
Chloromethane	<0.18	<0.18	<0.18 U	<0.24	<0.9	<0.36	<0.36	<0.9	<0.9	<0.18 U	<0.24	NA	<0.18	<0.18	<0.36	<0.18	<0.36 U	<0.18
cis-1,2-Dichloroethene	<0.12	<0.12	<0.12 U	**26**	**93**	**110**	**100**	**120**	**140**	**77**	<0.22	NA	6.6	4.7	3.6	1.5	<0.24 U	3.7
Cymene	<0.17	<0.17	<0.17 U	<0.24	<0.85	<0.34	<0.34	<0.85	<0.85	<0.17 U	<0.24	NA	<0.17	<0.17	<0.34	<0.17	<0.34 U	<0.17
Dichloromethane	<0.68	<0.68	<0.68 U	<0.63	<3.4	<1.4	<1.4	<3.4	<3.4	<0.68 U	<0.63	NA	<0.68	<0.68	<1.4	**5.7**	<1.4 U	<0.68
Ethylbenzene	<0.13	<0.13	<0.13 U	<0.14	<0.65	<0.26	<0.26	<0.65	<0.65	<0.13 U	<0.14	NA	<0.13	<0.13	<0.26	<0.13	<0.26 U	<0.13
Isopropylbenzene	<0.14	<0.14	<0.14 U	<0.21	<0.7	<0.28	<0.28	<0.7	<0.7	<0.14 U	<0.21	NA	<0.14	<0.14	<0.28	<0.14	<0.28 U	<0.14
Methyl-tert-butylether	<0.24	<0.24	<0.24 U	<0.28	<1.2	<0.48	<0.48	<1.2	<1.2	<0.24 U	<0.28	NA	<0.24	<0.24	<0.48	<0.24	<0.48 U	<0.24
Naphthalene	<0.16	<0.16	<0.16 U	<0.24	<0.8	<0.32	<0.32	<0.8	<0.8	<0.16 U	<0.24	NA	<0.16	<0.16	<0.32	<0.16	<0.32 U	<0.16
N-Butylbenzene	<0.13	<0.13	<0.13 U	<0.21	<0.65	<0.26	<0.26	<0.65	<0.65	<0.13 U	<0.21	NA	<0.13	<0.13	<0.26	<0.13	<0.26 U	<0.13
N-Propylbenzene	<0.13	<0.13	<0.13 U	<0.19	<0.65	<0.26	<0.26	<0.65	<0.65	<0.13 U	<0.19	NA	<0.13	<0.13	<0.26	<0.13	<0.26 U	<0.13
sec-Butylbenzene	<0.15	<0.15	<0.15 U	<0.19	<0.75	<0.3	<0.3	<0.75	<0.75	<0.15 U	<0.19	NA	<0.15	<0.15	<0.3	<0.15	<0.30 U	<0.15
Styrene (Monomer)	<0.1	<0.1	<0.10 U	<0.26	<0.5	<0.2	<0.2	<0.5	<0.5	<0.10 U	<0.26	NA	<0.1	<0.1	<0.2	<0.1	<0.20 U	<0.1
tert-Butylbenzene	<0.14	<0.14	<0.14 U	<0.24	<0.7	<0.28	<0.28	<0.7	<0.7	<0.14 U	<0.24	NA	<0.14	<0.14	<0.28	<0.14	<0.28 U	<0.14
Tetrachloroethene	**0.90 J**	**1.2**	**1.9**	**400**	**2,000**	**1,800**	**1,200**	**2,000**	**2,000**	<0.17 U	**47**	NA	**650**	**640**	**710**	**110**	**520**	**23**
Toluene	0.26 J	<0.11	<0.11 U	0.30 J	<0.55	<0.22	<0.22	<0.55	<0.55	<0.11 U	<0.15	NA	0.7	0.35 J	2.4	0.43 J	<0.22 U	<0.11
Total Xylenes	0.28 J	<0.068	<0.068 U	<0.3	<0.34	<0.14	<0.14	<0.34	<0.34	<0.068 U	<0.3	NA	<0.068	<0.068	<0.14	<0.068	<0.14 U	<0.068
trans-1,2-Dichloroethene	<0.25	<0.25	<0.25 U	1.3	3.9 J	3.9	3.4	3.8 J	2.9 J	<0.25 U	<0.27	NA	<0.25	<0.25	<0.5	<0.25	<0.50 U	<0.25
trans-1,3-Dichloropropene	<0.21	<0.21	<0.21 U	<0.35	<1.1	<0.42	<0.42 *	<1.1	<1.1	<0.21 U	<0.35	NA	<0.21	<0.21 *	<0.42	<0.21	<0.42 U	<0.21
Trichloroethene	<0.19	<0.19	<0.19 U	**48**	**190**	**180**	**170**	**160**	**110**	<0.19 U	<0.18	NA	**9.5**	**7.4**	**8.1**	**6.1**	**7.1**	**2.4**
Vinyl chloride	<0.1	<0.1	<0.10 U	<0.13	<0.5	<0.2	<0.2	<0.5	<0.5	<0.10 U	<0.13	NA	<0.1	<0.1	<0.2	<0.1	<0.20 U	<0.1
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	NA	NA	<0.19	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-4S (continued)			MW-5D							MW-5D2							MW-5D3
Sample Interval (feet bls)	35-50'	35-50'	35-50'	75-80'	75-80'	75-80'	75-80'	75-80'	75-80'	75-80'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	225-235'
Sample Date	7/18/2013	10/8/2013	4/17/2014	4/12/2012	11/28/2012	1/17/2013	4/19/2013	7/18/2013	10/4/2013	4/15/2014	4/12/2012	11/30/2012	1/17/2013	4/19/2013	7/18/2013	10/9/2013	4/15/2014	7/24/2012
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	NA	NA	NA	<0.094	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA	<0.41	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	<0.34	NA	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	<0.047	NA	NA	NA	NA	NA	NA	<0.05	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	<0.06	NA	NA	NA	NA	NA	NA	<0.063	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	<0.062	NA	NA	NA	NA	NA	NA	<0.065	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	<0.45	NA	NA	NA	NA	NA	NA	<0.47	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	<0.079	NA	NA	NA	NA	NA	NA	<0.084	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	<0.068	NA	NA	NA	NA	NA	NA	<0.072	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	<0.34	NA	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA	NA	<0.43	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	<0.089	NA	NA	NA	NA	NA	NA	<0.095	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	<0.32	NA	NA	NA	NA	NA	NA	<0.34	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	<0.37	NA	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	<0.51	NA	NA	NA	NA	NA	NA	<0.54	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	NA	NA	<0.15	0.15 J	NA	NA	NA	NA	NA	0.15 J	<0.15	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	0.25 J	0.15 J	NA	NA	NA	NA	NA	0.25 J	0.18 J	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	24	24	NA	NA	NA	NA	NA	18	22	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	**22**	**21**	NA	NA	NA	NA	NA	8.8	5.1	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	**33**	**20**	NA	NA	NA	NA	NA	8.6	6.5	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	<37	<37	NA	NA	NA	NA	NA	<37	<37	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	**220**	<37	NA	NA	NA	NA	NA	120	**250**	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	<0.16	<0.16	NA	NA	NA	NA	NA	<0.16	<0.16	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	10	10 B	NA	NA	NA	NA	NA	14	29 B	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	20	9.4 B	NA	NA	NA	NA	NA	18	34 B	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	**0.22 B**	<0.071	NA	NA	NA	NA	NA	0.072 J	<0.071	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-4S (continued)			MW-5D							MW-5D2							MW-5D3
Sample Interval (feet bls)	35-50'	35-50'	35-50'	75-80'	75-80'	75-80'	75-80'	75-80'	75-80'	75-80'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	165.8-170.8'	225-235'
Sample Date	7/18/2013	10/8/2013	4/17/2014	4/12/2012	11/28/2012	1/17/2013	4/19/2013	7/18/2013	10/4/2013	4/15/2014	4/12/2012	11/30/2012	1/17/2013	4/19/2013	7/18/2013	10/9/2013	4/15/2014	7/24/2012
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	<0.25	<0.25	NA	NA	NA	NA	NA	1.5 J	1.6 J	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	**130**	**120**	NA	NA	NA	NA	NA	**46**	**51**	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	980	930	NA	NA	NA	NA	NA	720	590	NA	NA	NA	NA	NA
Total BTEX (µg/L)	0.54	ND	ND	0.59	1.1	1.2	0.88	1.5	2.8	0.3	ND	ND	0.7	0.35	2.4	0.43	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
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LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-5D3 (continued)						MW-5S							MW-6D					MW-6S
Sample Interval (feet bls)	225-235'	225-235'	225-235'	225-235'	225-235'	225-235'	34-44'	34-44'	34-44'	34-44'	34-44'	34-44'	34-44'	65.5-70.5'	65.5-70.5'	65.5-70.5'	65.5-70.5'	65.5-70.5'	31.4-41.4'
Sample Date	11/28/2012	1/18/2013	4/21/2013	7/17/2013	10/7/2013	4/16/2014	4/12/2012	11/28/2012	1/17/2013	4/19/2013	7/18/2013	10/4/2013	4/15/2014	1/16/2013	4/20/2013	7/18/2013	10/7/2013	4/17/2014	4/11/2012
VOCs (µg/L)																			
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.5	<0.5	<0.5	<0.25	<0.50 U	<0.31
1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.4	<0.4	<0.4	<0.2	<0.40 U	<0.26
1,1,2-Trichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.56	<0.56	<0.56	<0.28	<0.56 U	<0.3
1,1-Dichloroethene	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.62	<0.62	<0.62	<0.31	<0.62 U	<0.29
1,2,4-Trimethylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.22	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	23	11	16	41	9.7	4.8
1,2-Dibromoethane	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.72	<0.72	<0.72	<0.36	<0.72 U	<0.45
1,2-Dichlorobenzene	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.54	<0.54	<0.54	<0.27	<0.54 U	<0.21
1,2-Dichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.56	<0.56	<0.56	<0.28	<0.56 U	<0.28
1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.4	**1.9 J**	<0.4	<0.2	<0.40 U	<0.36
1,3,5-Trimethylbenzene	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.36	<0.36	<0.36	0.71 J	<0.36 U	1.5
2-Chlorotoluene	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.42	<0.42	<0.42	<0.21	<0.42 U	<0.21
4-Chlorotoluene	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.4	<0.4	<0.4	<0.2	<0.40 U	<0.21
Benzene	<0.074	0.28 J	<0.074	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074	<0.074 U	**1,300**	**600**	**810**	**1,000**	**650**	**4.1**
Bromobenzene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.5	<0.5	<0.5	<0.25	<0.50 U	<0.31
Bromodichloromethane	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.34	<0.34	<0.34	<0.17	<0.34 U	<0.23
Bromoform	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.56	<0.56	<0.56	<0.28	<0.56 U	<0.45
Bromomethane	<0.31	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.31	0.73 J	<0.31	<0.31	<0.31	<0.31 U	<0.62	<0.62	<0.62	<0.31	<0.62 U	<0.49
Carbon Tetrachloride	<0.26	<0.26	<0.26	<0.26	<0.26	<0.26 U	**1.2**	**1.1**	<0.26	**1.1**	**1.3**	**1.3**	<0.26 U	<0.52	<0.52	<0.52	<0.26	<0.52 U	<0.28
CFC-12	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.4	<0.4	<0.4	<0.2	<0.40 U	<0.26
Chlorodibromomethane	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.64	<0.64	<0.64	<0.32	<0.64 U	<0.25
Chloroform	<0.2	<0.2	<0.2	<0.2	<0.2	<0.20 U	**0.84 J**	**0.79 J**	**0.79 J**	<0.2	<0.2	**0.61 J**	<0.20 U	<0.4	<0.4	<0.4	<0.2	<0.40 U	<0.25
Chloromethane	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.36	<0.36	<0.36	<0.18	<0.36 U	<0.24
cis-1,2-Dichloroethene	3.1	**12**	1.6	2.1	4.5	<0.12 U	**13**	4.2	3.8	2	2.9	2.9	<0.12 U	<0.24	<0.24	<0.24	0.89 J	2.8	<0.22
Cymene	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17	<0.17 U	3.8	1.7 J	3.2	3.4	2.7	<0.24
Dichloromethane	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.63	<0.68	<0.68	<0.68	<0.68	<0.68	<0.68 U	<1.4	<1.4	<1.4	<0.68	<1.4 U	**8.3**
Ethylbenzene	<0.13	<0.13	<0.13	0.32 J	<0.13	<0.13 U	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	7.5	3.5	7.1	8.1	6.7	9.8
Isopropylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	30	16	27	29	22	4.1
Methyl-tert-butylether	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.48	<0.48	<0.48	<0.24	<0.48 U	<0.28
Naphthalene	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16 U	**54**	3.9	**50**	**72**	**12**	**19**
N-Butylbenzene	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.26	<0.26	**5**	<0.13	<0.26 U	<0.21
N-Propylbenzene	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13	<0.13 U	13	5.4	12	14	9.2	1.8
sec-Butylbenzene	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15	<0.15 U	3.4	2	3.2	3.2	3	0.56 J
Styrene (Monomer)	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.2	<0.2	<0.2	1	<0.20 U	<0.26
tert-Butylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.28	<0.28	<0.28	<0.14	<0.28 U	<0.24
Tetrachloroethene	**19**	**0.59 J**	**1.8**	**0.78 J**	**1.5**	<0.17 U	**360**	**240**	**260**	**130**	**190**	**170**	**47**	**25**	**22**	**23**	**17**	**10**	<0.22
Toluene	<0.11	<0.11	0.29 J	0.53	0.20 J	<0.11 U	<0.15	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11 U	30	9.4	24	38	25	2.5
Total Xylenes	<0.068	<0.068	<0.068	0.68 J	<0.068	<0.068 U	<0.3	<0.068	<0.068	<0.068	<0.068	<0.068	<0.068 U	40	12	34	63	16	7.8
trans-1,2-Dichloroethene	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.5	<0.5	<0.5	<0.25	<0.50 U	<0.27
trans-1,3-Dichloropropene	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21 *	<0.21	<0.21	<0.21 U	<0.42	<0.42	<0.42	<0.21	<0.42 U	<0.35
Trichloroethene	**2.6**	<0.19	<0.19	<0.19	0.29 J	<0.19 U	**9.8**	**4.7**	**4.4**	**2.8**	**3**	**2.9**	<0.19 U	**11**	**13**	**12**	**18**	**24**	<0.18
Vinyl chloride	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.2	<0.2	<0.2	<0.1	<0.20 U	<0.13
PCBs (µg/L)																			
Aroclor 1016	NA	<0.16	NA	NA	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-5D3 (continued)						MW-5S							MW-6D					MW-6S
Sample Interval (feet bls)	**225-235'**	**225-235'**	**225-235'**	**225-235'**	**225-235'**	**225-235'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**65.5-70.5'**	**65.5-70.5'**	**65.5-70.5'**	**65.5-70.5'**	**65.5-70.5'**	**31.4-41.4'**
Sample Date	**11/28/2012**	**1/18/2013**	**4/21/2013**	**7/17/2013**	**10/7/2013**	**4/16/2014**	**4/12/2012**	**11/28/2012**	**1/17/2013**	**4/19/2013**	**7/18/2013**	**10/4/2013**	**4/15/2014**	**1/16/2013**	**4/20/2013**	**7/18/2013**	**10/7/2013**	**4/17/2014**	**4/11/2012**
PCBs (µg/L) (continued)																			
Aroclor 1232	NA	<0.09	NA	NA	NA	NA	NA	NA	<0.091	NA	NA	NA	NA	<0.094	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	<0.13	NA	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																			
1-Methylnaphthalene	NA	<1.1	NA	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	<0.15	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA
Acenaphthene	NA	<0.41	NA	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA
Anthracene	NA	<0.36	NA	NA	NA	NA	NA	NA	<0.34	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	<0.05	NA	NA	NA	NA	NA	NA	<0.046	NA	NA	NA	NA	<0.049	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	<0.063	NA	NA	NA	NA	NA	NA	<0.059	NA	NA	NA	NA	<0.063	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	<0.066	NA	NA	NA	NA	NA	NA	<0.061	NA	NA	NA	NA	<0.065	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	<0.47	NA	NA	NA	NA	NA	NA	<0.44	NA	NA	NA	NA	<0.47	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	<0.084	NA	NA	NA	NA	NA	NA	<0.078	NA	NA	NA	NA	<0.083	NA	NA	NA	NA	NA
Chrysene	NA	<0.16	NA	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	<0.072	NA	NA	NA	NA	NA	NA	<0.067	NA	NA	NA	NA	<0.072	NA	NA	NA	NA	NA
Fluoranthene	NA	<0.36	NA	NA	NA	NA	NA	NA	<0.34	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA
Fluorene	NA	<0.43	NA	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	<0.43	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	<0.095	NA	NA	NA	NA	NA	NA	<0.088	NA	NA	NA	NA	<0.094	NA	NA	NA	NA	NA
Naphthalene	NA	<0.34	NA	NA	NA	NA	NA	NA	<0.32	NA	NA	NA	NA	**31**	NA	NA	NA	NA	NA
Phenanthrene	NA	<0.4	NA	NA	NA	NA	NA	NA	<0.37	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA
Pyrene	NA	<0.54	NA	NA	NA	NA	NA	NA	<0.5	NA	NA	NA	NA	<0.54	NA	NA	NA	NA	NA
Metals (µg/L)																			
Arsenic, Dissolved	0.30 J	0.61 J	NA	NA	NA	NA	NA	0.24 J	0.26 J	NA	NA	NA	NA	0.34 J	NA	NA	NA	NA	NA
Arsenic, Total	0.61 J	**1.1**	NA	NA	NA	NA	NA	0.36 J	0.28 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	70	68	NA	NA	NA	NA	NA	96	97	NA	NA	NA	NA	**590**	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	<0.1	<0.1	NA	NA	NA	NA	NA	<0.1	<0.1	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	1.1 J	<0.64	NA	NA	NA	NA	NA	3.8 J	3.8 J	NA	NA	NA	NA	0.71 J	NA	NA	NA	NA	NA
Chromium, Total	1.3 J	1.2 J	NA	NA	NA	NA	NA	4.3 J	3.8 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	**850**	**970**	NA	NA	NA	NA	NA	<37	<37	NA	NA	NA	NA	**5,400 B**	NA	NA	NA	NA	NA
Iron, Total	**840**	**1,000**	NA	NA	NA	NA	NA	**310**	75 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	<0.16	<0.16	NA	NA	NA	NA	NA	<0.16	0.20 J	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	**430**	**560**	NA	NA	NA	NA	NA	8.8	0.86 JB	NA	NA	NA	NA	**1800**	NA	NA	NA	NA	NA
Manganese, Total	**400**	**570**	NA	NA	NA	NA	NA	48	5.3 B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	0.17 JB	<0.071	NA	NA	NA	NA	NA	0.17 JB	<0.071	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-5D3 (continued)						MW-5S							MW-6D					MW-6S
Sample Interval (feet bls)	**225-235'**	**225-235'**	**225-235'**	**225-235'**	**225-235'**	**225-235'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**34-44'**	**65.5-70.5'**	**65.5-70.5'**	**65.5-70.5'**	**65.5-70.5'**	**65.5-70.5'**	**31.4-41.4'**
Sample Date	**11/28/2012**	**1/18/2013**	**4/21/2013**	**7/17/2013**	**10/7/2013**	**4/16/2014**	**4/12/2012**	**11/28/2012**	**1/17/2013**	**4/19/2013**	**7/18/2013**	**10/4/2013**	**4/15/2014**	**1/16/2013**	**4/20/2013**	**7/18/2013**	**10/7/2013**	**4/17/2014**	**4/11/2012**
Metals (µg/L) (continued)																			
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	<0.25	<0.25	NA	NA	NA	NA	NA	<0.25	<0.25	NA	NA	NA	NA	0.39 J	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	<0.069	<0.069	NA	NA	NA	NA	NA	<0.069	<0.069	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																			
Chloride	**4.4**	**2.6**	NA	NA	NA	NA	NA	**350**	**360**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	360	290	NA	NA	NA	NA	NA	960	930	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	0.28	0.29	1.53	0.2	ND	ND	ND	ND	ND	ND	ND	ND	1,377.5	624.9	875.1	1,109.1	697.7	24.2
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:

100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.

100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.

< = Constituent not detected above noted laboratory detection limit.

* = LCS or LCSD exceeds the control limits.

B = Compound was found in the blank and the sample.

J = Result is between the method detection limit and the limit of quantitation.

µg/L = Micrograms per liter.

mg/L = Milligrams per liter.

LCS = Laboratory control sample.

LCSD = Laboratory control sample duplicate.

NA = Not analyzed.

NE = Not established.

ND = Total detected PCBs were reported less than the laboratory detection limit.

PAHs = Polyaromatic Hydrocarbons.

PCBs = Polychlorinated Biphenyls.

Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.

Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.

VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-6S (continued)					MW-7					MW-8					MW-9D		
Sample Interval (feet bls)	31.4-41.4'	31.4-41.4'	31.4-41.4'	31.4-41.4'	31.4-41.4'	25-35'	25-35'	25-35'	25-35'	25-35'	24-34'	24-34'	24-34'	24-34'	24-34'	44-49'	44-49'	44-49'
Sample Date	1/17/2013	4/20/2013	7/18/2013	10/7/2013	4/17/2014	4/10/2012	1/14/2013	4/16/2013	7/17/2013	10/3/2013	4/10/2012	1/15/2013	4/16/2013	7/17/2013	10/3/2013	4/11/2012	1/15/2013	4/18/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.31	<0.25	<0.25	<0.25	<0.25	<0.31	<0.25	<0.25
1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.26	<0.2	<0.2	<0.2	<0.2	<0.26	<0.2	<0.2
1,1,2-Trichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.3	<0.28	<0.28	<0.28	<0.28	<0.3	<0.28	<0.28
1,1-Dichloroethene	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31	<0.31	<0.31	<0.29	<0.31	<0.31	<0.31	<0.31	<0.29	<0.31	<0.31
1,2,4-Trimethylbenzene	12	0.92 J	<0.14	1.4	2	<0.22	<0.14	<0.14	<0.14	<0.14	<0.22	<0.14	<0.14	<0.14	<0.14	<0.22	<0.14	<0.14
1,2-Dibromoethane	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.45	<0.36	<0.36	<0.36	<0.36	<0.45	<0.36	<0.36
1,2-Dichlorobenzene	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.21	<0.27	<0.27	<0.27	<0.27	<0.21	<0.27	<0.27
1,2-Dichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.36	<0.2	<0.2	<0.2	<0.2	<0.36	<0.2	<0.2
1,3,5-Trimethylbenzene	3.4	<0.18	<0.18	<0.18	0.73 J	<0.23	<0.18	<0.18	<0.18	<0.18	<0.23	<0.18	<0.18	<0.18	<0.18	<0.23	<0.18	<0.18
2-Chlorotoluene	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
4-Chlorotoluene	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.21	<0.2	<0.2	<0.2	<0.2	<0.21	<0.2	<0.2
Benzene	**9.3**	**1.9**	0.34 J	**2.6**	**2.8**	<0.12	<0.074	<0.074	<0.074	<0.074	<0.12	<0.074	<0.074	<0.074	<0.074	<0.12	<0.074	<0.074
Bromobenzene	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.31	<0.25	<0.25	<0.25	<0.25	<0.31	<0.25	<0.25
Bromodichloromethane	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.23	<0.17	<0.17	<0.17	<0.17	<0.23	<0.17	<0.17
Bromoform	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.45	<0.28	<0.28	<0.28	<0.28	<0.45	<0.28	<0.28
Bromomethane	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31	<0.31	<0.31	<0.49	<0.31	<0.31	<0.31	<0.31	<0.49	<0.31	<0.31
Carbon Tetrachloride	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26	<0.26	<0.26	<0.28	<0.26	<0.26	<0.26	<0.26	<0.28	<0.26	<0.26
CFC-12	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.26	<0.2	<0.2	<0.2	<0.2	<0.26	<0.2	<0.2
Chlorodibromomethane	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.25	<0.32	<0.32	<0.32	<0.32	<0.25	<0.32	<0.32
Chloroform	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2	<0.2	<0.2	<0.25	<0.2	<0.2	<0.2	<0.2	<0.25	<0.2	<0.2
Chloromethane	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.24	<0.18	<0.18	<0.18	<0.18	<0.24	<0.18	<0.18
cis-1,2-Dichloroethene	<0.12	<0.12	<0.12	<0.12	<0.12 U	<0.22	<0.12	<0.12	<0.12	<0.12	<0.22	<0.12	<0.12	<0.12	<0.12	<0.22	<0.12	<0.12
Cymene	2.4	<0.17	<0.17	<0.17	0.56 J	<0.24	<0.17	<0.17	<0.17	<0.17	<0.24	<0.17	<0.17	<0.17	<0.17	<0.24	<0.17	<0.17
Dichloromethane	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.63	<0.68	<0.68	<0.68	<0.68	<0.63	<0.68	<0.68	<0.68	<0.68	**9**	<0.68	<0.68
Ethylbenzene	40	0.18 J	<0.13	8	7.5	<0.14	<0.13	<0.13	<0.13	<0.13	<0.14	<0.13	<0.13	<0.13	<0.13	<0.14	<0.13	<0.13
Isopropylbenzene	12	<0.14	<0.14	3.2	2.6	<0.21	<0.14	<0.14	<0.14	<0.14	<0.21	<0.14	<0.14	<0.14	<0.14	<0.21	<0.14	<0.14
Methyl-tert-butylether	<0.24	<0.24	<0.24	<0.24	<0.24 U	<0.28	<0.24	<0.24	<0.24	<0.24	<0.28	<0.24	<0.24	<0.24	<0.24	<0.28	<0.24	<0.24
Naphthalene	**43**	<0.16	<0.16	3.8	4.2	<0.24	<0.16	<0.16	<0.16	<0.16	<0.24	<0.16	<0.16	<0.16	<0.16	<0.24	<0.16	<0.16
N-Butylbenzene	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.21	<0.13	<0.13	<0.13	<0.13	<0.21	<0.13	<0.13
N-Propylbenzene	6.8	<0.13	<0.13	1.3	1.5	<0.19	<0.13	<0.13	<0.13	<0.13	<0.19	<0.13	<0.13	<0.13	<0.13	<0.19	<0.13	<0.13
sec-Butylbenzene	1.8	<0.15	<0.15	<0.15	0.82 J	<0.19	<0.15	<0.15	<0.15	<0.15	<0.19	<0.15	<0.15	<0.15	<0.15	<0.19	<0.15	<0.15
Styrene (Monomer)	0.64 J	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.26	<0.1	<0.1	<0.1	<0.1	<0.26	<0.1	<0.1
tert-Butylbenzene	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.24	<0.14	<0.14	<0.14	<0.14	<0.24	<0.14	<0.14
Tetrachloroethene	<0.17	**0.53 J**	<0.17	<0.17	**0.66 J**	<0.22	<0.17	<0.17	<0.17	<0.17	<0.22	<0.17	<0.17	<0.17	<0.17	<0.22	<0.17	<0.17
Toluene	6.3	0.82	<0.11	1.1	1.1	<0.15	<0.11	<0.11	<0.11	<0.11	<0.15	<0.11	<0.11	<0.11	<0.11	<0.15	<0.11	<0.11
Total Xylenes	25	1.8	<0.068	3.3	2.8	<0.3	<0.068	<0.068	<0.068	<0.068	<0.3	<0.068	<0.068	<0.068	<0.068	<0.3	<0.068	<0.068
trans-1,2-Dichloroethene	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25	<0.25	<0.25	<0.27	<0.25	<0.25	<0.25	<0.25	<0.27	<0.25	<0.25
trans-1,3-Dichloropropene	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21	<0.21	<0.35	<0.21	<0.21	<0.21	<0.21	<0.35	<0.21	<0.21
Trichloroethene	<0.19	<0.19	<0.19	<0.19	<0.19 U	<0.18	<0.19	<0.19	<0.19	<0.19	<0.18	<0.19	<0.19	<0.19	<0.19	<0.18	<0.19	<0.19
Vinyl chloride	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1	<0.1	<0.1	<0.13	<0.1	<0.1	<0.1	<0.1	<0.13	<0.1	<0.1
PCBs (µg/L)																		
Aroclor 1016	<0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-6S (continued)					MW-7					MW-8					MW-9D		
Sample Interval (feet bls)	31.4-41.4'	31.4-41.4'	31.4-41.4'	31.4-41.4'	31.4-41.4'	25-35'	25-35'	25-35'	25-35'	25-35'	24-34'	24-34'	24-34'	24-34'	24-34'	44-49'	44-49'	44-49'
Sample Date	1/17/2013	4/20/2013	7/18/2013	10/7/2013	4/17/2014	4/10/2012	1/14/2013	4/16/2013	7/17/2013	10/3/2013	4/10/2012	1/15/2013	4/16/2013	7/17/2013	10/3/2013	4/11/2012	1/15/2013	4/18/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	<0.094	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	<0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	3.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	<0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	<0.047	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	<0.06	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	<0.062	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	<0.45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	<0.079	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	<0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	<0.068	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	<0.34	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	<0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	<0.089	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	**39**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	<0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	<0.51	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	**4.3**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	250	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	<0.64	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	**4,100**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	<0.16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	**1,800**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	<0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-6S (continued)					MW-7					MW-8					MW-9D		
Sample Interval (feet bls)	**31.4-41.4'**	**31.4-41.4'**	**31.4-41.4'**	**31.4-41.4'**	**31.4-41.4'**	**25-35'**	**25-35'**	**25-35'**	**25-35'**	**25-35'**	**24-34'**	**24-34'**	**24-34'**	**24-34'**	**24-34'**	**44-49'**	**44-49'**	**44-49'**
Sample Date	**1/17/2013**	**4/20/2013**	**7/18/2013**	**10/7/2013**	**4/17/2014**	**4/10/2012**	**1/14/2013**	**4/16/2013**	**7/17/2013**	**10/3/2013**	**4/10/2012**	**1/15/2013**	**4/16/2013**	**7/17/2013**	**10/3/2013**	**4/11/2012**	**1/15/2013**	**4/18/2013**
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	1.5 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	<0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	80.6	4.7	0.34	15	14.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-9D (continued)			MW-9D2						MW-10S						MW-11S			
Sample Interval (feet bls)	44-49'	44-49'	44-49'	64-69'	64-69'	64-69'	64-69'	64-69'	64-69'	11-21'	11-21'	11-21'	11-21'	11-21'	11-21'	24-34'	24-34'	24-34'	24-34'
Sample Date	7/18/2013	10/4/2013	4/16/2014	4/11/2012	1/15/2013	4/18/2013	7/18/2013	10/4/2013	4/16/2014	4/10/2012	5/9/2012	1/15/2013	4/17/2013	7/17/2013	10/9/2013	4/12/2012	5/9/2012	1/15/2013	4/17/2013
VOCs (µg/L)																			
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25	<0.31	<0.25	<0.25	<0.25
1,1,1-Trichloroethane	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.26	<0.2	<0.2	<0.2
1,1,2-Trichloroethane	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28	<0.3	<0.28	<0.28	<0.28
1,1-Dichloroethene	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31	<0.29	<0.31	<0.31	<0.31
1,2,4-Trimethylbenzene	<0.14	<0.14	<0.14 U	<0.22	<0.14	<0.14	<0.14	<0.14	<0.14 U	0.76 J	<0.14	<0.14	<0.14	<0.14	<0.14	0.55 J	<0.14	<0.14	<0.14
1,2-Dibromoethane	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36 U	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36	<0.45	<0.36	<0.36	<0.36
1,2-Dichlorobenzene	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27 U	<0.21	<0.27	<0.27	<0.27	<0.27	<0.27	<0.21	<0.27	<0.27	<0.27
1,2-Dichloroethane	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28
1,2-Dichloropropane	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.36	<0.2	<0.2	<0.2	<0.2	<0.2	<0.36	<0.2	<0.2	<0.2
1,3,5-Trimethylbenzene	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18	<0.23	<0.18	<0.18	<0.18
2-Chlorotoluene	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21
4-Chlorotoluene	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.21	<0.2	<0.2	<0.2	<0.2	<0.2	<0.21	<0.2	<0.2	<0.2
Benzene	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074 U	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074	<0.12	<0.074	<0.074	<0.074
Bromobenzene	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25	<0.31	<0.25	<0.25	<0.25
Bromodichloromethane	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17	<0.23	<0.17	<0.17	<0.17
Bromoform	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28 U	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28	<0.45	<0.28	<0.28	<0.28
Bromomethane	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31 U	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31	<0.49	<0.31	<0.31	<0.31
Carbon Tetrachloride	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26 U	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26	<0.28	<0.26	<0.26	<0.26
CFC-12	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.26	<0.2	<0.2	<0.2
Chlorodibromomethane	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32 U	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32	<0.25	<0.32	<0.32	<0.32
Chloroform	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2	<0.2	<0.2	<0.20 U	<0.25	<0.2	<0.2	<0.2	<0.2	<0.2	<0.25	<0.2	<0.2	<0.2
Chloromethane	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18 U	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18	<0.24	<0.18	<0.18	<0.18
cis-1,2-Dichloroethene	<0.12	<0.12	<0.12 U	**11**	**14**	**16**	**16**	**18**	**19**	<0.22	<0.12	<0.12	<0.12	<0.12	<0.12	<0.22	<0.12	<0.12	<0.12
Cymene	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17 U	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17	<0.24	<0.17	<0.17	<0.17
Dichloromethane	<0.68	<0.68	<0.68 U	**8.8**	<0.68	<0.68	<0.68	<0.68	<0.68 U	<0.63	<0.68	<0.68	<0.68	<0.68	<0.68	<0.63	<0.68	<0.68	<0.68
Ethylbenzene	<0.13	<0.13	<0.13 U	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13 U	0.20 J	<0.13	<0.13	<0.13	<0.13	<0.13	<0.14	<0.13	<0.13	<0.13
Isopropylbenzene	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14	<0.21	<0.14	<0.14	<0.14
Methyl-tert-butylether	<0.24	<0.24	<0.24 U	9.3	**20**	10	12	**15**	9.6	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24	<0.28	<0.24	<0.24	<0.24
Naphthalene	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16 U	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16	<0.24	<0.16	<0.16	<0.16
N-Butylbenzene	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13	<0.21	<0.13	<0.13	<0.13
N-Propylbenzene	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13 U	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13	<0.19	<0.13	<0.13	<0.13
sec-Butylbenzene	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15 U	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15	<0.19	<0.15	<0.15	<0.15
Styrene (Monomer)	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.26	<0.1	<0.1	<0.1	<0.1	<0.1	<0.26	<0.1	<0.1	<0.1
tert-Butylbenzene	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14 U	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14	<0.24	<0.14	<0.14	<0.14
Tetrachloroethene	<0.17	<0.17	<0.17 U	**10**	**26**	**28**	**30**	**34**	**26**	<0.22	<0.17	**0.85 J**	<0.17	<0.17	<0.17	<0.22	<0.17	<0.17	<0.17
Toluene	<0.11	<0.11	<0.11 U	<0.15	<0.11	<0.11	<0.11	<0.11	<0.11 U	**0.54**	<0.11	<0.11	<0.11	<0.11	<0.11	0.73	<0.11	<0.11	<0.11
Total Xylenes	<0.068	<0.068	<0.068 U	<0.3	<0.068	<0.068	<0.068	<0.068	<0.068 U	0.83 J	<0.068	<0.068	<0.068	<0.068	<0.068	0.86 J	<0.068	<0.068	<0.068
trans-1,2-Dichloroethene	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25 U	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25	<0.27	<0.25	<0.25	<0.25
trans-1,3-Dichloropropene	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21 U	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21	<0.35	<0.21	<0.21	<0.21
Trichloroethene	<0.19	<0.19	<0.19 U	**3.8**	**5.5**	**6**	**6.3**	**7.4**	**6.5**	<0.18	<0.19	<0.19	<0.19	<0.19	<0.19	<0.18	<0.19	<0.19	<0.19
Vinyl chloride	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1	<0.1	<0.1	<0.10 U	<0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.13	<0.1	<0.1	<0.1
PCBs (µg/L)																			
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-9D (continued)			MW-9D2						MW-10S						MW-11S			
Sample Interval (feet bls)	44-49'	44-49'	44-49'	64-69'	64-69'	64-69'	64-69'	64-69'	64-69'	11-21'	11-21'	11-21'	11-21'	11-21'	11-21'	24-34'	24-34'	24-34'	24-34'
Sample Date	7/18/2013	10/4/2013	4/16/2014	4/11/2012	1/15/2013	4/18/2013	7/18/2013	10/4/2013	4/16/2014	4/10/2012	5/9/2012	1/15/2013	4/17/2013	7/17/2013	10/9/2013	4/12/2012	5/9/2012	1/15/2013	4/17/2013
PCBs (µg/L) (continued)																			
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																			
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																			
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-9D (continued)			MW-9D2						MW-10S						MW-11S			
Sample Interval (feet bls)	44-49'	44-49'	44-49'	64-69'	64-69'	64-69'	64-69'	64-69'	64-69'	11-21'	11-21'	11-21'	11-21'	11-21'	11-21'	24-34'	24-34'	24-34'	24-34'
Sample Date	7/18/2013	10/4/2013	4/16/2014	4/11/2012	1/15/2013	4/18/2013	7/18/2013	10/4/2013	4/16/2014	4/10/2012	5/9/2012	1/15/2013	4/17/2013	7/17/2013	10/9/2013	4/12/2012	5/9/2012	1/15/2013	4/17/2013
Metals (µg/L) (continued)																			
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																			
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.57	ND	ND	ND	ND	ND	1.59	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-11S (continued)		MW-12S										MW-18S				
Sample Interval (feet bls)	24-34'	24-34'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	20-30'	20-30'	20-30'	20-30'	20-30'
Sample Date	7/18/2013	10/4/2013	4/12/2012	5/9/2012	1/16/2013	4/17/2013	7/18/2013	10/4/2013	1/17/2013	4/20/2013	7/18/2013	10/8/2013	4/22/2014	11/28/2012	1/15/2013	4/19/2013	7/17/2013	10/9/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.25	<0.5	<0.50 U	<1.3	<0.5	<1.3	<1.3	<1.3
1,1,1-Trichloroethane	<0.2	<0.2	<0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.4	<0.2	<0.4	<0.40 U	<1	<0.4	<1	<1	<1
1,1,2-Trichloroethane	<0.28	<0.28	<0.3	<0.28	<0.28	<0.28	<0.28	<0.28	<0.56	**11**	<0.28	<0.56	<0.56 U	<1.4	<0.56	<1.4	<1.4	<1.4
1,1-Dichloroethene	<0.31	<0.31	<0.29	<0.31	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.31	<0.62	<0.62 U	<1.6	<0.62	<1.6	<1.6	<1.6
1,2,4-Trimethylbenzene	<0.14	<0.14	1.2	<0.14	<0.14	<0.14	<0.14	<0.14	<0.28	<0.28	<0.14	<0.28	<0.28 U	<0.7	<0.28	<0.7	<0.7	<0.7
1,2-Dibromoethane	<0.36	<0.36	<0.45	<0.36	<0.36	<0.36	<0.36	<0.36	<0.72	<0.72	<0.36	<0.72	<0.72 U	<1.8	<0.72	<1.8	<1.8	<1.8
1,2-Dichlorobenzene	<0.27	<0.27	<0.21	<0.27	0.79 J	<0.27	<0.27	<0.27	<0.54	<0.54	<0.27	<0.54	<0.54 U	<1.4	<0.54	<1.4	<1.4	<1.4
1,2-Dichloroethane	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.28	<0.56	<0.56	<0.28	<0.56	<0.56 U	<1.4	<0.56	<1.4	<1.4	<1.4
1,2-Dichloropropane	<0.2	<0.2	<0.36	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.4	<0.2	<0.4	<0.40 U	<1	<0.4	<1	<1	<1
1,3,5-Trimethylbenzene	<0.18	<0.18	<0.23	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.36	<0.18	<0.36	<0.36 U	<0.9	<0.36	<0.9	<0.9	<0.9
2-Chlorotoluene	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.21	<0.42	<0.42	<0.21	<0.42	<0.42 U	<1.1	<0.42	<1.1	<1.1	<1.1
4-Chlorotoluene	<0.2	<0.2	<0.21	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.4	<0.2	<0.4	<0.40 U	<1	<0.4	<1	<1	<1
Benzene	<0.074	<0.074	<0.12	<0.074	<0.074	<0.074	<0.074	<0.074	**20**	**1.2**	<0.074	<0.15	<0.15 U	**3.2**	**0.90 J**	**2.2 J**	<0.37	**1.3 J**
Bromobenzene	<0.25	<0.25	<0.31	<0.25	<0.25	<0.25	<0.25	<0.25	<0.5	<0.5	<0.25	<0.5	<0.50 U	<1.3	<0.5	<1.3	<1.3	<1.3
Bromodichloromethane	<0.17	<0.17	<0.23	<0.17	<0.17	<0.17	<0.17	<0.17	<0.34	<0.34	<0.17	<0.34	<0.34 U	<0.85	<0.34	<0.85	<0.85	<0.85
Bromoform	<0.28	<0.28	<0.45	<0.28	<0.28	<0.28	<0.28	<0.28	<0.56	<0.56	<0.28	<0.56	<0.56 U	<1.4	<0.56	<1.4	<1.4	<1.4
Bromomethane	<0.31	<0.31	<0.49	<0.31	<0.31	<0.31	<0.31	<0.31	<0.62	<0.62	<0.31	<0.62	<0.62 U	<1.6	<0.62	<1.6	<1.6	<1.6
Carbon Tetrachloride	<0.26	<0.26	<0.28	<0.26	<0.26	<0.26	<0.26	<0.26	**1.2 J**	<0.52	<0.26	<0.52	<0.52 U	<1.3	<0.52	<1.3	<1.3	<1.3
CFC-12	<0.2	<0.2	<0.26	<0.2	<0.2	<0.2	<0.2	<0.2	<0.4	<0.4	<0.2	<0.4	<0.40 U	<1	<0.4	<1	<1	<1
Chlorodibromomethane	<0.32	<0.32	<0.25	<0.32	<0.32	<0.32	<0.32	<0.32	<0.64	<0.64	<0.32	<0.64	<0.64 U	<1.6	<0.64	<1.6	<1.6	<1.6
Chloroform	<0.2	<0.2	<0.25	<0.2	<0.2	<0.2	<0.2	<0.2	**1.8 J**	<0.4	**0.86 J**	<0.4	**1.1 J**	**7.2**	**3.1**	**6.2**	<1	**5.2**
Chloromethane	<0.18	<0.18	<0.24	<0.18	<0.18	<0.18	<0.18	<0.18	<0.36	<0.36	<0.18	<0.36	<0.36 U	<0.9	<0.36	<0.9	<0.9	<0.9
cis-1,2-Dichloroethene	<0.12	<0.12	<0.22	<0.12	<0.12	<0.12	<0.12	<0.12	3.5	1.7 J	1.6	<0.24	2.7	**150**	**56**	**99**	**70**	**78**
Cymene	<0.17	<0.17	<0.24	<0.17	<0.17	<0.17	<0.17	<0.17	<0.34	<0.34	<0.17	<0.34	<0.34 U	<0.85	<0.34	<0.85	<0.85	<0.85
Dichloromethane	<0.68	<0.68	<0.63	<0.68	<0.68	<0.68	<0.68	<0.68	<1.4	<1.4	<0.68	<1.4	<1.4 U	<3.4	<1.4	<3.4	<3.4	<3.4
Ethylbenzene	<0.13	<0.13	<0.14	<0.13	<0.13	<0.13	<0.13	<0.13	<0.26	<0.26	<0.13	<0.26	<0.26 U	<0.65	<0.26	<0.65	<0.65	<0.65
Isopropylbenzene	<0.14	<0.14	<0.21	<0.14	<0.14	<0.14	<0.14	<0.14	<0.28	<0.28	<0.14	<0.28	<0.28 U	<0.7	<0.28	<0.7	<0.7	<0.7
Methyl-tert-butylether	<0.24	<0.24	<0.28	<0.24	<0.24	<0.24	<0.24	<0.24	<0.48	<0.48	<0.24	<0.48	<0.48 U	<1.2	<0.48	<1.2	<1.2	<1.2
Naphthalene	<0.16	<0.16	<0.24	<0.16	<0.16	<0.16	<0.16	<0.16	<0.32	<0.32	<0.16	<0.32	<0.32 U	<0.8	<0.32	<0.8	<0.8	<0.8
N-Butylbenzene	<0.13	<0.13	<0.21	<0.13	<0.13	<0.13	<0.13	<0.13	<0.26	<0.26	<0.13	<0.26	<0.26 U	<0.65	<0.26	<0.65	<0.65	<0.65
N-Propylbenzene	<0.13	<0.13	<0.19	<0.13	<0.13	<0.13	<0.13	<0.13	<0.26	<0.26	<0.13	<0.26	<0.26 U	<0.65	<0.26	<0.65	<0.65	<0.65
sec-Butylbenzene	<0.15	<0.15	<0.19	<0.15	<0.15	<0.15	<0.15	<0.15	<0.3	<0.3	<0.15	<0.3	<0.30 U	<0.75	<0.3	<0.75	<0.75	<0.75
Styrene (Monomer)	<0.1	<0.1	<0.26	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.1	<0.2	<0.20 U	<0.5	<0.2	<0.5	<0.5	<0.5
tert-Butylbenzene	<0.14	<0.14	<0.24	<0.14	<0.14	<0.14	<0.14	<0.14	<0.28	<0.28	<0.14	<0.28	<0.28 U	<0.7	<0.28	<0.7	<0.7	<0.7
Tetrachloroethene	<0.17	<0.17	**0.78 J**	**1.7**	**0.93 J**	<0.17	**1.3**	**1.5**	**1,300**	**790**	**470**	**800**	**970**	**3,300**	**830**	**2,600**	**2,900**	**1,800**
Toluene	<0.11	<0.11	0.64	<0.11	<0.11	<0.11	<0.11	<0.11	1.8	<0.22	0.69	<0.22	<0.22 U	1.1 J	<0.22	<0.55	<0.55	<0.55
Total Xylenes	<0.068	<0.068	1.6	<0.068	<0.068	<0.068	<0.068	<0.068	3.1	<0.14	0.56 J	<0.14	<0.14 U	<0.34	<0.14	<0.34	<0.34	<0.34
trans-1,2-Dichloroethene	<0.25	<0.25	<0.27	<0.25	<0.25	<0.25	<0.25	<0.25	1.5 J	<0.5	0.68 J	<0.5	<0.50 U	7.4	3.3	4.1 J	2.6 J	4.6 J
trans-1,3-Dichloropropene	<0.21	<0.21	<0.35	<0.21	<0.21	<0.21	<0.21	<0.21	<0.42	<0.42	<0.21	<0.42	<0.42 U	<1.1	<0.42	<1.1	<1.1	<1.1
Trichloroethene	<0.19	<0.19	<0.18	0.26 J	<0.19	<0.19	<0.19	<0.19	**86**	**46**	**33**	**49**	**51**	**230**	**75**	**170**	**140**	**150**
Vinyl chloride	<0.1	<0.1	<0.13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.1	<0.2	<0.20 U	<0.5	<0.2	<0.5	<0.5	<0.5
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	<0.17	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-11S (continued)		MW-12S											MW-18S				
Sample Interval (feet bls)	24-34'	24-34'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	20-30'	20-30'	20-30'	20-30'	20-30'
Sample Date	7/18/2013	10/4/2013	4/12/2012	5/9/2012	1/16/2013	4/17/2013	7/18/2013	10/4/2013	1/17/2013	4/20/2013	7/18/2013	10/8/2013	4/22/2014	11/28/2012	1/15/2013	4/19/2013	7/17/2013	10/9/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	<0.093	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	<1.1	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	<0.048	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	<0.061	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	<0.063	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	<0.46	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	<0.081	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	<0.07	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	<0.35	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	<0.41	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	<0.092	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	0.35 J	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	<0.52	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	0.46 J	NA	NA	NA	NA	0.46 J	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	0.58 J	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	45	NA	NA	NA	NA	200	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	<0.1	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	0.75 J	NA	NA	NA	NA	<0.64	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	<0.64	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<37	NA	NA	NA	NA	<37	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**410**	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	<0.16	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	**180**	NA	NA	NA	NA	**1,600**	NA	**1,100**	**1,100**	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,600**	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	<0.071	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-11S (continued)		MW-12S											MW-18S				
Sample Interval (feet bls)	24-34'	24-34'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	3-13'	20-30'	20-30'	20-30'	20-30'	20-30'
Sample Date	7/18/2013	10/4/2013	4/12/2012	5/9/2012	1/16/2013	4/17/2013	7/18/2013	10/4/2013	1/17/2013	4/20/2013	7/18/2013	10/8/2013	4/22/2014	11/28/2012	1/15/2013	4/19/2013	7/17/2013	10/9/2013
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	1.0 J	NA	NA	NA	NA	0.43 J	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	<0.069	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	**1,200**	**1,600**	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3,300	3,200	NA	NA	NA
Total BTEX (µg/L)	ND	ND	2.24	ND	ND	ND	ND	ND	24.9	1.2	1.25	ND	ND	4.3	0.9	2.2	ND	1.3
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-18S (continued)	MW-19D						MW-19D2						MW-20D		MW-20D	
Sample Interval (feet bls)	20-30'	60-90'	60-90'	60-90'	60-90'	60-90'	60-90'	110-140'	110-140'	110-140'	110-140'	110-140'	110-140'	60-90'	60-90'	60-90'	60-90'
Sample Date	4/22/2014	11/29/2012	1/16/2013	4/19/2013	7/17/2013	10/9/2013	4/17/2014	11/29/2012	1/17/2013	4/18/2013	7/17/2013	10/9/2013	4/17/2014	11/29/2012	1/16/2013	4/18/2013	7/17/2013
VOCs (µg/L)																	
1,1,1,2-Tetrachloroethane	<0.25 U	<1.3	<0.5	<1.3	<1.3	<1.3	<1.3 U	<0.5	<0.25	<1.3	<0.5	<0.5	<1.3 U	<1.3	<0.25	<1.3	<0.5
1,1,1-Trichloroethane	<0.20 U	<1	<0.4	<1	<1	<1	<1.0 U	<0.4	<0.2	<1	<0.4	<0.4	<1.0 U	<1	<0.2	<1	<0.4
1,1,2-Trichloroethane	<0.28 U	<1.4	<0.56	<1.4	<1.4	<1.4	<1.4 U	<0.56	<0.28	<1.4	<0.56	<0.56	<1.4 U	<1.4	<0.28	<1.4	<0.56
1,1-Dichloroethene	<0.31 U	<1.6	<0.62	<1.6	<1.6	<1.6	<1.6 U	<0.62	<0.31	<1.6	<0.62	<0.62	<1.6 U	<1.6	<0.31	<1.6	<0.62
1,2,4-Trimethylbenzene	<0.14 U	<0.7	<0.28	<0.7	<0.7	<0.7	<0.70 U	<0.28	<0.14	<0.7	<0.28	<0.28	<0.70 U	<0.7	<0.14	<0.7	<0.28
1,2-Dibromoethane	<0.36 U	<1.8	<0.72	<1.8	<1.8	<1.8	<1.8 U	<0.72	<0.36	<1.8	<0.72	<0.72	<1.8 U	<1.8	<0.36	<1.8	<0.72
1,2-Dichlorobenzene	<0.27 U	<1.4	<0.54	<1.4	<1.4	<1.4	<1.4 U	<0.54	<0.27	<1.4	<0.54	<0.54	<1.4 U	<1.4	<0.27	<1.4	<0.54
1,2-Dichloroethane	<0.28 U	<1.4	<0.56	<1.4	<1.4	<1.4	<1.4 U	<0.56	<0.28	<1.4	<0.56	<0.56	<1.4 U	<1.4	<0.28	<1.4	<0.56
1,2-Dichloropropane	<0.20 U	<1	<0.4	<1	<1	<1	<1.0 U	<0.4	<0.2	<1	<0.4	<0.4	<1.0 U	<1	<0.2	<1	<0.4
1,3,5-Trimethylbenzene	<0.18 U	<0.9	<0.36	<0.9	<0.9	<0.9	<0.90 U	<0.36	<0.18	<0.9	<0.36	<0.36	<0.90 U	<0.9	<0.18	<0.9	<0.36
2-Chlorotoluene	<0.21 U	<1.1	<0.42	<1.1	<1.1	<1.1	<1.1 U	<0.42	<0.21	<1.1	<0.42	<0.42	<1.1 U	<1.1	<0.21	<1.1	<0.42
4-Chlorotoluene	<0.20 U	<1	<0.4	<1	<1	<1	<1.0 U	<0.4	<0.2	<1	<0.4	<0.4	<1.0 U	<1	<0.2	<1	<0.4
Benzene	0.38 J	<0.37	<0.15	<0.37	<0.37	<0.37	<0.37 U	<0.15	<0.074	<0.37	<0.15	<0.15	<0.37 U	<0.37	<0.074	<0.37	<0.15
Bromobenzene	<0.25 U	<1.3	<0.5	<1.3	<1.3	<1.3	<1.3 U	<0.5	<0.25	<1.3	<0.5	<0.5	<1.3 U	<1.3	<0.25	<1.3	<0.5
Bromodichloromethane	<0.17 U	<0.85	<0.34	<0.85	<0.85	<0.85	<0.85 U	<0.34	<0.17	<0.85	<0.34	<0.34	<0.85 U	<0.85	<0.17	<0.85	<0.34
Bromoform	<0.28 U	<1.4	<0.56	<1.4	<1.4	<1.4	<1.4 U	<0.56	<0.28	<1.4	<0.56	<0.56	<1.4 U	<1.4	<0.28	<1.4	<0.56
Bromomethane	<0.31 U	<1.6	<0.62	<1.6	<1.6	<1.6	<1.6 U	<0.62	<0.31	<1.6	<0.62	<0.62	<1.6 U	<1.6	<0.31	<1.6	<0.62
Carbon Tetrachloride	<0.26 U	<1.3	<0.52	<1.3	<1.3	<1.3	<1.3 U	<0.52	<0.26	<1.3	<0.52	<0.52	<1.3 U	<1.3	<0.26	<1.3	<0.52
CFC-12	<0.20 U	<1	<0.4	<1	<1	<1	<1.0 U	<0.4	<0.2	<1	<0.4	<0.4	<1.0 U	<1	<0.2	<1	<0.4
Chlorodibromomethane	<0.32 U	<1.6	<0.64	<1.6	<1.6	<1.6	<1.6 U	<0.64	<0.32	<1.6	<0.64	<0.64	<1.6 U	<1.6	<0.32	<1.6	<0.64
Chloroform	**1.4**	<1	<0.4	<1	<1	<1	<1.0 U	<0.4	**0.61 J**	<1	<0.4	<0.4	<1.0 U	<1	<0.2	<1	<0.4
Chloromethane	<0.18 U	<0.9	<0.36	<0.9	<0.9	<0.9	<0.90 U	<0.36	<0.18	<0.9	<0.36	<0.36	<0.90 U	<0.9	<0.18	<0.9	<0.36
cis-1,2-Dichloroethene	**21**	**530**	**130**	**520**	**540**	**300**	**49**	**250**	**280**	**200**	**98**	**120**	**330**	**370**	<0.12	**220**	**180**
Cymene	<0.17 U	<0.85	<0.34	<0.85	<0.85	<0.85	<0.85 U	<0.34	<0.17	<0.85	<0.34	<0.34	<0.85 U	<0.85	<0.17	<0.85	<0.34
Dichloromethane	<0.68 U	<3.4	<1.4	<3.4	<3.4	<3.4	<3.4 U	<1.4	<0.68	<3.4	<1.4	<1.4	<3.4 U	<3.4	<0.68	<3.4	<1.4
Ethylbenzene	<0.13 U	<0.65	<0.26	<0.65	<0.65	<0.65	<0.65 U	<0.26	<0.13	<0.65	<0.26	<0.26	<0.65 U	<0.65	<0.13	<0.65	<0.26
Isopropylbenzene	<0.14 U	<0.7	<0.28	<0.7	<0.7	<0.7	<0.70 U	<0.28	<0.14	<0.7	<0.28	<0.28	<0.70 U	<0.7	<0.14	<0.7	<0.28
Methyl-tert-butylether	<0.24 U	<1.2	<0.48	<1.2	<1.2	<1.2	<1.2 U	<0.48	<0.24	<1.2	<0.48	<0.48	<1.2 U	<1.2	<0.24	<1.2	<0.48
Naphthalene	<0.16 U	<0.8	<0.32	<0.8	<0.8	<0.8	<0.80 U	<0.32	<0.16	<0.8	<0.32	<0.32	<0.80 U	<0.8	<0.16	<0.8	<0.32
N-Butylbenzene	<0.13 U	<0.65	<0.26	<0.65	<0.65	<0.65	<0.65 U	<0.26	<0.13	<0.65	<0.26	<0.26	<0.65 U	<0.65	<0.13	<0.65	<0.26
N-Propylbenzene	<0.13 U	<0.65	<0.26	<0.65	<0.65	<0.65	<0.65 U	<0.26	<0.13	<0.65	<0.26	<0.26	<0.65 U	<0.65	<0.13	<0.65	<0.26
sec-Butylbenzene	<0.15 U	<0.75	<0.3	<0.75	<0.75	<0.75	<0.75 U	<0.3	<0.15	<0.75	<0.3	<0.3	<0.75 U	<0.75	<0.15	<0.75	<0.3
Styrene (Monomer)	<0.10 U	<0.5	<0.2	<0.5	<0.5	<0.5	<0.50 U	<0.2	<0.1	<0.5	<0.2	<0.2	<0.50 U	<0.5	<0.1	<0.5	<0.2
tert-Butylbenzene	<0.14 U	<0.7	<0.28	<0.7	<0.7	<0.7	<0.70 U	<0.28	<0.14	<0.7	<0.28	<0.28	<0.70 U	<0.7	<0.14	<0.7	<0.28
Tetrachloroethene	**520**	**2,400**	**1,300**	**2,200**	**2,700**	**1,500**	**1,400**	**680**	**620**	**1,000**	**1,200**	**950**	**1900**	**1600**	**130**	**1,100**	**1,000**
Toluene	<0.11 U	<0.55	0.88 J	<0.55	<0.55	<0.55	<0.55 U	<0.22	<0.11	<0.55	<0.22	<0.22	<0.55 U	<0.55	0.39 J	<0.55	<0.22
Total Xylenes	<0.068 U	<0.34	<0.14	<0.34	<0.34	<0.34	<0.34 U	<0.14	<0.068	<0.34	<0.14	<0.14	<0.34 U	<0.34	<0.068	<0.34	<0.14
trans-1,2-Dichloroethene	1.3	7.2	<0.5	6.3	8.1	4.1 J	<1.3 U	3.4	4.2	2.6 J	<0.5	<0.5	5	5	<0.25	<1.3	2.2
trans-1,3-Dichloropropene	<0.21 U	<1.1	<0.42	<1.1	<1.1	<1.1	<1.1 U	<0.42	<0.21	<1.1	<0.42	<0.42	<1.1 U	<1.1	<0.21	<1.1	<0.42
Trichloroethene	**43**	**230**	**41**	**200**	**240**	**150**	**68**	**110**	**110**	**130**	**110**	**120**	**170**	**170**	<0.19	**100**	**100**
Vinyl chloride	<0.10 U	**9.1**	**2.8**	**18**	**20**	**6.6**	<0.50 U	**0.93 J**	<0.1	<0.5	<0.2	<0.2	**7.9**	**3.2**	<0.1	**1.0 J**	<0.2
PCBs (µg/L)																	
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-18S (continued)	MW-19D						MW-19D2						MW-20D		MW-20D	
Sample Interval (feet bls)	20-30'	60-90'	60-90'	60-90'	60-90'	60-90'	60-90'	110-140'	110-140'	110-140'	110-140'	110-140'	110-140'	60-90'	60-90'	60-90'	60-90'
Sample Date	4/22/2014	11/29/2012	1/16/2013	4/19/2013	7/17/2013	10/9/2013	4/17/2014	11/29/2012	1/17/2013	4/18/2013	7/17/2013	10/9/2013	4/17/2014	11/29/2012	1/16/2013	4/18/2013	7/17/2013
PCBs (µg/L) (continued)																	
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																	
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																	
Arsenic, Dissolved	**1.2**	0.17 J	NA	NA	NA	NA	NA	0.27 J	NA	NA	NA	NA	NA	0.18 J	NA	NA	NA
Arsenic, Total	**1.1**	0.17 J	NA	NA	NA	NA	NA	0.25 J	NA	NA	NA	NA	NA	0.24 J	NA	NA	NA
Barium, Dissolved	130	63	NA	NA	NA	NA	NA	130	NA	NA	NA	NA	NA	59	NA	NA	NA
Barium, Total	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	<0.15 U	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA
Cadmium, Total	<0.15 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	<0.63 U	<0.64	NA	NA	NA	NA	NA	1.1 J	NA	NA	NA	NA	NA	<0.64	NA	NA	NA
Chromium, Total	<0.63 U	<0.64	NA	NA	NA	NA	NA	1.4 J	NA	NA	NA	NA	NA	<0.64	NA	NA	NA
Copper, Dissolved	2.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	**600**	<37	NA	NA	NA	NA	NA	<37	NA	NA	NA	NA	NA	<37	NA	NA	NA
Iron, Total	**1,000**	<37	NA	NA	NA	NA	NA	50 JB	NA	NA	NA	NA	NA	<37	NA	NA	NA
Lead, Dissolved	0.18 J	<0.16	NA	NA	NA	NA	NA	0.42 J	NA	NA	NA	NA	NA	<0.16	NA	NA	NA
Lead, Total	**4.7**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	**1,900**	26	NA	NA	**12**	NA	NA	**290**	NA	**92 B**	NA	NA	NA	25	NA	NA	**79**
Manganese, Total	**2,000**	24	NA	NA	NA	NA	NA	**330**	NA	NA	NA	NA	NA	27	NA	NA	NA
Mercury, Dissolved	NA	<0.071	NA	NA	NA	NA	NA	**0.12 J**	NA	NA	NA	NA	NA	<0.071	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	4.6 B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-18S (continued)	MW-19D						MW-19D2						MW-20D		MW-20D	
Sample Interval (feet bls)	**20-30'**	**60-90'**	**60-90'**	**60-90'**	**60-90'**	**60-90'**	**60-90'**	**110-140'**	**110-140'**	**110-140'**	**110-140'**	**110-140'**	**110-140'**	**60-90'**	**60-90'**	**60-90'**	**60-90'**
Sample Date	**4/22/2014**	**11/29/2012**	**1/16/2013**	**4/19/2013**	**7/17/2013**	**10/9/2013**	**4/17/2014**	**11/29/2012**	**1/17/2013**	**4/18/2013**	**7/17/2013**	**10/9/2013**	**4/17/2014**	**11/29/2012**	**1/16/2013**	**4/18/2013**	**7/17/2013**
Metals (µg/L) (continued)																	
Nickel, Total	4.7 B	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	0.71 J	0.48 J	NA	NA	NA	NA	NA	0.75 J	NA	NA	NA	NA	NA	0.71 J	NA	NA	NA
Selenium, Total	0.76 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	<0.062 U	<0.069	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA	<0.069	NA	NA	NA
Silver, Total	<0.062 U	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	11 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																	
Chloride	NA	**200**	**200**	NA	NA	NA	NA	**300**	**290**	NA	NA	NA	NA	**170**	**120**	NA	NA
Total Dissolved Solids	NA	910	1,100	NA	NA	NA	NA	1,500	1,400	NA	NA	NA	NA	920	900	NA	NA
Total BTEX (µg/L)	0.38	ND	0.88	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.39	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-20D (continued)		MW-20D2						MW-21D						MW-21D2			
Sample Interval (feet bls)	60-90'	60-90'	110-140'	110-140'	110-140'	110-140'	110-140'	110-140'	60-90'	60-90'	60-90'	60-90'	60-90'	60-90'	110-170'	110-170'	110-170'	110-170'
Sample Date	10/9/2013	4/15/2014	11/29/2012	1/16/2013	4/18/2013	7/17/2013	10/15/2013	4/15/2014	11/28/2012	1/17/2013	4/17/2013	7/18/2013	10/10/2013	4/15/2014	11/28/2012	1/17/2013	4/17/2013	7/18/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<1.3	<0.50 U	<0.5	<0.25	<1.3	<0.25	<0.25	<1.3 U	<0.5	<0.25	<1.3	<1.3	<1.3	<1.3 U	<1.3	<0.25	<2.5	<1.3
1,1,1-Trichloroethane	<1	<0.40 U	<0.4	<0.2	<1	<0.2	<0.2	<1.0 U	<0.4	<0.2	<1	<1	<1	<1.0 U	<1	<0.2	<2	<1
1,1,2-Trichloroethane	<1.4	<0.56 U	<0.56	<0.28	<1.4	<0.28	<0.28	<1.4 U	<0.56	<0.28	<1.4	<1.4	<1.4	<1.4 U	<1.4	<0.28	<2.8	<1.4
1,1-Dichloroethene	<1.6	<0.62 U	<0.62	<0.31	<1.6	<0.31	<0.31	<1.6 U	<0.62	<0.31	<1.6	<1.6	<1.6	<1.6 U	<1.6	<0.31	<3.1	<1.6
1,2,4-Trimethylbenzene	<0.7	<0.28 U	<0.28	<0.14	<0.7	<0.14	<0.14	<0.70 U	<0.28	<0.14	<0.7	<0.7	<0.7	<0.70 U	<0.7	<0.14	<1.4	<0.7
1,2-Dibromoethane	<1.8	<0.72 U	<0.72	<0.36	<1.8	<0.36	<0.36	<1.8 U	<0.72	<0.36	<1.8	<1.8	<1.8	<1.8 U	<1.8	<0.36	<3.6	<1.8
1,2-Dichlorobenzene	<1.4	<0.54 U	<0.54	<0.27	<1.4	<0.27	<0.27	<1.4 U	<0.54	<0.27	<1.4	<1.4	<1.4	<1.4 U	<1.4	<0.27	<2.7	<1.4
1,2-Dichloroethane	<1.4	<0.56 U	<0.56	<0.28	<1.4	<0.28	<0.28	<1.4 U	<0.56	<0.28	<1.4	<1.4	<1.4	<1.4 U	<1.4	<0.28	<2.8	<1.4
1,2-Dichloropropane	<1	<0.40 U	<0.4	<0.2	<1	<0.2	<0.2	<1.0 U	<0.4	<0.2	<1	<1	<1	<1.0 U	<1	<0.2	<2	<1
1,3,5-Trimethylbenzene	<0.9	<0.36 U	<0.36	<0.18	<0.9	<0.18	<0.18	<0.90 U	<0.36	<0.18	<0.9	<0.9	<0.9	<0.90 U	<0.9	<0.18	<1.8	<0.9
2-Chlorotoluene	<1.1	<0.42 U	<0.42	<0.21	<1.1	<0.21	<0.21	<1.1 U	<0.42	<0.21	<1.1	<1.1	<1.1	<1.1 U	<1.1	<0.21	<2.1	<1.1
4-Chlorotoluene	<1	<0.40 U	<0.4	<0.2	<1	<0.2	<0.2	<1.0 U	<0.4	<0.2	<1	<1	<1	<1.0 U	<1	<0.2	<2	<1
Benzene	<0.37	<0.15 U	<0.15	<0.074	<0.37	<0.074	<0.074	<0.37 U	<0.15	<0.074	<0.37	<0.37	<0.37	<0.37 U	<0.37	0.23 J	<0.74	<0.37
Bromobenzene	<1.3	<0.50 U	<0.5	<0.25	<1.3	<0.25	<0.25	<1.3 U	<0.5	<0.25	<1.3	<1.3	<1.3	<1.3 U	<1.3	<0.25	<2.5	<1.3
Bromodichloromethane	<0.85	<0.34 U	<0.34	<0.17	<0.85	<0.17	<0.17	<0.85 U	<0.34	<0.17	<0.85	<0.85	<0.85	<0.85 U	<0.85	<0.17	<1.7	<0.85
Bromoform	<1.4	<0.56 U	<0.56	<0.28	<1.4	<0.28	<0.28	<1.4 U	<0.56	<0.28	<1.4	<1.4	<1.4	<1.4 U	<1.4	<0.28	<2.8	<1.4
Bromomethane	<1.6	<0.62 U	<0.62	<0.31	<1.6	<0.31	<0.31	<1.6 U	<0.62	<0.31	<1.6	<1.6	<1.6	<1.6 U	<1.6	<0.31	<3.1	<1.6
Carbon Tetrachloride	<1.3	<0.52 U	<0.52	<0.26	<1.3	<0.26	<0.26	<1.3 U	<0.52	<0.26	<1.3	<1.3	<1.3	<1.3 U	<1.3	<0.26	<2.6	<1.3
CFC-12	<1	<0.40 U	<0.4	<0.2	<1	<0.2	<0.2	<1.0 U	<0.4	<0.2	<1	<1	<1	<1.0 U	<1	<0.2	<2	<1
Chlorodibromomethane	<1.6	<0.64 U	<0.64	<0.32	<1.6	<0.32	<0.32	<1.6 U	<0.64	<0.32	<1.6	<1.6	<1.6	<1.6 U	<1.6	<0.32	<3.2	<1.6
Chloroform	<1	<0.40 U	<0.4	<0.2	<1	<0.2	<0.2	<1.0 U	<0.4	0.52 J	<1	<1	<1	<1.0 U	<1	**0.74 J**	<2	<1
Chloromethane	<0.9	<0.36 U	<0.36	<0.18	<0.9	<0.18	<0.18	<0.90 U	<0.36	<0.18	<0.9	<0.9	<0.9	<0.90 U	<0.9	<0.18	<1.8	<0.9
cis-1,2-Dichloroethene	**170**	**140**	**330**	<0.12	**30**	<0.12	1.4	<0.60 U	**380**	**22**	**310**	**370**	**360**	**320**	**300**	<0.12	**190**	**220**
Cymene	<0.85	<0.34 U	<0.34	<0.17	<0.85	<0.17	<0.17	<0.85 U	<0.34	<0.17	<0.85	<0.85	<0.85	<0.85 U	<0.85	<0.17	<1.7	<0.85
Dichloromethane	<3.4	<1.4 U	<1.4	<0.68	<3.4	<0.68	<0.68	<3.4 U	<1.4	<0.68	<3.4	<3.4	<3.4	<3.4 U	<3.4	<0.68	<6.8	<3.4
Ethylbenzene	<0.65	<0.26 U	<0.26	<0.13	<0.65	<0.13	<0.13	<0.65 U	<0.26	0.58	<0.65	<0.65	<0.65	<0.65 U	<0.65	0.57	<1.3	<0.65
Isopropylbenzene	<0.7	<0.28 U	<0.28	<0.14	<0.7	<0.14	<0.14	<0.70 U	<0.28	<0.14	<0.7	<0.7	<0.7	<0.70 U	<0.7	<0.14	<1.4	<0.7
Methyl-tert-butylether	<1.2	<0.48 U	<0.48	<0.24	<1.2	<0.24	<0.24	<1.2 U	<0.48	<0.24	<1.2	<1.2	<1.2	<1.2 U	<1.2	<0.24	<2.4	<1.2
Naphthalene	<0.8	<0.32 U	<0.32	<0.16	<0.8	<0.16	<0.16	<0.80 U	<0.32	<0.16	<0.8	<0.8	<0.8	<0.80 U	<0.8	1.8	<1.6	<0.8
N-Butylbenzene	<0.65	<0.26 U	<0.26	<0.13	<0.65	<0.13	<0.13	<0.65 U	<0.26	<0.13	<0.65	<0.65	<0.65	<0.65 U	<0.65	<0.13	<1.3	<0.65
N-Propylbenzene	<0.65	<0.26 U	<0.26	<0.13	<0.65	<0.13	<0.13	<0.65 U	<0.26	<0.13	<0.65	<0.65	<0.65	<0.65 U	<0.65	<0.13	<1.3	<0.65
sec-Butylbenzene	<0.75	<0.30 U	<0.3	<0.15	<0.75	<0.15	<0.15	<0.75 U	<0.3	<0.15	<0.75	<0.75	<0.75	<0.75 U	<0.75	<0.15	<1.5	<0.75
Styrene (Monomer)	<0.5	<0.20 U	<0.2	<0.1	<0.5	<0.1	<0.1	<0.50 U	<0.2	<0.1	<0.5	<0.5	<0.5	<0.50 U	<0.5	<0.1	<1	<0.5
tert-Butylbenzene	<0.7	<0.28 U	<0.28	<0.14	<0.7	<0.14	<0.14	<0.70 U	<0.28	<0.14	<0.7	<0.7	<0.7	<0.70 U	<0.7	<0.14	<1.4	<0.7
Tetrachloroethene	**1,200**	**780**	**1,300**	**3**	**1,100**	**53**	**380**	**1,600**	**1,200**	**270**	**1,100**	**1,700**	**1,600**	**1,800**	**2,600**	**170**	**3,500**	**2,500**
Toluene	<0.55	<0.22 U	<0.22	0.68	<0.55	<0.11	<0.11	<0.55 U	<0.22	0.55	<0.55	<0.55	<0.55	<0.55 U	<0.55	0.67	<1.1	<0.55
Total Xylenes	<0.34	<0.14 U	<0.14	<0.068	<0.34	<0.068	<0.068	<0.34 U	<0.14	5	<0.34	<0.34	<0.34	<0.34 U	<0.34	4.5	<0.68	<0.34
trans-1,2-Dichloroethene	<1.3	2	4.3	<0.25	<1.3	<0.25	<0.25	<1.3 U	**5.1**	<0.25	<1.3	5.2	6.2	5	2.7 J	<0.25	<2.5	<1.3
trans-1,3-Dichloropropene	<1.1	<0.42 U	<0.42	<0.21	<1.1	<0.21	<0.21	<1.1 U	<0.42	<0.21	<1.1	<1.1	<1.1	<1.1 U	<1.1	<0.21	<2.1	<1.1
Trichloroethene	**89**	**83**	**150**	<0.19	**41**	<0.19	**4.5**	**2.7**	**180**	**8.5**	**140**	**180**	**160**	**180**	**160**	<0.19	**150**	**210**
Vinyl chloride	<0.5	**0.76 J**	**1.7**	<0.1	<0.5	<0.1	<0.1	<0.50 U	**1.4**	<0.1	<0.5	<0.5	<0.5	**1.5 J**	<0.5	<0.1	<1	<0.5
PCBs (µg/L)																		
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-20D (continued)		MW-20D2						MW-21D						MW-21D2			
Sample Interval (feet bls)	60-90'	60-90'	110-140'	110-140'	110-140'	110-140'	110-140'	110-140'	60-90'	60-90'	60-90'	60-90'	60-90'	60-90'	110-170'	110-170'	110-170'	110-170'
Sample Date	10/9/2013	4/15/2014	11/29/2012	1/16/2013	4/18/2013	7/17/2013	10/15/2013	4/15/2014	11/28/2012	1/17/2013	4/17/2013	7/18/2013	10/10/2013	4/15/2014	11/28/2012	1/17/2013	4/17/2013	7/18/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	0.27 J	NA	NA	NA	NA	NA	0.19 J	NA	NA	NA	NA	NA	0.22 J	NA	NA	NA
Arsenic, Total	NA	NA	0.26 J	NA	NA	NA	NA	NA	0.20 J	NA	NA	NA	NA	NA	0.29 J	NA	NA	NA
Barium, Dissolved	NA	NA	170	NA	NA	NA	NA	NA	75	NA	NA	NA	NA	NA	100	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	<0.64	NA	NA	NA	NA	NA	<0.64	NA	NA	NA	NA	NA	5.6	NA	NA	NA
Chromium, Total	NA	NA	<0.64	NA	NA	NA	NA	NA	<0.64	NA	NA	NA	NA	NA	6.5	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	<37	NA	NA	NA	NA	NA	<37	NA	NA	NA	NA	NA	<37	NA	NA	NA
Iron, Total	NA	NA	<37	NA	NA	NA	NA	NA	<37	NA	NA	NA	NA	NA	**460**	NA	NA	NA
Lead, Dissolved	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.16	NA	NA	NA	NA	NA	<0.16	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	16	NA	NA	NA	NA	NA	**75**	NA	NA	4.4	NA	NA	**410**	NA	NA	**28**
Manganese, Total	NA	NA	50	NA	NA	NA	NA	NA	**74**	NA	NA	NA	NA	NA	**450**	NA	NA	NA
Mercury, Dissolved	NA	NA	0.10 J	NA	NA	NA	NA	NA	0.16 JB	NA	NA	NA	NA	NA	0.18 JB	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-20D (continued)		MW-20D2						MW-21D						MW-21D2			
Sample Interval (feet bls)	60-90'	60-90'	110-140'	110-140'	110-140'	110-140'	110-140'	110-140'	60-90'	60-90'	60-90'	60-90'	60-90'	60-90'	110-170'	110-170'	110-170'	110-170'
Sample Date	10/9/2013	4/15/2014	11/29/2012	1/16/2013	4/18/2013	7/17/2013	10/15/2013	4/15/2014	11/28/2012	1/17/2013	4/17/2013	7/18/2013	10/10/2013	4/15/2014	11/28/2012	1/17/2013	4/17/2013	7/18/2013
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	1.2 J	NA	NA	NA	NA	NA	<0.25	NA	NA	NA	NA	NA	0.37 J	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	<0.069	NA	NA	NA	NA	NA	0.12 J	NA	NA	NA	NA	NA	<0.069	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	**190**	**420**	NA	NA	NA	NA	**260**	**190**	NA	NA	NA	NA	**150**	**140**	NA	NA
Total Dissolved Solids	NA	NA	1,000	8,700	NA	NA	NA	NA	1,400	1,200	NA	NA	NA	NA	1,100	1,900	NA	NA
Total BTEX (µg/L)	ND	ND	ND	0.68	ND	ND	ND	ND	ND	6.13	ND	ND	ND	ND	ND	5.97	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:

100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.

100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.

< = Constituent not detected above noted laboratory detection limit.

* = LCS or LCSD exceeds the control limits.

B = Compound was found in the blank and the sample.

J = Result is between the method detection limit and the limit of quantitation.

µg/L = Micrograms per liter.

mg/L = Milligrams per liter.

LCS = Laboratory control sample.

LCSD = Laboratory control sample duplicate.

NA = Not analyzed.

NE = Not established.

ND = Total detected PCBs were reported less than the laboratory detection limit.

PAHs = Polyaromatic Hydrocarbons.

PCBs = Polychlorinated Biphenyls.

Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.

Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.

VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-21D2 (continued)		MW-22D						MW-22S						MW-23D			
Sample Interval (feet bls)	110-170'	110-170'	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	45-50'	45-50'	45-50'	45-50'
Sample Date	10/15/2013	4/15/2014	1/15/2013	3/8/2013	4/19/2013	7/16/2013	10/10/2013	4/18/2014	1/15/2013	3/7/2013	4/19/2013	7/16/2013	10/10/2013	4/18/2014	1/14/2013	3/8/2013	4/19/2013	4/20/2013
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.5	<1.3 U	<0.25	NA	<0.25	<0.25	<0.25	<0.25 U	<0.25	NA	<0.25	<0.25	<0.25	<0.25 U	<0.25	NA	<0.25	NA
1,1,1-Trichloroethane	<0.4	<1.0 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	NA
1,1,2-Trichloroethane	<0.56	<1.4 U	<0.28	NA	<0.28	<0.28	<0.28	<0.28 U	<0.28	NA	<0.28	<0.28	<0.28	<0.28 U	<0.28	NA	<0.28	NA
1,1-Dichloroethene	<0.62	<1.6 U	<0.31	NA	<0.31	<0.31	<0.31	<0.31 U	<0.31	NA	<0.31	<0.31	<0.31	<0.31 U	<0.31	NA	<0.31	NA
1,2,4-Trimethylbenzene	<0.28	<0.70 U	<0.14	NA	<0.14	<0.14	<0.14	<0.14 U	0.86 J	NA	<0.14	<0.14	<0.14	<0.14 U	<0.14	NA	<0.14	NA
1,2-Dibromoethane	<0.72	<1.8 U	<0.36	NA	<0.36	<0.36	<0.36	<0.36 U	<0.36	NA	<0.36	<0.36	<0.36	<0.36 U	<0.36	NA	<0.36	NA
1,2-Dichlorobenzene	<0.54	<1.4 U	<0.27	NA	<0.27	<0.27	<0.27	<0.27 U	<0.27	NA	<0.27	<0.27	<0.27	<0.27 U	<0.27	NA	<0.27	NA
1,2-Dichloroethane	<0.56	<1.4 U	<0.28	NA	<0.28	<0.28	<0.28	<0.28 U	<0.28	NA	<0.28	<0.28	<0.28	<0.28 U	<0.28	NA	<0.28	NA
1,2-Dichloropropane	<0.4	<1.0 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	NA
1,3,5-Trimethylbenzene	<0.36	<0.90 U	<0.18	NA	<0.18	<0.18	<0.18	<0.18 U	<0.18	NA	<0.18	<0.18	<0.18	<0.18 U	<0.18	NA	<0.18	NA
2-Chlorotoluene	<0.42	<1.1 U	<0.21	NA	<0.21	<0.21	<0.21	<0.21 U	<0.21	NA	<0.21	<0.21	<0.21	<0.21 U	<0.21	NA	<0.21	NA
4-Chlorotoluene	<0.4	<1.0 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	NA
Benzene	<0.15	<0.37 U	<0.074	NA	<0.074	<0.074	<0.074	<0.074 U	**1.1**	NA	<0.074	<0.074	<0.074	<0.074 U	0.32 J	NA	<0.074	NA
Bromobenzene	<0.5	<1.3 U	<0.25	NA	<0.25	<0.25	<0.25	<0.25 U	<0.25	NA	<0.25	<0.25	<0.25	<0.25 U	<0.25	NA	<0.25	NA
Bromodichloromethane	<0.34	<0.85 U	<0.17	NA	<0.17	<0.17	<0.17	<0.17 U	<0.17	NA	<0.17	<0.17	<0.17	<0.17 U	<0.17	NA	<0.17	NA
Bromoform	<0.56	<1.4 U	<0.28	NA	<0.28	<0.28	<0.28	<0.28 U	<0.28	NA	<0.28	<0.28	<0.28	<0.28 U	<0.28	NA	<0.28	NA
Bromomethane	<0.62	<1.6 U	<0.31	NA	<0.31	<0.31	<0.31	<0.31 U	<0.31	NA	<0.31	<0.31	<0.31	<0.31 U	<0.31	NA	<0.31	NA
Carbon Tetrachloride	<0.52	<1.3 U	<0.26	NA	<0.26	<0.26	<0.26	<0.26 U	<0.26	NA	<0.26	<0.26	<0.26	<0.26 U	<0.26	NA	<0.26	NA
CFC-12	<0.4	<1.0 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	<0.2	NA	<0.2	NA
Chlorodibromomethane	<0.64	<1.6 U	<0.32	NA	<0.32	<0.32	<0.32	<0.32 U	<0.32	NA	<0.32	<0.32	<0.32	<0.32 U	<0.32	NA	<0.32	NA
Chloroform	<0.4	<1.0 U	<0.2	NA	<0.2	<0.2	<0.2	<0.20 U	**1**	NA	**0.91 J**	**1.4**	<0.2	<0.20 U	<0.2	NA	<0.2	NA
Chloromethane	<0.36	<0.90 U	0.47 J	NA	<0.18	<0.18	<0.18	<0.18 U	<0.18	NA	<0.18	<0.18	<0.18	<0.18 U	<0.18	NA	<0.18	NA
cis-1,2-Dichloroethene	**110**	**110**	**3.6**	NA	4.9	3.7	<0.12	2.6	1.8	NA	6.1	3.8	**97**	**46**	<0.12	NA	<0.12	NA
Cymene	<0.34	<0.85 U	<0.17	NA	<0.17	<0.17	<0.17	<0.17 U	<0.17	NA	<0.17	<0.17	<0.17	<0.17 U	<0.17	NA	<0.17	NA
Dichloromethane	<1.4	<3.4 U	<0.68	NA	<0.68	<0.68	<0.68	<0.68 U	<0.68	NA	<0.68	<0.68	<0.68	<0.68 U	<0.68	NA	<0.68	NA
Ethylbenzene	<0.26	<0.65 U	<0.13	NA	<0.13	<0.13	<0.13	<0.13 U	0.5	NA	<0.13	<0.13	<0.13	<0.13 U	0.20 J	NA	<0.13	NA
Isopropylbenzene	<0.28	<0.70 U	<0.14	NA	<0.14	<0.14	<0.14	<0.14 U	<0.14	NA	<0.14	<0.14	<0.14	<0.14 U	<0.14	NA	<0.14	NA
Methyl-tert-butylether	<0.48	<1.2 U	<0.24	NA	<0.24	<0.24	<0.24	<0.24 U	<0.24	NA	<0.24	<0.24	<0.24	<0.24 U	<0.24	NA	<0.24	NA
Naphthalene	<0.32	<0.80 U	<0.16	NA	<0.16	<0.16	<0.16	<0.16 U	<0.16	NA	<0.16	<0.16	<0.16	<0.16 U	<0.16	NA	<0.16	NA
N-Butylbenzene	<0.26	<0.65 U	<0.13	NA	<0.13	<0.13	<0.13	<0.13 U	<0.13	NA	<0.13	<0.13	<0.13	<0.13 U	<0.13	NA	<0.13	NA
N-Propylbenzene	<0.26	<0.65 U	<0.13	NA	<0.13	<0.13	<0.13	<0.13 U	<0.13	NA	<0.13	<0.13	<0.13	<0.13 U	<0.13	NA	<0.13	NA
sec-Butylbenzene	<0.3	<0.75 U	<0.15	NA	<0.15	<0.15	<0.15	<0.15 U	<0.15	NA	<0.15	<0.15	<0.15	<0.15 U	<0.15	NA	<0.15	NA
Styrene (Monomer)	<0.2	<0.50 U	<0.1	NA	<0.1	<0.1	<0.1	<0.10 U	<0.1	NA	<0.1	<0.1	<0.1	<0.10 U	<0.1	NA	<0.1	NA
tert-Butylbenzene	<0.28	<0.70 U	<0.14	NA	<0.14	<0.14	<0.14	<0.14 U	<0.14	NA	<0.14	<0.14	<0.14	<0.14 U	<0.14	NA	<0.14	NA
Tetrachloroethene	**1,500**	**1,900**	**520**	NA	**450**	**270**	**190**	**430**	**180**	NA	**160**	**210**	**13**	**23**	**100**	NA	**86**	NA
Toluene	<0.22	<0.55 U	<0.11	NA	<0.11	0.37 J	<0.11	<0.11 U	1.7	NA	<0.11	<0.11	<0.11	<0.11 U	0.6	NA	<0.11	NA
Total Xylenes	<0.14	<0.34 U	<0.068	NA	<0.068	<0.068	<0.068	<0.068 U	1.5	NA	<0.068	<0.068	<0.068	<0.068 U	0.68 J	NA	<0.068	NA
trans-1,2-Dichloroethene	<0.5	<1.3 U	<0.25	NA	<0.25	<0.25	<0.25	<0.25 U	<0.25	NA	<0.25	<0.25	<0.25	<0.25 U	<0.25	NA	<0.25	NA
trans-1,3-Dichloropropene	<0.42	<1.1 U	<0.21	NA	<0.21	<0.21	<0.21	<0.21 U	<0.21	NA	<0.21	<0.21	<0.21	<0.21 U	<0.21	NA	<0.21	NA
Trichloroethene	**120**	**130**	**5.8**	NA	**5.8**	**5**	**4.9**	**6.8**	**4.8**	NA	**5.4**	**8.5**	**6.1**	**4.2**	<0.19	NA	**0.53**	NA
Vinyl chloride	<0.2	<0.50 U	<0.1	NA	<0.1	<0.1	<0.1	<0.10 U	<0.1	NA	<0.1	<0.1	<0.1	<0.10 U	<0.1	NA	<0.1	NA
PCBs (µg/L)																		
Aroclor 1016	NA	NA	**2.4**	<0.033	<0.064	<0.063	<0.063	<0.065 U	**12**	<0.033	**4**	<0.064	<0.064	<0.065 U	<0.16	<0.034	NA	<0.065

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-21D2 (continued)		MW-22D						MW-22S						MW-23D			
Sample Interval (feet bls)	110-170'	110-170'	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	45-50'	45-50'	45-50'	45-50'
Sample Date	10/15/2013	4/15/2014	1/15/2013	3/8/2013	4/19/2013	7/16/2013	10/10/2013	4/18/2014	1/15/2013	3/7/2013	4/19/2013	7/16/2013	10/10/2013	4/18/2014	1/14/2013	3/8/2013	4/19/2013	4/20/2013
PCBs (µg/L) (continued)																		
Aroclor 1232	NA	NA	<0.092	**2.6**	<0.19	<0.19	**3.3**	<0.19 U	<0.49	**13**	<0.19	<0.19	**12**	<0.20 U	<0.089	<0.1	NA	<0.19
Aroclor 1242, Dissolved	NA	NA	NA	<0.1	<0.19	<0.19	<0.19	<0.20 U	NA	<0.11	<0.2	<0.19	<0.19	**0.28 J**	NA	<0.1	NA	<0.2
Aroclor 1242	NA	NA	<0.13	<0.1	<0.19	**0.97**	<0.19	<0.19 U	<0.69	<0.099	<0.19	**4.7**	<0.19	**7.1**	**0.24 J**	<0.1	NA	<0.19
Aroclor 1254, Dissolved	NA	NA	NA	<0.1	<0.19	<0.19	<0.19	<0.20 U	NA	<0.11	<0.2	<0.19	<0.19	<0.20 U	NA	<0.1	NA	<0.2
PAHs (µg/L)																		
1-Methylnaphthalene	NA	NA	<1	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	<1.1	NA	NA	NA
2-Methylnaphthalene	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.13	NA	NA	NA	NA	NA	<0.14	NA	NA	NA
Acenaphthene	NA	NA	<0.38	NA	NA	NA	NA	NA	<0.37	NA	NA	NA	NA	NA	<0.4	NA	NA	NA
Anthracene	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.35	NA	NA	NA
Benzo(a)anthracene	NA	NA	<0.046	NA	NA	NA	NA	NA	<0.045	NA	NA	NA	NA	NA	<0.048	NA	NA	NA
Benzo(a)pyrene	NA	NA	<0.059	NA	NA	NA	NA	NA	<0.057	NA	NA	NA	NA	NA	<0.062	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	<0.061	NA	NA	NA	NA	NA	<0.059	NA	NA	NA	NA	NA	<0.064	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	<0.44	NA	NA	NA	NA	NA	<0.43	NA	NA	NA	NA	NA	<0.46	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	<0.077	NA	NA	NA	NA	NA	<0.076	NA	NA	NA	NA	NA	<0.082	NA	NA	NA
Chrysene	NA	NA	<0.15	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	<0.15	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	<0.067	NA	NA	NA	NA	NA	<0.066	NA	NA	NA	NA	NA	<0.071	NA	NA	NA
Fluoranthene	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	<0.35	NA	NA	NA
Fluorene	NA	NA	<0.4	NA	NA	NA	NA	NA	<0.39	NA	NA	NA	NA	NA	<0.42	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	<0.088	NA	NA	NA	NA	NA	<0.086	NA	NA	NA	NA	NA	<0.093	NA	NA	NA
Naphthalene	NA	NA	<0.31	NA	NA	NA	NA	NA	0.31 J	NA	NA	NA	NA	NA	<0.33	NA	NA	NA
Phenanthrene	NA	NA	<0.37	NA	NA	NA	NA	NA	<0.36	NA	NA	NA	NA	NA	<0.39	NA	NA	NA
Pyrene	NA	NA	<0.5	NA	NA	NA	NA	NA	<0.49	NA	NA	NA	NA	NA	<0.53	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	NA	NA	0.29 J	NA	NA	NA	NA	NA	**1.2**	NA	NA	NA	NA	NA	0.35 J	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	130	NA	NA	NA	NA	NA	200	NA	NA	NA	NA	NA	120	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	<0.1	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	1.8 J	NA	NA	NA	NA	NA	<0.64	NA	NA	NA	NA	NA	<0.64	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	66 J	NA	NA	NA	NA	NA	**200**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	<0.16	NA	NA	NA	NA	NA	0.22 J	NA	NA	NA	NA	NA	<0.16	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	**510**	NA	NA	NA	NA	NA	**1,400**	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	<0.071	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-21D2 (continued)		MW-22D						MW-22S						MW-23D			
Sample Interval (feet bls)	110-170'	110-170'	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	45-50'	45-50'	45-50'	45-50'
Sample Date	10/15/2013	4/15/2014	1/15/2013	3/8/2013	4/19/2013	7/16/2013	10/10/2013	4/18/2014	1/15/2013	3/7/2013	4/19/2013	7/16/2013	10/10/2013	4/18/2014	1/14/2013	3/8/2013	4/19/2013	4/20/2013
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	<0.25	NA	NA	NA	NA	NA	0.34 J	NA	NA	NA	NA	NA	1.0 J	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	<0.069	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA	<0.069	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	ND	ND	ND	ND	0.37	ND	ND	4.8	ND	ND	ND	ND	ND	1.8	ND	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-23D (continued)							MW-23S							MW-24			
Sample Interval (feet bls)	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	30-40'	30-40'	30-40'	30-40'
Sample Date	1/14/2013	3/8/2013	4/19/2013	4/20/2013	7/17/2013	10/10/2013	4/18/2014	1/15/2013	4/19/2013	7/16/2013	9/5/2013	9/5/2013	10/10/2013	4/18/2014	4/29/2013	7/19/2013	10/8/2013	4/17/2014
VOCs (µg/L)																		
1,1,1,2-Tetrachloroethane	<0.25	NA	<0.25	NA	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	NA	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25 U
1,1,1-Trichloroethane	<0.2	NA	<0.2	NA	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	NA	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U
1,1,2-Trichloroethane	<0.28	NA	<0.28	NA	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	NA	**1.8**	<0.28 U	<0.28	<0.28	<0.28	<0.28 U
1,1-Dichloroethene	<0.31	NA	<0.31	NA	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	NA	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31 U
1,2,4-Trimethylbenzene	<0.14	NA	<0.14	NA	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	NA	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14 U
1,2-Dibromoethane	<0.36	NA	<0.36	NA	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36	NA	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36 U
1,2-Dichlorobenzene	<0.27	NA	<0.27	NA	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27	NA	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27 U
1,2-Dichloroethane	<0.28	NA	<0.28	NA	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	NA	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28 U
1,2-Dichloropropane	<0.2	NA	<0.2	NA	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	NA	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U
1,3,5-Trimethylbenzene	<0.18	NA	<0.18	NA	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18	NA	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18 U
2-Chlorotoluene	<0.21	NA	<0.21	NA	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	NA	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21 U
4-Chlorotoluene	<0.2	NA	<0.2	NA	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	NA	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U
Benzene	0.32 J	NA	<0.074	NA	<0.074	<0.074	<0.074 U	**0.73**	<0.074	<0.074	<0.074	NA	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.074 U
Bromobenzene	<0.25	NA	<0.25	NA	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	NA	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25 U
Bromodichloromethane	<0.17	NA	<0.17	NA	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	NA	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17 U
Bromoform	<0.28	NA	<0.28	NA	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28	NA	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28 U
Bromomethane	<0.31	NA	<0.31	NA	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31	NA	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31 U
Carbon Tetrachloride	<0.26	NA	<0.26	NA	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26	NA	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26 U
CFC-12	<0.2	NA	<0.2	NA	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	NA	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U
Chlorodibromomethane	<0.32	NA	<0.32	NA	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32	NA	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32 U
Chloroform	<0.2	NA	<0.2	NA	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.2	NA	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U
Chloromethane	<0.18	NA	<0.18	NA	<0.18	<0.18	<0.18 U	1.2	<0.18	<0.18	<0.18	NA	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18 U
cis-1,2-Dichloroethene	<0.12	NA	<0.12	NA	<0.12	<0.12	<0.12 U	<0.12	3.7	**29**	**27**	NA	**16**	**16**	<0.12	<0.12	<0.12	<0.12 U
Cymene	<0.17	NA	<0.17	NA	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17	NA	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17 U
Dichloromethane	<0.68	NA	<0.68	NA	<0.68	<0.68	<0.68 U	<0.68	<0.68	<0.68	<0.68	NA	<0.68	<0.68 U	<0.68	<0.68	<0.68	<0.68 U
Ethylbenzene	0.20 J	NA	<0.13	NA	<0.13	<0.13	<0.13 U	0.43 J	<0.13	<0.13	<0.13	NA	<0.13	<0.13 U	<0.13	0.31 J	<0.13	<0.13 U
Isopropylbenzene	<0.14	NA	<0.14	NA	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	NA	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14 U
Methyl-tert-butylether	<0.24	NA	<0.24	NA	<0.24	<0.24	<0.24 U	<0.24	<0.24	<0.24	<0.24	NA	<0.24	<0.24 U	<0.24	<0.24	<0.24	<0.24 U
Naphthalene	<0.16	NA	<0.16	NA	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16	NA	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16 U
N-Butylbenzene	<0.13	NA	<0.13	NA	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	NA	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13 U
N-Propylbenzene	<0.13	NA	<0.13	NA	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13	NA	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13 U
sec-Butylbenzene	<0.15	NA	<0.15	NA	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15	NA	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15 U
Styrene (Monomer)	<0.1	NA	<0.1	NA	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.10 U
tert-Butylbenzene	<0.14	NA	<0.14	NA	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14	NA	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14 U
Tetrachloroethene	**100**	NA	**86**	NA	**170**	**160**	**190**	**290**	**580**	**420**	**240**	NA	**130**	**210**	**3**	**3**	**3.3**	**2.8**
Toluene	0.6	NA	<0.11	NA	<0.11	<0.11	<0.11 U	1.3	<0.11	<0.11	<0.11	NA	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.11 U
Total Xylenes	0.68 J	NA	<0.068	NA	<0.068	<0.068	<0.068 U	0.95 J	<0.068	<0.068	<0.068	NA	<0.068	<0.068 U	<0.068	0.37 J	<0.068	<0.068 U
trans-1,2-Dichloroethene	<0.25	NA	<0.25	NA	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25	NA	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25 U
trans-1,3-Dichloropropene	<0.21	NA	<0.21	NA	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21	NA	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21 U
Trichloroethene	<0.19	NA	**0.53**	NA	0.21 J	<0.19	<0.19 U	**0.64**	**1.4**	**20**	**17**	NA	**15**	**11**	<0.19	<0.19	<0.19	<0.19 U
Vinyl chloride	<0.1	NA	<0.1	NA	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.1	NA	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.10 U
PCBs (µg/L)																		
Aroclor 1016	<0.16	<0.034	NA	<0.065	<0.067 *	<0.064	NA	<0.19	NA	<0.063	<0.028	NA	<0.066	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-23D (continued)							MW-23S							MW-24			
Sample Interval (feet bls)	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	30-40'	30-40'	30-40'	30-40'
Sample Date	1/14/2013	3/8/2013	4/19/2013	4/20/2013	7/17/2013	10/10/2013	4/18/2014	1/15/2013	4/19/2013	7/16/2013	9/5/2013	9/5/2013	10/10/2013	4/18/2014	4/29/2013	7/19/2013	10/8/2013	4/17/2014
PCBs (µg/L) (continued)																		
Aroclor 1232	<0.089	<0.1	NA	<0.19	<0.2	<0.19	NA	<0.11	NA	<0.19	<0.083	NA	<0.2	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	<0.1	NA	<0.2	<0.2	<0.19	NA	NA	NA	<0.19	NA	<0.078	<0.19	NA	NA	NA	NA	NA
Aroclor 1242	**0.24 J**	<0.1	NA	<0.19	<0.2	<0.19	NA	<0.15	NA	<0.19	<0.083	NA	<0.2	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	<0.1	NA	<0.2	<0.2	<0.19	NA	NA	NA	**0.48**	NA	<0.078	<0.19	NA	NA	NA	NA	NA
PAHs (µg/L)																		
1-Methylnaphthalene	<1.1	NA	NA	NA	NA	NA	NA	<1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	<0.14	NA	NA	NA	NA	NA	NA	<0.14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	<0.4	NA	NA	NA	NA	NA	NA	<0.38	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	<0.35	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	<0.048	NA	NA	NA	NA	NA	NA	<0.046	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	<0.062	NA	NA	NA	NA	NA	NA	<0.059	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	<0.064	NA	NA	NA	NA	NA	NA	<0.061	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	<0.46	NA	NA	NA	NA	NA	NA	<0.44	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	<0.082	NA	NA	NA	NA	NA	NA	<0.077	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	<0.15	NA	NA	NA	NA	NA	NA	<0.15	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	<0.071	NA	NA	NA	NA	NA	NA	<0.067	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	<0.35	NA	NA	NA	NA	NA	NA	<0.33	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	<0.42	NA	NA	NA	NA	NA	NA	<0.4	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	<0.093	NA	NA	NA	NA	NA	NA	<0.088	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	<0.33	NA	NA	NA	NA	NA	NA	<0.31	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	<0.39	NA	NA	NA	NA	NA	NA	<0.37	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	<0.53	NA	NA	NA	NA	NA	NA	<0.5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)																		
Arsenic, Dissolved	0.35 J	NA	NA	NA	NA	NA	NA	0.56 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	120	NA	NA	NA	NA	NA	NA	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	<0.1	NA	NA	NA	NA	NA	NA	<0.1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	<0.64	NA	NA	NA	NA	NA	NA	0.90 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	**280**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	<0.16	NA	NA	NA	NA	NA	NA	0.25 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	**880**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	<0.071	NA	NA	NA	NA	NA	NA	<0.071	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-23D (continued)							MW-23S							MW-24			
Sample Interval (feet bls)	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	45-50'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	25-35'	30-40'	30-40'	30-40'	30-40'
Sample Date	1/14/2013	3/8/2013	4/19/2013	4/20/2013	7/17/2013	10/10/2013	4/18/2014	1/15/2013	4/19/2013	7/16/2013	9/5/2013	9/5/2013	10/10/2013	4/18/2014	4/29/2013	7/19/2013	10/8/2013	4/17/2014
Metals (µg/L) (continued)																		
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	1.0 J	NA	NA	NA	NA	NA	NA	0.79 J	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	<0.069	NA	NA	NA	NA	NA	NA	<0.069	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)																		
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	1.8	ND	ND	ND	ND	ND	ND	3.41	ND	ND	ND	ND	ND	ND	ND	0.68	ND	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-25D				MW-25D2				MW-26S			MW-27D		MW-27D2	
Sample Interval (feet bls)	120-130'	120-130'	120-130'	120-130'	160-170'	160-170'	160-170'	160-170'	7-17'	7-17'	7-17'	130-140'	130-140'	170-180'	170-180'
Sample Date	5/6/2013	7/19/2013	10/9/2013	4/21/2014	5/6/2013	7/19/2013	10/4/2013	4/21/2014	8/23/2013	10/9/2013	4/22/2014	12/26/2013	4/18/2014	12/26/2013	4/18/2014
VOCs (µg/L)															
1,1,1,2-Tetrachloroethane	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25 U	<0.25	<0.25 U	<0.25	<0.25 U
1,1,1-Trichloroethane	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.20 U	<0.2	<0.20 U	<0.2	<0.20 U
1,1,2-Trichloroethane	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28 U	<0.28	<0.28 U	<0.28	<0.28 U
1,1-Dichloroethene	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31 U	<0.31	<0.31 U	<0.31	<0.31 U
1,2,4-Trimethylbenzene	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14 U	<0.14	<0.14 U	<0.14	<0.14 U
1,2-Dibromoethane	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36	<0.36 U	<0.36	<0.36	<0.36 U	<0.36	<0.36 U	<0.36	<0.36 U
1,2-Dichlorobenzene	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27	<0.27 U	<0.27	<0.27	<0.27 U	<0.27	<0.27 U	<0.27	<0.27 U
1,2-Dichloroethane	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28 U	<0.28	<0.28 U	<0.28	<0.28 U
1,2-Dichloropropane	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.20 U	<0.2	<0.20 U	<0.2	<0.20 U
1,3,5-Trimethylbenzene	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18 U	<0.18	<0.18 U	<0.18	<0.18 U
2-Chlorotoluene	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21 U	<0.21	<0.21 U	<0.21	<0.21 U
4-Chlorotoluene	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.20 U	<0.2	<0.20 U	<0.2	<0.20 U
Benzene	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.074	<0.074 U	<0.074	<0.074	<0.074 U	<0.074	<0.074 U	<0.074	<0.074 U
Bromobenzene	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25 U	<0.25	<0.25 U	<0.25	<0.25 U
Bromodichloromethane	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17 U	<0.17	<0.17 U	<0.17	<0.17 U
Bromoform	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28	<0.28 U	<0.28	<0.28	<0.28 U	<0.28	<0.28 U	<0.28	<0.28 U
Bromomethane	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31	<0.31 U	<0.31	<0.31	<0.31 U	<0.31	<0.31 U	<0.31	<0.31 U
Carbon Tetrachloride	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26	<0.26 U	<0.26	<0.26	<0.26 U	<0.26	<0.26 U	<0.26	<0.26 U
CFC-12	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.20 U	<0.2	<0.20 U	<0.2	<0.20 U
Chlorodibromomethane	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32	<0.32 U	<0.32	<0.32	<0.32 U	<0.32	<0.32 U	<0.32	<0.32 U
Chloroform	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.2	<0.20 U	<0.2	<0.2	<0.20 U	<0.2	<0.20 U	<0.2	<0.20 U
Chloromethane	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18	<0.18 U	<0.18	<0.18	<0.18 U	<0.18	<0.18 U	<0.18	<0.18 U
cis-1,2-Dichloroethene	<0.12	<0.12	<0.12	<0.12 U	<0.12	<0.12	<0.12	<0.12 U	<0.12	<0.12	<0.12 U	0.85 J	2.6	3.7	**12**
Cymene	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17	<0.17 U	<0.17	<0.17	<0.17 U	<0.17	<0.17 U	<0.17	<0.17 U
Dichloromethane	<0.68	<0.68	**5.3**	<0.68 U	<0.68	<0.68	<0.68	<0.68 U	<0.68	<0.68	<0.68 U	<0.68	<0.68 U	<0.68	<0.68 U
Ethylbenzene	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13 U	<0.13	<0.13 U	<0.13	<0.13 U
Isopropylbenzene	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14 U	<0.14	<0.14 U	<0.14	<0.14 U
Methyl-tert-butylether	<0.24	<0.24	<0.24	<0.24 U	<0.24	<0.24	<0.24	<0.24 U	<0.24	<0.24	<0.24 U	<0.24	1.3	<0.24	<0.24 U
Naphthalene	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16	<0.16 U	<0.16	<0.16	<0.16 U	<0.16	<0.16 U	<0.16	<0.16 U
N-Butylbenzene	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13 U	<0.13	<0.13 U	<0.13	<0.13 U
N-Propylbenzene	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13	<0.13 U	<0.13	<0.13	<0.13 U	<0.13	<0.13 U	<0.13	<0.13 U
sec-Butylbenzene	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15	<0.15 U	<0.15	<0.15	<0.15 U	<0.15	<0.15 U	<0.15	<0.15 U
Styrene (Monomer)	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.10 U	<0.1	<0.10 U	<0.1	<0.10 U
tert-Butylbenzene	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14	<0.14 U	<0.14	<0.14	<0.14 U	<0.14	<0.14 U	<0.14	<0.14 U
Tetrachloroethene	**0.76 J**	**2.8**	**3.1**	**1.3**	<0.17	<0.17	<0.17	<0.17 U	**1.4**	<0.17	<0.17 U	**1.8**	**5.4**	**11**	**44**
Toluene	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.11	<0.11 U	<0.11	<0.11	<0.11 U	0.53	<0.11 U	0.20 J	<0.11 U
Total Xylenes	<0.068	0.36 J	<0.068	<0.068 U	<0.068	<0.068	<0.068	<0.068 U	<0.068	<0.068	<0.068 U	<0.068	<0.068 U	<0.068	<0.068 U
trans-1,2-Dichloroethene	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25	<0.25 U	<0.25	<0.25	<0.25 U	<0.25	<0.25 U	<0.25	<0.25 U
trans-1,3-Dichloropropene	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21	<0.21 U	<0.21	<0.21	<0.21 U	<0.21	<0.21 U	<0.21	<0.21 U
Trichloroethene	<0.19	<0.19	<0.19	<0.19 U	<0.19	<0.19	<0.19	<0.19 U	<0.19	<0.19	<0.19 U	**1.3**	**3.5**	**7.2**	**25**
Vinyl chloride	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.1	<0.10 U	<0.1	<0.1	<0.10 U	<0.1	<0.10 U	<0.1	<0.10 U
PCBs (µg/L)															
Aroclor 1016	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Footnotes on Page 90.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-25D				MW-25D2				MW-26S			MW-27D		MW-27D2	
Sample Interval (feet bls)	120-130'	120-130'	120-130'	120-130'	160-170'	160-170'	160-170'	160-170'	7-17'	7-17'	7-17'	130-140'	130-140'	170-180'	170-180'
Sample Date	5/6/2013	7/19/2013	10/9/2013	4/21/2014	5/6/2013	7/19/2013	10/4/2013	4/21/2014	8/23/2013	10/9/2013	4/22/2014	12/26/2013	4/18/2014	12/26/2013	4/18/2014
PCBs (µg/L) (continued)															
Aroclor 1232	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1242	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Aroclor 1254, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PAHs (µg/L)															
1-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(a)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(b)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(g,h,i)perylene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo(k)fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dibenzo(a,h)anthracene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluoranthene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Fluorene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Indeno(1,2,3-cd)pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Naphthalene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Phenanthrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pyrene	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metals (µg/L)															
Arsenic, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Arsenic, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Barium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cadmium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chromium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Copper, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Iron, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Lead, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Manganese, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nickel, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

Footnotes on Page 90.

Summary of Groundwater Analytical Results 2012 to 2014

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Well ID	MW-25D				MW-25D2				MW-26S			MW-27D		MW-27D2	
Sample Interval (feet bls)	**120-130'**	**120-130'**	**120-130'**	**120-130'**	**160-170'**	**160-170'**	**160-170'**	**160-170'**	**7-17'**	**7-17'**	**7-17'**	**130-140'**	**130-140'**	**170-180'**	**170-180'**
Sample Date	**5/6/2013**	**7/19/2013**	**10/9/2013**	**4/21/2014**	**5/6/2013**	**7/19/2013**	**10/4/2013**	**4/21/2014**	**8/23/2013**	**10/9/2013**	**4/22/2014**	**12/26/2013**	**4/18/2014**	**12/26/2013**	**4/18/2014**
Metals (µg/L) (continued)															
Nickel, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Selenium, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Silver, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Dissolved	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Zinc, Total	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Other (mg/L)															
Chloride	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Dissolved Solids	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total BTEX (µg/L)	ND	**0.36**	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.53	ND	0.2	ND
Total PAHs (µg/L)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

General Notes:
100 = Concentration exceeds the NR 140 Wis. adm. code Preventive Action Limit.
100 = Concentration exceeds the NR 140 Wis. adm. code Enforcement Standard.
< = Constituent not detected above noted laboratory detection limit.
* = LCS or LCSD exceeds the control limits.
B = Compound was found in the blank and the sample.
J = Result is between the method detection limit and the limit of quantitation.
µg/L = Micrograms per liter.
mg/L = Milligrams per liter.
LCS = Laboratory control sample.
LCSD = Laboratory control sample duplicate.
NA = Not analyzed.
NE = Not established.
ND = Total detected PCBs were reported less than the laboratory detection limit.
PAHs = Polyaromatic Hydrocarbons.
PCBs = Polychlorinated Biphenyls.
Total BTEX = Sum of detected Benzene, Toluene, Ethylbenzene and Total Xylenes.
Total PAHs = Sum of detected Benzo(a)anthracene, benzo(b)fluoranthene, Benzi(g,h,i)perylene, Benzo(k)fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Indeno(1,2,3-cd)pyrene, Phenanthrene, Pyrene.
VOCs = Volatile Organic Compounds.

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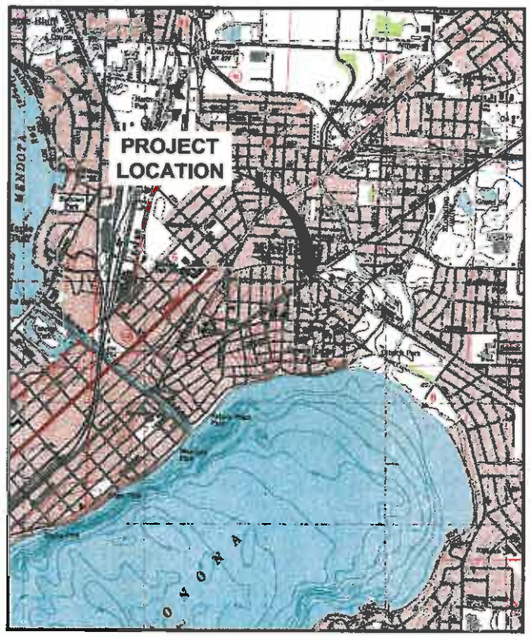
WPDES Section III.
6. Plans and Specifications for the Proposed Treatment System

Groundwater Extraction and Treatment System Drawings

Table 2 – Air Stripper Removal Efficiency

CONSTRUCTION DRAWINGS
ISSUED FOR CONSTRUCTION

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM



REFERENCE: BASE MAP USGS 7.5 MINUTE QUADRANGLE., MADISON EAST, WISCONSIN, 1983

LOCATION MAP

0 2000' 4000'

GRAPHIC SCALE

DATE ISSUED
AUGUST 2014

MADISON-KIPP CORPORATION
MADISON, WISCONSIN

ARCADIS

ARCADIS U.S., INC.

LIST OF DRAWINGS:

LEGEND:

- EXISTING MADISON-KIPP PROPERTY BOUNDARY
- EXISTING MONITORING WELL
- EXISTING SVE WELL
- EXISTING FENCE
- EXISTING PROPANE (OUT OF SERVICE)
- EXISTING STORM DRAIN
- EXISTING ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING WATER
- EXISTING GAS
- EXISTING FIBER OPTIC/CATV
- EXISTING TELEPHONE
- EXISTING SANITARY SEWER

ABBREVIATIONS:

CS	CARBON STEEL
CWTB	COMBINED WATER TREATMENT BUILDING
FT	FEET
GWE	GROUNDWATER EXTRACTION WELL
HP	HORSEPOWER
IN	INCH
MKC	MADISON-KIPP CORPORATION
NP	NORTH PLANT
POP	POLYPROPYLENE TUBING
PVC	POLYVINYL CHLORIDE
RO	REVERSE OSMOSIS
SCH	SCHEDULE
SP	SOUTH PLANT
SVE	SOIL VAPOR EXTRACTION
UF	ULTRAFILTRATION

GENERAL NOTES:

1. BASE MAP INFORMATION FROM NORTH SHORE ENGINEERING, DATED MAY 2014 AT A SCALE OF 1:1 (MODEL SCALE). ON 5/28/14. ADDITIONAL INFORMATION FROM BIRRENKOTT SURVEYING, INC., DATED DECEMBER 20, 2013 AT A SCALE OF 1:1 (MODEL SCALE) AND REPROJECTED FROM HORIZONTAL DATUM ASSUMED TO BE DANE COUNTY WISCONSIN DATUM, US FOOT.
2. PROPERTY LINES AND ADJACENT BUILDINGS OBTAINED FROM GIS DATA.
3. APPARENT HORIZONTAL COORDINATE SYSTEM IS NAD_1983_StatePlane_Wisconsin_South_FIPS_4803_Feet. APPARENT VERTICAL COORDINATE SYSTEM IS NAVD 88.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE PRESENCE AND LOCATION OF ALL EXISTING ABOVEGROUND AND UNDERGROUND SITE FEATURES (INCLUDING DRAINAGE PIPES AND STRUCTURES) IN THE VICINITY OF PROPOSED CONSTRUCTION ACTIVITIES PRIOR TO THE COMMENCEMENT OF WORK. THE LOCATION OF ALL EXISTING STRUCTURES/UTILITIES SHOWN ARE APPROXIMATE. ADDITIONAL SITE FEATURES MAY BE PRESENT WHICH ARE NOT SHOWN ON THE CONTRACT DRAWINGS.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF UNDERGROUND AND OVERHEAD UTILITIES DURING CONSTRUCTION.
6. THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE UTILITY COMPANIES FOR THE TEMPORARY REMOVAL, RELOCATION, AND REPLACEMENT OF ANY UTILITY POLES, GUY WIRES, UNDERGROUND UTILITIES, AND/OR OVERHEAD WIRES THAT ARE WITHIN OR IN THE VICINITY OF THE LIMITS OF CONSTRUCTION, OR THAT COULD OTHERWISE INTERFERE WITH CONSTRUCTION ACTIVITIES.
7. DIFFERENCES NOTED BY THE CONTRACTOR BETWEEN BASE MAP INFORMATION AND ACTUAL SITE CONDITIONS SHALL BE SUBMITTED TO THE FIELD ENGINEER IN WRITING.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING SURVEY CONTROL TO VERIFY EXISTING SITE GRADES AND CONDITIONS. THE OWNER WILL PROVIDE THE CONTRACTOR WITH SURVEY CONDITIONS AND COPIES OF ALL DRAWINGS IN ELECTRONIC FORMAT. THE CONTRACTOR WILL BE RESPONSIBLE FOR ACHIEVING AND VERIFYING DESIGN CONDITIONS IN THE FIELD.
9. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ESTABLISH AND MAINTAIN CONSTRUCTION SURVEY CONTROL DURING THE PERFORMANCE OF WORK.
10. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE ANY NECESSARY TRAFFIC CONTROLS. THE CONTRACTOR IS ALSO RESPONSIBLE FOR COORDINATION OF PEDESTRIAN CONTROLS.
11. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE THE NECESSARY PRECAUTION TO PREVENT DAMAGE, INJURY, OR LOSS TO, SITE WORKERS, CONSTRUCTION OVERSIGHT PERSONNEL, AND SITE VISITORS.
12. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE LAWS, ORDINANCES, RULES, REGULATIONS, AND ORDERS OF PUBLIC BODIES HAVING JURISDICTION FOR THE SAFETY OF PERSONS OR PROPERTY OR TO PROTECT THEM FROM DAMAGE, INJURY, OR LOSS, INCLUDING, WITHOUT LIMITATION, THE DEPARTMENT OF LABOR SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION PROMULGATED UNDER THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970 (PL 91-596) AND UNDER SECTION 107 OF THE CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (PL 91-54) AND AMENDMENTS THERETO. THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS SET FORTH UNDER 29 CFR 1910, AND 29 CFR 1926. THE CONTRACTOR SHALL COMPLY WITH NFPA STANDARD 70E. EARTHWORK, MECHANICAL, AND PLUMBING WORK MUST BE COMPLETED BY 40-HR HAZWOPER TRAINED EMPLOYEES. THE CONTRACTOR SHALL ERECT AND MAINTAIN, AS REQUIRED BY THE CONDITIONS AND THE PROGRESS OF THE WORK, ALL NECESSARY SAFEGUARDS FOR THE SAFETY AND PROTECTION OF PERSONS AND PROPERTY AND SHALL COMPLY WITH ALL APPLICABLE RECOMMENDATIONS OF THE MANUAL OF ACCIDENT PREVENTION IN CONSTRUCTION OF THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA INC.
13. THE CONTRACTOR SHALL FURNISH AND PLACE PROPER GUARDS FOR PREVENTION OF ACCIDENTS, PROVIDE ALL TRENCH SHORING, SCAFFOLDING, SHIELDING, DUST/FUME PROTECTION, MECHANICAL/ELECTRICAL PROTECTION, SPECIAL GROUNDING, SAFETY RAILINGS, BARRIERS, OR OTHER SAFETY FEATURES REQUIRED. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUFFICIENT LIGHT DURING NIGHT HOURS TO SECURE SUCH PROTECTION.
14. THE CONTRACTOR SHALL RESTORE TO PRECONSTRUCTION CONDITIONS ALL SITE AND NON-SITE AREAS THAT ARE DISTURBED BY CONSTRUCTION ACTIVITIES PER PROJECT SPECIFICATIONS.
15. THE CONTRACTOR SHALL CONTROL DUST AND VAPORS THAT RESULT FROM THE CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND CONTRACT SPECIFICATIONS AND APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.
16. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL ABOVEGROUND AND BELOW GROUND DEBRIS, BRUSH, LOGS, TREES, STUMPS, REFUSE, AND RUBBISH FROM WITHIN SITE WORK CLEARING LIMITS, AS REQUIRED TO PERFORM THE WORK.
17. CONTRACTOR SHALL PREPARE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). ALL STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES SHALL BE MANAGED IN ACCORDANCE WITH THE CONTRACT DRAWINGS AND CONTRACT SPECIFICATIONS.
18. THE CONTRACTOR IS ADVISED THAT SECTION 404 OF THE CLEAN WATER ACT (33 U.S.C. 1344) PROHIBITS THE DISCHARGE OF FILL MATERIALS INTO THE WATERS OF THE UNITED STATES. ALL SITE WORK ACTIVITIES TO BE PERFORMED IN A MANNER WHICH MEETS THE APPLICABLE SUBSTANTIVE REQUIREMENTS UNDER SECTION 404 OF THE CLEAN WATER ACT.
19. CONTRACTOR SHALL SUBMIT A GENERAL PERMIT AND NOTICE OF INTENT FOR STORMWATER MANAGEMENT DURING CONSTRUCTION.
20. ALL WORK SHALL BE LIMITED TO WITHIN THE DESIGNATED PROPERTY, RIGHT OF WAY, EASEMENT, OR PROJECT WORK LIMITS UNLESS OTHERWISE INDICATED ON THE CONTRACT DRAWINGS AND/OR CONTRACT SPECIFICATIONS.
21. PROVIDE RECORD DRAWINGS OF LOCATIONS OF ALL NEW ABOVE AND BELOW-GRADE ELEMENTS AND THEIR HORIZONTAL AND VERTICAL LOCATIONS.

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

No.	Date	Revisions	By	Ckd
1	08/08/14	ISSUED FOR CONSTRUCTION	VY	RR
0	07/07/14	60% DESIGN	VY	RR

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE.

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269

Date:	Date Signed:	Project Mgr.:
WI	8/8/14	JT
Designed by:	Drawn by:	Checked by:
SM	VY	RR

ARCADIS
ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GENERAL NOTES AND DRAWING LIST

GENERAL

ARCADIS Project No.: W0001366.0019
Date: AUGUST 06, 2014

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126 N. JEFFERSON ST.
SUITE 400
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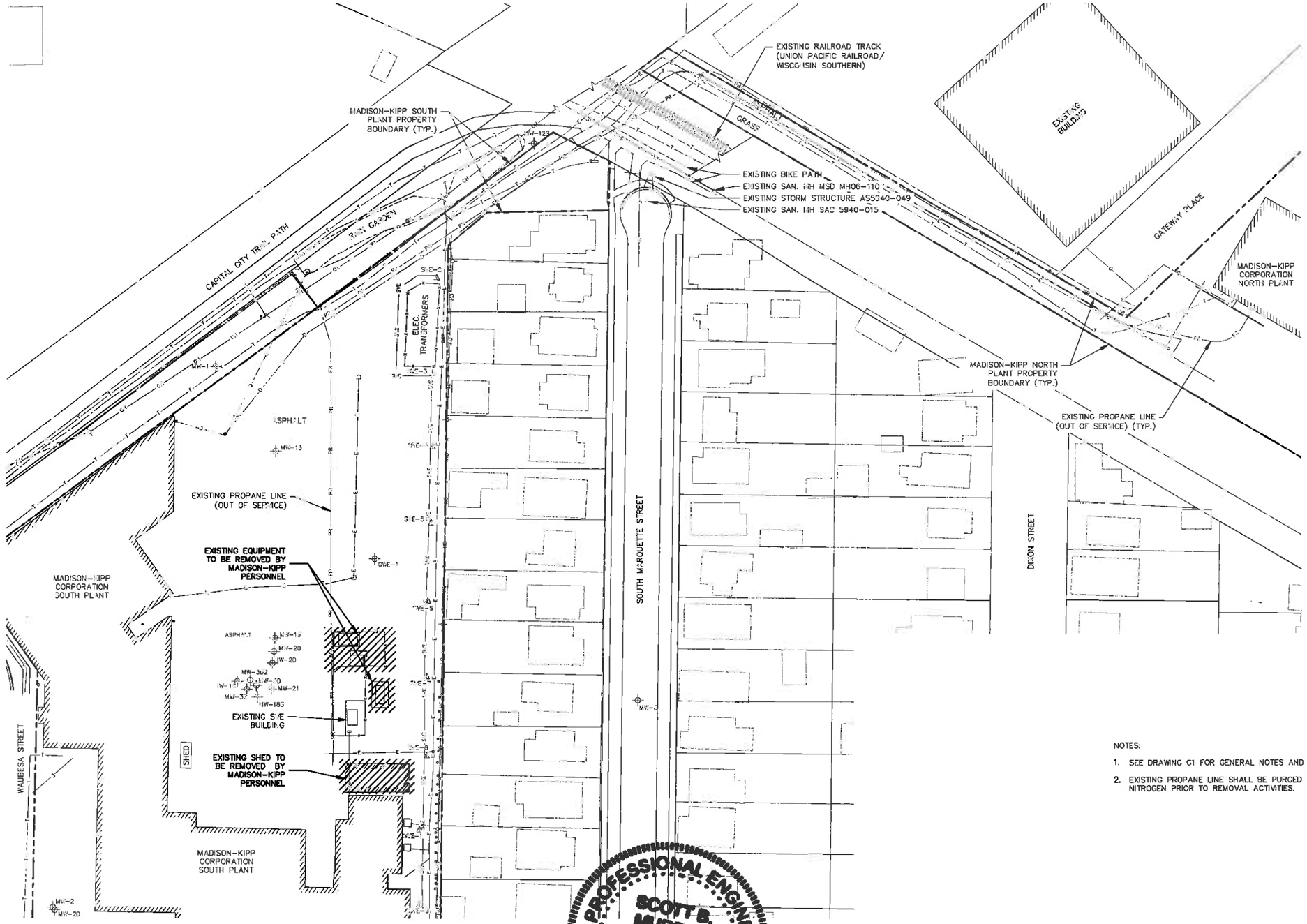
TEL. 414.276.7742

G1



LEGEND:

- EXISTING STRUCTURE OR EQUIPMENT TO BE REMOVED
- EXISTING MADISON-KIPP PROPERTY BOUNDARY
- EXISTING MONITORING WELL
- EXISTING SVE WELL
- EXISTING FENCE
- EXISTING PROPANE (OUT OF SERVICE)
- EXISTING STORM DRAIN
- EXISTING ELECTRIC
- EXISTING OVERHEAD ELECTRIC
- EXISTING WATER
- EXISTING GAS
- EXISTING FIBER OPTIC/CATV
- EXISTING TELEPHONE
- EXISTING SANITARY SEWER

NOTES:

1. SEE DRAWING G1 FOR GENERAL NOTES AND LEGEND.
2. EXISTING PROPANE LINE SHALL BE PURGED WITH NITROGEN PRIOR TO REMOVAL ACTIVITIES.

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36269 SUSSEX, WI. WISCONSIN

1"=40' (40' 0 40' 80')

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE.

No.	Date	Revisions	By	Ckd
1	08/07/14	ISSUED FOR CONSTRUCTION	VY	RR
0	07/30/14	60% DESIGN	VY	RR

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
State: WI | Date Signed: 8/8/14 | Project Mgr: JT
Designed by: SM | Drawn by: VY | Checked by: RR

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

EXISTING SITE PLAN

CIVIL

ARCADIS Project No.: WI001388.0019
Date: AUGUST 06, 2014
ARCADIS 126 N. JEFFERSON ST. SUITE 400 MILWAUKEE, WI 53202 TEL. 414.276.7742

C1

CITY:SYRACUSE-NY DIV/GROUP:ENV DB:S.MURPHY LD:S.MURPHY PIC: PLTD: TASK: R.ROBBENHOLT LYR:ON=*;OFF=*REF* G:\ENV\SYRACUSE\ACT WI001388.0190\0002\DWG\CONTRACT\1-SITE\WORK\WI1388X01.dwg LAYOUT: C1 SAVED: 8/7/2014 9:19 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: PLTCONT.CTB PLOTTED: 8/7/2014 9:32 AM BY: STEINBERGER, GEORGE
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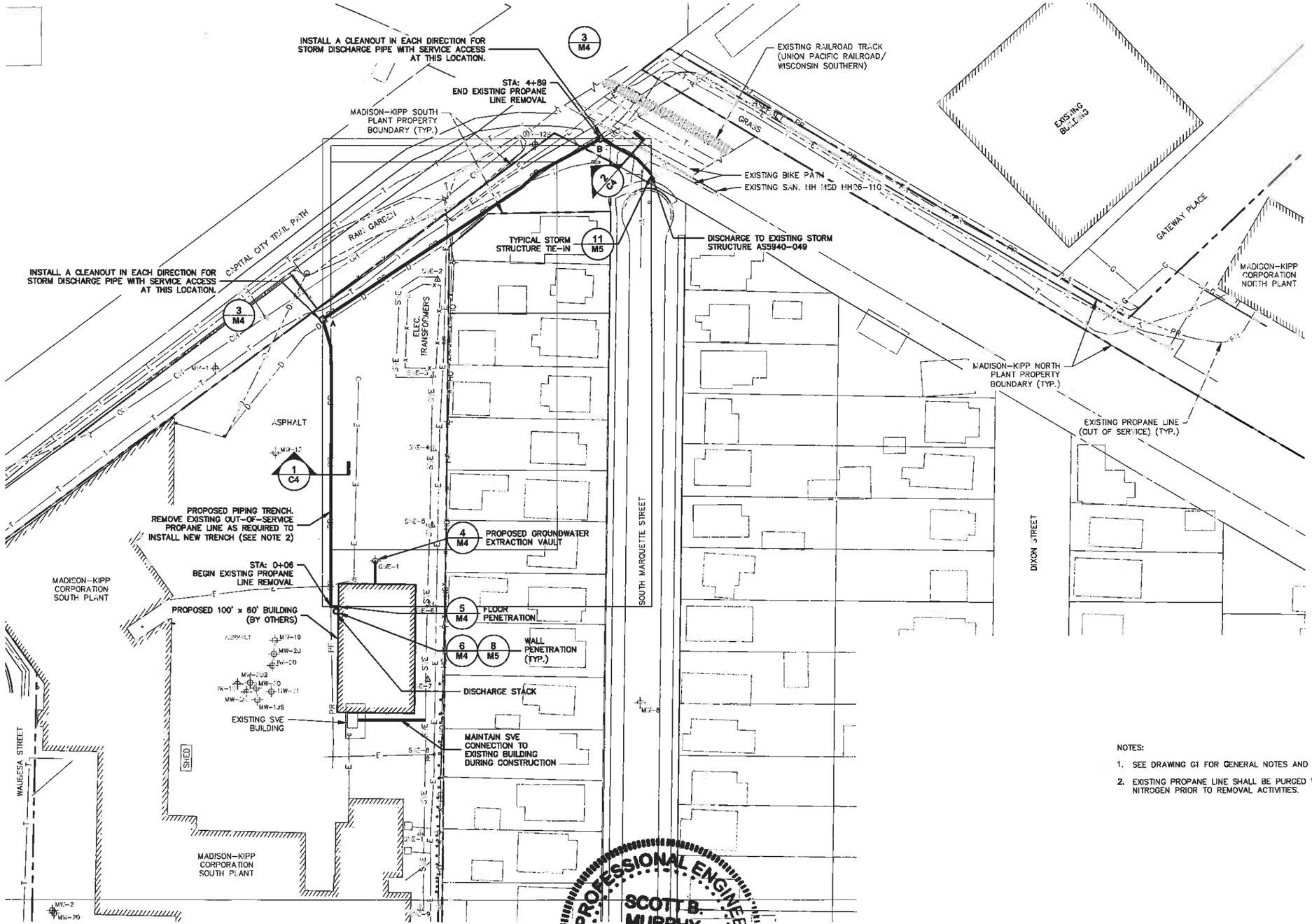
WI1388X01 WI1388X00



NOTES:

1. SEE DRAWING G1 FOR GENERAL NOTES AND LEGEND.
2. EXISTING PROPANE LINE SHALL BE PURGED WITH NITROGEN PRIOR TO REMOVAL ACTIVITIES.

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

1"=40' (40' 0 40' 80')

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name		
SCOTT MURPHY		
Professional Engineer's No.		
36269		
State	Date Signed	Project Mgr
WI	8/6/14	JT
Designed by	Drawn by	Checked by
SM	VY	RR

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

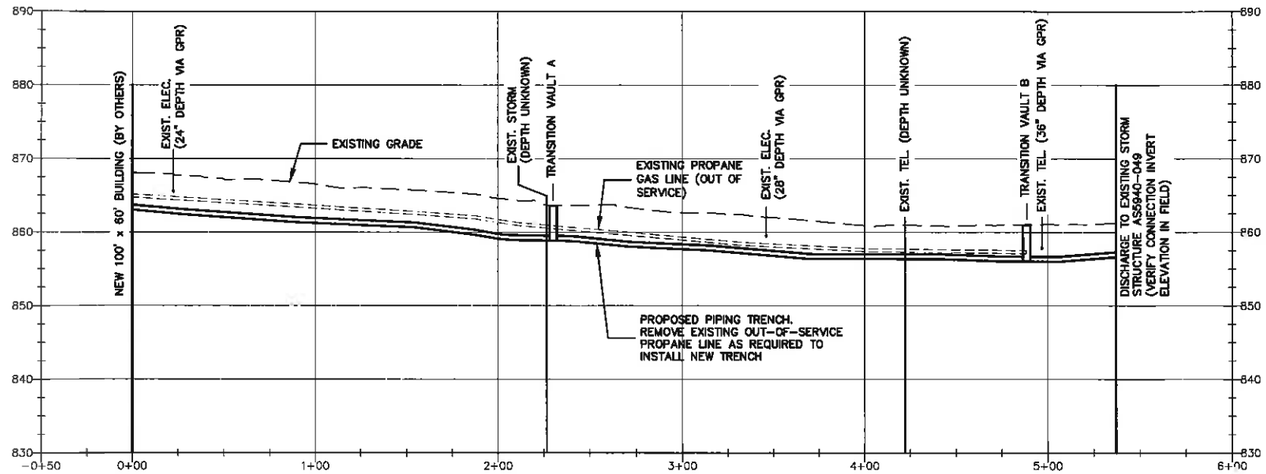
PROPOSED SITE PLAN

CIVIL

ARCADIS Project No.	WI001368.0019
Date	AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

C2



PROPOSED PIPING TRENCH PROFILE

0 40' 80'
HORIZONTAL SCALE: 1"=40'

0 10' 20'
VERTICAL SCALE: 1"=10'

NOTES:

1. PROPOSED CONVEYANCE AND DISCHARGE PIPE TO BE INSTALLED A MINIMUM OF 4' BELOW GROUND SURFACE.
2. GPR DEPTHS APPROXIMATE FROM 5/13/2014 SURVEY.

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

No.	Date	Revisions	By	Chkd
1	08/07/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/27/14	CMI DESIGN	VY	RR

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Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
State: WI | Date Signed: 8/8/14 | Project Mgr: JT
Designed by: SM | Drawn by: VY | Checked by: RR

ARCADIS
ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PROPOSED PIPING PROFILE

CIVIL

ARCADIS Project No.: WI001368.0019
Date: AUGUST 06, 2014
ARCADIS
120 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

C3

CITY: SYRACUSE-NY DIV/GROUP: ENV DB: S.MURPHY LD: S.MURPHY PIC: PMJ TR: SK TIR: R.ROBBENNOLT LYR:ON="0FF"="REF"
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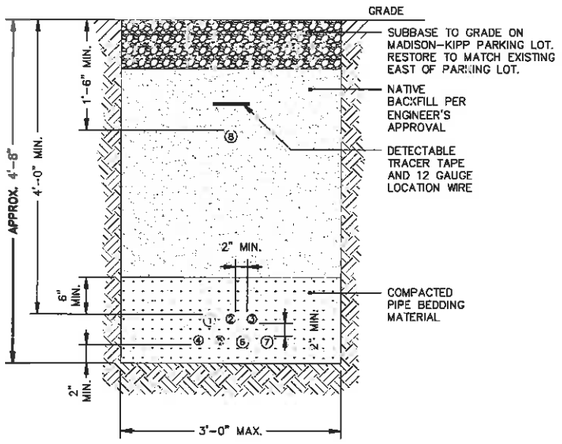
XREFS: WI1368X00 WI1368X01 IMAGES: PROJECTNAME: —

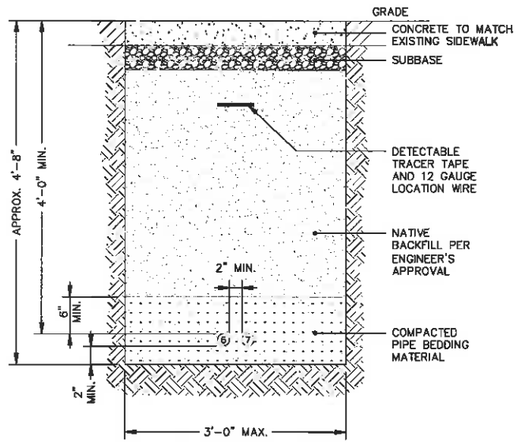


NOTE:

1. PROPER EXCAVATION MEANS SHALL BE USED FOR TRENCHING GREATER THAN 4'.

TRENCH CROSS-SECTION (1/C2)

SCALE: 1"=1'-0"



NOTE:

1. PROPER EXCAVATION MEANS SHALL BE USED FOR TRENCHING GREATER THAN 4'.

TRENCH CROSS-SECTION (2/C2)

SCALE: 1"=1'-0"

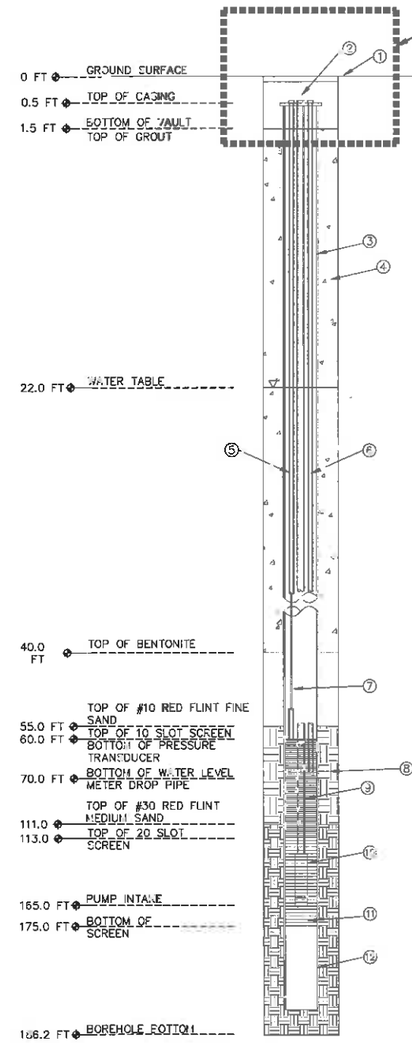
TRENCH CROSS-SECTION PIPING SCHEDULE			
PIPE ID	SIZE	MATERIAL	DESCRIPTION
1 (*)	2"	HDPE SDR-11	PROCESS COOLING TO NORTH PLANT
2 (*)	1 1/2"	HDPE SDR-11	PROCESS COOLING FROM NORTH PLANT
3 (*)	1 1/2"	HDPE SDR-11	DIELUBE TO NORTH PLANT
4 (*)	1 1/2"	HDPE SDR-11	DIELUBE FROM NORTH PLANT
5 (*)	1 1/2"	HDPE SDR-11	SPARE
6 (*)	2"	HDPE SDR-11	SANITARY DISCHARGE
7	2"	HDPE SDR-11	STORM DISCHARGE
8 (*)	1 1/4"	HDPE SDR-11 (**)	COMMUNICATION

(*) = PROVISIONAL LINE FOR FUTURE USE

(**) = HDPE FOR ELECTRICAL CONDUIT

NOTE:

1. PROVISIONAL LINES SHOULD BE CAPPED AT TRANSITION VAULT B FOR FUTURE USE.



EXISTING WELL COMPONENTS	
1	18 IN STEEL TRAFFIC RATED WELL COMPARTMENT
2	2 IN STEEL DROP PIPE FOR PUMP
3	8 IN SCH 80 PVC
4	14 IN BOREHOLE (0 – 55 FT)
5	3/4 IN DROP PIPE FOR PRESSURE TRANSDUCER
6	1 IN DROP PIPE FOR WATER LEVEL METER
7	PRESSURE TRANSDUCER AND CABLE
8	12 IN BOREHOLE (55 – 185 FT)
9	8 IN 10 SLOT STAINLESS STEEL SCREEN (60 – 113 FT)
10	4 IN DIAMETER 5HP SUBMERSIBLE PUMP WITH SHROUD (165 FT)
11	8 IN 20 SLOT STAINLESS STEEL SCREEN (113 – 175 FT)
12	8 IN SUMP SCH 80 PVC

NOTES:

1. CONTRACTOR TO REPLACE EXISTING WELL VAULT WITH VAULT DETAIL SHOWN ON DRAWING M4.
2. CONTRACTOR TO INSTALL TRANSDUCER.
3. EXISTING EXTRACTION WELL DETAIL PROVIDED FOR REFERENCE ONLY.

EXISTING EXTRACTION WELL DETAIL (3)

NOT TO SCALE

No.	Date	Revisions	By	Ckd
1	08/07/14	ISSUED FOR CONSTRUCTION	SM	RR
0	07/07/14	90% DESIGN	VY	RR

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36269 SUSSEX, WI. WISCONSIN

Date:	Date Checked:	Project Mgr.
WI	8/5/14	JT
Drawn by:	Drawn by:	Checked by:
SM	VY	RR

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

WELL DETAIL AND TRENCH SECTIONS

CIVIL

ARCADIS Project No.: W001368.0019
Date: AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

C4

GENERAL NOTES

SDR 11 HDPE PIPE AND POLYPROPYLENE TUBING:
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING, BUT NOT LIMITED TO, STANDARDS FOR SDR 11 HDPE PIPING:
1. ASTM D 2657, PRACTICE FOR HEAT FUSION JOINING OF POLYPROPYLENE PIPE AND FITTINGS.
2. ASTM D 2774, PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PRESSURE PIPING.
3. D338 - STANDARD TEST METHOD FOR TENSILE PROPERTIES OF PLASTICS
4. D696 - STANDARD TEST METHOD FOR COEFFICIENT OF LINEAR THERMAL EXPANSION OF PLASTICS BETWEEN -30°C AND 30°C WITH A VITREOUS SILICA DILATOMETER
5. D746 - STANDARD TEST METHOD FOR BRITTLENESS TEMPERATURE OF PLASTICS AND ELASTOMERS BY IMPACT
6. D790 - STANDARD TEST METHODS FOR FLEXURAL PROPERTIES OF UNREINFORCED AND REINFORCED PLASTICS AND ELECTRICAL INSULATING MATERIALS
7. D1238 - STANDARD TEST METHOD FOR MELT FLOW RATES OF THERMOPLASTICS BY EXTRUSION PLASTOMETER
8. D1248 - STANDARD SPECIFICATION FOR POLYETHYLENE PLASTICS EXTRUSION MATERIALS FOR WIRE AND CABLE
9. D1505 - STANDARD TEST METHOD FOR DENSITY OF PLASTICS BY THE DENSITY-GRADIENT TECHNIQUE
10. D1525 - STANDARD TEST METHOD FOR VICAT SOFTENING TEMPERATURE OF PLASTICS
11. D1598 - STANDARD TEST METHOD FOR TIME-TO-FAILURE OF PLASTIC PIPE UNDER CONSTANT INTERNAL PRESSURE
12. D1603 - STANDARD TEST METHOD FOR CARBON BLACK CONTENT IN OLEFIN PLASTICS
13. D1693 - STANDARD TEST METHOD FOR ENVIRONMENTAL STRESS-CRACKING OF ETHYLENE PLASTICS
14. D2240 - STANDARD TEST METHOD FOR RUBBER PROPERTY--DUROMETER HARDNESS
15. D2290 - STANDARD TEST METHOD FOR APPARENT HOOP TENSILE STRENGTH OF PLASTIC OR REINFORCED PLASTIC PIPE
16. D2412 - STANDARD TEST METHOD FOR DETERMINATION OF EXTERNAL LOADING CHARACTERISTICS OF PLASTIC PIPE BY PARALLEL-PLATE LOADING
17. D2837 - STANDARD TEST METHOD FOR OBTAINING HYDROSTATIC DESIGN BASIS FOR THERMOPLASTIC PIPE MATERIALS OR PRESSURE DESIGN BASIS FOR THERMOPLASTIC PIPE PRODUCTS
18. D3261 - STANDARD SPECIFICATION FOR BUTT HEAT FUSION POLYETHYLENE (PE) PLASTIC FITTINGS FOR POLYETHYLENE (PE) PLASTIC PIPE AND TUBING
19. D3350 - STANDARD SPECIFICATION FOR POLYETHYLENE PLASTICS PIPE AND FITTINGS MATERIALS
20. AWWA C901, POLYETHYLENE (PE) PRESSURE PIPE AND TUBING, ½-INCH THROUGH 3-INCH, FOR WATER SERVICE.
21. AWWA C906, POLYETHYLENE (PE) PRESSURE PIPE AND FITTINGS, 4-INCH THROUGH 63-INCH, FOR WATER DISTRIBUTION.

THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING FOR WELDING HDPE PIPING:
1. WELD IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATION FOR BUTT FUSION METHODS. PERSONNEL OPERATING FUSION EQUIPMENT SHALL BE CERTIFIED BY THE HDPE PIPE MANUFACTURER.
2. FOR CLEANING PIPE ENDS, SOLUTIONS SUCH AS DETERGENTS AND SOLVENTS, WHEN REQUIRED, SHALL BE USED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
3. DO NOT BEND PIPE TO GREATER DEGREE THAN MINIMUM RADIUS RECOMMENDED BY MANUFACTURER FOR TYPE AND GRADE.
4. DO NOT SUBJECT PIPE TO STRAINS THAT WILL OVERSTRESS OR BUCKLE PIPING OR IMPOSE EXCESSIVE STRESS ON JOINTS.
5. BRANCH SADDLE FUSIONS SHALL BE JOINED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND PROCEDURES. BRANCH SADDLE FUSION EQUIPMENT SHALL BE OF SIZE TO FACILITATE SADDLE FUSION WITHIN TRENCH.
6. BEFORE BUTT FUSING PIPE, INSPECT EACH LENGTH FOR PRESENCE OF DIRT, SAND, MUD, SHAVINGS, AND OTHER DEBRIS OR ANIMALS. REMOVE DEBRIS FROM PIPE.
7. COVER OPEN ENDS OF FUSED PIPE AT THE END OF EACH DAY'S WORK. CAP TO PREVENT ENTRY BY ANIMALS OR DEBRIS.

PVC PIPING
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING, BUT NOT LIMITED TO, STANDARDS FOR PVC:
1. ASTM D1784, SPECIFICATION FOR RIGID POLY (VINYL CHLORIDE) (PVC) COMPOUNDS AND CHLORINATED POLY (VINYL CHLORIDE) (CPVC) COMPOUNDS.
2. ASTM D1785, SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE, SCHEDULES 40, 80 AND 120.
3. ASTM D2464, SPECIFICATION FOR THREADED POLY (VINYL CHLORINATED) (PVC) PLASTIC PIPE FITTINGS, SCHEDULE 80.
4. ASTM D2466, SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE FITTINGS, SCHEDULE 40.
5. ASTM D2467, SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE FITTINGS, SCHEDULE 80.
6. ASTM D2564, SPECIFICATION FOR SOLVENT CEMENTS FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPING SYSTEMS.
7. ASTM D2665, SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS.
8. ASTM D3139, SPECIFICATION FOR JOINTS FOR PLASTIC PRESSURE PIPES USING FLEXIBLE ELASTOMERIC SEALS.
9. ASTM D3212, SPECIFICATION FOR JOINTS FOR DRAIN AND SEWER PLASTIC PIPES USING FLEXIBLE ELASTOMERIC SEALS.
10. ASTM F477, SPECIFICATION FOR ELASTOMERIC SEALS (GASKETS) FOR JOINING PLASTIC PIPE.
11. ASTM F656, SPECIFICATION FOR PRIMERS FOR USE IN SOLVENT CEMENT JOINTS OF POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE AND FITTINGS.
12. ASTM F1674, STANDARD TEST METHOD FOR JOINT RESTRAINT PRODUCTS FOR USE WITH PVC PIPE.
13. AWWA C900, POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FABRICATED FITTINGS, 4 IN.-12 IN. (100 MM-300 MM), FOR WATER TRANSMISSION AND DISTRIBUTION
14. AWWA C905, POLYVINYL CHLORIDE (PVC) PRESSURE PIPE AND FABRICATED FITTINGS, 14 IN.-48 IN. (350 MM-1,200 MM).
15. AWWA C907, INJECTION-MOLDED POLYVINYL CHLORIDE (PVC) PRESSURE FITTINGS, 4 IN. THROUGH 12 IN. (100 MM THROUGH 300 MM).
16. NSF 14, PLASTIC PIPING SYSTEMS COMPONENTS AND RELATED MATERIAL.

PVC CONNECTIONS:
1. CONNECTIONS AT PIPE JOINTS, AND FITTINGS ARE TO BE SOLVENT WELDED EXCEPT WHERE CONNECTING TO UNIONS, VALVES AND EQUIPMENT WITH THREADED OR FLANGED CONNECTIONS.
2. CONNECTIONS TO ALL EQUIPMENT ARE TO BE FLANGED. CONNECTIONS AT VALVES AND APPURTENANCES WITH A PIPE I.D. OF 3 INCHES OR LARGER ARE TO BE FLANGE TO FLANGE. FLANGES TO BE SOCKET-WELDED 150# FLANGES.
3. JOIN PVC FLANGES WITH FULL-FACE GASKETS, 1/8 INCH THICK. PROVIDE MACHINE MADE OR DIE STAMPED GASKETS WITH INSIDE AND OUTSIDE EDGES CONCENTRIC. OVERSIZE BOLT HOLES TO PREVENT CRIMPING OF GASKET WHEN INSTALLED. GASKET MATERIAL SHALL BE EPDM.
4. SOCKET CONNECTION SHALL BE JOINED WITH PVC SOLVENT CEMENT. MANUFACTURER AND VISCOSITY SHALL BE RECOMMENDED BY THE PIPE AND FITTING MANUFACTURER TO ASSUME COMPATIBILITY.

PIPE INSULATION
1. PROVIDE MANVILLE MICRO-LIK FIBERGLASS PLUS JACKET PIPE INSULATION ON ALL OUTDOOR ABOVE GROUND WATER PIPING. THICKNESS OF INSULATION SHALL BE ONE INCH.
2. PROVIDE ENGINEER APPROVED ALUMINUM JACKETING WITH FACTORY APPLIED VAPOR BARRIER. JACKETING SHALL BE ROUGH FINISH AND A MINIMUM OF 0.016" THICKNESS.

SCHEDULE 40 CARBON STEEL PIPE
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING, BUT NOT LIMITED TO, STANDARDS FOR CARBON STEEL PIPING:
1. ANSI/ASME B16.1, GRAY IRON PIPE FLANGES AND FLANGED FITTINGS: CLASSES 25, 125, AND 250.
2. ANSI/ASME B31.3, PROCESS PIPING.
3. ANSI/ASME BOILER AND PRESSURE VESSEL CODE.
4. ASTM A36/A36M, SPECIFICATION FOR CARBON STRUCTURAL STEEL.
5. ASTM A307, SPECIFICATION FOR CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH.
6. AWWA C200, STANDARD FOR STEEL WATER PIPE - 6 IN. (150 MM) AND LARGER.
7. AWWA MANUAL M11, STEEL WATER PIPE: A GUIDE FOR DESIGN AND INSTALLATION.
8. AWS B2.1, SPECIFICATION FOR WELDING PROCEDURE AND PERFORMANCE QUALIFICATION.
9. AWS D1.1/D1.1M, STRUCTURAL WELDING CODE - STEEL.
10. ASTM A53, CARBON STEEL PIPE.

PAINTING
ALL ABOVE GRADE PIPING SHALL BE PAINTED. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING, BUT NOT LIMITED TO, STANDARDS FOR PAINTING:
1. ANSI A13.1, SCHEME FOR IDENTIFICATION OF PIPING SYSTEMS.
2. ANSI Z535.1, SAFETY COLOR CODE.
3. ASTM D16, TERMINOLOGY FOR PAINT, RELATED COATINGS, MATERIALS AND APPLICATIONS.

PRODUCTS AND MANUFACTURERS: WHERE REFERENCED UNDER PAINTING SYSTEMS, PROVIDE PAINTING SYSTEMS MANUFACTURED BY THE FOLLOWING:
1. PAINT FOR PVC PIING SHALL BE KRYLON FUSION FOR PLASTIC.
2. PAINT FOR CARBON STEEL PIPING SHALL BE SHERWIN-WILLIAMS:
   a. PRIME COAT - RECOATABLE EPOXY PRIMER, B67 SERIES, B67V5 HARDNER
   b. FIRST COAT - HI-SOLIDS POLYURETHANE, B65-300 SERIES COLOR, B60V30 HARDNER
   c. SECOND COAT - HI-SOLIDS POLYURETHANE B65-300 SERIES COLOR, B60V30 HARDNER

COMPLY WITH MANUFACTURERS RECOMMENDATIONS ON SURFACE PREPARATION.

CONTRACTOR SHALL INCLUDE A PRIMER AND FINISH COAT PER MANUFACTURERS RECOMMENDATIONS.

COLOR CODING OF PIPELINES AND VALVES:
1. COLOR-CODING OF PIPELINES AND VALVES SHALL COMPLY WITH APPLICABLE STANDARDS OF ANSI A13.1, ANSI Z535.1, CFR 1910.144, RECOMMENDED STANDARDS FOR WATER WORKS, AND RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES. FOR PIPING AND EQUIPMENT NOT COVERED BY THE ABOVE STANDARDS, CONFORM TO OWNER'S COLOR STANDARDS.
2. ENGINEER RESERVES THE RIGHT TO SELECT NON-STANDARD COLORS FOR PAINT SYSTEMS SPECIFIED WITHIN ABILITY OF PAINT MANUFACTURER TO PRODUCE SUCH NON-STANDARD COLORS. PROVIDE SUCH COLORS AT NO ADDITIONAL EXPENSE TO OWNER.

BURIED PIPING
1. TRENCH DEPTH
   a. TRENCHES SHALL BE EXCAVATED TO THE DEPTH REQUIRED SO AS TO PROVIDE A UNIFORM AND CONTINUOUS BEARING AND SUPPORT FOR THE PIPE BARREL ON SOLID AND UNDISTURBED GROUND.
   b. TRENCHES SHALL BE EXCAVATED TO A SUFFICIENT DEPTH TO ALLOW THE PLACEMENT OF PIPE BEDDING MATERIAL UNDER ALL PIPES.
   c. ALL PIPING AND CONDUITS SHALL BURIED AT THE MINIMUM DEPTHS SHOWN ON THE CONTRACT DRAWINGS. BURIAL DEPTH SHALL BE MEASURED AS DEPTH BELOW GRADE TO THE TOP OF THE UPPERMOST PIPE OR CONDUIT IN THE TRENCH.
2. PIPE BEDDING
   a. A MINIMUM OF TWO INCHES OF PIPE BEDDING MATERIAL SHALL BE PLACED UNDER ALL PIPES.
   b. PIPE BEDDING MATERIAL PLACED BELOW STRUCTURES SHALL BE PLACED IN 8-INCH THICK (UNCOMPACTED) LIFTS AND COMPACTED TO 95 PERCENT OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY ACCORDING TO ASTM D698. PIPE BEDDING MATERIAL PLACED IN ALL OTHER AREAS SHALL BE PLACED IN 6-INCH THICK (UNCOMPACTED) LIFTS AND COMPACTED TO 92 PERCENT OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY ACCORDING TO ASTM D698. PIPE BEDDING MATERIAL SHALL BE MOISTENED OR AERATED AS NECESSARY TO OBTAIN THE REQUIRED COMPACTION.
   c. WHERE THE BOTTOM OF THE TRENCH AT SUBGRADE IS FOUND TO BE UNSTABLE OR TO INCLUDE REFUSE, VEGETABLE OR OTHER ORGANIC MATERIAL, OR LARGE PIECES OR FRAGMENTS OF INORGANIC MATERIAL THAT IN THE JUDGMENT OF ARCADIS SHOULD BE REMOVED, SUBCONTRACTOR SHALL EXCAVATE AND REMOVE SUCH UNSUITABLE MATERIAL TO THE WIDTH AND DEPTH ORDERED BY ARCADIS. BEFORE THE PIPE IS LAID, THE SUBGRADE SHALL BE MADE BY BACKFILLING WITH AN APPROVED MATERIAL IN 4-INCH LAYERS. THE LAYERS SHALL BE THOROUGHLY TAMPED AS DIRECTED SO AS TO PROVIDE A UNIFORM AND CONTINUOUS BEARING AND SUPPORT FOR THE PIPE AT EVERY POINT, WITH A MINIMUM COMPACTION OF 90 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557
3. BACKFILLING
   a. BACKFILL MATERIAL SHALL BE MOISTURE CONDITIONED, NATIVE MATERIAL, AND CONSIST OF SOIL FREE OF LUMPS AND ROCKS LARGER THAN 1 INCH AND FREE OF LOAM ORGANIC MATTER, CLAYS, ROCK AND GRAVEL LARGER THAN THREE INCHES IN ANY DIMENSION, DEBRIS, WASTE, FROZEN MATERIALS, ORGANIC MATERIAL, OTHER DELETERIOUS MATTER, AND FINE UNIFORM SANDS THAT MAY BE DIFFICULT TO COMPACT. SNOW, ICE, AND FROZEN SOIL WILL NOT BE PERMITTED. ANY PART OF THE BOTTOM OF THE TRENCH EXCAVATED BELOW THE SPECIFIED GRADE SHALL BE REFILLED WITH APPROVED MATERIALS AND THOROUGHLY COMPACTED.
   b. GENERAL FILL SHALL HAVE A LIQUID LIMIT NOT GREATER THAN 45, AND PLASTICITY INDEX NOT GREATER THAN 25.
   c. GENERAL FILL PLACED AT DEPTHS LESS THAN 5 FEET BGS SHALL BE COMPACTED TO 92 PERCENT OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY ACCORDING TO ASTM D698. GENERAL FILL PLACED AT DEPTHS GREATER THAN 5 FEET BGS SHALL BE COMPACTED TO 92 PERCENT OF THE MAXIMUM STANDARD PROCTOR DRY DENSITY ACCORDING TO ASTM D698. GENERAL FILL SHALL BE MOISTENED OR AERATED AS NECESSARY TO OBTAIN THE REQUIRED COMPACTION.
   d. THE COMPACTED SURFACE SHALL BE SMOOTH AND FREE OF ANY LOOSE STONES, PROTRUSIONS, AND OTHER SHARP OBJECTS OR FOREIGN MATTER.
   e. TRENCH BACKFILL TESTING SHALL BE CONDUCTED A MINIMUM OF ONE EVERY 250 FEET. ADDITIONAL TESTS MAY BE REQUESTED AT THE DISCRETION OF THE ENGINEER. TESTS SHALL BE CERTIFIED BY A REGISTERED WISCONSIN CIVIL OR GEOTECHNICAL ENGINEER OR TESTING LABORATORY IN ACCORDANCE WITH THE STATE OF WISCONSIN TEST REQUIREMENTS.
   f. ALL SURFACE MATERIALS THAT, IN THE OPINION OF ARCADIS, ARE SUITABLE FOR REUSE IN RESTORING THE SURFACE SHALL BE KEPT SEPARATE FROM THE GENERAL EXCAVATION MATERIAL, AS DIRECTED BY ARCADIS.
   g. BACKFILL MATERIAL SHALL BE PLACED AND COMPACTED IN MAXIMUM OF 12-INCH LIFTS.
4. TRACER TAPE
   a. DETECTABLE UNDERGROUND WARNING TAPE FOR NON-METALLIC PIPELINES:
      a.a. PROVIDE TRACER TAPE AS SPECIFIED HEREIN.
      a.b. PROVIDE MAGNETIC TRACER TAPE 12 TO 18 INCHES BELOW FINISHED GRADE, ABOVE AND PARALLEL TO BURIED PIPE.
      a.c. TAPE SHALL BE SPREAD FLAT WITH MESSAGE SIDE UP BEFORE BACKFILLING.

PIPE TESTING
1. PROVIDE A HYDROTEST OF THE SYSTEM WATER AND VAPOR PIPING. ISOLATE ANY EQUIPMENT (E.G. PUMPS, FLOW METERS, ETC.) THAT MAY BE DAMAGED BY THE TEST. THE PIPING SYSTEM MAY BE TESTED IN SECTIONS WITH THE APPROVAL FROM THE ENGINEER. HYDROTESTS WILL LAST FOR A MINIMUM OF 1 HOUR OR AS MUCH TIME AS REQUIRED TO PROPERLY INSPECT ALL JOINTS AND CONNECTIONS. HYDROTEST ACCEPTANCE SHALL BE +/- 5 PERCENT OF THE PRESSURE RATING. DEVIATIONS REGARDING THE TEST PRESSURE AND TIMES SHALL REQUIRE APPROVAL BY THE ENGINEER.
2. IF TESTS INDICATE WORK DOES NOT MEET SPECIFIED REQUIREMENTS, REMOVE WORK, REPLACE AND RETEST AT NO ADDITIONAL COST TO THE OWNER OR ENGINEER.

VALVES
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING, BUT NOT LIMITED TO, STANDARDS FOR VALVES:
1. ANSI B16.1, CAST-IRON PIPE FLANGES AND FLANGED FITTINGS.
2. ANSI B16.34, VALVES-FLANGED, THREADED AND WELDING END. (ASME B16.34).
3. API STD 594, CHECK VALVES, FLANGED LUG, WAFER AND BUTT-WELDING.
4. API STD 598, VALVE INSPECTION AND TESTING.
5. API STD 609, BUTTERFLY VALVES: DOUBLE FLANGED, LUG-TYPE AND WAFER-TYPE.
6. ASTM A126, SPECIFICATION FOR GRAY IRON CASTINGS FOR VALVES, FLANGES AND PIPE FITTINGS.
7. ASTM A193/A193M, SPECIFICATION FOR ALLOY-STEEL AND STAINLESS STEEL BOLTING MATERIALS FOR HIGH-TEMPERATURE SERVICE.
8. ASTM A194/A194M, SPECIFICATION FOR CARBON AND ALLOY STEEL NUTS FOR BOLTS FOR HIGH PRESSURE AND HIGH TEMPERATURE SERVICE, OR BOTH.
9. ASTM A276, SPECIFICATION FOR STAINLESS STEEL BARS AND SHAPES.
10. ASTM A307, SPECIFICATION FOR CARBON STEEL BOLTS AND STUDS, 60,000 PSI TENSILE STRENGTH.
11. ASTM D1784, SPECIFICATION FOR RIGID POLY (VINYL CHLORIDE) (PVC) COMPOUNDS AND CHLORINATED POLY (VINYL CHLORIDE) (CPVC) COMPOUNDS.
12. ASTM D1785, SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE, SCHEDULES 40, 80 AND 120.
13. ASTM D2464, SPECIFICATION FOR THREADED POLY (VINYL CHLORINATED) (PVC) PLASTIC PIPE FITTINGS, SCHEDULE 80.
14. ASTM D2467, SPECIFICATION FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE FITTINGS, SCHEDULE 80.
15. ASTM D2513, SPECIFICATION FOR THERMOPLASTIC GAS PRESSURE PIPE, TUBING, AND FITTINGS.
16. ASTM D2564, SPECIFICATION FOR SOLVENT CEMENTS FOR POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPING SYSTEMS.
17. ASTM F656, SPECIFICATION FOR PRIMERS FOR USE IN SOLVENT CEMENT JOINTS OF POLY (VINYL CHLORIDE) (PVC) PLASTIC PIPE AND FITTINGS.
18. ASTM A743/A743 M, SPECIFICATION FOR CASTINGS, IRON-CHROMIUM, IRON-CHROMIUM-NICKEL, CORROSION RESISTANT, FOR GENERAL APPLICATION.
19. AWWA C504, RUBBER-SEATED BUTTERFLY VALVES.
20. AWWA C507, BALL VALVES, 6-INCH THROUGH 48-INCH.
21. AWWA C508, SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2-INCH THROUGH 24-INCH NPS.
22. ANSI/AWWA C512, AIR RELEASE, AIR VACUUM AND COMBINATION AIR VALVES FOR WATERWORKS SERVICE

EQUIPMENT
1. BLOWERS SHALL BE INSTALLED AND TESTED PER THE MANUFACTURERS RECOMMENDATIONS.
2. PUMPS SHALL BE INSTALLED AND TESTED PER THE MANUFACTURERS RECOMMENDATIONS.
3. THE CONTRACTOR SHALL COMPLY WITH THE BILL OF MATERIALS FOR ALL EQUIPMENT.
4. THE CONTRACTOR SHALL OBTAIN ENGINEER'S APPROVAL PRIOR TO EQUIPMENT AND TANK PROCUREMENT.

CHEMICAL STORAGE TANKS
THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING, BUT NOT LIMITED TO, STANDARDS FOR POLYETHYLENE CHEMICAL STORAGE TANKS:
1. ASTM D638, STANDARD TEST METHOD FOR TENSILE PROPERTIES OF PLASTICS.
2. ASTM D1248, STANDARD SPECIFICATION FOR POLYETHYLENE PLASTICS EXTRUSION.
3. ASTM D1693, STANDARD TEST METHOD FOR ENVIRONMENTAL STRESS-CRACKING OF THEYLENE PLASTICS.
4. ASTM D1998, STANDARD SPECIFICATION FOR POLYETHYLENE UPRIGHT STORAGE TANKS.
5. ASTM D2837, TEST METHOD FOR OBTAINING HYDROSTATIC DESIGN BASIS FOR THERMOPLASTIC PIPE MATERIALS OR PRESSURE DESIGN BASIS FOR THERMOPLASTIC PIPE PRODUCTS

TANK NOZZLES SHALL BE THREADED. CONTRACTOR SHALL CONFIRM LOCATION, SIZE AND NUMBER OF NOZZLES WITH ENGINEER PRIOR TO MANUFACTURING TANKS.

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE

Professional Engineer Name	SCOTT MURPHY
Professional Engineer No.	36260
State	WI
Date Signed	8/6/14
Project Mgr.	JT
Designed by	SM
Drawn by	VY
Checked by	RR

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36260 SUSSEX, WI. WISCONSIN

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

MECHANICAL GENERAL NOTES

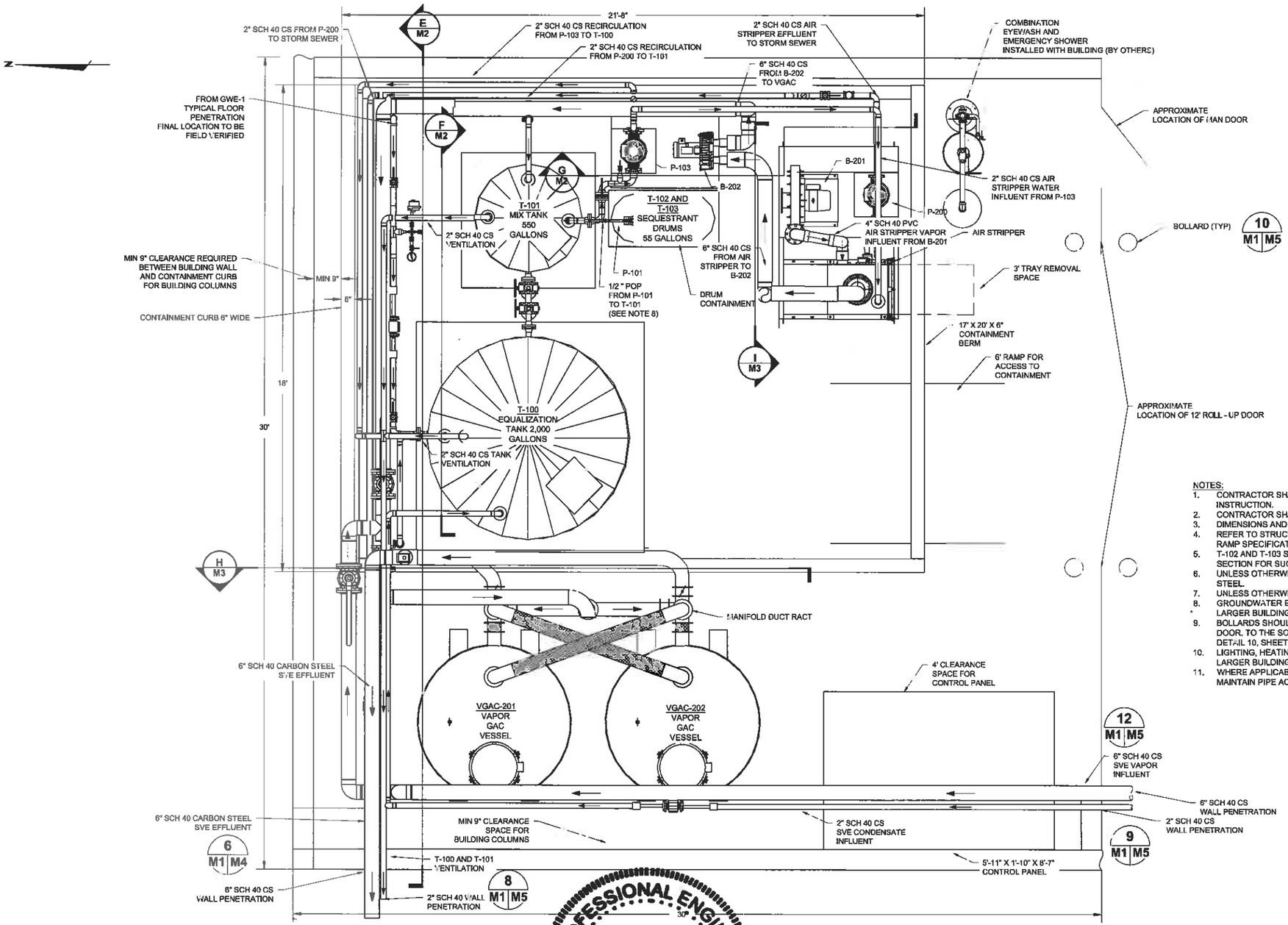
MECHANICAL

ARCADIS Project No.
WI001368.0019

Date
AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

M0



NOTES:
1. CONTRACTOR SHALL INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTION.
2. CONTRACTOR SHALL INSTALL EQUIPMENT IN AN ACCESSIBLE MANNER.
3. DIMENSIONS AND ELEVATIONS ARE APPROXIMATE.
4. REFER TO STRUCTURAL BUILDING DESIGN FOR CONTAINMENT BERM AND RAMP SPECIFICATIONS.
5. T-102 AND T-103 SHOULD BE FITTED WITH A FOOT VALVE AND PVC PIPE SECTION FOR SUCTION OF SEQUESTRANT LIQUID
6. UNLESS OTHERWISE SPECIFIED, PIPE MATERIAL IS SCHEDULE 40 CARBON STEEL.
7. UNLESS OTHERWISE SPECIFIED, VALVE MATERIAL IS CARBON STEEL.
8. GROUNDWATER EXTRACTION AND TREATMENT SYSTEM IS PART OF A LARGER BUILDING.
9. BOLLARDS SHOULD BE PLACED BOTH INSIDE AND OUTSIDE OF ROLL-UP DOOR. TO THE SOUTH OF THE GETS ROOM ON THE WEST WALL. SEE DETAIL 10, SHEET M5.
10. LIGHTING, HEATING AND VENTILATION ARE INCLUDED AS PART OF THE LARGER BUILDING DESIGN (BY OTHERS).
11. WHERE APPLICABLE, UNIONS AND REDUCERS SHALL BE INSTALLED TO MAINTAIN PIPE ACCESS TO 10 FOOT SECTIONS.

CITY:MILWAUKEE DIV/GROUP: ENV DB: V.YATES LD: S. MURPHY PIC: PHIL TRASK TM: R. ROBBENNOLT LYR:ON=*;OFF=*REF*
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No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/08/14	60% DESIGN	VY	RR

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USE TO VERIFY FIGURE REPRODUCTION SCALE

0 2' 4' 8'
1/2"=1'

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
State: WI
Date Signed: 8/7/14
Designed by: VY
Drawn by: VY
Checked by: RR
Project Mgr.:

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36269 SUSSEX, WI. WISCONSIN

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

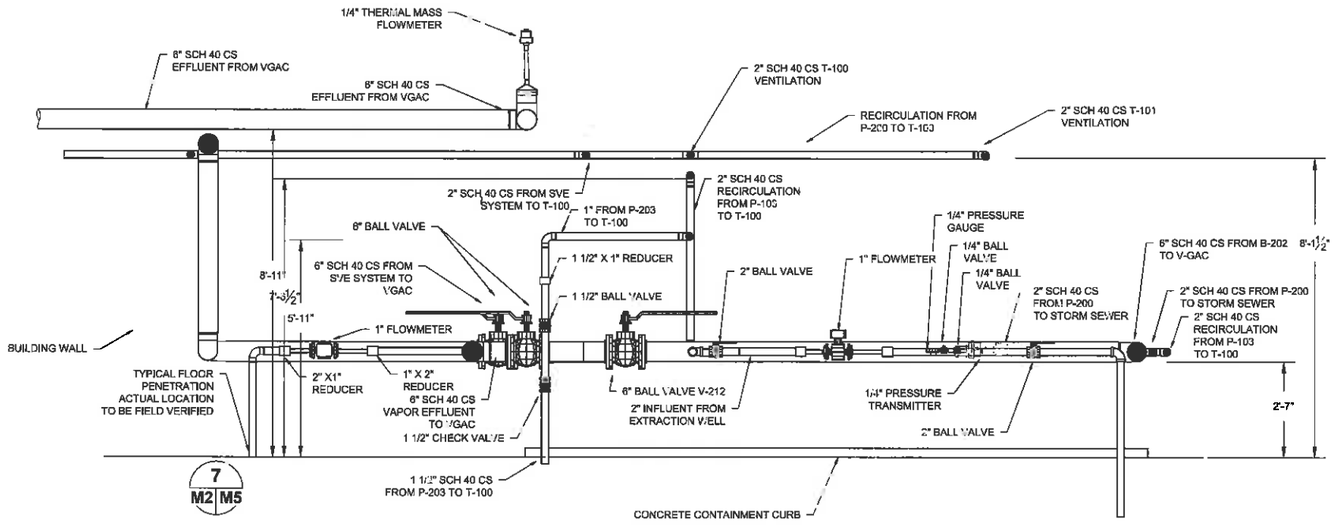
GROUNDWATER EXTRACTION AND TREATMENT BUILDING DETAIL (SHEET 1 OF 3)

CIVIL

ARCADIS Project No.: WI001368.0019
Date: AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

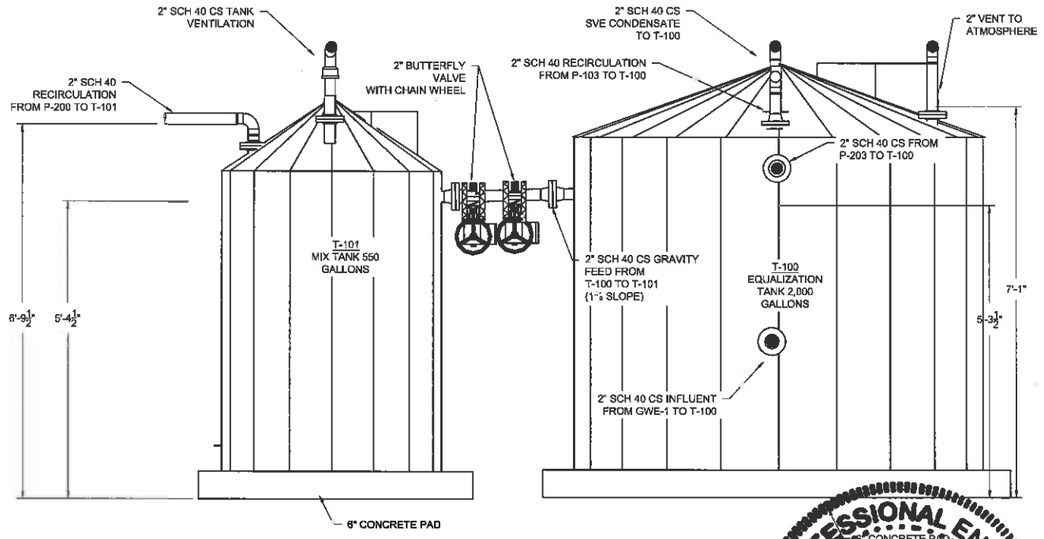
M1



PIPE SUPPORT DETAIL (NORTH WALL)

SCALE: 1/2" = 1'-0"

E
M1



T-100 AND T-101 CONNECTION

SCALE: 3/4" = 1'-0"

F
M1

NOTES:

1. CONTRACTOR SHALL INSTALL EQUIPMENT PER MANUFACTURERS INSTRUCTION.
2. CONTRACTOR SHALL INSTALL EQUIPMENT IN AN ACCESSIBLE MANNER.
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7. UNLESS OTHERWISE SPECIFIED, VALVE MATERIAL IS CARBON STEEL.
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9. BOLLARDS SHOULD BE PLACED BOTH INSIDE AND OUTSIDE OF ROLL-UP DOOR. TO THE SOUTH OF THE GETS ROOM ON THE WEST WALL. SEE DETAIL 9, SHEET M5.
10. LIGHTING, HEATING AND VENTILATION ARE INCLUDED AS PART OF THE LARGER BUILDING DESIGN (BY OTHERS).
11. WHERE APPLICABLE, UNIONS AND REDUCERS SHALL BE INSTALLED TO MAINTAIN PIPE ACCESS TO 10 FOOT SECTIONS.

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

No.	Date	Revisions	By	Ckd
1	09/08/14	ISSUED FOR CONSTRUCTION	VY	RR
0	08/08/14	60% DESIGN	VY	RR

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
Date Signed: 9-8-14
Designed by: VY
Drawn by: VY
Checked by: RR

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ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

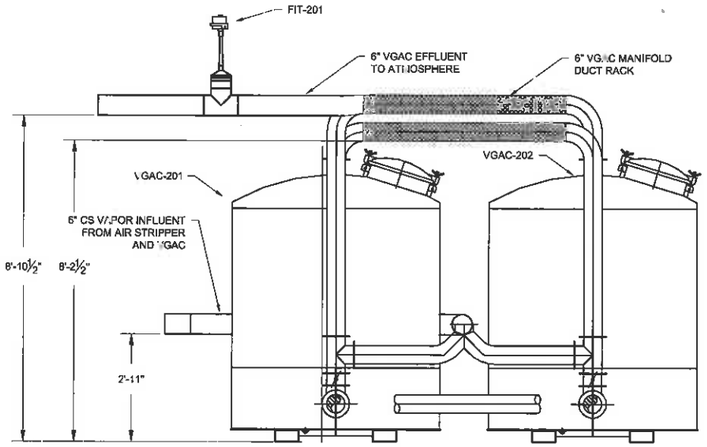
GROUNDWATER EXTRACTION AND TREATMENT BUILDING DETAIL (SHEET 2 OF 3)

CIVIL

ARCADIS Project No.: WI001366.0019
Date: AUGUST 08, 2014

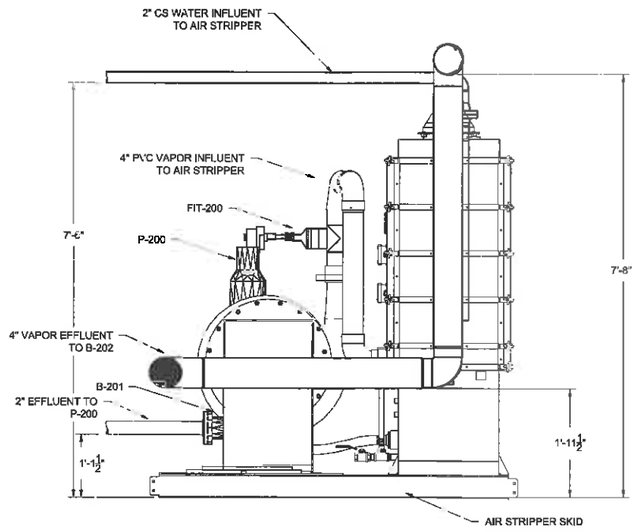
ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

M2



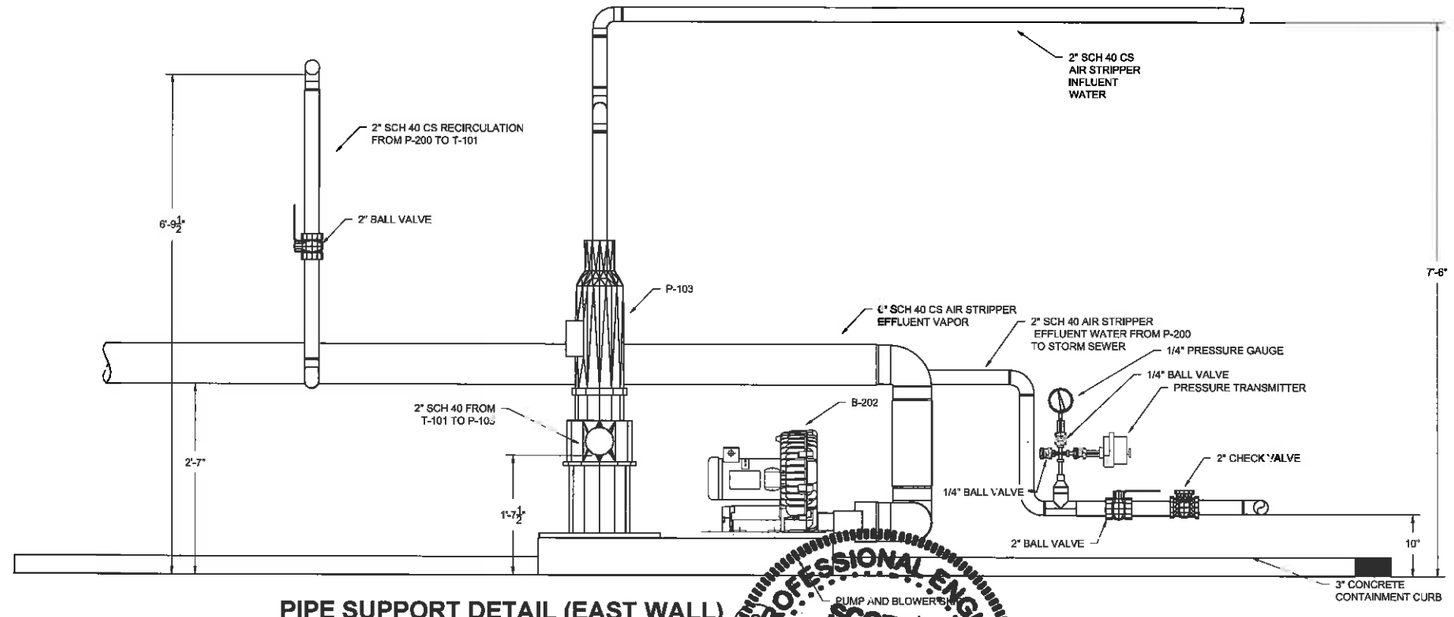
GAC DETAIL (H / M1)

SCALE: 1/2" = 1'-0"



AIR STRIPPER DETAIL (1 / M1)

SCALE: 3/4" = 1'-0"



PIPE SUPPORT DETAIL (EAST WALL)

SCALE: 1/2" = 1'-0"

NOTES:

1. CONTRACTOR SHALL INSTALL EQUIPMENT PER MANUFACTURERS INSTRUCTION.
2. CONTRACTOR SHALL INSTALL EQUIPMENT IN AN ACCESSIBLE MANNER.
3. DIMENSIONS AND ELEVATIONS ARE APPROXIMATE.
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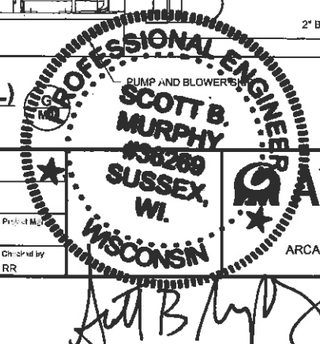
6. UNLESS OTHERWISE SPECIFIED, PIPE MATERIAL IS SCHEDULE 40 CARBON STEEL.
7. UNLESS OTHERWISE SPECIFIED, VALVE MATERIAL IS CARBON STEEL.
8. GROUNDWATER EXTRACTION AND TREATMENT SYSTEM IS PART OF A LARGER BUILDING.
9. BOLLARDS SHOULD BE PLACED BOTH INSIDE AND OUTSIDE OF ROLL-UP DOOR. TO THE SOUTH OF THE GETS ROOM ON THE WEST WALL. SEE DETAIL 9, SHEET M5.
10. LIGHTING, HEATING AND VENTILATION ARE INCLUDED AS PART OF THE LARGER BUILDING DESIGN (BY OTHERS).
11. WHERE APPLICABLE, UNIONS AND REDUCERS SHALL BE INSTALLED TO MAINTAIN PIPE ACCESS TO 10 FOOT SECTIONS.

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	MY	RR
0	03/06/14	60% DESIGN	MY	RR

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING

USE TO VERIFY FIGURE REPRODUCTION SCALE

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
Drawn by: WI | Date Signed: 8/8/14 | Project Mgr:
Designed by | Drawn by: MY | Checked by: RR



ARCADIS
ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT BUILDING DETAIL (SHEET 3 OF 3)

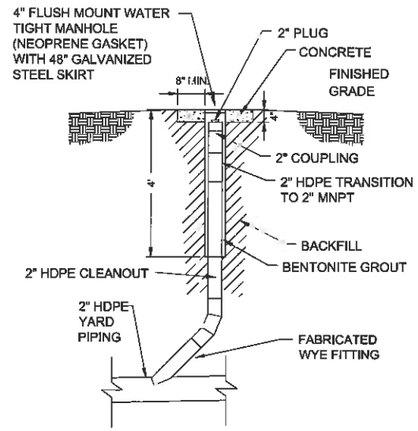
CIVIL

ARCADIS Project No.: 60136.0019
Date: AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

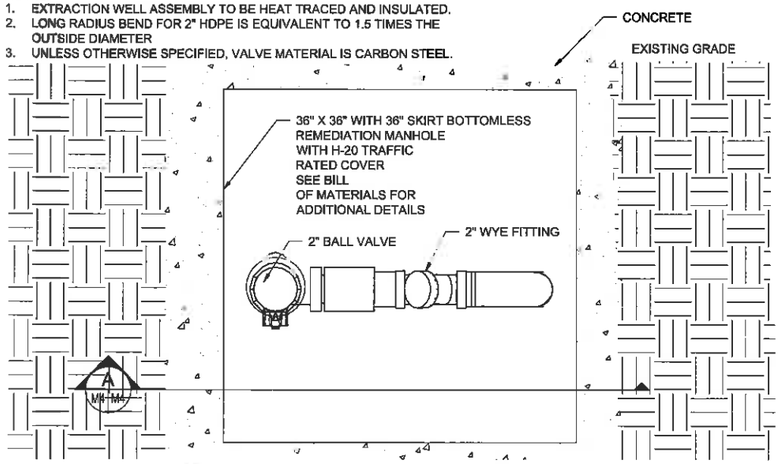
M3

NOTES:
1. PIPE ALIGNMENT TO BE DETERMINED IN THE FIELD

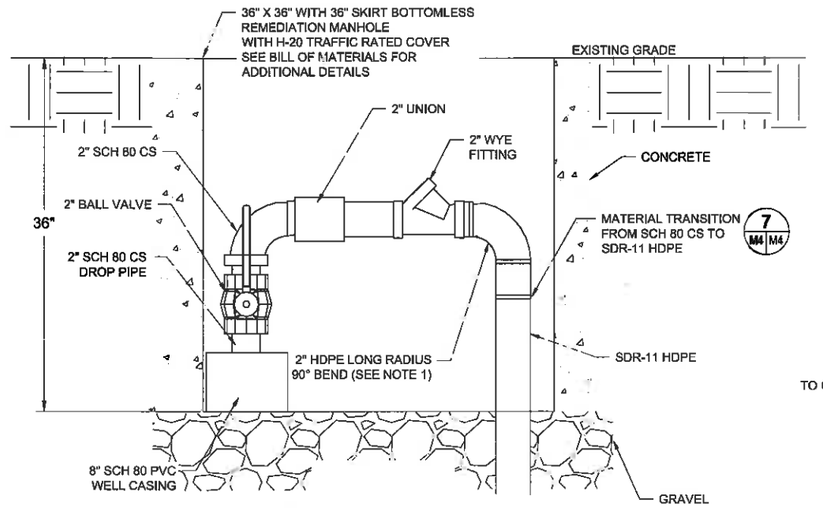


3 CLEANOUT DETAIL (TYP)
C2 M4 NOT TO SCALE

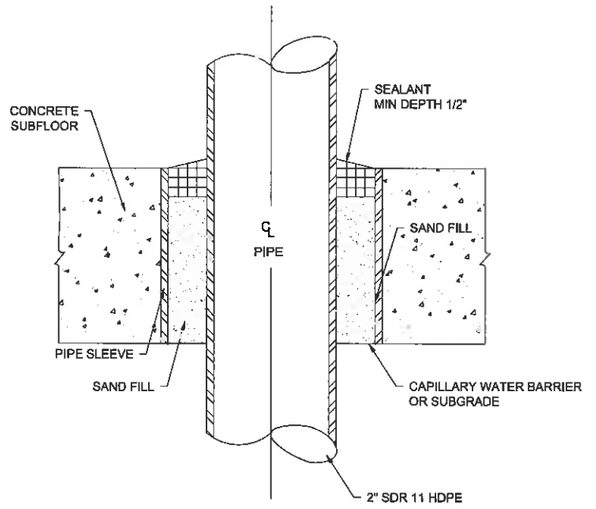
NOTES:
1. EXTRACTION WELL ASSEMBLY TO BE HEAT TRACED AND INSULATED.
2. LONG RADIUS BEND FOR 2" HDPE IS EQUIVALENT TO 1.5 TIMES THE OUTSIDE DIAMETER
3. UNLESS OTHERWISE SPECIFIED, VALVE MATERIAL IS CARBON STEEL.



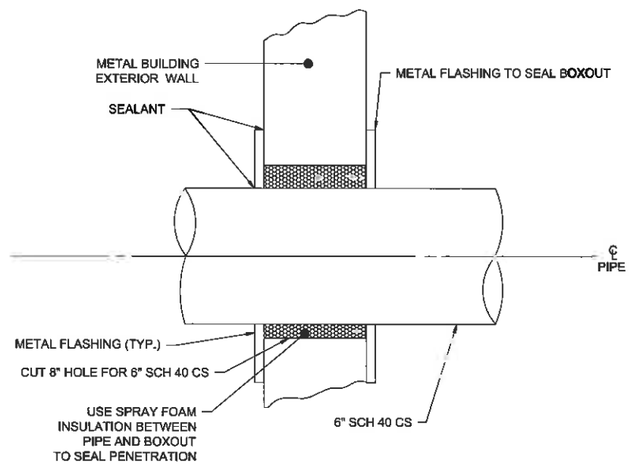
4 EXTRACTION WELL VAULT
C2 M4 NOT TO SCALE



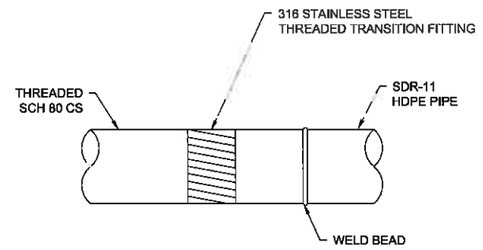
A EXTRACTION WELL VAULT SECTION
M4 M4 NOT TO SCALE



5 FLOOR PENETRATION
M1 M4 NOT TO SCALE



6 EXTERIOR WALL PENETRATION
M1 M4 NOT TO SCALE



7 THREADED PIPE MATERIAL TRANSITION
M4 M4 NOT TO SCALE

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36269 SUSSEX, WI. WISCONSIN

SCALE(S) AS INDICATED

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No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	90% DESIGN	VY	RR

Professional Engineer's Name	SCOTT MURPHY
Professional Engineer's No.	36269
State	WI
Date Signed	08/06/14
Project Mgr.	JT
Designed by	SM
Drawn by	VY
Checked by	RR

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

MISCELLANEOUS DETAILS

MECHANICAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

M4

CITY:MILWAUKEE DIV/GROUP:ENV DB:V.YATES LD:S.MURPHY PIC: PM:J. TRASK TM:R. ROBBENHOLT LYR:ON=*;OFF=*REF*
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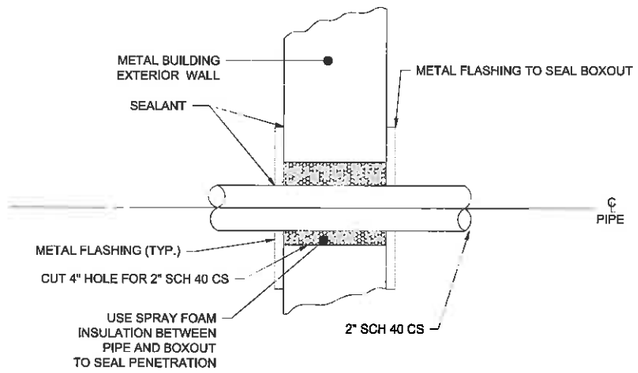
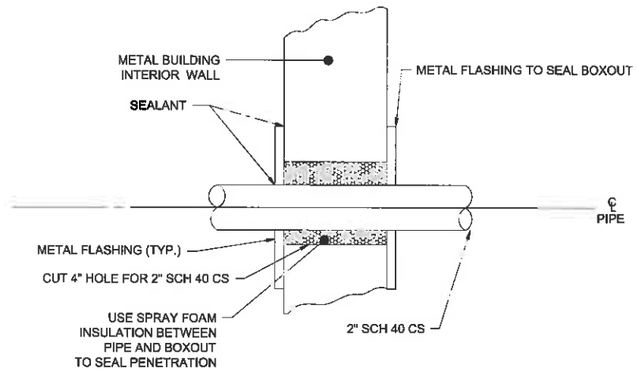
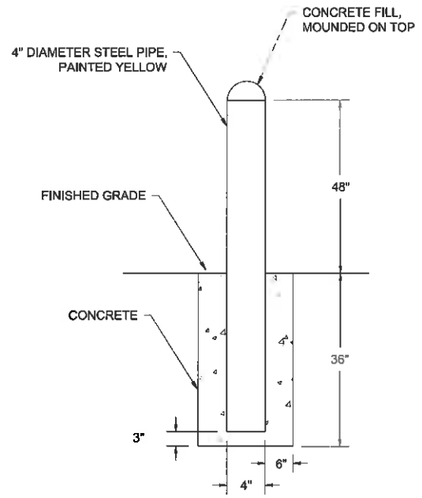


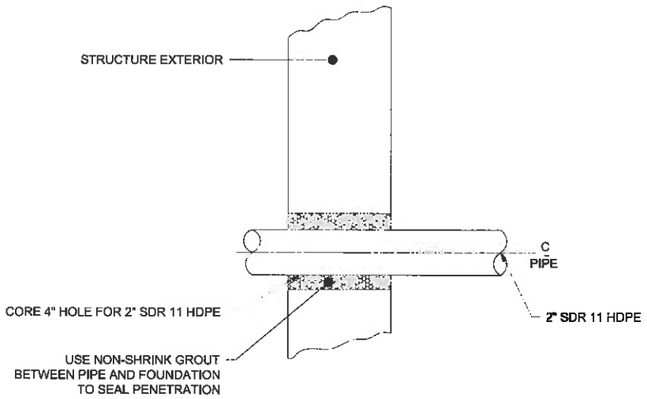
8 C2 M5 | 8 M1 M5 **2" EXTERIOR WALL PENETRATION**
NOT TO SCALE



9 M2 M5 | 9 M1 M5 **2" INTERIOR WALL PENETRATION**
NOT TO SCALE

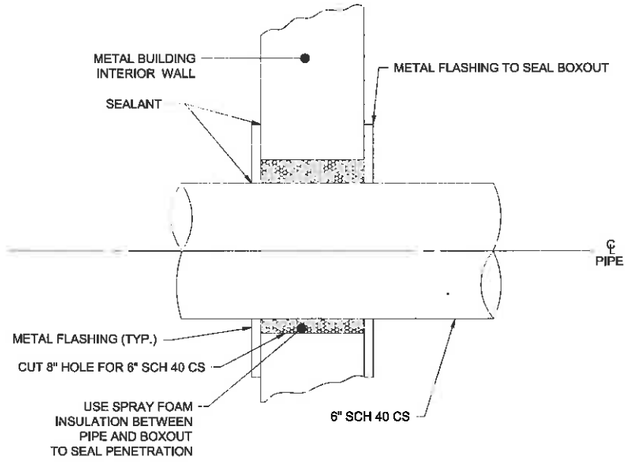


10 M1 M5 **BOLLARD DETAIL**
NOT TO SCALE



NOTES:
1. INVERT ELEVATIONS TO BE FINALIZED WITH DISCHARGE PIPE DESIGN IN ACCORDANCE WITH NR 811 STANDARDS.

11 M1 M5 **TYPICAL STORM STRUCTURE TIE-IN**
NOT TO SCALE



12 M1 M5 **6" INTERIOR WALL PENETRATION**
NOT TO SCALE

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

No.	Date	Revisions	By	Chkd
1	06/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	08/06/14	90% DESIGN	VY	RR

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SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE

Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
State: WI
Date Signed: 8/6/14
Designed by: SM
Drawn by: VY
Checked: RR
Project Mgr.: JW

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

MISCELLANEOUS DETAILS

MECHANICAL

ARCADIS Project No.: WI001388.0019
Date: AUGUST 06, 2014

ARCADIS
128 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL: 414.276.7742

M5

CITY:MILWAUKEE DIV\GROUP: ENV DB: V.YATES LD: S. MURPHY PIC: PM:J. TRASK TM: R. ROBBENNOLT LYR:ON=*;OFF=*REF*
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GENERAL

1. QUALITY OF CONSTRUCTION REQUIRED, PERFORMANCE LEVELS OF WORKMANSHIP, MANUFACTURING AND INDUSTRY STANDARDS, STRENGTH AND PHYSICAL REQUIREMENTS OF MATERIALS, CONFORMANCE TO CODES AND REGULATIONS, GUARANTEES AND OTHER PROJECT REQUIREMENTS ARE SPECIFIED IN THE PROJECT MANUAL.

2. IF MATERIALS, QUANTITIES, STRENGTHS OR SIZES INDICATED BY THE DRAWINGS OR SPECIFICATIONS ARE NOT IN AGREEMENT WITH THESE NOTES, THE BETTER QUALITY AND/OR GREATER QUANTITY, STRENGTH OR SIZE INDICATED, SPECIFIED, OR NOTED SHALL BE PROVIDED.

3. PERFORM ALL WORK IN COORDINATION WITH ALL DRAWINGS AND INFORMATION RELATED TO STRUCTURAL WORK. ANY CHANGES TO THE EQUIPMENT REQUIRING CHANGES TO THE STRUCTURAL SYSTEMS SHALL BE REDESIGNED BY A PROFESSIONAL ENGINEER AT NO COST TO THE OWNER AND SUBMITTED TO THE ENGINEER. SUBMITTAL SHALL BE ACKNOWLEDGED IN WRITING BEFORE BEGINNING CONSTRUCTION.

4. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS OR TIE-DOWNS MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER COMPLETION OF THE PROJECT.

5. FACILITIES HAVE BEEN DESIGNED FOR DESIGN LOADS SHOWN OR SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FACILITIES SUBJECT TO CONSTRUCTION LOADS EXCEEDING THE DESIGN LOADS AND SHALL NOTIFY THE ENGINEER OF ANY SUCH ADDITIONAL LOADS.

6. ALL DIMENSIONS AND ELEVATIONS NOTED THUS (*) ON STRUCTURES SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD OR WITH THE EQUIPMENT MANUFACTURER AND SHALL CONFORM TO THOSE SHOWN ON OTHER DRAWINGS.

7. COORDINATE WITH EQUIPMENT SUPPLIER PRIOR TO PLACING EQUIPMENT PADS. COORDINATE ALL PIPING OPENINGS.

8. NO STRUCTURAL MEMBERS SHALL BE CUT FOR PIPES, DUCTS, ETC. UNLESS SPECIFICALLY DETAILED OR APPROVED IN WRITING BY THE ENGINEER.

9. ENGINEER OF RECORD FOR STRUCTURAL DESIGN WILL REVIEW AND APPROVE ALL CONSTRUCTION SUBMITTALS FOR STRUCTURAL WORK PRIOR TO ORDERING MATERIALS OR BEGINNING CONSTRUCTION OF THOSE COMPONENTS. SUBMITTALS REQUIRED FOR THE FOLLOWING: ANCHOR BOLTS, AND STRUCTURAL STEEL DETAILING.

10. DESIGN LOADS: BASED ON INTERNATIONAL BUILDING CODE 2009. SEE DESIGN INFORMATION TABLE ON THIS SHEET FOR LOAD VALUES.

11. VERIFY EXISTING CONDITIONS AND DIMENSIONS AND NOTIFY ENGINEER OF ANY CONDITIONS WHICH DO NOT COMPLY WITH PLANS AND SPECIFICATIONS. STRUCTURAL DRAWINGS MUST BE COORDINATED WITH CIVIL DRAWINGS.

12. SHOP DRAWINGS WILL NOT BE REVIEWED BY THE DESIGNER UNTIL AFTER THE GENERAL CONTRACTOR HAS THOROUGHLY REVIEWED THE SHOP DRAWINGS, VERIFIED EXISTING CONDITIONS, AND COORDINATED THE SHOP DRAWINGS WITH OTHER AFFECTED TRADES. SUBMIT FOUR COPIES OF REVIEWED DRAWINGS FOR ENGINEER'S REVIEW. ONLY THREE SETS OF MARKED UP SHOP DRAWINGS SHALL BE RETURNED BY THE DESIGNER. REPRODUCTION OF STRUCTURAL DRAWINGS FOR SHOP DRAWINGS IS NOT PERMITTED.

13. DO NOT SCALE STRUCTURAL DRAWINGS, AND FOR LOCATION OF MISCELLANEOUS ITEMS (OPENINGS, BENT PLATES, INSERTS, ETC.) AFFECTING STRUCTURAL WORK, SEE CIVIL, MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS.

DESIGN AND CODE INFORMATION

1. ALL CONSTRUCTION SHALL CONFORM TO THE WISCONSIN BUILDING CODE, INTERNATIONAL BUILDING CODE (2009 EDITION), ASCE 7-05.

2. LIVE LOADS: N/A

3. WIND LOADS:
   MINIMUM INTERNAL PRESSURE: 10 PSF

4. SEISMIC LOADS:
   SEISMIC IMPORTANCE FACTOR: 1.0
   SEISMIC OCCUPANCY CATEGORY: II
   SPECTRAL RESPONSE ACCELERATIONS: S_S = 0.105, S_1 = 0.044
   SITE CLASS: D
   SPECTRAL RESPONSE COEFFICIENTS: S_{DS} = 0.122, S_{D1} = 0.070
   SEISMIC DESIGN CATEGORY: A
   ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE

5. SNOW LOADS:
   N/A

6. FLOOD LOADS:
   N/A

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC "SPECIFICATIONS FOR DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" 13TH EDITION.

2. WELDED CONNECTIONS SHALL CONFORM TO THE LATEST REVISED CODE THE AMERICAN WELDING SOCIETY, AWS D1.

3. BOLTS AND BOLTED CONNECTIONS SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS" AS APPROVED BY THE COUNCIL ON RIVETED AND BOLTED JOINTS.

4. ALL STRUCTURAL STEEL WORK SHALL CONFORM TO THE AISC "MANUAL OF STEEL CONSTRUCTION ALLOWABLE STRESS DESIGN" THIRTEENTH EDITION.

5. USE DIRECT TENSION INDICATORS AND HARDENED WASHERS WITH ALL HIGH STRENGTH BOLTS OR USE LOAD INDICATOR BOLTS.

6. ANCHOR BOLTS SHALL BE ASTM F1554 HEADED BOLTS. MINIMUM ANCHOR BOLT EMBEDMENT SHALL BE 12 BOLT DIAMETERS UNLESS NOTED OTHERWISE. CLEAN ANCHOR BOLTS OF ALL GREASE, DIRT, ETC., BEFORE INSTALLATION.

7. GALVANIZE ALL STRUCTURAL STEEL TO ASTM A123.

8. STRUCTURAL STEEL WIDE FLANGES SHALL BE ASTM A-992 GRADE 50 UNLESS NOTED OTHERWISE. STRUCTURAL STEEL (EXCEPT WIDE FLANGES) SHALL BE ASTM A-36.

9. STRUCTURAL TUBING SHALL BE ASTM A500, GRADE B.

10. STRUCTURAL PIPE SHALL BE ASTM A53, GRADE B.

11. STEEL FRAMING CONNECTIONS SHALL BE BOLTED OR WELDED. BOLTS SHALL BE 3/4 INCH DIAMETER MINIMUM AND SHALL BE ASTM A-325-N, UNLESS NOTED OTHERWISE.

12. THE FABRICATOR'S DRAWINGS SHALL SHOW WELDS AND THEY SHALL CONFORM TO AWS DI:I SPECIFICATIONS. ALL WELDING SHALL BE DONE WITH E-70 SERIES ELECTRODES.

13. COLD GALVANIZING COMPOUND SHALL BE ZRC PRODUCTS COMPANY, OR AS APPROVED.

14. HARDENED WASHERS SHALL BE INSTALLED OVER SHORT SLOTTED OR OVERSIZED HOLES OCCURRING IN AN OUTER PLY OF A CONNECTION.

15. NON-SHRINK LEVELING GROUT: PRE-MIXED NON-SHRINK GROUT COMPOUND CONSISTING OF NON-METALLIC AGGREGATE, CEMENT, WATER-REDUCING AND PLASTICIZING AGENTS; CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 5,000 psi IN 28 DAYS.

    MANUFACTURERS:
    1. EUCLID CHEMICAL COMPANY, NS GROUT.
    2. OR AS APPROVED.

16. ADHESIVE ANCHORS:

    MANUFACTURERS:
    1. HILTI CORPORATION, HIT-RE 500 SD.
    2. OR AS APPROVED.

    A. INJECTABLE TWO-COMPONENT EPOXY ADHESIVE.
    B. THREADED ROD TO BE ASTM F593, CW STAINLESS.
    C. ADHESIVE ANCHORAGE SYSTEM SHALL BE SEISMIC QUALIFIED PER IBC 2009 WITH CURRENT ICC-ES ESR REPORT.
    D. ADHESIVE ANCHORAGE SYSTEM SHALL MEET REQUIREMENTS OF ASTM C881-90, TYPE N, GRADE 2 AND 3, CLASS A, B, C EXCEPT GEL TIMES.
    E. INSTALLERS TO BE TRAINED BY ANCHOR MANUFACTURER.
    F. 10% OF ALL ADHESIVE ANCHORS TO BE LOAD TESTED, AS INSTALLED IN FIELD, TO ENSURE ALLOWABLE MANUFACTURER LOADS ARE ACHIEVED.

CONTRACTOR SHALL PERFORM THE FOLLOWING:

1. SUBMIT CERTIFICATION THAT THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM REQUIRED WORK WITHOUT SPECIAL INSPECTIONS.

2. IF FABRICATOR IS NOT APPROVED, SPECIAL INSPECTION OF THE FABRICATED ITEMS SHALL BE REQUIRED. SPECIAL INSPECTOR SHALL VERIFY THAT THE FABRICATOR MAINTAINS DETAILED FABRICATION AND QUALITY CONTROL PROCEDURES THAT PROVIDE A BASIS FOR INSPECTION CONTROL OF THE WORKMANSHIP AND THE FABRICATOR'S ABILITY TO CONFORM TO APPROVED CONSTRUCTION DOCUMENTS AND REFERENCED STANDARDS. SPECIAL INSPECTOR SHALL REVIEW THE PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE CODE REQUIREMENTS FOR THE FABRICATOR'S SCOPE OF WORK.

3. CONTRACTOR TO COORDINATE BUILDING DEPARTMENT INSPECTIONS AND SPECIAL INSPECTIONS.

4. SUBMIT CERTIFIED MILL TEST REPORTS FOR STRUCTURAL STEEL.

5. SUBMIT MANUFACTURER'S CERTIFICATE OF COMPLIANCE FOR HIGH-STRENGTH BOLTING AND WELD FILLER MATERIALS.

6. SUBMIT SHOP DRAWINGS FOR STRUCTURAL STEEL MEMBERS AND UNDERCUT ANCHORS.

STRUCTURAL QUALITY ASSURANCE PLAN (SEISMIC & WIND)

GENERAL:

THIS STRUCTURAL QUALITY ASSURANCE PLAN IDENTIFIES THE RESPONSIBILITIES OF THE CONTRACTOR AND THE SPECIAL INSPECTOR IN PERFORMING THE TESTING AND INSPECTION OF THE WORK REQUIRED BY CHAPTER 17 OF THE BUILDING CODE THAT IS WITHIN THE SCOPE OF THE STRUCTURAL ENGINEERING SERVICES FOR THIS PROJECT. REFER TO OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS FOR TESTING AND INSPECTIONS REQUIRED OF MECHANICAL, ELECTRICAL, CIVIL, OR OTHER BUILDING COMPONENTS.

SPECIAL INSPECTOR'S RESPONSIBILITIES:

THE SPECIAL INSPECTOR SHALL BE QUALIFIED TO PERFORM APPROPRIATE DUTIES AND HAVE A THOROUGH UNDERSTANDING OF THE SPECIAL INSPECTION REQUIREMENTS OF THE 2009 IBC. THE SPECIAL INSPECTOR SHALL BE AN INDIVIDUAL OR INDIVIDUALS CERTIFIED OR EXPERIENCED TO PERFORM SUCH INSPECTIONS IN A PARTICULAR FIELD.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL INSPECTIONS AND FURNISH REPORTS TO THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. PERIODIC REPORTS SHALL BE PROVIDED AND SHALL INDICATE THAT WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED TO THE SATISFACTION OF THE SPECIAL INSPECTOR, THE DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE.

A WEEKLY REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED. AT THE COMPLETION OF THE SPECIAL INSPECTIONS, THE INSPECTOR SHALL CERTIFY THE FINAL SPECIAL INSPECTION REPORT. PROVIDE COPIES OF THIS REPORT TO THE STRUCTURAL ENGINEER OF RECORD.

ABBREVIATIONS

BOT	BOTTOM
B/W	BETWEEN
C/C	CENTER TO CENTER
DIA OR Ø	DIAMETER
EL	ELEVATION
EW	EACH WAY
EXST	EXISTING
FDN	FOUNDATION
FTG	FOOTING
GALV	GALVANIZED
MFG	MANUFACTURER
O/O	OUTSIDE TO OUTSIDE
PEMB	PRE-ENGINEERED BUILDING MANUFACTURER
SOG	SLAB-ON-GRADE
SHT	SHEET
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UOS	UNLESS OTHERWISE SHOWN
W/	WITH

SPECIAL INSPECTOR SHALL PERFORM THE FOLLOWING:

TABLE 1704.3 REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION				
VERIFICATION AND INSPECTION	C	P	REFERENCE	IBC REFERENCE
1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:				
A. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.		X	ASTM MATERIAL SPECS; AISC 360, SECTION A3.3	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.		X		
2. INSPECTION OF HIGH-STRENGTH BOLTING:				
A. SNUG TIGHT JOINTS..		X	AISC 360, SECTION M2.5	1704.3.3
3. MATERIAL VERIFICATION OF STRUCTURAL STEEL AND COLD FORMED STEEL DECK:				
A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360.		X	AISC 360, SECTION M5.5	
B. FOR OTHER STEEL, IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.		X	APPLICABLE ASTM STANDARDS	
C. MANUFACTURER'S CERTIFICATE OF COMPLIANCE RECORD.		X		
4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS.				
A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.		X	AISC 360, SECTION A3.5 AND APPLICABLE AWS A5 DOCUMENTS	
B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE RECORD.		X		
5. INSPECTION OF WELDING:				
A. STRUCTURAL STEEL:				
1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	X		AWS D1.1	1704.3.1
2) MULTIPLE FILLET WELDS.	X			
3) SINGLE-PASS FILLET WELDS > 5/16"	X			
4) PLUG AND SLOT WELDS.	X			
5) SINGLE-PASS FILLET WELDS ≤ 5/16"		X		
6) FLOOR AND DECK ROOF WELDS.		X		
6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE:				
A. DETAILS SUCH AS BRACING AND STIFFENING.		X		1704.3.2
B. MEMBER LOCATIONS.		X		
C. APPLICATION OF JOINT DETAILS AT EACH CONNECTIONS.		X		

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name: **RON KOLODZAIKE**
Professional Engineer's No.: **E-43570-6**

State	Date Signed	Project Mgr.
WI	8/6/14	JT
Designed by	Drawn by	Checked by
RK	VY	RR

REGISTERED PROFESSIONAL ENGINEER RONALD A. KOLODZAIKE E-43570-6 TOLEDO, OH

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION ● MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

STRUCTURAL NOTES

STRUCTURAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
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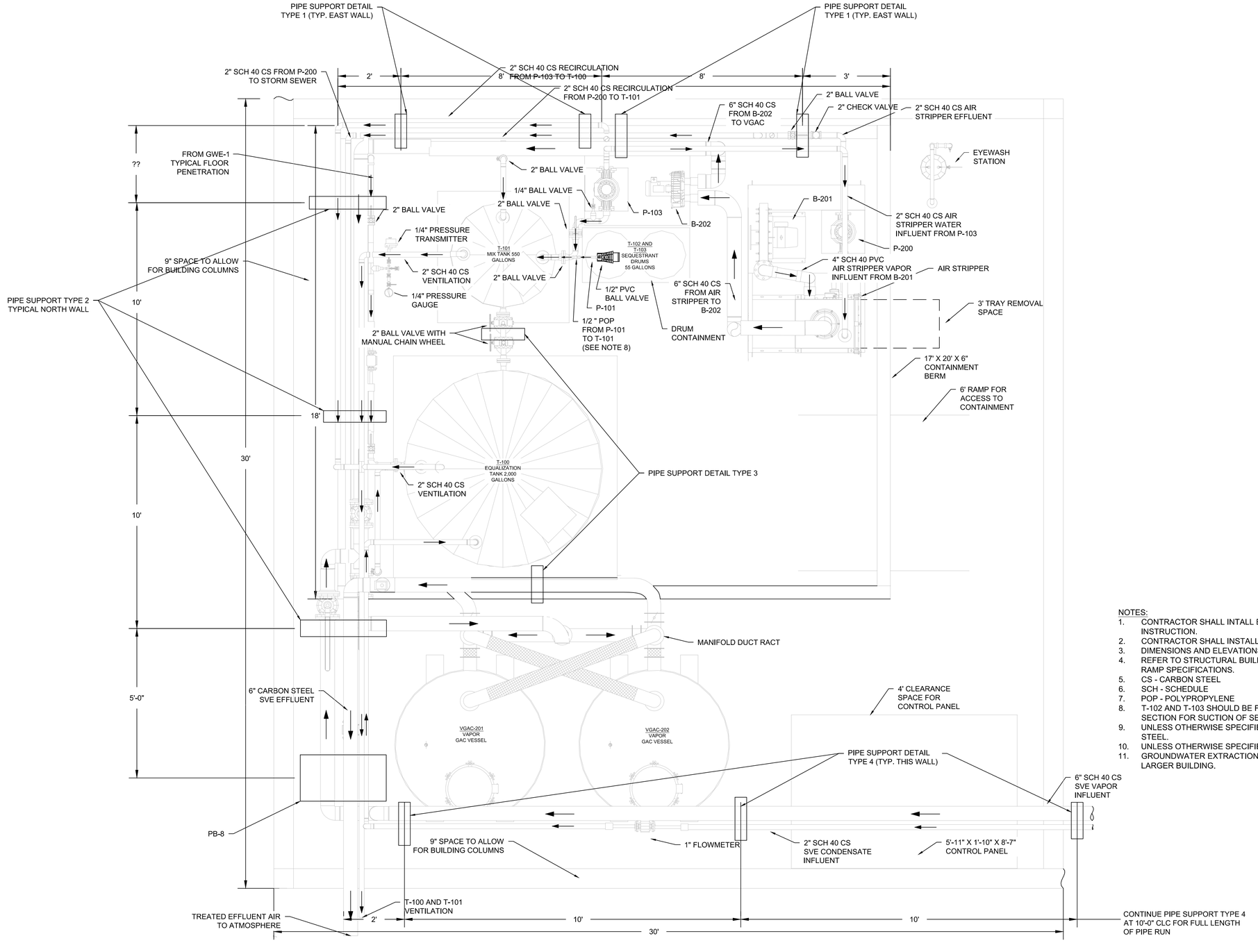

NOTES:

1. CONTRACTOR SHALL INTALL EQUIPMENT PER MANUFACTURERS INSTRUCTION.
2. CONTRACTOR SHALL INSTALL EQUIPMENT IN AN ACCESSIBLE MANOR.
3. DIMENSIONS AND ELEVATIONS ARE APPROXIMATE.
4. REFER TO STRUCTURAL BUILDING DESIGN FOR CONTAINMENT BERM AND RAMP SPECIFICATIONS.
5. CS - CARBON STEEL
6. SCH - SCHEDULE
7. POP - POLYPROPYLENE
8. T-102 AND T-103 SHOULD BE FITTED WITH A FOOT VALVE AND PVC PIPE SECTION FOR SUCTION OF SEQUESTRANT LIQUID
9. UNLESS OTHERWISE SPECIFIED, PIPE MATERIAL IS SCHEDULE 40 CARBON STEEL.
10. UNLESS OTHERWISE SPECIFIED, VALVE MATERIAL IS CARBON STEEL.
11. GROUNDWATER EXTRACTION AND TREATMENT SYSTEM IS PART OF A LARGER BUILDING.

CITY:MILWAUKEE DIV/GROUP: ENV DB: V.YATES LD: S. MURPHY PIC: PM:J. TRASK TM: R. ROBBENNOLT LYR:ON=*;OFF=*REF* G:\Aproject\MadisonKipp\WI001368\2014\cadd\Design Drawings\GETS\90 PERCENT\S1. S2 Pipe Support Details.dwg LAYOUT: S1 SAVED: 8/7/2014 11:14 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 8/7/2014 11:17 AM BY: YATES, VIVIAN

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0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name: **RON KOLODZAIKE**
Professional Engineer's No.: **E-43570-6**

State	Date Signed	Project Mgr.
WI	8/6/14	JT
Designed by	Drawn by	Checked by
RK	VY	RR

RONALD A. KOLODZAIKE E-43570-6 REGISTERED PROFESSIONAL ENGINEER STATE OF WISCONSIN

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PIPE SUPPORT DETAILS (SHEET 1 OF 2)

STRUCTURAL

ARCADIS Project No.
WI001368.0019

Date
AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
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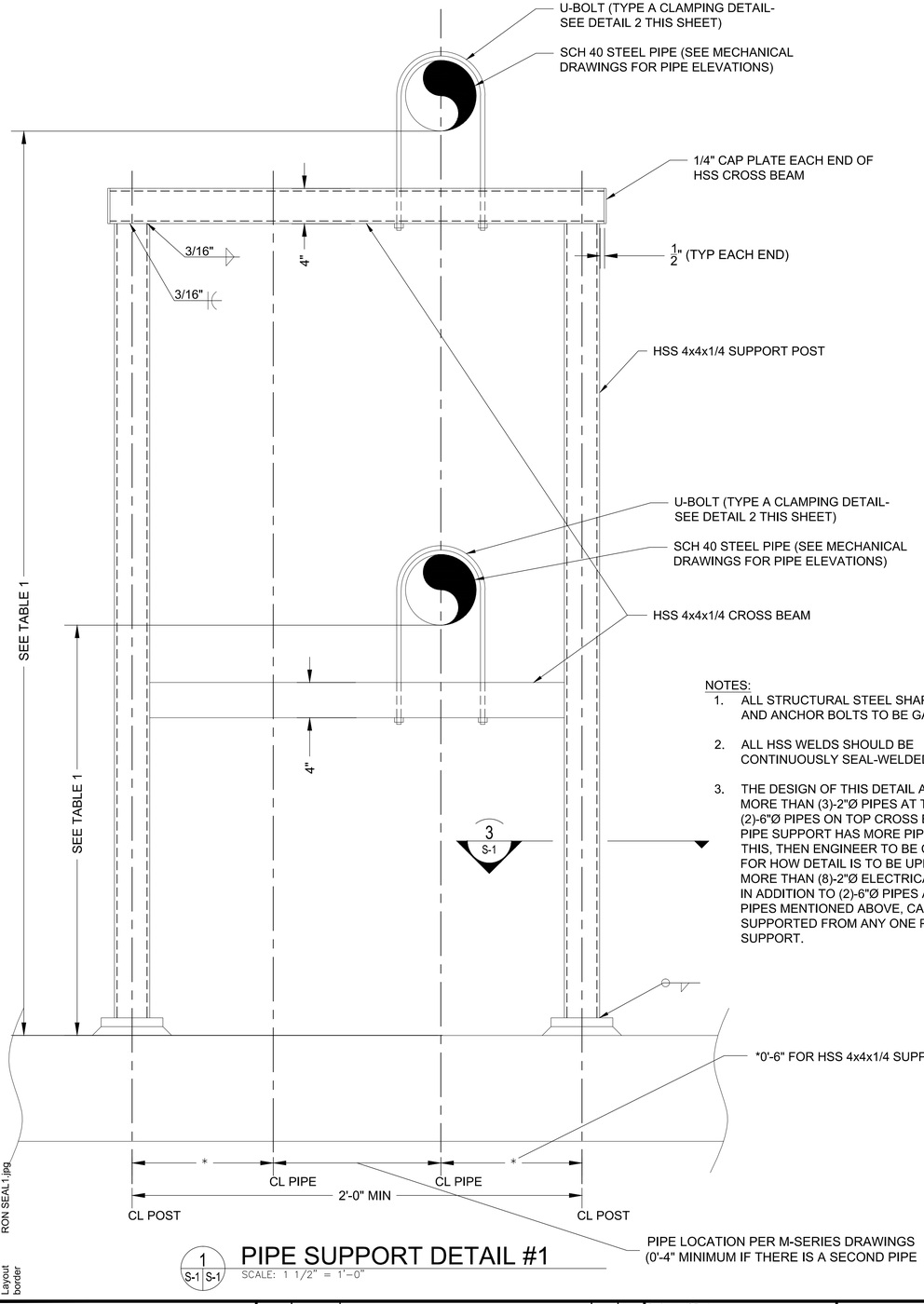
TEL. 414.276.7742

S1

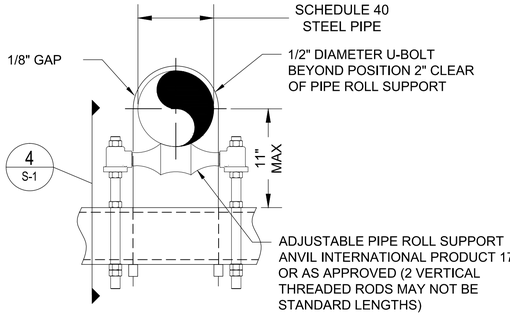


NOTES:

1. ALL STRUCTURAL STEEL SHAPES, U-BOLTS AND ANCHOR BOLTS TO BE GALVANIZED.
2. ALL HSS WELDS SHOULD BE CONTINUOUSLY SEAL-WELDED.
3. THE DESIGN OF THIS DETAIL ASSUMES NO MORE THAN (3)-2"Ø PIPES AT TOP AND (2)-6"Ø PIPES ON TOP CROSS BEAM. IF ONE PIPE SUPPORT HAS MORE PIPING THAN THIS, THEN ENGINEER TO BE CONTACTED FOR HOW DETAIL IS TO BE UPDATED. NO MORE THAN (8)-2"Ø ELECTRICAL CONDUITS, IN ADDITION TO (2)-6"Ø PIPES AND (3)-2"Ø PIPES MENTIONED ABOVE, CAN BE SUPPORTED FROM ANY ONE PIPE SUPPORT.

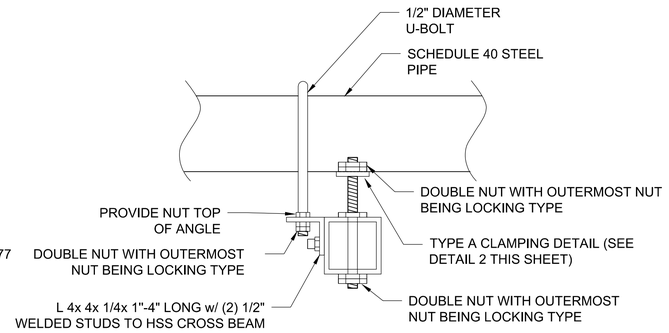
1 S-1 | S-1 PIPE SUPPORT DETAIL #1

SCALE: 1 1/2" = 1'-0"



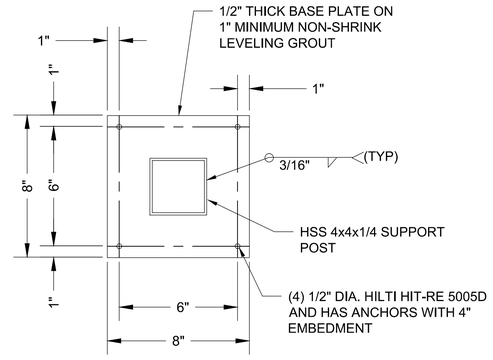
2 S-1 | S-1 TYPE A CLAMPING DETAIL

SCALE: 1 1/2" = 1'-0"



4 S-1 | S-1 CLAMPING DETAIL SECTION

SCALE: 1 1/2" = 1'-0"



NOTES:

1. THE DESIGN OF THIS BASE PLATE DETAIL IS BASED ON NOTE #3 FOR PIPE SUPPORT DETAIL #1 THIS SHEET.

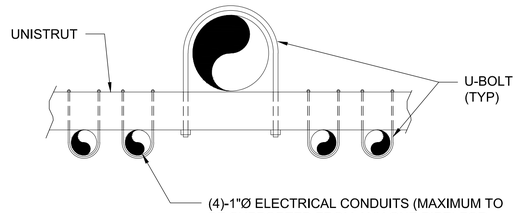
3 S-1 | S-1 BASE PLATE DETAIL

SCALE: 1 1/2" = 1'-0"

TABLE 1

PIPE SUPPORT TYPE	B/PIPE AT LEVEL 1	B/PIPE AT LEVEL 2
1	2'-7"	7'-6"
2	2'-7"	8'-1 1/2"
3	N/A	8'-6 1/2"
4	2'-7"	N/A

*SEE M-SERIES SHEETS FOR FURTHER INFORMATION
**PIPE SUPPORT TYPE 3 AND 4 SHALL CONSIST OF A SINGLE LEVEL CROSS BEAM SUPPORT



NOTES:

1. ELECTRICAL CONDUITS TO SPAN BETWEEN PIPE SUPPORTS. HOWEVER WHERE DISTANCE BETWEEN PIPE SUPPORTS EXCEEDS 12 FEET FOR 1" DIAMETER AND 16 FEET FOR 2" DIAMETER ELECTRICAL CONDUITS, THEN ELECTRICAL CONDUITS CAN BE SUPPORTED OFF PIPE AS SHOWN IN DETAIL. MAXIMUM PIPE SPANS FOR ALL SCHEDULE 40 STEEL PROCESS PIPE (ASTM A53 GRADE B) ARE AS FOLLOWS (FOR PIPES LARGER THAN 4" DIAMETER, MAXIMUM SPAN CONTROLLED BY STRENGTH OF PIPE SUPPORTS AND NOT PIPE):

PIPE SIZE	MAXIMUM SPAN W/ ELECTRICAL CONDUITS SUPPORTED
6"	20 FT [W/(4)-1"Ø]
2"	16 FT

5 S-1 | S-1 ELECTRICAL CONDUIT (OFF PIPE) SUPPORT DETAIL

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Professional Engineer's Name: **RON KOLODZAIKE**
Professional Engineer's No.: **E-43570-6**

State	Date Signed	Project Mgr.
WI	8/6/14	JT
Designed by: RK	Drawn by: VY	Checked by: RR

RONALD A. KOLODZAIKE E-43570-6 TOLEDO, OH PROFESSIONAL ENGINEER 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PIPE SUPPORT DETAILS (SHEET 2 OF 2)

STRUCTURAL

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S2

ELECTRICAL SYMBOL LEGEND

SINGLE LINE DIAGRAM

SERVICE CONNECTION

CIRCUIT BREAKER

DISCONNECT SWITCH

HP — MOTOR

COMBINATION MOTOR STARTER WITH MOTOR CIRCUIT PROTECTOR AND OVERLOADS

M — METER

GROUND ROD

FUSE

DRY TYPE TRANSFORMER

PANELBOARD

UNIT HEATER

T — THERMOSTAT

VFD — VARIABLE FREQUENCY DRIVE WITH 3% LINE REACTOR

SPD — SURGE PROTECTION DEVICE

PFD — POWER FEED DISCONNECT

EPB — ELECTRICAL PULL BOX

PB — PULL BOX

TURN DOWN OF CONDUIT

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ELECTRICAL SPECIFICATIONS:

GENERAL

1. ALL ELECTRICAL EQUIPMENT SHALL BE U.L. LISTED AND LABELED.
2. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND HIS PROPOSAL SHALL INCLUDE ALL CONTINGENCIES NECESSARY FOR THE COMPLETION OF HIS WORK REGARDING SUCH EXISTING CONDITIONS.
3. ALL ELECTRICAL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REGULATIONS INCLUDING THE MOST RECENT EDITION OF THE NATIONAL ELECTRIC CODE (NEC) AND OSHA REQUIREMENTS, ALL AS INTERPRETED BY THOSE HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION REQUIRED WITH THE LOCAL FIRE DEPARTMENT. ANY DRAWINGS REQUIRED FOR PERMITS OTHER THAN THOSE PRESENTED HEREIN WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REVIEWED BY THE ENGINEER PRIOR TO USE.
4. THERE SHALL BE NO SUBSTITUTIONS UNLESS THE CONTRACTOR HAS OBTAINED WRITTEN APPROVAL FROM THE OWNER AFTER HAVING SUBMITTED AN ALTERNATIVE PROPOSAL COMPLETE WITH A DESCRIPTION OF DEVIATION FROM THE SPECIFICATIONS AND A STATEMENT OF BENEFITS TO BE DERIVED SHOULD SUCH A PROPOSED SUBSTITUTE BE ACCEPTED.
5. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND ARE INTENDED TO SHOW THE APPROXIMATE LOCATIONS OF OUTLETS, CONDUIT, JUNCTION BOXES, EQUIPMENT, ETC. DIMENSIONS PRESENTED ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS AND ALL DIMENSIONS, WHETHER SHOWN ON THE DRAWINGS OR SCALED, SHALL BE VERIFIED IN THE FIELD.
6. ELECTRICAL PANEL BUILDER(S) SHALL PROVIDE DETAILED SHOP DRAWINGS OF PANEL FOR ENGINEER APPROVAL PRIOR TO CONSTRUCTION.
7. UNLESS OTHERWISE NOTED, CONDUIT USE SHALL BE AS FOLLOWS:
   - 7.1. CONDUIT ABOVE GRADE AND EXPOSED TO THE ELEMENTS SHALL BE SCHEDULE 80 POLYVINYL CHLORIDE (PVC).
   - 7.2. EXPOSED CONDUIT ABOVE GRADE AND PROTECTED FROM THE ELEMENTS SHALL BE EMT.
   - 7.3. FINAL CONNECTION TO MOVING EQUIPMENT (i.e. MOTORS, TRANSFORMERS, FREE STANDING EQUIPMENT, ECT.) SHALL BE BY LIQUID TIGHT FLEXIBLE METALLIC CONDUIT.
   - 7.4. INTERIOR LIGHTING CIRCUITS ABOVE 8'-0" AFF SHALL BE MC CABLE WITH A DEDICATED GROUNDING CONDUCTOR.
   - 7.5. DIRECT BURIED CONDUIT BELOW GRADE SHALL BE SCHEDULE 40 PVC. FACTORY MADE SCHEDULE 80 SWEEPS AND APPROPRIATE FITTINGS SHALL BE USED TO TRANSITION BELOW GRADE PVC TO ABOVE GRADE CONDUIT SYSTEMS. PROVIDE SEAL OFF FITTINGS FOR ALL CONDUITS ENTERING AND EXITING CLASSIFIED AREAS.
8. INSTALL PULL BOXES, JUNCTION BOXES, SPLICE BOXES AND FITTINGS WHERE SHOWN AND AT OTHER LOCATIONS AS NECESSARY. PULL AND JUNCTION BOX MATERIAL SHALL MATCH THE CONDUIT SYSTEM ATTACHED.
9. ALL 125 VOLT, SINGLE PHASE 20 AMPERE RECEPTACLE OUTLETS USED BY THE WORKMEN SHALL BE GROUND FAULT CIRCUIT INTERRUPTER (GFCI) TYPE. ALL RECEPTACLES INSTALLED OUTDOORS SHALL BE WEATHER RESISTANT, GFCI TYPE RECEPTACLES, PER NEC 406.9.

RIGID METAL CONDUIT (RGS)

1. GALVANIZED STEEL, HOT-DIPPED ZINC, ANSI STANDARD C80.1 AND C80.4.
2. MANUFACTURER SHALL BE ALLIED TUBE & CONDUIT CORPORATION, TRIANGLE WIRE AND CABLE INC., OR EQUAL.

NONMETALLIC CONDUIT (PVC)

1. NONMETALLIC RIGID CONDUIT AND FITTINGS SHALL BE SCHEDULE 40, POLYVINYL CHLORIDE AND SHALL BE RESISTANT TO CORROSION.
2. CONDUIT AND FITTINGS SHALL BE IN ACCORDANCE WITH NEMA STANDARD TC-2 AND TC-3, LATEST REVISION.
3. MANUFACTURER SHALL BE CARLON ELECTRIC CONDUIT CO., TRIANGLE PWC CO., OR EQUAL.

LIQUID TIGHT FLEXIBLE METALLIC CONDUIT (LFMC)

1. FLEXIBLE CONDUIT SHALL BE AN INTERLINKED GALVANIZED STEEL CORE WITH A SMOOTH LIQUID TIGHT PVC COVER.
2. FITTINGS SHALL BE NEMA-3R RATED AND MATCH CONDUIT TYPE INSTALLED.
3. MANUFACTURER'S SHALL BE ANACONDA, LIQUATITE OR EQUAL.

HANDHOLES:

1. OPEN-BASE STACKABLE HANDHOLES SUITABLE FOR HEAVY DUTY VEHICULAR TRAFFIC, CONSTRUCTED OF POLYMER CONCRETED REINFORCED BY HEAVY WEAVE FIBERGLASS. INCLUDE BOX, EXTENSION, AND NON-LOCKING COVER WITH PERMANENT LOGO ("ELECTRIC", "INSTRUMENTATION", OR "COMMUNICATION") AS DIRECTED BY ENGINEER
2. MANUFACTURER SHALL BE QUAZITE, CDR, OR EQUAL.

JUNCTION BOXES

JUNCTION BOXES AND FITTINGS SHALL BE OF GALVANIZED STEEL OR COPPER FREE ALUMINUM.

WIRES AND CABLES

1. GENERAL
   - A. ALL CONDUCTORS, UNLESS OTHERWISE NOTED, SHALL BE STRANDED COPPER, CONSTRUCTED OF SOFT DRAWN OR ANNEALED COPPER.
   - B. CONDUCTORS INSULATION SHALL BE COLOR CODED. COLOR OF INSULATION SHALL BE ONE COLOR THROUGHOUT THE ENTIRE RUN.
   - C. 277/480 VAC, THREE PHASE, 4 WIRE
     PHASE A - BROWN
     PHASE B - ORANGE
     PHASE C - YELLOW
     NEUTRAL - GRAY
     GROUND - GREEN
   - D. 120/208 VAC, THREE PHASE, 4 WIRE
     PHASE A - RED
     PHASE B - BLACK
     PHASE C - BLUE
     NEUTRAL - WHITE
     GROUND - GREEN
2. LOW VOLTAGE CONDUCTORS
   - A. ALL CONDUCTORS FOR POWER, LIGHTING AND 120 VAC CONTROL SHALL BE RATED FOR A MINIMUM OF 600 VAC.
   - B. CONDUCTORS SHALL BE CONSTRUCTED OF UNCOATED CLASS C COPPER CONCENTRIC-LAY-STRANDED WIRES.
   - C. POWER AND LIGHTING CONDUCTORS SHALL BE TYPE THWN-2-90C OR XHHW WITH PVC INSULATION AND NYLON JACKET.
3. INSTRUMENTATION CABLES

   TWISTED PAIR, WITH QUANTITY OF PAIRS AS SHOWN ON DRAWINGS, OF NO. 18 AWG TINNED COATED CLASS C COPPER CONCENTRIC LAY STRANDED WIRES WITH AN ALUMINUM POLYESTER SHIELD AND COPPER DRAIN. RATED FOR 600V AND COLOR CODED WITH PVC OUTER JACKET.
4. VARIABLE FREQUENCY DRIVE (VFD) CABLES

   SHALL HAVE A MINIMUM OF 45 MILS OF CROSS LINKED POLYETHYLENE INSULATION.
5. CONNECTORS
   - A. PIGTAIL SPLICING #10 AND SMALLER, USE TAPERED SPRING WIRE NUTS. MANUFACTURER SHALL BE IDEAL WING NUT, BUCHANAN B-CAP, T&B PIGGIES, OR EQUAL.
   - B. FOR TERMINATION OF #14 CONTROL WIRES TO TERMINALS, USE INSULATED COMPRESSION SPADE TYPE CONNECTORS. MANUFACTURER SHALL BE BURNDY HYDENT, T&B STA-KON, OR EQUAL.
   - C. SPLICES AND TERMINALS FOR #8 AND LARGER SHALL BE COPPER COMPRESSION TYPE. MANUFACTURER SHALL BE BURNDY HYDENT OR HYLUG, T&B, STA-CON, OR EQUAL.
   - D. FIXTURE CONNECTIONS MANUFACTURER SHALL BE T&B STA-KON SERIES PT-66M, IDEAL CRIMP SLEEVE NO. 410 WITH LONG BARREL, OR EQUAL.

FIBER OPTIC CABLE

1. FIBER CABLE SHALL BE 4-PAIR FIBER CABLE, TIGHT BUFFERED TO 900 UM, WITH ARAMID FIBER YARN STRENGTH MEMBERS. FIBER SHALL BE ABLE TO BE TERMINATED TO AN ST CONNECTOR WITHOUT THE USE OF A BREAK-OUT KIT. FIBER CABLE SHALL BE MANUFACTURED BY AMP, DRAKA, OR OPTICAL CABLE CORPORATION.
2. FIBER TYPE SHALL BE MULTI-MODE, 62.5/125 UM. PROVIDE WITH BLACK JACKET, UV AND MOISTURE-RESISTANT POLYOLEFIN.
3. FIBER OPTIC CONNECTORS SHALL BE 2.5 MM BAYONET, ST CONNECTOR WITH CERAMIC FERRULE, BY AT&T OR AS APPPROVED BY ENGINEER.
4. WHERE REQUIRED, USE FUSION SPLICES, WITH HEAT-SHRINK REINFORCING PROTECTION.
5. TEST EACH FIBER FOR dB LOSSES (FROM SOURCE TO DESTINATION PANEL) AFTER INSTALLATION.
6. DEVELOP A TABLE TO REFLECT THE dB LOSSES FOR EACH FIBER INSTALLED. TABLE SHOULD CLEARLY IDENTIFY EACH FIBER AND THE ASSOCIATED SOURCE AND DESTINATION TERMINATIONS.
7. FIBERS WHICH YIELD TEST RESULT LOSSES EXCEEDING 8 dB OR MANUFACTURER'S RECOMMENDED MAX LOSS SHALL BE DEEMED UNUSABLE. THE ENTIRE LENGTH OF CABLE SHALL BE REPLACED.

GROUNDING

1. GROUNDING OF ELECTRICAL SYSTEMS AND EQUIPMENT SHALL, AT A MINIMUM, MEET THE REQUIREMENTS OF NEC ARTICLE 250 OR SHALL EXCEED ARTICLE 250 AS HEREIN SPECIFIED.
2. ALL CONDUITS SHALL HAVE AN INTERNAL GROUNDING CONDUCTOR. THIS GROUNDING CONDUCTOR SHALL BE PROVIDED ALTHOUGH IT MAY NOT BE SHOWN OR SCHEDULED ON THE PLANS.
3. GROUNDING ELECTRODE CONDUCTORS SHALL BE A MINIMUM OF NO. 6 AWG BARE STRANDED COPPER.
4. GROUND RODS SHALL BE 3/4" DIAMETER, 10 FEET LONG, STEEL CORE WITH COPPER MOLTEN WELDED OR ELECTROLYTICALLY BONDED TO EXTERIOR.
5. ALL CONNECTIONS SHALL BE MADE WITH COMPRESSION OR CADWELD CONNECTORS.

ENCLOSURES

1. ENCLOSURES SHALL BE NEMA RATED FOR LOCATION UNLESS OTHERWISE NOTED.
2. WET LOCATIONS OR OUTDOORS, ENCLOSURES SHALL BE NEMA TYPE 3R.
3. ENCLOSURES SHALL HAVE A NAMEPLATE ON THE EXTERIOR IDENTIFYING THE APPLICATION OR FUNCTION OF THE EQUIPMENT ENCLOSED. COORDINATE NAMING IN THE FIELD.

WIRING DEVICES

1. RECEPTACLES MARKED AS GFCI SHALL BE OF THE GROUND FAULT CIRCUIT INTERRUPTER TYPE. MANUFACTURER SHALL BE GE TYPE TGTR 20, OR EQUAL.
2. RECEPTACLES USED IN CLASS 1, DIVISION 2 AREAS SHALL BE CROUSE-HINDS CAT. NO. ENR 21201 WITH EDS BACKBOX AND ENP5201 PLUG.
3. SWITCHES
   - A. LIGHTING SWITCHES SHALL BE RATED 20 AMPERES AT 277 VAC, TOGGLE OPERATED, PLASTIC ENCLOSED, SINGLE POLE, THREE-WAY OR FOUR-WAY AS SHOWN OR REQUIRED. MANUFACTURER SHALL BE P&S SERIES 20AC1 SPECIFICATION GRADE, OR EQUAL.
   - B. SWITCHES SHALL HAVE SILVER ALLOY CONTACTS AND PROVISIONS FOR SIDE AND BACK WIRING.
   - C. EACH SWITCH SHALL BE SUITED FOR FULL-RATED CAPACITY ON TUNGSTEN FILAMENT AND FLOURSCENT LAMP LOADS.
4. FACEPLATE AND COVERS
   - A. FINISHED AREAS SHALL HAVE STAINLESS STEEL TYPE 302 ALLOY COVERS.
   - B. WET AND CORROSIVE AREAS SHALL BE WEATHERPROOF COVERS WITH GASKETS.

VARIABLE FREQUENCY DRIVE (VFD)

1. PROVIDE VFD AS SHOWN TO OPERATE SPECIFIED LOAD. VFD MANUFACTURER SHALL BE ALLEN BRADLEY, SQUARE D, OR EQUAL.
2. PROVIDE 3 PERCENT LINE REACTOR INTEGRAL TO CONTROLLER TO REDUCE SURGE CURRENTS AND POWER LINE DISTURBANCES, AND ELIMINATE NUISANCE TRIPPING OF CONTROLLER.
3. PROVIDE VFD WITH INTEGRAL, FLANGE-MOUNTED, NON-FUSIBLE DISCONNECT SWITCH ON THE LINE SIDE OF THE CONTROLLER.
4. PROVIDE LOAD REACTOR DV/DT OUTPUT FILTER AT LOAD SIDE OF VFD. FILTER SHALL BE TRANSCOIL KLC SERIES V1K.

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name: JOHN SIDOTI
Professional Engineer's No.: E-43415

State	Date Signed	Project Mgr.
WI	8/6/14	JT

Designed by	Drawn by	Checked by
JH	JF	JS

WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ENGINEER 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

ELECTRICAL SYMBOL LEGEND AND SPECIFICATIONS

ELECTRICAL

ARCADIS Project No. WI001368.0021
Date AUGUST 06, 2014

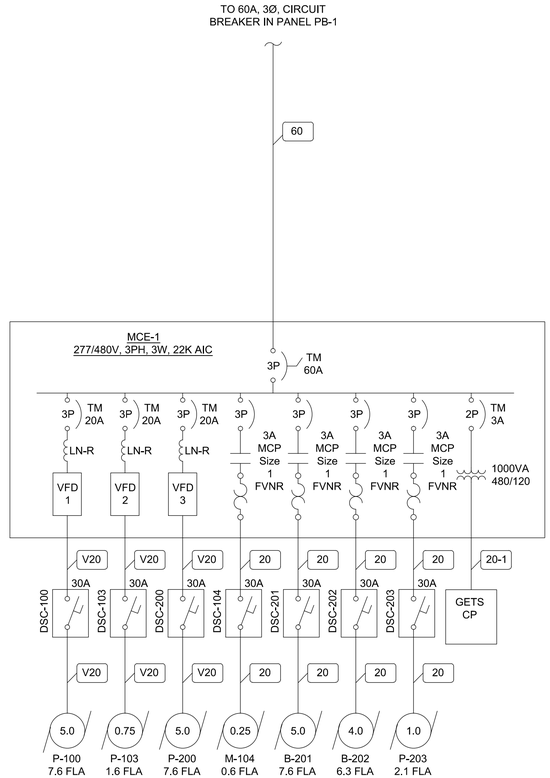
ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

E-0

MOTOR CONTROL ENCLOSURE (MCE-1)									
DEVICE	VOLTAGE	PHASE	HP	DUTY FACTOR	BREAKER SIZE (AMPS)	CONNECT LOAD - 480V (AMPS)**	DEMAND LOAD - 480V (AMPS)**	kVA	
GWE-1 PUMP (P-100)	480	3	5.00	100.0%	10	7.60	7.60	6.32	
TRANSFER PUMP (P-103)	480	3	0.75	100.0%	3	1.60	1.60	1.33	
DISCHARGE PUMP (P-200)	480	3	5.00	100.0%	10	7.60	7.60	6.32	
MIXER (M-104)	480	3	0.25	100.0%	1	0.60	0.60	0.50	
BLOWER (B-201)	480	3	5.00	100.0%	10	7.60	7.60	6.32	
BOOSTER BLOWER (B-202)	480	3	4.00	100.0%	10	6.30	6.30	5.24	
CONTAINMENT SUMP PUMP (P-203)	480	3	1.00	100.0%	10	2.10	2.10	1.75	
1000VA TRANSFORMER LOADS	480	3	---	100.0%	3	0.96	0.96	0.80	
					SUBTOTALS :	**34.4**	**34.4**	**28.6**	
						TOTAL ELECTRICAL LOAD:		**34.4**	**CONNECTED AMPS**
***VALUES TAKEN FROM 2014 NEC*								**34.4**	**DEMAND AMPS**
MAIN BREAKER INFORMATION								**43**	**MINIMUM BREAKER SIZE**
								60	**MAIN BREAKER**

CONDUIT SCHEDULE				
SYMBOL	TYPE AWG	SIZE	GROUND	CONDUIT
V20	BELDEN 29503	(3) # 10	(1) # 10	SEE NOTE 1
V40	BELDEN 29504	(3) # 8	(1) # 8	1"
20	XHHW	(3) # 10	(1) # 10	SEE NOTE 1
20-1	XHHW	(2) # 12	(1) # 12	3/4"
40	XHHW	(3) # 8	(1) # 10	1"
45	XHHW	(3) #6	(1) # 10	3/4"
50	XHHW	(3) # 4	(1) # 10	1"
60	XHHW	(3) # 4	(1) # 10	SEE NOTE 1
80	XHHW	(3) # 2	(1) # 8	1-1/2"
100	XHHW	(3) # 6	(1) # 10	1-1/2"
200	XHHW	(4) 4/0	(1) # 4	2-1/2"

CONDUIT SCHEDULE NOTES:
1. SEE SHEET E-2 FOR CONDUIT SIZING AND LAYOUT INFORMATION.



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RON SEAL1.jpg
JMS PE (2).jpg
border
WI1368X00-ge

SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING: USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name: JOHN SIDOTI
Professional Engineer's No.: E-43415
State: WI | Date Signed: 8/6/14 | Project Mgr.: JT
Designed by: JH | Drawn by: JF | Checked by: JS

WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

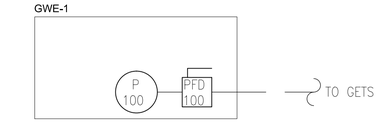
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
ELECTRICAL SINGLE LINE DIAGRAM

ELECTRICAL

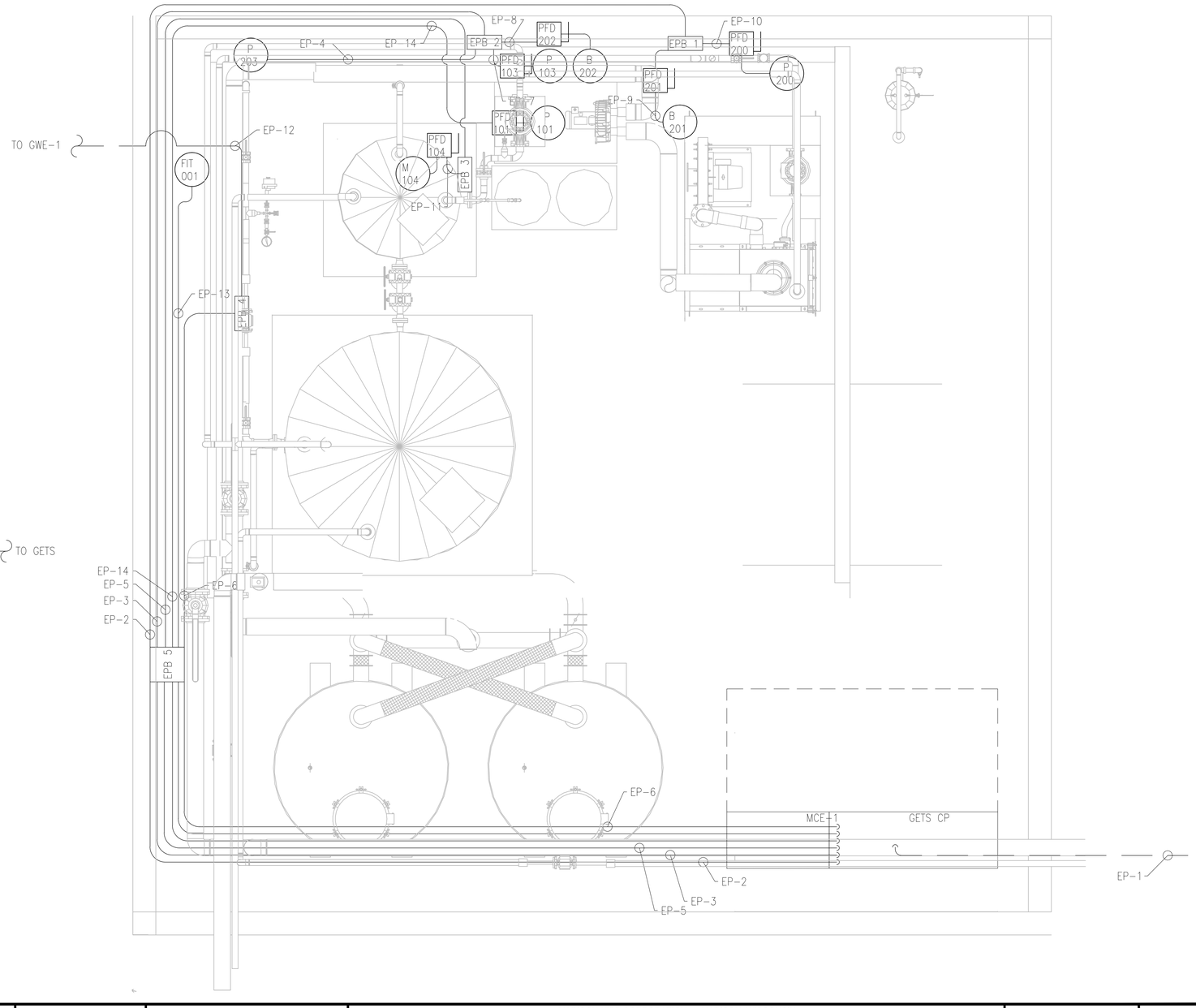
ARCADIS Project No. WI001368.0021
Date AUGUST 06, 2014
ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

E-1

AC CONDUIT SCHEDULE				
CONDUIT NUMBER	SIZE	WIRE	ORIGIN	TERMINATION
EP-1	1"	3 - #4 AWG XHHW 1 - #10 Green AWG XHHW	PB-1	MCE-1
EP-2	2"	3 - #10 AWG BELDEN 29503 2 - #10 Green AWG XHHW 3 - #10 AWG XHHW	MCE-1	EPB-1
EP-3	2"	6 - #10 AWG XHHW 3 - #10 Green AWG XHHW 3 - #10 AWG BELDEN 29503	MCE-1	EPB-2
EP-4	3/4"	3 - #10 AWG XHHW 1 - #10 Green AWG XHHW	EPB-2	P-203
EP-5	1 1/4"	3 - #10 AWG XHHW 1 - #10 Green AWG XHHW	MCE-1	EPB-3
EP-6	1 1/4"	3 - #10 AWG BELDEN 29503 1 - #10 Green AWG XHHW	MCE-1	EPB-4
EP-7	3/4"	3 - #10 AWG BELDEN 29503 1 - #10 Green AWG XHHW	EPB-2	P-103
EP-8	3/4"	3 - #10 AWG XHHW 1 - #10 Green AWG XHHW	EPB-2	B-202
EP-9	3/4"	3 - #10 AWG XHHW 1 - #10 Green AWG XHHW	EPB-1	B-201
EP-10	3/4"	3 - #10 AWG BELDEN 29503 1 - #10 Green AWG XHHW	EPB-1	P-200
EP-11	3/4"	3 - #10 AWG XHHW 1 - #10 Green AWG XHHW	EPB-3	M-104
EP-12	3/4"	3 - #10 AWG BELDEN 29503 1 - #10 Green AWG XHHW	EPB-4	P-100
EP-13	3/4"	3 - #10 AWG XHHW 1 - #10 Green AWG XHHW	MCE-1	FIT-001
EP-14	3/4"	3 - #10 AWG BELDEN 29503 1 - #10 Green AWG XHHW	MCE-1	P-101



NOTE: EXTRACTION WELL POSITION NOT TO SCALE, LOCATED 12 FEET FROM SYSTEM BUILDING. ALL CONDUITS RUNNING TO THIS VAULT SHALL BE BELOW GRADE OUTSIDE OF THE BUILDING.



NOTES:

1. ALL CONDUIT SHALL BE RUN OVERHEAD/EXPOSED UNLESS OTHERWISE NOTED.

2. MAXIMUM NUMBER OF CONDUIT BENDS BETWEEN PULL POINTS SHALL NOT EXCEED A TOTAL OF 360 DEGREES.

3. CONDUIT ROUTINGS DEPICTED HEREIN ARE MEANT TO DETAIL ORIGINATION AND TERMINATION POINT FOR EACH CONDUIT, ACTUAL ROUTING SHALL BE FIELD DETERMINED AS REQUIRED BY THE SPECIFICATIONS AND ON THESE DRAWINGS.

4. JUNCTION BOXES AND ENCLOSURES SHALL BE MOUNTED ON CHANNEL FRAMING BOLTED TO THE TANK, FLOOR, OR PUMP SKID. THEY SHALL BE BE MOUNTED IN A LOCATION THAT ALLOWS FULL ACCESS AND COMPLIES WITH THE APPROPRIATE CLEARANCE REQUIREMENTS OF NEC AND OSHA.

0' 1' 2' 3' 4' 8'
3/8"=1'-0" SCALE(S) AS INDICATED

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING:

USE TO VERIFY FIGURE REPRODUCTION SCALE

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name: JOHN SIDOTI
Professional Engineer's No.: E-43415
State: WI | Date Signed: 8/6/14 | Project Mgr.:
Designed by: JS | Drawn by: VY | Checked by: JS

WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ENGINEER ELECTRICAL 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

ELECTRICAL LAYOUT AC POWER CONDUIT

ELECTRICAL

ARCADIS
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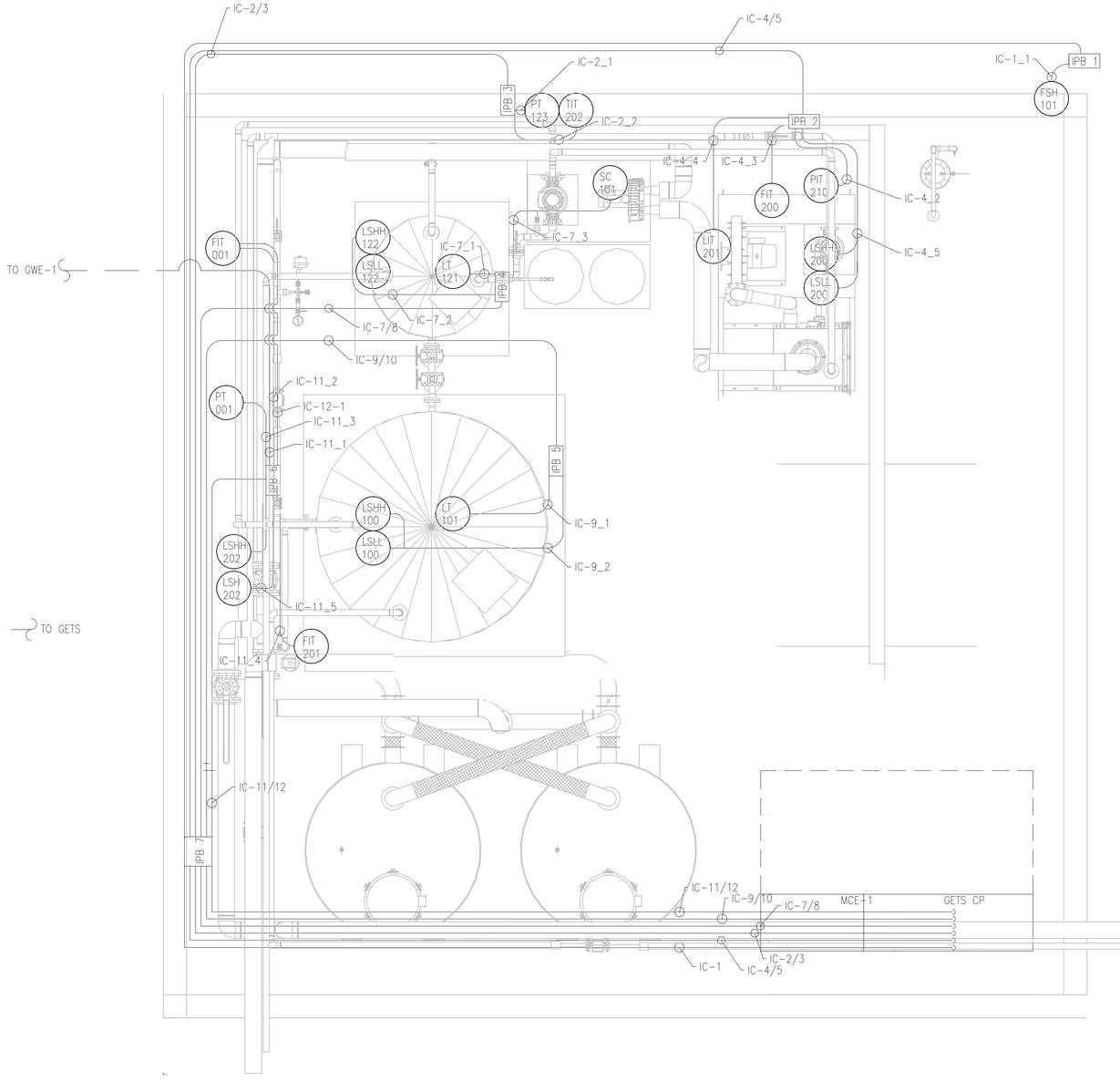
MILWAUKEE, WI 53202
TEL. 414.276.7742

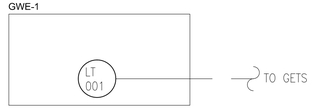
ARCADIS Project No.: WI001368.0019
Date: AUGUST 06, 2014

E-2

24V DC CONDUIT SCHEDULE				
CONDUIT NUMBER	SIZE	WIRE	ORIGIN	TERMINATION
IC-1	3/4"	2 - #14 AWG THHN	GETS CP	IPB-1
		1 - 2 Wire Shielded #18 AWG	GETS CP	IPB-1
IC-1_1	3/4"	2 - #14 AWG THHN	IPB-1	FSH-101
IC-2	1 1/2"	3 - 2 Wire Shielded #18 AWG 6 - #14 AWG THHN	GETS CP	IPB-3
IC-2_1	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-3	PT-123
IC-2_2	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-3	TT-202
IC-3	1 1/2"		GETS CP	IPB-3
IC-4	1 1/2"	5 - 2 Wire Shielded #18 AWG 6 - #14 AWG THHN	GETS CP	IPB-2
IC-4_2	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-2	PT-210
IC-4_3	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-2	FIT-200
IC-4_4	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-2	LT-201
IC-4_5	3/4"	3 - #14 AWG THHN	IPB-2	LSHH-200
IC-5	1 1/2"	10 - #14 AWG THHN / 2 ground	GETS CP	IPB-2
IC-7	1 1/2"	5 - 2 Wire Shielded #18 AWG 6 - #14 AWG THHN	GETS CP	IPB-4
IC-7_1	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-4	LT-121
IC-7_2	3/4"	3 - #14 AWG THHN	IPB-4	LSHH-122
IC-7_3	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-4	SC-101
IC-8	1 1/2"	Spare	GETS CP	IPB-4
IC-9	1 1/2"	3 - 2 Wire Shielded #18 AWG 6 - #14 AWG THHN	GETS CP	IPB-5
IC-9_1	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-5	LT-101
IC-9_2	3/4"	3 - #14 AWG THHN	IPB-5	LSHH-100
IC-10	1 1/2"	Spare	GETS CP	IPB-5
IC-11	1"	4 - 2 Wire Shielded #18 AWG 4 - #14 AWG THHN	GETS CP	IPB-6
IC-11_1	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-6	LT-001
IC-11_2	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-6	FT-001
IC-11_3	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-6	PT-001
IC-11_4	3/4"	1 - 2 Wire Shielded #18 AWG	IPB-6	FIT-201
IC-11_5	3/4"	2 - #14 AWG THHN	IPB-6	LSH-202
IC-11_6	3/4"	2 - #14 AWG THHN	IPB-6	LSHH-202
IC-12	1"	8 - #14 AWG THHN / 2 ground	GETS CP	IPB-7
IC-12_1	3/4"	2 - #14 AWG THHN / 1 ground	IPB-6	FT-001



GWE-1



NOTE: EXTRACTION WELL POSITION NOT TO SCALE. LOCATED 12 FEET FROM SYSTEM BUILDING. ALL CONDUITS RUNNING TO THIS VAULT SHALL BE BELOW GRADE OUTSIDE OF THE BUILDING.

NOTES:

1. ALL CONDUIT SHALL BE RUN OVERHEAD/EXPOSED UNLESS OTHERWISE NOTED.

2. MAXIMUM NUMBER OF CONDUIT BENDS BETWEEN PULL POINTS SHALL NOT EXCEED A TOTAL OF 360 DEGREES.

3. CONDUIT ROUTINGS DEPICTED HEREIN ARE MEANT TO DETAIL ORIGINATION AND TERMINATION POINT FOR EACH CONDUIT, ACTUAL ROUTING SHALL BE FIELD DETERMINED AS REQUIRED BY THE SPECIFICATIONS AND ON THESE DRAWINGS.

4. JUNCTION BOXES AND ENCLOSURES SHALL BE MOUNTED ON CHANNEL FRAMING BOLTED TO THE TANK, FLOOR, OR PUMP SKID. THEY SHALL BE BE MOUNTED IN A LOCATION THAT ALLOWS FULL ACCESS AND COMPLIES WITH THE APPROPRIATE CLEARANCE REQUIREMENTS OF NEC AND OSHA.

0' 1' 2' 3' 4' 8'
3/8"=1'-0" SCALE(S) AS INDICATED

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No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

Professional Engineer's Name: JOHN SIDOTI
Professional Engineer's No.: E-43415
State: WI | Date Signed: 8/6/14 | Project Mgr.:
Designed by: JS | Drawn by: VY | Checked by: JS

WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ENGINEER 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

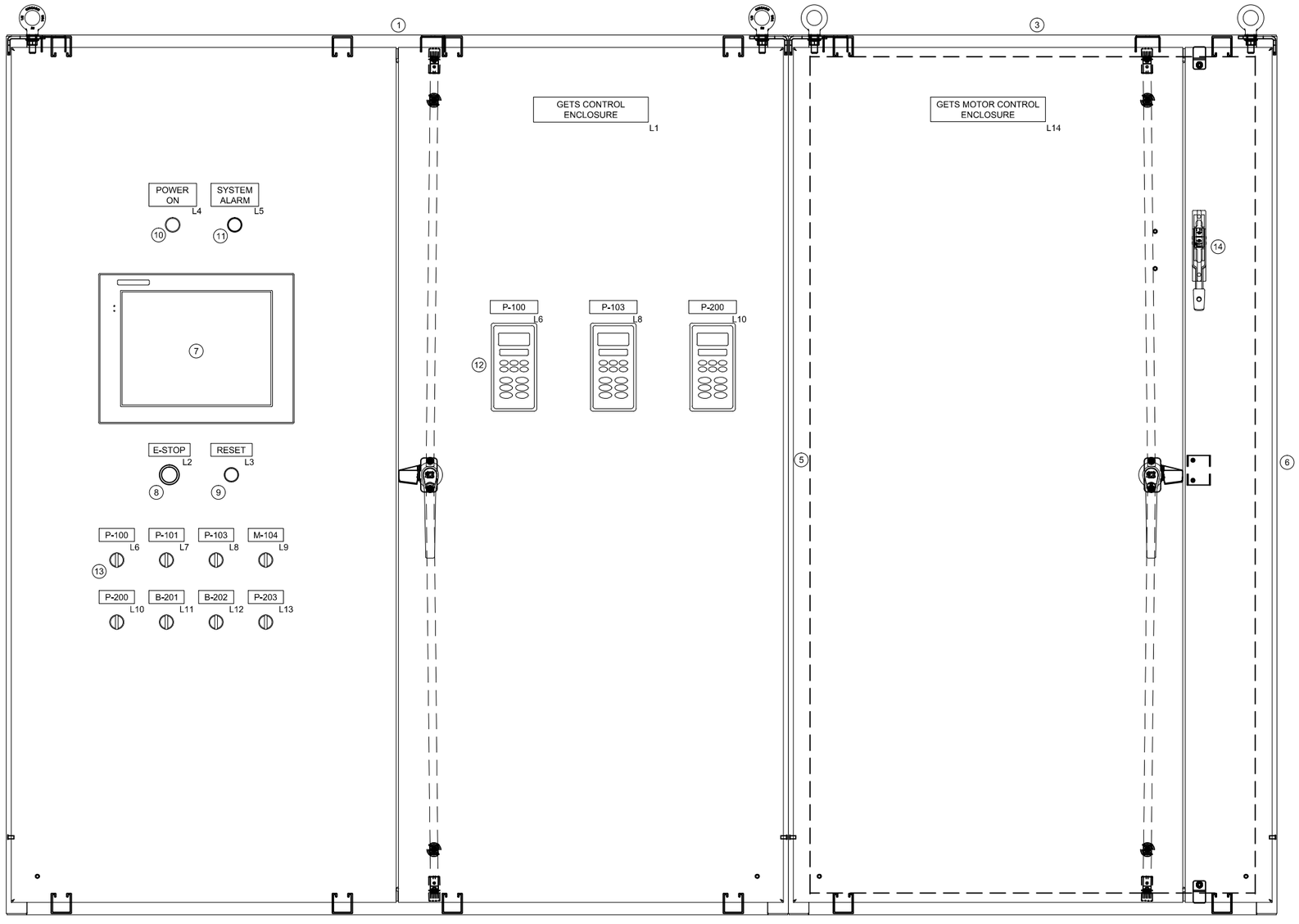
ELECTRICAL LAYOUT
DC CONTROL CONDUIT

ELECTRICAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

E-3



TAG	QTY	DESCRIPTION	MANUFACTURER	CATALOG #
1	1	MODULAR 2 DOOR ENCLOSURE (71"X63"X22")	SCE	T181606
2	1	BACKPANEL FOR 2 DOOR ENCLOSURE (71"X63")	SCE	SP1816G
3	1	MODULAR DISCONNECT ENCLOSURE (71"X40"X22")	SCE	SD181006
4	1	BACKPANEL FOR DISCONNECT ENCLOSURE (71"X40")	SCE	SP1810G
5	1	BARRIER PLATE FOR (71"X22") ENCLOSURES	SCE	BP1806
6	1	END PLATE FOR DISCONNECT ENCLOSURE (71"X22")	SCE	EP1806
7	1	15" PANELVIEW+6	AB	1500
8	1	RED 40 MM E-STOP (1 NC)	TBD	
9	1	BLACK 22 MM PUSHBUTTON (NO MOMENTARY)	TBD	
10	1	GREEN 22 MM INDICATOR LIGHTS (120 VAC)	TBD	
11	1	RED 22 MM INDICATOR LIGHTS (120 VAC)	TBD	
12	3	VFD HIM FOR AB DRIVES	AB	22-HIM-C2S
13	8	BLACK 22 MM 3 POSITION SWITCH	TBD	
14	1	DISCONNECT HANDEL (CIRCUIT BREAKER MECHANISM)	TBD	
15	1	COMPACTLOGIX POWER SUPPLY (3.5 A @ 24 VDC)	AB	1768-PA3
16	2	COMPACTLOGIX L4X ETHERNET/IP BRIDGE MODULE	AB	1768-ENBT
17	1	COMPACTLOGIX L43 PROCESSOR (2.0M MEMORY)	AB	1768-L43
18	3	8 CH. ANALOG INPUT MODULE	AB	1769-IF8
19	1	8 CH. ANALOG CURRENT OUTPUT MODULE	AB	1769-OF8C
20	1	RIGHT BANK-TO-RIGHT BANK EXPANSION (305 MM)	AB	1769-CRR1
21	1	LEFT END CAP TERMINATOR	AB	1769-ECL
22	3	16 PT. 24 VDC SINKING/SOURCING INPUT MODULE	AB	1769-IQ16
23	1	COMPACTLOGIX POWER SUPPLY (2 A @ 5 VDC)	AB	1769-PA2
24	3	16 PT. RELAY OUTPUT MODULE	AB	1769-OW16
25	1	5 PORT UNMANAGED ETHERNET SWITCH	TBD	
26	2	4PDT RELAY WITH BASE SOCKET (120 VAC COIL)	TBD	
27	1	SPDT RELAY WITH BASE SOCKET (120 VAC COIL)	TBD	
28	1	DIN MOUNTED DUAL RECEPTACLE	TBD	
29	1	SURGE SUPRESSOR (120 VAC, 10 A)	TBD	
30	1	SINGLE POLE, 8 A MINIATURE CIRCUIT BREAKER	TBD	
31	1	SINGLE POLE, 10 A MINIATURE CIRCUIT BREAKER	TBD	
32	1	850 VA UPS	SOLA	SDU850
33	1	24 VDC POWER SUPPLY, 120W	TBD	
34	TBD	1/4" X 1-1/4" FUSE HOLDERS (WITH 2 A FUSES)	TBD	
35	48	SPDT RELAY WITH BASE SOCKET (24 VDC COIL)	TBD	
36	1	60 A MOLDED CASE CIRCUIT BREAKER (WITH DISCONNECT MECHANISM)	TBD	
37	1	POWER TERMINAL BLOCK (480 VAC, 3 POLE, 1:12)	TBD	
38	4	MOTOR CIRCUIT PROTECTION CIRCUIT BREAKER (480 VAC, 6.3-10 A)	TBD	
39	2	MOTOR CIRCUIT PROTECTION CIRCUIT BREAKER (480 VAC, 1.6-2.5 A)	TBD	
40	1	MOTOR CIRCUIT PROTECTION CIRCUIT BREAKER (480 VAC, 0.63-1 A)	TBD	
41	2	3% LINE REACTOR (480 VAC, 8 A)	TBD	
42	1	3% LINE REACTOR (480 VAC, 2 A)	TBD	
43	4	9A IEC CONTACTOR	TBD	
44	1	TWO POLE, 3 A MINIATURE CIRCUIT BREAKER	TBD	
45	1	1 KVA TRANSFORMER (480X240 TO 240X120)	TBD	
46	2	5 HP, VFD WITH ETHERNET COMMUNICATION AND INTERNAL LOAD FILTER	AB	25B-D010N114
47	1	1 HP, VFD WITH ETHERNET COMMUNICATION AND INTERNAL LOAD FILTER	AB	25B-D2P3N114
48	TBD	30 A, IEC TERMINAL BLOCKS	TBD	
49	TBD	30 A, IEC TERMINAL BLOCKS, WITH PLUG IN FUSES	TBD	
50	TBD	30 A, IEC GROUNDING TERMINAL BLOCKS	TBD	
51	TBD	END ANCHORS	TBD	
52	TBD	DIN RAIL	TBD	
53	TBD	WIRE DUCT (SIZE APPROPRIATELY)	TBD	

TAG	QTY	TEXT	BACKGROUND/LETTERS	SIZE
L1	1	GETS CONTROL ENCLOSURE	BLACK/WHITE	2"X3"
L2	1	E-STOP	RED/YELLOW	1"X3"
L3	1	RESET	BLACK/WHITE	1"X3"
L4	1	POWER ON	BLACK/WHITE	1"X3"
L5	1	SYSTEM ALARM	BLACK/WHITE	1"X3"
L6	2	P-100	BLACK/WHITE	1"X3"
L7	2	P-103	BLACK/WHITE	1"X3"
L8	2	P-200	BLACK/WHITE	1"X3"
L9	1	P-101	BLACK/WHITE	1"X3"
L10	1	M-104	BLACK/WHITE	1"X3"
L11	1	B-201	BLACK/WHITE	1"X3"
L12	1	B-202	BLACK/WHITE	1"X3"
L13	1	P-203	BLACK/WHITE	1"X3"
L14	1	GETS MOTOR CONTROL ENCLOSURE	BLACK/WHITE	2"X3"

CITY:MILWAUKEE DIV/GROUP: ENV DB: V.YATES LD: S. MURPHY PIC: PM:J. TRASK TM: R. ROBBENNOLT LYR:ON=*;OFF=*REF* G:\EIC_DWG\PROJECTS\Madison Kipp\WI001368\CADMadison Kipp\PANELS.dwg LAYOUT: I-L1 SAVED: 8/6/2014 9:03 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 8/6/2014 5:02 PM BY: HESS, BRITTANY
XREFS: border IMAGES: JMS PE (2).jpg PROJECTNAME: ---

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Professional Engineer's Name: **JOHN SIDOTI**
Professional Engineer's No.: **E-43415**

State	Date Signed	Project Mgr.
WI	8/6/14	JT
Designed by SH	Drawn by VY	Checked by JS

WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ELECTRICAL ENGINEER 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

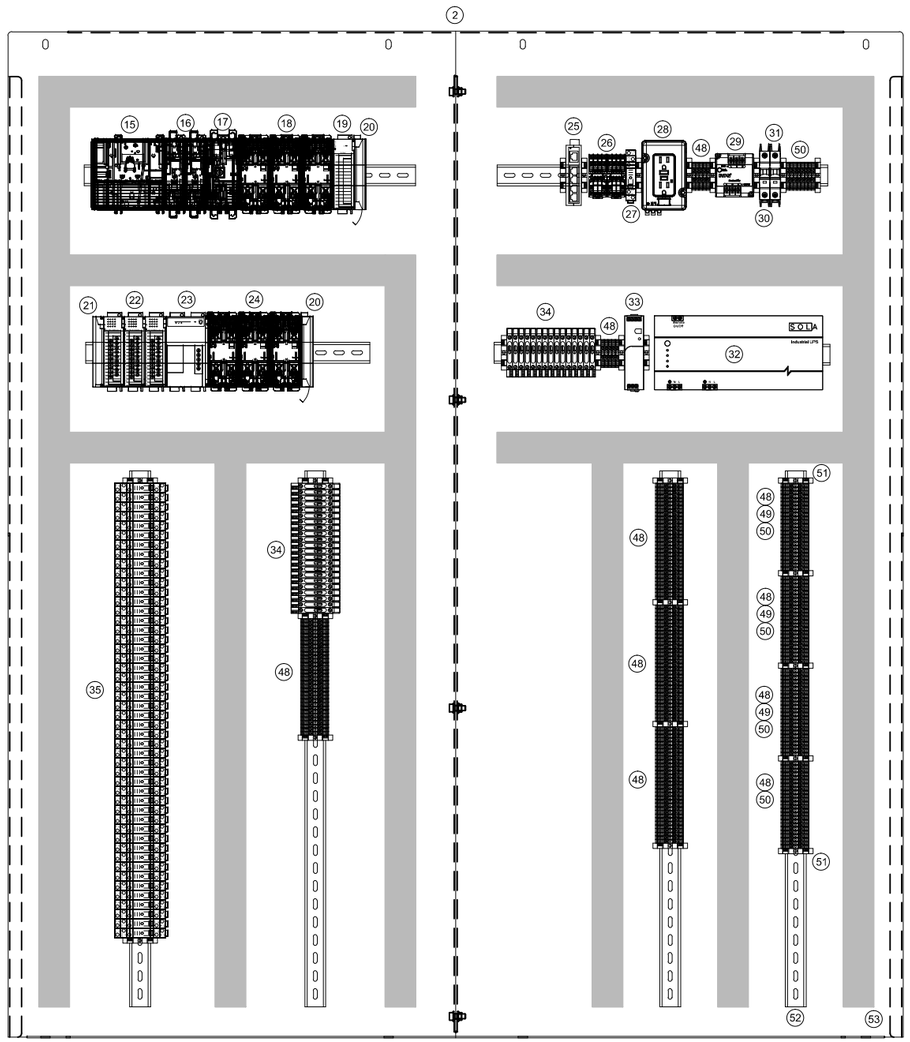
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM PANEL LAYOUT (EXTERIOR)

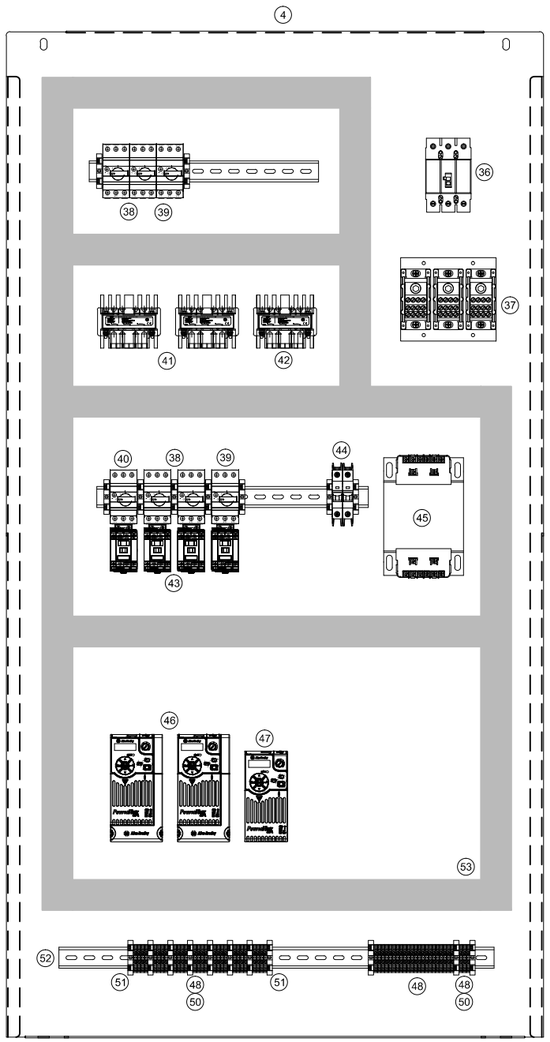
ELECTRICAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

I-L1





LEGEND

- DENOTES TERMINAL BLOCK CONNECTION
- DASHED LINES DENOTES WIRING TO FIELD DEVICES
- DASHED WITH PATTERN DENOTES DEVICES IN REMOTE LOCATIONS

LINE NUMBER DESCRIPTION

0000
- WIRING DIAGRAM SHEET NUMBER (1 OR 2 DIGITS)
- LINE NUMBER (ALWAYS 2 DIGITS)

WIRE NUMBER DESCRIPTION

00000
- WIRING DIAGRAM SHEET NUMBER (1 OR 2 DIGITS)
- WIRE NUMBER (ALWAYS 1 DIGIT)
- LINE NUMBER (ALWAYS 2 DIGITS)

INPUT OR OUTPUT WIRE NUMBER CONFIGURATION

X:X.XX
- OUTPUT = O / INPUT = I
- I/O NUMBER
- CARD SLOT

TB TERMINAL BLOCK

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G:\EIC_DWG\PROJECTS\Madison Kipp\WI001368\CAD\Madison Kipp\PANELS.dwg LAYOUT: I-L2 SAVED: 8/6/2014 9:03 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: ---- PLOTSTYLETABLE: ---- PLOTTED: 8/6/2014 5:02 PM BY: HESS, BRITTANY
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Professional Engineer's Name	JOHN SIDOTI		
Professional Engineer's No.	E-43415		
State: WI	Date Signed: 8/6/14	Project Mgr.: JT	
Designed by: SR	Drawn by: VY	Checked by: JS	

WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM PANEL LAYOUT (INTERIOR)

ELECTRICAL

ARCADIS Project No. WI001368.0019

Date AUGUST 06, 2014

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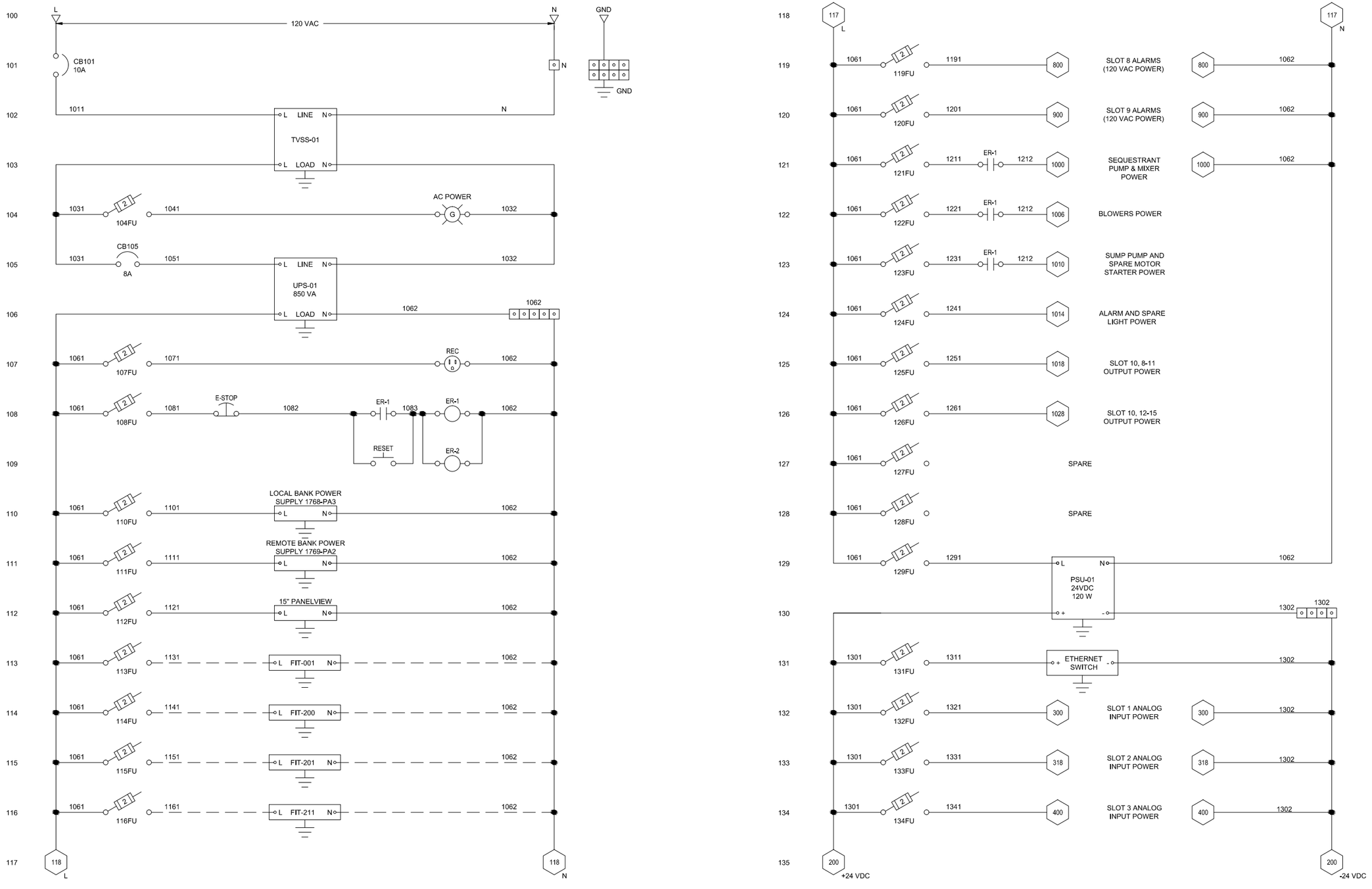
MILWAUKEE, WI 53202
TEL. 414.276.7742

I-L2



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Professional Engineer's No.: E-43415

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WI	8/6/14	JT
Designed by	Drawn by	Checked by
JS	VY	JS

WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM POWER DISTRIBUTION (SHEET 1 OF 2)

ELECTRICAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

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MILWAUKEE, WI 53202
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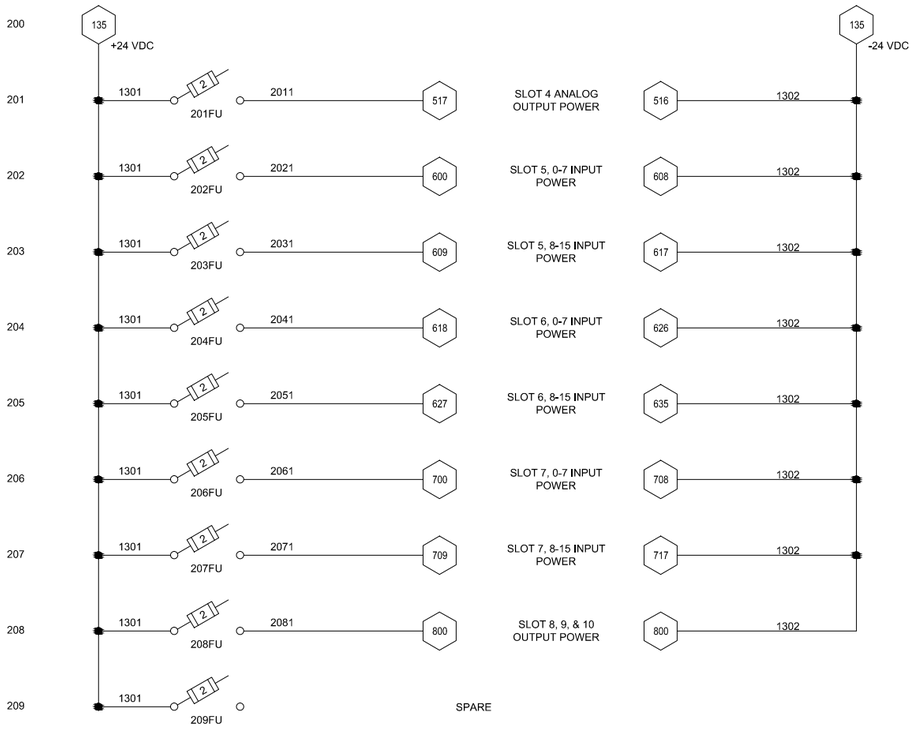
I-1



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WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM POWER DISTRIBUTION (SHEET 2 OF 2)

ELECTRICAL

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WI001368.0019

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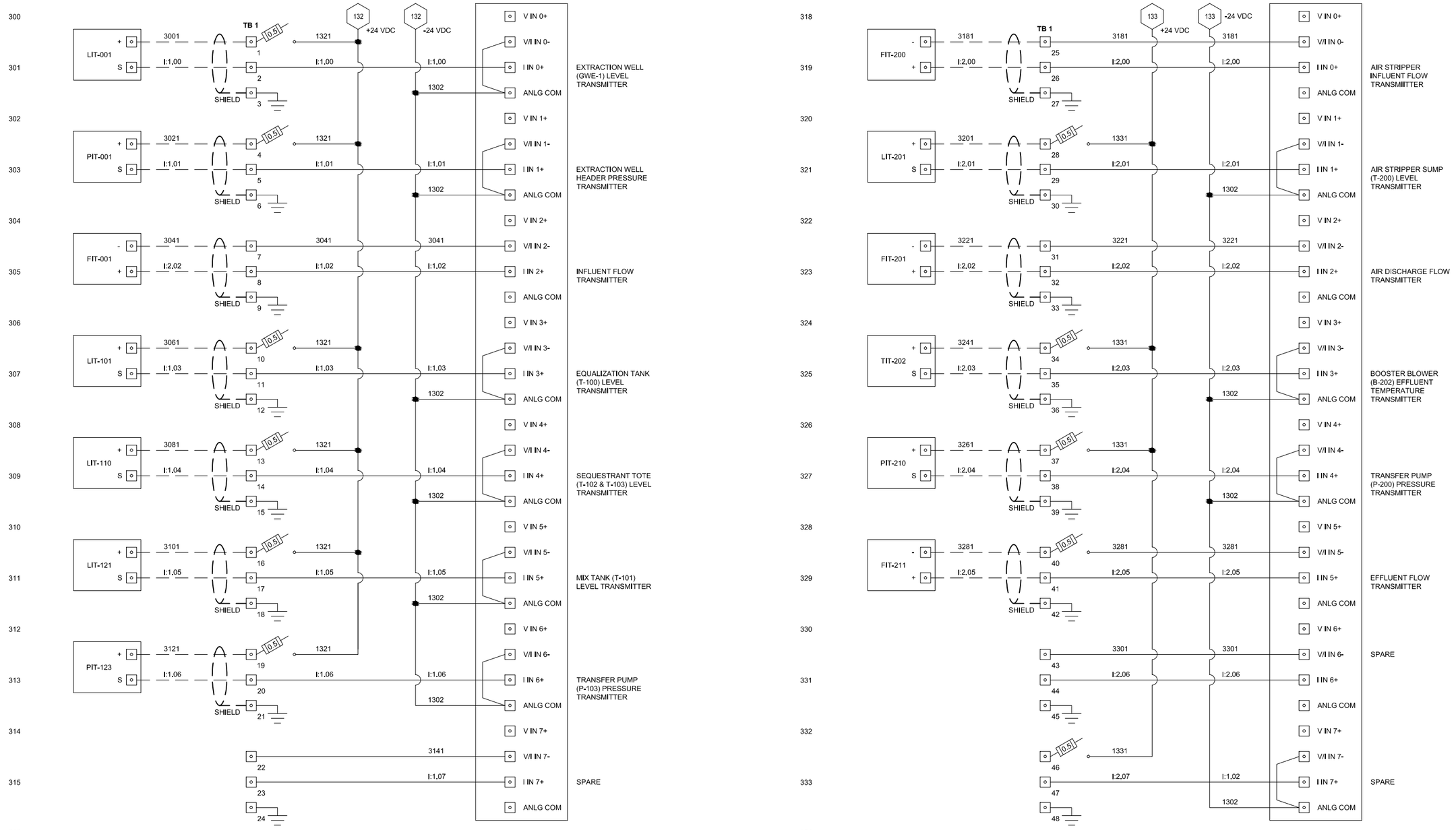
I-2



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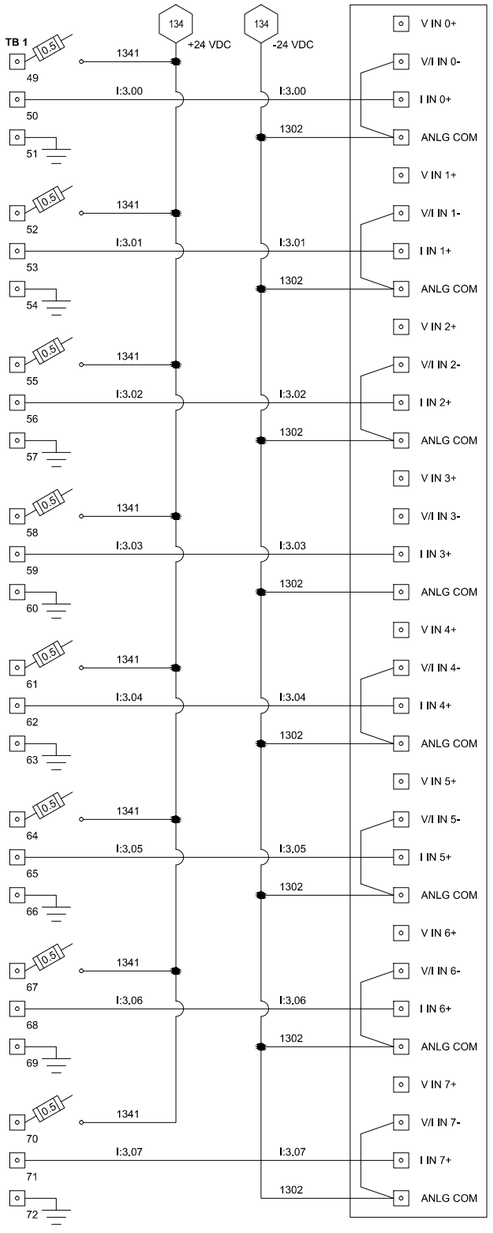
WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ENGINEER ELECTRICAL 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SLOT 1 AND 2 ANALOG INPUTS
ELECTRICAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014
ARCADIS 126 N. JEFFERSON ST. SUITE 400 MILWAUKEE, WI 53202 TEL. 414.276.7742

I-3



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401						SPARE	419
402	52	53	54				420
403						SPARE	421
404	55	56	57				422
405						SPARE	423
406	58	59	60				424
407						SPARE	425
408	61	62	63				426
409						SPARE	427
410	64	65	66				428
411						SPARE	429
412	67	68	69				430
413						SPARE	431
414	70	71	72				432
415						SPARE	433
416							434
417							435

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WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
SLOT 3 ANALOG INPUTS

ELECTRICAL

ARCADIS Project No.: WI001368.0019
Date: AUGUST 06, 2014

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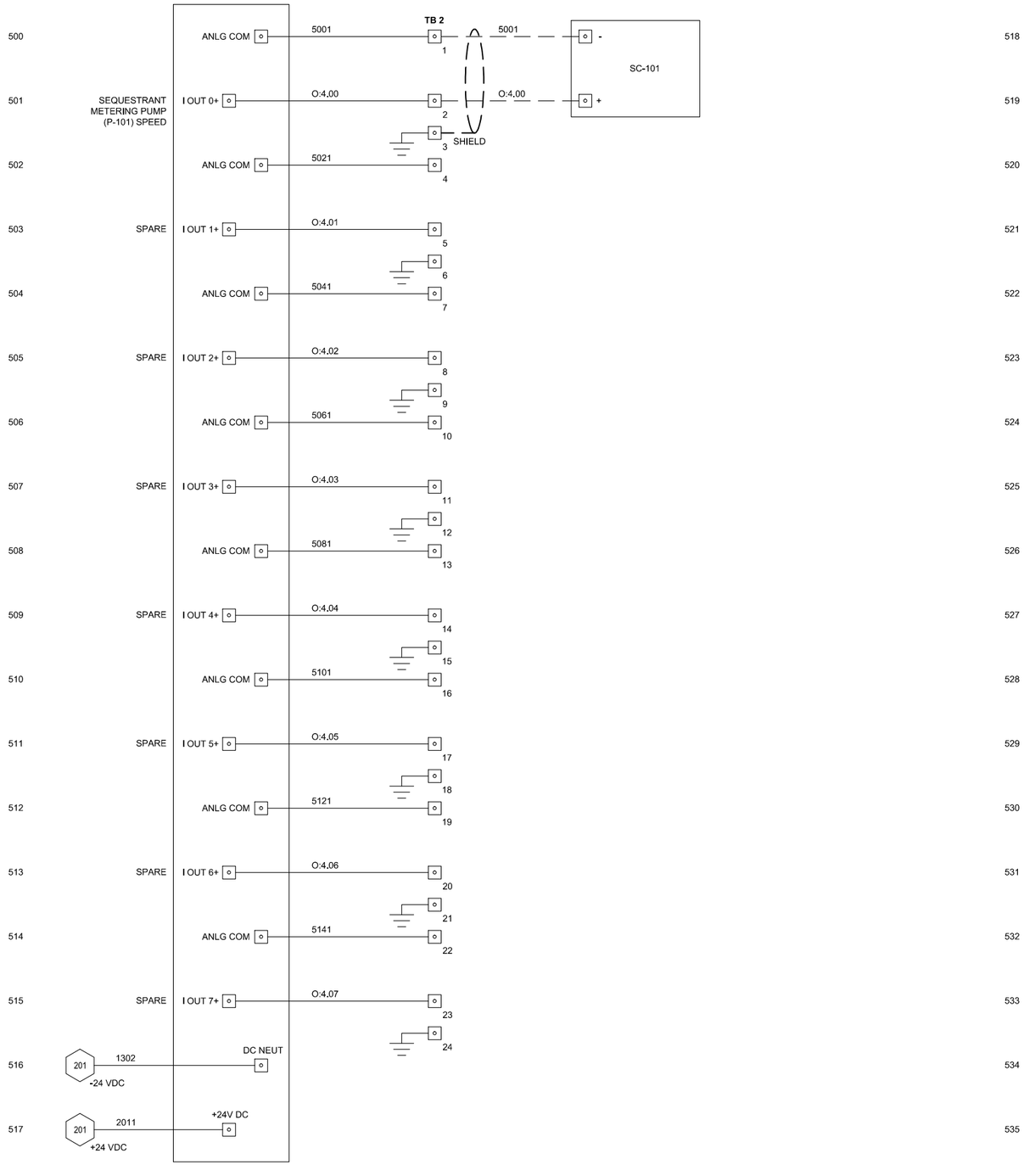
I-4



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WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
SLOT 4 ANALOG OUTPUTS

ELECTRICAL

ARCADIS Project No. WI001368.0019

Date AUGUST 06, 2014

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SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

I-5

600	202 +24 VDC	2021	TB 3 1	6001 H A X00	I:5.00 TB 3 2 I:5.00 IN 0	EXTRACTION PUMP (P-100) IN HAND
601			3	I:5.01 00X	I:5.01 4 I:5.01 IN 1	EXTRACTION PUMP (P-100) IN AUTO
602			5	6021 FIT-001	I:5.02 6 I:5.02 IN 2	INFLUENT FLOW PULSE
603			7	6031 LSHH-100	I:5.03 8 I:5.03 IN 3	EQUALIZATION TANK (T-100) HIGH-HIGH LEVEL SWITCH
604			9	6041 LSLL-100	I:5.04 10 I:5.04 IN 4	EQUALIZATION TANK (P-100) LOW-LOW LEVEL SWITCH
605			11	6051 H A X00	I:5.05 12 I:5.05 IN 5	SEQUESTRANT PUMP (P-101) IN HAND
606			13	I:5.06 00X	I:5.06 14 I:5.06 IN 6	SEQUESTRANT PUMP (P-101) IN AUTO
607			15	6071 FSH-101	I:5.07 16 I:5.07 IN 7	EYE WASH FLOW SWITCH
608	202 -24 VDC	1302			DC COM 1	
609	203 +24 VDC	2031	17	6091 LSH-111	I:5.08 18 I:5.08 IN 8	SEQUESTRANT CONTAINMENT HIGH LEVEL SWITCH
610			19	6101 FIT-130	I:5.09 20 I:5.09 IN 9	SVE CONDENSATE FLOW PULSE
611			21	6111 H A X00	I:5.10 22 I:5.10 IN 10	MIXER (M-104) IN HAND
612			23	I:5.11 00X	I:5.11 24 I:5.11 IN 11	MIXER (M-104) IN AUTO
613			25	6131 YI-104	I:5.12 26 I:5.12 IN 12	MIXER (M-104) RUNNING
614			27	SPARE	I:5.13 28 I:5.13 IN 13	SPARE
615			29	SPARE	I:5.14 30 I:5.14 IN 14	SPARE
616			31	SPARE	I:5.15 32 I:5.15 IN 15	SPARE
617	203 -24 VDC	1302			DC COM 2	

618	204 +24 VDC	2041	TB 3 33	6181 LSHH-122	I:6.00 TB 3 34 I:6.00 IN 0	MIX TANK (T-101) HIGH-HIGH LEVEL SWITCH
619			35	6191 LSLL-122	I:6.01 36 I:6.01 IN 1	MIX TANK (T-101) LOW-LOW LEVEL SWITCH
620			37	6201 H A X00	I:6.02 38 I:6.02 IN 2	TRANSFER PUMP (P-103) IN HAND
621			39	I:6.03 00X	I:6.03 40 I:6.03 IN 3	TRANSFER PUMP (P-103) IN AUTO
622			41	6221 H A X00	I:6.04 42 I:6.04 IN 4	CONTAINMENT SUMP PUMP (P-203) IN HAND
623			43	I:6.05 00X	I:6.05 44 I:6.05 IN 5	CONTAINMENT SUMP PUMP (P-203) IN AUTO
624			45	6241 YI-203	I:6.06 46 I:6.06 IN 6	CONTAINMENT SUMP PUMP (P-203) RUNNING
625			47	6251 LSH-202	I:6.07 48 I:6.07 IN 7	CONTAINMENT SUMP HIGH LEVEL SWITCH
626	204 -24 VDC	1302			DC COM 1	
627	205 +24 VDC	2051	49	6271 H A X00	I:6.08 50 I:6.08 IN 8	BLOWER (B-201) IN HAND
628			51	I:6.09 00X	I:6.09 52 I:6.09 IN 9	BLOWER (B-201) IN AUTO
629			53	6291 YI-201	I:6.10 54 I:6.10 IN 10	BLOWER (P-201) RUNNING
630			55	6301 FIT-200	I:6.11 56 I:6.11 IN 11	AIR STRIPPER INFLUENT FLOW PULSE
631			57	6311 LSHH-200	I:6.12 58 I:6.12 IN 12	AIR STRIPPER SUMP (T-200) HIGH-HIGH LEVEL SWITCH
632			59	6321 LSLL-200	I:6.13 60 I:6.13 IN 13	AIR STRIPPER SUMP (T-200) LOW-LOW LEVEL SWITCH
633			61	SPARE	I:5.14 62 I:5.14 IN 14	SPARE
634			63	SPARE	I:6.15 64 I:6.15 IN 15	SPARE
635	205 -24 VDC	1302			DC COM 2	

SCALE(S) AS INDICATED

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Professional Engineer's Name: JOHN SIDOTI
Professional Engineer's No.: E-43415

State	Date Signed	Project Mgr.
WI	8/6/14	JT
Designed by: JS	Drawn by: VY	Checked by: JS

WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ENGINEER 8/6/14

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
SLOT 5 AND 6 DISCRETE INPUTS

ELECTRICAL

ARCADIS Project No. WI001368.0019

Date AUGUST 06, 2014

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SUITE 400
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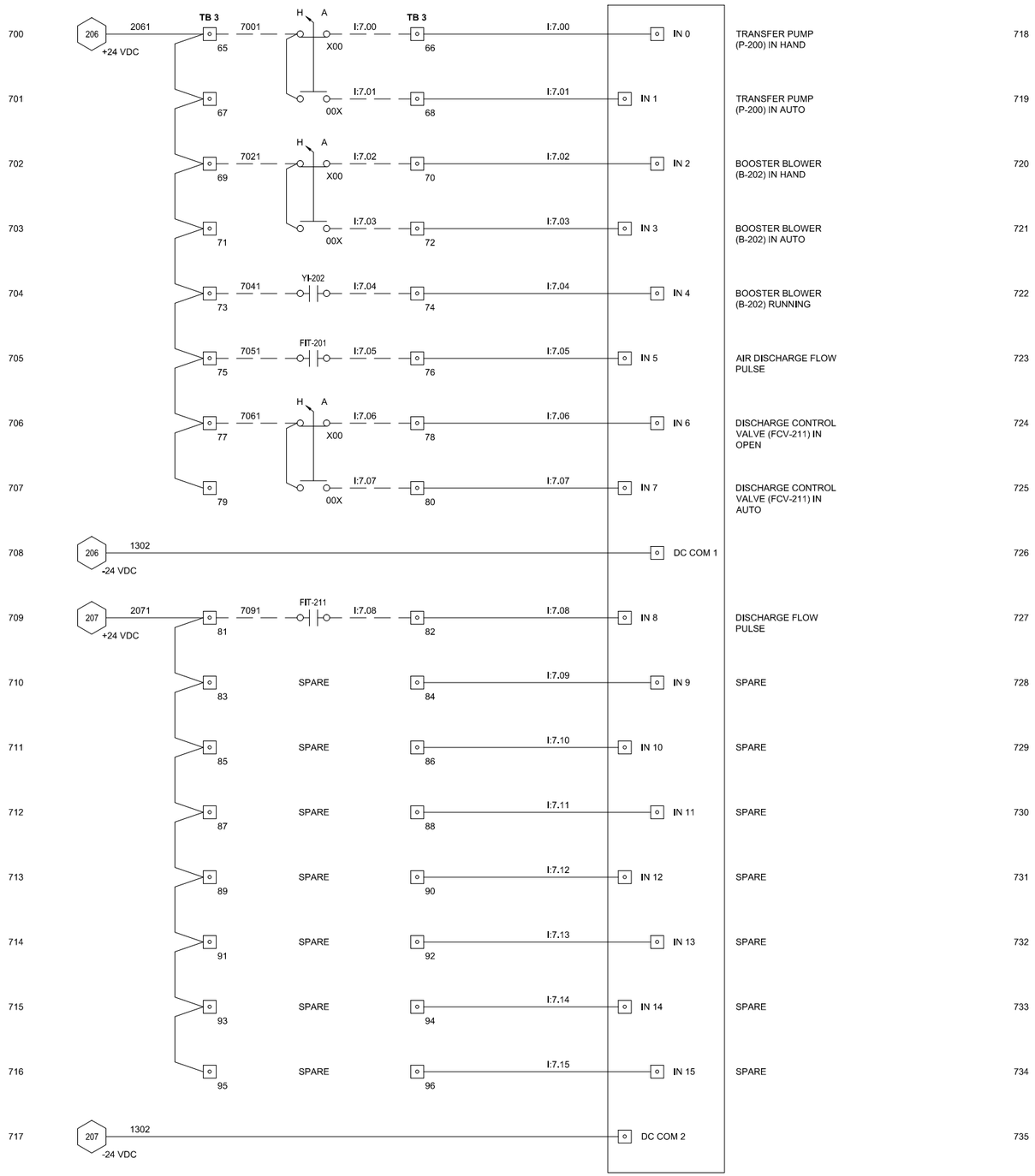
TEL. 414.276.7742

I-6



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WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
SLOT 7 DISCRETE INPUTS

ELECTRICAL

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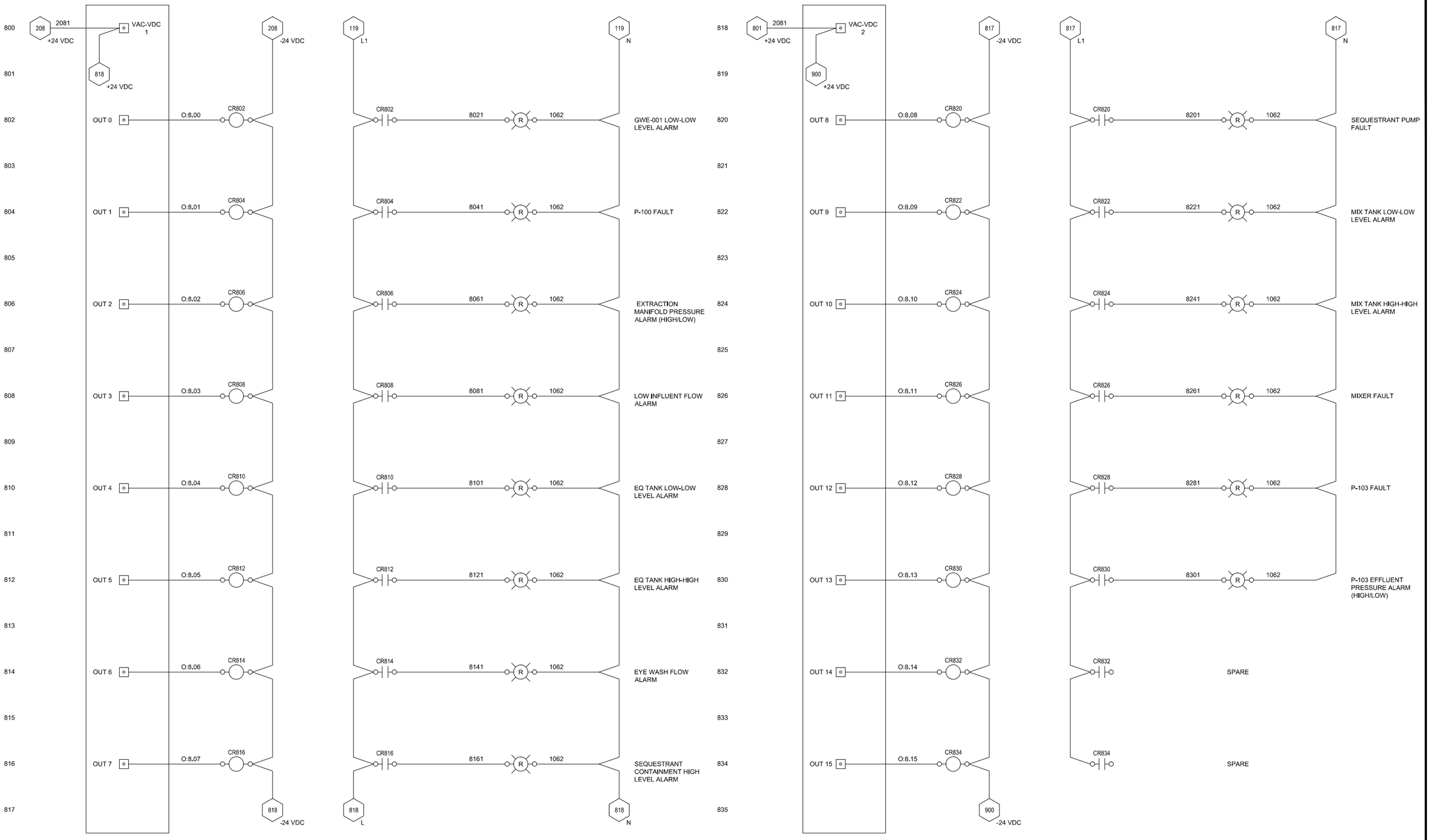
I-7



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Professional Engineer's No.: E-43415

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Designed by	Drawn by	Checked by
JS	VY	JS

WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ELECTRICAL ENGINEER

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
SLOT 8 RELAY OUTPUTS

ELECTRICAL

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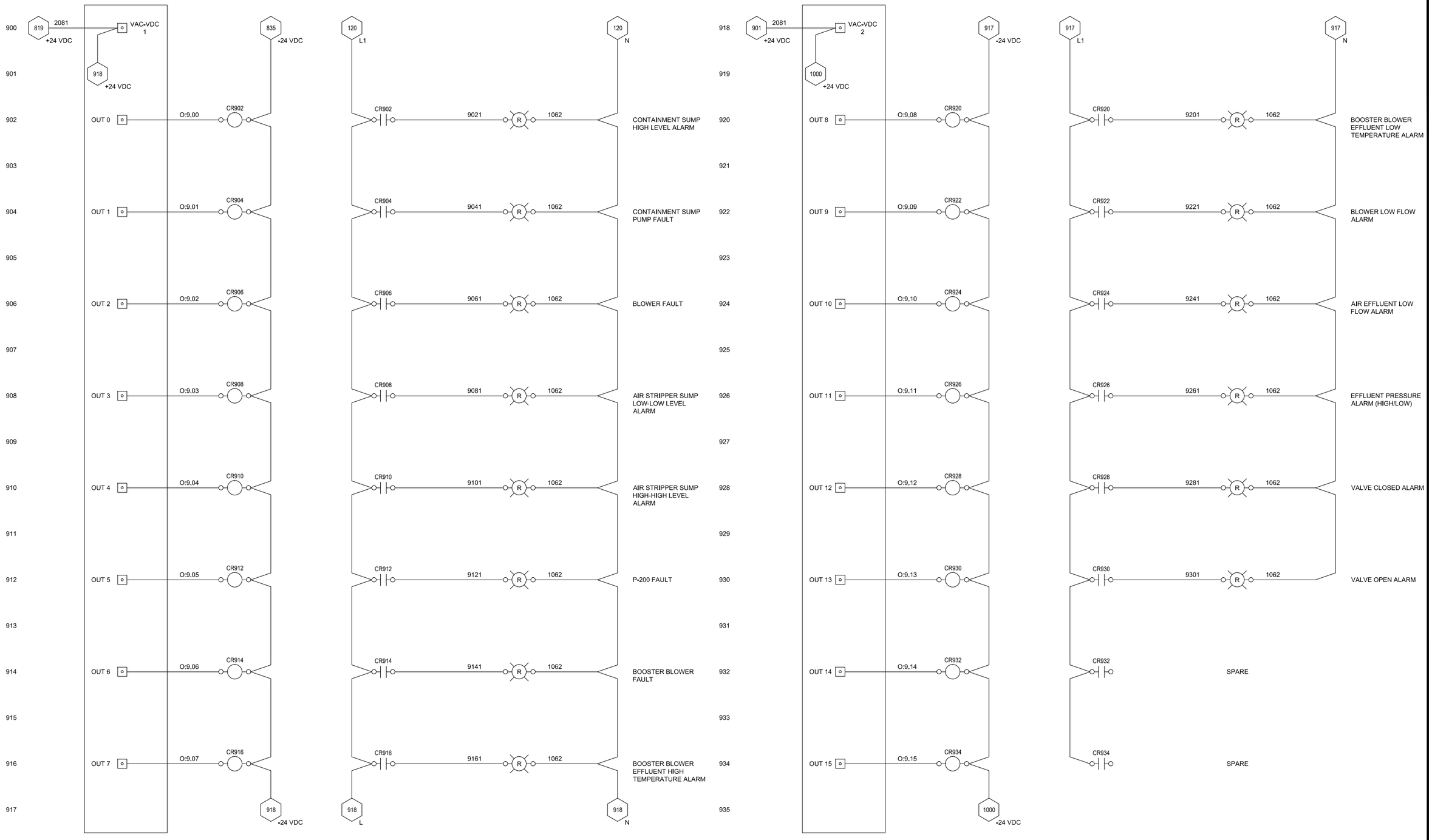
I-8



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Designed by	Drawn by	Checked by
JS	VY	JS

WISCONSIN JOHN SIDOTI E-43415 8/6/14 ELECTRICAL PROFESSIONAL ENGINEER

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
SLOT 9 RELAY OUTPUTS

ELECTRICAL

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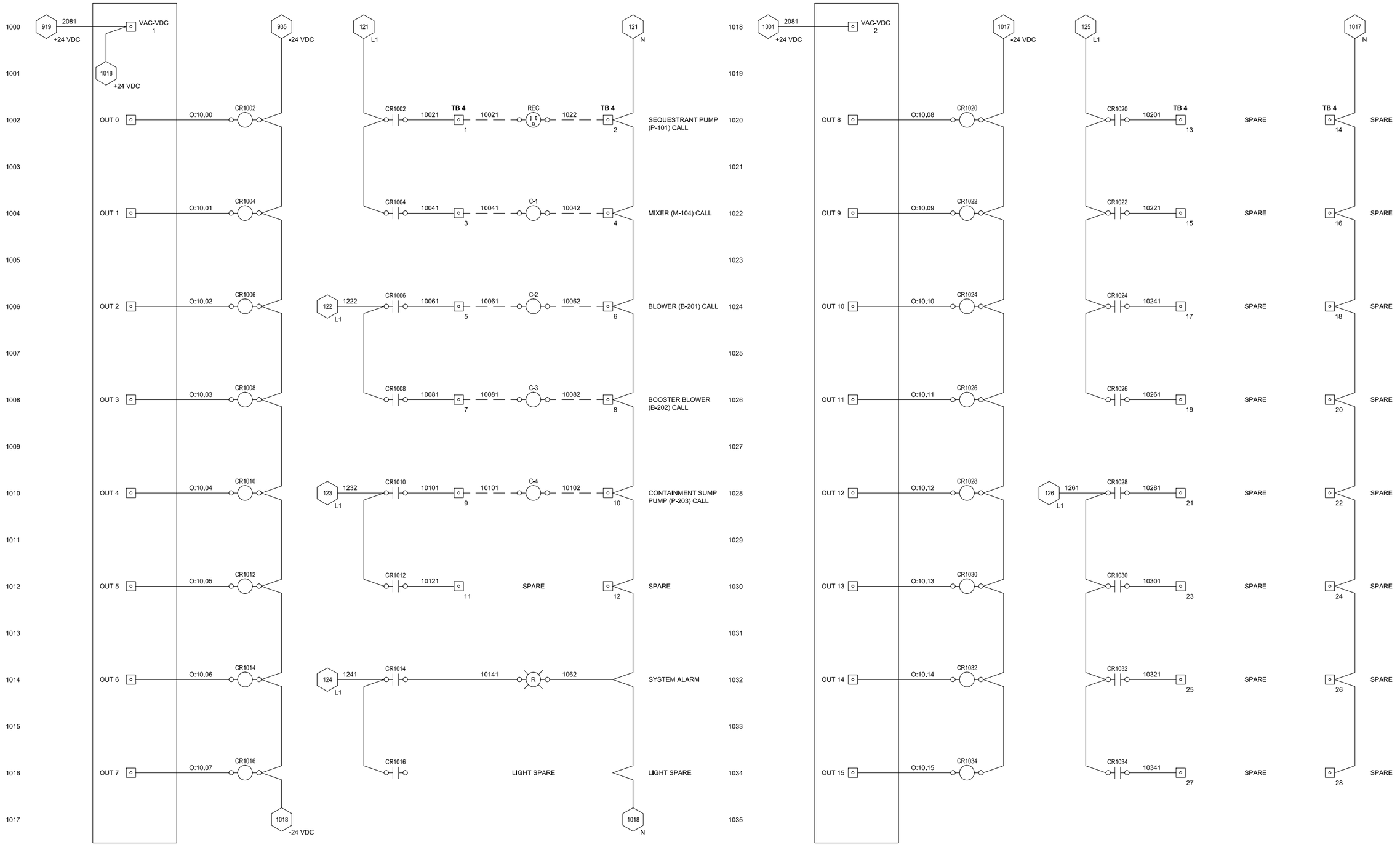
I-9



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Professional Engineer's Name: **JOHN SIDOTI**

Professional Engineer's No.: **E-43415**

State	Date Signed	Project Mgr.
WI	8/6/14	JT
Designed by: JS	Drawn by: VY	Checked by: JS

WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM SLOT 10 RELAY OUTPUTS

ELECTRICAL

ARCADIS Project No. WI001368.0019

Date AUGUST 06, 2014

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TEL. 414.276.7742

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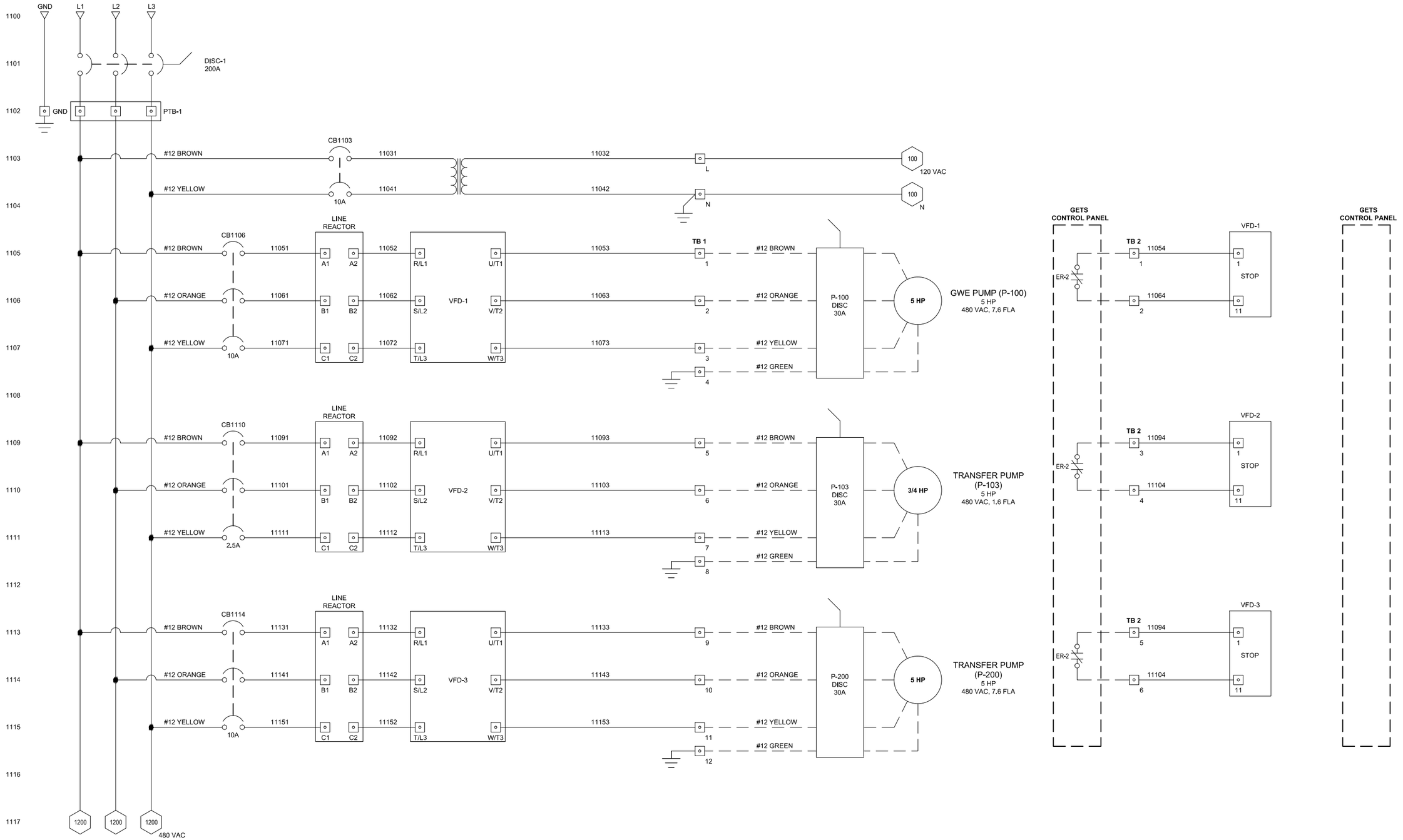

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JS	VY	JS

WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
MOTOR CONTROL ENCLOSURE WIRING

ELECTRICAL

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Date AUGUST 06, 2014

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I-11

1200 1201 1202 1203 1204 1205 1206 1207 1208 1209 1210 1211 1212 1213 1214 1215 1216 1217

1117 1117 1117

480 VAC

COMBINATION STARTER 1

CB1202 C-1 O/L-1

#12 BROWN

#12 ORANGE

#12 YELLOW

1A

12011 12021 12031

TB 1

13 14 15 16

#12 BROWN #12 ORANGE #12 YELLOW #12 GREEN

M-104 DISC 30A

1/4 HP

MIXER (M-104)
1/4 HP
480 VAC, 0.6 FLA

COMBINATION STARTER 2

CB1206 C-2 O/L-2

#12 BROWN

#12 ORANGE

#12 YELLOW

10A

12051 12061 12071

TB 1

17 18 19 20

#12 BROWN #12 ORANGE #12 YELLOW #12 GREEN

B-201 DISC 30A

5 HP

BLOWER (B-201)
5 HP
480 VAC, 7.6 FLA

COMBINATION STARTER 3

CB1210 C-3 O/L-3

#12 BROWN

#12 ORANGE

#12 YELLOW

10A

12091 12101 12111

TB 1

21 22 23 24

#12 BROWN #12 ORANGE #12 YELLOW #12 GREEN

B-202 DISC 30A

4 HP

BOOSTER BLOWER (B-202)
4 HP
480 VAC, 7.6 FLA

COMBINATION STARTER 4

CB1214 C-4 O/L-4

#12 BROWN

#12 ORANGE

#12 YELLOW

2.5A

12131 12141 12151

TB 1

25 26 27 28

#12 BROWN #12 ORANGE #12 YELLOW #12 GREEN

P-203 DISC 30A

1 HP

CONTAINMENT SUMP PUMP (P-203)
1 HP
480 VAC, 2.1 FLA

GETS CONTROL PANEL

TB 4 3	TB 2 7	10041	C-1	10042	TB 2 8	TB 4 4
TB 3 31	9	6161	AUX-1	I:5.15	10	TB 3 32
TB 4 5	TB 2 11	10061	C-2	10062	TB 2 12	TB 4 6
TB 3 53	13	6291	AUX-2	I:6.10	14	TB 3 54
TB 4 7	TB 2 15	10081	C-3	10082	TB 2 16	TB 4 8
TB 3 73	17	7041	AUX-3	I:7.04	18	TB 3 74
TB 4 9	TB 2 19	10101	C-4	10102	TB 2 20	TB 4 10
TB 3 45	21	6241	AUX-4	I:6.06	22	TB 3 46

GETS CONTROL PANEL

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Project Mgr.: JT
Designed by: SM
Drawn by: VY
Checked by: JS

WISCONSIN JOHN SIDOTI E-43415 PROFESSIONAL ENGINEER 8/6/14

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION AND TREATMENT SYSTEM MOTOR CONTROL ENCLOSURE WIRING

ELECTRICAL

ARCADIS Project No. WI001368.0019

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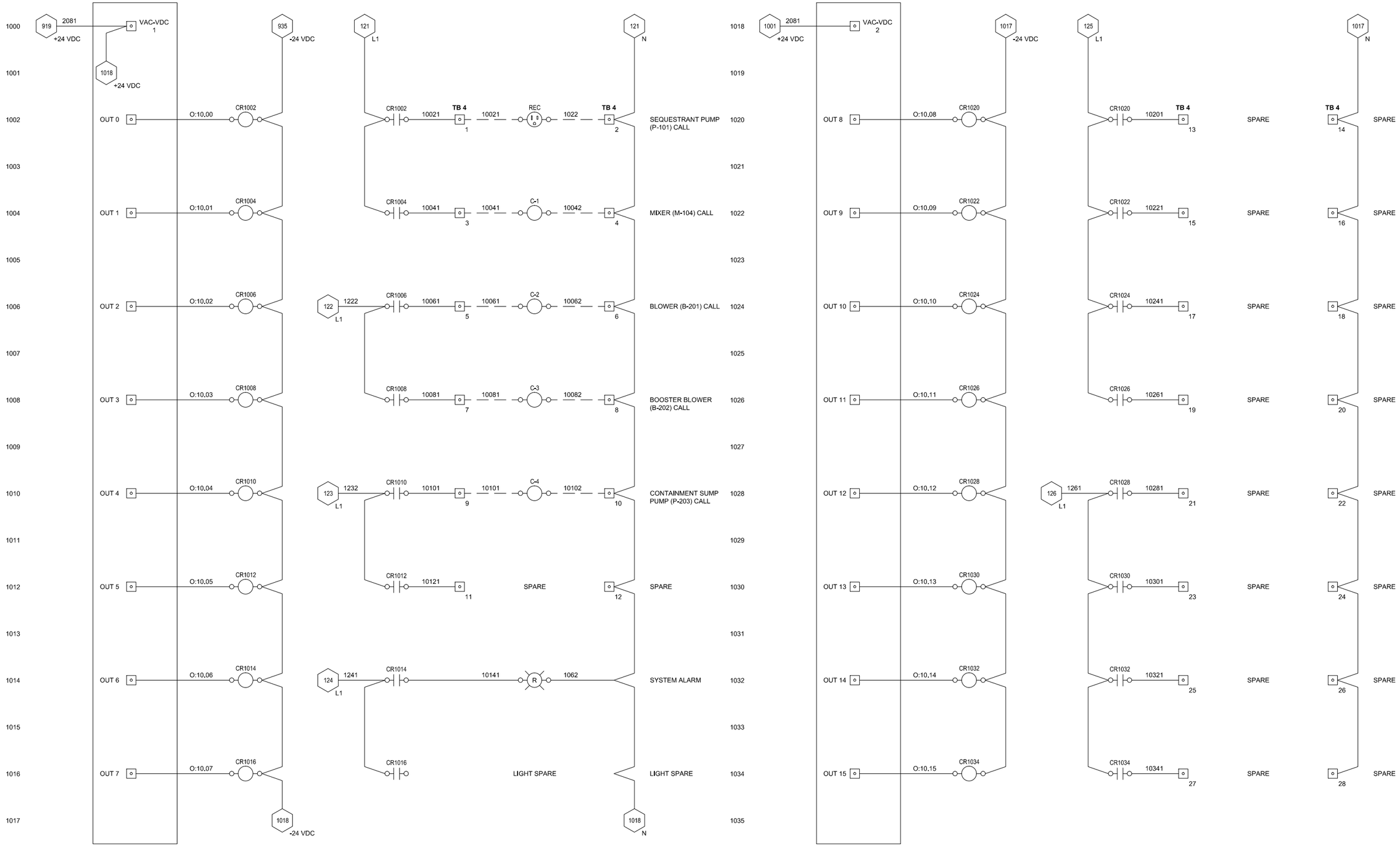
TEL. 414.276.7742

I-12



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WISCONSIN JOHN SIDOTI E-43415 8/6/14 PROFESSIONAL ENGINEER ELECTRICAL

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

GROUNDWATER EXTRACTION TREATMENT SYSTEM SLOT 10 RELAY OUTPUTS

ELECTRICAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014
ARCADIS 126 N. JEFFERSON ST. SUITE 400 MILWAUKEE, WI 53202 TEL. 414.276.7742

I-13

LEGEND:

- WATER PROCESS PIPING
- SECONDARY PROCESS PIPING
- AIR PROCESS PIPING
- INSTRUMENT SIGNAL
- SKID/VAULT LIMITS
- TREATMENT BUILDING LIMITS
- LIMITS OF CONTAINMENT
- EXISTING
- BALL VALVE
- SWING CHECK VALVE
- PRESSURE RELIEF VALVE
- FM — FLOW METER (MECH.)
- TFM — THERMAL MASS FLOW METER
- M — MOTOR
- REDUCER
- AIR FILTER
- CALIBRATION CYLINDER
- MIXER
- TRANSFER PUMP
- EXTRACTION PUMP
- SUMP PUMP
- BLOWER
- CLEANOUT
- TRANSITION
- HEAT TRACE AND INSULATE
- METERING PUMP
- PROGRESSIVE CAVITY PUMP
- 3 — INTERLOCK

ABBREVIATIONS:

FCV	FLOW CONTROL VALVE
FM	FLOW METER
GAC	GRANULAR ACTIVATED CARBON
GETS	GROUNDWATER EXTRACTION AND TREATMENT SYSTEM
M	MOTOR
SVE	SOIL VAPOR EXTRACTION
VGAC	VAPOR GAC VESSEL
VFD	VARIABLE FREQUENCY DRIVE

INSTRUMENT IDENTIFICATION LETTERS

FIRST LETTER		SUCCEEDING LETTERS		
MEASURE OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A = ANALYSIS		ALARM		
B = BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C = USER'S CHOICE			CONTROL, CLOSED	
D =	DIFFERENTIAL			
E = VOLTAGE		SENSOR (PRIMARY ELEMENT)		
F = FLOW RATE	RATIO (FRACTION)			
G = USER'S CHOICE		GLASS, VIEWING DEVICE		
H = HAND				HIGH
I = CURRENT (ELECTRICAL)		INDICATE		
J = POWER	SCAN			
K = TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L = LEVEL		LIGHT		LOW
M = USER'S CHOICE	MOMENTARY			MIDDLE, INTERMEDIATE
N = USER'S CHOICE		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
O = PULSE		ORIFICE, RESTRICTION	OPEN	
P = PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q = QUANTITY	INTEGRATE, TOTALIZE			
R = RADIATION		RECORD	RUN	
S = SPEED, FREQUENCY	SAFETY	SWITCH		
T = TEMPERATURE			TRANSMITTER	
U = MULTIVARIABLE		MULTIFUNCTION		MULTIFUNCTION
V = VACUUM, MECH. ANALYSIS				
W = WEIGHT, FORCE		WELL		
X = UNCLASSIFIED	X AXIS	UNCLASSIFIED		UNCLASSIFIED
Y = EVENT, STATUS OR PRESENCE	Y AXIS			
Z = POSITION, DIMENSION	Z AXIS	UNCLASSIFIED		

LEGENDS NOTES:

1. ANY FIRST LETTER COMBINED WITH MODIFIER REPRESENTS A NEW AND SEPARATE MEASURED VARIABLE. EXAMPLES: PD = PRESSURE DIFFERENTIAL FQ = FLOW TOTALIZED OR INTEGRATED. EXCEPTION IS THE MODIFIER "J" FOR MULTIPOINT SCANNING.
2. FOR ANALYSIS NOT IDENTIFIED BY A SPECIFIC LETTER IN THE TABLE, USE FIRST LETTER "A" NEAR THE INSTRUMENT SYMBOL, SPECIFY THE NATURE OF THE ANALYSIS. EXAMPLE: PH
3. MEANING OF A "USER'S CHOICE" LETTER SHALL BE CONSISTENT THROUGHOUT A PROJECT, AND SHALL BE SPECIFIED IN THE DRAWING LEGEND.
4. UNCLASSIFED LETTER MAY HAVE A FEW DIFFERENT MEANINGS ON A PROJECT, THE MEANING SHALL BE SPECIFIED NEAR EACH INSTRUMENT SYMBOL USING THE UNCLASSIFIED LETTER.
5. THE MODIFIER "SCAN" APPLIES TO MULTIPOINT PRINTING INSTRUMENTS, SUCH AS CJRS (MULTIPOINT CONDUCTIVITY RECORDER WITH ALARM SWITCHES).

PIPELINE DESIGNATION

6" PVC — MATERIAL — SIZE

MATERIAL:

POP	- POLYPROPYLENE
PVC	- POLYVINYL CHLORIDE
SCH	- SCHEDULE
HDPE	- HIGH DENSITY POLYETHYLENE
CS	- CARBON STEEL
GS	- GALVANIZED STEEL

INSTRUMENT SYMBOLS

	PRIMARY CONTROL PANEL NORMALLY ACCESSIBLE TO OPERATOR	FIELD MOUNTED	AUXILIARY PANEL OR RACK NORMALLY ACCESSIBLE TO OPERATOR
DISCRETE INSTRUMENTS			
SHARED DISPLAY, SHARED CONTROL			
COMPUTER FUNCTION INCLUDING DISTRIB. CNTL. SYS.			
PROGRAMMABLE LOGIC CONTROLLER FUNCTION			

GENERAL NOTES:

1. ALL ANALOG SETPOINTS SHALL BE FIELD ADJUSTED BY OPERATOR AT HMI INTERFACE SCREEN.
2. ALARMS THAT SHUT DOWN EXTRACTION WELL AND TREATMENT EQUIPMENT MUST BE CLEARED BY OPERATOR BEFORE BEING RESTARTED.
3. WHERE APPLICABLE, UNIONS AND REDUCERS SHALL BE INSTALLED TO MAINTAIN PIPE ACCESS TO 10 FOOT SECTIONS.
4. REFER TO CONTROL NARRATIVE FOR INTERLOCK DESCRIPTIONS.

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36269 SUSSEX, WI. WISCONSIN

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Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
State: WI | Date Signed: 8/6/14 | Project Mgr.: JT
Designed by: SM | Drawn by: VY | Checked by: RR

ARCADIS
ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PIPING AND INSTRUMENTATION DIAGRAM

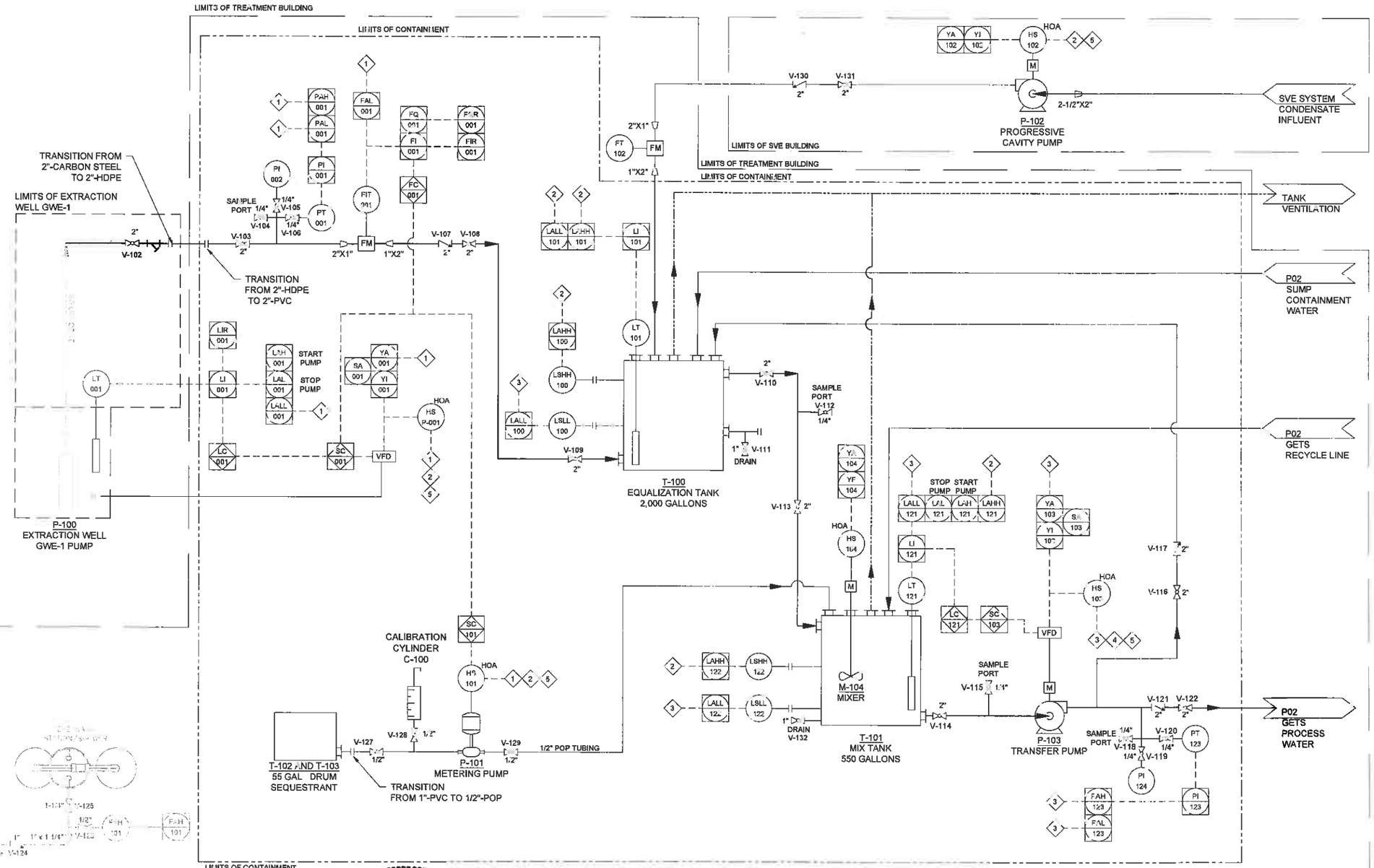
PROCESS

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

P0

NOTES:
1. UNLESS OTHERWISE SPECIFIED, PIPE MATERIAL IS SCHEDULE 40 CARBON STEEL.
2. POTABLE WATER LINE METER, BACKFLOW PREVENTER, AND COMBINATION EYEWASH AND EMERGENCY SHOWER TO BE INSTALLED AS PART OF THE BUILDING INSTALLATION.



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RON SEAL1.jpg
booster

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Professional Engineer's Name			
SCOTT MURPHY			
Professional Engineer's No. 36269			
State WI	Date Signed 8/8/14	Project Mgr. JT	
Designed by SM	Drawn by VY	Checked RR	

PROFESSIONAL ENGINEER SCOTT B. MURPHY #36269 SUSSEX, WI. WISCONSIN

ARCADIS

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION ▪ MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PIPING AND INSTRUMENTATION DIAGRAM

PROCESS

ARCADIS Project No. W0001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE WI 53202
TEL: 414.276.7742

P01

P01 CONTAINMENT WATER TO T-100

1" V-219

1-1/2" x 1"

1-1/2" V-218

1-1/2" V-217

1-1/2"-P-C

ON-OFF HS 203 | YI 203 | YA 203

LAH 202 | LAHH 202

LSH 202 | LSHH 202

M

CONTAINMENT AREA
P-203
SUMP PUMP

1/4" V-210 PI 202

P01 GETS PROCESS WATER

START PUMP LAH 201 | LAHH 201

STOP PUMP LAL 201 | LALL 201

LAHH 200

LSHH 200

LALL 200 | LALL 200

LI 201

LC 201

LIT 201

AIR STRIPPER SUMP (50 GAL)

T-200
AIR STRIPPER

YA 200 | YI 200

HS 200 HOA

VFD

SC 200

SA 200

M

P-200
TRANSFER PUMP

2" V-204

V-203 2"

2" V-202

1" DRAIN V-201

YA 201 | YI 201

HS 201 HOA

M

4" SCH 40 PVC

4" x 3/4"

TFM

FIT 200

FI 200 | FQ 200

FIR 200 | FQR 200

FAL 200 | FALL 200

AMBIENT AIR INTAKE

B-201
BLOWER

LIMITS OF AIR STRIPPER SKID

LIMITS OF CONTAINMENT

P01 GETS RECYCLE LINE TO T-101

TI 202 | TAH 202 | TAL 202

TT 202

V-211

6" X 2-1/2"

2-1/2" X 6"

B-202
BOOSTER
BLOWER

V-224 6"

V-216 6"

PI 203

1/4" V-214

V-215 1/4" SAMPLE PORT

6" V-213

V-212 6"

SVE SYSTEM VAPOR INFLUENT

6" x 3/4"

TFM

FIT 201

FI 201 | FQ 201

FIR 201 | FQR 201

FALL 201

TREATED EFFLUENT AIR TO ATMOSPHERE

PI 204

1/2" SAMPLE PORT 1/2" V-220

VGAC-201
VAPOR
GAC VESSEL

3/4"

1/4" SAMPLE PORT V-221

PI 205

1/2" SAMPLE PORT 1/2" V-222

VGAC-202
VAPOR
GAC VESSEL

3/4"

SAMPLE PORT 1/4" V-223

SAMPLE PORT 1/4" V-224 PI 206 1/4"

LIMITS OF GAC SKID

PI 210

1/4" V-206

SAMPLE PORT V-205 1/4"

V-207 1/4"

PI 210

PT 210

PAH 210

PAL 210

2" V-208

FT 211

2"X1" FM 1"X2"

TRANSITION TO HDPE

P02 GETS EFFLUENT TO STORM SEWER

LIMITS OF TREATMENT BUILDING

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

No.	Date	Revisions	By	Chkd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	07/30/14	90% DESIGN	VY	RR

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SCALE(S) AS INDICATED

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Professional Engineer's Name: SCOTT MURPHY
Professional Engineer's No.: 36269
State: WI | Date Signed: 8/6/14 | Project Mgr.: JT
Designed by: SM | Drawn by: VY | Checked by: RR

ARCADIS
ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PIPING AND INSTRUMENTATION DIAGRAM

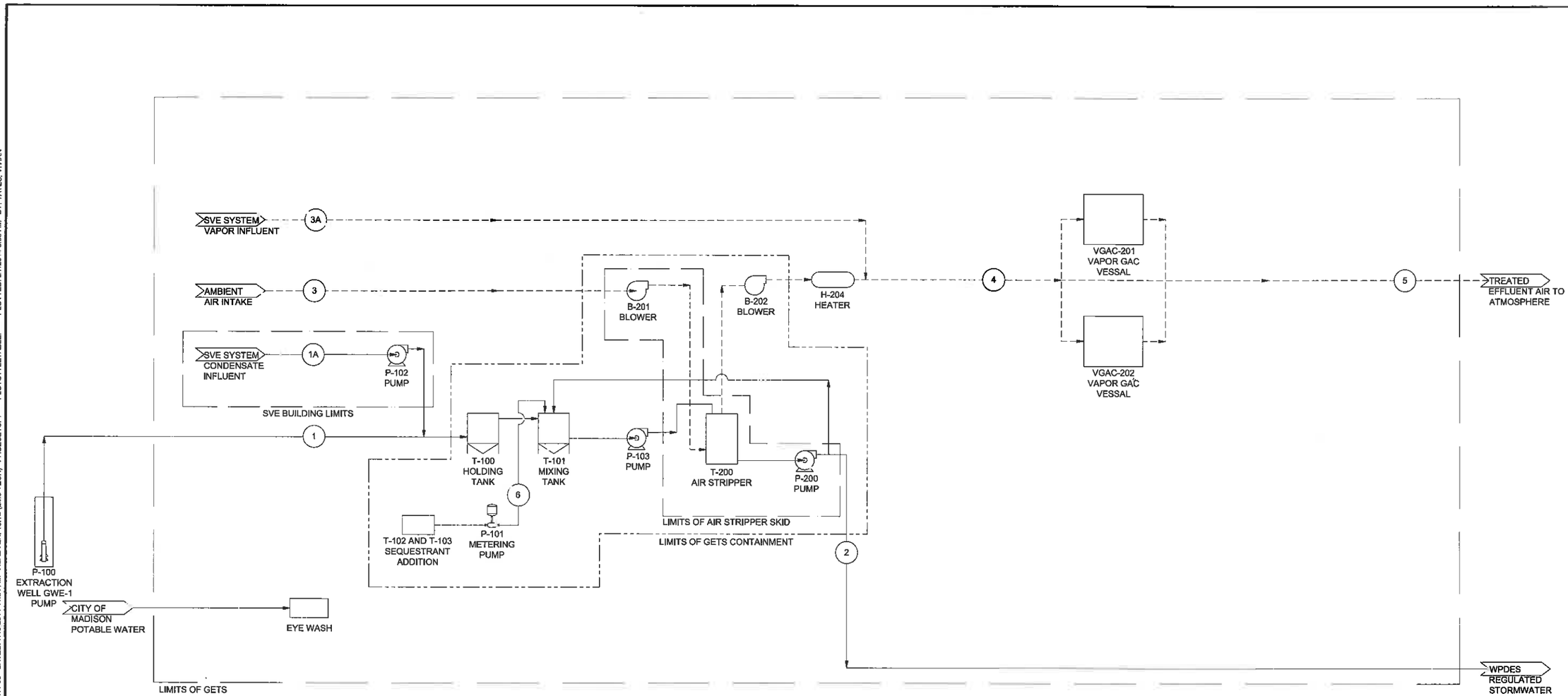
PROCESS

ARCADIS Project No. WI001368.0019

Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

P02



STREAM ID:	1	1A	2	3	3A	4	5	6
STREAM DESCRIPTION:	EXTRACTED GROUNDWATER	CONDENSATE FROM SVE SYSTEM	DISCHARGE TO STORM SEWER	AMBIENT AIR TO STRIPPER	EXTRACTED VAPOR FROM SVE SYSTEM	COMBINED VAPOR FOR TREATMENT	TREATED VAPOR FOR DISCHARGE	SEQUESTRANT
DESIGN FLOW (GPM)	45	8	0-45	210 CFM	320 CFM	530 CFM	530 CFM	0.0113-0.023 LBS/MIN

NOTES:
1. CAPACITY OF KNOCK OUT TANK AT SOIL VAPOR EXTRACTION SYSTEM IS 82 GALLONS. THIS FLOW IS INTERMITTENT BASED ON WEATHER CONDITIONS.

PROFESSIONAL ENGINEER
SCOTT B. MURPHY
#36269
SUSSEX, WI.
WISCONSIN

No.	Date	Revisions	By	Ckd
1	08/06/14	ISSUED FOR CONSTRUCTION	VY	RR
0	06/06/14	60% DESIGN	VY	RR

THIS BAR REPRESENTS ONE INCH ON THE ORIGINAL DRAWING. USE TO VERIFY FIGURE REPRODUCTION SCALE

Professional Engineer's Name		
SCOTT MURPHY		
Professional Engineer's No.		
36269		
State	Date Signed	Project Mgr
WI	8/6/14	JT
Designed by:	Drawn by:	Checked by:
SM	VY	RR

ARCADIS U.S., INC.

MADISON-KIPP CORPORATION • MADISON, WISCONSIN
GROUNDWATER EXTRACTION AND TREATMENT SYSTEM

PROCESS FLOW DRAWING

GENERAL

ARCADIS Project No. WI001368.0019
Date AUGUST 06, 2014

ARCADIS
126 N. JEFFERSON ST.
SUITE 400
MILWAUKEE, WI 53202
TEL. 414.276.7742

P03

CITY:\\MILWAUKEE DIV/GROUP: ENV DB: V.YATES LD: S. MURPHY PIC: PM:J. TRASK TM: R. ROBBENNOLT LYR:ON=*;OFF=*REF*
G:\Aproject\MadisonKipp\WI001368\2013\cadd\Design Drawings\GETS\80 PERCENT\PFDMKC.dwg LAYOUT: P03 SAVED: 7/16 2014 11:54 AM ACADVER: 18.1S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: — PLOTTED: 8.7.2014 9:00 AM BY: YATES, VIVIAN
XREFS: border IMAGES: RON SEAL.jpg RON SEAL1.jpg PROJECTNAME: —

Table 2
Air Stripper Removal Efficiency

Madison-Kipp Corporation
201 Waubesa Street, Madison, Wisconsin

Analyte	Air Stripper Influent from Extraction Well (µg/L)[1]	Air Stripper Effluent Concentration in Water (µg/L)	4-Tray Air Stripper Removal Efficiency (%)	Air Stripper Effluent Concentration in Vapor (ppmv)[2]
cis-1,2-Dichloroethene	1,400	32.3	98	9.3529
Tetrachloroethene	3,200	6	100	12.7684
trans-1,2-Dichloroethene	21	<1	100	0.1397
Trichloroethene	610	5.7	99	3.0493
Vinyl chloride	56	<1	100	0.5929

Notes:
1 = Groundwater analytical results summarized from the January 20, 2014 event. Only analytes detected are modeled.
2 = Air stripper effluent will be treated through vapor granular activated carbon before discharge to the atmosphere.

Acronyms and Abbreviations:
< = constituent not detected above noted laboratory detection limit
ppmv = parts per million by volume
µg/L = micrograms per liter

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WPDES Section III.
8. Site Plan Including Contaminant Plume Information

Figures 2-11 - 2014 Discharge Design

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WPDES Section III.
8. Site Plan Including Contaminant Plume Information

Figures 2-11 - 2014 Discharge Design

CLASSIC CLEANERS
BRRTS #0213522764

MW-27D
MW-27D2

MW-9D
MW-9D2
MP-15

MW-12S
MW-26S
MW-1
MP-13
MW-20D
MW-19D2
MW-3D3
GWE-1
MW-3D2
MW-19D
MW-3D
MW-20D2
MW-3S
MW-21D
MW-21D2
MW-18S
MW-10S
MP-14
MW-2S
MW-2D
MW-8
MW-5D3
MW-5S
MW-7
MW-5D2
MW-5D
MP-16
MW-22D
MW-22S
MW-11S
MW-23D
MW-23S
MW-24
MW-4D2
MW-6S
MW-4D
MW-6D
MW-4S
MW-17

MW-25D
MW-25D2

UNIT
WELL 8

LAKE MONONA

0 350 700
Feet

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- EXTRACTION WELL
- MUNICIPAL UNIT WELL 8
- MONITORING WELL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN
2014 DISCHARGE DESIGN

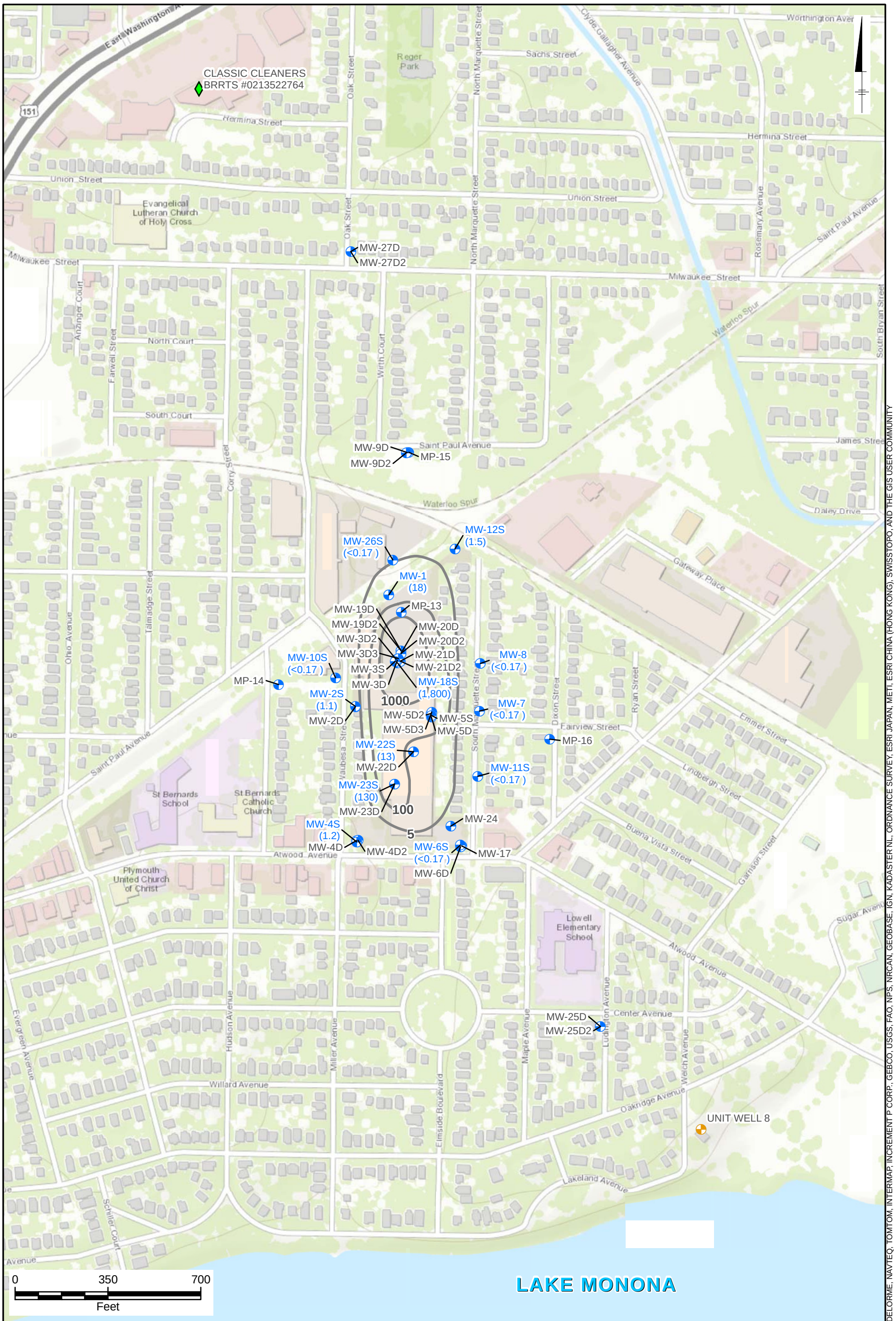
WELL LOCATIONS MAP

ARCADIS

FIGURE
2

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig2_WellLocations_20141105.mxd 11/5/2014 8:15:58 PM

SERVICE LAYER CREDITS: SOURCES: ESRI, DELORME, NAVTEQ, TOMTOM, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA (HONG KONG), SWISSTOPO, AND THE GIS USER COMMUNITY



LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (1,800) TETRACHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —5— TETRACHLOROETHENE ISOCONCENTRATION CONTOUR

THE WATER TABLE IS INTERPRETTED TO BE FROM APPROXIMATELY 2 - 50 FEET BELOW LAND SURFACE OR 887 - 821 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

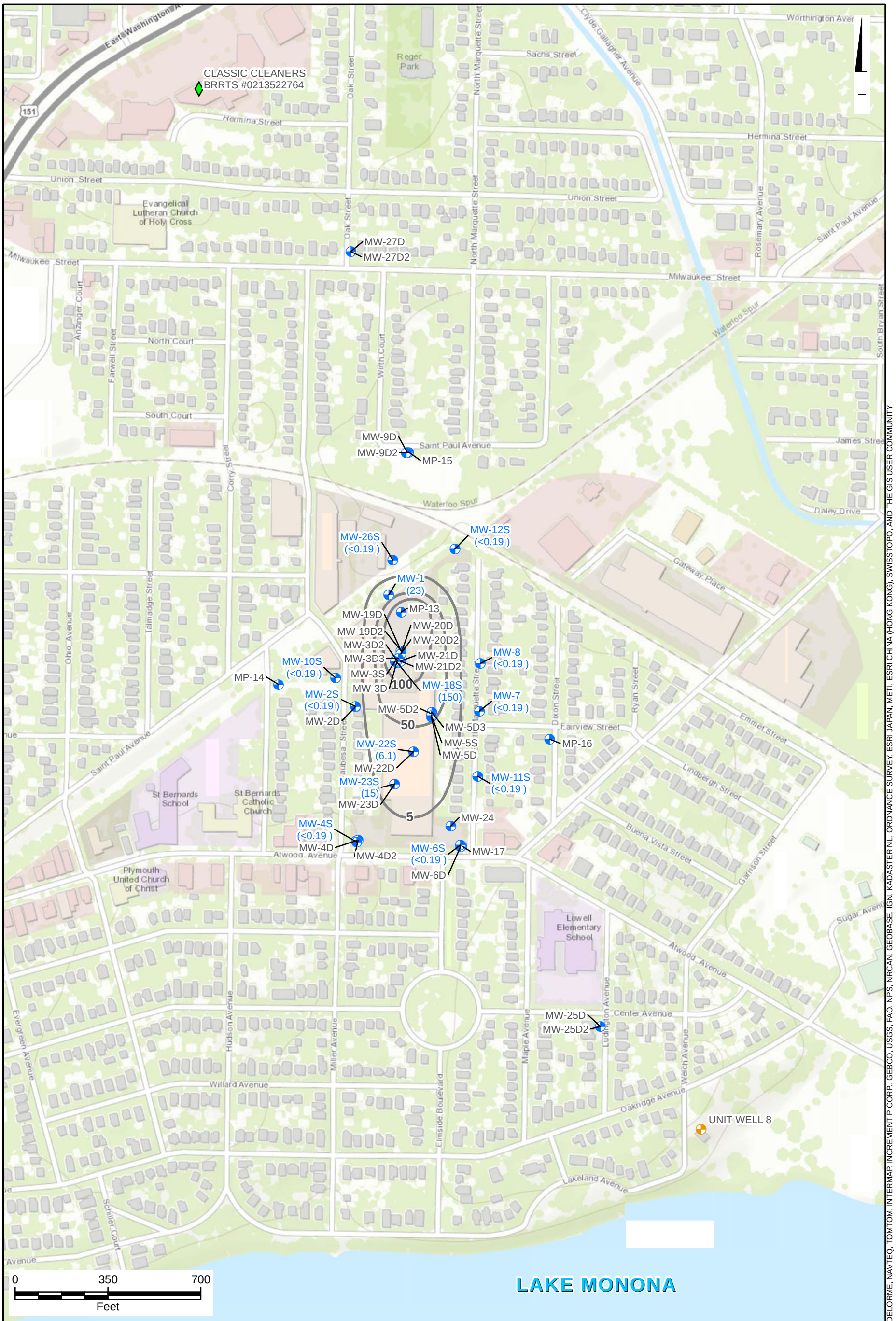
2014 DISCHARGE DESIGN

WATER TABLE TETRACHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 3

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig3_WT_PCE_Oct13_20141105.mxd 11/5/2014 8:16:15 PM



LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (150) TRICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- 5 TRICHLOROETHENE ISOCONCENTRATION CONTOUR

THE WATER TABLE IS INTERPRETTED TO BE FROM APPROXIMATELY 2 - 50 FEET BELOW LAND SURFACE OR 887 - 821 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

WATER TABLE TRICHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 4

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig4_WT_TCE_Oct13_20141105.mxd 11/5/2014 8:19:16 PM

CLASSIC CLEANERS
BRRTS #0213522764

MW-27D
MW-27D2

MW-9D
MW-9D2
MP-15

MW-26S
(<0.12)
MW-12S
(<0.12)
MW-1
(27)
MP-13
MW-19D
MW-19D2
MW-3D2
MW-3D3
MW-3S
MW-3D
MW-20D
MW-20D2
MW-21D
MW-21D2
MW-18S
(78)
MW-10S
(<0.12)
MP-14
MW-2S
(<0.12)
MW-2D
MW-5D2
MW-5D3
MW-5S
MW-5D
MW-22S
(97)
MW-22D
MW-23S
(16)
MW-23D
50
7
MW-8
(<0.12)
MW-7
(<0.12)
MP-16
MW-11S
(<0.12)
MW-24
MW-4S
(<0.12)
MW-4D2
MW-4D
MW-6S
(<0.12)
MW-17
MW-6D

MW-25D
MW-25D2

UNIT WELL 8

0 350 700
Feet

LAKE MONONA

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (78) CIS-1,2 DICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —7— CIS-1,2 DICHLOROETHENE ISOCONCENTRATION CONTOUR

THE WATER TABLE IS INTERPRETTED TO BE FROM APPROXIMATELY 2 - 50 FEET BELOW LAND SURFACE OR 887 - 821 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

WATER TABLE
CIS-1,2 DICHLOROETHENE
ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE
5

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig5_WT_CIS_Oct13_20141105.mxd 11/5/2014 8:19:06 PM

CLASSIC CLEANERS
BRRTS #0213522764

MW-27D (1)
MW-27D2

MW-9D
MW-9D2
(7.4)
MP-15

MW-26S
MW-12S

MW-1
MP-13
(660)

MW-19D2
MW-19D
(150)
MW-20D2
MW-20D
MW-3D3
MW-3D2
MW-3S
MW-3D
MW-21D
MW-21D2
MW-18S

MW-8
MW-10S
MP-14
(<0.19)

MW-2S
MW-2D
MW-5D2
MW-5D3
MW-5S
MW-5D
(110)
MW-7

MP-16
(<0.19)

MW-22S
MW-22D
MW-11S

MW-23S
MW-23D

MW-4D2
(<0.19)
MW-4D
MW-4S
MW-24
MW-6S
MW-17
MW-6D
(18)

MW-25D
(<0.19)
MW-25D2

UNIT WELL 8

100
5

East Washington Avenue
Worthington Avenue
Reger Park
Sachs Street
Clyde Gallagher Avenue
North Marquette Street
Oak Street
Hermina Street
Union Street
Evangelical Lutheran Church of Holy Cross
Milwaukee Street
Rosemary Avenue
Saint Paul Avenue
Waterloo Spur
South Bryan Street
Anzinger Court
Farwell Street
North Court
South Court
Wirth Court
Corry Street
James Street
Daley Drive
Gateway Place
Ohio Avenue
Talmadge Street
Waubesa Street
Dixon Street
Ryan Street
Fairview Street
Emmet Street
Lindbergh Street
Buena Vista Street
Garrison Street
Sugar Avenue
St Bernards School
St Bernards Catholic Church
Atwood Avenue
Plymouth United Church of Christ
Lowell Elementary School
Hudson Avenue
Miller Avenue
Maple Avenue
Ludington Avenue
Center Avenue
Evergreen Avenue
Willard Avenue
Elmside Boulevard
Oakridge Avenue
Welch Avenue
Lakeland Avenue
Schiller Court
Avenue

0 350 700
Feet

LAKE MONONA

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (150) TRICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —5— TRICHLOROETHENE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- TRICHLOROETHENE CONCENTRATION FOR MW-25D (SCREENED IN THE UPPER WONEWOC) AND MW-27 (VERTICAL AQUIFER PROFILING DATA) ARE USED TO ESTIMATE THE ISOCONCENTRATION CONTOUR.

THE LOWER LONE ROCK FORMATION IS INTERPRETTED TO BE FROM APPROXIMATELY 65 - 120 FEET BELOW LAND SURFACE OR 818 - 781 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

LOWER LONE ROCK FORMATION TRICHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 6

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig6_LLR_TCE_Oct13_20141125.mxd

CLASSIC CLEANERS
BRRTS #0213522764

MW-27D
MW-27D2
MW-9D
MW-9D2
MP-15
MW-26S (<0.19)
MW-12S (<0.19)
MW-1 (23)
MP-13
MW-19D
MW-19D2
MW-20D
MW-20D2
MW-3D2
MW-3D3
MW-21D
MW-21D2
MW-3S
MW-3D
100
MW-18S (150)
MW-10S (<0.19)
MP-14
MW-2S (<0.19)
MW-2D
MW-5D2
50
MW-5D3
MW-5S
MW-5D
MW-22S (6.1)
MW-22D
MW-23S (15)
MW-23D
5
MW-24
MW-4S (<0.19)
MW-4D
MW-4D2
MW-6S (<0.19)
MW-6D
MW-17
MW-8 (<0.19)
MW-7 (<0.19)
MP-16
MW-11S (<0.19)
MW-25D
MW-25D2
UNIT WELL 8
LAKE MONONA

0 350 700
Feet

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (150) TRICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —5— TRICHLOROETHENE ISOCONCENTRATION CONTOUR

THE WATER TABLE IS INTERPRETTED TO BE FROM APPROXIMATELY 2 - 50 FEET BELOW LAND SURFACE OR 887 - 821 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

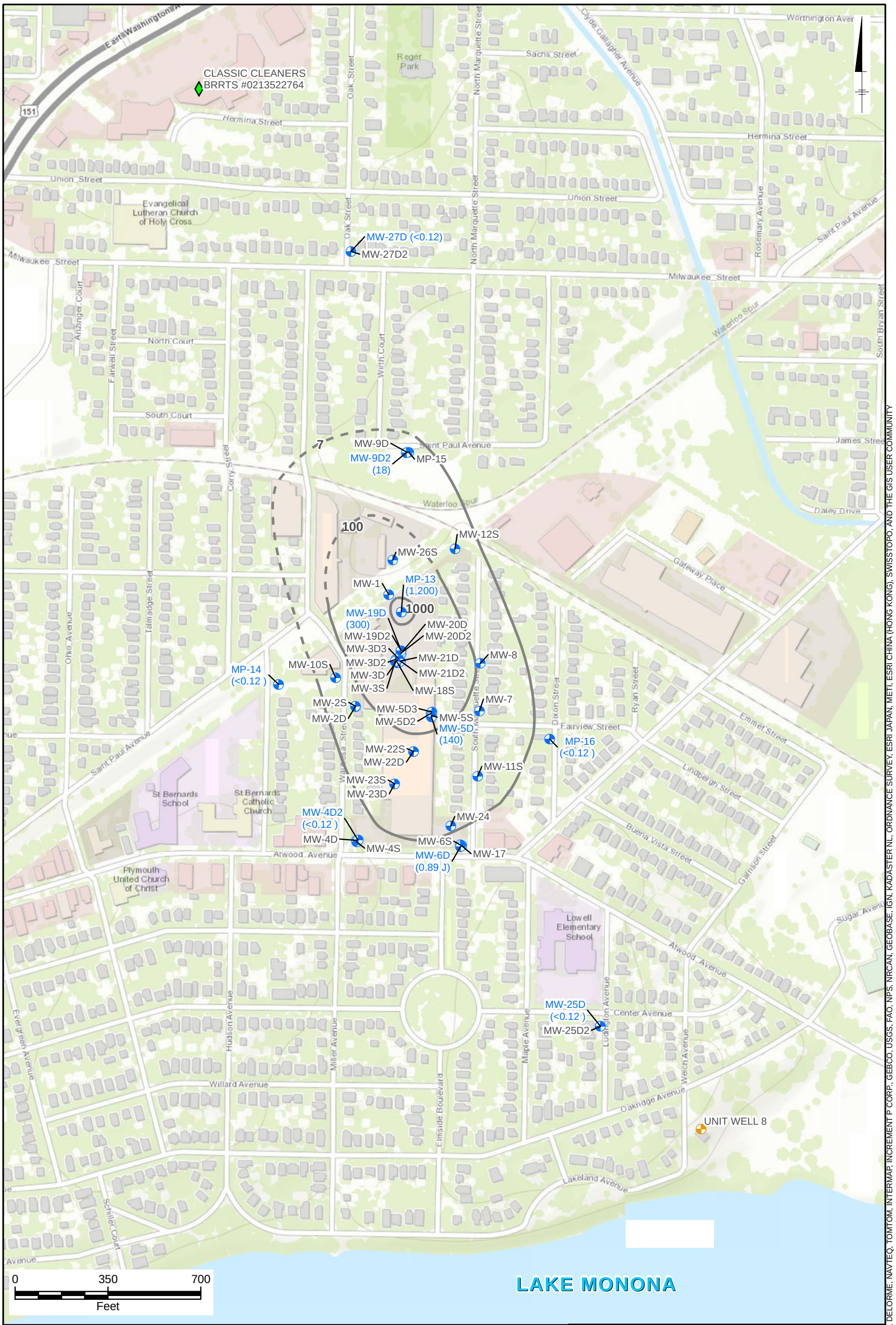
2014 DISCHARGE DESIGN

WATER TABLE TRICHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 7

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig7_WT_TCE_Oct13_20141105.mxd 11/5/2014 8:20:48 PM



LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (300) CIS-1,2 DICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —7— CIS-1,2 DICHLOROETHENE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- CIS-1,2 DICHLOROETHENE CONCENTRATION FOR MW-25D (SCREENED IN THE UPPER WONEWOC) AND MW-27 (VERTICAL AQUIFER PROFILING DATA) ARE USED TO ESTIMATE THE ISOCONCENTRATION CONTOUR.

THE LOWER LONE ROCK FORMATION IS INTERPRETTED TO BE FROM APPROXIMATELY 65 - 120 FEET BELOW LAND SURFACE OR 818 - 781 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

LOWER LONE ROCK FORMATION CIS-1,2 DICHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 8

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig8_LLR_CIS_Oct13_20141105.mxd 11/5/2014 8:21:47 PM

CLASSIC CLEANERS
BRRTS #0213522764

MW-27D (2)
MW-27D2

5
100
1000
2000
4000

MW-9D
MW-9D2
MP-15
(1,800)

MW-12S
MW-26S
MW-1
MP-13
(6,500)
MW-19D
MW-19D2
MW-20D
MW-20D2
MW-3D2
MW-3D3
MW-21D
MW-21D2
(1,500)
MW-3S
MW-3D
MW-18S
MW-10S
MP-14
(970)
MW-8
MW-7
MW-2S
MW-2D
MW-5D2
MW-5D3
MW-5S
MW-5D
MW-22S
MW-22D
MW-11S
MW-23S
MW-23D
MP-16
(94)
MW-24
MW-4S
MW-4D
MW-4D2
MW-6S
MW-6D
MW-17
(800)

MW-25D
MW-25D2
(<0.17)

UNIT WELL 8

0 350 700
Feet

LAKE MONONA

TETRACHLOROETHENE CONCENTRATION FROM MW27D (SCREENED IN LOWER WONEWOC) USED TO ESTIMATE THE ISOCONCENTRATION CONTOURS

IN GENERAL THE HIGHEST CONCENTRATION FROM THE MULTIPORT SAMPLE INTERVALS IN A GIVEN FORMATION ARE USED FOR CONTOURING

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (6,500) TETRACHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —5— TETRACHLOROETHENE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

THE UPPER WONEWOC FORMATION IS INTERPRETTED TO BE FROM APPROXIMATELY 87 - 139 FEET BELOW LAND SURFACE OR 767 - 690 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

UPPER WONEWOC FORMATION TETRACHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 9

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig9_UWF_PCE_Oct13_20141105.mxd 11/5/2014 8:22:16 PM

CLASSIC CLEANERS
BRRTS #0213522764

MW-27D (1)
MW-27D2

5
50
100
500

MW-9D
MW-9D2
MP-15
(190)

MW-26S
MW-12S
MW-1
MP-13
(550)
MW-19D
MW-19D2
MW-20D
MW-20D2
MW-3D2
MW-3D3
MW-21D
MW-21D2
(120)
MW-3S
MW-3D
MW-18S
MW-10S
MP-14
(53)
MW-8
MW-7
MW-2S
MW-2D
MW-5D2
MW-5D3
MW-5S
MW-5D
MW-22S
MW-22D
MW-11S
MW-23S
MW-23D
MW-24
MW-4S
MW-4D
MW-4D2
MW-6S
MW-6D
MW-17
(49)
MP-16
(13)

MW-25D
MW-25D2
(<0.19)

UNIT WELL 8

TRICHLOROETHENE CONCENTRATION FROM MW27D (SCREENED IN LOWER WONEWOC) USED TO ESTIMATE THE ISOCONCENTRATION CONTOURS

IN GENERAL THE HIGHEST CONCENTRATION FROM THE MULTIPORT SAMPLE INTERVALS IN A GIVEN FORMATION ARE USED FOR CONTOURING

0 350 700
Feet

LAKE MONONA

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (550) TRICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —5— TRICHLOROETHENE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)

THE UPPER WONEWOC FORMATION IS INTERPRETTED TO BE FROM APPROXIMATELY 87 - 139 FEET BELOW LAND SURFACE OR 767 - 690 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

UPPER WONEWOC FORMATION TRICHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 10

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
Z:\GISPROJECTS_ENV\MadisonKipp\ArcMap\2014-11\Fig10_UWF_TCE_Oct13_20141105.mxd 11/5/2014 8:23:33 PM

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CLASSIC CLEANERS
BRRTS #0213522764

MW-27D (0.85 J)
MW-27D2

MW-9D
MW-9D2
MP-15
(220)

7
100
500

MW-12S
MW-26S
MW-1
MP-13
(650)
MW-19D
MW-19D2
MW-20D
MW-20D2
MW-3D2
MW-3D3
MW-21D
MW-21D2
(110)
MW-3S
MW-3D
MW-18S
MW-8
MP-14
(27)
MW-10S
MW-2S
MW-2D
MW-5D2
MW-5D3
MW-5S
MW-5D
MW-7
MP-16
(10)
MW-22S
MW-22D
MW-11S
MW-23S
MW-23D
MW-24
MW-4S
MW-4D
MW-4D2
MW-6S
MW-6D
MW-17
(<0.24)

MW-25D
MW-25D2
(<0.12)

UNIT WELL 8

LAKE MONONA

0 350 700
Feet

CIS-1,2 DICHLOROETHENE CONCENTRATION FROM MW27D (SCREENED IN LOWER WONEWOC) USED TO ESTIMATE THE ISOCONCENTRATION CONTOURS

IN GENERAL THE HIGHEST CONCENTRATION FROM THE MULTIPORT SAMPLE INTERVALS IN A GIVEN FORMATION ARE USED FOR CONTOURING

LEGEND

- CLOSED SITE (COMPLETED CLEANUP)
- MUNICIPAL UNIT WELL 8
- MONITORING WELL
- (650) CIS-1,2 DICHLOROETHENE CONCENTRATIONS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
- —7— CIS-1,2 DICHLOROETHENE ISOCONCENTRATION CONTOUR (DASHED WHERE INFERRED)
- J ESTIMATED CONCENTRATION

THE UPPER WONEWOC FORMATION IS INTERPRETTED TO BE FROM APPROXIMATELY 87 - 139 FEET BELOW LAND SURFACE OR 767 - 690 FEET ABOVE MEAN SEA LEVEL

MADISON-KIPP CORPORATION
201 WAUBESA STREET
MADISON, WISCONSIN

2014 DISCHARGE DESIGN

UPPER WONEWOC FORMATION CIS-1,2 DICHLOROETHENE ISOCONCENTRATION MAP, OCTOBER 2013

ARCADIS

FIGURE 11

CITY: MPLS DIV/GROUP: IM/DV DB: MG LD: TS MADISON-KIPP
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