WOODARD &CURRAN

Monthly Operating Report

November 2017

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So. Sangamon

December 19, 2017

woodardcurran.com

COMMITMENT & INTEGRITY DRIVE RESULTS

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EXECUTIVE SUMMARY

Safety. Safety is the number one priority at Woodard and Curran. We continue to provide monthly training for operations staff at the plant, provide weekly safety updates and safety videos are assigned to all employees. The safety topic for this month was "Fire Extinguisher Safety". There were no lost time accidents in the month of November 2017. As of November 30, 2017, 100 percent of the safety audit items have been completed.

Compliance. The finished water quality was within regulatory limits and all reporting and sampling requirements were met for the month. A copy of the Operations Report submitted to the Illinois Environmental Protection Agency is available at www.sswc.us.

During the month of November 2017, the plant pumped 35.758 million gallons from the well field and 28.617 million gallons of finished water. For the period of May 2017 through November 2017, the plant has pumped 8,431,881 more gallons of finished water then during the same period one year ago.

During the November 21, 2017 SSWC monthly meeting, there was mention of an article in the SJR regarding high toxins at Illinois debris sites. The article called out the Buckhart Sand and Gravel in Mechanicsburg as the only site in the Springfield area to receive a violation notice. Aluminum, Chromium, Iron and Selenium were excessive in the samples taken from Buckhart Sand and Gravel, which stopped taking any backfill for about two years. No detectable levels of Aluminum, Chromium or Selenium were found in the SSWC sample. A summary of the test results for SSWC's Raw Water is included in this report and the full report is included in Attachment A.

The SSWC plant remains on Critical Review status. Systems on Critical Review will be evaluated for sufficient capacity before issuance of water main extension permits.

Operations. There was 0 emergency call-outs for the month. There were five customer inquiries for the month.

Maintenance and Repair. For the month of November 2017, there were 11 inspections, 5 preventative and 3 corrective maintenance activities completed.

Budget. Through November 24, 2017, we are $5,353 under budget for the fiscal year.

Capital Planning. Woodard and Curran is working with Meco Engineering to update and prioritize the Capital Improvement Plan. The CIP is a planning document that includes all projects anticipated to exceed $5,000 in cost over the next five years. The CIP is an ongoing process and will be refined from time to time as projects are completed and new issues are identified.

1. SAFETY

1.1 SAFETY TRAINING

Woodard and Curran continues to provide safety training for personnel at the plant. This is accomplished by requiring daily safety meetings, weekly safety updates are available to the plant, and safety videos are assigned to all employees and are required to be completed. The November 2017 safety training topic was "Hunter Safety".

1.2 LOST TIME ACCIDENTS

There were no lost time accidents in the month of November 2017.

1.3 SAFETY AUDIT

Since Woodard and Curran assumed operational responsibility for the SSWC plant, two safety audits have been completed. The first audit was conducted in May 2015 and identified 89 items needing to be addressed. Approximately 86 percent of those items identified had been addressed when a second audit occurred in November 2016.

The finding for these two audits were combined to produce a list of 40 items needing to be addressed. As of November 30, 2017, 100 percent of the safety audit items have been completed.

1.4 MISCELLANEOUS SAFETY

There were no Miscellaneous Safety items for the month.

2. COMPLIANCE, FLOWS AND LOADINGS

2.1 COMPLIANCE

The finished water quality was within regulatory limits and all reporting and sampling requirements were met for November. A copy of the Operations Report to the Illinois Environmental Protection Agency (IEPA) is available on the SSWC website.

2.2 INFLUENT FLOWS AND LOADINGS

The total gallons pumped from the well field was 35.758 MG. The influent parameters were all within the normal range.

The influent flow and loadings are summarized below in Table 2.2

Table 2.2 Influent Concentrations and Flow

	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Well Flow Gals (k)
Max.	7.66	14.9	5.96	0.531	-	376	298	1.550
Min.	7.31	13.6	0.45	0.212	-	358	286	0.821
Avg.	7.44	14.2	1.19	0.254	-	366	292	1.192
Total	-	-	-	-	-	-	-	35.758

2.3 EFFLUENT CONCENTRATIONS

The facility filtered 32.821 MG during the month with a daily average of 1.094 MG and a min/max of 0.752/1.432 MG.

Table 2.3 Finished Water Quality

	Free CL2	Total CL2	pH	Temp	Iron	Manganese	Fluoride	Hardness	Alkalinity	Phosphate
Max.	1.5	1.7	8.11	15.6	0.01	0.042	0.98	120	290	1.66
Min.	1.3	1.5	7.74	13.6	0.00	0.007	0.79	98	270	1.00
Avg.	1.4	1.6	7.88	14.3	0.01	0.020	0.90	109	279	1.24
MCL	-	-	-	-	1.00	-	4.00	-	-	-
SMCL	-	-	-	-	0.30	0.050	2.00	-	-	-

Finished Water Flow Comparison for FY 2018

Time Period	2017-2018	2016-2017	2015-2016
May – November	255,179,559	246,747,678	234,247,917
Increase for the same period last year		**8,431,881**	

FINISHED WATER PUMPING HISTORY						
	2017-2018	2016-2017	2015-2016	2014-2015	2013-2014	2012-2013
May	32,301,672	33,248,127	33,376,051	37,669,726	31,157,411	29,592,356
June	39,931,402	**41,541,321**	31,092,539	38,462,951	36,530,691	47,120,577
July	42,164,927	35,378,396	33,123,375	**38,674,894**	40,908,704	**57,780,876**
August	38,760,634	35,401,490	**38,109,033**	33,748,543	**42,999,243**	42,398,528
September	39,896,986	36,325,215	36,546,171	29,763,075	37,597,085	32,510,603
October	33,506,605	34,374,820	34,783,455	28,803,052	33,916,594	30,278,765
November	28,617,333	30,478,309	27,217,293	28,426,579	31,615,459	27,114,479
December		32,525,530	27,788,637	28,656,869	32,697,551	29,014,035
January		30,449,215	28,510,121	30,346,721	32,499,427	28,007,432
February		27,373,232	26,095,228	26,336,077	28,745,378	25,763,807
March		30,068,363	27,851,811	28,729,919	31,217,486	28,130,190
April		29,625,797	29,292,618	29,270,184	31,690,073	27,991,597
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Totals	255,179,559	396,789,815	373,786,332	378,888,590	411,575,102	405,703,245
Average		1,087,095	1,022,702	1,038,051	1,127,603	1,111,516
Maximum		2,061,098	2,177,926	1,837,344	2,010,587	2,546,901
Minimum		275,315	-	349,690	363,767	142,411

2.4 LAGOON DISCHARGE CONCENTRATIONS

The results for the NPDES lagoon discharge permit are summarized below.

Table 2.4 Weekly Grab Sample Analysis Results

Lagoon Effluent Results						
Date	**Fe (mg/l)**	**Mn (mg/l)**	**Chloride (mg/l)**	**Cl^2 (mg/l)**	**pH (S.U.)**	**TSS (mg/l)**
11/09/17	0.570	0.171	263	0.01	7.86	0.00
Minimum						
Maximum						
Average						
Monthly Avg Limit	***2.000***	***1.000***				***15***
Daily Limit	***4.000***	***2.000***	***500***	***0.05***	***6.0-9.0***	***30***

The Chloride sample for the month of November 2017, performed by the Springfield Metropolitan Sanitary District, was 19,100 mg/L. The limit for chloride discharge to the sanitary district is 30,000 mg/L.

FOLLOW-UP ON ILLINOIS STATE JOURNAL-REGISTER ARTICLE – 4 OUT OF 5 ILLINOIS DEBRIS SITES HIGH IN TOXINS

- During the November 21, 2017 SSWC monthly meeting, there was mention of an article in the SJR regarding high toxins at Illinois debris sites. The article called out the Buckhart Sand and Gravel in Mechanicsburg as the only site in the Springfield area to receive a violation notice.

  Aluminum, Chromium, Iron and Selenium were excessive in the samples taken from Buckhart Sand and Gravel, which stopped taking any backfill for about two years.

  Below is a summary of the test results for the four toxins mentioned in the article. A complete copy for all the test results is included in Attachment A of this document.

South Sangamon Water Commission
Project: CCDD Monitoring Wat
Work Order: 17K0733

Prairie Analytical Systems, INCORPORATED

Chemical Name	Groundwater Remediation Objectives		17K0733-01
	Class1	Class2	Raw
			11/28/2017
INORG			
SW6010B R2 1996 (mg/L)			
Aluminum			< 0.100
Arsenic	0.05	0.2	< 0.0100
Chromium	0.1	1	< 0.00500
Iron	5	5	1.61
Manganese	0.15	10	**0.185**
SW6020A R1 1998 (mg/L)			
Mercury	0.002	0.01	< 0.000200
Selenium	0.05	0.05	< 0.00500

Notes:
* Illinois EPA Tier 1 Groundwater Remediation Objectives; 35 IAC 742, Appendix B, Table E
Contact the IEPA Toxicity Assessment Unit for further information.
All results are reported as mg/L unless otherwise noted.
Bold/Shaded results indicate concentrations exceeding most stringent (Class I) Values

Critical Review Status

- Meco Engineering contacted the Illinois EPA regarding the SSWC being on Critical Review Status. In an email dated November 29, 2017 from Mr. David Cook with the Permits Section, SSWC will not be removed from Critical Status until a determination is made on whether SSWC's raw water transmission main is not a limiting factor for source capacity.

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3. OPERATIONS

3.1 EVENTS IMPACTING OPERATIONS

Leak on the Backwash Line. A leak developed on the WesTech backwash line on November 6, 2017. Henson Robinson was called to order the necessary parts. Repairs were completed on November 21, 2017. There was no disruption in service.

Well 8 Pump Replacement. Brotcke Well and Pump was on-site in early November to perform rehabilitation work on Well 8. After treatment, Brotcke recommended replacement of the pump. A replacement pump belonging to SSWC was on-site and was used to replace the pump. Well 8 was placed back in service on November 22, 2017.

Well 1 Off Line. While Brotcke Well and Pump was on-site November 20, 2017 working on Well 8, Well 1 went into alarm. Currently, Well 1 is off line until Brotcke can be on-site in early 2018 to pull the pump and determine the problem.

3.2 EMERGENCY & SERVICE CALLS

Service Calls:

There was 2 emergency call-outs for the month requiring operational personnel at the plant after normal business hours.

Pre-filter on Bank #1. On Sunday, November 5, 2017 at 7:21 pm, an alarm occurred on Bank #1 Pre-Filter. Plant operational staff went to the plant and found the Iron on the plant influent water was at 1.84 mg/L versus the normal 1.0 +/- above normal. Several regenerations were going to be starting soon so the flush line was opened to help with the issue to get through the pending regenerations.

Communication Fail Alarm. On November 19, 2017 at approximately 5:30 am, an alarm was received for high inlet pressure on the Prefilter for Bank #3. Upon further investigation by plant operations personnel, it was discovered that Communication Failures had occurred on Banks 1 and 3. When this takes place, the WesTech system continues to function in whatever mode it was in at the time of the communication failure. At the time of the communication failure, Bank 3 was cleaning the Prefilter and subjected the Prefilter to pressures near 75 psi. Woodard and Curran SCADA Controls Group is investigating the reason for these failures. Pictured below is Ray Giguere of the SCADA Controls Group.

3.3 EMERGENCY CALL-OUTS

- There were no emergency call-outs to contractors for the month.

3.4 CUSTOMER INQUIRIES

There were five customer inquiries for the month of November:

- Replace the cover on the water meter pit at 5820 New City Road.
- Read the meter and get meter information for 7950 Cardinal Hill Road.
- Gentleman from Los Angeles, California requesting Fluoride information.
- Alan Mendenhall stopped by the plant to inform plant operations staff that he bumped the hydrant with his new truck here his driveway. No damage done to his hydrant.
- Shane Hill with the village of Chatham regarding brine hauling.

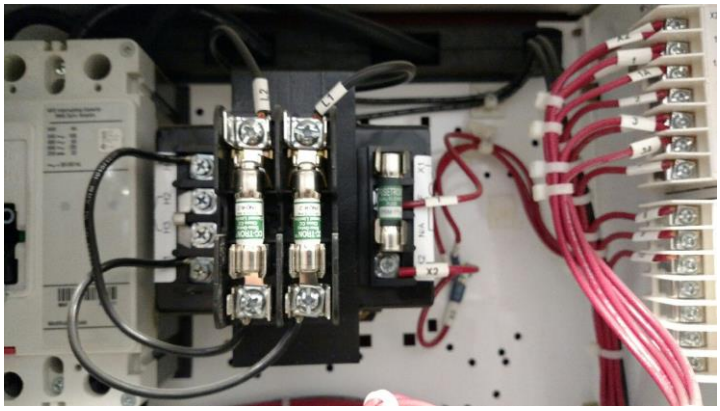
4. MAINTENANCE AND REPAIR

4.1 PREVENTATIVE AND PREDICTIVE MAINTENANCE

For the month of November 2017, there were 11 inspections, 5 preventative and 3 corrective maintenance activities completed.

4.2 CORRECTIVE REPAIRS

- **Eye Wash Station Heater.** SSWC plant is equipped with eye wash stations in the event an operator gets chemical in their eyes. The system provides water heated to a set temperature so the person needing to flush their eyes isn't shocked with cold water. The system was not operating correctly. Pictured below is the fuse for the eye wash station water heater that was the cause of the problem. The system is now functioning correctly.



- **Clean and Inspect Prefilter # 1 and #2.** On November 8 and 13, 2017, Banks #1 and #2 were taken out of service to clean and inspect the screens. Pictured below on the left is what the screens look like when removed. The picture on the right shows what the screens look link after they've been cleaned.

OTHER WORK PERFORMED

Cleaning of Brine Tank #1. On November 24, 2017, Brine Tank #1 was taken down for cleaning.

5. PROJECT MANAGEMENT & SUPPORT

5.1 STAFFING & TRAINING

- Woodard and Curran continues to train and provide staffing to the plant as needed.
- Woodard and Curran IT staff are working with plant personnel on Hach Wims. Hach Wims is the computer program utilized by Woodard and Curran for developing IEPA Monthly Operating Reports and storage of test data. We are working through the issues discovered with the reporting last year as time allows.

5.2 CORPORATE SUPPORT

The following individuals, either on-site or remotely, provided assistance in operation and/or maintenance of the plant during the month.

- Gregory Frieden
- Ray Giguere
- Joe Hurley
- Jeannie Dubois
- Jackie Smith
- Joyce Garnett
- Alan Fabiano

5.3 BUDGET

Table 5.3 below is a breakdown of the current budget as of November 24, 2017.

Table 5.3 Budget Table

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget	Over (under)	% of budget
Labor (D.L. + OH)	$24,213	$20,102	$169,488	$144,617	$290,551	($24,871)	50%
Utilities	$8,150	$7,898	$57,050	$58,664	$97,800	$1,614	60%
Chemicals	$14,583	$7,130	$102,083	$115,616	$175,000	$13,533	66%
Maintenance & Repair	$9,102	$4,086	$63,715	$80,064	$109,225	$16,349	73%
Chloride	$13,522	$13,084	$94,652	$82,912	$162,260	($11,740)	51%
Lab Supplies and Equipment	$1,882	$505	$13,174	$10,307	$22,584	($2,867)	46%
Office Supplies	$216	$292	$1,509	$3,252	$2,586	$1,744	126%
Miscellaneous Expenses	$1,141	$766	$7,989	$8,530	$13,695	$541	62%
Other Operating Costs	$1,398	$1,625	$9,786	$10,617	$16,776	$831	63%
Subtotal of Costs for Contract Year 3	**$74,206**	**$55,488**	**$519,445**	**$514,579**	**$890,477**	**($4,866)**	**58%**
Fixed Fee for Contract Year 3	$7,421	$5,549	$51,945	$51,458	$89,048	($487)	58%
Year One Transition	$1,366	$1,366	$9,560	$9,560	$16,389	$0	58%
Total	**$82,993**	**$62,403**	**$580,950**	**$575,597**	**$995,914**	**($5,353)**	**58%**

6. CAPITAL PLANNING

6.1 APPROVED CIP PROJECTS CURRENT STATUS

No new information is available.

6.2 DRAFT CAPITAL IMPROVEMENT PLAN

The CIP is a planning document that includes all projects anticipated to exceed $5,000 in cost over the next five years. The CIP is an ongoing process and will be refined from time to time as projects are completed and new issues are identified.

The most recent Capital List was included in the Year 2 Annual Report.

Tuesday, December 5, 2017

Dan Held
South Sangamon Water Commission
9199 Buckhard Rd
Rochester, IL 62563
TEL: 217-381-2206
FAX: NA

RE: CCDD Monitoring Water PAS WO: 17K0733

Prairie Analytical Systems, Inc. received 1 sample(s) on 11/28/2017 for the analyses presented in the following report.

All applicable quality control procedures met method specific acceptance criteria unless otherwise noted.

If you have any questions, please feel free to contact me at (217) 753- 1148.

Respectfully submitted,

Kristen A. Potter
Project Manager

Certifications: NELAP/NELAC - IL #100323

1210 Capital Airport Drive * Springfield, IL 62707 * 1.217.753.1148 * 1.217.753.1152 Fax
9114 Virginia Road Suite #112 * Lake in the Hills, IL 60156 * 1.847.651.2604 * 1.847.458.0538 Fax

Prairie Analytical Systems, Inc. **Date:** 12/5/2017

LABORATORY RESULTS

Client: South Sangamon Water Commission
Project: CCDD Monitoring Water **Lab Order:** 17K0733
Client Sample ID: Raw **Lab ID:** 17K0733-01
Collection Date: 11/28/17 14:10 **Matrix:** Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
Volatile Organic Compounds by GC-MS									
*Acetone	U	0.0500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Benzene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Bromodichloromethane	U	0.000200		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Bromoform	U	0.00100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Bromomethane	U	0.00980		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*2-Butanone	U	0.0100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Carbon disulfide	U	0.0100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Carbon tetrachloride	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Chlorobenzene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Chloroethane	U	0.0100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Chloroform	U	0.000200		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Chloromethane	U	0.0100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Dibromochloromethane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,1-Dichloroethane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,2-Dichloroethane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,1-Dichloroethene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*cis-1,2-Dichloroethene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*trans-1,2-Dichloroethene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,2-Dichloropropane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*cis-1,3-Dichloropropene	U	0.00100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*trans-1,3-Dichloropropene	U	0.00100		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Ethylbenzene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*2-Hexanone	U	0.00980		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Methyl tert-butyl ether	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*4-Methyl-2-pentanone	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Methylene chloride	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Styrene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,1,2,2-Tetrachloroethane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Tetrachloroethene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Toluene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,1,1-Trichloroethane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*1,1,2-Trichloroethane	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Trichloroethene	U	0.00500		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Vinyl chloride	U	0.00200		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
*Xylenes (total)	U	0.0150		mg/L	1	11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
Surrogate: 4-Bromofluorobenzene		*85 %*		*67-133*		11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*85-125*		11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
Surrogate: Toluene-d8		*104 %*		*81-116*		11/28/17 15:51	11/28/17 18:23	SW8260B R2	JKK
Semi-Volatile Organic Compounds by GC-MS									
*Acenaphthene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Acenaphthylene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Anthracene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Benzo(a)anthracene	U	0.000115		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Benzo(b)fluoranthene	U	0.000120		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Benzo(k)fluoranthene	U	0.000130		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Benzo(g,h,i)perylene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Benzo(a)pyrene	U	0.000140		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Bis(2-chloroethoxy)methane	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Bis(2-chloroethyl)ether	U	0.00700		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA

Prairie Analytical Systems, Inc. **Date:** 12/5/2017

LABORATORY RESULTS

Client: South Sangamon Water Commission
Project: CCDD Monitoring Water **Lab Order:** 17K0733
Client Sample ID: Raw **Lab ID:** 17K0733-01
Collection Date: 11/28/17 14:10 **Matrix:** Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Bis(2-chloroisopropyl)ether	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Bis(2-ethylhexyl)phthalate	U	0.00400		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4-Bromophenyl phenyl ether	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Butyl benzyl phthalate	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Carbazole	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4-Chloro-3-methylphenol	U	0.0200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4-Chloroaniline	U	0.0200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2-Chloronaphthalene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2-Chlorophenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4-Chlorophenyl phenyl ether	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Chrysene	U	0.00110		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Dibutyl phthalate	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Di-n-octyl phthalate	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Dibenz(a,h)anthracene	U	0.000200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Dibenzofuran	U	0.0200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*1,2-Dichlorobenzene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*1,3-Dichlorobenzene	U	0.00400		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*1,4-Dichlorobenzene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*3,3'-Dichlorobenzidine	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,4-Dichlorophenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Diethyl phthalate	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Dimethyl phthalate	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,4-Dimethylphenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4,6-Dinitro-2-methylphenol	U	0.000911	M	mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,4-Dinitrophenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,4-Dinitrotoluene	U	0.0000630	M	mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,6-Dinitrotoluene	U	0.000191	M	mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Fluoranthene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Fluorene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Hexachlorobenzene	U	0.000115	M	mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Hexachlorobutadiene	U	0.00100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Hexachlorocyclopentadiene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Hexachloroethane	U	0.00500		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Indeno(1,2,3-cd)pyrene	U	0.000300		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Isophorone	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2-Methylnaphthalene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2-Methylphenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
3 & 4-Methylphenol	U	0.0200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Naphthalene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2-Nitroaniline	U	0.0500		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*3-Nitroaniline	U	0.0500		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4-Nitroaniline	U	0.0200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Nitrobenzene	U	0.00200		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2-Nitrophenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*4-Nitrophenol	U	0.0500		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*N-Nitroso-di-n-propylamine	U	0.00110		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*N-Nitrosodiphenylamine	U	0.000560		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Pentachlorophenol	U	0.00100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Phenanthrene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*Phenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA

Prairie Analytical Systems, Inc. **Date:** 12/5/2017

LABORATORY RESULTS

Client: South Sangamon Water Commission
Project: CCDD Monitoring Water **Lab Order:** 17K0733
Client Sample ID: Raw **Lab ID:** 17K0733-01
Collection Date: 11/28/17 14:10 **Matrix:** Water

Analyses	Result	Limit	Qual	Units	DF	Date Prepared	Date Analyzed	Method	Analyst
*Pyrene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*1,2,4-Trichlorobenzene	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,4,5-Trichlorophenol	U	0.0100		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
*2,4,6-Trichlorophenol	U	0.00560		mg/L	1	12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Surrogate: 2-Fluorobiphenyl		*45 %*		*40-150*		12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Surrogate: 2-Fluorophenol		*14 %*		*10-95*		12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Surrogate: Nitrobenzene-d5		*85 %*		*40-150*		12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Surrogate: Phenol-d6		*15 %*		*10-25*		12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Surrogate: 4-Terphenyl-d14		*47 %*		*40-140*		12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Surrogate: 2,4,6-Tribromophenol		*75 %*		*30-100*		12/1/17 15:17	12/1/17 23:51	SW8270C R3	JKA
Organochlorine Pesticides by GC-ECD									
*Aldrin	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*alpha-BHC	U	0.00000964	M	mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*beta-BHC	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*delta-BHC	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*gamma-BHC	U	0.0000154	M	mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*alpha-Chlordane	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*gamma-Chlordane	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Chlordane (total)	U	0.00200		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*4,4'-DDD	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*4,4'-DDE	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*4,4'-DDT	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Dieldrin	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Endosulfan I	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Endosulfan II	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Endosulfan sulfate	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Endrin	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Endrin aldehyde	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Endrin ketone	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Heptachlor	U	0.0000263	M	mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Heptachlor epoxide	U	0.0000118	M	mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Methoxychlor	U	0.00100		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
*Toxaphene	U	0.00500		mg/L	1	11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
Surrogate: Decachlorobiphenyl		*76 %*		*50-170*		11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
Surrogate: Tetrachloro-m-xylene		*78 %*		*40-150*		11/29/17 14:38	12/5/17 13:43	SW8081A R1	AJD
Metals by ICP-MS									
*Mercury	U	0.000200		mg/L	1	11/29/17 8:32	11/29/17 17:07	SW6020A R1	JTC
*Selenium	U	0.00500		mg/L	1	11/29/17 8:32	11/29/17 17:07	SW6020A R1	JTC
Metals by ICP									
*Aluminum	U	0.100		mg/L	1	11/29/17 8:32	11/29/17 12:55	SW6010B R2	KSH
*Arsenic	U	0.0100		mg/L	1	11/29/17 8:32	11/29/17 12:55	SW6010B R2	KSH
*Chromium	U	0.00500		mg/L	1	11/29/17 8:32	11/29/17 12:55	SW6010B R2	KSH
*Iron	**1.61**	0.0500		mg/L	1	11/29/17 8:32	11/29/17 12:55	SW6010B R2	KSH
*Manganese	**0.185**	0.00500		mg/L	1	11/29/17 8:32	11/29/17 12:55	SW6010B R2	KSH

Prairie Analytical Systems, Inc. **Date:** 12/5/2017

LABORATORY RESULTS

Client: South Sangamon Water Commission
Project: CCDD Monitoring Water **Lab Order:** 17K0733

Notes and Definitions

SI	Analyte exceeds the laboratory control sample acceptance criteria, but there is no observable concentration in the sample.
M	Reporting limit set between LOQ and MDL.
*	NELAC certified compound.
U	Analyte not detected (i.e. less than RL or MDL).

Chain of Custody Record

Prairie Analytical Systems

www.prairieanalytical.com

Client	South Sangamon Water Commission
Address	P.O. Box 83
City, State, Zip Code	New Berlin, IL 62670
Phone / Facsimile	
Project Name / Number	Buckhart
Project Location	
P.O. # or Invoice To	
Contact Person	Dan Held (dan.held@sswc.us)

Sample Description	Sampling Date	Sampling Time	Matrix Code	Preserv. Code	No. of Containers	Sample Type Comp	Sample Type Grab	Al, Fe, Se, Cr, Mn, As, Hg	VOCs	BNAs	Pests
RAW	11/28/2017	14:18	A	1/3/0	5		X	X	X	X	X

Relinquished By	Date	Time	Received By	Date	Time	Method of Shipment
[signature]	11/28/17	14:50	[signature]	11/28/17	14:50	[signature]

Special Instructions

Turnaround Time: Standard ■ Rush☐

Date Required

QC Level: ■ 2☐ 3☐ 4☐

On wet ice? Yes No

Temperature (°C): 16.7

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Copies: White - Client / Yellow - PAS, Inc. / Pink - Sampler

PAS COC Rev. 3