



September 20, 2021

Bridgett Carver  
Surface Water Quality Division  
Michigan Department of EGLE  
301 East Louis Glick Highway  
Jackson, Michigan 49201

**Re: Monitoring Report #292  
August 1 – August 31, 2021**

Dear Ms. Carver:

Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit No. MI0048453, please find the enclosed Monitoring Report for the period of August 1 through August 31, 2021.

Should you have any questions or concerns regarding this report, please contact me at 269-993-7585.

Sincerely,

FLEIS & VANDENBRINK

A handwritten signature in blue ink, appearing to read "Jim Brode", is written over a light blue horizontal line.

Jim Brode, CPG  
Senior Project Manager

cc: Dan Hamel, EGLE  
Supervisor, Scio Twp.  
City of Ann Arbor

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TABLE #1

UNIT D2 UPGRADIENT EXTRACTION DATA

Month of: Aug-21

Date	Horizontal Well Extraction			TW-9			TW-5			TW-21			Daily Flow	Daily Total
	HW-S Gallons	GPM	Run Hrs.	TW-9 Gallons	GPM	Run Hrs.	TW-5 Gallons	GPM	Run Hrs.	TW-21 Gallons	GPM	Run Hrs.	GPM	Gallons
Sun-8/1/21	-	-	-	-	-	-	-	-	-	144,285	100	24.00	100	144,285
Mon-8/2/21	-	-	-	-	-	-	-	-	-	144,301	100	24.00	100	144,301
Tue-8/3/21	-	-	-	-	-	-	-	-	-	144,329	100	24.00	100	144,329
Wed-8/4/21	-	-	-	-	-	-	-	-	-	144,333	100	24.00	100	144,333
Thu-8/5/21	-	-	-	-	-	-	-	-	-	144,344	100	24.00	100	144,344
Fri-8/6/21	-	-	-	-	-	-	-	-	-	144,332	100	24.00	100	144,332
Sat-8/7/21	-	-	-	-	-	-	-	-	-	144,342	100	24.00	100	144,342
Sun-8/8/21	-	-	-	-	-	-	-	-	-	144,364	100	24.00	100	144,364
Mon-8/9/21	-	-	-	-	-	-	-	-	-	144,370	100	24.00	100	144,370
Tue-8/10/21	-	-	-	-	-	-	-	-	-	144,383	100	24.00	100	144,383
Wed-8/11/21	-	-	-	-	-	-	-	-	-	144,345	100	24.00	100	144,345
Thu-8/12/21	-	-	-	-	-	-	-	-	-	45,454	100	7.57	32	45,454
Fri-8/13/21	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Sat-8/14/21	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Sun-8/15/21	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Mon-8/16/21	-	-	-	-	-	-	-	-	-	83,714	100	13.92	58	83,714
Tue-8/17/21	-	-	-	-	-	-	-	-	-	144,384	100	24.00	100	144,384
Wed-8/18/21	-	-	-	69,221	61	19.00	-	-	-	144,380	100	24.00	148	213,601
Thu-8/19/21	-	-	-	12,770	61	3.50	-	-	-	144,019	100	24.00	109	156,789
Fri-8/20/21	-	-	-	-	-	-	-	-	-	144,428	100	24.00	100	144,428
Sat-8/21/21	-	-	-	-	-	-	-	-	-	144,346	100	24.00	100	144,346
Sun-8/22/21	-	-	-	-	-	-	-	-	-	133,968	93	24.00	93	133,968
Mon-8/23/21	-	-	-	-	-	-	-	-	-	27,678	50	9.20	19	27,678
Tue-8/24/21	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Wed-8/25/21	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Thu-8/26/21	-	-	-	48,213	61	13.25	-	-	-	94,035	100	15.62	99	142,248
Fri-8/27/21	-	-	-	34,786	60	9.63	-	-	-	144,422	100	24.00	124	179,208
Sat-8/28/21	-	-	-	-	-	-	-	-	-	144,439	100	24.00	100	144,439
Sun-8/29/21	-	-	-	-	-	-	-	-	-	144,414	100	24.00	100	144,414
Mon-8/30/21	-	-	-	-	-	-	-	-	-	144,399	100	24.00	100	144,399
Tue-8/31/21	-	-	-	-	-	-	-	-	-	144,355	100	24.00	100	144,355
<b>TOTALS</b>	-	-	-	164,990	61	45.38	-	-	-	3,416,163	98	574.31	80	3,581,153

TOTAL VOLUME EXTRACTED :	3,581,153 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	80.22 GPM

8/12/21-8/16/21 - TW-21 was shut down due to a DTE power outage.

8/23/21-8/26/21 - TW-21 was shut down for Red Pond cleaning.

UNIT D2 DOWNGRADIENT EXTRACTION DATA

Month of: Aug-21

Date	LB-1			LB-4			Daily	Daily
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Sun-8/1/21	-	-	-	144,178	100	24.00	100	144,178
Mon-8/2/21	-	-	-	144,220	100	24.00	100	144,220
Tue-8/3/21	-	-	-	144,197	100	24.00	100	144,197
Wed-8/4/21	-	-	-	144,198	100	24.00	100	144,198
Thu-8/5/21	-	-	-	144,210	100	24.00	100	144,210
Fri-8/6/21	-	-	-	144,164	100	24.00	100	144,164
Sat-8/7/21	-	-	-	144,209	100	24.00	100	144,209
Sun-8/8/21	-	-	-	144,155	100	24.00	100	144,155
Mon-8/9/21	-	-	-	144,177	100	24.00	100	144,177
Tue-8/10/21	-	-	-	144,231	100	24.00	100	144,231
Wed-8/11/21	-	-	-	144,242	100	24.00	100	144,242
Thu-8/12/21	-	-	-	42,793	101	7.06	30	42,793
Fri-8/13/21	-	-	-	-	-	-	0	-
Sat-8/14/21	-	-	-	-	-	-	0	-
Sun-8/15/21	-	-	-	-	-	-	0	-
Mon-8/16/21	-	-	-	81,580	100	13.56	57	81,580
Tue-8/17/21	-	-	-	95,998	100	15.98	67	95,998
Wed-8/18/21	-	-	-	114,614	100	19.06	80	114,614
Thu-8/19/21	-	-	-	144,186	100	24.00	100	144,186
Fri-8/20/21	-	-	-	144,217	100	24.00	100	144,217
Sat-8/21/21	-	-	-	144,208	100	24.00	100	144,208
Sun-8/22/21	-	-	-	144,212	100	24.00	100	144,212
Mon-8/23/21	-	-	-	55,284	100	9.20	38	55,284
Tue-8/24/21	-	-	-	-	-	-	0	-
Wed-8/25/21	-	-	-	-	-	-	0	-
Thu-8/26/21	-	-	-	80,057	100	13.31	56	80,057
Fri-8/27/21	-	-	-	144,218	100	24.00	100	144,218
Sat-8/28/21	-	-	-	144,210	100	24.00	100	144,210
Sun-8/29/21	-	-	-	144,204	100	24.00	100	144,204
Mon-8/30/21	-	-	-	144,226	100	24.00	100	144,226
Tue-8/31/21	-	-	-	144,229	100	24.00	100	144,229
<b>TOTALS</b>	-	-	-	<b>3,354,417</b>	<b>100</b>	<b>558.17</b>	<b>75</b>	<b>3,354,417</b>

TOTAL VOLUME EXTRACTED :	3,354,417 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	75.14 GPM

8/12/21-8/18/21 - LB-4 was shut down due to a DTE power outage.  
 8/23/21-8/26/21 - LB-4 was shut down for Red Pond cleaning.

TABLE #3  
CORE AREA EXTRACTION DATA

Month of: Aug-21

Core Area Well Extraction																			Daily Flow	Daily Total				
Date	TW-1			TW-2 (Dolph)			TW-3			TW-10			TW-14			TW-20			TW-24			GPM	Gallons	
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.			
Sun-8/1/21	-	-	-	39,956	28	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,092	25	24.00	53	76,048	
Mon-8/2/21	-	-	-	39,101	27	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,086	25	24.00	52	75,187	
Tue-8/3/21	-	-	-	38,605	27	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,122	25	24.00	52	74,727	
Wed-8/4/21	-	-	-	37,726	26	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,074	25	24.00	51	73,800	
Thu-8/5/21	-	-	-	37,516	26	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,042	25	24.00	51	73,558	
Fri-8/6/21	-	-	-	37,156	26	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,039	25	24.00	51	73,195	
Sat-8/7/21	-	-	-	36,633	25	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,020	25	24.00	50	72,653	
Sun-8/8/21	-	-	-	36,066	25	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,003	25	24.00	50	72,069	
Mon-8/9/21	-	-	-	35,494	25	24.00	-	-	-	-	-	-	-	-	-	-	-	-	35,993	25	24.00	50	71,487	
Tue-8/10/21	-	-	-	35,038	24	24.00	-	-	-	-	-	-	-	-	-	-	-	-	36,006	25	24.00	49	71,044	
Wed-8/11/21	-	-	-	34,585	24	24.00	-	-	-	-	-	-	-	-	-	-	-	-	35,987	25	24.00	49	70,570	
Thu-8/12/21	-	-	-	6,428	23	4.57	-	-	-	-	-	-	-	-	-	-	-	-	10,628	25	7.08	12	17,056	
Fri-8/13/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sat-8/14/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sun-8/15/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Mon-8/16/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	20,875	25	13.92	14	20,875	
Tue-8/17/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	35,922	25	24.00	25	35,922	
Wed-8/18/21	-	-	-	-	-	-	-	-	42,195	37	19.00	40,080	35	18.93	28,576	25	19.00	35,863	25	24.00	102	146,714		
Thu-8/19/21	-	-	-	-	-	-	-	-	7,513	36	3.50	7,450	35	3.52	5,250	25	3.52	36,160	25	24.00	39	56,353		
Fri-8/20/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36,258	25	24.00	25	36,258		
Sat-8/21/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	36,271	25	24.00	25	36,271		
Sun-8/22/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	21,282	25	14.08	15	21,282		
Mon-8/23/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tue-8/24/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Wed-8/25/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Thu-8/26/21	-	-	-	-	-	-	-	-	32,095	40	13.25	27,916	35	13.27	19,809	25	13.25	-	-	-	-	55	79,820	
Fri-8/27/21	-	-	-	3,135	25	2.10	-	-	24,271	42	9.63	49,703	38	21.85	36,014	25	24.00	3,115	25	2.07	81	116,238		
Sat-8/28/21	-	-	-	-	-	-	-	-	-	-	-	57,448	40	24.00	36,188	25	24.00	-	-	-	-	65	93,636	
Sun-8/29/21	-	-	-	-	-	-	-	-	-	-	-	57,914	40	24.00	36,213	25	24.00	-	-	-	-	65	94,127	
Mon-8/30/21	-	-	-	-	-	-	-	-	158	40	0.07	58,196	40	24.00	29,813	21	24.00	-	-	-	-	61	88,167	
Tue-8/31/21	-	-	-	-	-	-	-	-	-	-	-	57,310	40	24.00	21,729	15	24.00	-	-	-	-	55	79,039	
<b>TOTALS</b>	-	-	-	<b>417,437</b>	<b>26</b>	<b>270.67</b>	-	-	-	-	<b>106,232</b>	<b>39</b>	<b>45.45</b>	<b>355,997</b>	<b>38</b>	<b>153.57</b>	<b>213,592</b>	<b>23</b>	<b>155.77</b>	<b>632,838</b>	<b>25</b>	<b>421.15</b>	<b>48</b>	<b>1,726,096</b>

TOTAL VOLUME EXTRACTED :	1,726,096	GALLONS
DAYS IN MONTH :	31	DAYS
MONTHLY AVERAGE FLOW RATE :	38.67	GPM

8/1/21-8/11/21 - TW-20 was shut down to control pond level.  
 8/12/21-8/16/21 - TW-2, TW-20, and TW-24 were shut down due to a DTE power outage.  
 8/17/21-8/26/21 - TW-20 was shut down for Red Pond cleaning.  
 8/17/21-8/31/21 - TW-2 was shut down for Red Pond cleaning.  
 8/22/21-8/31/21 - TW-24 was shut down for Red Pond cleaning.

MARSHY AREA EXTRACTION DATA

Month of: Aug-21

Marshy Well Extraction				Daily	Daily
Date	PW-1 Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Sun-8/1/21	4,452	3	24.00	3	4,452
Mon-8/2/21	4,447	3	24.00	3	4,447
Tue-8/3/21	4,452	3	24.00	3	4,452
Wed-8/4/21	4,021	3	24.00	3	4,021
Thu-8/5/21	3,289	2	24.00	2	3,289
Fri-8/6/21	3,270	2	24.00	2	3,270
Sat-8/7/21	3,277	2	24.00	2	3,277
Sun-8/8/21	3,211	2	24.00	2	3,211
Mon-8/9/21	3,282	2	24.00	2	3,282
Tue-8/10/21	3,308	2	24.00	2	3,308
Wed-8/11/21	3,235	2	24.00	2	3,235
Thu-8/12/21	1,117	2	8.67	1	1,117
Fri-8/13/21	-	-	-	-	-
Sat-8/14/21	-	-	-	-	-
Sun-8/15/21	-	-	-	-	-
Mon-8/16/21	516	1	13.90	0	516
Tue-8/17/21	1,303	1	24.00	1	1,303
Wed-8/18/21	1,508	1	24.00	1	1,508
Thu-8/19/21	1,674	1	24.00	1	1,674
Fri-8/20/21	1,720	1	24.00	1	1,720
Sat-8/21/21	1,702	1	24.00	1	1,702
Sun-8/22/21	1,367	1	18.82	1	1,367
Mon-8/23/21	-	-	-	-	-
Tue-8/24/21	-	-	-	-	-
Wed-8/25/21	-	-	-	-	-
Thu-8/26/21	1,353	2	13.23	1	1,353
Fri-8/27/21	1,157	2	10.62	1	1,157
Sat-8/28/21	-	-	-	-	-
Sun-8/29/21	-	-	-	-	-
Mon-8/30/21	1,935	2	15.87	1	1,935
Tue-8/31/21	2,954	2	24.00	2	2,954
<b>TOTALS</b>	<b>58,550</b>	<b>2</b>	<b>489.10</b>	<b>2</b>	<b>58,550</b>

TOTAL VOLUME EXTRACTED :	58,550 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	1.31 GPM

8/12/21-8/16/21 - PW-1 was shut down due to a DTE power outage.  
 8/22/21-8/30/21 - PW-1 was shut down for Red Pond cleaning.

SOUTHWEST AREA EXTRACTION DATA

Month of: Aug-21

South West Well Extraction							Daily	Daily
Date	TW22			TW28			Flow	Total
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Sun-8/1/21	3,518	2	23.88	28,734	20	24.00	22	32,252
Mon-8/2/21	3,262	2	23.55	28,747	20	24.00	22	32,009
Tue-8/3/21	3,157	2	23.30	28,753	20	24.00	22	31,910
Wed-8/4/21	3,137	2	24.00	32,059	22	24.00	24	35,196
Thu-8/5/21	2,981	2	24.00	36,085	25	24.00	27	39,066
Fri-8/6/21	2,969	2	24.00	36,116	25	24.00	27	39,085
Sat-8/7/21	2,952	2	24.00	36,090	25	24.00	27	39,042
Sun-8/8/21	2,935	2	24.00	36,081	25	24.00	27	39,016
Mon-8/9/21	2,929	2	24.00	36,113	25	24.00	27	39,042
Tue-8/10/21	2,928	2	24.00	36,142	25	24.00	27	39,070
Wed-8/11/21	2,913	2	24.00	36,138	25	24.00	27	39,051
Thu-8/12/21	962	2	8.15	12,261	25	8.15	9	13,223
Fri-8/13/21	-	-	-	-	-	-	<2	-
Sat-8/14/21	-	-	-	-	-	-	<2	-
Sun-8/15/21	-	-	-	-	-	-	<2	-
Mon-8/16/21	1,475	2	13.93	20,894	25	13.93	16	22,369
Tue-8/17/21	2,814	2	24.00	35,858	25	24.00	27	38,672
Wed-8/18/21	3,035	2	24.00	35,946	25	24.00	27	38,981
Thu-8/19/21	3,149	2	24.00	35,875	25	24.00	27	39,024
Fri-8/20/21	3,242	2	24.00	35,966	25	24.00	27	39,208
Sat-8/21/21	3,239	2	24.00	35,939	25	24.00	27	39,178
Sun-8/22/21	2,531	2	18.82	28,183	25	18.82	21	30,714
Mon-8/23/21	-	-	-	-	-	-	<2	-
Tue-8/24/21	-	-	-	-	-	-	<2	-
Wed-8/25/21	-	-	-	-	-	-	<2	-
Thu-8/26/21	1,626	2	13.25	19,951	25	13.25	15	21,577
Fri-8/27/21	2,993	2	23.53	35,957	25	24.00	27	38,950
Sat-8/28/21	3,053	2	24.00	36,170	25	24.00	27	39,223
Sun-8/29/21	3,049	2	24.00	36,136	25	24.00	27	39,185
Mon-8/30/21	3,039	2	24.00	36,188	25	24.00	27	39,227
Tue-8/31/21	3,038	2	24.00	36,201	25	24.00	27	39,239
<b>TOTALS</b>	<b>70,926</b>	<b>2</b>	<b>556.42</b>	<b>812,583</b>	<b>24</b>	<b>558.15</b>	<b>25</b>	<b>883,509</b>

TOTAL VOLUME EXTRACTED :	883,509 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	19.79 GPM

8/12/21-8/16/21 - TW-22 and TW-28 were shut down due to a DTE power outage.  
 8/22/21-8/26/21 - TW-22 and TW-28 were shut down for Red Pond cleaning.

TABLE #6

UNIT "E" EXTRACTION DATA

Month of: Aug-21

Date	TW-11			TW-17			TW-18			TW-19*			TW-23			Daily Flow GPM	Daily Total Gallons
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.		
Sun-8/1/21	-	-	-	-	-	-	147,727	103	24.00	-	-	-	144,147	100	24.00	203	291,874
Mon-8/2/21	-	-	-	-	-	-	147,757	103	24.00	-	-	-	144,147	100	24.00	203	291,904
Tue-8/3/21	-	-	-	-	-	-	147,779	103	24.00	-	-	-	144,256	100	24.00	203	292,035
Wed-8/4/21	-	-	-	-	-	-	147,847	103	24.00	-	-	-	144,089	100	24.00	203	291,936
Thu-8/5/21	-	-	-	-	-	-	147,901	103	24.00	-	-	-	144,055	100	24.00	203	291,956
Fri-8/6/21	-	-	-	-	-	-	147,770	103	24.00	-	-	-	144,258	100	24.00	203	292,028
Sat-8/7/21	-	-	-	-	-	-	147,790	103	24.00	-	-	-	144,065	100	24.00	203	291,855
Sun-8/8/21	-	-	-	-	-	-	147,855	103	24.00	-	-	-	144,092	100	24.00	203	291,947
Mon-8/9/21	-	-	-	-	-	-	147,915	103	24.00	-	-	-	144,054	100	24.00	203	291,969
Tue-8/10/21	-	-	-	-	-	-	147,994	103	24.00	-	-	-	144,107	100	24.00	203	292,101
Wed-8/11/21	-	-	-	-	-	-	147,971	103	24.00	-	-	-	143,959	100	24.00	203	291,930
Thu-8/12/21	-	-	-	-	-	-	46,587	103	7.55	-	-	-	43,521	100	7.23	63	90,108
Fri-8/13/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Sat-8/14/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Sun-8/15/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Mon-8/16/21	-	-	-	-	-	-	85,548	103	13.90	-	-	-	80,702	100	13.43	115	166,250
Tue-8/17/21	-	-	-	-	-	-	147,748	103	24.00	-	-	-	96,617	100	16.08	170	244,365
Wed-8/18/21	-	-	-	62,779	55	18.93	147,779	103	24.00	-	-	-	114,206	100	19.03	226	324,764
Thu-8/19/21	-	-	-	11,595	55	3.52	147,308	102	24.00	-	-	-	143,922	100	24.00	210	302,825
Fri-8/20/21	-	-	-	-	-	-	147,784	103	24.00	-	-	-	143,947	100	24.00	203	291,731
Sat-8/21/21	-	-	-	-	-	-	147,816	103	24.00	-	-	-	142,594	99	24.00	202	290,410
Sun-8/22/21	-	-	-	-	-	-	137,221	95	24.00	-	-	-	144,205	100	24.00	195	281,426
Mon-8/23/21	-	-	-	-	-	-	28,535	52	9.18	-	-	-	55,310	100	9.20	58	83,845
Tue-8/24/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Wed-8/25/21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	-
Thu-8/26/21	-	-	-	43,908	55	13.27	96,181	103	15.62	-	-	-	79,842	100	13.31	153	219,931
Fri-8/27/21	-	-	-	31,922	55	9.63	147,834	103	24.00	-	-	-	144,148	100	24.00	225	323,904
Sat-8/28/21	-	-	-	-	-	-	147,913	103	24.00	-	-	-	144,157	100	24.00	203	292,070
Sun-8/29/21	-	-	-	-	-	-	147,902	103	24.00	-	-	-	144,028	100	24.00	203	291,930
Mon-8/30/21	-	-	-	-	-	-	147,896	103	24.00	-	-	-	144,060	100	24.00	203	291,956
Tue-8/31/21	-	-	-	-	-	-	147,922	103	24.00	-	-	-	144,026	100	24.00	203	291,948
<b>TOTALS</b>	-	-	-	<b>150,204</b>	<b>55</b>	<b>48.35</b>	<b>3,498,280</b>	<b>100</b>	<b>574.25</b>	-	-	-	<b>3,350,514</b>	<b>100</b>	<b>558.28</b>	<b>157</b>	<b>6,998,998</b>

TOTAL VOLUME EXTRACTED :	6,998,998 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	156.79 GPM

8/12/21-8/16/21 - TW-18 was shut down due to a DTE power outage.  
 8/12/21-8/18/21 - TW-23 was shut down due to a DTE power outage.  
 8/23/21-8/26/21 - TW-18 and TW-23 were shut down for Red Pond cleaning.  
 \*TW-19 has been plugged due to permanent damage.



TABLE #7

Little Lake Area System

MW-53i	
Date	1,4-Dioxane ug/L
05/10/21	31
06/01/21	46
07/01/21	55
08/02/21	37

A2 Cleaning Supply Well	
Date	1,4-Dioxane ug/L
05/10/21	45
06/01/21	43
07/01/21	49
08/02/21	38

TABLE #8

INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
DOLPH-08-03-21-10:50-1	08/03/21	130
DOLPH-08-27-21-10:45-1	08/27/21	120
TW-10-08-18-21-09:15-1	08/18/21	620
TW-10-08-27-21-08:30-1	08/27/21	660
TW-14-08-18-21-09:18-1	08/18/21	85
TW-14-08-27-21-08:25-1	08/27/21	94
TW-20-08-18-21-09:10-1	08/18/21	540
TW-20-08-27-21-08:40-1	08/27/21	600
TW-24-08-03-21-11:00-1	08/03/21	1800
TW-24-08-27-21-11:00-1	08/27/21	2100
LB-4-08-03-21-09:50-1	08/03/21	400
LB-4-08-27-21-10:15-1	08/27/21	400
TW-21-08-03-21-10:25-1	08/03/21	270
TW-21-08-27-21-10:30-1	08/27/21	240
TW-9-08-18-21-09:25-1	08/18/21	390
TW-9-08-27-21-08:35-1	08/27/21	430
TW-17-08-18-21-09:20-1	08/18/21	130
TW-17-08-27-21-08:20-1	08/27/21	86
TW-18-08-03-21-10:40-1	08/03/21	210
TW-18-08-27-21-10:35-1	08/27/21	220
TW-23-08-03-21-09:55-1	08/03/21	330
TW-23-08-27-21-10:20-1	08/27/21	320
PW-1-08-03-21-10:45-1	08/03/21	680
PW-1-08-27-21-10:40-1	08/27/21	530
TW-22-08-03-21-11:10-1	08/03/21	460
TW-22-08-27-21-08:50-1	08/27/21	460
TW-28-08-03-21-11:15-1	08/03/21	620
TW-28-08-27-21-08:55-1	08/27/21	620

RED POND DATA

Month of: Aug-21

			Red Pond				
Date	Time	Notes	Pond	Level	Aeration	Influent	Influent
			Visual Chk	Feet	Hours	Hours	GPM
Sun-8/1/21	04:00:00.000	(1)		4.2	-	24.00	481
Mon-8/2/21	04:00:00.000		Y	4.1	-	24.00	481
Tue-8/3/21	04:00:00.000		Y	4.1	-	24.00	480
Wed-8/4/21	04:00:00.000		Y	4.2	-	24.00	482
Thu-8/5/21	04:00:00.000		Y	4.2	-	24.00	484
Fri-8/6/21	04:00:00.000		Y	4.2	-	24.00	483
Sat-8/7/21	04:00:00.000	(1)		4.2	-	24.00	483
Sun-8/8/21	04:00:00.000	(1)		4.2	-	24.00	482
Mon-8/9/21	04:00:00.000		Y	4.2	-	24.00	482
Tue-8/10/21	04:00:00.000		Y	4.2	-	24.00	482
Wed-8/11/21	04:00:00.000		Y	4.4	-	24.00	482
Thu-8/12/21	04:00:00.000		Y	4.4	-	8.67	403
Fri-8/13/21	04:00:00.000		Y	-	-	-	-
Sat-8/14/21	21:00:00.000	(1)		4.5	-	-	-
Sun-8/15/21	21:00:00.000	(1)		4.4	-	-	-
Mon-8/16/21	21:00:00.000		Y	3.5	-	13.93	449
Tue-8/17/21	21:00:00.000		Y	4.4	-	24.00	389
Wed-8/18/21	21:00:00.000		Y	4.8	-	24.00	583
Thu-8/19/21	19:15:00.000		Y	4.4	-	24.00	487
Fri-8/20/21	17:30:00.000		Y	4.0	-	24.00	457
Sat-8/21/21	15:45:00.000	(1)		3.7	-	24.00	456
Sun-8/22/21	14:00:00.000	(1)		1.5	-	24.00	426
Mon-8/23/21	12:15:00.000		Y	-	-	9.20	302
Tue-8/24/21	10:30:00.000		Y	-	-	-	-
Wed-8/25/21	08:45:00.000		Y	-	-	-	-
Thu-8/26/21	07:00:00.000		Y	4.3	-	15.62	582
Fri-8/27/21	05:15:00.000		Y	4.7	-	24.00	558
Sat-8/28/21	04:00:00.000	(1)		4.9	-	24.00	496
Sun-8/29/21	04:00:00.000	(1)		5.1	-	24.00	496
Mon-8/30/21	04:00:00.000		Y	5.3	-	24.00	493
Tue-8/31/21	04:00:00.000		Y	5.3	-	24.00	487
<b>TOTALS</b>			-	-	-	575	

Daily readings are collected by the Operator at various times of the day, resulting in varied readings and calculations.

(1) Manual readings were not taken due to weekend and/or holiday.

**TABLE #10**

**RED POND CONCENTRATIONS**

Concentrations of 1,4-Dioxane found in the Red Pond

<b>SAMPLE ID</b>	<b>Date Sampled</b>	<b>1,4-DIOXANE (ppb)</b>
Red Pond-08-02-21-08:15-1	8/2/2021	450
Red Pond-08-09-21-08:50-1	8/9/2021	410
Red Pond-08-17-21-07:54-1	8/17/2021	410
Red Pond-08-27-21-07:05-1	8/27/2021	310
Red Pond-08-30-21-07:30-1	8/30/2021	300

Analyte value quantified from a dilution, reporting limit is raised to reflect dilution

OZONE OPERATION REPORT

Month of: Aug-21

Date	Time	Notes	SYSTEM-1A		SYSTEM-1B		SYSTEM-2A		SYSTEM-2B	
			Flow GPM	Run Hours	Flow GPM	Run Hours	Flow GPM	Run Hours	Flow GPM	Run Hours
Sun-8/1/21	14:00:00.00	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Mon-8/2/21	14:00:00.00		240	24.00	0	0.00	239	24.00	0	0.00
Tue-8/3/21	14:00:00.00		240	24.00	0	0.00	240	24.00	0	0.00
Wed-8/4/21	14:00:00.00		240	23.22	0	0.00	239	24.00	0	0.00
Thu-8/5/21	14:00:00.00		240	24.00	0	0.00	240	24.00	0	0.00
Fri-8/6/21	14:00:00.00		241	24.00	0	0.00	240	24.00	0	0.00
Sat-8/7/21	14:00:00.00	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Sun-8/8/21	14:00:00.00	(1)	241	24.00	0	0.00	239	24.00	0	0.00
Mon-8/9/21	14:00:00.00		240	24.00	0	0.00	240	24.00	0	0.00
Tue-8/10/21	14:00:00.00		241	24.00	0	0.00	240	24.00	0	0.00
Wed-8/11/21	14:00:00.00		241	24.00	0	0.00	240	24.00	0	0.00
Thu-8/12/21	14:00:00.00		240	7.05	0	0.00	240	6.03	0	0.00
Fri-8/13/21	14:00:00.00		0	-	0	0.00	0	-	0	0.00
Sat-8/14/21	11:00:00.00	(1)	0	-	0	0.00	0	-	0	0.00
Sun-8/15/21	11:00:00.00	(1)	0	-	0	0.00	0	-	0	0.00
Mon-8/16/21	11:00:00.00		241	13.42	0	0.00	243	15.00	0	0.00
Tue-8/17/21	11:00:00.00		240	24.00	0	0.00	243	24.00	0	0.00
Wed-8/18/21	11:00:00.00		241	22.73	0	0.00	243	24.00	0	0.00
Thu-8/19/21	9:15:00.00		240	24.00	0	0.00	235	24.00	0	0.00
Fri-8/20/21	7:30:00.00		240	24.00	0	0.00	242	24.00	0	0.00
Sat-8/21/21	5:45:00.00	(1)	241	24.00	0	0.00	243	24.00	0	0.00
Sun-8/22/21	4:00:00.00	(1)	0	24.00	0	0.00	0	24.00	0	0.00
Mon-8/23/21	2:15:00.00		0	9.15	0	0.00	0	8.13	0	0.00
Tue-8/24/21	0:30:00.00		0	-	0	0.00	0	-	0	0.00
Wed-8/25/21	18:45:00.00		0	-	0	0.00	0	-	0	0.00
Thu-8/26/21	17:00:00.00		240	5.92	0	0.00	236	6.98	0	0.00
Fri-8/27/21	15:15:00.00		241	24.00	0	0.00	237	24.00	0	0.00
Sat-8/28/21	14:00:00.00	(1)	235	24.00	0	0.00	240	24.00	0	0.00
Sun-8/29/21	14:00:00.00	(1)	240	24.00	0	0.00	241	24.00	0	0.00
Mon-8/30/21	14:00:00.00		240	24.00	0	0.00	243	23.30	0	0.00
Tue-8/31/21	14:00:00.00		240	24.00	0	0.00	243	24.00	0	0.00

Daily readings are collected by the Operator at various times of the day, resulting in varied readings and calculations.

(1) Manual readings were not taken due to weekend and/or holiday.

8/12/21-8/16/21 - Treatment was shut down due to a DTE power outage.

8/18/21 - Treatment System 1A was shut down briefly for maintenance.

8/23/21-8/26/21 - Treatment was shut down for Red Pond cleaning.

GREEN POND / DISCHARGE DATA

Month of: Aug-21

			Green Pond														
Date	Time	Notes	Pond			Pond Discharge			Bypass Discharge			Recirc Thru UV to Pond			Recirc Thru UV to Disch		
			Visual Chk	Level Feet	Aeration Hours	Influent Hours	Influent GPM	GPM	Gallons	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons
Sun-8/1/21	14:00:00.00	(1)		-	-				498	717,838	24.00	-	-	-	-	-	-
Mon-8/2/21	14:00:00.00		Y	-	-				498	717,656	24.00	-	-	-	-	-	-
Tue-8/3/21	14:00:00.00		Y	-	-				498	717,751	24.00	-	-	-	-	-	-
Wed-8/4/21	14:00:00.00		Y	-	-				490	705,164	24.00	-	-	-	-	-	-
Thu-8/5/21	14:00:00.00		Y	-	-				498	717,578	24.00	-	-	-	-	-	-
Fri-8/6/21	14:00:00.00		Y	-	-				498	717,610	24.00	-	-	-	-	-	-
Sat-8/7/21	14:00:00.00	(1)		-	-				498	717,715	24.00	-	-	-	-	-	-
Sun-8/8/21	14:00:00.00	(1)		-	-				499	717,869	24.00	-	-	-	-	-	-
Mon-8/9/21	14:00:00.00		Y	-	-				499	717,944	24.00	-	-	-	-	-	-
Tue-8/10/21	14:00:00.00		Y	-	-				499	717,943	24.00	-	-	-	-	-	-
Wed-8/11/21	14:00:00.00		Y	-	-				499	717,994	24.00	-	-	-	-	-	-
Thu-8/12/21	14:00:00.00		Y	-	-				497	208,208	6.98	-	-	-	-	-	-
Fri-8/13/21	14:00:00.00		Y	-	-					-	-	-	-	-	-	-	-
Sat-8/14/21	21:00:00.00	(1)		-	-					-	-	-	-	-	-	-	-
Sun-8/15/21	21:00:00.00	(1)		-	-					-	-	-	-	-	-	-	-
Mon-8/16/21	21:00:00.00		Y	-	-				486	404,437	13.87	-	-	-	-	-	-
Tue-8/17/21	21:00:00.00		Y	-	-				496	714,714	24.00	-	-	-	-	-	-
Wed-8/18/21	21:00:00.00		Y	-	-				484	696,299	24.00	-	-	-	-	-	-
Thu-8/19/21	19:15:00.00		Y	-	-				498	716,640	24.00	-	-	-	-	-	-
Fri-8/20/21	17:30:00.00		Y	-	-				498	716,862	24.00	-	-	-	-	-	-
Sat-8/21/21	15:45:00.00	(1)		-	-				498	717,031	24.00	-	-	-	-	-	-
Sun-8/22/21	14:00:00.00	(1)		-	-				498	717,075	24.00	-	-	-	-	-	-
Mon-8/23/21	12:15:00.00		Y	-	-				497	270,744	9.08	-	-	-	-	-	-
Tue-8/24/21	10:30:00.00		Y	-	-					1	-	-	-	-	-	-	-
Wed-8/25/21	08:45:00.00		Y	-	-					1	-	-	-	-	-	-	-
Thu-8/26/21	07:00:00.00		Y	-	-				478	162,107	5.65	-	-	-	-	-	-
Fri-8/27/21	05:15:00.00		Y	-	-				498	716,656	24.00	-	-	-	-	-	-
Sat-8/28/21	14:00:00.00	(1)		-	-				498	716,957	24.00	-	-	-	-	-	-
Sun-8/29/21	14:00:00.00	(1)		-	-				498	717,039	24.00	-	-	-	-	-	-
Mon-8/30/21	14:00:00.00		Y	-	-				488	702,433	24.00	-	-	-	-	-	-
Tue-8/31/21	14:00:00.00		Y	-	-				498	716,940	24.00	-	-	-	-	-	-
<b>TOTALS</b>				-	-				-	16,777,206	564	-	-	-	-	-	-

Daily readings are collected by the Operator at various times of the day, resulting in varied readings and calculations.

(1) Manual readings were not taken due to weekend and/or holiday.

TABLE #13  
Daily Discharge Monitoring Report

	(Daily)	(Annually)	(Annually)	(Effluent - Outfall)	(Influent - Red Pond)	(Effluent - Outfall)	(Effluent - Outfall)	(Weekly)	(2 x Week)	(4 x Week)	(4 x Week)	(5 X Week)	(2 X Week)
PARAMETER NAME	Flow	Total Barium	Total Barium	1,4-Dioxane	1,4-Dioxane	Hydrogen Peroxide	Hydrogen Peroxide	Outfall Observation	Equipment Inspection	pH (Min. Daily)	pH (Max. Daily)	Bromate	Sodium Bisulfite Dose Rate
PARAMETER CODE	50050	1007	1007	82388	82388	00139	00139	84130	46478	00400	00400	99814	99798
MONITORING PT.	001A	001A	001A	001A	001A	001A	001A	001A	001A	001A	001A	001A	001A
STAGE CODE	1	1	1	1	G	1	1	1	1	1	1	1	1
UNIT	MGD	ug/l	lbs/day	ug/l	mg/l	ug/l	lbs/day	yes/no	yes/no	S.U.	S.U.	ug/l	mg/l
8/1/2021	0.718	*G	*G	8								7.2	
8/2/2021	0.718			8	0.450	<50	<0.16	yes	yes	6.8	6.8	8.8	56
8/3/2021	0.718			8		<50	<0.16	no	no	6.7	6.7	10	
8/4/2021	0.705			8		<50	<0.16	no	yes	6.8	6.8	8.8	54
8/5/2021	0.718			8		<50	<0.16	no	no	6.8	6.8	9.6	
8/6/2021	0.718					<50	<0.16	no	no	6.5	6.5		
8/7/2021	0.718												
8/8/2021	0.718			8								11	
8/9/2021	0.718			8	0.410	<50	<0.16	yes	yes	6.6	6.6	9.0	36
8/10/2021	0.718			9		<50	<0.16	no	no	6.6	6.6	6.7	
8/11/2021	0.718			9		<50	<0.16	no	yes	6.5	6.5	10	42
8/12/2021	0.000							no	no				
8/13/2021	0.000							no	no				
8/14/2021	0.000												
8/15/2021	0.208												
8/16/2021	0.404			8		<50	<0.16	yes	yes	6.6	6.6	10	45
8/17/2021	0.715			9	0.410	<50	<0.16	no	no	6.7	6.7	10	
8/18/2021	0.696			9		<50	<0.16	no	yes	6.7	6.7	5.8	60
8/19/2021	0.717			8		<50	<0.16	no	no	6.6	6.6	8.0	
8/20/2021	0.717					<50	<0.16	no	no	6.6	6.6		
8/21/2021	0.717												
8/22/2021	0.717			8								9.6	
8/23/2021	0.271					<50	<0.16	yes	yes	6.7	6.7		38
8/24/2021	0.000							no	no				
8/25/2021	0.000							no	no				
8/26/2021	0.162			5				no	no			6.4	
8/27/2021	0.717			6	0.310	<50	<0.16	no	yes	6.5	6.5	5.4	56
8/28/2021	0.717			6								4.9	
8/29/2021	0.717			6								6.4	
8/30/2021	0.702			6	0.300	<50	<0.16	yes	yes	6.6	6.6	7.5	54
8/31/2021	0.717			6		<50	<0.16	no	no	6.6	6.6	5.5	
Discharged	16.777												
Monthly Avg				7.6								8.0	

8/23/2021 - Influent - Red Pond sample not collected due to shut down for system maintenance/Red Pond cleaning.