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August 8, 2019

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

**Re: Monitoring Report # 267**  
**July 1 – July 31, 2019** part 201, dioxin, dioxane, rrd,  
remediation

Dear Ms. Dijak:

Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit No. MI0048453, please find the enclosed Monitoring Report for the period of July 1 through July 31, 2019.

Should you have any questions or concerns regarding this report, please contact me at 386-562-0176.

Sincerely,

Lawrence J. Gelb  
Sr. Director Global EHS

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

**EXTRACTION DATA**

<b>TABLE #1</b>	<b>-</b>	<b>UNIT "D2" UPGRADIENT EXTRACTION DATA</b>
<b>TABLE #2</b>	<b>-</b>	<b>UNIT "D2" DOWNGRADIENT EXTRACTION DATA</b>
<b>TABLE #3</b>	<b>-</b>	<b>CORE AREA EXTRACTION DATA</b>
<b>TABLE #4</b>	<b>-</b>	<b>MARSHY AREA EXTRACTION DATA</b>
<b>TABLE #5</b>	<b>-</b>	<b>SOUTHWEST AREA EXTRACTION DATA</b>
<b>TABLE #6</b>	<b>-</b>	<b>UNIT "E" EXTRACTION DATA</b>
<b>TABLE #7</b>	<b>-</b>	<b>LITTLE LAKE AREA SYSTEM DATA</b>
<b>TABLE #8</b>	<b>-</b>	<b>INDIVIDUAL PURGE WELL CONCENTRATIONS</b>
<b>TABLE #9</b>	<b>-</b>	<b>RED POND DATA</b>
<b>TABLE #10</b>	<b>-</b>	<b>RED POND CONCENTRATIONS</b>

**OZONE OPERATION DATA**

<b>TABLE #11</b>	<b>-</b>	<b>OZONE OPERATION REPORT</b>
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**DISCHARGE DATA**

<b>TABLE #12</b>	<b>-</b>	<b>GREEN POND / DISCHARGE DATA</b>
<b>TABLE #13</b>	<b>-</b>	<b>DAILY DISCHARGE MONITORING REPORT</b>

**UNIT D2 UPGRADIENT EXTRACTION DATA**

Month of: **Jul-19**

Date	Horizontal Well Extraction			TW-9			TW-5			TW-21			Daily Flow	Daily Total
	HW-S	GPM	Run Hrs.	TW-9	GPM	Run Hrs.	TW-5	GPM	Run Hrs.	TW-21	GPM	Run Hrs.	GPM	Gallons
	Gallons			Gallons			Gallons			Gallons				
Mon-7/1/19	-	-	-	-	-	-	-	-	-	98,407	68	24.00	68	98,407
Tue-7/2/19	-	-	-	-	-	-	-	-	-	84,252	59	24.00	59	84,252
Wed-7/3/19	-	-	-	-	-	-	-	-	-	83,332	58	24.00	58	83,332
Thu-7/4/19	-	-	-	-	-	-	-	-	-	83,352	58	24.00	58	83,352
Fri-7/5/19	-	-	-	-	-	-	-	-	-	86,400	60	24.00	60	86,400
Sat-7/6/19	-	-	-	-	-	-	-	-	-	56,485	57	16.52	39	56,485
Sun-7/7/19	-	-	-	-	-	-	-	-	-	80,308	57	23.53	56	80,308
Mon-7/8/19	-	-	-	-	-	-	-	-	-	83,266	58	24.00	58	83,266
Tue-7/9/19	-	-	-	-	-	-	-	-	-	83,281	58	24.00	58	83,281
Wed-7/10/19	-	-	-	-	-	-	-	-	-	83,294	58	24.00	58	83,294
Thu-7/11/19	-	-	-	-	-	-	-	-	-	83,344	58	24.00	58	83,344
Fri-7/12/19	-	-	-	-	-	-	-	-	-	76,944	53	24.00	53	76,944
Sat-7/13/19	-	-	-	-	-	-	-	-	-	72,265	50	24.00	50	72,265
Sun-7/14/19	-	-	-	-	-	-	-	-	-	72,317	50	24.00	50	72,317
Mon-7/15/19	-	-	-	-	-	-	-	-	-	72,311	50	24.00	50	72,311
Tue-7/16/19	-	-	-	-	-	-	-	-	-	72,341	50	24.00	50	72,341
Wed-7/17/19	-	-	-	-	-	-	-	-	-	72,309	50	24.00	50	72,309
Thu-7/18/19	-	-	-	14,298	102	2.33	-	-	-	72,328	50	24.00	60	86,626
Fri-7/19/19	-	-	-	-	-	-	-	-	-	72,324	50	24.00	50	72,324
Sat-7/20/19	-	-	-	-	-	-	-	-	-	71,744	50	24.00	50	71,744
Sun-7/21/19	-	-	-	-	-	-	-	-	-	72,308	50	24.00	50	72,308
Mon-7/22/19	-	-	-	-	-	-	-	-	-	72,272	50	24.00	50	72,272
Tue-7/23/19	-	-	-	-	-	-	-	-	-	72,258	50	24.00	50	72,258
Wed-7/24/19	-	-	-	-	-	-	-	-	-	72,254	50	24.00	50	72,254
Thu-7/25/19	-	-	-	-	-	-	-	-	-	72,281	50	24.00	50	72,281
Fri-7/26/19	-	-	-	-	-	-	-	-	-	72,279	50	24.00	50	72,279
Sat-7/27/19	-	-	-	-	-	-	-	-	-	72,280	50	24.00	50	72,280
Sun-7/28/19	-	-	-	-	-	-	-	-	-	72,318	50	24.00	50	72,318
Mon-7/29/19	-	-	-	-	-	-	-	-	-	72,341	50	24.00	50	72,341
Tue-7/30/19	-	-	-	-	-	-	-	-	-	72,280	50	24.00	50	72,280
Wed-7/31/19	-	-	-	-	-	-	-	-	-	72,304	50	24.00	50	72,304
<b>TOTALS</b>	-	-	-	14,298	102	2.33	-	-	-	2,355,779	53	736.05	53	2,370,077

<b>TOTAL VOLUME EXTRACTED :</b>	<b>2,370,077 GALLONS</b>
<b>DAYS IN MONTH :</b>	<b>31 DAYS</b>
<b>MONTHLY AVERAGE FLOW RATE :</b>	<b>53.09 GPM</b>

7/6/19 - TW-21 was shut down due to a DTE Energy power outage in the area.

UNIT D2 DOWNGRADE EXTRACTION DATA

Month of: **Jul-19**

Date	LB-1			LB-4			Daily	Daily
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Mon-7/1/19	-	-	-	144,199	100	24.00	100	144,199
Tue-7/2/19	-	-	-	144,196	100	24.00	100	144,196
Wed-7/3/19	-	-	-	144,157	100	24.00	100	144,157
Thu-7/4/19	-	-	-	144,203	100	24.00	100	144,203
Fri-7/5/19	-	-	-	128,493	100	21.40	89	128,493
Sat-7/6/19	-	-	-	118,057	100	19.65	82	118,057
Sun-7/7/19	-	-	-	144,170	100	24.00	100	144,170
Mon-7/8/19	-	-	-	144,207	100	24.00	100	144,207
Tue-7/9/19	-	-	-	144,204	100	24.00	100	144,204
Wed-7/10/19	-	-	-	144,178	100	24.00	100	144,178
Thu-7/11/19	-	-	-	144,154	100	24.00	100	144,154
Fri-7/12/19	-	-	-	140,833	100	23.45	98	140,833
Sat-7/13/19	-	-	-	144,177	100	24.00	100	144,177
Sun-7/14/19	-	-	-	144,165	100	24.00	100	144,165
Mon-7/15/19	-	-	-	144,207	100	24.00	100	144,207
Tue-7/16/19	-	-	-	144,190	100	24.00	100	144,190
Wed-7/17/19	-	-	-	144,163	100	24.00	100	144,163
Thu-7/18/19	-	-	-	114,751	100	19.10	80	114,751
Fri-7/19/19	-	-	-	139,470	100	23.21	97	139,470
Sat-7/20/19	-	-	-	144,187	100	24.00	100	144,187
Sun-7/21/19	-	-	-	144,202	100	24.00	100	144,202
Mon-7/22/19	-	-	-	144,207	100	24.00	100	144,207
Tue-7/23/19	-	-	-	144,213	100	24.00	100	144,213
Wed-7/24/19	-	-	-	144,163	100	24.00	100	144,163
Thu-7/25/19	-	-	-	144,231	100	24.00	100	144,231
Fri-7/26/19	-	-	-	144,197	100	24.00	100	144,197
Sat-7/27/19	-	-	-	144,192	100	24.00	100	144,192
Sun-7/28/19	-	-	-	144,168	100	24.00	100	144,168
Mon-7/29/19	-	-	-	144,164	100	24.00	100	144,164
Tue-7/30/19	-	-	-	144,163	100	24.00	100	144,163
Wed-7/31/19	-	-	-	144,187	100	24.00	100	144,187
<b>TOTALS</b>	-	#DIV/0!	-	4,390,448	100	730.81	98	4,390,448

TOTAL VOLUME EXTRACTED :	4,390,448 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	98.35 GPM

7/5/19 - 7/6/19 - LB-4 was shut down due to a DTE Energy power outage in the area.  
 7/18/19 - LB-4 was shut down due to a DTE Energy power outage in the area.

**TABLE #3**

**CORE AREA EXTRACTION DATA**

Month of: **Jul-19**

Core Area Well Extraction																		Daily	Daily	
Date	TW-1			TW-2 (Dolph)			TW-3			TW-10			TW-14			TW-20			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.	Gallons	GPM	Run Hrs.		
Mon-7/1/19	-	-	-	16,484	11	24.00	-	-	-	-	-	-	-	-	36,074	25	24.00	36	52,558	
Tue-7/2/19	-	-	-	16,431	11	24.00	-	-	-	-	-	-	-	-	36,050	25	24.00	36	52,481	
Wed-7/3/19	-	-	-	16,324	11	24.00	-	-	-	-	-	-	-	-	36,071	25	24.00	36	52,395	
Thu-7/4/19	-	-	-	16,168	11	24.00	-	-	-	-	-	-	-	-	35,988	25	24.00	36	52,156	
Fri-7/5/19	-	-	-	14,467	12	19.83	-	-	-	-	-	-	-	-	28,800	20	24.00	30	43,267	
Sat-7/6/19	-	-	-	13,935	12	19.27	-	-	-	-	-	-	-	-	27,938	25	18.63	29	41,873	
Sun-7/7/19	-	-	-	17,394	12	24.00	-	-	-	-	-	-	-	-	36,084	25	24.00	37	53,478	
Mon-7/8/19	-	-	-	17,087	12	24.00	-	-	-	-	-	-	-	-	35,948	25	24.00	37	53,035	
Tue-7/9/19	-	-	-	17,337	12	24.00	-	-	-	-	-	-	-	-	35,879	25	24.00	37	53,216	
Wed-7/10/19	-	-	-	17,155	12	24.00	-	-	-	-	-	-	-	-	36,016	25	24.00	37	53,171	
Thu-7/11/19	-	-	-	17,602	12	24.00	-	-	-	-	-	-	-	-	35,945	25	24.00	37	53,547	
Fri-7/12/19	-	-	-	17,920	12	24.00	-	-	-	-	-	-	-	-	35,910	25	24.00	37	53,830	
Sat-7/13/19	-	-	-	17,838	12	24.00	-	-	-	-	-	-	-	-	35,759	25	24.00	37	53,597	
Sun-7/14/19	-	-	-	17,784	12	24.00	-	-	-	-	-	-	-	-	35,920	25	24.00	37	53,704	
Mon-7/15/19	-	-	-	17,696	12	24.00	-	-	-	-	-	-	-	-	35,925	25	24.00	37	53,621	
Tue-7/16/19	-	-	-	17,685	12	24.00	-	-	-	-	-	-	-	-	35,899	25	24.00	37	53,584	
Wed-7/17/19	-	-	-	17,740	12	24.00	-	-	-	-	-	-	-	-	35,880	25	24.00	37	53,620	
Thu-7/18/19	-	-	-	17,612	12	24.00	-	-	-	2,809	20	2.30	-	-	36,125	25	24.00	39	56,546	
Fri-7/19/19	-	-	-	17,339	12	23.78	-	-	-	503	20	0.42	-	-	36,358	25	23.98	38	54,200	
Sat-7/20/19	-	-	-	17,923	12	24.00	-	-	-	-	-	-	-	-	36,163	25	24.00	38	54,086	
Sun-7/21/19	-	-	-	17,912	12	24.00	-	-	-	-	-	-	-	-	36,090	25	24.00	38	54,002	
Mon-7/22/19	-	-	-	17,195	12	24.00	-	-	-	-	-	-	-	-	36,152	25	24.00	37	53,347	
Tue-7/23/19	-	-	-	17,118	12	24.00	-	-	-	-	-	-	-	-	36,085	25	24.00	37	53,203	
Wed-7/24/19	-	-	-	17,084	12	24.00	-	-	-	-	-	-	-	-	36,026	25	24.00	37	53,110	
Thu-7/25/19	-	-	-	17,058	12	24.00	-	-	-	-	-	-	-	-	35,969	25	24.00	37	53,027	
Fri-7/26/19	-	-	-	17,049	12	24.00	-	-	-	-	-	-	-	-	36,061	25	24.00	37	53,110	
Sat-7/27/19	-	-	-	17,003	12	24.00	-	-	-	-	-	-	-	-	36,160	25	24.00	37	53,163	
Sun-7/28/19	-	-	-	17,525	12	24.00	-	-	-	-	-	-	-	-	36,128	25	24.00	37	53,653	
Mon-7/29/19	-	-	-	17,777	12	24.00	-	-	-	-	-	-	-	-	36,052	25	24.00	37	53,829	
Tue-7/30/19	-	-	-	17,782	12	24.00	-	-	-	-	-	-	-	-	35,912	25	24.00	37	53,694	
Wed-7/31/19	-	-	-	17,758	12	24.00	-	-	-	-	-	-	-	-	37,447	30	20.65	38	55,205	
<b>TOTALS</b>	-	-	-	<b>531,182</b>	<b>12</b>	<b>734.88</b>	-	-	-	<b>3,312</b>	<b>20</b>	<b>2.72</b>	-	-	-	<b>1,102,814</b>	<b>25</b>	<b>735.27</b>	<b>37</b>	<b>1,637,308</b>

TOTAL VOLUME EXTRACTED :	1,637,308 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	36.68 GPM

7/5/19 - 7/6/19 - Dolph was shut down due to a DTE Energy power outage in the area.  
 7/6/19 - TW-20 was shut down due to a DTE Energy power outage in the area.  
 7/31/19 - TW-20 was shut down briefly for maintenance.



**MARSHY AREA EXTRACTION DATA**

Month of: **Jul-19**

Marshy Well Extraction				Daily Flow	Daily Total
Date	PW-1 Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-7/1/19	976	1	24.00	1	976
Tue-7/2/19	962	1	23.80	1	962
Wed-7/3/19	944	1	24.00	1	944
Thu-7/4/19	935	1	24.00	1	935
Fri-7/5/19	593	0.5	19.88	0	593
Sat-7/6/19	498	0.4	19.33	0	498
Sun-7/7/19	642	0.4	24.00	0	642
Mon-7/8/19	642	0.4	24.00	0	642
Tue-7/9/19	636	0.4	24.00	0	636
Wed-7/10/19	633	0.4	24.00	0	633
Thu-7/11/19	985	1	24.00	1	985
Fri-7/12/19	1,353	1	24.00	1	1,353
Sat-7/13/19	1,347	1	24.00	1	1,347
Sun-7/14/19	1,336	1	24.00	1	1,336
Mon-7/15/19	1,523	1	24.00	1	1,523
Tue-7/16/19	1,672	1	24.00	1	1,672
Wed-7/17/19	1,673	1	24.00	1	1,673
Thu-7/18/19	1,671	1	24.00	1	1,671
Fri-7/19/19	1,459	1	24.00	1	1,459
Sat-7/20/19	1,359	1	24.00	1	1,359
Sun-7/21/19	1,367	1	24.00	1	1,367
Mon-7/22/19	1,731	1	24.00	1	1,731
Tue-7/23/19	1,915	1	24.00	1	1,915
Wed-7/24/19	1,918	1	24.00	1	1,918
Thu-7/25/19	1,925	1	24.00	1	1,925
Fri-7/26/19	1,941	1	24.00	1	1,941
Sat-7/27/19	1,946	1	24.00	1	1,946
Sun-7/28/19	1,949	1	24.00	1	1,949
Mon-7/29/19	1,959	1	24.00	1	1,959
Tue-7/30/19	1,969	1	24.00	1	1,969
Wed-7/31/19	1,976	1	24.00	1	1,976
<b>TOTALS</b>	<b>42,435</b>	<b>1</b>	<b>735.02</b>	<b>1</b>	<b>42,435</b>

TOTAL VOLUME EXTRACTED :	42,435 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	0.95 GPM

7/5/19 - 7/6/19 - Marshy was shut down due to a DTE Energy power outage in the area.

**SOUTHWEST AREA EXTRACTION DATA**

Month of: **Jul-19**

SouthWest Well Extraction							Daily	Daily
Date	TW22			TW28			Flow	Total
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-7/1/19	-	<2	24.00	39,981	28	24.00	28	39,981
Tue-7/2/19	1	<2	24.00	39,745	28	24.00	28	39,746
Wed-7/3/19	29	<2	24.00	40,418	28	24.00	28	40,447
Thu-7/4/19	-	<2	24.00	40,333	28	24.00	28	40,333
Fri-7/5/19	-	<2	24.00	33,902	24	24.00	24	33,902
Sat-7/6/19	-	<2	24.00	30,029	21	24.00	21	30,029
Sun-7/7/19	-	<2	24.00	40,827	28	24.00	28	40,827
Mon-7/8/19	-	<2	24.00	40,839	28	24.00	28	40,839
Tue-7/9/19	-	<2	24.00	40,119	28	24.00	28	40,119
Wed-7/10/19	72	<2	24.00	40,130	28	24.00	28	40,202
Thu-7/11/19	1	<2	24.00	40,211	28	24.00	28	40,212
Fri-7/12/19	878	<2	24.00	40,759	28	24.00	29	41,637
Sat-7/13/19	2,509	<2	24.00	40,769	28	24.00	30	43,278
Sun-7/14/19	2,524	<2	24.00	40,642	28	24.00	30	43,166
Mon-7/15/19	2,441	<2	24.00	40,652	28	24.00	30	43,093
Tue-7/16/19	2,393	<2	24.00	40,587	28	24.00	30	42,980
Wed-7/17/19	2,490	<2	24.00	40,402	28	24.00	30	42,892
Thu-7/18/19	2,529	<2	24.00	40,295	28	24.00	30	42,824
Fri-7/19/19	2,671	<2	24.00	40,092	28	24.00	30	42,763
Sat-7/20/19	2,092	<2	24.00	40,642	28	24.00	30	42,734
Sun-7/21/19	-	<2	24.00	40,648	28	24.00	28	40,648
Mon-7/22/19	-	<2	24.00	40,360	28	24.00	28	40,360
Tue-7/23/19	1,992	<2	24.00	40,078	28	24.00	29	42,070
Wed-7/24/19	2,917	2	24.00	40,058	28	24.00	30	42,975
Thu-7/25/19	2,902	2	24.00	40,237	28	24.00	30	43,139
Fri-7/26/19	2,900	2	24.00	40,905	28	24.00	30	43,805
Sat-7/27/19	2,911	2	24.00	40,861	28	24.00	30	43,772
Sun-7/28/19	2,917	2	24.00	40,836	28	24.00	30	43,753
Mon-7/29/19	2,910	2	24.00	40,841	28	24.00	30	43,751
Tue-7/30/19	2,911	2	24.00	40,803	28	24.00	30	43,714
Wed-7/31/19	2,911	2	24.00	40,777	28	24.00	30	43,688
<b>TOTALS</b>	<b>45,901</b>	<b>2</b>	<b>744.00</b>	<b>1,237,778</b>	<b>28</b>	<b>744.00</b>	<b>29</b>	<b>1,283,679</b>

<b>TOTAL VOLUME EXTRACTED :</b>	<b>1,283,679 GALLONS</b>
<b>DAYS IN MONTH :</b>	<b>31 DAYS</b>
<b>MONTHLY AVERAGE FLOW RATE :</b>	<b>28.76 GPM</b>

**TABLE #6**

**UNIT "E" EXTRACTION DATA**

Month of: **Jul-19**

Date	TW-11			TW-12			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.	Gallons	GPM	Run Hrs.		
Mon-7/1/19	-	-	-	-	-	-	-	-	237,889	165	24.00	44,768	31	24.00	99,254	69	24.00	265	381,911	
Tue-7/2/19	-	-	-	-	-	-	-	-	237,839	165	24.00	44,795	31	24.00	99,251	69	24.00	265	381,885	
Wed-7/3/19	-	-	-	-	-	-	-	-	237,858	165	24.00	44,803	31	24.00	99,195	69	24.00	265	381,856	
Thu-7/4/19	-	-	-	-	-	-	-	-	237,938	165	24.00	44,793	31	24.00	99,092	69	24.00	265	381,823	
Fri-7/5/19	-	-	-	-	-	-	-	-	217,440	151	24.00	38,869	31	20.75	85,699	69	20.78	238	342,008	
Sat-7/6/19	-	-	-	-	-	-	-	-	191,464	165	19.32	37,744	31	20.13	83,140	69	20.13	217	312,348	
Sun-7/7/19	-	-	-	-	-	-	-	-	237,894	165	24.00	45,049	31	24.00	99,048	69	24.00	265	381,991	
Mon-7/8/19	-	-	-	-	-	-	-	-	237,893	165	24.00	45,102	31	24.00	99,107	69	24.00	265	382,102	
Tue-7/9/19	-	-	-	-	-	-	-	-	237,878	165	24.00	45,140	31	24.00	99,058	69	24.00	265	382,076	
Wed-7/10/19	-	-	-	-	-	-	-	-	237,955	165	24.00	45,121	31	24.00	99,128	69	24.00	265	382,204	
Thu-7/11/19	-	-	-	-	-	-	-	-	230,090	160	24.00	43,743	31	23.30	96,396	69	23.30	257	370,229	
Fri-7/12/19	-	-	-	-	-	-	-	-	219,198	152	24.00	44,326	31	24.00	99,061	69	24.00	252	362,585	
Sat-7/13/19	-	-	-	-	-	-	-	-	219,241	152	24.00	44,339	31	24.00	99,116	69	24.00	252	362,696	
Sun-7/14/19	-	-	-	-	-	-	-	-	219,206	152	24.00	45,284	31	23.98	99,092	69	23.98	252	363,582	
Mon-7/15/19	-	-	-	-	-	-	-	-	219,259	152	24.00	44,357	31	24.00	99,146	69	24.00	252	362,762	
Tue-7/16/19	-	-	-	-	-	-	-	-	219,258	152	24.00	44,341	31	24.00	99,136	69	24.00	252	362,735	
Wed-7/17/19	-	-	-	-	-	-	-	-	219,340	152	24.00	45,368	32	24.00	99,152	69	24.00	253	363,860	
Thu-7/18/19	-	-	-	-	-	-	9,678	70	2,32	219,289	152	24.00	36,285	31	19.35	79,922	69	19.35	240	345,174
Fri-7/19/19	-	-	-	-	-	-	-	-	209,711	152	23.00	42,809	31	23.15	95,549	69	23.13	242	348,069	
Sat-7/20/19	-	-	-	-	-	-	-	-	219,322	152	24.00	44,064	31	24.00	99,058	69	24.00	252	362,444	
Sun-7/21/19	-	-	-	-	-	-	-	-	219,258	152	24.00	44,093	31	24.00	99,064	69	24.00	252	362,415	
Mon-7/22/19	-	-	-	-	-	-	-	-	219,194	152	24.00	43,857	30	24.00	99,076	69	24.00	251	362,127	
Tue-7/23/19	-	-	-	-	-	-	-	-	219,218	152	24.00	43,992	31	24.00	99,088	69	24.00	252	362,298	
Wed-7/24/19	-	-	-	-	-	-	-	-	219,211	152	24.00	44,013	31	24.00	99,119	69	24.00	252	362,343	
Thu-7/25/19	-	-	-	-	-	-	-	-	228,416	159	24.00	44,014	31	24.00	99,067	69	24.00	258	371,497	
Fri-7/26/19	-	-	-	-	-	-	-	-	241,134	167	24.00	43,996	31	24.00	99,109	69	24.00	267	384,239	
Sat-7/27/19	-	-	-	-	-	-	-	-	241,210	168	24.00	43,985	31	24.00	99,056	69	24.00	267	384,251	
Sun-7/28/19	-	-	-	-	-	-	-	-	241,234	168	24.00	43,964	31	24.00	99,121	69	24.00	267	384,319	
Mon-7/29/19	-	-	-	-	-	-	-	-	241,168	167	24.00	43,960	31	24.00	99,329	69	24.00	267	384,457	
Tue-7/30/19	-	-	-	-	-	-	-	-	241,257	168	24.00	43,997	31	24.00	99,162	69	24.00	267	384,416	
Wed-7/31/19	-	-	-	-	-	-	-	-	241,136	167	24.00	44,001	31	24.00	99,166	69	24.00	267	384,303	
<b>TOTALS</b>	-	-	-	-	-	-	<b>9,678</b>	<b>70</b>	<b>2,32</b>	<b>7,058,398</b>	<b>159</b>	<b>738.32</b>	<b>1,354,972</b>	<b>31</b>	<b>730.66</b>	<b>3,017,957</b>	<b>69</b>	<b>730.67</b>	<b>256</b>	<b>11,441,005</b>

TOTAL VOLUME EXTRACTED :	11,441,005 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	256.29 GPM

7/5/19 - 7/6/19 - TW-19 & TW-23 were down due to a DTE Energy power outage in the area.  
 7/6/19 - TW-18 was shut down due to a DTE Energy power outage in the area.  
 7/18/19 - TW-19 & TW-23 were shut down due to a DTE Energy power outage in the area.  
 7/19/19 - TW-18 was shut down due to a DTE Energy power outage in the area.



**TABLE #7**

**Little Lake Area System**

MW-53i	
Date	1,4-Dioxane ug/L
04/03/19	50
05/01/19	56
06/04/19	100
07/17/19	44

A2 Cleaning Supply Well	
Date	1,4-Dioxane ug/L
05/01/19	87
06/04/19	87
06/13/19	76
07/03/19	82

**TABLE #8**

**INDIVIDUAL PURGE WELL CONCENTRATIONS**

<b>SAMPLE ID</b>	<b>Date Sampled</b>	<b>1,4-DIOXANE (ppb)</b>
DOLPH-07-02-19-11:40-1	07/02/19	120
TW-10-07-19-19-08:02-1	07/19/19	360
TW-20-07-02-19-11:45-1	07/02/19	930
LB-4-07-02-19-11:00-1	07/02/19	460
TW-21-07-02-19-11:15-1	07/02/19	210
TW-21-07-02-19-11:17-1	07/02/19	230
TW-9-07-19-19-08:00-1	07/19/19	540
TW-17-07-19-19-07:55-1	07/19/19	180
TW-18-07-02-19-11:26-1	07/02/19	260
TW-19-07-02-19-10:30-1	07/02/19	610
TW-23-07-02-19-10:32-1	07/02/19	430
PW-1-07-02-19-12:21-1	07/02/19	700
TW-22-07-02-19-12:11-1	07/02/19	190
TW-28-07-02-19-12:00-1	07/02/19	710

RED POND DATA

Month of: **Jul-19**

Date	Time	Notes	Red Pond				
			Pond	Level	Aeration	Influent	Influent
			Visual Chk	Feet	Hours	Hours	GPM
Mon-7/1/19	04:00:00.000		Y	5.9	-	24.00	499
Tue-7/2/19	04:00:00.000		Y	5.9	-	24.00	489
Wed-7/3/19	04:00:00.000		Y	6.4	-	24.00	488
Thu-7/4/19	04:00:00.000		Y	4.8	-	24.00	488
Fri-7/5/19	04:00:00.000		Y	4.9	-	24.00	441
Sat-7/6/19	04:00:00.000	(1)		4.8	-	24.00	388
Sun-7/7/19	04:00:00.000	(1)		5.6	-	23.90	489
Mon-7/8/19	04:00:00.000		Y	5.6	-	24.00	489
Tue-7/9/19	04:00:00.000		Y	5.6	-	24.00	489
Wed-7/10/19	04:00:00.000		Y	5.5	-	24.00	489
Thu-7/11/19	04:00:00.000		Y	5.5	-	24.00	481
Fri-7/12/19	04:00:00.000		Y	5.8	-	24.00	470
Sat-7/13/19	04:00:00.000	(1)		5.6	-	24.00	470
Sun-7/14/19	04:00:00.000	(1)		5.3	-	24.00	471
Mon-7/15/19	04:00:00.000		Y	5.1	-	24.00	470
Tue-7/16/19	04:00:00.000		Y	4.9	-	24.00	470
Wed-7/17/19	04:00:00.000		Y	4.8	-	24.00	471
Thu-7/18/19	04:00:00.000		Y	5.2	-	24.00	450
Fri-7/19/19	04:00:00.000		Y	4.8	-	24.00	457
Sat-7/20/19	04:00:00.000	(1)		5.0	-	24.00	470
Sun-7/21/19	04:00:00.000	(1)		4.8	-	24.00	469
Mon-7/22/19	04:00:00.000		Y	4.8	-	24.00	468
Tue-7/23/19	04:00:00.000		Y	4.5	-	24.00	469
Wed-7/24/19	04:00:00.000		Y	4.2	-	24.00	470
Thu-7/25/19	04:00:00.000		Y	4.0	-	24.00	476
Fri-7/26/19	04:00:00.000		Y	3.8	-	24.00	486
Sat-7/27/19	04:00:00.000	(1)		3.7	-	24.00	486
Sun-7/28/19	04:00:00.000	(1)		3.7	-	24.00	486
Mon-7/29/19	04:00:00.000		Y	3.7	-	24.00	486
Tue-7/30/19	04:00:00.000		Y	3.9	-	24.00	486
Wed-7/31/19	04:00:00.000		Y	3.8	-	24.00	487
<b>TOTALS</b>			-	-	-	744	

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-07-01-19-08:47-1	7/1/2019	370
Red Pond-07-08-19-09:05-1	7/8/2019	370
Red Pond-07-15-19-09:10-1	7/15/2019	420
Red Pond-07-22-19-08:54-1	7/22/2019	400
Red Pond-07-29-19-09:10-1	7/29/2019	360

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

OZONE OPERATION REPORT

Month of: **2019-07-01**

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
2019-07-01	04:00:00.000		239	24.00	0	0.40	240	24.00	0	0.00
2019-07-02	04:00:00.000		240	22.15	0	1.35	240	22.15	0	0.00
2019-07-03	04:00:00.000		240	23.72	0	12.08	238	23.72	0	0.00
2019-07-04	04:00:00.000		241	24.00	0	0.08	240	24.00	0	0.00
2019-07-05	04:00:00.000		240	18.17	0	0.72	240	18.17	0	0.00
2019-07-06	04:00:00.000	(1)	240	15.95	0	0.28	241	18.02	0	0.00
2019-07-07	04:00:00.000	(1)	240	24.00	0	0.00	240	24.00	0	0.00
2019-07-08	04:00:00.000		240	24.00	0	0.00	241	24.00	0	0.00
2019-07-09	04:00:00.000		240	24.00	0	0.00	240	24.00	0	0.00
2019-07-10	04:00:00.000		240	24.00	0	0.00	240	24.00	0	0.00
2019-07-11	04:00:00.000		240	24.00	0	0.00	239	24.00	0	0.00
2019-07-12	04:00:00.000		239	22.15	0	0.00	240	22.15	0	0.00
2019-07-13	04:00:00.000	(1)	240	24.00	0	0.00	240	24.00	0	0.00
2019-07-14	04:00:00.000	(1)	239	23.80	0	0.00	240	23.83	0	0.00
2019-07-15	04:00:00.000		240	24.00	0	0.00	240	24.00	0	0.00
2019-07-16	04:00:00.000		240	24.00	0	0.00	239	24.00	0	0.00
2019-07-17	04:00:00.000		240	19.42	0	0.00	240	23.92	0	0.00
2019-07-18	04:00:00.000		239	23.58	0	0.00	240	23.95	0	0.00
2019-07-19	04:00:00.000		240	23.73	0	0.00	240	23.50	0	0.00
2019-07-20	04:00:00.000	(1)	240	22.45	0	0.00	241	22.45	0	0.00
2019-07-21	04:00:00.000	(1)	240	23.62	0	0.00	239	23.58	0	0.00
2019-07-22	04:00:00.000		240	23.38	0	0.00	240	23.45	0	0.00
2019-07-23	04:00:00.000		240	24.00	0	0.00	241	24.00	0	0.00
2019-07-24	04:00:00.000		239	24.00	0	0.00	240	24.00	0	0.00
2019-07-25	04:00:00.000		239	24.00	0	0.00	240	24.00	0	0.00
2019-07-26	04:00:00.000		240	24.00	0	0.00	240	24.00	0	0.00
2019-07-27	04:00:00.000	(1)	239	24.00	0	0.00	241	24.00	0	0.00
2019-07-28	04:00:00.000	(1)	240	24.00	0	0.00	241	24.00	0	0.00
2019-07-29	04:00:00.000		239	23.60	0	0.00	240	24.00	0	0.00
2019-07-30	04:00:00.000		240	23.75	0	0.00	239	23.77	0	0.00
2019-07-31	04:00:00.000		240	24.00	0	0.00	239	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.

7/2/19 - Treatment was shut down briefly for maintenance.

7/5/19 - 7/6/19 - Treatment was shut down due to a DTE Energy power outage in the area.

7/12/19 - Treatment was shut down briefly for maintenance.

7/17/19 - System 1A was shut down for maintenance.

7/20/19 - Treatment was shut down briefly due to a DTE Energy power outage in the area.



**TABLE #12**

**GREEN POND / DISCHARGE DATA**

Month of: **Jul-19**

			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	Hours		
Mon-7/1/19	14:00:00.00		Y	-	-				499	718,136	24.00	-	-	-	-	-	-			
Tue-7/2/19	14:00:00.00		Y	-	-				506	662,011	21.80	-	-	-	-	-	-			
Wed-7/3/19	14:00:00.00		Y	-	-				617	888,893	24.00	-	-	-	-	-	-			
Thu-7/4/19	14:00:00.00		Y	-	-				500	720,345	24.00	-	-	-	-	-	-			
Fri-7/5/19	14:00:00.00		Y	-	-				479	579,118	20.17	-	-	-	-	-	-			
Sat-7/6/19	14:00:00.00	(1)		-	-				502	543,330	18.03	-	-	-	-	-	-			
Sun-7/7/19	14:00:00.00	(1)		-	-				498	716,453	24.00	-	-	-	-	-	-			
Mon-7/8/19	14:00:00.00		Y	-	-				498	716,525	24.00	-	-	-	-	-	-			
Tue-7/9/19	14:00:00.00		Y	-	-				498	716,718	24.00	-	-	-	-	-	-			
Wed-7/10/19	14:00:00.00		Y	-	-				498	717,242	24.00	-	-	-	-	-	-			
Thu-7/11/19	14:00:00.00		Y	-	-				498	659,327	22.07	-	-	-	-	-	-			
Fri-7/12/19	14:00:00.00		Y	-	-				498	717,476	24.00	-	-	-	-	-	-			
Sat-7/13/19	14:00:00.00	(1)		-	-				498	717,706	24.00	-	-	-	-	-	-			
Sun-7/14/19	14:00:00.00	(1)		-	-				498	710,656	23.80	-	-	-	-	-	-			
Mon-7/15/19	14:00:00.00		Y	-	-				498	717,351	24.00	-	-	-	-	-	-			
Tue-7/16/19	14:00:00.00		Y	-	-				495	712,861	24.00	-	-	-	-	-	-			
Wed-7/17/19	14:00:00.00		Y	-	-				448	645,435	24.00	-	-	-	-	-	-			
Thu-7/18/19	14:00:00.00		Y	-	-				496	706,188	23.75	-	-	-	-	-	-			
Fri-7/19/19	14:00:00.00		Y	-	-				498	661,511	22.15	-	-	-	-	-	-			
Sat-7/20/19	14:00:00.00	(1)		-	-				498	703,993	23.57	-	-	-	-	-	-			
Sun-7/21/19	14:00:00.00	(1)		-	-				497	699,053	23.45	-	-	-	-	-	-			
Mon-7/22/19	14:00:00.00		Y	-	-				498	716,880	24.00	-	-	-	-	-	-			
Tue-7/23/19	14:00:00.00		Y	-	-				498	716,910	24.00	-	-	-	-	-	-			
Wed-7/24/19	14:00:00.00		Y	-	-				498	716,769	24.00	-	-	-	-	-	-			
Thu-7/25/19	14:00:00.00		Y	-	-				498	717,018	24.00	-	-	-	-	-	-			
Fri-7/26/19	14:00:00.00		Y	-	-				498	717,016	24.00	-	-	-	-	-	-			
Sat-7/27/19	14:00:00.00	(1)		-	-				498	716,883	24.00	-	-	-	-	-	-			
Sun-7/28/19	14:00:00.00	(1)		-	-				498	716,986	24.00	-	-	-	-	-	-			
Mon-7/29/19	14:00:00.00		Y	-	-				493	702,785	23.77	-	-	-	-	-	-			
Tue-7/30/19	14:00:00.00		Y	-	-				497	716,152	24.00	-	-	-	-	-	-			
Wed-7/31/19	14:00:00.00		Y	-	-				497	716,138	24.00	-	-	-	-	-	-			
<b>TOTALS</b>											21,783,865	727								

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)	Quarterly		(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
7/1/2019	0.718	*G	*G	5	0.370	<50	<0.16	Yes	Yes	6.8	6.8	7.9	20
7/2/2019	0.662			4.7		<50	<0.16	No	No	6.8	6.8	7.2	
7/3/2019	0.889			4.7		<50	<0.16	No	Yes	6.7	6.7	5.7	60
7/4/2019	0.720			4.6								6.3	
7/5/2019	0.579					<50	<0.16	No	No	6.8	6.8		
7/6/2019	0.543												
7/7/2019	0.716			4.1								5.5	
7/8/2019	0.717			4.3	0.370	<50	<0.16	Yes	Yes	6.9	6.9	7.7	15
7/9/2019	0.717			4.6		<50	<0.16	No	No	6.8	6.8	9.6	
7/10/2019	0.717			5		<50	<0.16	No	Yes	6.8	6.8	8.4	20
7/11/2019	0.659			5.6		<50	<0.16	No	No	6.8	6.8	8.8	
7/12/2019	0.717					<50	<0.16	No	No	6.8	6.8		
7/13/2019	0.718												
7/14/2019	0.711			5.5								8.3	
7/15/2019	0.717			6.1	0.420	<50	<0.16	Yes	Yes	6.8	6.8	7.4	20
7/16/2019	0.713			5.4		<50	<0.16	No	No	6.7	6.7	7.4	
7/17/2019	0.645			6		<50	<0.16	No	Yes	7.0	7.0	7.3	15
7/18/2019	0.706			6.8		<50	<0.16	No	No	6.7	6.7	5.6	
7/19/2019	0.662					<50	<0.16	No	No	6.7	6.7		
7/20/2019	0.704												
7/21/2019	0.699			5.7								6.9	
7/22/2019	0.717			5.3	0.400	<50	<0.16	Yes	Yes	6.8	6.8	7.2	25
7/23/2019	0.717			6.0		<50	<0.16	No	No	6.8	6.8	5.8	
7/24/2019	0.717			6.0		<50	<0.16	No	Yes	6.6	6.6	8.3	40
7/25/2019	0.717			6.9		<50	<0.16	No	No	6.7	6.7	5.7	
7/26/2019	0.717					<50	<0.16	No	No	6.7	6.7		
7/27/2019	0.717												
7/28/2019	0.717			6.0								6.1	
7/29/2019	0.703			6.3	0.360	<50	<0.16	Yes	Yes	6.7	6.7	5.3	20
7/30/2019	0.716			5.3		<50	<0.16	No	No	6.8	6.8	5.5	
7/31/2019	0.716			5.3		<50	<0.16	No	Yes	6.8	6.8	5.8	20
<b>Discharged</b>	<b>21.784</b>												
<b>Monthly Avg</b>				<b>5.4</b>								<b>6.9</b>	

7/4/19 - Holiday