

October 20, 2022

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

### Re: Monitoring Report #305 September 1 – September 30, 2022

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 September 1 through September 30, 2022.

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

Sincerely,

FLEIS & VANDENBRINK

Jim Brode, CPG Senior Project Manager

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

> 4798 Campus Drive Kalamazoo, MI 49008 P: 269.385.0011 F: 269.382.6972 www.fveng.com

# **EXTRACTION DATA**

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

# **OZONE OPERATION DATA**

TABLE #11 - OZONE OPERATION REPORT

# DISCHARGE DATA

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

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### TABLE #1

### **UNIT D2 UPGRADIENT EXTRACTION DATA**

#### Sep-22 Month of:

													Daily	Daily
	Horiza	ontal Well Extr	action		TW-9			TW-5			TW-21		Flow	Total
	HW-S			TW-9			TW-5			TW-21				
Date	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Fri-9/2/22	-		-	40,481	50	13.58	-		-	82,189	100	13.65	85	122,670
Sat-9/3/22	-		-	71,636	50	24.00	-		-	144,426	100	24.00	150	216,062
Sun-9/4/22	-		-	72,049	50	24.00	-		-	144,339	100	24.00	150	216,388
Mon-9/5/22	-		-	72,222	50	24.00	-		-	144,337	100	24.00	150	216,559
Tue-9/6/22	-		-	71,349	50	24.00	-		-	144,361	100	24.00	150	215,710
Wed-9/7/22	-		-	71,582	50	24.00	-		-	144,308	100	24.00	150	215,890
Thu-9/8/22	-		-	70,995	49	24.00	-		-	144,358	100	24.00	150	215,353
Fri-9/9/22	-		-	70,857	49	24.00	-		-	144,347	100	24.00	149	215,204
Sat-9/10/22	-		-	71,163	49	24.00	-		-	144,333	100	24.00	150	215,496
Sun-9/11/22	-		-	70,820	49	24.00	-		-	144,374	100	24.00	149	215,194
Mon-9/12/22	-		-	72,062	50	24.00	-		-	144,324	100	24.00	150	216,386
Tue-9/13/22	-		-	72,497	50	24.00	-		-	144,332	100	24.00	151	216,829
Wed-9/14/22	-		-	71,608	50	24.00	-		-	144,367	100	24.00	150	215,975
Thu-9/15/22	-		-	71,334	50	24.00	-		-	144,355	100	24.00	150	215,689
Fri-9/16/22	-		-	71,408	50	24.00	-		-	144,371	100	24.00	150	215,779
Sat-9/17/22	-		-	71,478	50	24.00	-		-	144,387	100	24.00	150	215,865
Sun-9/18/22	-		-	71,876	50	24.00	-		-	144,381	100	24.00	150	216,257
Mon-9/19/22	-		-	72,246	50	24.00	-		-	144,390	100	24.00	150	216,636
Tue-9/20/22	-		-	72,755	51	24.00	-		-	144,333	100	24.00	151	217,088
Wed-9/21/22	-		-	71,880	50	24.00	-		-	134,846	100	22.42	144	206,726
Thu-9/22/22	-		-	72,439	50	24.00	-		-	144,267	100	24.00	150	216,706
Fri-9/23/22	-		-	72,951	51	24.00	-		-	143,837	100	23.93	151	216,788
Sat-9/24/22	-		-	72,880	51	24.00	-		-	144,265	100	24.00	151	217,145
Sun-9/25/22	-		-	72,222	50	24.00	-		-	144,249	100	24.00	150	216,471
Mon-9/26/22	-		-	72,342	50	24.00	-		-	144,234	100	24.00	150	216,576
Tue-9/27/22	-		-	72,981	51	24.00	-		-	144,234	100	24.00	151	217,215
Wed-9/28/22	-		-	73,375	51	24.00	58,131	40	24.00	144,233	100	24.00	191	275,739
Thu-9/29/22	-		-	72,248	50	24.00	50,599	35	24.00	144,071	100	24.00	185	266,918
Fri-9/30/22	-		-	71,714	50	24.00	50,620	35	24.00	144,237	100	24.00	185	266,571
	-		-	-		-	-		-	-		-		
	-		-	-		-	-		-	-		-		
TOTALS	-		-	2,055,450	50	685.58	159,350	37	72.00	4,113,085	100	684.00	152	6,327,885

TOTAL VOLUME EXTRACTED :	6,327,885 GALLONS
DAYS IN MONTH :	29 DAYS
MONTHLY AVERAGE FLOW RATE :	151.53 GPM

9/1/22 - TW-9, TW-5, TW-21 shut down due to power outage - DTE 9/2/22 - TW-9, TW-21 were shut down due to power outage -DTE

9/21/22 TW-21 was shut down for pond level management 9/2/22 - 9/27/22 - TW-5 was shut down due to power outage - DTE

## TABLE #2

## **UNIT D2 DOWNGRADIENT EXTRACTION DATA**

## Month of: Sep-22

							Daily	Daily
Г	LB-1			LB-4			Flow	Total
Date	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Fri-9/2/22	-		-	82,171	100	13.66	57	82,171
Sat-9/3/22	-		-	144,200	100	24.00	100	144,200
Sun-9/4/22	-		-	144,192	100	24.00	100	144,192
Mon-9/5/22	-		-	144,205	100	24.00	100	144,205
Tue-9/6/22	-		-	144,202	100	24.00	100	144,202
Wed-9/7/22	-		-	144,228	100	24.00	100	144,228
Thu-9/8/22	-		-	144,189	100	24.00	100	144,189
Fri-9/9/22	-		-	144,242	100	24.00	100	144,242
Sat-9/10/22	-		-	144,242	100	24.00	100	144,242
Sun-9/11/22	-		-	144,193	100	24.00	100	144,193
Mon-9/12/22	-		-	144,153	100	24.00	100	144,153
Tue-9/13/22	-		-	144,220	100	24.00	100	144,220
Wed-9/14/22	-		-	144,205	100	24.00	100	144,205
Thu-9/15/22	-		-	144,203	100	24.00	100	144,203
Fri-9/16/22	-		-	144,218	100	24.00	100	144,218
Sat-9/17/22	-		-	144,252	100	24.00	100	144,252
Sun-9/18/22	-		-	144,193	100	24.00	100	144,193
Mon-9/19/22	-		-	144,192	100	24.00	100	144,192
Tue-9/20/22	-		-	144,220	100	24.00	100	144,220
Wed-9/21/22	-		-	144,223	100	24.00	100	144,223
Thu-9/22/22	-		-	144,236	100	24.00	100	144,236
Fri-9/23/22	-		-	144,224	100	24.00	100	144,224
Sat-9/24/22	-		-	144,235	100	24.00	100	144,235
Sun-9/25/22	-		-	144,205	100	24.00	100	144,205
Mon-9/26/22	-		-	144,238	100	24.00	100	144,238
Tue-9/27/22	-		-	144,229	100	24.00	100	144,229
Wed-9/28/22	-		-	144,235	100	24.00	100	144,235
Thu-9/29/22	-		-	144,200	100	24.00	100	144,200
Fri-9/30/22	-		-	144,236	100	24.00	100	144,236
	-		-	-		-		, *
	-		-	-		-		
TOTALS	-		-	4,120,181	100	685.66	99	4,120,181

TOTAL VOLUME EXTRACTED :	4,120,181 GALLONS
DAYS IN MONTH :	29 DAYS
MONTHLY AVERAGE FLOW RATE :	98.66 GPM

9/1/22 - LB-4 shut down due to power outage - DTE

9/2/22 - LB-4 was shut down due to power outage - DTE

#### TABLE #3

#### CORE AREA EXTRACTION DATA

Month of: Sep-22

Core Area Well																_									Daily	Daily
	TW-1			TW-2 (Dolph)			TW-3			TW-10			TW-14			TW-20			TW-24			TW-25			Flow	Total
Date	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.	Gallons	GPM	Run Hrs.	GPM	Gallons
Fri-9/2/22	-		-	25,004	35	11.83	-		-	-		-	-		-	24,603	30	13.60	7,772	15	8.67	12,302	15	13.60	40	57,379
Sat-9/3/22	-		-	50,734	35	24.00	-		-	-		-	-		-	43,368	30	24.00	21,395	15	24.00	21,711	15	24.00	80	115,497
Sun-9/4/22	-		-	50,789	35	24.00	-		-	-		-	-		-	43,370	30	24.00	21,333	15	24.00	21,425	15	24.00	80	115,492
Mon-9/5/22	-		-	50,724	35	24.00	-		-	-		-	-		-	43,369	30	24.00	21,320	15	24.00	21,391	15	24.00	80	115,413
Tue-9/6/22	-		-	50,714	35	24.00	-		-	-		-	-		-	43,344	30	24.00	21,271	15	24.00	21,259	15	24.00	80	115,329
Wed-9/7/22	-		-	50,706	35	24.00	-		-	-		-	-		-	43,330	30	24.00	21,256	15	24.00	21,239	15	24.00	80	115,292
Thu-9/8/22	-		-	50,707	35	24.00	-		-	-		-	-		-	43,305	30	24.00	21,292	15	24.00	21,284	15	24.00	80	115,304
Fri-9/9/22	-		-	50,666	35	24.00	-		-	-		-	-		-	43,337	30	24.00	21,253	15	24.00	21,256	15	24.00	80	115,256
Sat-9/10/22	-		-	50,642	35	24.00	-		-	-		-	-		-	43,313	30	24.00	21,205	15	24.00	21,357	15	24.00	80	115,160
Sun-9/11/22	-		-	50,732	35	24.00	-		-	-		-	-		-	43,230	30	24.00	21,264	15	24.00	21,311	15	24.00	80	115,226
Mon-9/12/22	-		-	50,829	35	24.00	-		-	-		-	-		-	43,223	30	24.00	21,297	15	24.00	21,347	15	24.00	80	115,349
Tue-9/13/22	-		-	50,864	35	24.00	-		-	-		-	-		-	43,203	30	24.00	21,216	15	24.00	21,330	15	24.00	80	115,283
Wed-9/14/22	-		-	50,847	35	24.00	-		-	-		-	-		-	43,150	30	24.00	21,066	15	24.00	21,519	15	24.00	80	115,063
Thu-9/15/22	-		-	50,842	35	24.00	-		-	-		-	-		-	43,144	30	24.00	21,033	15	24.00	21,533	15	24.00	80	115,019
Fri-9/16/22	-		-	50,786	35	24.00	-		-	-		-	-		-	43,134	30	24.00	21,079	15	24.00	21,490	15	24.00	80	114,999
Sat-9/17/22	-		-	50,686	35	24.00	-		-	-		-	-		-	43,096	30	24.00	21,100	15	24.00	21,428	15	24.00	80	114,882
Sun-9/18/22	-		-	50,713	35	24.00	-		-	-		-	-		-	43,076	30	24.00	21,129	15	24.00	21,312	15	24.00	80	114,918
Mon-9/19/22	-		-	50,770	35	24.00	-		-	-		-	-		-	43,084	30	24.00	21,116	15	24.00	21,352	15	24.00	80	114,970
Tue-9/20/22	-		-	48,691	35	22.97	-		-	-		-	-		-	43,066	30	24.00	21,046	15	24.00	21,426	15	24.00	78	112,803
Wed-9/21/22	-		-	50,290	35	24.00	-		-	-		-	-		-	43,866	31	23.87	21,158	15	24.00	21,057	15	24.00	80	115,314
Thu-9/22/22	-		-	50,145	35	24.00	-		-	-		-	-		-	43,348	30	24.00	21,019	15	24.00	5,549	4	24.00	80	114,512
Fri-9/23/22	-		-	50,211	35	23.77	-		-	-		-	-		-	43,253	30	24.00	13,257	15	14.93	24,543	17	24.00	74	106,721
Sat-9/24/22	-		-	50,817	35	24.00	-		-	-		-	-		-	43,260	30	24.00	-		-	28,764	20	24.00	65	94,077
Sun-9/25/22	-		-	50,757	35	24.00	-		-	-		-	-		-	43,210	30	24.00	-		-	28,684	20	24.00	65	93,967
Mon-9/26/22	-		-	50,799	35	24.00	-		-	-		-	-		-	43,166	30	24.00	19,634	20	16.47	28,766	20	24.00	79	113,599
Tue-9/27/22	-		-	50,772	35	24.00	-		-	-		-	-		-	43,171	30	24.00	28,446	20	24.00	28,876	20	24.00	85	122,389
Wed-9/28/22	-		-	50,689	35	24.00	-		-	-		-	- 1		-	43,197	30	24.00	28,291	20	24.00	29,071	20	24.00	85	122,177
Thu-9/29/22	-		-	50,679	35	24.00	-		-	-		-	-		-	43,202	30	24.00	28,335	20	24.00	29,015	20	24.00	85	122,216
Fri-9/30/22	-		-	50,602	35	24.00	-		-	-		-	- 1		-	43,170	30	24.00	28,460	20	24.00	28,843	20	24.00	85	122,232
	-		-	-		-	-		-	-		-			-	-		-	-		-	-		-		
	-		-	-		-	-		-	-		-	-		-	-		-	-		-	-		-		-
TOTALS	-		-	1,442,207	35	682.57	-		-	-		-	-		-	1,235,588	30	685.47	578,043	16	616.07	650,440	16	685.60	78	3,255,838
												TOTAL	VOLUME EX			GALLONS										
														N MONTH :		DAYS										
											-		AVEDAGE EL		77.07											

TOTAL VOLUME EXTRACTED :	3,255,838 GALLONS	
DAYS IN MONTH :	29 DAYS	1
MONTHLY AVERAGE FLOW RATE :	77.97 GPM	1

9/1/22 - TW-2 (Dolph), TW-20, TW-24, TW-25 were shut down due to power outage - DTE 9/2/22 - TW-2 (Dolph), TW-20, TW-24, TW-25 were shut down due to power outage- -DTE

# GelmanSciences TABLE #4

MARSHY AREA EXTRACTION DATA

### Month of: Sep-22

Marshy Well E	xtraction			Daily	Daily
	PW-1			Flow	Total
Date	Gallons	GPM	Run Hrs.	GPM	Gallons
Fri-9/2/22	1,380	2	13.60	1	1,380
Sat-9/3/22	2,502	2	24.00	2	2,502
Sun-9/4/22	2,457	2	24.00	2	2,457
Mon-9/5/22	2,441	2	24.00	2	2,441
Tue-9/6/22	2,411	2	24.00	2	2,411
Wed-9/7/22	2,361	2	24.00	2	2,361
Thu-9/8/22	2,315	2	24.00	2	2,315
Fri-9/9/22	2,261	2	24.00	2	2,261
Sat-9/10/22	2,175	2	24.00	2	2,175
Sun-9/11/22	2,213	2	24.00	2	2,213
Mon-9/12/22	2,235	2	24.00	2	2,235
Tue-9/13/22	2,269	2	24.00	2	2,269
Wed-9/14/22	2,243	2	24.00	2	2,243
Thu-9/15/22	2,218	2	24.00	2	2,218
Fri-9/16/22	2,244	2	24.00	2	2,244
Sat-9/17/22	2,248	2	24.00	2	2,248
Sun-9/18/22	2,230	2	24.00	2	2,230
Mon-9/19/22	2,099	1	24.00	1	2,099
Tue-9/20/22	1,816	1	24.00	1	1,816
Wed-9/21/22	1,767	1	24.00	1	1,767
Thu-9/22/22	1,768	1	24.00	1	1,768
Fri-9/23/22	1,708	1	24.00	1	1,708
Sat-9/24/22	1,685	1	24.00	1	1,685
Sun-9/25/22	1,688	1	24.00	1	1,688
Mon-9/26/22	1,710	1	24.00	1	1,710
Tue-9/27/22	1,717	1	24.00	1	1,717
Wed-9/28/22	1,723	1	24.00	1	1,723
Thu-9/29/22	1,715	1	24.00	1	1,715
Fri-9/30/22	1,710	1	24.00	1	1,710
	-		-		-
	-		-		-
TOTALS	59,309	1	685.60	1	59,309
					GALLONS

TOTAL VOLUME EXTRACTED :	59,309 GALLONS
DAYS IN MONTH :	29 DAYS
MONTHLY AVERAGE FLOW RATE :	1.42 GPM

9/1/22 - PW-1 was shut down due to power outage - DTE

9/2/22 - PW-1 was shut down due to power outage - DTE

## TABLE #5

## SOUTHWEST AREA EXTRACTION DATA

Month of: Sep-22

SouthWest Well	Extraction						Daily	Daily
	TW22		l	W28			Flow	Total
Date	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Fri-9/2/22	1,548	2	13.33	20,330	25	13.60	27	21,878
Sat-9/3/22	2,670	2	24.00	35,809	25	24.00	27	38,479
Sun-9/4/22	2,659	2	24.00	35,822	25	24.00	27	38,481
Mon-9/5/22	2,653	2	24.00	35,850	25	24.00	27	38,503
Tue-9/6/22	2,649	2	24.00	35,845	25	24.00	27	38,494
Wed-9/7/22	2,648	2	24.00	35,856	25	24.00	27	38,504
Thu-9/8/22	2,645	2	24.00	35,859	25	24.00	27	38,504
Fri-9/9/22	2,982	2	24.00	35,769	25	24.00	27	38,751
Sat-9/10/22	3,378	2	24.00	35,652	25	24.00	27	39,030
Sun-9/11/22	3,380	2	24.00	35,751	25	24.00	27	39,131
Mon-9/12/22	3,378	2	24.00	35,632	25	24.00	27	39,010
Tue-9/13/22	3,326	2	24.00	36,266	25	24.00	27	39,592
Wed-9/14/22	3,320	2	24.00	36,227	25	24.00	27	39,547
Thu-9/15/22	3,324	2	24.00	36,222	25	24.00	27	39,546
Fri-9/16/22	2,273	2	16.03	34,657	25	23.02	27	36,930
Sat-9/17/22	-	0	-	35,944	25	24.00	25	35,944
Sun-9/18/22	-	0	-	35,911	25	24.00	25	35,911
Mon-9/19/22	1,897	2	16.95	35,872	25	24.00	27	37,769
Tue-9/20/22	2,800	2	23.48	35,859	25	24.00	27	38,659
Wed-9/21/22	2,910	2	24.00	35,743	25	24.00	27	38,653
Thu-9/22/22	2,902	2	24.00	35,713	25	24.00	27	38,615
Fri-9/23/22	2,882	2	24.00	36,082	25	24.00	27	38,964
Sat-9/24/22	2,881	2	24.00	36,240	25	24.00	27	39,121
Sun-9/25/22	2,887	2	24.00	36,220	25	24.00	27	39,107
Mon-9/26/22	2,880	2	24.00	36,208	25	24.00	27	39,088
Tue-9/27/22	2,880	2	24.00	36,157	25	24.00	27	39,037
Wed-9/28/22	2,812	2	24.00	36,179	25	24.00	27	38,991
Thu-9/29/22	2,746	2	24.00	36,245	25	24.00	27	38,991
Fri-9/30/22	2,748	2	24.00	36,253	25	24.00	27	39,001
	-	0	-	-	0	-	0	-
		0	-	-	0	-	0	
TOTALS	76,058	2	621.80	1,026,173	23	684.62	25	1,102,231

TOTAL VOLUME EXTRACTED :	1,102,231 GALLONS
DAYS IN MONTH :	29 DAYS
MONTHLY AVERAGE FLOW RATE :	26.39 GPM

9/1/22 - TW22, TW28 were shut down due to power outage - DTE 9/2/22 - TW22, TW28 were down due to power outage - DTE

9/16/22-9/19/22 - TW22 was shut down due to breaker overload

#### TABLE #6

#### UNIT "E" EXTRACTION DATA

#### Month of: Sep-22

																Daily	Daily
	TW-11			TW-17			TW-18			TW-29			TW-23			Flow	Total
Date	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Fri-9/2/22	-		-	7,324	25	4.83	84,413	103	13.63	40,988	50	13.66	41,120	50	13.66	121	173,845
Sat-9/3/22	-		-	-		-	148,577	103	24.00	71,947	50	24.00	71,927	50	24.00	203	292,451
Sun-9/4/22	-		-	-		-	148,535	103	24.00	71,990	50	24.00	71,968	50	24.00	203	292,493
Mon-9/5/22	-		-	-		-	148,595	103	24.00	72,001	50	24.00	71,981	50	24.00	203	292,577
Tue-9/6/22	-		-	-		-	148,616	103	24.00	71,995	50	24.00	71,921	50	24.00	203	292,532
Wed-9/7/22	-		-	-		-	148,606	103	24.00	71,994	50	24.00	71,948	50	24.00	203	292,548
Thu-9/8/22	-		-	12,551	25	8.28	148,647	103	24.00	71,988	50	24.00	71,979	50	24.00	212	305,165
Fri-9/9/22	-		-	36,275	25	24.00	148,545	103	24.00	71,608	50	23.85	71,585	50	23.83	228	328,013
Sat-9/10/22	-		-	36,201	25	24.00	148,584	103	24.00	71,553	50	23.85	71,732	50	23.85	228	328,070
Sun-9/11/22	-		-	36,336	25	24.00	148,597	103	24.00	71,838	50	24.00	72,240	50	24.00	228	329,011
Mon-9/12/22	-		-	36,213	25	24.00	148,599	103	24.00	71,865	50	24.00	72,159	50	24.00	228	328,836
Tue-9/13/22	-		-	36,020	25	24.00	148,607	103	24.00	71,855	50	24.00	72,045	50	24.00	228	328,527
Wed-9/14/22	-		-	36,016	25	24.00	148,548	103	24.00	71,852	50	24.00	72,003	50	24.00	228	328,419
Thu-9/15/22	-		-	36,292	25	24.00	148,607	103	24.00	71,892	50	24.00	72,341	50	24.00	229	329,132
Fri-9/16/22	-		-	36,319	25	24.00	148,582	103	24.00	71,867	50	24.00	72,187	50	24.00	228	328,955
Sat-9/17/22	-		-	36,375	25	24.00	148,569	103	24.00	71,882	50	24.00	72,271	50	24.00	229	329,097
Sun-9/18/22	-		-	36,299	25	24.00	148,585	103	24.00	71,875	50	24.00	72,041	50	24.00	228	328,800
Mon-9/19/22	-		-	36,321	25	24.00	148,663	103	24.00	71,884	50	24.00	72,031	50	24.00	228	328,899
Tue-9/20/22	-		-	42,220	29	24.00	148,572	103	24.00	71,877	50	24.00	72,013	50	24.00	232	334,682
Wed-9/21/22	-		-	63,223	134	7.88	148,584	104	23.87	66,944	50	22.33	66,788	50	22.33	240	345,539
Thu-9/22/22	-		-	-		-	148,599	103	24.00	71,954	50	24.00	71,905	50	24.00	203	292,458
Fri-9/23/22	-		-	-		-	148,067	103	23.93	71,563	50	23.86	71,739	50	23.86	202	291,369
Sat-9/24/22	-		-	5,758	38	2.53	148,489	103	24.00	71,877	50	24.00	72,387	50	24.00	207	298,511
Sun-9/25/22	-		-	60,510	42	24.00	148,436	103	24.00	71,852	50	24.00	72,419	50	24.00	245	353,217
Mon-9/26/22	-		-	65,032	45	24.00	148,409	103	24.00	71,904	50	24.00	72,341	50	24.00	248	357,686
Tue-9/27/22	-		-	65,130	45	24.00	148,374	103	24.00	71,875	50	24.00	72,300	50	24.00	248	357,679
Wed-9/28/22	-		-	45,079	31	24.00	148,319	103	24.00	46,888	33	23.75	96,254	67	23.88	234	336,540
Thu-9/29/22	-		-	23,465	25	15.58	148,305	103	24.00	35,880	25	23.86	107,561	75	23.86	219	315,211
Fri-9/30/22	-		-	-		-	148,299	103	24.00	36,097	25	24.00	108,299	75	24.00	203	292,695
	-		-	-		-	-		-	-		-	-		-		
	-		-	-		-	-		-	-		-	-		-		
TOTALS	-		-	788,959	34	423.12	4,242,928	103	685.43	1,951,585	48	683.16	2,149,485	52	683.27	219	9,132,957
									OTAL VOLUME			7 GALLONS					

TOTAL VOLUME EXTRACTED :	9,132,957 GALLONS
DAYS IN MONTH :	29 DAYS
MONTHLY AVERAGE FLOW RATE :	218.70 GPM

9/1/22 TW-17, TW-18, TW-29, TW-23 were shut down due to power outage - DTE 9/2/22 - TW-17, TW-18, TW-29, TW-23 were shut down due to power outage - DTE 9/21/22-9/24/22 - TW-17 was shut down for pond level management and internet outage - Comcast 9/21/22 TW-29, TW-23 was shut down for pond level management

# TABLE #7

# Little Lake Area System

MW-53i										
Date	1,4-Dioxane ug/L									
06/03/22	21									
07/05/22	23									
08/02/22	22									
09/02/22	21									

# TABLE #8

# INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE	Date	1,4-DIOXANE
ID	Sampled	(ppb)
DOLPH-09-09-22-11:25-1	09/09/22	120
TW-20-09-09-22-11:50-1	09/09/22	680
TW-24-09-09-22-11:15-1	09/09/22	2000
TW-25-09-09-22-12:20-1	09/09/22	2100
LB-4-09-09-22-10:35-1	09/09/22	430
TW-21-09-09-22-11:00-1	09/09/22	220
TW-5-09-09-22-11:40-1	09/09/22	620
TW-9-09-09-22-11:35-1	09/09/22	400
TW-17-09-09-22-11:30-1	09/09/22	58
TW-18-09-09-22-11:05-1	09/09/22	220
TW-23-09-09-22-10:40-1	09/09/22	360
TW-29-09-09-22-10:45-1	09/09/22	360
PW-1-09-09-22-11:20-1	09/09/22	850
TW-22-09-09-22-12:30-1	09/09/22	430
TW-28-09-09-22-12:10-1	09/09/22	590

## **RED POND DATA**

Month of: Sep-22

			Red Pond				
			Pond	Level	Aeration	Influent	Influent
Date	Time	Notes	Visual Chk	Feet	Hours	Hours	GPM
Fri-9/2/22	21:00:00.000		Y	5.3	-	13.66	560
Sat-9/3/22	21:00:00.000	(1)		4.5	-	24.00	562
Sun-9/4/22	21:00:00.000	(1)		4.2	-	24.00	562
Mon-9/5/22	21:00:00.000		Y	4.0	-	24.00	562
Tue-9/6/22	21:00:00.000		Y	3.7	-	24.00	562
Wed-9/7/22	21:00:00.000		Y	3.5	-	24.00	562
Thu-9/8/22	21:00:00.000		Y	3.5	-	24.00	570
Fri-9/9/22	21:00:00.000		Y	3.6	-	24.00	586
Sat-9/10/22	21:00:00.000	(1)		3.7	-	24.00	586
Sun-9/11/22	21:00:00.000	(1)		3.8	-	24.00	587
Mon-9/12/22	21:00:00.000		Y	3.9	-	24.00	587
Tue-9/13/22	21:00:00.000		Y	4.0	-	24.00	588
Wed-9/14/22	21:00:00.000		Y	4.0	-	24.00	587
Thu-9/15/22	21:00:00.000		Y	4.0	-	24.00	587
Fri-9/16/22	21:00:00.000		Y	4.1	-	24.00	586
Sat-9/17/22	21:00:00.000	(1)		4.1	-	24.00	585
Sun-9/18/22	21:00:00.000	(1)		4.2	-	24.00	585
Mon-9/19/22	21:00:00.000		Y	4.2	-	24.00	587
Tue-9/20/22	21:00:00.000		Y	5.3	-	24.00	590
Wed-9/21/22	21:00:00.000		Y	4.4	-	24.00	592
Thu-9/22/22	21:00:00.000		Y	3.5	-	24.00	561
Fri-9/23/22	21:00:00.000		Y	2.5	-	24.00	555
Sat-9/24/22	21:00:00.000	(1)		2.8	-	24.00	552
Sun-9/25/22	21:00:00.000	(1)		3.5	-	24.00	589
Mon-9/26/22	21:00:00.000		Y	4.2	-	24.00	606
Tue-9/27/22	21:00:00.000		Y	4.6	-	24.00	613
Wed-9/28/22	19:15:00.000		Y	6.8	-	24.00	638
Thu-9/29/22	17:30:00.000		Y	6.6	-	24.00	618
Fri-9/30/22	15:45:00.000		Y	6.4	-	24.00	602
	-		-	-	-	-	-
	-	TOTALS	-	-	-	- 686	-
		IUTALS	-		-	080	

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**

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
Red Pond-09-06-22-08:00-1	9/6/2022	390
Red Pond-09-12-22-08:00-1	9/12/2022	380
Red Pond-09-19-22-07:30-1	9/19/2022	360
Red Pond-09-21-22-09:40-1	9/21/2022	390
Red Pond-09-26-22-07:30-1	9/26/2022	380
Red Pond-09-27-22-08:16-1	9/27/2022	390
Red Pond-09-30-22-07:50-1	9/30/2022	440

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

### TABLE #11

### **OZONE OPERATION REPORT**

#### Month of: Sep-22

			SYSTEM-1A		SYSTEM-1B		SYSTEM-2A		SYSTEM-2B	
			Flow	Run	Flow	Run	Flow	Run	Flow	Run
Date	Time	Notes	GPM	Hours	GPM	Hours	GPM	Hours	GPM	Hours
Fri-9/2/22	21:00:00.000		241	13.85	0	0.00	381	21.83	0	0.00
Sat-9/3/22	21:00:00.000	(1)	241	24.00	0	0.00	380	24.00	0	0.00
Sun-9/4/22	21:00:00.000	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Mon-9/5/22	21:00:00.000		241	24.00	0	0.00	380	24.00	0	0.00
Tue-9/6/22	21:00:00.000		240	23.63	0	0.00	380	23.65	0	0.00
Wed-9/7/22	21:00:00.000		239	24.00	0	0.00	380	24.00	0	0.00
Thu-9/8/22	21:00:00.000		238	24.00	0	0.00	381	24.00	0	0.00
Fri-9/9/22	21:00:00.000		239	24.00	0	0.00	380	24.00	0	0.00
Sat-9/10/22	21:00:00.000	(1)	237	24.00	0	0.00	380	24.00	0	0.00
Sun-9/11/22	21:00:00.000	(1)	238	24.00	0	0.00	381	24.00	0	0.00
Mon-9/12/22	21:00:00.000		238	24.00	0	0.00	381	24.00	0	0.00
Tue-9/13/22	21:00:00.000		239	24.00	0	0.00	380	24.00	0	0.00
Wed-9/14/22	21:00:00.000		243	24.00	0	0.00	381	24.00	0	0.00
Thu-9/15/22	21:00:00.000		238	24.00	0	0.00	381	24.00	0	0.00
Fri-9/16/22	21:00:00.000		239	24.00	0	0.00	380	24.00	0	0.00
Sat-9/17/22	21:00:00.000	(1)	239	24.00	0	0.00	381	24.00	0	0.00
Sun-9/18/22	21:00:00.000	(1)	239	24.00	0	0.00	380	24.00	0	0.00
Mon-9/19/22	21:00:00.000		239	24.00	0	0.00	380	24.00	0	0.00
Tue-9/20/22	21:00:00.000		239	24.00	0	0.00	380	24.00	0	0.00
Wed-9/21/22	21:00:00.000		242	21.37	0	0.00	381	21.35	0	0.00
Thu-9/22/22	21:00:00.000		237	24.00	0	0.00	381	24.00	0	0.00
Fri-9/23/22	21:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Sat-9/24/22	21:00:00.000	(1)	238	24.00	0	0.00	381	24.00	0	0.00
Sun-9/25/22	21:00:00.000	(1)	241	24.00	0	0.00	381	24.00	0	0.00
Mon-9/26/22	21:00:00.000		240	24.00	0	0.00	381	24.00	0	0.00
Tue-9/27/22	21:00:00.000		242	24.00	0	0.00	381	24.00	0	0.00
Wed-9/28/22	19:15:00.000		242	24.00	0	0.00	381	24.00	0	0.00
Thu-9/29/22	17:30:00.000		241	18.22	0	0.00	381	17.50	0	0.00
Fri-9/30/22	15:45:00.000		238	24.00	0	0.00	381	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.

9/1/22 - 1A, 2A were shut down due to power outage - DTE 9/2/22 - 1A, 2A were shut down due to power outage - DTE 9/21/22 1A, 2A were shut down for pond level management 9/29/22 1A, 2A were shut down for pump replacement

#### TABLE #12

### **GREEN POND / DISCHARGE DATA**

Month of:

Sep-22

			Green Pond																
			Pond	Level	Aeration	Influent Ir	nfluent	Ро	Pond Discharge		B	Bypass Discharge		Recirc Thru UV to Pond			Recirc Thru UV to Disch		
Date	Time	Notes	Visual Chk	Feet	Hours		GPM	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours
Fri-9/2/22	21:00:00.000		Y	-	-						595	490,966	13.75	-	-	-	-	-	-
Sat-9/3/22	21:00:00.000	(1)		-	-						644	927,573	24.00	-	-	-	-	-	-
Sun-9/4/22	21:00:00.000	(1)		-	-						644	927,110	24.00	-	-	-	-	-	-
Mon-9/5/22	21:00:00.000		Y	-	-						644	927,109	24.00	-	-	-	-	-	-
Tue-9/6/22	21:00:00.000		Y	-	-						642	910,294	23.62	-	-	-	-	-	-
Wed-9/7/22	21:00:00.000		Y	-	-						644	927,565	24.00	-	-	-	-	-	-
Thu-9/8/22	21:00:00.000		Y	-	-						644	927,504	24.00	-	-	-	-	-	-
Fri-9/9/22	21:00:00.000		Y	-	-						644	927,523	24.00	-	-	-	-	-	-
Sat-9/10/22	21:00:00.000	(1)		-	-						644	927,829	24.00	-	-	-	-	-	-
Sun-9/11/22	21:00:00.000	(1)		-	-						644	927,954	24.00	-	-	-	-	-	-
Mon-9/12/22	21:00:00.000	. ,	Y	-	-						644	927,931	24.00	-	-	-	-	-	-
Tue-9/13/22	21:00:00.000		Y	-	-						644	927,676	24.00	-	-	-	-	-	-
Wed-9/14/22	21:00:00.000		Y	-	-						644	927,621	24.00	-	-	-	-	-	-
Thu-9/15/22	21:00:00.000		Y	-	-						644	927,583	24.00	-	-	-	-	-	-
Fri-9/16/22	21:00:00.000		Y	-	-						644	927,665	24.00	-	-	-	-	-	-
Sat-9/17/22	21:00:00.000	(1)		-	-						644	927,915	24.00	-	-	-	-	-	-
Sun-9/18/22	21:00:00.000	(1)		-	-						644	927,907	24.00	-	-	-	-	-	-
Mon-9/19/22	21:00:00.000		Y	-	-						644	928,077	24.00	-	-	-	-	-	-
Tue-9/20/22	21:00:00.000		Y	-	-						644	927,803	24.00	-	-	-	-	-	-
Wed-9/21/22	21:00:00.000		Y	-	-						643	821,131	21.30	-	-	-	-	-	-
Thu-9/22/22	21:00:00.000		Y	-	-						644	927,677	24.00	-	-	-	-	-	-
Fri-9/23/22	21:00:00.000		Y	-	-						644	927,353	24.00	-	-	-	-	-	-
Sat-9/24/22	21:00:00.000	(1)		-	-						644	927,591	24.00	-	-	-	-	-	-
Sun-9/25/22	21:00:00.000	(1)		-	-						644	927,782	24.00	-	-	-	-	-	-
Mon-9/26/22	21:00:00.000	• •	Y	-	-						644	927,516	24.00	-	-	-	-	-	-
Tue-9/27/22	21:00:00.000		Y	-	-						644	927,256	24.00	-	-	-	-	-	-
Wed-9/28/22	19:15:00.000		Y	-	-						644	926,845	24.00	-	-	-	-	-	-
Thu-9/29/22	17:30:00.000		Y	-	-						621	676,260	18.15	-	-	-	-	-	-
Fri-9/30/22	15:45:00.000		Y	-	-						644	928,068	24.00	-	-	-	-	-	-
	-		Y	-	-								-	-	-	-	-	-	-
	-		Y	-	-							-	-	-	-	-	-	-	-
		TOTALS	•		-	-			-	-		26,089,084	677			-	·	-	

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 MONITORING	50050	1007	1007	82388	82388	00139	00139	84130	46478	00400	00400	99814	99798
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
9/1/2022	0	*G	*G					no	no			, in the second s	
9/2/2022	0.491			5.4		<50	<0.16	no	no	6.8	6.8	7.4	
9/3/2022	0.928												
9/4/2022	0.927			4.6								7.0	
9/5/2022	0.927			5.5		<50	<0.16	yes	yes			12	
9/6/2022	0.910			4.4	0.390	<50	<0.16	no	no	6.8	6.8	12	50
9/7/2022	0.928			4.5		<50	<0.16	no	yes	6.8	6.8	9.8	
9/8/2022	0.928			4.7		<50	<0.16	no	no	6.9	6.9	10	50
9/9/2022	0.928					<50	<0.16	no	no	6.9	6.9		
9/10/2022	0.928												
9/11/2022	0.928			5.0								10	
9/12/2022	0.928			5.0	0.380	<50	<0.16	yes	yes	6.9	6.9	9.5	30
9/13/2022	0.928			4.9		<50	<0.16	no	no	7.0	7.0	7.8	
9/14/2022	0.928			5.2		<50	<0.16	no	yes	6.9	6.9	9.5	30
9/15/2022	0.928			5.4		<50	<0.16	no	no	6.9	6.9	8.4	
9/16/2022	0.928					<50	<0.16	no	no	6.7	6.7		
9/17/2022	0.928												
9/18/2022	0.928			5.6								8.4	
9/19/2022	0.928			5.5	0.360	<50	<0.16	yes	yes	6.9	6.9	9.7	50
9/20/2022	0.928			5.6		<50	<0.16	no	no	6.9	6.9	10	
9/21/2022	0.821			5.5	0.390	<50	<0.16	no	yes	6.9	6.9	10	44
9/22/2022	0.928			5.6		<50	<0.16	no	no	6.8	6.8	8.6	
9/23/2022	0.927					<50	<0.16	no	no	6.9	6.9		
9/24/2022	0.928	1											
9/25/2022	0.928			5.4								11	
9/26/2022	0.928	1		4.9	0.380	<50	<0.16	yes	yes	6.9	6.9	12	30
9/27/2022	0.927			6.3	0.390	<50	<0.16	no	no	6.9	6.9	8.5	
9/28/2022	0.927			6.9		<50	<0.16	no	yes	6.9	6.9	8.5	32
9/29/2022	0.676			7.2		<50	<0.16	no	no	7.0	7.0	10	
9/30/2022	0.928	1			0.440	<50	<0.16	no	no	6.9	6.9		
		1											
Discharged	26.089												
Monthly Avg	0.900			5.4				İ				9.5	