

November 13, 2018

Tiffany Myers, District Supervisor
Surface Water Quality Division
Michigan Department of Environmental Quality
301 East Louis Glick Highway
Jackson, Michigan 49201

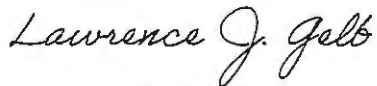
**Re: Monitoring Report # 258
October 1 – October 31, 2018**

Dear Ms. Myers:

Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit No. MI0048453, please find the enclosed Monitoring Report for the period of October 1 through October 31, 2018.

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.
Matthew Naud, City of Ann Arbor

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UNIT D2 UPGRADIENT EXTRACTION DATA

Month of: **Oct-18**

Date	TW-9			TW-21			Daily Flow	Daily Total
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
	Mon-10/1/18	-	-	-	93,681	65	24.00	65
Tue-10/2/18	-	-	-	93,783	65	24.00	65	93,783
Wed-10/3/18	-	-	-	93,826	65	24.00	65	93,826
Thu-10/4/18	-	-	-	93,756	65	24.00	65	93,756
Fri-10/5/18	-	-	-	93,690	65	24.00	65	93,690
Sat-10/6/18	-	-	-	67,768	65	17.35	47	67,768
Sun-10/7/18	-	-	-	93,733	65	24.00	65	93,733
Mon-10/8/18	-	-	-	93,820	65	24.00	65	93,820
Tue-10/9/18	-	-	-	93,851	65	24.00	65	93,851
Wed-10/10/18	-	-	-	93,826	65	24.00	65	93,826
Thu-10/11/18	-	-	-	93,761	65	24.00	65	93,761
Fri-10/12/18	-	-	-	93,646	65	24.00	65	93,646
Sat-10/13/18	-	-	-	93,645	65	24.00	65	93,645
Sun-10/14/18	-	-	-	93,666	65	24.00	65	93,666
Mon-10/15/18	-	-	-	93,646	65	24.00	65	93,646
Tue-10/16/18	-	-	-	93,641	65	24.00	65	93,641
Wed-10/17/18	-	-	-	93,630	65	24.00	65	93,630
Thu-10/18/18	-	-	-	93,604	65	24.00	65	93,604
Fri-10/19/18	-	-	-	93,643	65	24.00	65	93,643
Sat-10/20/18	-	-	-	93,617	65	24.00	65	93,617
Sun-10/21/18	-	-	-	93,624	65	24.00	65	93,624
Mon-10/22/18	-	-	-	93,668	65	24.00	65	93,668
Tue-10/23/18	-	-	-	76,532	53	24.00	53	76,532
Wed-10/24/18	-	-	-	71,984	50	24.00	50	71,984
Thu-10/25/18	-	-	-	72,019	50	24.00	50	72,019
Fri-10/26/18	-	-	-	89,057	62	24.00	62	89,057
Sat-10/27/18	-	-	-	93,657	65	24.00	65	93,657
Sun-10/28/18	-	-	-	93,665	65	24.00	65	93,665
Mon-10/29/18	-	-	-	93,645	65	24.00	65	93,645
Tue-10/30/18	3,684	42	1.47	93,636	65	24.00	68	97,320
Wed-10/31/18	-	-	-	62,447	65	16.03	43	62,447
TOTALS	3,684	42	1.47	2,782,167	64	729.38	62	2,785,851

TOTAL VOLUME EXTRACTED : 2,785,851 GALLONS
DAYS IN MONTH : 31 DAYS
MONTHLY AVERAGE FLOW RATE : 62.41 GPM

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.

UNIT D2 DOWNGRADIENT EXTRACTION DATA

Month of: Oct-18

Date	LB-4			Daily	Daily
	Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Mon-10/1/18	144,212	100	24.00	100	144,212
Tue-10/2/18	144,135	100	24.00	100	144,135
Wed-10/3/18	144,163	100	24.00	100	144,163
Thu-10/4/18	144,210	100	24.00	100	144,210
Fri-10/5/18	144,254	100	24.00	100	144,254
Sat-10/6/18	107,507	100	17.90	75	107,507
Sun-10/7/18	144,259	100	24.00	100	144,259
Mon-10/8/18	144,176	100	24.00	100	144,176
Tue-10/9/18	144,195	100	24.00	100	144,195
Wed-10/10/18	144,246	100	24.00	100	144,246
Thu-10/11/18	144,202	100	24.00	100	144,202
Fri-10/12/18	144,217	100	24.00	100	144,217
Sat-10/13/18	144,238	100	24.00	100	144,238
Sun-10/14/18	144,260	100	24.00	100	144,260
Mon-10/15/18	144,162	100	24.00	100	144,162
Tue-10/16/18	144,213	100	24.00	100	144,213
Wed-10/17/18	144,157	100	24.00	100	144,157
Thu-10/18/18	144,236	100	24.00	100	144,236
Fri-10/19/18	144,240	100	24.00	100	144,240
Sat-10/20/18	144,147	100	24.00	100	144,147
Sun-10/21/18	144,187	100	24.00	100	144,187
Mon-10/22/18	144,160	100	24.00	100	144,160
Tue-10/23/18	144,211	100	24.00	100	144,211
Wed-10/24/18	144,201	100	24.00	100	144,201
Thu-10/25/18	144,189	100	24.00	100	144,189
Fri-10/26/18	144,158	100	24.00	100	144,158
Sat-10/27/18	144,222	100	24.00	100	144,222
Sun-10/28/18	144,204	100	24.00	100	144,204
Mon-10/29/18	144,195	100	24.00	100	144,195
Tue-10/30/18	144,201	100	24.00	100	144,201
Wed-10/31/18	140,973	100	23.46	98	140,973
TOTALS	4,430,330	100	737.36	99	4,430,330

TOTAL VOLUME EXTRACTED :	4,430,330 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	99.25 GPM

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.

TABLE #3

CORE AREA EXTRACTION DATA

Month of: **Oct-18**

Core Area Well Extraction												Daily	Daily	
Date	TW-1			TW-2 (Dolph)			TW-14			TW-20			Flow	Total
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-10/1/18	-	-	-	16,566	12	24.00	-	-	-	43,249	30	24.00	42	59,815
Tue-10/2/18	-	-	-	16,207	11	24.00	-	-	-	43,153	30	24.00	41	59,360
Wed-10/3/18	-	-	-	15,776	11	24.00	-	-	-	43,286	30	24.00	41	59,062
Thu-10/4/18	-	-	-	15,724	11	24.00	-	-	-	43,216	30	24.00	41	58,940
Fri-10/5/18	-	-	-	15,743	11	24.00	-	-	-	43,447	30	24.00	41	59,190
Sat-10/6/18	-	-	-	11,741	11	17.32	-	-	-	30,120	30	16.67	29	41,861
Sun-10/7/18	-	-	-	16,479	11	24.00	-	-	-	43,354	30	24.00	42	59,833
Mon-10/8/18	-	-	-	16,547	11	24.00	-	-	-	43,588	30	24.00	42	60,135
Tue-10/9/18	-	-	-	16,543	11	24.00	-	-	-	43,467	30	24.00	42	60,010
Wed-10/10/18	-	-	-	16,537	11	24.00	-	-	-	43,406	30	24.00	42	59,943
Thu-10/11/18	-	-	-	16,540	11	24.00	-	-	-	43,389	30	24.00	42	59,929
Fri-10/12/18	-	-	-	16,604	12	24.00	-	-	-	43,235	30	24.00	42	59,839
Sat-10/13/18	-	-	-	15,960	11	24.00	-	-	-	43,235	30	24.00	41	59,195
Sun-10/14/18	-	-	-	15,989	11	24.00	-	-	-	43,523	30	24.00	41	59,512
Mon-10/15/18	-	-	-	16,019	11	24.00	-	-	-	43,408	30	24.00	41	59,427
Tue-10/16/18	-	-	-	16,072	11	24.00	-	-	-	43,226	30	24.00	41	59,298
Wed-10/17/18	-	-	-	16,134	11	24.00	-	-	-	42,855	30	24.00	41	58,989
Thu-10/18/18	-	-	-	16,199	11	24.00	-	-	-	43,298	30	24.00	41	59,497
Fri-10/19/18	-	-	-	16,283	11	24.00	-	-	-	43,602	30	24.00	42	59,885
Sat-10/20/18	-	-	-	16,256	11	24.00	-	-	-	43,396	30	24.00	41	59,652
Sun-10/21/18	-	-	-	16,229	11	24.00	-	-	-	43,018	30	24.00	41	59,247
Mon-10/22/18	-	-	-	16,285	11	24.00	-	-	-	42,266	29	24.00	41	58,551
Tue-10/23/18	-	-	-	16,317	11	24.00	-	-	-	43,345	30	24.00	41	59,662
Wed-10/24/18	-	-	-	16,349	11	24.00	-	-	-	43,077	30	24.00	41	59,426
Thu-10/25/18	-	-	-	16,373	11	24.00	-	-	-	43,212	30	24.00	41	59,585
Fri-10/26/18	-	-	-	16,410	11	24.00	-	-	-	43,210	30	24.00	41	59,620
Sat-10/27/18	-	-	-	16,439	11	24.00	-	-	-	43,004	30	24.00	41	59,443
Sun-10/28/18	-	-	-	16,455	11	24.00	-	-	-	43,272	30	24.00	41	59,727
Mon-10/29/18	-	-	-	16,464	11	24.00	-	-	-	41,383	32	21.80	40	57,847
Tue-10/30/18	4,108	121	0.57	16,488	11	24.00	7,225	82	1.47	39,655	34	19.22	47	67,476
Wed-10/31/18	381	191	0.03	16,814	12	24.00	6,748	82	1.37	25,146	27	15.62	34	49,089
TOTALS	4,489	156	0.60	500,542	11	737.32	13,973	82	2.83	1,304,041	30	721.30	41	1,823,045

TOTAL VOLUME EXTRACTED :	1,823,045 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	40.84 GPM

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.
 10/29/18 - 10/31/18 - TW-20 was shut down due to flow fluctuations.

MARSHY AREA EXTRACTION DATA

Month of: **Oct-18**

Marshy Well Extraction				Daily Flow	Daily Total
Date	PW-1 Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-10/1/18	2,016	1	24.00	1	2,016
Tue-10/2/18	2,047	1	24.00	1	2,047
Wed-10/3/18	670	1	7.98	0	670
Thu-10/4/18	1,419	1	16.30	1	1,419
Fri-10/5/18	2,128	1	24.00	1	2,128
Sat-10/6/18	1,495	1	17.03	1	1,495
Sun-10/7/18	2,133	1	24.00	1	2,133
Mon-10/8/18	2,239	2	24.00	2	2,239
Tue-10/9/18	2,279	2	24.00	2	2,279
Wed-10/10/18	2,291	2	24.00	2	2,291
Thu-10/11/18	2,313	2	24.00	2	2,313
Fri-10/12/18	2,335	2	24.00	2	2,335
Sat-10/13/18	2,314	2	24.00	2	2,314
Sun-10/14/18	2,293	2	24.00	2	2,293
Mon-10/15/18	2,288	2	24.00	2	2,288
Tue-10/16/18	2,289	2	24.00	2	2,289
Wed-10/17/18	1,891	2	18.18	1	1,891
Thu-10/18/18	2,613	3	17.37	2	2,613
Fri-10/19/18	1,595	3	9.17	1	1,595
Sat-10/20/18	-	-	-	-	-
Sun-10/21/18	-	-	-	-	-
Mon-10/22/18	1,936	2	15.93	1	1,936
Tue-10/23/18	3,085	2	24.00	2	3,085
Wed-10/24/18	3,099	2	24.00	2	3,099
Thu-10/25/18	3,178	2	22.68	2	3,178
Fri-10/26/18	3,161	2	22.68	2	3,161
Sat-10/27/18	2,780	2	23.67	2	2,780
Sun-10/28/18	2,800	2	24.00	2	2,800
Mon-10/29/18	2,798	2	24.00	2	2,798
Tue-10/30/18	2,838	2	24.00	2	2,838
Wed-10/31/18	2,880	2	24.00	2	2,880
TOTALS	67,203	2	627.00	2	67,203

TOTAL VOLUME EXTRACTED :	67,203 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	1.51 GPM

PW-1 was shut down intermittently due to flow fluctuations.

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.

10/18/18 - PW-1 was shut down for maintenance

SOUTHWEST AREA EXTRACTION DATA

Month of: Oct-18

SouthWest Well Extraction				Daily	Daily
Date	ACTIVE WELLS			Flow	Total
	Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-10/1/18	16,411	11	24.00	11	16,411
Tue-10/2/18	16,394	11	24.00	11	16,394
Wed-10/3/18	16,354	11	24.00	11	16,354
Thu-10/4/18	16,355	11	24.00	11	16,355
Fri-10/5/18	16,363	11	24.00	11	16,363
Sat-10/6/18	11,460	12	16.58	8	11,460
Sun-10/7/18	16,563	12	24.00	12	16,563
Mon-10/8/18	16,537	11	24.00	11	16,537
Tue-10/9/18	16,545	11	24.00	11	16,545
Wed-10/10/18	16,566	12	24.00	12	16,566
Thu-10/11/18	16,569	12	24.00	12	16,569
Fri-10/12/18	16,585	12	24.00	12	16,585
Sat-10/13/18	16,590	12	24.00	12	16,590
Sun-10/14/18	16,597	12	24.00	12	16,597
Mon-10/15/18	16,609	12	24.00	12	16,609
Tue-10/16/18	16,622	12	24.00	12	16,622
Wed-10/17/18	16,612	12	24.00	12	16,612
Thu-10/18/18	16,576	12	24.00	12	16,576
Fri-10/19/18	16,595	12	24.00	12	16,595
Sat-10/20/18	16,612	12	24.00	12	16,612
Sun-10/21/18	16,598	12	24.00	12	16,598
Mon-10/22/18	16,599	12	24.00	12	16,599
Tue-10/23/18	16,587	12	24.00	12	16,587
Wed-10/24/18	16,575	12	24.00	12	16,575
Thu-10/25/18	16,553	11	24.00	11	16,553
Fri-10/26/18	16,538	11	24.00	11	16,538
Sat-10/27/18	16,553	11	24.00	11	16,553
Sun-10/28/18	16,548	11	24.00	11	16,548
Mon-10/29/18	16,521	11	24.00	11	16,521
Tue-10/30/18	16,468	11	24.00	11	16,468
Wed-10/31/18	16,419	11	24.00	11	16,419
TOTALS	507,474	11	736.58	11	507,474

TOTAL VOLUME EXTRACTED :	507,474 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	11.37 GPM

Note: ACTIVE WELLS = TW-8, TW-22

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.

TABLE #6

UNIT "E" EXTRACTION DATA

Month of: **Oct-18**

Date	TW-17			TW-18			TW-19			TW-23			Dnily Flow GPM	Dnily Total Gallons
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.		
Mon-10/1/18	-	-	-	240,999	167	24.00	45,301	31	24.00	99,180	69	24.00	268	385,480
Tue-10/2/18	-	-	-	240,910	167	23.98	45,312	31	24.00	99,344	69	24.00	268	385,566
Wed-10/3/18	-	-	-	241,095	167	24.00	43,955	31	23.70	97,551	69	23.60	266	382,601
Thu-10/4/18	-	-	-	241,062	167	24.00	44,031	31	24.00	99,366	69	24.00	267	384,459
Fri-10/5/18	-	-	-	241,058	167	24.00	44,040	31	24.00	99,263	69	24.00	267	384,361
Sat-10/6/18	-	-	-	174,171	167	17.37	33,131	31	17.90	74,103	69	17.90	195	281,405
Sun-10/7/18	-	-	-	241,025	167	24.00	44,635	31	24.00	99,292	69	24.00	267	384,952
Mon-10/8/18	-	-	-	241,055	167	24.00	44,643	31	24.00	99,330	69	24.00	267	385,028
Tue-10/9/18	-	-	-	241,094	167	24.00	44,606	31	24.00	99,332	69	24.00	267	385,032
Wed-10/10/18	-	-	-	241,084	167	24.00	44,599	31	24.00	99,397	69	24.00	267	385,080
Thu-10/11/18	-	-	-	240,995	167	24.00	44,595	31	24.00	99,356	69	24.00	267	384,946
Fri-10/12/18	-	-	-	240,945	167	24.00	44,606	31	24.00	99,295	69	24.00	267	384,846
Sat-10/13/18	-	-	-	240,955	167	24.00	44,614	31	24.00	99,207	69	24.00	267	384,776
Sun-10/14/18	-	-	-	241,021	167	24.00	44,612	31	24.00	99,200	69	24.00	267	384,833
Mon-10/15/18	-	-	-	240,934	167	24.00	44,602	31	24.00	99,210	69	24.00	267	384,746
Tue-10/16/18	-	-	-	240,937	167	24.00	44,631	31	24.00	99,320	69	24.00	267	384,888
Wed-10/17/18	-	-	-	240,894	167	24.00	44,646	31	24.00	99,352	69	24.00	267	384,892
Thu-10/18/18	-	-	-	240,912	167	24.00	44,644	31	24.00	99,317	69	24.00	267	384,873
Fri-10/19/18	-	-	-	240,951	167	24.00	44,684	31	24.00	99,368	69	24.00	267	385,003
Sat-10/20/18	-	-	-	239,787	167	24.00	44,674	31	24.00	99,336	69	24.00	267	383,797
Sun-10/21/18	-	-	-	233,615	162	24.00	44,649	31	24.00	99,308	69	24.00	262	377,572
Mon-10/22/18	-	-	-	227,605	158	24.00	44,645	31	24.00	99,288	69	24.00	258	371,538
Tue-10/23/18	-	-	-	219,048	152	24.00	44,645	31	24.00	99,279	69	24.00	252	362,972
Wed-10/24/18	-	-	-	219,063	152	24.00	44,644	31	24.00	99,377	69	24.00	252	363,084
Thu-10/25/18	-	-	-	219,033	152	24.00	44,703	31	24.00	99,283	69	24.00	252	363,019
Fri-10/26/18	-	-	-	236,281	164	24.00	44,711	31	24.00	99,303	69	24.00	264	380,295
Sat-10/27/18	-	-	-	240,924	167	24.00	44,723	31	24.00	99,451	69	24.00	267	385,098
Sun-10/28/18	-	-	-	240,929	167	24.00	44,733	31	24.00	99,346	69	24.00	267	385,008
Mon-10/29/18	-	-	-	240,924	167	24.00	44,703	31	24.00	99,569	69	24.00	267	385,196
Tue-10/30/18	6,451	75	1.43	240,922	167	24.00	44,705	31	24.00	99,567	69	24.00	272	391,645
Wed-10/31/18	-	-	-	160,637	167	16.00	43,569	31	23.20	96,174	69	23.20	209	300,380
TOTALS	6,451	75	1.43	7,230,865	165	729.35	1,370,991	31	736.80	3,049,064	69	736.70	261	11,657,371

TOTAL VOLUME EXTRACTED :	11,657,371 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	261.14 GPM

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.
 10/31/18 - TW-18 was shut down for maintenance.

TABLE #7

Little Lake Area System

MW-53i	
Date	1,4-Dioxane ug/L
07/03/18	46
08/07/18	61
09/05/18	78
10/02/18	46

A2 Cleaning Supply	
Date	1,4-Dioxane ug/L
07/03/18	75
08/07/18	84
09/07/18	84
10/02/18	83



TABLE #8

INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
DOLPH-10-03-18-09:00-1	10/03/18	130
TW-1-10-30-18-14:24-1	10/30/18	58
TW-14-10-31-18-13:40-1	10/31/18	33
TW-20-10-03-18-08:50-1	10/03/18	980
LB-4-10-03-18-09:36-1	10/03/18	480
TW-21-10-03-18-09:12-1	10/03/18	220
TW-9-10-30-18-09:23-1	10/30/18	630
TW-17-10-30-18-09:14-1	10/30/18	370
TW-18-10-03-18-09:02-1	10/03/18	260
TW-19-10-03-18-09:33-1	10/03/18	530
TW-23-10-03-18-09:48-1	10/03/18	690
PW-1-10-03-18-09:05-1	10/03/18	1000
TW-22-10-03-18-08:37-1	10/03/18	660
TW-8-10-03-18-08:34-1	10/03/18	740

RED POND DATA

Month of: Oct-18

			Red Pond				
Date	Time	Notes	Pond	Level	Aeration	Influent	Influent
			Visual Chk	Feet	Hours	Hours	GPM
Mon-10/1/18	3:05:00		Y	4.7	-	24.00	487
Tue-10/2/18	3:00		Y	4.7	-	24.00	487
Wed-10/3/18	3:00		Y	4.7	-	24.00	484
Thu-10/4/18	3:05		Y	4.6	-	24.00	486
Fri-10/5/18	3:00		Y	4.6	-	24.00	486
Sat-10/6/18	3:00	(1)		4.6	-	17.90	476
Sun-10/7/18	3:00:00	(1)		4.9	-	24.00	487
Mon-10/8/18	3:00		Y	4.9	-	24.00	487
Tue-10/9/18	3:00		Y	4.9	-	24.00	487
Wed-10/10/18	3:00		Y	4.9	-	24.00	487
Thu-10/11/18	3:00		Y	4.9	-	24.00	487
Fri-10/12/18	3:00		Y	4.9	-	24.00	487
Sat-10/13/18	3:00	(1)		4.9	-	24.00	487
Sun-10/14/18	3:00	(1)		5.7	-	24.00	487
Mon-10/15/18	3:00		Y	5.6	-	24.00	487
Tue-10/16/18	3:00		Y	5.6	-	24.00	487
Wed-10/17/18	3:00		Y	5.6	-	24.00	486
Thu-10/18/18	3:00		Y	5.5	-	24.00	487
Fri-10/19/18	3:00		Y	5.7	-	24.00	487
Sat-10/20/18	3:00	(1)		6.0	-	24.00	485
Sun-10/21/18	3:00	(1)		6.0	-	24.00	480
Mon-10/22/18	3:00		Y	5.9	-	24.00	477
Tue-10/23/18	3:00		Y	6.1	-	24.00	460
Wed-10/24/18	3:00		Y	6.0	-	24.00	457
Thu-10/25/18	3:00		Y	5.8	-	24.00	457
Fri-10/26/18	3:00		Y	5.5	-	24.00	481
Sat-10/27/18	3:00	(1)		5.4	-	24.00	487
Sun-10/28/18	3:00	(1)		5.4	-	24.00	487
Mon-10/29/18	3:00		Y	5.4	-	24.00	486
Tue-10/30/18	3:00		Y	5.3	-	24.00	500
Wed-10/31/18	3:00		Y	5.5	-	24.00	397
TOTALS			-	-	-	738	

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

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
Red Pond-10-01-18-07:55-1	10/1/2018	390
Red Pond-10-08-18-08:30-1	10/8/2018	420
Red Pond-10-15-18-08:50-1	10/15/2018	440
Red Pond-10-22-18-09:30-1	10/22/2018	380
Red Pond-10-29-18-08:45-1	10/29/2018	420

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

OZONE OPERATION REPORT

Month of: **Oct-18**

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
Mon-10/1/18	3:07:00		240	24.00	0	0.00	241	24.00	0	0.00
Tue-10/2/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Wed-10/3/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Thu-10/4/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Fri-10/5/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-10/6/18	3:00 AM	(1)	240	16.80	0	0.00	240	16.80	0	0.00
Sun-10/7/18	3:00:00	(1)	240	23.93	0	0.00	240	24.00	0	0.00
Mon-10/8/18	3:00 AM		241	24.00	0	0.00	240	24.00	0	0.00
Tue-10/9/18	3:00 AM		240	24.00	0	0.00	239	24.00	0	0.00
Wed-10/10/18	3:00 AM		240	24.00	0	0.00	239	24.00	0	0.00
Thu-10/11/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Fri-10/12/18	3:00 AM		240	24.00	0	0.00	241	23.93	0	0.00
Sat-10/13/18	3:00 AM	(1)	240	23.42	0	0.00	240	19.45	0	0.00
Sun-10/14/18	3:00 AM	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Mon-10/15/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Tue-10/16/18	3:00 AM		239	24.00	0	0.00	240	24.00	0	0.00
Wed-10/17/18	3:00 AM		240	24.00	0	0.00	241	24.00	0	0.00
Thu-10/18/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Fri-10/19/18	3:00 AM		240	24.00	0	0.00	241	24.00	0	0.00
Sat-10/20/18	3:00 AM	(1)	240	23.93	0	0.00	240	23.90	0	0.00
Sun-10/21/18	3:00 AM	(1)	239	24.00	0	0.00	240	24.00	0	0.00
Mon-10/22/18	3:00 AM		239	23.90	0	0.00	240	23.90	0	0.00
Tue-10/23/18	3:00 AM		239	23.85	0	0.00	240	23.92	0	0.00
Wed-10/24/18	3:00 AM		240	24.00	0	0.00	241	24.00	0	0.00
Thu-10/25/18	3:00 AM		239	24.00	0	0.00	240	24.00	0	0.00
Fri-10/26/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-10/27/18	3:00 AM	(1)	241	24.00	0	0.00	241	24.00	0	0.00
Sun-10/28/18	3:00 AM	(1)	240	24.00	0	0.00	242	24.00	0	0.00
Mon-10/29/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Tue-10/30/18	3:00 AM		240	24.00	0	0.00	241	24.00	0	0.00
Wed-10/31/18	3:00 AM		241	22.23	0	0.00	240	12.45	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.

10/06/18 - Treatment and extraction were shut down due to a DTE Energy power loss in the area.

10/13/18 - System 2B was shut down briefly for maintenance.

10/31/18 - Treatment was shut down for maintenance.

TABLE #12

GREEN POND / DISCHARGE DATA

Month of: Oct-18

Date	Time	Notes	Green Pond														
			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	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours	
Mon-10/1/18	3:05:00		Y	-	-	-	-	-	497	716,292	24.00	-	-	-	-	-	-
Tue-10/2/18	3:00 AM		Y	-	-	-	-	-	498	716,486	24.00	-	-	-	-	-	-
Wed-10/3/18	3:00 AM		Y	-	-	-	-	-	498	716,742	24.00	-	-	-	-	-	-
Thu-10/4/18	3:05 AM		Y	-	-	-	-	-	498	716,779	24.00	-	-	-	-	-	-
Fri-10/5/18	3:00 AM		Y	-	-	-	-	-	497	716,215	24.00	-	-	-	-	-	-
Sat-10/6/18	3:00 AM	(1)		-	-	-	-	-	497	498,775	16.72	-	-	-	-	-	-
Sun-10/7/18	3:00:00	(1)		-	-	-	-	-	495	713,479	24.00	-	-	-	-	-	-
Mon-10/8/18	3:00 AM		Y	-	-	-	-	-	498	716,441	24.00	-	-	-	-	-	-
Tue-10/9/18	3:00 AM		Y	-	-	-	-	-	498	716,852	24.00	-	-	-	-	-	-
Wed-10/10/18	3:00 AM		Y	-	-	-	-	-	498	716,748	24.00	-	-	-	-	-	-
Thu-10/11/18	3:00 AM		Y	-	-	-	-	-	498	716,423	24.00	-	-	-	-	-	-
Fri-10/12/18	3:00 AM		Y	-	-	-	-	-	496	713,871	24.00	-	-	-	-	-	-
Sat-10/13/18	3:00 AM	(1)		-	-	-	-	-	459	631,653	22.95	-	-	-	-	-	-
Sun-10/14/18	3:00 AM	(1)		-	-	-	-	-	498	716,463	24.00	-	-	-	-	-	-
Mon-10/15/18	3:00 AM		Y	-	-	-	-	-	498	716,482	24.00	-	-	-	-	-	-
Tue-10/16/18	3:00 AM		Y	-	-	-	-	-	497	716,238	24.00	-	-	-	-	-	-
Wed-10/17/18	3:00 AM		Y	-	-	-	-	-	497	716,220	24.00	-	-	-	-	-	-
Thu-10/18/18	3:00 AM		Y	-	-	-	-	-	497	716,194	24.00	-	-	-	-	-	-
Fri-10/19/18	3:00 AM		Y	-	-	-	-	-	498	716,525	24.00	-	-	-	-	-	-
Sat-10/20/18	3:00 AM	(1)		-	-	-	-	-	494	711,409	24.00	-	-	-	-	-	-
Sun-10/21/18	3:00 AM	(1)		-	-	-	-	-	497	715,802	24.00	-	-	-	-	-	-
Mon-10/22/18	3:00 AM		Y	-	-	-	-	-	493	710,563	24.00	-	-	-	-	-	-
Tue-10/23/18	3:00 AM		Y	-	-	-	-	-	494	711,262	24.00	-	-	-	-	-	-
Wed-10/24/18	3:00 AM		Y	-	-	-	-	-	497	716,279	24.00	-	-	-	-	-	-
Thu-10/25/18	3:00 AM		Y	-	-	-	-	-	497	716,388	24.00	-	-	-	-	-	-
Fri-10/26/18	3:00 AM		Y	-	-	-	-	-	498	716,576	24.00	-	-	-	-	-	-
Sat-10/27/18	3:00 AM	(1)		-	-	-	-	-	498	716,446	24.00	-	-	-	-	-	-
Sun-10/28/18	3:00 AM	(1)		-	-	-	-	-	498	716,512	24.00	-	-	-	-	-	-
Mon-10/29/18	3:00 AM		Y	-	-	-	-	-	498	716,437	24.00	-	-	-	-	-	-
Tue-10/30/18	3:00 AM		Y	-	-	-	-	-	498	716,413	24.00	-	-	-	-	-	-
Wed-10/31/18	3:00 AM		Y	-	-	-	-	-	384	499,034	21.65	-	-	-	-	-	-
TOTALS																	
										21,667,999	733						

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
10/1/2018	0.716			5	0.390	<50	<0.16	Yes	Yes	7.1	7.1	8	50
10/2/2018	0.716			4.9		<50	<0.16	No	No	6.8	6.8	6.8	
10/3/2018	0.717			5		<50	<0.16	No	Yes	6.7	6.7	7.2	
10/4/2018	0.717			5.2		<50	<0.16	No	No	6.7	6.7	7.2	50
10/5/2018	0.716					<50	<0.16	No	No	6.7	6.7		
10/6/2018	0.499	180	1.05										
10/7/2018	0.713			4.8								7.5	
10/8/2018	0.716			5.1	0.420	<50	<0.16	Yes	Yes	6.8	6.8	7.6	30
10/9/2018	0.717			4.9		<50	<0.16	No	No	6.7	6.7	8.4	
10/10/2018	0.717			5.2		<50	<0.16	No	Yes	6.8	6.8	7.7	
10/11/2018	0.716			5.7		<50	<0.16	No	No	6.8	6.8	7.4	45
10/12/2018	0.714					<50	<0.16	No	No	6.7	6.7		
10/13/2018	0.632												
10/14/2018	0.716			6								6.5	
10/15/2018	0.716			5.4	0.440	<50	<0.16	Yes	Yes	6.7	6.7	6.7	30
10/16/2018	0.716			5.8		<50	<0.16	No	No	6.7	6.7	8.5	
10/17/2018	0.716			5		<50	<0.16	No	Yes	6.7	6.7	9	
10/18/2018	0.716			5.0		<50	<0.16	No	No	6.9	6.9	8.9	30
10/19/2018	0.717					<50	<0.16	No	No	6.6	6.6		
10/20/2018	0.711												
10/21/2018	0.716			4.7								6.2	
10/22/2018	0.711			4.5	0.380	<50	<0.16	Yes	Yes	6.6	6.6	8.1	38
10/23/2018	0.711			5.1		<50	<0.16	No	No	6.6	6.6	6.8	
10/24/2018	0.716			4.8		<50	<0.16	No	Yes	6.6	6.6	7.7	
10/25/2018	0.716			5.2		<50	<0.16	No	No	6.6	6.6	7.4	
10/26/2018	0.717					<50	<0.16	No	No	6.7	6.7		40
10/27/2018	0.716												
10/28/2018	0.717			6								7.7	
10/29/2018	0.716			6	0.420	<50	<0.16	Yes	Yes	6.6	6.6	7.1	28
10/30/2018	0.716			6		<50	<0.16	No	No	6.6	6.6	5.7	
10/31/2018	0.499			6.1		<50	<0.16	No	Yes	6.5	6.5	5.4	14
Discharged (mg)	21.685												
Monthly Avg				5.3								7.4	