FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

February 17, 2022

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

Re: Monitoring Report #297
January 1 – January 31, 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 January 1 through January 31, 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

GelmanSciences

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

Copyright 2022 Gelman Sciences, Inc. All rights reserved.

GelmanSciences

TABLE #1

UNIT D2 UPGRADIENT EXTRACTION DATA

Month of: Jan-22

	Horizontal Well Extraction			TW-9			TW-5			TW-21			Daily Flow	Daily Total
Date	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
Sat-1/1/22	-		-	-		-	-		-	144,070	100	24.00	100	144,070
Sun-1/2/22	-		-	-		-	-		-	143,970	100	24.00	100	143,970
Mon-1/3/22	-		-	-		-	-		-	143,970	100	24.00	100	143,970
Tue-1/4/22	-		-	-		-	-		-	144,033	100	24.00	100	144,033
Wed-1/5/22	-		-	-		-	2,624	50	0.87	144,018	100	24.00	102	146,642
Thu-1/6/22	-		-	-		-	-		-	143,963	100	24.00	100	143,963
Fri-1/7/22	-		-	-		-	-		-	143,245	100	23.88	99	143,245
Sat-1/8/22	-		-	-		-	-		-	143,990	100	24.00	100	143,990
Sun-1/9/22	-		-	-		-	-		-	144,016	100	24.00	100	144,016
Mon-1/10/22	-		-	-		-	-		-	143,951	100	24.00	100	143,951
Tue-1/11/22	-		-	-		-	-		-	143,949	100	24.00	100	143,949
Wed-1/12/22	-		-	-		-	-		-	143,512	100	23.92	100	143,512
Thu-1/13/22	-		-	-		-	-		-	143,208	100	23.87	99	143,208
Fri-1/14/22	-		-	-		-	-		-	144,001	100	24.00	100	144,001
Sat-1/15/22	-		-	-		-	-		-	143,958	100	24.00	100	143,958
Sun-1/16/22	-		-	-		-	-		-	143,973	100	24.00	100	143,973
Mon-1/17/22	-		-	53,737	55	16.25	-		-	143,998	100	24.00	137	197,735
Tue-1/18/22	-		-	21,545	56	6.43	-		-	144,041	100	24.00	115	165,586
Wed-1/19/22	-		-	-		-	-		-	144,052	100	24.00	100	144,052
Thu-1/20/22	-		-	-		-	-		-	143,965	100	24.00	100	143,965
Fri-1/21/22	-		-	-		-	-		-	143,970	100	24.00	100	143,970
Sat-1/22/22	-		-	-		-	-		-	143,950	100	24.00	100	143,950
Sun-1/23/22	-		-	-		-	-		-	143,953	100	24.00	100	143,953
Mon-1/24/22	-		-	-		-	-		-	143,962	100	24.00	100	143,962
Tue-1/25/22	-		-	-		-	-		-	143,883	100	24.00	100	143,883
Wed-1/26/22	-		-	-		-	-		-	143,949	100	24.00	100	143,949
Thu-1/27/22	-		-	-		-	-		-	143,952	100	24.00	100	143,952
Fri-1/28/22	-		-	-		-	-		-	143,954	100	24.00	100	143,954
Sat-1/29/22	-		-	-		-	-		-	143,891	100	24.00	100	143,891
Sun-1/30/22	-		-	-		-	-		-	143,930	100	24.00	100	143,930
Mon-1/31/22	-		-	-		-	-		-	143,566	100	23.95	100	143,566
TOTALS	-		-	75,282	55	22.68	2,624	50	0.87	4,460,843	100	743.62	102	4,538,749

TOTAL VOLUME EXTRACTED :	4,538,749 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	101.67 GPM

GelmanSciences

TABLE #2

UNIT D2 DOWNGRADIENT EXTRACTION DATA

Month of: Jan-22

Date	LB-1 Gallons	GPM	Run Hrs.	LB-4 Gallons	GPM	Run Hrs.	Daily Flow GPM	Daily Total Gallons
Sat-1/1/22	-		-	144,195	100	24.00	100	144,195
Sun-1/2/22	-		-	144,182	100	24.00	100	144,182
Mon-1/3/22	-		-	144,235	100	24.00	100	144,235
Tue-1/4/22	-		-	144,259	100	24.00	100	144,259
Wed-1/5/22	-		-	144,218	100	24.00	100	144,218
Thu-1/6/22	-		-	144,219	100	24.00	100	144,219
Fri-1/7/22	-		-	144,216	100	24.00	100	144,216
Sat-1/8/22	-		-	144,230	100	24.00	100	144,230
Sun-1/9/22	-		-	144,196	100	24.00	100	144,196
Mon-1/10/22	-		-	144,243	100	24.00	100	144,243
Tue-1/11/22	-		-	144,237	100	24.00	100	144,237
Wed-1/12/22	-		-	144,229	100	24.00	100	144,229
Thu-1/13/22	-		-	144,231	100	24.00	100	144,231
Fri-1/14/22	-		-	144,253	100	24.00	100	144,253
Sat-1/15/22	-		-	144,228	100	24.00	100	144,228
Sun-1/16/22	-		-	144,199	100	24.00	100	144,199
Mon-1/17/22	-		-	144,202	100	24.00	100	144,202
Tue-1/18/22	-		-	144,226	100	24.00	100	144,226
Wed-1/19/22	-		-	144,188	100	24.00	100	144,188
Thu-1/20/22	-		-	144,193	100	24.00	100	144,193
Fri-1/21/22	-		-	144,205	100	24.00	100	144,205
Sat-1/22/22	-		-	144,211	100	24.00	100	144,211
Sun-1/23/22	-		-	144,198	100	24.00	100	144,198
Mon-1/24/22	-		-	144,221	100	24.00	100	144,221
Tue-1/25/22	-		-	144,210	100	24.00	100	144,210
Wed-1/26/22	-		-	144,224	100	24.00	100	144,224
Thu-1/27/22	-		-	144,229	100	24.00	100	144,229
Fri-1/28/22	-		-	144,212	100	24.00	100	144,212
Sat-1/29/22	-		-	144,237	100	24.00	100	144,237
Sun-1/30/22	-		-	144,218	100	24.00	100	144,218
Mon-1/31/22	-		-	144,232	100	24.00	100	144,232
TOTALS	-		-	**4,470,776**	**100**	**744.00**	**100**	**4,470,776**

TOTAL VOLUME EXTRACTED :	4,470,776 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	100.15 GPM

GelmanSciences

TABLE #3

CORE AREA EXTRACTION DATA

Month of: Jan-22

Core Area Well Extraction

Date	TW-1 Gallons	GPM	Run Hrs.	TW-2 (Dolph) Gallons	GPM	Run Hrs.	TW-3 Gallons	GPM	Run Hrs.	TW-10 Gallons	GPM	Run Hrs.	TW-14 Gallons	GPM	Run Hrs.	TW-20 Gallons	GPM	Run Hrs.	TW-24 Gallons	GPM	Run Hrs.	Daily Flow GPM	Daily Total Gallons
Sat-1/1/22	-			41,860	29	24.00	-		-	-		-	-		-	36,002	25	24.00	-		-	54	77,862
Sun-1/2/22	-			41,879	29	24.00	-		-	-		-	-		-	36,336	25	24.00	-		-	54	78,215
Mon-1/3/22	-			41,882	29	24.00	-		-	-		-	-		-	36,334	25	24.00	8,489	10	14.63	60	86,705
Tue-1/4/22	-			41,910	29	24.00	-		-	-		-	33,811	54	10.42	38,554	27	24.00	14,114	10	24.00	89	128,389
Wed-1/5/22	-			39,361	27	24.00	-		-	-		-	79,035	55	24.00	43,002	30	24.00	14,208	10	24.00	122	175,606
Thu-1/6/22	-			38,187	27	24.00	-		-	-		-	74,109	51	24.00	42,968	30	24.00	13,832	10	24.00	117	169,096
Fri-1/7/22	-			38,145	26	24.00	-		-	-		-	71,602	50	24.00	40,175	28	24.00	14,030	10	24.00	114	165,952
Sat-1/8/22	-			38,166	27	24.00	-		-	-		-	71,428	50	24.00	36,064	25	24.00	14,221	10	24.00	111	159,879
Sun-1/9/22	-			38,149	26	24.00	-		-	-		-	71,565	50	24.00	42,287	29	24.00	14,286	10	24.00	115	166,287
Mon-1/10/22	-			38,099	26	24.00	-		-	-		-	72,029	50	24.00	43,633	30	24.00	14,086	10	24.00	117	167,847
Tue-1/11/22	-			38,143	26	24.00	-		-	19,551	21	15.80	62,600	43	24.00	43,623	30	24.00	14,121	10	24.00	124	178,038
Wed-1/12/22	-			38,394	27	23.75	-		-	29,920	21	24.00	57,508	40	24.00	43,614	30	24.00	14,306	10	24.00	128	183,742
Thu-1/13/22	-			39,219	27	24.00	-		-	29,322	20	24.00	57,060	40	24.00	39,389	27	24.00	14,233	10	24.00	124	179,223
Fri-1/14/22	-			36,462	25	24.00	-		-	29,334	20	24.00	56,936	40	24.00	36,149	25	24.00	14,007	10	24.00	120	172,888
Sat-1/15/22	-			36,595	25	24.00	-		-	29,356	20	24.00	57,359	40	24.00	36,179	25	24.00	13,945	10	24.00	120	173,434
Sun-1/16/22	-			36,616	25	24.00	-		-	29,396	20	24.00	57,574	40	24.00	40,271	28	24.00	14,335	10	24.00	124	178,192
Mon-1/17/22	-			36,510	25	24.00	-		-	29,422	20	24.00	57,219	40	24.00	43,621	30	24.00	14,367	10	24.00	126	181,139
Tue-1/18/22	-			36,491	25	24.00	-		-	29,413	20	24.00	57,766	40	24.00	43,583	30	24.00	14,084	10	24.00	126	181,337
Wed-1/19/22	-			36,569	25	24.00	-		-	29,439	20	24.00	58,330	41	24.00	43,568	30	24.00	14,080	10	24.00	126	181,986
Thu-1/20/22	-			36,604	25	24.00	-		-	29,477	20	24.00	57,541	40	24.00	43,535	30	24.00	14,244	10	24.00	126	181,401
Fri-1/21/22	-			36,663	25	24.00	-		-	29,504	20	24.00	57,534	40	24.00	43,556	30	24.00	14,412	10	24.00	126	181,669
Sat-1/22/22	-			36,687	25	24.00	-		-	29,523	21	24.00	57,372	40	24.00	43,398	30	24.00	14,441	10	24.00	126	181,421
Sun-1/23/22	-			36,659	25	24.00	-		-	29,549	21	24.00	56,844	39	24.00	43,353	30	24.00	14,299	10	24.00	125	180,704
Mon-1/24/22	-			36,694	25	24.00	-		-	33,854	24	24.00	52,702	37	24.00	43,352	30	24.00	14,305	10	24.00	126	180,907
Tue-1/25/22	-			36,663	25	24.00	-		-	36,048	25	24.00	49,790	35	24.00	43,308	30	24.00	13,911	10	24.00	125	179,720
Wed-1/26/22	-			36,681	25	24.00	-		-	35,898	25	24.00	50,457	35	24.00	43,298	30	24.00	13,854	10	24.00	125	180,188
Thu-1/27/22	-			36,746	26	24.00	-		-	35,914	25	24.00	49,743	35	24.00	43,283	30	24.00	14,126	10	24.00	125	179,812
Fri-1/28/22	-			36,685	25	24.00	-		-	35,956	25	24.00	49,820	35	24.00	43,282	30	24.00	13,975	10	24.00	125	179,718
Sat-1/29/22	-			36,757	26	24.00	-		-	36,003	25	24.00	49,764	35	24.00	43,211	30	24.00	14,093	10	24.00	125	179,828
Sun-1/30/22	-			36,679	25	24.00	-		-	36,012	25	24.00	50,073	35	24.00	43,161	30	24.00	14,192	10	24.00	125	180,117
Mon-1/31/22	-			36,744	26	24.00	-		-	36,040	25	24.00	50,199	35	24.00	43,179	30	24.00	13,996	10	24.00	125	180,158
TOTALS	-			1,172,899	26	743.75	-		-	658,931	22	495.80	1,627,770	41	658.42	1,285,268	29	744.00	404,592	10	686.63	115	5,149,460

TOTAL VOLUME EXTRACTED :	5,149,460 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	115.36 GPM

1/1/22-1/11/22 - TW-10 was shut down to control Red Pond levels.
1/1/22-1/4/22 - TW-14 was shut down to control Red Pond levels.
1/1/22-1/3/22 - TW-24 was shut down over the weekend while no one was on-site.

GelmanSciences TABLE #4

MARSHY AREA EXTRACTION DATA

Month of: Jan-22

Marshy Well Extraction				Daily	Daily
	PW-1			Flow	Total
Date	Gallons	GPM	Run Hrs.	GPM	Gallons
Sat-1/1/22	3,135	2	24.00	2	3,135
Sun-1/2/22	3,174	2	24.00	2	3,174
Mon-1/3/22	3,173	2	24.00	2	3,173
Tue-1/4/22	3,182	2	24.00	2	3,182
Wed-1/5/22	3,217	2	24.00	2	3,217
Thu-1/6/22	3,252	2	24.00	2	3,252
Fri-1/7/22	3,248	2	24.00	2	3,248
Sat-1/8/22	3,258	2	24.00	2	3,258
Sun-1/9/22	3,243	2	24.00	2	3,243
Mon-1/10/22	3,277	2	24.00	2	3,277
Tue-1/11/22	3,289	2	24.00	2	3,289
Wed-1/12/22	3,256	2	24.00	2	3,256
Thu-1/13/22	3,263	2	24.00	2	3,263
Fri-1/14/22	3,313	2	24.00	2	3,313
Sat-1/15/22	3,333	2	24.00	2	3,333
Sun-1/16/22	3,313	2	24.00	2	3,313
Mon-1/17/22	3,339	2	24.00	2	3,339
Tue-1/18/22	3,327	2	24.00	2	3,327
Wed-1/19/22	3,334	2	24.00	2	3,334
Thu-1/20/22	3,370	2	24.00	2	3,370
Fri-1/21/22	3,342	2	24.00	2	3,342
Sat-1/22/22	3,359	2	24.00	2	3,359
Sun-1/23/22	3,353	2	24.00	2	3,353
Mon-1/24/22	3,382	2	24.00	2	3,382
Tue-1/25/22	3,381	2	24.00	2	3,381
Wed-1/26/22	3,406	2	24.00	2	3,406
Thu-1/27/22	3,437	2	24.00	2	3,437
Fri-1/28/22	3,432	2	24.00	2	3,432
Sat-1/29/22	3,440	2	24.00	2	3,440
Sun-1/30/22	3,414	2	24.00	2	3,414
Mon-1/31/22	3,415	2	24.00	2	3,415
TOTALS	102,657	2	744.00	2	102,657

TOTAL VOLUME EXTRACTED :	102,657 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	2.30 GPM

GelmanSciences

TABLE #5

SOUTHWEST AREA EXTRACTION DATA

Month of: Jan-22

SouthWest Well Extraction							Daily	Daily
	TW22			TW28			Flow	Total
Date	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Sat-1/1/22	3,407	2	24.00	35,627	25	24.00	27	39,034
Sun-1/2/22	3,370	2	24.00	36,139	25	24.00	27	39,509
Mon-1/3/22	3,286	2	24.00	36,201	25	24.00	27	39,487
Tue-1/4/22	3,296	2	24.00	36,248	25	24.00	27	39,544
Wed-1/5/22	3,305	2	24.00	36,233	25	24.00	27	39,538
Thu-1/6/22	3,299	2	24.00	36,169	25	24.00	27	39,468
Fri-1/7/22	3,296	2	24.00	36,131	25	24.00	27	39,427
Sat-1/8/22	3,298	2	24.00	36,107	25	24.00	27	39,405
Sun-1/9/22	3,302	2	24.00	36,110	25	24.00	27	39,412
Mon-1/10/22	3,294	2	24.00	36,112	25	24.00	27	39,406
Tue-1/11/22	3,319	2	24.00	36,043	25	24.00	27	39,362
Wed-1/12/22	3,377	2	24.00	35,982	25	24.00	27	39,359
Thu-1/13/22	2,985	2	24.00	35,893	25	24.00	27	38,878
Fri-1/14/22	2,944	2	23.65	35,999	25	24.00	27	38,943
Sat-1/15/22	3,100	2	24.00	36,217	25	24.00	27	39,317
Sun-1/16/22	2,626	2	24.00	36,184	25	24.00	27	38,810
Mon-1/17/22	2,614	2	24.00	35,867	25	24.00	27	38,481
Tue-1/18/22	2,613	2	24.00	35,810	25	24.00	27	38,423
Wed-1/19/22	2,611	2	24.00	35,789	25	24.00	27	38,400
Thu-1/20/22	2,605	2	24.00	35,745	25	24.00	27	38,350
Fri-1/21/22	2,592	2	24.00	35,777	25	24.00	27	38,369
Sat-1/22/22	2,578	2	24.00	35,769	25	24.00	27	38,347
Sun-1/23/22	2,571	2	24.00	35,782	25	24.00	27	38,353
Mon-1/24/22	2,528	2	24.00	35,961	25	24.00	27	38,489
Tue-1/25/22	2,995	2	24.00	35,877	25	24.00	27	38,872
Wed-1/26/22	3,127	2	24.00	36,039	25	24.00	27	39,166
Thu-1/27/22	2,655	2	24.00	36,180	25	24.00	27	38,835
Fri-1/28/22	2,638	2	24.00	36,169	25	24.00	27	38,807
Sat-1/29/22	2,600	2	24.00	36,147	25	24.00	27	38,747
Sun-1/30/22	2,591	2	24.00	36,154	25	24.00	27	38,745
Mon-1/31/22	3,032	2	24.00	36,012	25	24.00	27	39,044
TOTALS	91,854	2	743.65	1,116,473	25	744.00	27	1,208,327

TOTAL VOLUME EXTRACTED :	1,208,327 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	27.07 GPM

GelmanSciences

TABLE #6

UNIT "E" EXTRACTION DATA

Month of: Jan-22

Date	TW-11 Gallons	GPM	Run Hrs.	TW-17 Gallons	GPM	Run Hrs.	TW-18 Gallons	GPM	Run Hrs.	TW-29 Gallons	GPM	Run Hrs.	TW-23 Gallons	GPM	Run Hrs.	Daily Flow GPM	Daily Total Gallons
Sat-1/1/22	72,398	50	24.00	-		-	146,358	102	24.00	71,876	50	24.00	72,332	50	24.00	252	362,964
Sun-1/2/22	70,317	49	24.00	-		-	146,358	102	24.00	71,840	50	24.00	72,291	50	24.00	251	360,806
Mon-1/3/22	67,279	47	24.00	-		-	146,328	102	24.00	71,839	50	24.00	72,275	50	24.00	248	357,721
Tue-1/4/22	19,525	46	7.15	33,733	54	10.42	146,381	102	24.00	71,891	50	24.00	72,329	50	24.00	239	343,859
Wed-1/5/22	222	44	0.08	79,407	55	24.00	146,356	102	24.00	71,930	50	24.00	72,361	50	24.00	257	370,276
Thu-1/6/22	-		-	84,182	58	24.00	146,331	102	24.00	71,888	50	24.00	72,310	50	24.00	260	374,711
Fri-1/7/22	-		-	89,506	62	24.00	148,520	104	23.88	71,850	50	24.00	72,187	50	24.00	265	382,063
Sat-1/8/22	-		-	93,853	65	24.00	153,622	107	24.00	71,805	50	24.00	72,231	50	24.00	272	391,511
Sun-1/9/22	-		-	93,839	65	24.00	153,588	107	24.00	71,822	50	24.00	72,391	50	24.00	272	391,640
Mon-1/10/22	-		-	93,845	65	24.00	153,620	107	24.00	71,783	50	24.00	72,284	50	24.00	272	391,532
Tue-1/11/22	-		-	90,603	63	24.00	168,087	117	24.00	71,813	50	24.00	72,314	50	24.00	280	402,817
Wed-1/12/22	-		-	86,605	60	24.00	162,761	113	23.92	71,472	50	23.85	71,820	50	23.85	273	392,658
Thu-1/13/22	9,633	40	4.05	86,591	60	24.00	161,218	113	23.88	70,752	50	23.56	71,119	50	23.60	277	399,313
Fri-1/14/22	-		-	86,580	60	24.00	160,318	111	24.00	72,055	50	24.00	72,279	50	24.00	272	391,232
Sat-1/15/22	-		-	86,569	60	24.00	153,614	107	24.00	71,927	50	24.00	72,294	50	24.00	267	384,404
Sun-1/16/22	-		-	86,566	60	24.00	157,732	110	24.00	71,964	50	24.00	72,334	50	24.00	270	388,596
Mon-1/17/22	-		-	86,589	60	24.00	161,037	112	24.00	71,956	50	24.00	72,336	50	24.00	272	391,918
Tue-1/18/22	-		-	86,613	60	24.00	156,180	108	24.00	71,937	50	24.00	72,400	50	24.00	269	387,130
Wed-1/19/22	-		-	86,596	60	24.00	153,707	107	24.00	71,913	50	24.00	72,363	50	24.00	267	384,579
Thu-1/20/22	-		-	86,593	60	24.00	153,717	107	24.00	71,953	50	24.00	72,395	50	24.00	267	384,658
Fri-1/21/22	-		-	86,555	60	24.00	153,683	107	24.00	71,967	50	24.00	72,427	50	24.00	267	384,632
Sat-1/22/22	-		-	86,577	60	24.00	156,403	109	24.00	71,992	50	24.00	72,399	50	24.00	269	387,371
Sun-1/23/22	-		-	86,546	60	24.00	160,984	112	24.00	71,977	50	24.00	72,417	50	24.00	272	391,924
Mon-1/24/22	-		-	86,577	60	24.00	161,005	112	24.00	71,892	50	24.00	72,416	50	24.00	272	391,890
Tue-1/25/22	-		-	86,586	60	24.00	161,007	112	24.00	71,553	50	23.86	71,956	50	23.86	272	391,102
Wed-1/26/22	-		-	86,536	60	24.00	161,005	112	24.00	71,931	50	24.00	72,351	50	24.00	272	391,823
Thu-1/27/22	-		-	86,580	60	24.00	161,021	112	24.00	71,935	50	24.00	72,367	50	24.00	272	391,903
Fri-1/28/22	-		-	86,539	60	24.00	161,014	112	24.00	71,935	50	24.00	72,349	50	24.00	272	391,837
Sat-1/29/22	-		-	86,558	60	24.00	161,100	112	24.00	71,943	50	24.00	72,374	50	24.00	272	391,975
Sun-1/30/22	-		-	86,541	60	24.00	161,043	112	24.00	71,932	50	24.00	72,380	50	24.00	272	391,896
Mon-1/31/22	-		-	86,566	60	24.00	160,571	112	23.93	71,933	50	24.00	72,357	50	24.00	272	391,427
TOTALS	239,374	46	83.28	2,390,431	60	658.42	4,834,669	108	743.62	2,227,256	50	743.27	2,240,438	50	743.31	267	11,932,168

TOTAL VOLUME EXTRACTED :	11,932,168 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	267.30 GPM

1/4/22-1/13/22 - TW-11 was shut down to control Red Pond levels.
1/1/22-1/4/22 - TW-17 was shut down to control Red Pond levels.

GelmanSciences

TABLE #7

Little Lake Area System

MW-53i	
Date	1,4-Dioxane ug/L
10/04/21	38
11/18/21	31
12/01/21	40
01/12/22	54

GelmanSciences

TABLE #8

INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
DOLPH-01-13-22-13:00-1	01/13/22	150
TW-10-01-11-22-12:50-1	01/13/22	550
TW-14-01-05-22-13:35-1	01/13/22	130
TW-14-01-13-22-13:30-1	01/13/22	120
TW-20-01-13-22-13:20-1	01/13/22	720
TW-24-01-13-22-13:10-1	01/13/22	2300
LB-4-01-13-22-11:40-1	01/13/22	410
TW-21-01-13-22-12:50-1	01/13/22	240
TW-17-01-05-22-13:30-1	01/13/22	74
TW-17-01-13-22-13:35-1	01/13/22	49
TW-18-01-13-22-12:55-1	01/13/22	240
TW-23-01-13-22-11:40-1	01/13/22	400
TW-29-01-13-22-11:55-1	01/13/22	330
PW-1-01-13-22-13:05-1	01/13/22	840
TW-22-01-13-22-13:45-1	01/13/22	470
TW-28-01-13-22-13:50-1	01/13/22	620

GelmanSciences

TABLE #9

RED POND DATA

Month of: Jan-22

Date	Time	Notes	Red Pond Pond Visual Chk	Level Feet	Aeration Hours	Influent Hours	Influent GPM
Sat-1/1/22	04:00:00.000	(1)		4.8	-	24.00	536
Sun-1/2/22	04:00:00.000	(1)		5.2	-	24.00	535
Mon-1/3/22	04:00:00.000		Y	5.6	-	24.00	538
Tue-1/4/22	04:00:00.000		Y	5.0	-	24.00	558
Wed-1/5/22	04:00:00.000		Y	4.9	-	24.00	611
Thu-1/6/22	04:00:00.000		Y	4.6	-	24.00	607
Fri-1/7/22	04:00:00.000		Y	4.4	-	24.00	608
Sat-1/8/22	04:00:00.000	(1)		4.2	-	24.00	613
Sun-1/9/22	04:00:00.000	(1)		4.1	-	24.00	617
Mon-1/10/22	04:00:00.000		Y	3.9	-	24.00	618
Tue-1/11/22	04:00:00.000		Y	4.0	-	24.00	633
Wed-1/12/22	04:00:00.000		Y	4.0	-	24.00	630
Thu-1/13/22	04:00:00.000		Y	4.4	-	24.00	631
Fri-1/14/22	04:00:00.000		Y	4.2	-	24.00	621
Sat-1/15/22	04:00:00.000	(1)		4.1	-	24.00	617
Sun-1/16/22	04:00:00.000	(1)		4.0	-	24.00	623
Mon-1/17/22	04:00:00.000		Y	4.7	-	24.00	664
Tue-1/18/22	04:00:00.000		Y	4.7	-	24.00	639
Wed-1/19/22	04:00:00.000		Y	4.7	-	24.00	623
Thu-1/20/22	04:00:00.000		Y	4.6	-	24.00	622
Fri-1/21/22	04:00:00.000		Y	4.6	-	24.00	622
Sat-1/22/22	04:00:00.000	(1)		4.5	-	24.00	624
Sun-1/23/22	04:00:00.000	(1)		4.5	-	24.00	627
Mon-1/24/22	04:00:00.000		Y	4.5	-	24.00	627
Tue-1/25/22	04:00:00.000		Y	4.5	-	24.00	626
Wed-1/26/22	04:00:00.000		Y	4.5	-	24.00	627
Thu-1/27/22	04:00:00.000		Y	4.7	-	24.00	627
Fri-1/28/22	04:00:00.000		Y	4.7	-	24.00	626
Sat-1/29/22	04:00:00.000	(1)		4.6	-	24.00	626
Sun-1/30/22	04:00:00.000	(1)		4.6	-	24.00	627
Mon-1/31/22	04:00:00.000		Y	4.6	-	24.00	626
		TOTALS	-		-	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.

GelmanSciences

TABLE #10

RED POND CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
Red Pond-01-04-22-07:45-1	1/4/2022	360
Red Pond-01-05-22-07:15-1	1/5/2022	380
Red Pond-01-06-22-07:10-1	1/6/2022	390
Red Pond-01-07-22-07:30-1	1/7/2022	380
Red Pond-01-10-22-07:05-1	1/10/2022	380
Red Pond-01-11-22-07:35-1	1/11/2022	430
Red Pond-01-12-22-07:00-1	1/12/2022	460
Red Pond-01-13-22-07:10-1	1/13/2022	400
Red Pond-01-14-22-07:00-1	1/14/2022	330
Red Pond-01-17-22-07:20-1	1/17/2022	390
Red Pond-01-18-22-07:20-1	1/18/2022	400
Red Pond-01-19-22-07:15-1	1/19/2022	350
Red Pond-01-20-22-07:15-1	1/20/2022	350
Red Pond-01-21-22-07:25-1	1/21/2022	360
Red Pond-01-24-22-07:15-1	1/24/2022	400
Red Pond-01-25-22-08:47-1	1/25/2022	380
Red Pond-01-26-22-08:55-1	1/26/2022	390
Red Pond-01-27-22-07:10-1	1/27/2022	390
Red Pond-01-28-22-07:10-1	1/28/2022	380
Red Pond-01-31-22-09:05-1	1/31/2022	370

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

GelmanSciences

TABLE #11

OZONE OPERATION REPORT

Month of: Jan-22

			SYSTEM-1A		SYSTEM-1B		SYSTEM-2A		SYSTEM-2B	
Date	Time	Notes	Flow GPM	Run Hours	Flow GPM	Run Hours	Flow GPM	Run Hours	Flow GPM	Run Hours
Sat-1/1/22	04:00:00.000	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-1/2/22	04:00:00.000	(1)	241	24.00	0	0.00	380	24.00	0	0.00
Mon-1/3/22	04:00:00.000		240	24.00	0	0.00	381	24.00	0	0.00
Tue-1/4/22	04:00:00.000		240	24.00	0	0.00	381	24.00	0	0.00
Wed-1/5/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Thu-1/6/22	04:00:00.000		240	24.00	0	0.00	381	24.00	0	0.00
Fri-1/7/22	04:00:00.000		241	24.00	0	0.00	380	24.00	0	0.00
Sat-1/8/22	04:00:00.000	(1)	240	24.00	0	0.00	381	24.00	0	0.00
Sun-1/9/22	04:00:00.000	(1)	241	24.00	0	0.00	379	24.00	0	0.00
Mon-1/10/22	04:00:00.000		241	24.00	0	0.00	380	24.00	0	0.00
Tue-1/11/22	04:00:00.000		240	24.00	0	0.00	379	24.00	0	0.00
Wed-1/12/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Thu-1/13/22	04:00:00.000		241	24.00	0	0.00	379	24.00	0	0.00
Fri-1/14/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Sat-1/15/22	04:00:00.000	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-1/16/22	04:00:00.000	(1)	240	24.00	0	0.00	381	24.00	0	0.00
Mon-1/17/22	04:00:00.000		241	24.00	0	0.00	380	24.00	0	0.00
Tue-1/18/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Wed-1/19/22	04:00:00.000		240	24.00	0	0.00	381	24.00	0	0.00
Thu-1/20/22	04:00:00.000		240	24.00	0	0.00	381	24.00	0	0.00
Fri-1/21/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Sat-1/22/22	04:00:00.000	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-1/23/22	04:00:00.000	(1)	241	24.00	0	0.00	380	24.00	0	0.00
Mon-1/24/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Tue-1/25/22	04:00:00.000		240	24.00	0	0.00	380	24.00	0	0.00
Wed-1/26/22	04:00:00.000		241	24.00	0	0.00	380	24.00	0	0.00
Thu-1/27/22	04:00:00.000		241	24.00	0	0.00	379	24.00	0	0.00
Fri-1/28/22	04:00:00.000		240	24.00	0	0.00	379	24.00	0	0.00
Sat-1/29/22	04:00:00.000	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-1/30/22	04:00:00.000	(1)	240	24.00	0	0.00	379	24.00	0	0.00
Mon-1/31/22	04:00:00.000		240	24.00	0	0.00	380	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.

GelmanSciences

TABLE #12

GREEN POND / DISCHARGE DATA

Month of: Jan-22

			Green Pond																
			Pond					Pond Discharge			Bypass Discharge			Recirc Thru UV to Pond			Recirc Thru UV to Disch		
Date	Time	Notes	Visual Chk	Level Feet	Aeration Hours	Influent Hours	Influent GPM	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours
Sat-1/1/22	04:00:00.000	(1)		-	-						643	925,756	24.00	-	-	-	-	-	-
Sun-1/2/22	04:00:00.000	(1)		-	-						642	924,942	24.00	-	-	-	-	-	-
Mon-1/3/22	04:00:00.000		Y	-	-						642	924,879	24.00	-	-	-	-	-	-
Tue-1/4/22	04:00:00.000		Y	-	-						642	924,986	24.00	-	-	-	-	-	-
Wed-1/5/22	04:00:00.000		Y	-	-						642	925,040	24.00	-	-	-	-	-	-
Thu-1/6/22	04:00:00.000		Y	-	-						642	924,602	24.00	-	-	-	-	-	-
Fri-1/7/22	04:00:00.000		Y	-	-						642	924,582	24.00	-	-	-	-	-	-
Sat-1/8/22	04:00:00.000	(1)		-	-						642	924,636	24.00	-	-	-	-	-	-
Sun-1/9/22	04:00:00.000	(1)		-	-						642	924,756	24.00	-	-	-	-	-	-
Mon-1/10/22	04:00:00.000		Y	-	-						642	924,417	24.00	-	-	-	-	-	-
Tue-1/11/22	04:00:00.000		Y	-	-						642	924,321	24.00	-	-	-	-	-	-
Wed-1/12/22	04:00:00.000		Y	-	-						642	924,791	24.00	-	-	-	-	-	-
Thu-1/13/22	04:00:00.000		Y	-	-						642	924,997	24.00	-	-	-	-	-	-
Fri-1/14/22	04:00:00.000		Y	-	-						642	924,675	24.00	-	-	-	-	-	-
Sat-1/15/22	04:00:00.000	(1)		-	-						642	924,304	24.00	-	-	-	-	-	-
Sun-1/16/22	04:00:00.000	(1)		-	-						642	924,553	24.00	-	-	-	-	-	-
Mon-1/17/22	04:00:00.000		Y	-	-						642	924,731	24.00	-	-	-	-	-	-
Tue-1/18/22	04:00:00.000		Y	-	-						642	924,674	24.00	-	-	-	-	-	-
Wed-1/19/22	04:00:00.000		Y	-	-						642	924,716	24.00	-	-	-	-	-	-
Thu-1/20/22	04:00:00.000		Y	-	-						642	924,173	24.00	-	-	-	-	-	-
Fri-1/21/22	04:00:00.000		Y	-	-						642	924,300	24.00	-	-	-	-	-	-
Sat-1/22/22	04:00:00.000	(1)		-	-						642	924,383	24.00	-	-	-	-	-	-
Sun-1/23/22	04:00:00.000	(1)		-	-						642	924,436	24.00	-	-	-	-	-	-
Mon-1/24/22	04:00:00.000		Y	-	-						642	924,613	24.00	-	-	-	-	-	-
Tue-1/25/22	04:00:00.000		Y	-	-						642	924,490	24.00	-	-	-	-	-	-
Wed-1/26/22	04:00:00.000		Y	-	-						642	924,349	24.00	-	-	-	-	-	-
Thu-1/27/22	04:00:00.000		Y	-	-						641	908,873	23.65	-	-	-	-	-	-
Fri-1/28/22	04:00:00.000		Y	-	-						642	924,335	24.00	-	-	-	-	-	-
Sat-1/29/22	04:00:00.000	(1)		-	-						642	924,339	24.00	-	-	-	-	-	-
Sun-1/30/22	04:00:00.000	(1)		-	-						642	924,417	24.00	-	-	-	-	-	-
Mon-1/31/22	04:00:00.000		Y	-	-						642	924,496	24.00	-	-	-	-	-	-
		TOTALS			-	-			-	-		28,647,562	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.

GelmanSciences

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
1/1/2022	0.926	*G	*G										
1/2/2022	0.925			6								7.2	
1/3/2022	0.925			6								7.8	
1/4/2022	0.925			6	0.360	<50	<0.16	yes	yes	7.0	7.0	7.6	52
1/5/2022	0.925			7	0.380	<50	<0.16	no	no	6.9	6.9	6.5	
1/6/2022	0.925			6	0.390	<50	<0.16	no	yes	6.9	6.9	9.6	55
1/7/2022	0.925				0.380	<50	<0.16	no	no	6.9	6.9		
1/8/2022	0.925												
1/9/2022	0.925			6								4.8	
1/10/2022	0.924			5	0.380	<50	<0.16	yes	yes	6.9	6.9	9.5	60
1/11/2022	0.924			6	0.430	<50	<0.16	no	no	6.9	6.9	7.6	
1/12/2022	0.925			5	0.460	<50	<0.16	no	yes	6.9	6.9	8.3	40
1/13/2022	0.925			5	0.400	<50	<0.16	no	no	6.9	6.9	8.3	
1/14/2022	0.925				0.330	<50	<0.16	no	no	6.9	6.9		
1/15/2022	0.924												
1/16/2022	0.925			5								8.4	
1/17/2022	0.925			5	0.390	<50	<0.16	yes	yes	7.0	7.0	8.2	54
1/18/2022	0.925			5	0.400	<50	<0.16	no	no	7.0	7.0	11	
1/19/2022	0.925			5	0.350	<50	<0.16	no	yes	7.0	7.0	11	42
1/20/2022	0.924			5	0.350	<50	<0.16	no	no	7.0	7.0	10	
1/21/2022	0.924				0.360	<50	<0.16	no	no	6.9	6.9		
1/22/2022	0.924												
1/23/2022	0.924			6								9	
1/24/2022	0.925			6	0.400	<50	<0.16	yes	yes	7.0	7.0	7.2	50
1/25/2022	0.924			6	0.380	<50	<0.16	no	no	6.9	6.9	7.8	
1/26/2022	0.909			6	0.390	<50	<0.16	no	yes	7.0	7.0	5.5	58
1/27/2022	0.924			6	0.390	<50	<0.16	no	no	7.0	7.0	7.6	
1/28/2022	0.924				0.380	<50	<0.16	no	no	7.0	7.0		
1/29/2022	0.924												
1/30/2022	0.924			6								7.6	
1/31/2022	0.924			5	0.370	<50	<0.16	yes	yes	7.0	7.0	14	46
Discharged	28.648												
Monthly Avg	0.924			5.6								8.4	

1/1/22 - New Years Day. Manual readings were not taken due to holiday.