FLEIS&VANDENBRINK
DESIGN. BUILD. OPERATE.

December 20, 2021

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

Re: Monitoring Report #295
November 1 – November 30, 2021

Dear Ms. Carver:

Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit No. MI0048453, please find the enclosed Monitoring Report for the period of November 1 through November 30, 2021.

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

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TABLE #1

UNIT D2 UPGRADIENT EXTRACTION DATA

Month of: Nov-21

	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
Mon-11/1/21	-		-	-		-	57,869	40	24.00	144,115	100	24.00	140	201,984
Tue-11/2/21	-		-	-		-	57,851	40	24.00	144,113	100	24.00	140	201,964
Wed-11/3/21	-		-	-		-	57,960	44	22.00	143,470	100	23.90	140	201,430
Thu-11/4/21	-		-	-		-	65,088	45	24.00	144,090	100	24.00	145	209,178
Fri-11/5/21	-		-	-		-	65,092	45	24.00	144,094	100	24.00	145	209,186
Sat-11/6/21	-		-	-		-	65,070	45	24.00	144,117	100	24.00	145	209,187
Sun-11/7/21	-		-	-		-	67,795	45	25.00	150,167	100	25.00	151	217,962
Mon-11/8/21	-		-	-		-	65,112	45	24.00	144,198	100	24.00	145	209,310
Tue-11/9/21	-		-	-		-	65,101	45	24.00	144,159	100	24.00	145	209,260
Wed-11/10/21	-		-	-		-	58,895	41	24.00	144,153	100	24.00	141	203,048
Thu-11/11/21	-		-	-		-	50,632	35	24.00	141,823	100	23.60	134	192,455
Fri-11/12/21	-		-	-		-	50,610	35	24.00	144,142	100	24.00	135	194,752
Sat-11/13/21	-		-	-		-	50,569	35	24.00	144,097	100	24.00	135	194,666
Sun-11/14/21	-		-	-		-	50,587	35	24.00	144,059	100	24.00	135	194,646
Mon-11/15/21	-		-	-		-	50,603	35	24.00	144,076	100	24.00	135	194,679
Tue-11/16/21	-		-	-		-	50,620	35	24.00	144,104	100	24.00	135	194,724
Wed-11/17/21	-		-	-		-	50,632	35	24.00	144,193	100	24.00	135	194,825
Thu-11/18/21	-		-	-		-	50,574	35	24.00	144,118	100	24.00	135	194,692
Fri-11/19/21	-		-	-		-	50,598	35	24.00	144,101	100	24.00	135	194,699
Sat-11/20/21	-		-	-		-	50,538	35	24.00	144,082	100	24.00	135	194,620
Sun-11/21/21	-		-	-		-	50,536	35	24.00	144,054	100	24.00	135	194,590
Mon-11/22/21	-		-	-		-	50,582	35	24.00	144,077	100	24.00	135	194,659
Tue-11/23/21	-		-	-		-	50,591	35	24.00	144,064	100	24.00	135	194,655
Wed-11/24/21	-		-	-		-	50,604	35	24.00	144,119	100	24.00	135	194,723
Thu-11/25/21	-		-	-		-	50,599	35	24.00	144,125	100	24.00	135	194,724
Fri-11/26/21	-		-	-		-	50,555	35	24.00	144,036	100	24.00	135	194,591
Sat-11/27/21	-		-	-		-	50,587	35	24.00	144,035	100	24.00	135	194,622
Sun-11/28/21	-		-	-		-	50,581	35	24.00	144,045	100	24.00	135	194,626
Mon-11/29/21	-		-	-		-	50,600	35	24.00	144,072	100	24.00	135	194,672
Tue-11/30/21	-		-	-		-	50,610	35	24.00	144,091	100	24.00	135	194,701
	-		-	-		-	-		-	-		-		
TOTALS	-		-	-		-	1,637,641	38	719.00	4,326,189	100	720.50	138	5,963,830

TOTAL VOLUME EXTRACTED :	5,963,830 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	138.05 GPM

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.

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TABLE #2

UNIT D2 DOWNGRADIENT EXTRACTION DATA

Month of: Nov-21

Date	LB-1 Gallons	GPM	Run Hrs.	LB-4 Gallons	GPM	Run Hrs.	Daily Flow GPM	Daily Total Gallons
Mon-11/1/21	93,735	65	24.00	-		-	65	93,735
Tue-11/2/21	93,734	65	24.00	-		-	65	93,734
Wed-11/3/21	93,742	65	24.00	-		-	65	93,742
Thu-11/4/21	93,745	65	24.00	-		-	65	93,745
Fri-11/5/21	93,743	65	24.00	-		-	65	93,743
Sat-11/6/21	93,743	65	24.00	-		-	65	93,743
Sun-11/7/21	97,636	65	25.00	-		-	68	97,636
Mon-11/8/21	93,739	65	24.00	-		-	65	93,739
Tue-11/9/21	93,741	65	24.00	-		-	65	93,741
Wed-11/10/21	54,360	65	13.98	60,517	96	10.56	80	114,877
Thu-11/11/21	-		-	143,312	100	23.85	100	143,312
Fri-11/12/21	-		-	144,225	100	24.00	100	144,225
Sat-11/13/21	-		-	144,193	100	24.00	100	144,193
Sun-11/14/21	-		-	144,244	100	24.00	100	144,244
Mon-11/15/21	-		-	144,212	100	24.00	100	144,212
Tue-11/16/21	-		-	144,256	100	24.00	100	144,256
Wed-11/17/21	-		-	144,226	100	24.00	100	144,226
Thu-11/18/21	-		-	144,209	100	24.00	100	144,209
Fri-11/19/21	-		-	144,218	100	24.00	100	144,218
Sat-11/20/21	-		-	144,236	100	24.00	100	144,236
Sun-11/21/21	-		-	144,205	100	24.00	100	144,205
Mon-11/22/21	-		-	144,220	100	24.00	100	144,220
Tue-11/23/21	-		-	144,217	100	24.00	100	144,217
Wed-11/24/21	-		-	144,230	100	24.00	100	144,230
Thu-11/25/21	-		-	144,211	100	24.00	100	144,211
Fri-11/26/21	-		-	144,203	100	24.00	100	144,203
Sat-11/27/21	-		-	144,231	100	24.00	100	144,231
Sun-11/28/21	-		-	144,200	100	24.00	100	144,200
Mon-11/29/21	-		-	144,240	100	24.00	100	144,240
Tue-11/30/21	-		-	144,236	100	24.00	100	144,236
	-		-	-		-		
TOTALS	901,918	65	230.98	2,944,041	100	490.41	89	3,845,959

TOTAL VOLUME EXTRACTED :	3,845,959 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	89.03 GPM

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.
11/1/21-11/10/21 - LB-4 was shut down for rehabilitation.

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TABLE #3

CORE AREA EXTRACTION DATA

Month of: Nov-21

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
Mon-11/1/21	-		-	42,151	29	24.00	-		-	-		-	-		-	43,429	30	24.00	-		-	59	85,580
Tue-11/2/21	-		-	42,205	29	24.00	-		-	-		-	-		-	43,355	30	24.00	-		-	59	85,560
Wed-11/3/21	-		-	37,319	29	21.68	-		-	-		-	-		-	39,959	30	22.08	-		-	54	77,278
Thu-11/4/21	-		-	41,292	29	24.00	-		-	-		-	-		-	43,442	30	24.00	-		-	59	84,734
Fri-11/5/21	-		-	41,392	29	24.00	-		-	-		-	-		-	43,449	30	24.00	-		-	59	84,841
Sat-11/6/21	-		-	41,473	29	24.00	-		-	-		-	-		-	43,439	30	24.00	-		-	59	84,912
Sun-11/7/21	-		-	43,270	29	25.00	-		-	-		-	-		-	45,241	30	25.00	-		-	61	88,511
Mon-11/8/21	-		-	41,621	29	24.00	-		-	-		-	-		-	43,456	30	24.00	-		-	59	85,077
Tue-11/9/21	-		-	41,674	29	24.00	-		-	-		-	-		-	43,401	30	24.00	-		-	59	85,075
Wed-11/10/21	-		-	41,734	29	24.00	-		-	-		-	-		-	43,345	30	24.00	-		-	59	85,079
Thu-11/11/21	-		-	43,378	31	23.58	-		-	-		-	-		-	43,334	30	24.00	-		-	60	86,712
Fri-11/12/21	-		-	44,775	31	24.00	-		-	-		-	-		-	43,260	30	24.00	-		-	61	88,035
Sat-11/13/21	-		-	44,527	31	24.00	-		-	-		-	-		-	43,151	30	24.00	-		-	61	87,678
Sun-11/14/21	-		-	44,274	31	24.00	-		-	-		-	-		-	43,143	30	24.00	-		-	61	87,417
Mon-11/15/21	-		-	40,168	28	24.00	-		-	-		-	-		-	43,182	30	24.00	-		-	58	83,350
Tue-11/16/21	-		-	36,322	25	24.00	-		-	-		-	-		-	43,192	30	24.00	-		-	55	79,514
Wed-11/17/21	-		-	36,336	25	24.00	-		-	-		-	-		-	43,173	30	24.00	-		-	55	79,509
Thu-11/18/21	-		-	36,381	25	24.00	-		-	-		-	-		-	43,202	30	24.00	-		-	55	79,583
Fri-11/19/21	-		-	36,375	25	24.00	-		-	-		-	-		-	43,422	30	24.00	-		-	55	79,797
Sat-11/20/21	-		-	36,397	25	24.00	-		-	-		-	-		-	43,555	30	24.00	-		-	56	79,952
Sun-11/21/21	-		-	36,419	25	24.00	-		-	-		-	-		-	43,552	30	24.00	-		-	56	79,971
Mon-11/22/21	-		-	36,558	25	24.00	-		-	-		-	-		-	43,553	30	24.00	-		-	56	80,111
Tue-11/23/21	-		-	36,649	25	24.00	-		-	-		-	-		-	43,430	30	24.00	-		-	56	80,079
Wed-11/24/21	-		-	36,650	25	24.00	-		-	-		-	-		-	43,461	30	24.00	-		-	56	80,111
Thu-11/25/21	-		-	36,612	25	24.00	-		-	-		-	-		-	43,469	30	24.00	-		-	56	80,081
Fri-11/26/21	-		-	36,656	25	24.00	-		-	-		-	-		-	43,457	30	24.00	-		-	56	80,113
Sat-11/27/21	-		-	36,660	25	24.00	-		-	-		-	-		-	43,439	30	24.00	-		-	56	80,099
Sun-11/28/21	-		-	36,663	25	24.00	-		-	-		-	-		-	43,425	30	24.00	-		-	56	80,088
Mon-11/29/21	-		-	36,657	25	24.00	-		-	-		-	-		-	43,445	30	24.00	-		-	56	80,102
Tue-11/30/21	-		-	36,647	25	24.00	-		-	-		-	-		-	43,453	30	24.00	-		-	56	80,100
	-		-	-		-	-		-	-		-	-		-	-		-	-		-		-
TOTALS	-		-	1,179,235	27	718.27	-		-	-		-	-		-	1,299,814	30	719.08	-		-	57	2,479,049

TOTAL VOLUME EXTRACTED :	2,479,049	GALLONS
DAYS IN MONTH :	30	DAYS
MONTHLY AVERAGE FLOW RATE :	57.39	GPM

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.
11/1/21-11/30/21 - TW-24 was shut down.
11/3/21 - TW-2 (Dolph) and TW-20 were shut down briefly to control Red Pond level.

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MARSHY AREA EXTRACTION DATA

Month of: Nov-21

Marshy Well Extraction				Daily	Daily
	PW-1			Flow	Total
Date	Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-11/1/21	2,479	2	24.00	2	2,479
Tue-11/2/21	2,580	2	24.00	2	2,580
Wed-11/3/21	2,595	2	24.00	2	2,595
Thu-11/4/21	2,600	2	24.00	2	2,600
Fri-11/5/21	2,604	2	24.00	2	2,604
Sat-11/6/21	2,608	2	24.00	2	2,608
Sun-11/7/21	2,708	2	25.00	2	2,708
Mon-11/8/21	2,600	2	24.00	2	2,600
Tue-11/9/21	2,618	2	24.00	2	2,618
Wed-11/10/21	2,636	2	24.00	2	2,636
Thu-11/11/21	2,646	2	24.00	2	2,646
Fri-11/12/21	2,696	2	24.00	2	2,696
Sat-11/13/21	2,731	2	24.00	2	2,731
Sun-11/14/21	2,744	2	24.00	2	2,744
Mon-11/15/21	2,755	2	24.00	2	2,755
Tue-11/16/21	2,757	2	24.00	2	2,757
Wed-11/17/21	2,759	2	24.00	2	2,759
Thu-11/18/21	2,787	2	24.00	2	2,787
Fri-11/19/21	2,798	2	24.00	2	2,798
Sat-11/20/21	2,815	2	24.00	2	2,815
Sun-11/21/21	2,814	2	24.00	2	2,814
Mon-11/22/21	2,839	2	24.00	2	2,839
Tue-11/23/21	2,844	2	24.00	2	2,844
Wed-11/24/21	2,861	2	24.00	2	2,861
Thu-11/25/21	2,859	2	24.00	2	2,859
Fri-11/26/21	2,904	2	24.00	2	2,904
Sat-11/27/21	2,895	2	24.00	2	2,895
Sun-11/28/21	2,899	2	24.00	2	2,899
Mon-11/29/21	2,911	2	24.00	2	2,911
Tue-11/30/21	2,916	2	24.00	2	2,916
	-		-		-
TOTALS	82,258	2	721.00	2	82,258

TOTAL VOLUME EXTRACTED :	82,258 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	1.90 GPM

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.

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TABLE #5

SOUTHWEST AREA EXTRACTION DATA

Month of: Nov-21

SouthWest Well Extraction							Daily	Daily
	TW22			TW28			Flow	Total
Date	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Mon-11/1/21	3,375	2	24.00	36,233	25	24.00	28	39,608
Tue-11/2/21	3,381	2	24.00	36,226	25	24.00	28	39,607
Wed-11/3/21	3,387	2	24.00	36,184	25	24.00	27	39,571
Thu-11/4/21	3,400	2	24.00	36,212	25	24.00	28	39,612
Fri-11/5/21	3,406	2	24.00	36,201	25	24.00	28	39,607
Sat-11/6/21	3,352	2	24.00	36,155	25	24.00	27	39,507
Sun-11/7/21	3,399	2	25.00	37,630	25	25.00	27	41,029
Mon-11/8/21	3,268	2	24.00	36,115	25	24.00	27	39,383
Tue-11/9/21	3,271	2	24.00	36,101	25	24.00	27	39,372
Wed-11/10/21	3,275	2	24.00	36,098	25	24.00	27	39,373
Thu-11/11/21	3,282	2	24.00	36,117	25	24.00	27	39,399
Fri-11/12/21	3,203	2	24.00	36,139	25	24.00	27	39,342
Sat-11/13/21	3,170	2	24.00	36,170	25	24.00	27	39,340
Sun-11/14/21	3,173	2	24.00	36,168	25	24.00	27	39,341
Mon-11/15/21	3,167	2	24.00	36,172	25	24.00	27	39,339
Tue-11/16/21	3,175	2	24.00	36,180	25	24.00	27	39,355
Wed-11/17/21	3,184	2	24.00	36,193	25	24.00	27	39,377
Thu-11/18/21	3,176	2	24.00	36,181	25	24.00	27	39,357
Fri-11/19/21	3,164	2	24.00	36,162	25	24.00	27	39,326
Sat-11/20/21	3,174	2	24.00	36,159	25	24.00	27	39,333
Sun-11/21/21	3,199	2	24.00	36,160	25	24.00	27	39,359
Mon-11/22/21	3,218	2	24.00	36,132	25	24.00	27	39,350
Tue-11/23/21	3,230	2	24.00	36,108	25	24.00	27	39,338
Wed-11/24/21	3,240	2	24.00	36,120	25	24.00	27	39,360
Thu-11/25/21	3,249	2	24.00	36,121	25	24.00	27	39,370
Fri-11/26/21	3,255	2	24.00	36,040	25	24.00	27	39,295
Sat-11/27/21	3,254	2	24.00	36,024	25	24.00	27	39,278
Sun-11/28/21	3,258	2	24.00	36,007	25	24.00	27	39,265
Mon-11/29/21	3,260	2	24.00	36,018	25	24.00	27	39,278
Tue-11/30/21	3,264	2	24.00	36,020	25	24.00	27	39,284
	-	0	-	-	0	-	0	
TOTALS	97,809	2	721.00	1,085,546	24	721.00	26	1,183,355

TOTAL VOLUME EXTRACTED :	1,183,355 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	27.39 GPM

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.

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TABLE #6

UNIT "E" EXTRACTION DATA

Month of: Nov-21

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
Mon-11/1/21	-			79,391	55	24.00	147,495	102	24.00	71,777	50	24.00	72,063	50	24.00	257	370,726
Tue-11/2/21	-			79,415	55	24.00	147,492	102	24.00	71,856	50	24.00	72,151	50	24.00	258	370,914
Wed-11/3/21	-			73,162	55	22.10	146,824	102	23.90	71,788	50	24.00	72,099	50	24.00	253	363,873
Thu-11/4/21	-			79,415	55	24.00	147,472	102	24.00	71,878	50	24.00	72,244	50	24.00	258	371,009
Fri-11/5/21	-			79,365	55	24.00	147,490	102	24.00	71,856	50	24.00	72,285	50	24.00	258	370,996
Sat-11/6/21	-			79,341	55	24.00	147,506	102	24.00	71,908	50	24.00	72,303	50	24.00	258	371,058
Sun-11/7/21	-			82,676	55	25.00	153,674	102	25.00	74,802	50	25.00	75,326	50	25.00	268	386,478
Mon-11/8/21	-			79,417	55	24.00	147,546	102	24.00	71,783	50	24.00	72,191	50	24.00	258	370,937
Tue-11/9/21	-			79,357	55	24.00	147,520	102	24.00	71,941	50	24.00	72,230	50	24.00	258	371,048
Wed-11/10/21	-			71,220	49	24.00	147,535	102	24.00	71,884	50	24.00	72,241	50	24.00	252	362,880
Thu-11/11/21	-			60,782	42	24.00	145,077	102	23.62	69,918	50	23.33	70,148	50	23.33	240	345,925
Fri-11/12/21	-			64,833	45	24.00	147,321	102	24.00	70,821	50	23.63	71,185	50	23.68	246	354,160
Sat-11/13/21	-			64,898	45	24.00	147,297	102	24.00	71,823	50	24.00	72,187	50	24.00	247	356,205
Sun-11/14/21	-			65,006	45	24.00	147,283	102	24.00	71,797	50	24.00	72,174	50	24.00	247	356,260
Mon-11/15/21	-			60,207	42	24.00	147,274	102	24.00	71,807	50	24.00	72,240	50	24.00	244	351,528
Tue-11/16/21	-			57,752	40	24.00	147,294	102	24.00	71,881	50	24.00	72,231	50	24.00	242	349,158
Wed-11/17/21	-			57,782	40	24.00	147,307	102	24.00	71,862	50	24.00	72,237	50	24.00	242	349,188
Thu-11/18/21	-			57,817	40	24.00	147,292	102	24.00	71,745	50	24.00	72,238	50	24.00	242	349,092
Fri-11/19/21	-			57,868	40	24.00	147,290	102	24.00	71,825	50	24.00	72,234	50	24.00	243	349,217
Sat-11/20/21	-			57,921	40	24.00	147,278	102	24.00	72,028	50	24.00	72,264	50	24.00	243	349,491
Sun-11/21/21	-			57,953	40	24.00	147,291	102	24.00	71,762	50	24.00	72,324	50	24.00	243	349,330
Mon-11/22/21	-			57,717	40	24.00	147,346	102	24.00	71,892	50	24.00	72,292	50	24.00	243	349,247
Tue-11/23/21	-			62,744	44	24.00	147,316	102	24.00	71,807	50	24.00	72,296	50	24.00	246	354,163
Wed-11/24/21	-			65,071	45	24.00	147,304	102	24.00	71,764	50	24.00	72,307	50	24.00	248	356,446
Thu-11/25/21	-			65,027	45	24.00	147,310	102	24.00	71,815	50	24.00	72,328	50	24.00	248	356,480
Fri-11/26/21	-			65,039	45	24.00	147,298	102	24.00	71,812	50	24.00	72,292	50	24.00	248	356,441
Sat-11/27/21	-			64,786	45	24.00	147,298	102	24.00	71,815	50	24.00	72,316	50	24.00	247	356,215
Sun-11/28/21	-			64,744	45	24.00	147,281	102	24.00	71,811	50	24.00	72,309	50	24.00	247	356,145
Mon-11/29/21	-			64,774	45	24.00	147,345	102	24.00	71,819	50	24.00	72,299	50	24.00	247	356,237
Tue-11/30/21	-			64,842	45	24.00	147,297	102	24.00	71,734	50	24.00	72,314	50	24.00	247	356,187
	-			-		-	-		-	-		-	-		-		
TOTALS	-		-	2,020,322	47	719.10	4,424,353	102	720.52	2,155,011	50	719.96	2,167,348	50	720.01	249	10,767,034

TOTAL VOLUME EXTRACTED :	10,767,034 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	249.24 GPM

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.

GelmanSciences

TABLE #7

Little Lake Area System

MW-53i	
Date	1,4-Dioxane ug/L
08/02/21	37
09/01/21	57
10/04/21	38
11/18/21	31

A2 Cleaning Supply Well	
Date	1,4-Dioxane ug/L
08/02/21	38
09/01/21	44
10/04/21	51
11/23/21	35

GelmanSciences

TABLE #8

INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
DOLPH-11-12-21-11:40-1	11/12/21	130
TW-20-11-12-21-11:45-1	11/12/21	770
LB-4-11-11-21-10:55-1	11/11/21	400
TW-21-11-12-21-11:25-1	11/12/21	220
TW-5-11-12-21-11:55-1	11/12/21	710
TW-11-11-12-21-12:00-1	11/12/21	150
TW-17-11-12-21-11:50-1	11/12/21	65
TW-18-11-12-21-11:30-1	11/12/21	220
TW-23-11-12-21-10:35-1	11/12/21	370
TW-29-11-12-21-10:50-1	11/12/21	280
PW-1-11-12-21-11:35-1	11/12/21	710
TW-22-11-12-21-12:05-1	11/12/21	430
TW-28-11-12-21-12:10-1	11/12/21	610

GelmanSciences

TABLE #9

RED POND DATA

Month of: Nov-21

			Red Pond				
			Pond	Level	Aeration	Influent	Influent
Date	Time	Notes	Visual Chk	Feet	Hours	Hours	GPM
Mon-11/1/21	04:00:00.000		Y	4.0	-	24.00	551
Tue-11/2/21	04:00:00.000		Y	3.9	-	24.00	552
Wed-11/3/21	04:00:00.000		Y	4.0	-	24.00	541
Thu-11/4/21	04:00:00.000		Y	4.0	-	24.00	556
Fri-11/5/21	04:00:00.000		Y	4.1	-	24.00	556
Sat-11/6/21	03:00:00.000	(1)		4.1	-	24.00	556
Sun-11/7/21	04:00:00.000	(1)		4.2	-	25.00	556
Mon-11/8/21	04:00:00.000		Y	4.3	-	24.00	556
Tue-11/9/21	04:00:00.000		Y	4.3	-	24.00	556
Wed-11/10/21	04:00:00.000		Y	4.3	-	24.00	561
Thu-11/11/21	04:00:00.000		Y	4.2	-	24.00	563
Fri-11/12/21	04:00:00.000		Y	4.3	-	24.00	572
Sat-11/13/21	04:00:00.000	(1)		4.4	-	24.00	573
Sun-11/14/21	04:00:00.000	(1)		4.6	-	24.00	573
Mon-11/15/21	04:00:00.000		Y	4.6	-	24.00	567
Tue-11/16/21	04:00:00.000		Y	4.6	-	24.00	562
Wed-11/17/21	04:00:00.000		Y	4.5	-	24.00	562
Thu-11/18/21	04:00:00.000		Y	4.9	-	24.00	562
Fri-11/19/21	04:00:00.000		Y	4.7	-	24.00	563
Sat-11/20/21	04:00:00.000	(1)		4.5	-	24.00	563
Sun-11/21/21	04:00:00.000	(1)		4.3	-	24.00	563
Mon-11/22/21	04:00:00.000		Y	4.1	-	24.00	563
Tue-11/23/21	04:00:00.000		Y	4.1	-	24.00	566
Wed-11/24/21	04:00:00.000		Y	4.1	-	24.00	568
Thu-11/25/21	04:00:00.000		Y	4.2	-	24.00	568
Fri-11/26/21	04:00:00.000		Y	4.2	-	24.00	568
Sat-11/27/21	04:00:00.000	(1)		4.2	-	24.00	568
Sun-11/28/21	04:00:00.000	(1)		4.3	-	24.00	568
Mon-11/29/21	04:00:00.000		Y	4.3	-	24.00	568
Tue-11/30/21	04:00:00.000		Y	4.4	-	24.00	568
	-		-	-	-	-	-
		TOTALS	-		-	721	

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.

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.

GelmanSciences

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-11-01-21-07:00-1	11/1/2021	300
Red Pond-11-02-21-07:10-1	11/2/2021	330
Red Pond-11-03-21-09:05-1	11/3/2021	320
Red Pond-11-04-21-07:05-1	11/4/2021	330
Red Pond-11-05-21-06:55-1	11/5/2021	300
Red Pond-11-08-21-07:20-1	11/8/2021	330
Red Pond-11-09-21-07:25-1	11/9/2021	320
Red Pond-11-10-21-06:55-1	11/10/2021	320
Red Pond-11-11-21-07:10-1	11/11/2021	340
Red Pond-11-12-21-07:30-1	11/12/2021	340
Red Pond-11-15-21-07:05-1	11/15/2021	310
Red Pond-11-16-21-07:05-1	11/16/2021	330
Red Pond-11-17-21-07:30-1	11/17/2021	330
Red Pond-11-18-21-06:55-1	11/18/2021	320
Red Pond-11-19-21-07:15-1	11/19/2021	310
Red Pond-11-22-21-07:30-1	11/22/2021	290
Red Pond-11-23-21-07:00-1	11/23/2021	290
Red Pond-11-24-21-07:20-1	11/24/2021	340
Red Pond-11-29-21-07:05-1	11/29/2021	310
Red Pond-11-30-21-07:35-1	11/30/2021	300

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

GelmanSciences

TABLE #11

OZONE OPERATION REPORT

Month of: Nov-21

			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
Mon-11/1/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Tue-11/2/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Wed-11/3/21	04:00:00		240	21.95	0	0.00	380	24.00	0	0.00
Thu-11/4/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Fri-11/5/21	04:00:00		241	24.00	0	0.00	380	24.00	0	0.00
Sat-11/6/21	03:00:00	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-11/7/21	04:00:00	(1)	240	25.00	0	0.00	380	25.00	0	0.00
Mon-11/8/21	04:00:00		240	24.00	0	0.00	381	24.00	0	0.00
Tue-11/9/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Wed-11/10/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Thu-11/11/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Fri-11/12/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Sat-11/13/21	04:00:00	(1)	241	24.00	0	0.00	380	24.00	0	0.00
Sun-11/14/21	04:00:00	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Mon-11/15/21	04:00:00		241	24.00	0	0.00	380	24.00	0	0.00
Tue-11/16/21	04:00:00		241	24.00	0	0.00	380	24.00	0	0.00
Wed-11/17/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Thu-11/18/21	04:00:00		240	22.77	0	0.00	379	23.12	0	0.00
Fri-11/19/21	04:00:00		241	24.00	0	0.00	380	24.00	0	0.00
Sat-11/20/21	04:00:00	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-11/21/21	04:00:00	(1)	241	24.00	0	0.00	380	24.00	0	0.00
Mon-11/22/21	04:00:00		241	24.00	0	0.00	380	24.00	0	0.00
Tue-11/23/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Wed-11/24/21	04:00:00		240	24.00	0	0.00	379	24.00	0	0.00
Thu-11/25/21	04:00:00		240	24.00	0	0.00	379	24.00	0	0.00
Fri-11/26/21	04:00:00		240	24.00	0	0.00	380	24.00	0	0.00
Sat-11/27/21	04:00:00	(1)	240	24.00	0	0.00	380	24.00	0	0.00
Sun-11/28/21	04:00:00	(1)	239	24.00	0	0.00	379	24.00	0	0.00
Mon-11/29/21	04:00:00		241	24.00	0	0.00	379	24.00	0	0.00
Tue-11/30/21	04:00:00		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.

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.
11/3/21 - Treatment System 1A was automatically shut down briefly by low water sensor.
11/18/21 - Treatment System 1A was shut down briefly for maintenance.

GelmanSciences

TABLE #12

GREEN POND / DISCHARGE DATA

Month of: Nov-21

			Green Pond																
			Pond	Level	Aeration	Influent	Influent	Pond Discharge		Bypass Discharge			Recirc Thru UV to Pond			Recirc Thru UV to Disch		
Date	Time	Notes	Visual Chk	Feet	Hours	Hours	GPM	GPM	Gallons	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours
Mon-11/1/21	04:00:00		Y	-	-					641	923,507	24.00	-	-	-	-	-	-
Tue-11/2/21	04:00:00		Y	-	-					641	923,464	24.00	-	-	-	-	-	-
Wed-11/3/21	04:00:00		Y	-	-					619	891,114	24.00	-	-	-	-	-	-
Thu-11/4/21	04:00:00		Y	-	-					641	923,664	24.00	-	-	-	-	-	-
Fri-11/5/21	04:00:00		Y	-	-					641	923,529	24.00	-	-	-	-	-	-
Sat-11/6/21	03:00:00	(1)		-	-					641	923,588	24.00	-	-	-	-	-	-
Sun-11/7/21	04:00:00	(1)		-	-					641	962,204	25.00	-	-	-	-	-	-
Mon-11/8/21	04:00:00		Y	-	-					642	923,811	24.00	-	-	-	-	-	-
Tue-11/9/21	04:00:00		Y	-	-					642	923,785	24.00	-	-	-	-	-	-
Wed-11/10/21	04:00:00		Y	-	-					641	923,712	24.00	-	-	-	-	-	-
Thu-11/11/21	04:00:00		Y	-	-					642	923,861	24.00	-	-	-	-	-	-
Fri-11/12/21	04:00:00		Y	-	-					641	923,601	24.00	-	-	-	-	-	-
Sat-11/13/21	04:00:00	(1)		-	-					641	923,603	24.00	-	-	-	-	-	-
Sun-11/14/21	04:00:00	(1)		-	-					641	923,637	24.00	-	-	-	-	-	-
Mon-11/15/21	04:00:00		Y	-	-					641	923,456	24.00	-	-	-	-	-	-
Tue-11/16/21	04:00:00		Y	-	-					641	923,593	24.00	-	-	-	-	-	-
Wed-11/17/21	04:00:00		Y	-	-					642	923,928	24.00	-	-	-	-	-	-
Thu-11/18/21	04:00:00		Y	-	-					640	874,226	22.75	-	-	-	-	-	-
Fri-11/19/21	04:00:00		Y	-	-					643	925,281	24.00	-	-	-	-	-	-
Sat-11/20/21	04:00:00	(1)		-	-					643	925,212	24.00	-	-	-	-	-	-
Sun-11/21/21	04:00:00	(1)		-	-					643	925,287	24.00	-	-	-	-	-	-
Mon-11/22/21	04:00:00		Y	-	-					642	925,032	24.00	-	-	-	-	-	-
Tue-11/23/21	04:00:00		Y	-	-					642	925,009	24.00	-	-	-	-	-	-
Wed-11/24/21	04:00:00		Y	-	-					642	925,005	24.00	-	-	-	-	-	-
Thu-11/25/21	04:00:00		Y	-	-					643	925,325	24.00	-	-	-	-	-	-
Fri-11/26/21	04:00:00		Y	-	-					642	924,818	24.00	-	-	-	-	-	-
Sat-11/27/21	04:00:00	(1)		-	-					642	924,868	24.00	-	-	-	-	-	-
Sun-11/28/21	04:00:00	(1)		-	-					642	925,050	24.00	-	-	-	-	-	-
Mon-11/29/21	04:00:00		Y	-	-					642	924,940	24.00	-	-	-	-	-	-
Tue-11/30/21	04:00:00		Y	-	-					642	925,025	24.00	-	-	-	-	-	-
		TOTALS			-	-			-		27,683,135	720		-	-		-	-

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.

11/7/21 - Due to the end of daylight savings, the maximum run time on this date is 25 hours.

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
11/1/2021	0.924	*G	*G	7.0	0.300	<50	<0.16	yes	yes	7.0	7.0	13	48
11/2/2021	0.923			7.0	0.330	<50	<0.16	no	no	6.9	6.9	7.2	
11/3/2021	0.891			8.0	0.320	<50	<0.16	no	yes	7.0	7.0	6.6	50
11/4/2021	0.924			7.0	0.330	<50	<0.16	no	no	6.9	6.9	8.2	
11/5/2021	0.924				0.300	<50	<0.16	no	no	7.0	7.0		
11/6/2021	0.924												
11/7/2021	0.962			7.0								10	
11/8/2021	0.924			6.0	0.330	<50	<0.16	yes	yes	7.0	7.0	9.6	46
11/9/2021	0.924			6.0	0.320	<50	<0.16	no	no	7.1	7.1	9.0	
11/10/2021	0.924			6.0	0.320	<50	<0.16	no	yes	7.0	7.0	7.8	38
11/11/2021	0.924			7.0	0.340	<50	<0.16	no	no	7.1	7.1	9.2	
11/12/2021	0.924				0.340	<50	<0.16	no	no	7.0	7.0		
11/13/2021	0.924												
11/14/2021	0.924			6.0								9.2	
11/15/2021	0.923			6.0	0.310	<50	<0.16	yes	yes	6.9	6.9	11	42
11/16/2021	0.924			6.0	0.330	<50	<0.16	no	no	7.0	7.0	8.7	
11/17/2021	0.924			7.0	0.330	<50	<0.16	no	yes	6.8	6.8	7.7	86
11/18/2021	0.874			7.0	0.320	<50	<0.16	no	no	6.9	6.9	9.3	
11/19/2021	0.925				0.310	<50	<0.16	no	no	7.0	7.0		
11/20/2021	0.925												
11/21/2021	0.925			7.0								6.5	
11/22/2021	0.925			6.0	0.290	<50	<0.16	yes	yes	7.0	7.0	8.0	38
11/23/2021	0.925			7.0	0.290	<50	<0.16	no	no	7.0	7.0	7.0	
11/24/2021	0.925			6.0	0.340	<50	<0.16	no	yes	7.0	7.0	7.8	36
11/25/2021	0.925			7.0								7.7	
11/26/2021	0.925												
11/27/2021	0.925												
11/28/2021	0.925			6.0								7.6	
11/29/2021	0.925			6.0	0.310	<50	<0.16	yes	yes	7.0	7.0	7.6	36
11/30/2021	0.925			6.0	0.300	<50	<0.16	no	no	7.1	7.1	8.2	
Discharged (mg)	27.683												
Monthly Avg				6.5								8.5	

11/7/21 - End of daylight savings (25-hour day).
11/25/21-11/26/21 - Thanksgiving Holiday.