



Gelman Sciences, Inc. d/b/a
Pall Life Sciences
642 South Wagner Road
Ann Arbor, MI 48103
734.436.4025 phone
734.436.4040 fax

February 13, 2019

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

**Re: Monitoring Report # 261
January 1 – January 31, 2019**

Dear Ms. Dijak:

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

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

Sincerely,

Lawrence J. Gelb
Sr. Director Global EHS

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



EXTRACTION DATA

- 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**

UNIT D2 UPGRADIENT EXTRACTION DATA

Month of: Jan-19

Date	TW-21			Daily Flow	Daily Total
	TW-21			GPM	Gallons
	Gallons	GPM	Run Hrs.		
Tue-1/1/19	93,555	65	24.00	65	93,555
Wed-1/2/19	93,538	65	24.00	65	93,538
Thu-1/3/19	93,552	65	24.00	65	93,552
Fri-1/4/19	93,575	65	24.00	65	93,575
Sat-1/5/19	93,569	65	24.00	65	93,569
Sun-1/6/19	93,553	65	24.00	65	93,553
Mon-1/7/19	93,569	65	24.00	65	93,569
Tue-1/8/19	93,592	65	24.00	65	93,592
Wed-1/9/19	93,507	65	24.00	65	93,507
Thu-1/10/19	93,474	65	24.00	65	93,474
Fri-1/11/19	93,481	65	24.00	65	93,481
Sat-1/12/19	93,514	65	24.00	65	93,514
Sun-1/13/19	61,448	65	15.78	43	61,448
Mon-1/14/19	83,764	65	21.50	58	83,764
Tue-1/15/19	93,508	65	24.00	65	93,508
Wed-1/16/19	93,508	65	24.00	65	93,508
Thu-1/17/19	93,519	65	24.00	65	93,519
Fri-1/18/19	93,529	65	24.00	65	93,529
Sat-1/19/19	46,772	32	24.00	32	46,772
Sun-1/20/19	93,412	65	24.00	65	93,412
Mon-1/21/19	93,417	65	24.00	65	93,417
Tue-1/22/19	93,450	65	24.00	65	93,450
Wed-1/23/19	93,544	65	24.00	65	93,544
Thu-1/24/19	82,319	65	21.13	57	82,319
Fri-1/25/19	93,457	65	24.00	65	93,457
Sat-1/26/19	93,463	65	24.00	65	93,463
Sun-1/27/19	93,439	65	24.00	65	93,439
Mon-1/28/19	93,461	65	24.00	65	93,461
Tue-1/29/19	93,435	65	24.00	65	93,435
Wed-1/30/19	93,377	65	24.00	65	93,377
Thu-1/31/19	93,358	65	24.00	65	93,358
TOTALS	2,798,659	64	730.41	63	2,798,659

TOTAL VOLUME EXTRACTED :	2,798,659 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	62.69 GPM

01/13/19 - 01/14/19 - TW-21 was shut down for communications maintenance.
 01/24/19 - TW-21 was shut down briefly to adjust the Pond level.

UNIT D2 DOWNGRADIENT EXTRACTION DATA

Month of: Jan-19

Date	LB-4			Daily	Daily
	Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Tue-1/1/19	144,195	100	24.00	100	144,195
Wed-1/2/19	144,265	100	24.00	100	144,265
Thu-1/3/19	144,159	100	24.00	100	144,159
Fri-1/4/19	144,191	100	24.00	100	144,191
Sat-1/5/19	144,171	100	24.00	100	144,171
Sun-1/6/19	144,186	100	24.00	100	144,186
Mon-1/7/19	138,941	100	23.15	96	138,941
Tue-1/8/19	142,197	100	23.66	99	142,197
Wed-1/9/19	141,677	100	23.60	98	141,677
Thu-1/10/19	144,179	100	24.00	100	144,179
Fri-1/11/19	141,727	100	23.60	98	141,727
Sat-1/12/19	144,186	100	24.00	100	144,186
Sun-1/13/19	94,963	100	15.81	66	94,963
Mon-1/14/19	116,745	100	19.43	81	116,745
Tue-1/15/19	144,188	100	24.00	100	144,188
Wed-1/16/19	144,223	100	24.00	100	144,223
Thu-1/17/19	144,279	100	24.00	100	144,279
Fri-1/18/19	144,146	100	24.00	100	144,146
Sat-1/19/19	144,219	100	24.00	100	144,219
Sun-1/20/19	144,232	100	24.00	100	144,232
Mon-1/21/19	144,228	100	24.00	100	144,228
Tue-1/22/19	130,226	100	21.68	90	130,226
Wed-1/23/19	144,256	100	24.00	100	144,256
Thu-1/24/19	144,223	100	24.00	100	144,223
Fri-1/25/19	144,196	100	24.00	100	144,196
Sat-1/26/19	144,150	100	24.00	100	144,150
Sun-1/27/19	133,679	100	22.25	93	133,679
Mon-1/28/19	144,256	100	24.00	100	144,256
Tue-1/29/19	144,165	100	24.00	100	144,165
Wed-1/30/19	144,182	100	24.00	100	144,182
Thu-1/31/19	144,189	100	24.00	100	144,189
TOTALS	4,356,819	100	725.18	98	4,356,819

TOTAL VOLUME EXTRACTED :	4,356,819 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	97.60 GPM

01/13/19 - 01/14/19 - LB-4 was shut down due to communication maintenance.
 01/22/19 - LB-4 was shut down briefly for maintenance.
 01/27/19 - LB-4 was shut down briefly to adjust the Pond level.

TABLE #3

CORE AREA EXTRACTION DATA

Month of: **Jan-19**

Core Area Well Extraction																Daily	Daily
Date	TW-1			TW-2 (Dolph)			TW-3			TW-10			TW-20			Flow	Total
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	GPM	Gallons
Tue-1/1/19	-	-	-	19,009	13	24.00	-	-	-	-	-	-	43,553	30	24.00	43	62,562
Wed-1/2/19	-	-	-	18,756	13	24.00	-	-	-	-	-	-	43,564	30	24.00	43	62,320
Thu-1/3/19	-	-	-	19,029	13	24.00	-	-	-	-	-	-	43,498	30	24.00	43	62,527
Fri-1/4/19	-	-	-	19,326	13	24.00	-	-	-	-	-	-	43,113	30	24.00	43	62,439
Sat-1/5/19	-	-	-	19,468	14	24.00	-	-	-	-	-	-	43,477	30	24.00	44	62,945
Sun-1/6/19	-	-	-	19,567	14	24.00	-	-	-	-	-	-	43,441	30	24.00	44	63,008
Mon-1/7/19	-	-	-	19,664	14	24.00	-	-	-	552	32	0.28	43,378	30	24.00	44	63,594
Tue-1/8/19	-	-	-	19,703	14	24.00	-	-	-	-	-	-	43,543	30	24.00	44	63,246
Wed-1/9/19	-	-	-	17,628	12	24.00	-	-	-	-	-	-	43,599	30	24.00	43	61,227
Thu-1/10/19	-	-	-	16,822	12	24.00	-	-	-	-	-	-	43,008	30	24.00	42	59,830
Fri-1/11/19	-	-	-	17,085	12	24.00	-	-	-	-	-	-	43,299	30	24.00	42	60,384
Sat-1/12/19	-	-	-	16,361	11	24.00	-	-	-	-	-	-	29,497	30	16.32	32	45,858
Sun-1/13/19	-	-	-	17,134	12	24.00	-	-	-	-	-	-	43,197	30	24.00	42	60,331
Mon-1/14/19	-	-	-	16,438	11	24.00	-	-	-	5,574	38	2.42	42,992	30	24.00	45	65,004
Tue-1/15/19	-	-	-	17,823	12	24.00	-	-	-	-	-	-	43,321	30	24.00	42	61,144
Wed-1/16/19	-	-	-	17,764	12	24.00	-	-	-	-	-	-	43,247	30	24.00	42	61,011
Thu-1/17/19	-	-	-	18,497	13	24.00	-	-	-	-	-	-	43,649	30	24.00	43	62,146
Fri-1/18/19	676	36	0.32	19,520	14	24.00	1,278	107	0.20	-	-	-	43,212	30	24.00	45	64,686
Sat-1/19/19	-	-	-	19,760	14	24.00	-	-	-	-	-	-	42,998	30	24.00	44	62,758
Sun-1/20/19	-	-	-	19,733	14	24.00	-	-	-	-	-	-	43,193	30	24.00	44	62,926
Mon-1/21/19	-	-	-	19,912	14	24.00	-	-	-	-	-	-	43,026	30	24.00	44	62,938
Tue-1/22/19	-	-	-	20,177	14	24.00	-	-	-	-	-	-	43,106	30	24.00	44	63,283
Wed-1/23/19	-	-	-	20,268	14	24.00	-	-	-	-	-	-	43,302	30	24.00	44	63,570
Thu-1/24/19	-	-	-	19,255	13	24.00	-	-	-	-	-	-	43,276	30	24.00	43	62,531
Fri-1/25/19	-	-	-	19,084	13	24.00	-	-	-	-	-	-	43,620	30	24.00	44	62,704
Sat-1/26/19	-	-	-	19,150	13	24.00	-	-	-	-	-	-	43,653	30	24.00	44	62,803
Sun-1/27/19	-	-	-	19,261	13	24.00	-	-	-	-	-	-	43,675	30	24.00	44	62,936
Mon-1/28/19	-	-	-	19,282	13	24.00	-	-	-	-	-	-	43,004	30	24.00	43	62,286
Tue-1/29/19	-	-	-	19,369	13	24.00	-	-	-	-	-	-	43,470	30	24.00	44	62,839
Wed-1/30/19	-	-	-	19,355	13	24.00	-	-	-	-	-	-	43,422	30	24.00	44	62,777
Thu-1/31/19	-	-	-	19,384	13	24.00	-	-	-	-	-	-	43,186	30	24.00	43	62,570
TOTALS	676	36	0.32	583,584	13	744.00	1,278	107	0.20	6,126	35	2.70	1,329,519	30	736.32	43	1,921,183

TOTAL VOLUME EXTRACTED :	1,921,183 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	43.04 GPM

01/12/19 - TW-20 was shut down to adjust the Pond level.

MARSHY AREA EXTRACTION DATA

Month of: Jan-19

Marshy Well Extraction				Daily	Daily
Date	PW-1			Flow	Total
	Gallons	GPM	Run Hrs.	GPM	Gallons
Tue-1/1/19	2,342	2	24.00	2	2,342
Wed-1/2/19	2,389	2	24.00	2	2,389
Thu-1/3/19	2,339	2	24.00	2	2,339
Fri-1/4/19	2,314	2	24.00	2	2,314
Sat-1/5/19	2,310	2	24.00	2	2,310
Sun-1/6/19	2,324	2	24.00	2	2,324
Mon-1/7/19	2,292	2	24.00	2	2,292
Tue-1/8/19	2,262	2	24.00	2	2,262
Wed-1/9/19	2,264	2	24.00	2	2,264
Thu-1/10/19	2,252	2	24.00	2	2,252
Fri-1/11/19	2,233	2	24.00	2	2,233
Sat-1/12/19	1,598	2	16.38	1	1,598
Sun-1/13/19	2,357	2	24.00	2	2,357
Mon-1/14/19	2,338	2	24.00	2	2,338
Tue-1/15/19	2,337	2	24.00	2	2,337
Wed-1/16/19	2,352	2	24.00	2	2,352
Thu-1/17/19	2,321	2	24.00	2	2,321
Fri-1/18/19	2,296	2	24.00	2	2,296
Sat-1/19/19	2,261	2	24.00	2	2,261
Sun-1/20/19	2,234	2	24.00	2	2,234
Mon-1/21/19	2,207	2	24.00	2	2,207
Tue-1/22/19	2,166	2	24.00	2	2,166
Wed-1/23/19	2,124	1	24.00	1	2,124
Thu-1/24/19	2,143	1	24.00	1	2,143
Fri-1/25/19	2,162	2	24.00	2	2,162
Sat-1/26/19	2,144	1	24.00	1	2,144
Sun-1/27/19	2,132	1	24.00	1	2,132
Mon-1/28/19	2,109	1	24.00	1	2,109
Tue-1/29/19	2,120	1	24.00	1	2,120
Wed-1/30/19	2,138	1	24.00	1	2,138
Thu-1/31/19	2,140	1	24.00	1	2,140
TOTALS	69,000	2	736.38	2	69,000

TOTAL VOLUME EXTRACTED :	69,000 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	1.55 GPM

01/12/19 - PW-1 was shut down due to low flow.

SOUTHWEST AREA EXTRACTION DATA

Month of: Jan-19

SouthWest Well Extraction				Daily	Daily
Date	ACTIVE WELLS			Flow	Total
	Gallons	GPM	Run Hrs.	GPM	Gallons
Tue-1/1/19	6,003		-	4	6,003
Wed-1/2/19	6,060		-	4	6,060
Thu-1/3/19	6,034		-	4	6,034
Fri-1/4/19	5,955		-	4	5,955
Sat-1/5/19	6,032		-	4	6,032
Sun-1/6/19	6,119		-	4	6,119
Mon-1/7/19	6,175		-	4	6,175
Tue-1/8/19	6,189		-	4	6,189
Wed-1/9/19	6,206		-	4	6,206
Thu-1/10/19	6,232		-	4	6,232
Fri-1/11/19	6,226		-	4	6,226
Sat-1/12/19	1,565		-	<2	1,565
Sun-1/13/19	60		-	<2	60
Mon-1/14/19	28,891	48	9.97	20	28,891
Tue-1/15/19	41,620		-	29	41,620
Wed-1/16/19	41,874	34	20.27	29	41,874
Thu-1/17/19	41,984	29	24.00	29	41,984
Fri-1/18/19	42,032	29	24.00	29	42,032
Sat-1/19/19	42,077	29	24.00	29	42,077
Sun-1/20/19	42,035	29	24.00	29	42,035
Mon-1/21/19	41,841	29	24.00	29	41,841
Tue-1/22/19	41,932	29	24.00	29	41,932
Wed-1/23/19	41,907	29	24.00	29	41,907
Thu-1/24/19	37,187	29	21.12	26	37,187
Fri-1/25/19	42,258	29	24.00	29	42,258
Sat-1/26/19	42,110	29	24.00	29	42,110
Sun-1/27/19	42,018	29	24.00	29	42,018
Mon-1/28/19	41,973	29	24.00	29	41,973
Tue-1/29/19	41,891	29	24.00	29	41,891
Wed-1/30/19	41,861	29	24.00	29	41,861
Thu-1/31/19	41,893	29	24.00	29	41,893
TOTALS	806,240	31	387.35	19	806,240

TOTAL VOLUME EXTRACTED :	806,240 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	18.06 GPM

Note: ACTIVE WELLS = TW-28, TW-22

TW-8 was shut down for replacement (TW-28).

01/14/19 - TW-28 extraction began

01/16/19 - SW extraction was shut down briefly for maintenance.

01/24/19 - SW extraction was shut down briefly to adjust the Pond level.

UNIT "E" EXTRACTION DATA

Month of: Jan-19

Date	TW-17			TW-18			TW-19			TW-23			Daily	Daily
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Tue-1/1/19	-		-	240,935	167	24.00	44,239	31	24.00	99,396	69	24.00	267	384,570
Wed-1/2/19	-		-	241,003	167	24.00	44,250	31	24.00	99,418	69	24.00	267	384,671
Thu-1/3/19	-		-	240,912	167	24.00	44,271	31	24.00	99,467	69	24.00	267	384,650
Fri-1/4/19	-		-	240,972	167	24.00	44,267	31	24.00	99,591	69	24.00	267	384,830
Sat-1/5/19	-		-	240,997	167	24.00	44,263	31	24.00	99,470	69	24.00	267	384,730
Sun-1/6/19	-		-	240,989	167	24.00	42,814	31	23.20	96,211	69	23.20	264	380,014
Mon-1/7/19	-		-	240,984	167	24.00	43,918	31	23.50	97,177	69	23.50	265	382,079
Tue-1/8/19	-		-	240,988	167	24.00	44,659	32	23.50	97,402	69	23.50	266	383,049
Wed-1/9/19	-		-	241,027	167	24.00	44,269	31	23.60	97,644	69	23.60	266	382,940
Thu-1/10/19	-		-	241,027	167	24.00	44,608	31	24.00	99,331	69	24.00	267	384,966
Fri-1/11/19	-		-	241,020	167	24.00	43,786	31	23.50	97,240	69	23.50	265	382,046
Sat-1/12/19	-		-	164,892	167	16.43	45,062	31	24.00	99,465	69	24.00	215	309,419
Sun-1/13/19	-		-	158,099	167	15.75	24,685	31	13.20	54,498	69	13.20	165	237,282
Mon-1/14/19	-		-	216,223	167	21.53	30,643	31	16.70	90,038	69	21.70	234	336,904
Tue-1/15/19	-		-	241,005	167	24.00	44,314	31	24.00	99,452	69	24.00	267	384,771
Wed-1/16/19	5,319	109	0.82	240,987	167	24.00	44,232	31	24.00	99,396	69	24.00	271	389,934
Thu-1/17/19	-		-	241,025	167	24.00	44,257	31	24.00	99,447	69	24.00	267	384,729
Fri-1/18/19	-		-	224,913	156	24.00	44,256	31	24.00	99,385	69	24.00	256	368,554
Sat-1/19/19	-		-	219,236	152	24.00	44,265	31	24.00	99,359	69	24.00	252	362,860
Sun-1/20/19	-		-	219,263	152	24.00	44,281	31	24.00	99,520	69	24.00	252	363,064
Mon-1/21/19	-		-	219,313	152	24.00	44,301	31	24.00	99,410	69	24.00	252	363,024
Tue-1/22/19	-		-	219,232	152	24.00	40,026	31	21.70	89,886	69	21.70	242	349,144
Wed-1/23/19	-		-	219,181	152	24.00	44,832	31	24.00	99,536	69	24.00	252	363,549
Thu-1/24/19	-		-	192,823	152	21.12	44,759	31	24.00	99,462	69	24.00	234	337,044
Fri-1/25/19	-		-	219,186	152	24.00	44,779	31	24.00	99,518	69	24.00	252	363,483
Sat-1/26/19	-		-	219,247	152	24.00	44,803	31	24.00	99,524	69	24.00	252	363,574
Sun-1/27/19	-		-	219,237	152	24.00	41,519	31	22.20	92,190	69	22.20	245	352,946
Mon-1/28/19	-		-	219,193	152	24.00	44,856	31	24.00	99,483	69	24.00	252	363,532
Tue-1/29/19	-		-	219,247	152	24.00	44,849	31	24.00	99,389	69	24.00	252	363,485
Wed-1/30/19	-		-	219,348	152	24.00	44,874	31	24.00	99,550	69	24.00	253	363,772
Thu-1/31/19	-		-	219,365	152	24.00	44,923	31	24.00	99,464	69	24.00	253	363,752
TOTALS	5,319	109	0.82	6,961,869	161	722.83	1,335,860	31	719.10	3,000,319	69	724.10	253	11,303,367

TOTAL VOLUME EXTRACTED :	11,303,367 GALLONS
DAYS IN MONTH :	31 DAYS
MONTHLY AVERAGE FLOW RATE :	253.21 GPM

01/12/19 - 01/14/19 - TW-18 was shut down for communications maintenance.
 01/13/19 - 01/14/19 - TW-19 and TW-23 were shut down for communication maintenance.
 01/22/19 - TW-19 and TW-23 were shut down for maintenance.
 01/24/19 - TW-18 was shut down briefly to adjust the Pond level.
 01/27/19 - TW-19 and TW-23 were shut down briefly to adjust the Pond level.

TABLE #7

Little Lake Area System

MW-53i	
Date	1,4-Dioxane ug/L
10/02/18	46
11/07/18	42
12/03/18	77
01/14/19	26

A2 Cleaning Supply	
Date	1,4-Dioxane ug/L
10/02/18	83
11/12/18	66
12/06/18	88
01/29/19	73



TABLE #8

INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
DOLPH-01-07-19-09:55-1	01/07/19	140
TW-10-01-14-19-09:54-1	01/14/19	350
TW-20-01-07-19-09:45-1	01/07/19	1100
LB-4-01-07-19-10:13-1	01/07/19	500
TW-21-01-07-19-10:06-1	01/07/19	240
TW-18-01-07-19-09:52-1	01/07/19	260
TW-19-01-07-19-10:48-1	01/07/19	560
TW-23-01-07-19-10:23-1	01/07/19	540
PW-1-01-07-19-09:57-1	01/07/19	1000
TW-22-01-07-19-09:50-1	01/07/19	510
TW-22-01-14-19-09:40-1	01/14/19	460
TW-28-01-14-19-09:45-1	01/14/19	560

RED POND DATA

Month of: Jan-19

Date	Time	Notes	Red Pond				
			Pond	Level	Aeration	Influent	Influent
			Visual Chk	Feet	Hours	Hours	GPM
Tue-1/1/19	3:05:00		Y	4.4	-	24.00	481
Wed-1/2/19	3:00		Y	4.5	-	24.00	481
Thu-1/3/19	3:00		Y	4.4	-	24.00	481
Fri-1/4/19	3:00		Y	4.3	-	24.00	481
Sat-1/5/19	3:00	(1)		4.9	-	24.00	482
Sun-1/6/19	3:00	(1)		4.8	-	24.00	479
Mon-1/7/19	3:00:00		Y	4.6	-	24.00	477
Tue-1/8/19	3:00		Y	4.5	-	24.00	480
Wed-1/9/19	3:00		Y	4.4	-	24.00	478
Thu-1/10/19	3:00		Y	4.3	-	24.00	480
Fri-1/11/19	3:00		Y	4.1	-	24.00	476
Sat-1/12/19	3:00	(1)		4.0	-	24.00	414
Sun-1/13/19	3:00	(1)		4.1	-	24.00	317
Mon-1/14/19	3:00		Y	-	-	24.00	440
Tue-1/15/19	3:00		Y	4.2	-	24.00	505
Wed-1/16/19	3:00		Y	4.5	-	24.00	509
Thu-1/17/19	3:00		Y	4.8	-	24.00	506
Fri-1/18/19	3:00		Y	5.1	-	24.00	497
Sat-1/19/19	3:00	(1)		5.2	-	24.00	459
Sun-1/20/19	3:00	(1)		5.2	-	24.00	492
Mon-1/21/19	3:00		Y	5.2	-	24.00	491
Tue-1/22/19	3:00		Y	5.4	-	24.00	472
Wed-1/23/19	3:00		Y	5.9	-	24.00	492
Thu-1/24/19	3:00		Y	6.0	-	24.00	462
Fri-1/25/19	3:00		Y	6.1	-	24.00	492
Sat-1/26/19	3:00	(1)		6.1	-	24.00	492
Sun-1/27/19	3:00	(1)		6.4	-	24.00	477
Mon-1/28/19	3:00		Y	6.4	-	24.00	491
Tue-1/29/19	3:00		Y	6.5	-	24.00	492
Wed-1/30/19	3:00		Y	6.5	-	24.00	492
Thu-1/31/19	3:00		Y	6.8	-	24.00	492
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.

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-01-07-19-08:01-1	1/7/2019	400
Red Pond-01-14-19-09:34-1	1/14/2019	370
Red Pond-01-21-19-08:31-1	1/21/2019	420
Red Pond-01-28-19-07:21-1	1/28/2019	390

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

OZONE OPERATION REPORT

Month of: Jan-19

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
Tue-1/1/19	3:07:00		241	23.87	0	0.00	240	23.12	0	0.00
Wed-1/2/19	3:00 AM		239	24.00	0	0.00	239	24.00	0	0.00
Thu-1/3/19	3:00 AM		240	24.00	0	0.00	240	23.83	0	0.00
Fri-1/4/19	3:00 AM		240	22.07	0	0.00	240	21.80	0	0.00
Sat-1/5/19	3:00 AM	(1)	239	24.00	0	0.00	240	24.00	0	0.00
Sun-1/6/19	3:00 AM	(1)	240	24.00	0	0.00	241	24.00	0	0.00
Mon-1/7/19	3:00:00		240	24.00	0	0.00	240	24.00	0	0.00
Tue-1/8/19	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Wed-1/9/19	3:00 AM		241	24.00	0	0.00	239	24.00	0	0.00
Thu-1/10/19	3:00 AM		240	24.00	0	0.00	241	24.00	0	0.00
Fri-1/11/19	3:00 AM		240	24.00	0	0.00	239	24.00	0	0.00
Sat-1/12/19	3:00 AM	(1)	240	24.00	0	0.00	241	15.72	0	0.00
Sun-1/13/19	3:00 AM	(1)	240	24.00	0	0.00	241	15.78	0	0.00
Mon-1/14/19	3:00 AM		0	18.58	0	0.00	0	15.93	0	0.00
Tue-1/15/19	3:00 AM		239	23.78	0	0.00	240	23.90	0	0.00
Wed-1/16/19	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Thu-1/17/19	3:00 AM		240	23.85	0	0.00	240	23.70	0	0.00
Fri-1/18/19	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-1/19/19	3:00 AM	(1)	239	24.00	0	0.00	241	24.00	0	0.00
Sun-1/20/19	3:00 AM	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Mon-1/21/19	3:00 AM		239	24.00	0	0.00	240	23.28	0	0.00
Tue-1/22/19	3:00 AM		240	21.52	0	0.00	239	21.47	0	0.00
Wed-1/23/19	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Thu-1/24/19	3:00 AM		240	20.73	0	0.00	240	23.88	0	0.00
Fri-1/25/19	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-1/26/19	3:00 AM	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Sun-1/27/19	3:00 AM	(1)	240	22.92	0	0.00	241	21.90	0	0.00
Mon-1/28/19	3:00 AM		240	24.00	0	0.00	239	24.00	0	0.00
Tue-1/29/19	3:00 AM		240	24.00	0	0.00	239	23.88	0	0.00
Wed-1/30/19	3:00 AM		240	23.80	0	0.00	240	22.35	0	0.00
Thu-1/31/19	3:00 AM		240	24.00	0	0.00	240	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.

01/04/19, 01/22/19, & 01/27/19 - Treatment was shut down briefly for maintenance.

01/12/19 - 01/14/19 - System 2A was shut down for communication maintenance.

01/14/19 & 1/24/19 - System 1A was shut down briefly for maintenance.

01/30/19 - System 2A was shut down briefly for maintenance.

TABLE #12

GREEN POND / DISCHARGE DATA

Month of: **Jan-19**

Date	Time	Notes	Green Pond																	
			Pond		Level	Aeration	Influent	Influent	Pond Discharge		Bypass Discharge			Recirc Thru UV to Pond			Recirc Thru UV to Disch			
			Visual Chk	Feet	Hours	Hours	GPM	GPM	Gallons	GPM	Gallons	Hours	GPM	Gallons	Hours	GPM	Gallons	Hours		
Tue-1/1/19	3:05:00		Y	-	-					482	693,486	24.00	-	-	-	-	-	-		
Wed-1/2/19	3:00 AM		Y	-	-					497	715,633	24.00	-	-	-	-	-	-		
Thu-1/3/19	3:00 AM		Y	-	-					494	711,194	24.00	-	-	-	-	-	-		
Fri-1/4/19	3:00 AM		Y	-	-					493	648,493	21.92	-	-	-	-	-	-		
Sat-1/5/19	3:00 AM	(1)		-	-					497	715,372	24.00	-	-	-	-	-	-		
Sun-1/6/19	3:00 AM	(1)		-	-					497	715,320	24.00	-	-	-	-	-	-		
Mon-1/7/19	3:00:00		Y	-	-					497	715,357	24.00	-	-	-	-	-	-		
Tue-1/8/19	3:00 AM		Y	-	-					497	715,699	24.00	-	-	-	-	-	-		
Wed-1/9/19	3:00 AM		Y	-	-					497	715,244	24.00	-	-	-	-	-	-		
Thu-1/10/19	3:00 AM		Y	-	-					497	715,120	24.00	-	-	-	-	-	-		
Fri-1/11/19	3:00 AM		Y	-	-					497	715,153	24.00	-	-	-	-	-	-		
Sat-1/12/19	3:00 AM	(1)		-	-					409	589,660	24.00	-	-	-	-	-	-		
Sun-1/13/19	3:00 AM	(1)		-	-					412	592,594	24.00	-	-	-	-	-	-		
Mon-1/14/19	3:00 AM		Y	-	-					462	510,465	18.42	-	-	-	-	-	-		
Tue-1/15/19	3:00 AM		Y	-	-					489	704,229	24.00	-	-	-	-	-	-		
Wed-1/16/19	3:00 AM		Y	-	-					497	715,385	24.00	-	-	-	-	-	-		
Thu-1/17/19	3:00 AM		Y	-	-					495	706,349	23.77	-	-	-	-	-	-		
Fri-1/18/19	3:00 AM		Y	-	-					497	715,313	24.00	-	-	-	-	-	-		
Sat-1/19/19	3:00 AM	(1)		-	-					497	715,119	24.00	-	-	-	-	-	-		
Sun-1/20/19	3:00 AM	(1)		-	-					497	714,961	24.00	-	-	-	-	-	-		
Mon-1/21/19	3:00 AM		Y	-	-					486	699,938	24.00	-	-	-	-	-	-		
Tue-1/22/19	3:00 AM		Y	-	-					495	636,125	21.42	-	-	-	-	-	-		
Wed-1/23/19	3:00 AM		Y	-	-					497	716,175	24.00	-	-	-	-	-	-		
Thu-1/24/19	3:00 AM		Y	-	-					455	655,041	24.00	-	-	-	-	-	-		
Fri-1/25/19	3:00 AM		Y	-	-					497	715,272	24.00	-	-	-	-	-	-		
Sat-1/26/19	3:00 AM	(1)		-	-					497	715,393	24.00	-	-	-	-	-	-		
Sun-1/27/19	3:00 AM	(1)		-	-					487	665,121	22.75	-	-	-	-	-	-		
Mon-1/28/19	3:00 AM		Y	-	-					497	715,643	24.00	-	-	-	-	-	-		
Tue-1/29/19	3:00 AM		Y	-	-					496	714,157	24.00	-	-	-	-	-	-		
Wed-1/30/19	3:00 AM		Y	-	-					474	677,574	23.80	-	-	-	-	-	-		
Thu-1/31/19	3:00 AM		Y	-	-					496	714,561	24.00	-	-	-	-	-	-		
TOTALS				-	-		-	-	-		21,365,146	732	-	-	-	-	-	-		

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
1/1/2019	0.693			5.3								6.7	
1/2/2019	0.716			5.4		<50	<0.16	No	Yes	6.7	6.7	6.6	16
1/3/2019	0.711			5.6		<50	<0.16	Yes	No	6.8	6.8	5.8	20
1/4/2019	0.648					<50	<0.16	No	Yes	6.8	6.8		37
1/5/2019	0.715												
1/6/2019	0.715	210	1.208	5.7								7.1	
1/7/2019	0.715			5.8	0.400	<50	<0.16	No	Yes	6.9	6.9	7.3	45
1/8/2019	0.716			5.3		<50	<0.16	No	No	6.7	6.7	7	35
1/9/2019	0.715			5.6		<50	<0.16	Yes	Yes	6.7	6.7	6.7	46
1/10/2019	0.715			6		<50	<0.16	No	No	6.6	6.6	5.3	44
1/11/2019	0.715					<50	<0.16	No	No	6.7	6.7		80
1/12/2019	0.590												
1/13/2019	0.593			6.2								8.2	
1/14/2019	0.510			5.7	0.370	<50	<0.16	No	Yes	6.7	6.7	6.2	76
1/15/2019	0.704			6.1		<50	<0.16	No	No	6.7	6.7	6.6	70
1/16/2019	0.715			6		<50	<0.16	Yes	Yes	6.7	6.7	6.8	55
1/17/2019	0.706			5.7		<50	<0.16	No	No	6.7	6.7	6	40
1/18/2019	0.715					<50	<0.16	No	No	6.7	6.7		50
1/19/2019	0.715												
1/20/2019	0.715			5.6								7.9	
1/21/2019	0.700			5.6	0.420	<50	<0.16	No	Yes	6.6	6.6	7.6	65
1/22/2019	0.636			5.6		<50	<0.16	No	No	6.7	6.7	6.8	70
1/23/2019	0.716			5.4		<50	<0.16	Yes	Yes	6.6	6.6	7.6	50
1/24/2019	0.655			5.6		<50	<0.16	No	No	6.6	6.6	7.9	50
1/25/2019	0.715					<50	<0.16	No	No	6.9	6.9		60
1/26/2019	0.715												
1/27/2019	0.665			6								5.3	
1/28/2019	0.716			5.8	0.390	<50	<0.16	No	Yes	6.6	6.6	6.4	60
1/29/2019	0.714			6.1		<50	<0.16	Yes	No	6.6	6.6	6.3	70
1/30/2019	0.678			6.4		<50	<0.16	No	Yes	6.7	6.7	7.6	82
1/31/2019	0.715			5.9		<50	<0.16	No	No	6.7	6.7	6.4	67
Discharged	21.365												
Monthly Avg				5.8								6.8	