



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

May 11, 2018

RECEIVED

MAY 15 2018

DEQ . RRD
JACKSON DISTRICT OFFICE

Jeff Surfus
Surface Water Quality Division
Michigan Department of Environmental Quality
301 East Louis Glick Highway
Jackson, Michigan 49201

**Re: Monitoring Report # 252
April 1 – April 30, 2018**

Dear Mr. Surfus:

Pursuant to the National Pollutant Discharge Elimination System (NPDES) Permit No. MI0048453, please find the enclosed Monitoring Report for the period of April 1 through April 30, 2018.

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

Sincerely,

A handwritten signature in black ink, appearing to read "L. Gelb", with a long horizontal stroke extending to the right.

Lawrence J. Gelb
Sr. Director Global EHS

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



RECEIVED

MAY 15 2018

DEQ . RRD
JACKSON DISTRICT OFFICE

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: **Apr-18**

Date	TW-9			TW-21			Daily Flow	Daily Total
	TW-9 Gallons	GPM	Run Hrs.	TW-21 Gallons	GPM	Run Hrs.	GPM	Gallons
	Sun-4/1/18	-	-	-	79,172	55	24.00	55
Mon-4/2/18	-	-	-	79,182	55	24.00	55	79,182
Tue-4/3/18	13,833	47	4.87	79,156	55	24.00	65	92,989
Wed-4/4/18	32,721	48	11.33	79,180	55	24.00	78	111,901
Thu-4/5/18	-	-	-	82,254	57	24.00	57	82,254
Fri-4/6/18	-	-	-	86,344	60	24.00	60	86,344
Sat-4/7/18	-	-	-	86,353	60	24.00	60	86,353
Sun-4/8/18	-	-	-	86,367	60	24.00	60	86,367
Mon-4/9/18	-	-	-	86,361	60	24.00	60	86,361
Tue-4/10/18	-	-	-	86,416	60	24.00	60	86,416
Wed-4/11/18	1,528	45	0.57	86,433	60	24.00	61	87,961
Thu-4/12/18	-	-	-	86,434	60	24.00	60	86,434
Fri-4/13/18	-	-	-	83,379	58	24.00	58	83,379
Sat-4/14/18	-	-	-	79,149	55	24.00	55	79,149
Sun-4/15/18	-	-	-	76,277	53	24.00	53	76,277
Mon-4/16/18	-	-	-	71,940	50	24.00	50	71,940
Tue-4/17/18	-	-	-	15,882	50	5.32	11	15,882
Wed-4/18/18	-	-	-	34,978	50	11.67	24	34,978
Thu-4/19/18	-	-	-	75,315	52	24.00	52	75,315
Fri-4/20/18	-	-	-	83,189	58	24.00	58	83,189
Sat-4/21/18	-	-	-	86,414	60	24.00	60	86,414
Sun-4/22/18	-	-	-	86,491	60	24.00	60	86,491
Mon-4/23/18	-	-	-	86,519	60	24.00	60	86,519
Tue-4/24/18	-	-	-	86,491	60	24.00	60	86,491
Wed-4/25/18	-	-	-	86,478	60	24.00	60	86,478
Thu-4/26/18	-	-	-	86,491	60	24.00	60	86,491
Fri-4/27/18	-	-	-	86,474	60	24.00	60	86,474
Sat-4/28/18	-	-	-	86,391	60	24.00	60	86,391
Sun-4/29/18	-	-	-	86,390	60	24.00	60	86,390
Mon-4/30/18	-	-	-	86,464	60	24.00	60	86,464
TOTALS	48,082	47	16.77	2,388,364	57	688.99	56	2,436,446

TOTAL VOLUME EXTRACTED :	2,436,446 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	56.40 GPM

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.

UNIT D2 DOWNGRADE EXTRACTION DATA

Month of: Apr-18

Date	LB-4			Daily	Daily
	Gallons	GPM	Run Hrs.	Flow GPM	Total Gallons
Sun-4/1/18	144,138	100	24.00	100	144,138
Mon-4/2/18	144,208	100	24.00	100	144,208
Tue-4/3/18	139,572	100	23.25	97	139,572
Wed-4/4/18	144,204	100	24.00	100	144,204
Thu-4/5/18	144,174	100	24.00	100	144,174
Fri-4/6/18	144,206	100	24.00	100	144,206
Sat-4/7/18	144,198	100	24.00	100	144,198
Sun-4/8/18	144,186	100	24.00	100	144,186
Mon-4/9/18	144,181	100	24.00	100	144,181
Tue-4/10/18	137,221	100	22.85	95	137,221
Wed-4/11/18	144,205	100	24.00	100	144,205
Thu-4/12/18	141,560	100	23.56	98	141,560
Fri-4/13/18	144,261	100	24.00	100	144,261
Sat-4/14/18	144,148	100	24.00	100	144,148
Sun-4/15/18	144,166	100	24.00	100	144,166
Mon-4/16/18	144,142	100	24.00	100	144,142
Tue-4/17/18	45,496	100	7.58	32	45,496
Wed-4/18/18	56,838	100	9.45	39	56,838
Thu-4/19/18	144,169	100	24.00	100	144,169
Fri-4/20/18	144,246	100	24.00	100	144,246
Sat-4/21/18	144,149	100	24.00	100	144,149
Sun-4/22/18	144,204	100	24.00	100	144,204
Mon-4/23/18	144,201	100	24.00	100	144,201
Tue-4/24/18	136,223	100	22.68	95	136,223
Wed-4/25/18	144,294	100	24.00	100	144,294
Thu-4/26/18	144,286	100	24.00	100	144,286
Fri-4/27/18	144,206	100	24.00	100	144,206
Sat-4/28/18	144,195	100	24.00	100	144,195
Sun-4/29/18	144,177	100	24.00	100	144,177
Mon-4/30/18	144,136	100	24.00	100	144,136
TOTALS	4,117,590	100	685.37	95	4,117,590

TOTAL VOLUME EXTRACTED :	4,117,590 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	96.31 GPM

04/10/18 - LB-4 was shut down briefly due to a DTE Energy power loss in the area.

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.

04/24/18 - LB-4 was shut down briefly for maintenance.

TABLE #3

CORE AREA EXTRACTION DATA

Month of: Apr-18

Core Area Well Extraction															Daily	Daily				
Date	TW-1			TW-2 (Dolph)			TW-3			TW-10			TW-14			TW-20			Flow GPM	Total Gallons
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.		
Sun-4/1/18	-	-	-	37,192	26	23.80	-	-	-	-	-	-	-	-	43,135	30	24.00	56	80,327	
Mon-4/2/18	-	-	-	34,544	24	24.00	-	-	-	-	-	-	-	-	42,977	30	24.00	54	77,521	
Tue-4/3/18	-	-	-	36,807	26	24.00	-	-	-	-	-	-	-	-	43,382	30	24.00	56	80,189	
Wed-4/4/18	-	-	-	36,779	26	24.00	-	-	-	22	11	0.03	-	-	43,368	30	24.00	56	80,169	
Thu-4/5/18	-	-	-	34,227	24	24.00	-	-	-	-	-	-	-	-	43,369	30	24.00	54	77,596	
Fri-4/6/18	-	-	-	36,521	25	24.00	-	-	-	-	-	-	-	-	43,400	30	24.00	56	79,921	
Sat-4/7/18	-	-	-	31,914	22	24.00	-	-	-	-	-	-	-	-	43,198	30	24.00	52	75,112	
Sun-4/8/18	-	-	-	28,821	20	24.00	-	-	-	-	-	-	-	-	43,238	30	24.00	50	72,059	
Mon-4/9/18	-	-	-	35,247	24	24.00	-	-	-	-	-	-	-	-	43,201	30	24.00	54	78,448	
Tue-4/10/18	-	-	-	35,084	24	24.00	-	-	-	-	-	-	-	-	43,166	30	24.00	54	78,250	
Wed-4/11/18	501	100	0.08	35,622	25	23.60	-	0	0.07	-	-	-	1,625	46	0.58	43,447	30	24.00	56	81,195
Thu-4/12/18	-	-	-	35,887	25	23.58	-	-	-	-	-	-	-	-	43,099	30	24.00	55	78,986	
Fri-4/13/18	-	-	-	35,483	25	23.52	-	-	-	-	-	-	-	-	43,097	30	24.00	55	78,580	
Sat-4/14/18	-	-	-	35,104	25	23.38	-	-	-	-	-	-	-	-	43,285	30	24.00	54	78,389	
Sun-4/15/18	-	-	-	35,275	25	23.33	-	-	-	-	-	-	-	-	43,196	30	24.00	54	78,471	
Mon-4/16/18	-	-	-	35,070	25	23.42	-	-	-	-	-	-	-	-	43,012	30	24.00	54	78,082	
Tue-4/17/18	-	-	-	9,810	25	6.62	-	-	-	-	-	-	-	-	11,536	30	6.43	15	21,346	
Wed-4/18/18	-	-	-	16,205	27	10.08	-	-	-	-	-	-	-	-	18,779	30	10.45	24	34,984	
Thu-4/19/18	-	-	-	30,116	21	23.58	-	-	-	-	0	0.02	-	-	43,255	30	24.00	51	73,371	
Fri-4/20/18	-	-	-	25,473	18	24.00	-	-	-	-	-	-	-	-	43,369	30	24.00	48	68,842	
Sat-4/21/18	-	-	-	28,977	20	24.00	-	-	-	-	-	-	-	-	42,946	30	24.00	50	71,923	
Sun-4/22/18	-	-	-	28,810	20	24.00	-	-	-	-	-	-	-	-	43,117	30	24.00	50	71,927	
Mon-4/23/18	-	-	-	28,829	20	24.00	-	-	-	32	2	0.32	-	-	43,442	30	24.00	50	72,303	
Tue-4/24/18	-	-	-	28,832	20	24.00	-	-	-	-	-	-	-	-	43,427	30	24.00	50	72,259	
Wed-4/25/18	-	-	-	28,831	20	24.00	-	-	-	48	48	0.02	-	-	43,465	30	24.00	50	72,344	
Thu-4/26/18	-	-	-	28,887	20	24.00	-	-	-	-	-	-	-	-	43,173	30	24.00	50	72,060	
Fri-4/27/18	-	-	-	28,935	20	24.00	-	-	-	-	-	-	-	-	43,327	30	24.00	50	72,262	
Sat-4/28/18	-	-	-	28,992	20	24.00	-	-	-	-	-	-	-	-	43,187	30	24.00	50	72,179	
Sun-4/29/18	-	-	-	29,069	20	24.00	-	-	-	-	-	-	-	-	43,158	30	24.00	50	72,227	
Mon-4/30/18	-	-	-	29,148	20	24.00	-	-	-	-	-	-	-	-	43,140	30	24.00	50	72,288	
TOTALS	501	100	0.08	930,491	23	684.92	-	0	0.07	102	15	0.38	1,625	46	0.58	1,240,891	30	688.88	50	2,173,610

TOTAL VOLUME EXTRACTED :	2,173,610 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	50.32 GPM

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.

MARSHY AREA EXTRACTION DATA

Month of: **Apr-18**

Marshy Well Extraction				Daily	Daily
Date	PW-1			Flow	Total
	Gallons	GPM	Run Hrs.	GPM	Gallons
Sun-4/1/18	3,363	2	24.00	2	3,363
Mon-4/2/18	3,368	2	24.00	2	3,368
Tue-4/3/18	3,372	2	24.00	2	3,372
Wed-4/4/18	3,381	2	24.00	2	3,381
Thu-4/5/18	3,388	2	24.00	2	3,388
Fri-4/6/18	3,392	2	24.00	2	3,392
Sat-4/7/18	3,398	2	24.00	2	3,398
Sun-4/8/18	3,376	2	24.00	2	3,376
Mon-4/9/18	3,363	2	24.00	2	3,363
Tue-4/10/18	3,356	2	24.00	2	3,356
Wed-4/11/18	3,416	2	24.00	2	3,416
Thu-4/12/18	3,441	2	24.00	2	3,441
Fri-4/13/18	3,432	2	24.00	2	3,432
Sat-4/14/18	3,445	2	24.00	2	3,445
Sun-4/15/18	3,455	2	24.00	2	3,455
Mon-4/16/18	3,453	2	24.00	2	3,453
Tue-4/17/18	1,064	3	6.45	1	1,064
Wed-4/18/18	1,673	3	10.42	1	1,673
Thu-4/19/18	3,641	3	24.00	3	3,641
Fri-4/20/18	3,595	2	24.00	2	3,595
Sat-4/21/18	3,576	2	24.00	2	3,576
Sun-4/22/18	3,568	2	24.00	2	3,568
Mon-4/23/18	3,579	2	24.00	2	3,579
Tue-4/24/18	3,578	2	24.00	2	3,578
Wed-4/25/18	3,576	2	24.00	2	3,576
Thu-4/26/18	3,567	2	24.00	2	3,567
Fri-4/27/18	3,562	2	24.00	2	3,562
Sat-4/28/18	3,575	2	24.00	2	3,575
Sun-4/29/18	3,575	2	24.00	2	3,575
Mon-4/30/18	3,560	2	24.00	2	3,560
TOTALS	100,088	2	688.87	2	100,088

TOTAL VOLUME EXTRACTED :	100,088 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	2.32 GPM

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.

SOUTHWEST AREA EXTRACTION DATA

Month of: **Apr-18**

South West Well Extraction				Daily	Daily
Date	ACTIVE WELLS			Flow	Total
	Gallons	GPM	Run Hrs.	GPM	Gallons
Sun-4/1/18	20,690	14	24.00	14	20,690
Mon-4/2/18	20,576	14	24.00	14	20,576
Tue-4/3/18	20,593	14	24.00	14	20,593
Wed-4/4/18	20,211	14	24.00	14	20,211
Thu-4/5/18	19,949	14	24.00	14	19,949
Fri-4/6/18	20,125	14	24.00	14	20,125
Sat-4/7/18	19,963	14	24.00	14	19,963
Sun-4/8/18	19,849	14	24.00	14	19,849
Mon-4/9/18	19,637	14	24.00	14	19,637
Tue-4/10/18	19,494	14	24.00	14	19,494
Wed-4/11/18	19,510	14	24.00	14	19,510
Thu-4/12/18	19,455	14	24.00	14	19,455
Fri-4/13/18	19,245	13	24.00	13	19,245
Sat-4/14/18	19,088	13	24.00	13	19,088
Sun-4/15/18	19,094	13	24.00	13	19,094
Mon-4/16/18	19,037	13	24.00	13	19,037
Tue-4/17/18	4,337	11	6.45	3	4,337
Wed-4/18/18	9,448	15	10.40	7	9,448
Thu-4/19/18	19,962	14	24.00	14	19,962
Fri-4/20/18	20,130	14	24.00	14	20,130
Sat-4/21/18	20,201	14	24.00	14	20,201
Sun-4/22/18	20,182	14	24.00	14	20,182
Mon-4/23/18	20,225	14	24.00	14	20,225
Tue-4/24/18	20,272	14	24.00	14	20,272
Wed-4/25/18	20,288	14	24.00	14	20,288
Thu-4/26/18	20,307	14	24.00	14	20,307
Fri-4/27/18	20,322	14	24.00	14	20,322
Sat-4/28/18	20,339	14	24.00	14	20,339
Sun-4/29/18	20,336	14	24.00	14	20,336
Mon-4/30/18	20,355	14	24.00	14	20,355
TOTALS	573,220	14	688.85	13	573,220

TOTAL VOLUME EXTRACTED :	573,220 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	13.27 GPM

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

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.

UNIT "E" EXTRACTION DATA

Month of: **Apr-18**

Date	TW-17			TW-18			TW-19			TW-23			Daily Flow GPM	Daily Total Gallons
	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.	Gallons	GPM	Run Hrs.		
Sun-4/1/18	-	-	-	226,451	157	24.00	43,783	30	24.00	99,404	69	24.00	257	369,638
Mon-4/2/18	-	-	-	226,388	157	23.98	43,811	30	24.00	99,356	69	24.00	257	369,555
Tue-4/3/18	22,038	75	4.88	226,446	157	24.00	30,667	30	16.80	69,687	69	16.80	242	348,838
Wed-4/4/18	51,097	75	11.35	226,517	157	24.00	26,578	31	14.50	59,811	69	14.50	253	364,003
Thu-4/5/18	-	-	-	226,467	157	24.00	43,946	31	24.00	99,318	69	24.00	257	369,731
Fri-4/6/18	-	-	-	226,465	157	24.00	43,981	31	24.00	99,309	69	24.00	257	369,755
Sat-4/7/18	-	-	-	226,409	157	24.00	43,998	31	24.00	99,253	69	24.00	257	369,660
Sun-4/8/18	-	-	-	226,408	157	24.00	44,011	31	24.00	99,293	69	24.00	257	369,712
Mon-4/9/18	-	-	-	229,094	159	24.00	44,016	31	24.00	99,270	69	24.00	259	372,380
Tue-4/10/18	-	-	-	233,634	162	24.00	42,273	31	22.70	94,125	69	22.70	257	370,032
Wed-4/11/18	2,504	74	0.57	233,665	162	24.00	43,524	31	23.40	96,639	69	23.40	261	376,332
Thu-4/12/18	-	-	-	233,780	162	24.00	44,246	31	23.90	99,070	69	23.90	262	377,096
Fri-4/13/18	-	-	-	233,779	162	24.00	45,043	31	24.00	99,300	69	24.00	263	378,122
Sat-4/14/18	-	-	-	233,843	162	24.00	45,040	31	24.00	99,361	69	24.00	263	378,244
Sun-4/15/18	-	-	-	228,797	159	24.00	45,168	31	24.00	99,460	69	24.00	259	373,425
Mon-4/16/18	-	-	-	219,336	152	24.00	45,129	31	24.00	99,439	69	24.00	253	363,904
Tue-4/17/18	-	-	-	59,006	152	6.45	10,050	32	5.30	22,136	70	5.30	63	91,192
Wed-4/18/18	-	-	-	96,186	152	10.53	21,802	31	11.70	48,294	69	11.70	115	166,282
Thu-4/19/18	-	-	-	222,270	154	24.00	45,295	31	24.00	99,250	69	24.00	255	366,815
Fri-4/20/18	-	-	-	229,527	159	24.00	45,526	32	24.00	99,501	69	24.00	260	374,554
Sat-4/21/18	-	-	-	233,670	162	24.00	45,478	32	24.00	99,500	69	24.00	263	378,648
Sun-4/22/18	-	-	-	233,692	162	24.00	44,690	31	24.00	99,454	69	24.00	262	377,836
Mon-4/23/18	-	-	-	233,657	162	24.00	44,665	31	24.00	99,368	69	24.00	262	377,690
Tue-4/24/18	-	-	-	233,684	162	24.00	41,588	31	22.40	92,767	69	22.40	256	368,039
Wed-4/25/18	-	-	-	233,626	162	24.00	44,440	31	24.00	99,386	69	24.00	262	377,452
Thu-4/26/18	-	-	-	233,677	162	24.00	44,416	31	24.00	99,300	69	24.00	262	377,393
Fri-4/27/18	-	-	-	233,677	162	24.00	44,390	31	24.00	99,242	69	24.00	262	377,309
Sat-4/28/18	-	-	-	233,656	162	24.00	44,386	31	24.00	99,304	69	24.00	262	377,346
Sun-4/29/18	-	-	-	232,695	162	24.00	44,371	31	24.00	99,190	69	24.00	261	376,256
Mon-4/30/18	-	-	-	232,624	162	24.00	44,353	31	24.00	99,281	69	24.00	261	376,258
TOTALS	75,639	75	16.80	6,599,126	159	688.97	1,240,664	31	668.70	2,768,068	69	668.70	247	10,683,497

TOTAL VOLUME EXTRACTED :	10,683,497 GALLONS
DAYS IN MONTH :	30 DAYS
MONTHLY AVERAGE FLOW RATE :	247.30 GPM

04/03/18-04/04/18 - TW-19 & TW-23 were shut down for maintenance.
 04/10/18 - TW-19 & TW-23 were shut down briefly due to a DTE Energy power loss in the area.
 04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.
 04/24/18 - TW-19 & TW-23 were shut down briefly for maintenance to communication.

TABLE #7

Little Lake Area System

MW-53i	
Date	1,4-Dioxane ug/L
01/08/18	35
02/06/18	30
03/07/18	32
04/03/18	34

A2 Cleaning Supply	
Date	1,4-Dioxane ug/L
01/09/18	87
02/13/18	69
03/08/18	82
04/04/18	84

TABLE #8

INDIVIDUAL PURGE WELL CONCENTRATIONS

SAMPLE ID	Date Sampled	1,4-DIOXANE (ppb)
DOLPH-04-02-18-10:17-1	04/02/18	100
TW-1-04-11-18-14:28-1	04/11/18	70
TW-14-04-11-18-13:58-1	04/11/18	38
TW-20-04-02-18-13:49-1	04/02/18	900
TW-3-04-11-18-14:22-1	04/11/18	nd
LB-4-04-19-18-14:35-1	04/19/18	520
TW-21-04-02-18-10:12-1	04/02/18	210
TW-9-04-11-18-14:02-1	04/11/18	670
TW-12-04-11-18-14:45-1	04/11/18	21
TW-17-04-11-18-13:54-1	04/11/18	390
TW-18-04-19-18-14:47-1	04/19/18	280
TW-19-04-02-18-11:58-1	04/02/18	740
TW-23-04-02-18-12:00-1	04/02/18	450
PW-1-04-02-18-13:40-1	04/02/18	780
TW-22-04-24-18-14:35-1	04/24/18	420
TW-8-04-02-18-14:13-1	04/02/18	740

RED POND DATA

Month of: **Apr-18**

Date	Time	Notes	Red Pond				
			Pond	Level	Aeration	Influent	Influent
			Visual Chk	Feet	Hours	Hours	GPM
Sun-4/1/18	3:05	(1)		5.0	-	24.00	484
Mon-4/2/18	3:00		Y	4.9	-	24.00	482
Tue-4/3/18	3:00		Y	4.8	-	24.00	476
Wed-4/4/18	3:00		Y	4.8	-	24.00	503
Thu-4/5/18	3:00		Y	4.9	-	24.00	484
Fri-4/6/18	3:00		Y	4.8	-	24.00	489
Sat-4/7/18	3:00	(1)		4.8	-	24.00	485
Sun-4/8/18	3:00	(1)		4.8	-	24.00	483
Mon-4/9/18	3:00		Y	4.7	-	24.00	489
Tue-4/10/18	3:00		Y	4.7	-	24.00	482
Wed-4/11/18	3:00		Y	4.6	-	24.00	495
Thu-4/12/18	3:00		Y	4.7	-	24.00	491
Fri-4/13/18	3:00		Y	5.0	-	24.00	491
Sat-4/14/18	3:00	(1)		5.1	-	24.00	488
Sun-4/15/18	3:00	(1)		5.2	-	24.00	483
Mon-4/16/18	3:00		Y	5.3	-	24.00	473
Tue-4/17/18	3:00		Y	5.1	-	7.58	394
Wed-4/18/18	3:00		Y	5.1	-	11.70	433
Thu-4/19/18	3:00		Y	4.9	-	24.00	474
Fri-4/20/18	3:00		Y	4.8	-	24.00	482
Sat-4/21/18	3:00	(1)		4.7	-	24.00	490
Sun-4/22/18	3:00	(1)		4.7	-	24.00	489
Mon-4/23/18	3:00		Y	4.7	-	24.00	489
Tue-4/24/18	3:00		Y	4.7	-	24.00	477
Wed-4/25/18	3:00		Y	4.9	-	24.00	489
Thu-4/26/18	3:00		Y	4.9	-	24.00	489
Fri-4/27/18	3:00		Y	5.0	-	24.00	489
Sat-4/28/18	3:00	(1)		5.0	-	24.00	489
Sun-4/29/18	3:00	(1)		5.0	-	24.00	488
Mon-4/30/18	3:00		Y	5.0	-	24.00	488
TOTALS			-	-	-	691	

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.

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.



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-04-02-18-09:30-1	4/2/2018	330
Red Pond-04-09-18-07:05-1	4/9/2018	450
Red Pond-04-16-18-10:49-1	4/16/2018	420
Red Pond-04-23-18-08:27-1	4/23/2018	420
Red Pond-04-30-18-08:24-1	4/30/2018	360

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

OZONE OPERATION REPORT

Month of: Apr-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
Sun-4/1/18	3:07 AM	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Mon-4/2/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Tue-4/3/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Wed-4/4/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Thu-4/5/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Fri-4/6/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-4/7/18	3:00 AM	(1)	239	24.00	0	0.00	240	24.00	0	0.00
Sun-4/8/18	3:00 AM	(1)	240	24.00	0	0.00	241	24.00	0	0.00
Mon-4/9/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Tue-4/10/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Wed-4/11/18	3:00 AM		240	23.77	0	0.00	240	23.88	0	0.00
Thu-4/12/18	3:00 AM		240	23.57	0	0.00	240	22.80	0	0.00
Fri-4/13/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-4/14/18	3:00 AM	(1)	240	24.00	0	0.00	241	23.65	0	0.00
Sun-4/15/18	3:00 AM	(1)	240	24.00	0	0.00	240	23.70	0	0.00
Mon-4/16/18	3:00 AM		240	24.00	0	0.00	241	23.90	0	0.00
Tue-4/17/18	3:00 AM		240	5.38	0	0.00	241	5.37	0	0.00
Wed-4/18/18	3:00 AM		0	12.02	0	0.00	0	11.98	0	0.00
Thu-4/19/18	3:00 AM		240	23.88	0	0.00	241	23.25	0	0.00
Fri-4/20/18	3:00 AM		240	24.00	0	0.00	241	24.00	0	0.00
Sat-4/21/18	3:00 AM	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Sun-4/22/18	3:00 AM	(1)	240	24.00	0	0.00	241	24.00	0	0.00
Mon-4/23/18	3:00 AM		239	24.00	0	0.00	241	24.00	0	0.00
Tue-4/24/18	3:00 AM		240	21.72	0	0.00	240	24.00	0	0.00
Wed-4/25/18	3:00 AM		239	24.00	0	0.00	240	24.00	0	0.00
Thu-4/26/18	3:00 AM		240	23.75	0	0.00	241	24.00	0	0.00
Fri-4/27/18	3:00 AM		240	24.00	0	0.00	240	24.00	0	0.00
Sat-4/28/18	3:00 AM	(1)	240	24.00	0	0.00	240	24.00	0	0.00
Sun-4/29/18	3:00 AM	(1)	240	24.00	0	0.00	241	24.00	0	0.00
Mon-4/30/18	3:00 AM		239	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.

04/12/18 - System 2A was shut down briefly for maintenance.

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.

04/24/18 - System 1A was shut down briefly for maintenance.

TABLE #12

GREEN POND / DISCHARGE DATA

Month of: **Apr-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	GPM
Sun-4/1/18	3:05 AM	(1)		-	-				496	714,371	24.00	-	-	-	-	-	-
Mon-4/2/18	3:00 AM		Y	-	-				496	714,503	24.00	-	-	-	-	-	-
Tue-4/3/18	3:00 AM		Y	-	-				496	714,440	24.00	-	-	-	-	-	-
Wed-4/4/18	3:00 AM		Y	-	-				496	714,304	24.00	-	-	-	-	-	-
Thu-4/5/18	3:00 AM		Y	-	-				496	714,547	24.00	-	-	-	-	-	-
Fri-4/6/18	3:00 AM		Y	-	-				496	714,579	24.00	-	-	-	-	-	-
Sat-4/7/18	3:00 AM	(1)		-	-				496	714,475	24.00	-	-	-	-	-	-
Sun-4/8/18	3:00 AM	(1)		-	-				496	714,692	24.00	-	-	-	-	-	-
Mon-4/9/18	3:00 AM		Y	-	-				496	714,667	24.00	-	-	-	-	-	-
Tue-4/10/18	3:00 AM		Y	-	-				496	714,793	24.00	-	-	-	-	-	-
Wed-4/11/18	3:00 AM		Y	-	-				490	705,536	24.00	-	-	-	-	-	-
Thu-4/12/18	3:00 AM		Y	-	-				487	685,901	23.47	-	-	-	-	-	-
Fri-4/13/18	3:00 AM		Y	-	-				497	715,050	24.00	-	-	-	-	-	-
Sat-4/14/18	3:00 AM	(1)		-	-				491	706,924	24.00	-	-	-	-	-	-
Sun-4/15/18	3:00 AM	(1)		-	-				492	708,919	24.00	-	-	-	-	-	-
Mon-4/16/18	3:00 AM		Y	-	-				494	711,658	24.00	-	-	-	-	-	-
Tue-4/17/18	3:00 AM		Y	-	-				492	158,079	5.35	-	-	-	-	-	-
Wed-4/18/18	3:00 AM		Y	-	-				489	351,045	11.97	-	-	-	-	-	-
Thu-4/19/18	3:00 AM		Y	-	-				490	699,137	23.80	-	-	-	-	-	-
Fri-4/20/18	3:00 AM		Y	-	-				496	714,545	24.00	-	-	-	-	-	-
Sat-4/21/18	3:00 AM	(1)		-	-				496	714,584	24.00	-	-	-	-	-	-
Sun-4/22/18	3:00 AM	(1)		-	-				496	714,717	24.00	-	-	-	-	-	-
Mon-4/23/18	3:00 AM		Y	-	-				497	715,005	24.00	-	-	-	-	-	-
Tue-4/24/18	3:00 AM		Y	-	-				470	677,329	24.00	-	-	-	-	-	-
Wed-4/25/18	3:00 AM		Y	-	-				497	715,113	24.00	-	-	-	-	-	-
Thu-4/26/18	3:00 AM		Y	-	-				494	701,274	23.65	-	-	-	-	-	-
Fri-4/27/18	3:00 AM		Y	-	-				497	715,272	24.00	-	-	-	-	-	-
Sat-4/28/18	3:00 AM	(1)		-	-				496	714,833	24.00	-	-	-	-	-	-
Sun-4/29/18	3:00 AM	(1)		-	-				496	714,851	24.00	-	-	-	-	-	-
Mon-4/30/18	3:00 AM		Y	-	-				497	715,027	24.00	-	-	-	-	-	-
TOTALS										20,400,170	688						

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

PARAMETER NAME	(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)
	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
4/1/2018	0.714			5.2								7.6	
4/2/2018	0.715			5.5	0.330	<50	<0.16	yes	yes	6.8	6.8	8.0	40
4/3/2018	0.714			4.4		<50	<0.16	no	no	6.8	6.8	7.6	
4/4/2018	0.714			5.1		<50	<0.16	no	no	6.8	6.8	7.7	
4/5/2018	0.715			5.9		<50	<0.16	no	yes	6.8	6.8	7.9	50
4/6/2018	0.715	260	1.55			<50	<0.16	no	no	6.8	6.8		
4/7/2018	0.714												
4/8/2018	0.715			6.5								7.6	
4/9/2018	0.715			6.1	0.450	<50	<0.16	yes	yes	6.8	6.8	7.1	45
4/10/2018	0.715			6.2		<50	<0.16	no	no	6.8	6.8	8.5	
4/11/2018	0.706			6.5		<50	<0.16	no	no	6.8	6.8	7.9	
4/12/2018	0.686			5.5		<50	<0.16	no	yes	6.8	6.8	7.2	50
4/13/2018	0.715					<50	<0.16	no	no	6.7	6.7		
4/14/2018	0.707												
4/15/2018	0.709			6.0								8.4	
4/16/2018	0.712			6.7	0.420	<50	<0.16	yes	yes	6.8	6.8	7.8	45
4/17/2018	0.158					<50	<0.16	no	no	6.9	6.9		
4/18/2018	0.351			5.1		<50	<0.16	no	no	6.8	6.8	8.4	
4/19/2018	0.699			5.6		<50	<0.16	no	yes	6.8	6.8	8.7	40
4/20/2018	0.715					<50	<0.16	no	no	6.8	6.8		
4/21/2018	0.715												
4/22/2018	0.715			5.5								7.6	
4/23/2018	0.715			5.9	0.420	<50	<0.16	yes	yes	6.8	6.8	7.9	45
4/24/2018	0.677			6.0		<50	<0.16	no	no	6.8	6.8	9.2	
4/25/2018	0.715			6.0		<50	<0.16	no	no	6.8	6.8	9.4	
4/26/2018	0.701			5.5		<50	<0.16	no	yes	6.7	6.7	8.9	60
4/27/2018	0.715					<50	<0.16	no	no	6.7	6.7		
4/28/2018	0.715												
4/29/2018	0.715			6.0								8.2	
4/30/2018	0.715			5.0	0.360	<50	<0.16	yes	yes	6.7	6.7	8.4	36
Discharged (mg)	20.400												
Monthly Avg				5.7								8.1	

04/17/18-04/18/18 - Extraction and treatment were shut down for several hours to install new chemical tanks.