Richard Healey (adpce.ad)

From: Charles McDowell <CMcDowell@lsbindustries.com>
Sent: Friday, January 5, 2024 12:18 PM
To: Richard Healey (adpce.ad); Water-Enforcement-Report
Cc: Keith Long; Howard Stevens
Subject: EDCC, NPDES Permit AR0000752
Attachments: EDC Weekly Update 2024-1-5.docx; 2023-24 Waste Water Data.xlsx

Mr Healey,
Attached is the weekly update with the effluent data.

If you have any questions, feel free to contact me.

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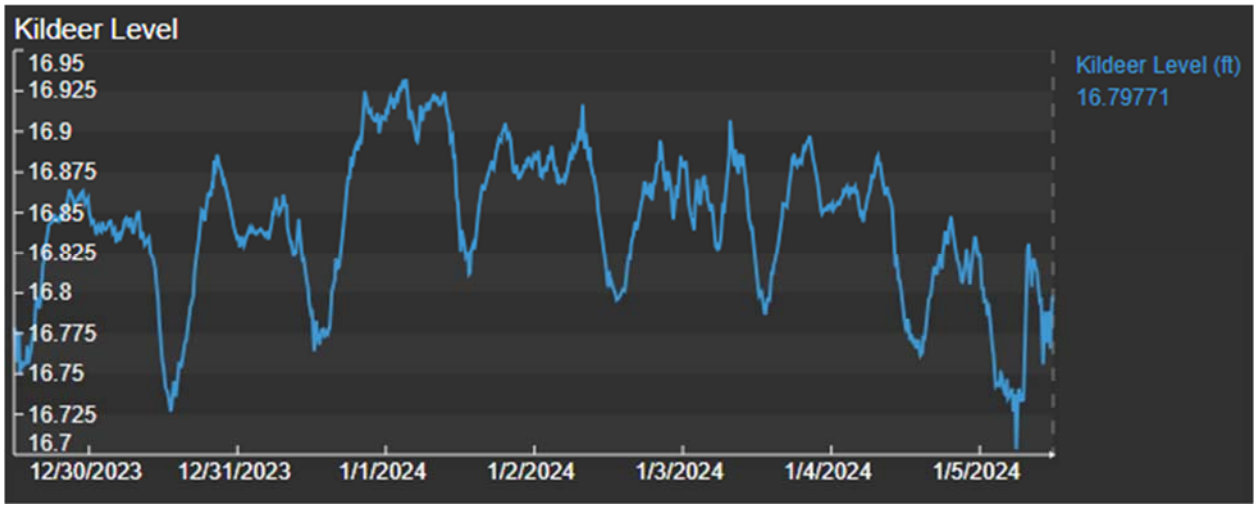
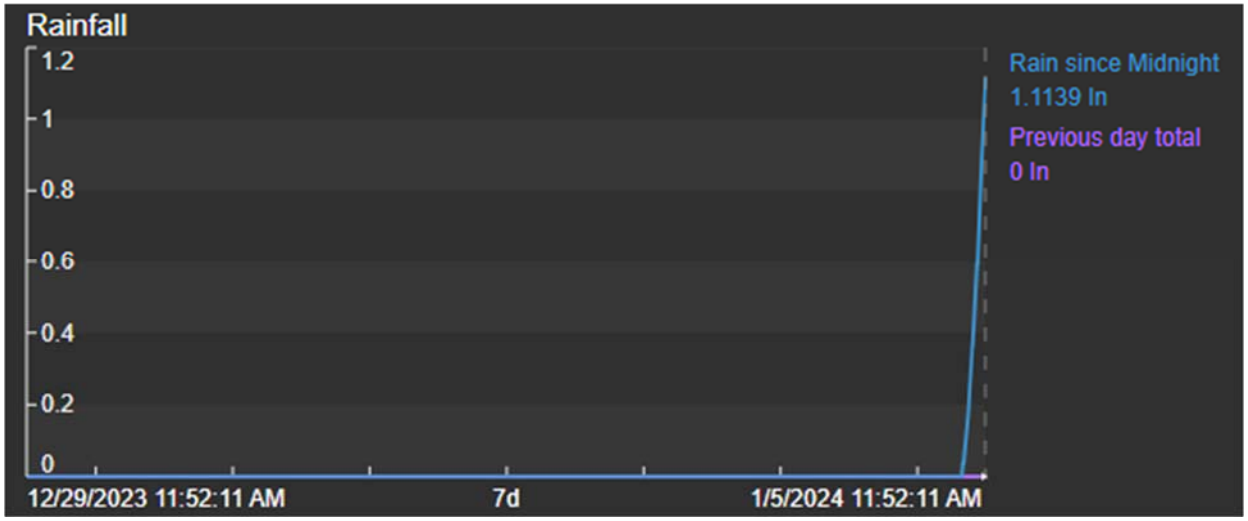
Weekly Report Required by Interim Measures Letter dated 8/4/2023

El Dorado Chemical Company, NPDES Permit Number: AR0000752, AFIN: 70-00040
Weekly Report Date: December 28, 2023 Updated portions are underlined.

Discharges and Implementation of Emergency Action Plan

EDC did not discharge any water through Outfall 001, Outfall 010, or the emergency spillway between when our interim measures plan was initiated on August 9th, 2023 and the 28th. Over the last week, the facility received 1.1 inches of rain with an additional 0.5 inches predicted today. Looking forward, forecast indicates up to an additional 1.79 inches of rain. Based on the forecast we increased our discharge rate on January 2nd. Kildeer is currently at 16.8 feet and is expected to climb as runoff from the incoming rain enters the lake. EDC is attempting to keep the levels of Kildeer below 16.80 feet. In the event of additional rain, EDC will manage the discharge from Kildeer as necessary to ensure water does not overtop the emergency spillway in accordance with the August 4, 2023 Interim Measures letter.





Conduct Daily Sampling of Lake Lee, Lake Killdeer, and Pond 004

EDC commenced this required sampling on August 5, 2023. Updated Information is in the attached 2023 spreadsheet.

Provide Copies of Sampling of Lake Lee, Lake Killdeer, and Pond 004 Since January 1, 2023

Please see the EDC Interim Measures response dated August 9, 2023.

Corrective Action Plan Activities [updates from the previous week are underlined]

During our August 17th conference call we discussed that these proposed activities may trigger a communication to the ADEQ and possible permit changes. We will continue to communicate plans and improvements to obtain ADEQ's guidance on proper permitting.

Minimize Wastewater Contaminant Loading

Water Reuse:

EDC has evaluated its processes to assess locations where water can be reutilized in processes. Currently we are reusing as much wastewater as possible, that would otherwise flow into Pond 004, and are reusing some water from Pond 004 when the opportunity arises.

Minimize Wastewater Inflow

EDC has diverted approximately 15% of the water flowing into Pond 004. Parts are now on order that will allow us to divert approximately an additional 15% of stormwater from Pond 004. Work has started to prepare to have the valves installed. All valves are expected to arrive in December. It is expected to have these installed and operation by the first quarter of 2023. EDC met with ADEQ on the 19th to discuss permit applicability. Based on the discussions this action will not require a construction permit. Additionally, we have started an engineering study to divert additional water away from the Ammonia Nitrate facility. This project will focus on paving in and around the Ammonia Nitrate area and is upstream of any waste/process water connections and will not require a construction permit. EDC has utilized seven frac tanks to increase the storage capacity of Ammonia Nitrate water to reduce the overflow into Pond 004 from rain events.

Maximize Treatment Efficiency and Capacity

Lake Lee Ammonia Stripper

EDC continues to operate the ammonia stripper with an approximate 20% efficiency.

Short Term Treatment of Pond 004

EDC has met with Clean Harbors to develop a short-term treatment system (approximately one year) to provide treatment pending implementation of a permanent solution. EDC has collected samples for Clean Harbors to develop a short-term biological treatment system. Clean Harbors proposed a secondary solution utilizing membrane filtration. This may be a viable alternative; however, it will create a further concentrated wastewater stream that will have to be managed. After further investigation, this process is not viable.

EDC met with Black & Veatch, a wastewater consulting firm, to determine the best treatment possibilities for Pond 004. Based on these initial conversations a biological system seems to be the best path forward. The B&V report was attached in the 13 Oct 2023 report.

Based on review of the Black and Veatch data, EDC is proceeding with biological treatment of 004, but we are still assessing how to address treatment barriers such as predilution, carbon addition, and sludge generation. EDC has evaluated two existing package plants that would be moved to El Dorado to facilitate biological treatment. This will allow EDC to avoid long lead times on construction of new units and have a solution in place soon. This will probably require permit coverage from ADEQ.

Working with Borderland Construction who is developing a cost estimate for disassembling the package plants and shipping them from Arizona to ELD. EDC is attempting to get the units onsite by the end of the calendar year, however with the numerous entities involved this is ambitious and may not be achieved within that timeframe. It now appears the units will be on site in January. A construction permit will be submitted as soon as engineering is completed.

Working with Black and Veatch to develop a written plan to use these package plants in the setup they are proposing. Provide modifications and changes to adapt these package plants for the El Dorado wastewater contaminants. Once the plans are developed we can propose permit modification to facilitate this.

EDC internal engineering is evaluating siting and location for these package plants, ideally in a location near the Pond 004 outfall area.

EDC contacted a local Geotech engineer in Little Rock to provide estimate for sub-surface geo survey to determine how to design package plant foundations.

Additionally, we are evaluating possibilities of reuse of the process wastewater as an input into a product.

Increased Efficiency in Lake Killdeer Biological Activity

Based upon discussion with supplier of nitrification/denitrification bacteria, EDC will begin dosing Lake Killdeer with calcium carbonate or magnesium carbonate to increase the available of carbon and alkalinity in Lake Killdeer. Increasing available carbon should promote additional biological activity to reduce the amount of ammonia in Lake Killdeer and the effluent discharge. EDC has also ordered one ton of lime and will begin dosing Lake Lee with the lime in efforts to increase alkalinity in Lake Lee which flows into Lake Kildeer. Before any dosing begins a construction, permit will be submitted.

Baffles in Lake Killdeer

EDC selected a vendor to install baffles in Lake Killdeer. As discussed in our August 17th conference call, this should promote longer residence time and further increase biological activity to reduce the amount of ammonia in Lake Killdeer and the effluent discharge. Baffles have arrived onsite. Construction drawings and design basis have been submitted to apply for the construction permit. A teleconference was conducted on the 19th with ADEQ to discuss the path forward. ECD is working with Alliance Technical Group to develop the application. The installation is expected to be completed in the first quarter of 2024.

Water Quality Sampling Results

Water quality sampling required by the Interim Measures letter is included in the attached 2023 spreadsheet.

Water Column Profile Measurements

EDC has contracted with Alliance Technology Group (formerly GBMc) to complete the profile and sampling of Pond 004, Lake Lee, and Lake Killdeer. The field work was completed on September 28th.

KT French Drain

KT French Drain is located south west of the KT plant on the west edge of the facility. Water is collected in a wet well then pumped back into the facility, much like a municipality utilized lift stations. During the previous inspection the pump was not operating and the wet well was overflowing. EDC has implemented daily inspections to ensure that the pump remains operational.
As requested, EDC collected samples from KT Wier. Samples collected on December 8th were collected based on the December 7, 2023 conversation with ADEQ and before we received the official request thus all requested in-situ parameters were not collected. Data is presented below:

Date	Temp	pH	D.O.	Cond.	Ammonia mg/l	Nitrate mg/l	Nitrite mg/l	Total – N mg/l	Nitrate + Nitrite
12-8-2023	NA	4.35	NA	79,150	6,600	10,351	0.43	16,951.4	10,351.4
12-12-2023	16	4.40	5.63	79,250	6,500	10,633	0.41	16,833.4	10,633.4
12-14-2023	18	4.37	5.16	77,440	6,350	10,669	0.46	17,019.46	10,669.46
12-19-2023	16	4.35	6.16	78630	12080	11,477	ND	23,557	11,477
12-21-2023	18	4.35	5.43	77,750	9200	11,108	ND	20,308	11,108

Other Actions

Derek Turner has stepped down as the general manager effective the 4th of January. Howard Stevens is the new General Manager for the facility. All documentation has been submitted though ePortal and hard copies were mailed on the 4th of January.

In this call EDC was informed we need to obtain a wastewater operator's license as quickly as possible. Charles McDowell is planning on completing the advanced industrial wastewater class in March. EDC currently has a three certified operators. Second, ADEQ advised that EDC should coordinate with other Joint Pipeline members regarding discharges and volumes. We have initiated this communication.

EDC has contracted Alliance Technology to conduct a bathometric survey of 004. The results of the study indicate that Pond 004 contains approximately 1.5 Million Gallons of water.

	Lake Killdeer (KD)									Lake Lee								Pond 004							
	KD Grab Sample	KD Grab Sample	KD Composite EDCC LAB	KD Grab Sample	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	LEE Grab Sample	LEE Grab Sample	Lee Composite EDCC LAB	LEE Grab Sample	Lee Composite EDCC LAB	Lee Composite EDCC LAB	Lee Composite EDCC LAB	Lee Composite EDCC LAB	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab
Date	Time of Grab	Temp °C	pH	DO, ppm	Conductivity	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	P, ppm	SO_4 ppm	Time of Grab	Temp °C	pH	DO, ppm	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	Phosphorous, ppm	SO_4 ppm	DATE/ TIME	Temp °C	DO, ppm	pH	Conductivity	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	SO_4 ppm
1/1/2023												3.82		341	301		216								
1/2/2023			6.69		1073	54	70	0.10	107			4.00		296	298	0.36	232								
1/3/2023												3.11		265	289		255								
1/4/2023			7.10		1095	62	71		103			6.95		268	272		105								
1/5/2023												7.60		195	197		121								
1/6/2023			7.21		1114	63	75		103			7.71		178	180		108								
1/7/2023												7.66		126	150		86								
1/8/2023												7.70		73	82		88								
1/9/2023			7.10		1127	64	76	0.65	100			7.42		65	69	0.76	73								
1/10/2023												7.34		92	103		83	1/10/23			7.64	34410	4720	4741	13
1/11/2023			7.11		1154	71	81		102			7.69		96	101		110								
1/12/2023												7.85		83	89		91								
1/13/2023			7.18		1162	70	84		100			8.02		88	92		99								
1/14/2023												8.04		83	83		72								
1/15/2023												7.73		65	72		73								
1/16/2023			7.25		1185	60	89	0.04	97			8.41		88	62	2.31	109								
1/17/2023												8.21		87	53		96								
1/18/2023			7.15		1183	70	90		98			8.36		104	53		107								
1/19/2023												7.94		125	93		87								
1/20/2023			7.27		1202	81	89		94			8.45		225	173		106								
1/21/2023												8.51		234	197		122								
1/22/2023												8.95		232	153		98								
1/23/2023			7.49		1245	89	90	2.28	92			8.87		320	152	5.17	117								
1/24/2023												8.81		342	128		112								
1/25/2023			7.81		1248	82	90		82			8.67		252	158		88								
1/26/2023												8.34		312	182		100								
1/27/2023			7.83		1250	89	87		80			8.10		225	143		127								
1/28/2023												7.94		161	143		100								
1/29/2023												7.78		142	134		82								
1/30/2023			7.78		1286	77	97	2.59	81			7.18		154	167	2.93	79								
1/31/2023												7.45		158	171		79								
2/1/2023			7.60		1280	94	97		76			7.30		149	158		55								
2/2/2023												7.55		194	150		78								
2/3/2023			7.52		1308	99	100		76			7.38		167	158		63								
2/4/2023												7.36		169	176		71								
2/5/2023												7.67		154	179		72								
2/6/2023			7.35		1416	67	112	0.04	73			7.13		82	122	1.80	71								
2/7/2023												7.50		129	121		103								
2/8/2023			7.43		1294	98	100		75			7.52		152	120		130	02/08/23			8.05	47270	6440	6041	<1
2/9/2023												6.93		135	120		292								
2/10/2023			7.46		1315	94	99		76			7.67		150	134		194								
2/11/2023												7.72		192	191		154								
2/12/2023												7.64		208	211		101								
2/13/2023			7.30		1311	100	102	0.02	78			7.80		198	158	2.08	109								
2/14/2023												7.75		207	159		82								
2/15/2023			7.26		1340	110	106		82			7.60		255	161		84								
2/16/2023												7.68		181	160		141								
2/17/2023			7.39		1342	106	107		82			7.99		213	222		112								
2/18/2023												8.53		147	100		109								
2/19/2023												8.00		152	97		101								
2/20/2023			7.50		1446	117	119	0.03	85			7.96		128	122	1.47	81								
2/21/2023												7.70		115	113		93								
2/22/2023			7.48		1438	135	115		82			7.36		105	98		125								
2/23/2023												7.21		114	104		128								
2/24/2023			7.47		1440	118	116		82			7.23		131	126		121								
2/25/2023												7.36		117	152		114								
2/26/2023												7.16		122	153		112								
2/27/2023			7.33		1464	123	119	0.02	83			7.15		108	144	1.30	98								
2/28/2023												6.95		105	135		145								
3/1/2023			7.35		1460	130	116		82			6.68		80	107		151								
3/2/2023												7.17		63	76		125								
3/3/2023			7.26		1463	101	94		81			6.67		105	111		127								
3/4/2023												6.27		238	167		93								
3/5/2023												6.55		186	156		103								
3/6/2023			7.33		1846	131	131	1.67	81			6.59		187	158	3.04	100								
3/7/2023												7.24		173	151		100								
3/8/2023			8.23		1874	152	146		75			6.96		109	107		101								
3/9/2023												7.06		139	123		117	03/09/23			8.22	54800	11000	7275	26
3/10/2023			7.21		1672	124	137		78			7.08		136	148		131								
3/11/2023												6.84		122	149		129								
3/12/2023												6.92		118	144		98								
3/13/2023			7.36		1534	130	125	1.79	76			6.57		225	196	0.14	67								
3/14/2023												7.00		238	212		77								
3/15/2023			7.56		1595	127	133		76			7.35		225	195		100								
3/16/2023												7.62		144	160		111								
3/17/2023			7.38		1599	168	135		79			7.31		154	137		108								
3/18/2023												6.96		132	149		129								
3/19/2023												7.17		123	154		113								
3/20/2023			7.56		1608	135	136	3.07	80			7.33		139	144	0.21	104								
3/21/2023												7.27		118	116		100								
3/22/2023			7.24		1598	131	136		80			7.30		102	106		104								
3/23/2023												7.17		66	72		207								
3/24/2023			7.22		1595	129	134		82			7.21		57	61		165								
3/25/2023												6.67		44	58		155								
3/26/2023												7.14		155	161		174								
3/27/2023			7.06		1593	129	133	1.25	83			7.04		143	146	1.64	173								

	Lake Killdeer (KD)									Lake Lee								Pond 004							
	KD Grab Sample	KD Grab Sample	KD Composite EDCC LAB	KD Grab Sample	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	LEE Grab Sample	LEE Grab Sample	Lee Composite EDCC LAB	LEE Grab Sample	Lee Composite EDCC LAB	Lee Composite EDCC LAB	Lee Composite EDCC LAB	Lee Composite EDCC LAB	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab
Date	Time of Grab	Temp °C	pH	DO, ppm	Conductivity	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	P, ppm	SO_4 ppm	Time of Grab	Temp °C	pH	DO, ppm	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	Phosphorous, ppm	SO_4 ppm	DATE/ TIME	Temp °C	DO, ppm	pH	Conductivity	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	SO_4 ppm
3/28/2023												7.13		132	143		178								
3/29/2023			7.12		1620	130	134		83			7.16		140	141		140								
3/30/2023												7.18		126	129		123								
3/31/2023			6.98		1622	119	136		85			7.01		87	103		107								
4/1/2023												7.30		68	76		93								
4/2/2023												7.92		53	70		127								
4/3/2023			7.16		1588	122	134	0.04	83			7.10		67	77	1.01	115								
4/4/2023												7.56		141	134		103	04/04/23			8.33	70340	10060	9506	28
4/5/2023			7.04		1867	164	167		83			7.54		139	148		99								
4/6/2023												6.95		168	170		122								
4/7/2023			6.87		1806	159	166		72			6.78		272	294		97								
4/8/2023												6.94		330	343		112								
4/9/2023												9.95		164	248		97								
4/10/2023			7.04		2042	169	188	0.00	72			7.36		175	190	0.24	99								
4/11/2023												7.02		136	141		154								
4/12/2023			7.00		1814	140	162		74			6.58		87	122		149	04/12/23			8.61	39320	4400	5032	20
4/13/2023												6.47		78	109		138								
4/14/2023			6.90		1675	132	146		75			5.86		63	81		231								
4/15/2023												6.24		47	56		182								
4/16/2023												6.56		30	44		171								
4/17/2023			7.18		1598	131	140	1.42	81			5.56		72	82	1.28	205								
4/18/2023												7.03		64	61		272	04/18/23			7.68	57620	8240	3691	16
4/19/2023			6.75		1615	131	141		83			6.94		35	36		233								
4/20/2023												6.89		19	21		198								
4/21/2023			6.82		1580	124	137		84			6.37		18	20		178								
4/22/2023												5.21		75	87		202								
4/23/2023												5.42		181	199		187								
4/24/2023			7.03		1565	130	133	1.41	86			6.26		210	212	2.70	179								
4/25/2023												6.89		175	177		191								
4/26/2023			7.02		1582	121	137		88			6.95		109	117		219								
4/27/2023												6.65		93	95		184								
4/28/2023			6.93		1570	112	135		89			5.71		140	154		162								
4/29/2023												7.63		142	180		174								
4/30/2023												6.82		169	204		176								
5/1/2023			6.87		1611	112	139	1.46	92			5.50		122	169	2.02	189								
5/2/2023												7.18		133	150		246								
5/3/2023			6.82		1633	122	140		93			7.03		95	108		191								
5/4/2023												6.73		57	68		168								
5/5/2023			6.85		1628	120	138		94			4.68		44	51		209								
5/6/2023												6.94		73	89		210								
5/7/2023												8.07		95	108		152								
5/8/2023			6.88		1613	123	139	1.24	95			8.19		81	97	1.50	122								
5/9/2023												7.58		163	157		75								
5/10/2023			6.65		1588	120	132		92			7.55		335	361		82	05/10/23			8.71	34840	5080	4463	26
5/11/2023												7.60		323	332		139								
5/12/2023			6.81		1841	138	161		89			7.02		208	243		90								
5/13/2023												7.19		213	235		171								
5/14/2023												7.15		164	187		169								
5/15/2023			6.80		1805	142	156	1.61	86			7.71		138	156	2.96	192								
5/16/2023												7.63		103	119		176								
5/17/2023			6.86		1812	138	158		86			7.36		81	105		171								
5/18/2023												7.35		81	95		175								
5/19/2023			7.03		1825	145	160		85			7.21		64	75		176								
5/20/2023												6.68		52	65		170								
5/21/2023												6.27		111	133		171								
5/22/2023			6.97		1786	143	155	1.79	86			6.51		182	199	2.72	194								
5/23/2023												6.78		142	158		221								
5/24/2023			7.10		1758	117	153		87			6.72		75	103		206								
5/25/2023												6.55		68	83		405								
5/26/2023			6.73		1760	135	149		111			3.80		63	65		672								
5/27/2023												3.32		46	49		511								
5/28/2023												3.17		30	48		432								
5/29/2023			6.18		1740	122	146	0.32	114			3.14		20	53	1.12	332								
5/30/2023												3.67		16	32		298								
5/31/2023			6.59		1734	119	146		121			4.88		14	20		283								
6/1/2023												6.67		11	13		275								
6/2/2023			6.73		1721	120	147		126			7.24		7	10		234								
6/3/2023												7.25		4	9		199								
6/4/2023												7.36		6	9		227								
6/5/2023			6.68		1680	122	137	1.64	135			7.38		7	10	0.65	205								
6/6/2023												7.25		7	10		192								
6/7/2023			6.06		1674	116	135		139			7.27		8	10		205	06/07/23			7.42	79560	10600	10832	42
6/8/2023												7.49		6	18		259								
6/9/2023			6.22		1655	114	132		141			7.60		5	23		202								
6/10/2023												7.46		3	15		146								
6/11/2023												6.35		12	26		190								
6/12/2023			6.44		1624	116	126	1.31	142			6.70		30	42	0.22	197								
6/13/2023												6.53		27	42		140								
6/14/2023			6.55		1590	111	125		145			6.38		103	120		148								
6/15/2023												6.96		180	202		146								
6/16/2023			6.65		1695	123	139		139			7.52		155	175		157								
6/17/2023												7.59		115	142		137								
6/18/2023												7.37		105	121		130								
6/19/2023			6.52		1685	119	132	1.37	139			7.00		195	205	2.65	188								
6/20/2023												7.18		182	191		197								

	Lake Killdeer (KD)									Lake Lee								Pond 004							
	KD Grab Sample	KD Grab Sample	KD Composite EDCC LAB	KD Grab Sample	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	KD Composite EDCC LAB	LEE Grab Sample	LEE Grab Sample	Lee Composite EDCC LAB	LEE Grab Sample	Lee Composite EDCC LAB	Lee Composite EDCC LAB	Lee Composite EDCC LAB	Lee Composite EDCC LAB	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab	004 Grab
Date	Time of Grab	Temp °C	pH	DO, ppm	Conductivity	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	P, ppm	SO_4 ppm	Time of Grab	Temp °C	pH	DO, ppm	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	Phosphorous, ppm	SO_4 ppm	DATE/ TIME	Temp °C	DO, ppm	pH	Conductivity	$NH_{3\text{-}N}$, ppm	$N0_{3\text{-}N}$,ppm	SO_4 ppm
6/21/2023			6.60		1688	115	131		138			7.31		141	153		201								
6/22/2023												6.86		123	130		322								
6/23/2023			6.68		1705	115	133		141			7.17		101	116		287								
6/24/2023												6.84		78	94		200								
6/25/2023												7.14		55	69		199								
6/26/2023			6.69		1690	119	130	1.32	143			6.72		49	54	1.27	184								
6/27/2023												7.02		125	136		180								
6/28/2023			6.75		1672	122	127		142			7.61		195	201		143								
6/29/2023												7.82		192	194		146								
6/30/2023			6.64		1720	119	133		141			7.97		132	164		167								
7/1/2023												7.59		108	126		167								
7/2/2023												7.23		75	100		167								
7/3/2023			6.69		1730	120	137	1.38	144			7.09		72	86	2.21	149								
7/4/2023												7.06		51	67		158								
7/5/2023			6.77		1724	125	133		142			6.82		102	116		152								
7/6/2023												6.96		188	209		172								
7/7/2023			6.74		1720	116	132		140			7.62		186	223		161								
7/8/2023												7.66		134	130		186								
7/9/2023												8.21		132	126		195								
7/10/2023			6.75		1780	130	136	5.24	140			8.16		209	231	3.83	155								
7/11/2023												7.88		157	196		125								
7/12/2023			6.64		1782	102	113		139			5.74		52	66		73								
7/13/2023												8.49		136	215		75								
7/14/2023			7.50		2240	179	69		34			8.22		281	119		36	07/14/23			9.02	24910	4320	2989	2
7/15/2023												8.29		278	323		109								
7/16/2023												8.50		231	270		110								
7/17/2023			6.98		1890	151	153	6.08	112			8.35		222	229	4.11	124								
7/18/2023												8.03		167	189		122								
7/19/2023			6.95		1820	143	143		104			7.92		133	143		110								
7/20/2023												8.17		128	137		170								
7/21/2023			6.91		1804	140	141		108			8.05		120	129		123								
7/22/2023												7.49		95	93		113								
7/23/2023												6.86		86	82		121								
7/24/2023			6.90		1763	125	136	2.03	110			7.69		86	90	2.89	133								
7/25/2023												7.38		72	79		146								
7/26/2023			6.85		1764	126	134		110			7.22		58	72		125								
7/27/2023												7.43		53	57		101								
7/28/2023			6.84		1753	120	132		110			8.14		36	42		121								
7/29/2023												8.27		16	30		107								
7/30/2023												6.99		10	24		121								
7/31/2023			6.83		1745	128	129	1.96	110			7.19		13	20	1.34	119								
8/1/2023												6.92		64	75		126								
8/2/2023			6.77		1726	114	128		111			7.09		38	51		122								
8/3/2023												8.10		16	32		113				7.26	46930	5840	6016	24
8/4/2023			6.79		1710	119	126		111			7.44		9	22		143	11:20am	34	10.63	7.14	48920	5280	6293	25
8/5/2023	8:53AM	28	6.79	7.65	1703	114	125			6:00AM	26	6.60	6.03	6	17	1.22	147	9:50AM	28	5.61	7.07	49230	6200	6191	34
8/6/2023	9:57AM	29	6.77	8.27	1676	105	123			6:00AM	25	6.45	6.12	6	15		125	10:09AM	27	6.02	6.95	49870	6200	6657	20
8/7/2023	8:25AM	26	6.80	6.45	1683	115	124	1.75	113	7:00AM	27	6.48	7.69	7	14		115	8:40AM	30	6.5	6.84	49750	6240	6216	33
8/8/2023	8:45AM	26	6.84	6.13	1678	114	124			7:00AM	26	6.81	6.08	10	18		111	8:53AM	25	5.62	6.81	34560	4260	4281	22
8/9/2023	8:13AM	27	7.11	7.34	1584	114	120		128	7:00AM	24	7.26	7.86	102	102		80	8:39AM	25	6.63	6.63	29930	3660	3553	18