

Annual Monitoring Report

****Must be submitted to the regional DNR Field Office of the facility of origin.****
567 Iowa Administrative Code Chapter 63 (455B)

Facility Name: Sunrise Farms, Inc

Operation Permit No: 7200802

County: Osceola

Why is this Required?

This facility was issued a land application permit pursuant to the authority of Iowa Code section 4558.174 and rule 567 - 64.3, Iowa Administrative Code. The permittee is authorized to operate the disposal system in accordance with the terms set forth in the permit and to submit an annual report. The facility shall submit an annual report by January 15th of each year to the regional Iowa DNR Field Office.

This form may be used for your written report as long as the following information is provided and attachments provided, if needed:

1. The freeboard measurement representing the **highest water level** for each lagoon/storage structure observed during the month shall be recorded for each month.

Month	Structure 1 (feet)	Structure 2 (feet)	Structure 3 (feet)	Structure 4 (feet)
January	--	--	--	
February	--	--	--	
March	5.5	5.5	6.0	
April	5.75	5.75	6.25	
May	6.0	5.75	5.0	
June	5.0	4.75	7.5	
July	4.0	5.0	6.0	
August	3.0	5.25	7.0	
September	3.0	5.25	7.0	
October	1.5	3.5	5.0	
November	1.0	3.0	6	
December	1.0	3.75	6.0	

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2. If application occurred to a golf course, was the treated wastewater disinfected?

☐ Yes ☐ No

If yes, how: _____

3. Groundwater monitoring wells for all application fields must be obtained annually. The results of the required monitoring samples must be provided on the enclosed table and all analytical lab results maintained on-site. **Time of year? **
4. Land Application Records, sheet attached. Must be filled out for each field where application occurred.
5. One sample of the wastewater just prior to application for total nitrogen and/or total phosphorus in units of pounds/1000 gallons. The sample analysis must be provided and include the date, exact place and time of the sampling, dates the analyses were performed, who performed the analyses, the analytical techniques or methods used, and the results of such analyses. **This requirement only applies to facilities that have a maximum nitrogen loading rate and/or a maximum phosphorus loading rate in their facility plan approval letter or construction permit.**

Signature: Andrew Nesseth

Date: 1/15/2021

SUNRISE FARMS, INC
OSCEOLA

GROUNDWATER MONITORING WELL SAMPLING FORM

FIELD NAME	Area B				Area D			Area C			DATE	LAB
Monitoring Well ID	MW 5	MW 7	MW 6	MW 8	MW 9	MW 10	MW 11	MW 12	MW 13			
Ammonia Nitrogen (mg/L)	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.14	0.12	8/12/2020	Keystone	
Alkalinity (mg/L as CaCO3)	350.00	200.00	355.00	380.00	353.00	350.00	354.00	415.00	368.00	8/12/2020	Foundation	
Aluminum (ppm)	1.48	1.48	1.12	1.31	1.74	6.44	6.73	6.34	5.87	8/12/2020	Foundation	
Arsenic (ppm)	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	8/12/2020	Foundation	
Beryllium (ppm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8/12/2020	Foundation	
Boron (ppm)	0.03	0.04	0.34	0.05	0.04	0.12	0.10	0.11	0.12	8/12/2020	Foundation	
Cadmium (ppm)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8/12/2020	Foundation	
Calcium (ppm)	115	119	113.00	113.00	117.00	260.00	263.00	299.00	284.00	8/12/2020	Foundation	
Chloride (ppm)	52.30	51.60	51.80	49.30	48.80	45.30	45.10	48.40	46.40	8/12/2020	Foundation	
Chromium (ppm)	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	8/12/2020	Foundation	
Cobalt (ppm)	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.02	0.02	8/12/2020	Foundation	
Conductivity (uS/cm)	1299.00	1197.00	1221.00	1154.00	1230.00	1110.00	1108.00	1117.00	1104.00	8/12/2020	Foundation	
Copper (ppm)	0.01	0.02	0.01	0.01	0.02	0.05	0.05	0.05	0.10	8/12/2020	Foundation	
Flouride										8/12/2020	Foundation	
Hardness (mg/L)	469.00	465.00	467.00	458.00	479.00	575.00	581.00	584.00	600.00	8/12/2020	Foundation	
Iron (ppm)	3.00	3.36	2.40	2.71	3.57	30.20	27.70	26.00	20.90	8/12/2020	Foundation	
Lead (ppm)	0.00	0.00	0.00	0.00	0.01	0.02	0.02	0.02	0.02	8/12/2020	Foundation	
Lithium (ppm)	0.09	0.09	0.08	0.09	0.09	0.18	0.18	0.18	0.17	8/12/2020	Foundation	
Magnesium (ppm)	40.40	40.40	40.40	39.20	42.00	73.90	75.80	87.60	80.50	8/12/2020	Foundation	
Manganese (ppm)	0.19	0.28	0.17	0.21	0.22	7.71	7.52	7.07	5.86	8/12/2020	Foundation	
Molybdenum (ppm)	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	8/12/2020	Foundation	
Nickel (ppm)	0.01	0.02	0.01	0.02	0.02	0.07	0.06	0.06	0.06	8/12/2020	Foundation	
Nitrate+Nitrogen (ppm)	53.60	53.50	52.90	51.40	50.00	3.54	3.52	4.34	3.59	8/12/2020	Foundation	
Organic Nitrogen (mg/L)	1.13	1.03	1.44	3.69	2.57	1.64	0.00	2.11	1.78	8/12/2020	Keystone	
pH	7.59	7.39	7.41	7.39	7.40	7.17	7.12	7.08	7.17	8/12/2020	Foundation	
Selenium (ppm)	0.00	0.00	0.00	0.00	0.00	14.80	0.00	0.01	0.01	8/12/2020	Foundation	
Sodium (ppm)	60.10	45.50	69.00	54.40	69.50	14.80	14.60	15.20	15.50	8/12/2020	Foundation	
Sodium Absorption Ratio	6.82	5.09	7.89	6.25	7.78	1.14	1.12	1.10	1.15	8/12/2020	Foundation	
Total Dissolved Solids	784.00	770.00	820.00	732.00	727.00	728.00	500.00	504.00	520.00	8/12/2020	Foundation	
Total Nitrogen	54.80	53.50	54.40	52.70	50.00	5.74	3.52	4.34	3.59	8/12/2020	Foundation	
Total Kjeldahl Nitrogen (mg/L)	1.17	1.03	1.44	1.31	2.57	1.75	0.00	2.25	1.90	8/12/2020	Keystone	
Total Organic Carbon (mg/L)	1.83	3.14	2.60	2.82	3.61	3.69	3.69	3.75	3.67	8/12/2020	Keystone	
Total Phosphorus (mg/L)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.70	1.16	8/12/2020	Keystone	
Zinc		0.05	0.08	0.07	0.08	0.19	0.20	0.25	0.18	8/12/2020	Foundation	
Coliform bacteria (MPN/100 ml)	0	0	10	10	10	20	86	31	529	3/11/2020	Keystone	

DAILY LAND APPLICATION REPORTING FORM

Weather Conditions			Land Application									
Date	Prop Day of	Temp Day Of	Show Cover	FIELD	Crop/Grown	SOURCE	Total Gallons Applied	Application Method	Ac-Inches	Applied Acres	Gallons/Ac	Hours N/ac P/ac
5/3/2021	0.0	77	0.0	B NORTH	Corn	LAGOON AVERAGE	-	Irrigate	0.2	0.0	5,430	4 1
5/4/2021	0.0	64	0.0	B NORTH	Corn	LAGOON AVERAGE	-	Irrigate	0.2	0.0	5,430	4 0.8
5/17/2021	0.0	73	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 3.5 0.8
5/17/2021	0.0	73	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 4 1
5/17/2021	0.0	73	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 3 0.8
5/18/2021	0.0	70	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 4 1
5/18/2021	0.0	70	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 4 0.8
5/18/2021	0.0	70	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 3.5 0.8
5/19/2021	0.0	65	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 3 1
5/19/2021	0.0	65	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 3.5 0.8
5/19/2021	0.0	65	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 4 1
5/20/2021	1.0	72	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 4 1
5/20/2021	1.0	72	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 3 0.8
5/20/2021	1.0	72	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 4 1
5/21/2021	0.1	73	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 4 0.8
5/21/2021	0.1	73	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 3.5 0.8
5/21/2021	0.1	73	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 4 0.8
5/22/2021	0.0	82	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 3.5 0.8
5/22/2021	0.0	82	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 3 1
5/22/2021	0.0	82	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 3.5 0.8
5/23/2021	0.0	86	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0 3.5 0.8
5/23/2021	0.0	86	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0 4 0.8
5/23/2021	0.0	86	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0 4 0.8
5/24/2021	0.1	86	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	7.5 4 0.8
6/4/2021	0.0	90	0.0	C WEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.2	5,414	7.5 4 0.8
6/4/2021	0.0	90	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5 3 0.8
6/5/2021	0.0	96	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	7.5 3.5 0.8
6/5/2021	0.0	96	0.0	C WEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.2	5,414	7.5 3.5 0.8
6/5/2021	0.0	96	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5 3 0.8
6/6/2021	0.0	98	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	8 4 1
6/6/2021	0.0	98	0.0	C WEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.2	5,414	7.5 4 0.8
6/6/2021	0.0	98	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5 3.5 0.8
6/7/2021	0.0	90	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	7.5 4 0.8

DAILY LAND APPLICATION REPORTING FORM

Weather Conditions				Land Application										
Date	Prcp Day of	Temp Day Of	Snow Cover	FIELD	Crop Grown	SOURCE	Total Gallons Applied	Application Method	Ac- Inches	Applied Acres	Gallons / Ac	Hours	N/ac	P/ac
6/9/2021	0.0	95	0.0	B NORTH	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	30.9	5,430	7.0	3.5	0.8
6/9/2021	0.0	95	0.0	C WEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.0	5,414	7.0	4	0.8
6/9/2021	0.0	95	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.4	5,353	7.0	3	0.8
6/11/2021	0.0	98	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	7.5	4	0.8
6/11/2021	0.0	98	0.0	C WEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.2	5,414	7.5	3.5	0.8
6/11/2021	0.0	98	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5	3	0.8
6/14/2021	0.0	93	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	7.5	4	0.8
6/14/2021	0.0	93	0.0	C WEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.2	5,414	7.5	4	0.8
6/14/2021	0.0	93	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5	3.5	0.8
6/15/2021	0.0	89	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5	3	0.8
6/16/2021	0.0	89	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.4	5,353	7.0	3.5	0.8
6/17/2021	0.1	90	0.0	B NORTH	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	30.9	5,430	7.0	4	0.8
6/17/2021	0.1	90	0.0	C WEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.0	5,414	7.0	4	0.8
6/17/2021	0.1	90	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.4	5,353	7.0	3.5	0.8
6/19/2021	0.0	90	0.0	B NORTH	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	30.9	5,430	7.0	4	0.8
6/19/2021	0.0	90	0.0	C WEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.0	5,414	7.0	4	0.8
6/19/2021	0.0	90	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.4	5,353	7.0	3.5	0.8
6/20/2021	0.2	81	0.0	B NORTH	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	30.9	5,430	7.0	4	0.8
6/20/2021	0.2	81	0.0	C WEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.0	5,414	7.0	4	0.8
6/20/2021	0.2	81	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.4	5,353	7.0	3.5	0.8
6/23/2021	0.0	82	0.0	B NORTH	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	30.9	5,430	7.0	4	0.8
6/24/2021	0.0	91	0.0	B NORTH	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	30.9	5,430	7.0	4	0.8
6/24/2021	0.0	91	0.0	C WEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.0	5,414	7.0	3.5	0.8
6/24/2021	0.0	91	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	168,000	Irrigate	0.2	31.4	5,353	7.0	3	0.8
6/25/2021	0.0	87	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
6/30/2021	0.0	84	0.0	B NORTH	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.1	5,430	7.5	3.5	0.8
6/30/2021	0.0	84	0.0	C WEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.2	5,414	7.5	4	0.8
6/30/2021	0.0	84	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	180,000	Irrigate	0.2	33.6	5,353	7.5	3	0.8
7/2/2021	0.0	89	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
7/2/2021	0.0	89	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
7/3/2021	0.0	89	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/3/2021	0.0	89	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
7/5/2021	0.0	92	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/5/2021	0.0	92	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8

DAILY LAND APPLICATION REPORTING FORM

Weather Conditions				Land Application										
Date	Prcp Day of	Temp Day Of	Snow Cover	FIELD	Crop Grown	SOURCE	Total Gallons Applied	Application Method	Ac- Inches	Applied Acres	Gallons/ Ac	Hours	N/ac	P/ac
7/9/2021	0.2	74	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
7/12/2021	0.0	82	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/12/2021	0.0	82	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
7/16/2021	0.0	80	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
7/16/2021	0.0	80	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/16/2021	0.0	80	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
7/19/2021	0.0	84	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
7/19/2021	0.0	84	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/19/2021	0.0	84	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
7/21/2021	0.0	85	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	4	0.8
7/21/2021	0.0	85	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/21/2021	0.0	85	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
7/22/2021	0.0	86	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	4	0.8
7/23/2021	0.0	86	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
7/28/2021	0.0	92	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/28/2021	0.0	92	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
7/29/2021	0.0	95	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
7/29/2021	0.0	95	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
7/30/2021	0.0	83	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
7/30/2021	0.0	83	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
8/2/2021	0.0	78	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
8/2/2021	0.0	78	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/3/2021	0.0	80	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
8/3/2021	0.0	80	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/4/2021	0.0	81	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
8/4/2021	0.0	81	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
8/5/2021	0.0	81	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
8/5/2021	0.0	81	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/10/2021	0.0	86	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
8/10/2021	0.0	86	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/11/2021	0.0	87	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
8/11/2021	0.0	87	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/14/2021	0.0	81	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
8/14/2021	0.0	81	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8

DAILY LAND APPLICATION REPORTING FORM

Weather Conditions				Land Application										
Date	Prcp Day of	Temp Day Of	Snow Cover	FIELD	Crop Grown	SOURCE	Total Gallons Applied	Application Method	Ac- Inches	Applied Acres	Gallons / Ac	Hours	N/ac	P/ac
8/17/2021	0.0	86	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
8/17/2021	0.0	86	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/19/2021	0.0	88	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
8/19/2021	0.0	88	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
8/25/2021	0.0	83	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
8/25/2021	0.0	83	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
8/31/2021	0.0	82	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
8/31/2021	0.0	82	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
9/3/2021	2.1	65	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	3.5	0.8
9/4/2021	0.0	69	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	4	0.8
9/6/2021	0.0	82	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	4	0.8
9/7/2021	0.0	86	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	3.5	0.8
9/8/2021	0.0	79	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	4	0.8
9/9/2021	0.0	76	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	4	0.8
9/10/2021	0.0	78	0.0	B NORTH	Corn	LAGOON AVERAGE	228,000	Irrigate	0.2	42.0	5,430	9.5	3.5	0.8
10/15/2021	0.0	55	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
10/15/2021	0.0	55	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
10/16/2021	0.0	57	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
10/16/2021	0.0	57	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
10/16/2021	0.0	57	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
10/19/2021	0.0	78	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
10/19/2021	0.0	78	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
10/20/2021	0.0	73	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	4	0.8
10/20/2021	0.0	73	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
10/20/2021	0.0	73	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/1/2021	0.0	46	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
11/2/2021	0.0	43	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	4	0.8
11/3/2021	0.0	43	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	4	0.8
11/4/2021	0.0	47	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	4	0.8
11/7/2021	0.0	69	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
11/7/2021	0.0	69	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
11/7/2021	0.0	69	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/8/2021	0.0	64	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
11/8/2021	0.0	64	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8

DAILY LAND APPLICATION REPORTING FORM

Weather Conditions				Land Application										
Date	Prcp Day of	Temp Day Of	Snow Cover	FIELD	Crop Grown	SOURCE	Total Gallons Applied	Application Method	Ac- Inches	Applied Acres	Gallons / Ac	Hours	N/ac	P/ac
11/8/2021	0.0	64	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/9/2021	0.0	58	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
11/9/2021	0.0	58	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
11/9/2021	0.0	58	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/10/2021	0.0	53	0.0	B NORTH	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.8	5,430	9.0	3.5	0.8
11/10/2021	0.0	53	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
11/10/2021	0.0	53	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/16/2021	0.0	40	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
11/16/2021	0.0	40	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/18/2021	0.0	41	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
11/18/2021	0.0	41	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8
11/19/2021	0.0	33	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
11/19/2021	0.0	33	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/22/2021	0.0	37	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	3.5	0.8
11/22/2021	0.0	37	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3	0.8
11/23/2021	0.0	41	0.0	C WEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	39.9	5,414	9.0	4	0.8
11/23/2021	0.0	41	0.0	D NORTHWEST	Corn	LAGOON AVERAGE	216,000	Irrigate	0.2	40.3	5,353	9.0	3.5	0.8