2020 Fall Sampling Event

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NE Dept of Environment and Energy
By: ____DEE #171____

ALTEN, LLC

IIS# 84069

Groundwater Monitoring Report

Submitted by:

NUTRIENT ADVISORS

449 E. DEERE STREET
WEST POINT, NEBRASKA 68788
402-372-2236

2021001356 7

NUTRIENT ADVISORS

January 4, 2021

Patrick Durey
Agricultural Section
NDEE
PO Box 98922
Lincoln, NE 68509

RE: 2020 Fall Sampling Event
AltEn, LLC
IIS# 84069

Dear Mr. Miesbach:

This report summarizes Nutrient Advisors monitoring operations at AltEn, LLC in Saunders County, Nebraska.

Justin Sindelar (Certification #79763) conducted ground water sampling on October 12, 2020. Prior to sampling, ground water levels and well depths were measured in each well using an electronic water level indicator. Wells were purged using an electric submersible pump and bailer. A minimum of three well volumes were purged from each well while groundwater parameters (temperature, pH and conductivity) were monitored by Nutrient Advisors until readings stabilized. Ground water samples were collected following stabilized readings and placed in laboratory-supplied bottles. Complete field data sheets are included.

Samples were shipped via UPS to Ward Laboratories, Inc. in Kearney, Nebraska and analyzed for nitrate (EPA Method 353.2), ammonia (EPA Method 350.1), chloride (EPA Method 325.1), total dissolved solids (EPA Method 160.1). Additional samples were also sent to South Dakota Agricultural Laboratories in Brookings, SD and analyzed for azoxystrobin, clothianidin, glyphosate, thiabendazole, and thiamethoxam. Results from this sampling event are reported on the Ground Water Monitoring Results Reports. The duplicate sample was collected from MW-1. Complete analytical results including laboratory detection limits and chain-of-custody are contained in this report.

The additional information needed for the first sampling event, including the as-built map, geological logs and well registrations, are also included.

If you have any questions please call our office.

Sincerely,

Justin Sindelar

Justin Sindelar
Nutrient Advisors

NUTRIENT
449 E. Deere Street • West Point, NE 68788 •
Phone: 402.372.CAFO nutrientadvisors.com

Field Data Sheet

GENERAL INFORMATION

DATE: 10/12/20

Site Name:	AltEn, LLC	IIS Number:	84069
Sampler:	Justin Sindelar	Sampler License:	79763
Monitoring Well Number:	MW-1	Well Registration:	G-190723A
Sample ID (must match COC):	ALT-F20-1	Weather Conditions:	Sunny, Breezy, 68°F
Top of Casing (TOC) Elev.:	114.77	Description of Top of Casing (TOC) Mark:	North

GROUNDWATER MEASUREMENTS AND PURGE CALCULATIONS

Depth to bottom of casing from TOC (0.00 ft.):		42.61
	Depth to water from TOC (0.00 ft.):	— 36.18
A	Depth to bottom of casing - Depth to water	6.43
	Casing diameter (in.):	2"
B	Gallons/Linear Foot (Refer to Table)	0.17
C	Well volume (gal.) = A x B	1.09
3 times well volume (gal.) = 3 x C		3.28
5 times well volume (gal.) = 5 x C		
Groundwater measurement equipment used:		Electric Tape
Purge equipment used:		___Bailer X Pump ___Dedicated X Non Dedicated
Well evacuated to Dryness		___Yes X No

Well Pipe Volume Table

Diameter	Gallons/Linear Foot
2"	0.17
3"	0.38
4"	0.66
6"	1.5
8"	2.6

Actual Water Purged (gal.): 4.1

PURGE PARAMETERS

Time	Temp. (C or F)	pH	Specific Conductivity (umhos)	Approximate Gallons Purged	Observations (clear, cloudy, odors)
4:51	13	6.62	1875 us	1	cloudy
4:52	12.8	6.56	1961 us	2	clearing
4:54	12.3	6.58	2.03 ms	3	clear

STABLIZED GROUNDWATER SAMPLE PARAMETERS

Time	Temp. (C or F)	pH	Specific Conductivity (umhos)	Appearance (clear, cloudy, color)	Analysis	Preservatives
4:55	12.3	6.58	2.03 ms	clear	NH4N03	H2SO4

TIMES:

4:43 pm	UNLOCK WELL
4:44 pm	DECON EQUIPMENT
4:46 pm	MEASURE WELL
4:50 pm	START PURGE
5:01 pm	LOCK WELL

NOTES:

ALT-F20-6 Blank - 4:40 pm

ALT-F20-5 Duplicate - 4:55 pm

NUTRIENT

Field Data Sheet

GENERAL INFORMATION

DATE: 10/12/20

Site Name:	AltEn, LLC	IIS Number:	84069
Sampler:	Justin Sindelar	Sampler License:	79763
Monitoring Well Number:	MW-2	Well Registration:	G-190723B
Sample ID (must match COC):	ALT-F20-2	Weather Conditions:	Sunny, Breezy, 69°F
Top of Casing (TOC) Elev.:	105.64	Description of Top of Casing (TOC) Mark:	North

GROUNDWATER MEASUREMENTS AND PURGE CALCULATIONS

			Well Pipe Volume Table	
Depth to bottom of casing from TOC (0.00 ft.):		36.23		
	Depth to water from TOC (0.00 ft.):	— 28.90	Diameter	Gallons/Linear Foot
A	Depth to bottom of casing - Depth to water	7.33	2"	0.17
	Casing diameter (in.):	2"	3"	0.38
B	Gallons/Linear Foot (Refer to Table)	0.17	4"	0.66
C	Well volume (gal.) = A x B	1.25	6"	1.5
3 times well volume (gal.) = 3 x C		3.75	8"	2.6
5 times well volume (gal.) = 5 x C			Actual Water Purged (gal.):	4.5
Groundwater measurement equipment used:		Electric Tape		
Purge equipment used:		___Bailer X Pump	___Dedicated X Non Dedicated	
Well evacuated to Dryness		___Yes X No		

PURGE PARAMETERS

Time	Temp. (°C or F)	pH	Specific Conductivity (umhos)	Approximate Gallons Purged	Observations (clear, cloudy, odors)
5:25	13.3	6.01	1941 us	1	cloudy
5:26	12.7	6.31	1969 us	2	clearing
5:27	12.3	6.43	2.03 ms	3	clear

STABLIZED GROUNDWATER SAMPLE PARAMETERS

Time	Temp. (°C or F)	pH	Specific Conductivity (umhos)	Appearance (clear, cloudy, color)	Analysis	Preservatives
5:29	12.2	6.47	2.04 ms	clear	NH4NO3	H2SO4

TIMES:

5:19 pm UNLOCK WELL

5:20 pm DECON EQUIPMENT

5:22 pm MEASURE WELL

5:24 pm START PURGE

5:32 pm LOCK WELL

NOTES:

NUTRIENT

Field Data Sheet

GENERAL INFORMATION

DATE: 10/12/20

Site Name:	AltEn, LLC	IIS Number:	84069
Sampler:	Justin Sindelar	Sampler License:	79763
Monitoring Well Number:	MW-3	Well Registration:	G-190723C
Sample ID (must match COC):	ALT-F20-3	Weather Conditions:	Sunny, Breezy, 68°F
Top of Casing (TOC) Elev.:	110.30	Description of Top of Casing (TOC) Mark:	North

GROUNDWATER MEASUREMENTS AND PURGE CALCULATIONS

Depth to bottom of casing from TOC (0.00 ft.):		41.10
	Depth to water from TOC (0.00 ft.):	– 34.08
A	Depth to bottom of casing - Depth to water	7.02
	Casing diameter (in.):	2"
B	Gallons/Linear Foot (Refer to Table)	0.17
C	Well volume (gal.) = A x B	1.19
3 times well volume (gal.) = 3 x C		3.58
5 times well volume (gal.) = 5 x C		
Groundwater measurement equipment used:		Electric Tape
Purge equipment used:		___Bailer X Pump ___Dedicated X Non Dedicated
Well evacuated to Dryness		___Yes X No

Well Pipe Volume Table

Diameter	Gallons/Linear Foot
2"	0.17
3"	0.38
4"	0.66
6"	1.5
8"	2.6

Actual Water Purged (gal.): 4.25

PURGE PARAMETERS

Time	Temp (C or F)	pH	Specific Conductivity (umhos)	Approximate Gallons Purged	Observations (clear, cloudy, odors)
5:44	13.8	6.42	1498 us	1	cloudy
5:45	13.0	6.42	1589 us	2	clear
5:47	12.6	6.42	1700 us	3	clear

STABLIZED GROUNDWATER SAMPLE PARAMETERS

Time	Temp. (C or F)	pH	Specific Conductivity (umhos)	Appearance (clear, cloudy, color)	Analysis	Preservatives
5:48	12.5	6.44	1703 us	clear	NH4N03	H2SO4

TIMES:

5:38 pm	UNLOCK WELL
5:39 pm	DECON EQUIPMENT
5:41 pm	MEASURE WELL
5:43 pm	START PURGE
5:51 pm	LOCK WELL

NOTES:

NUTRIENT ANALYTICAL

Field Data Sheet

GENERAL INFORMATION

DATE: 10/12/20

Site Name:	AltEn, LLC	IIS Number:	84069
Sampler:	Justin Sindelar	Sampler License:	79763
Monitoring Well Number:	MW-4	Well Registration:	G-190723D
Sample ID (must match COC):	ALT-F20-4	Weather Conditions:	Sunny, Breezy, 69°F
Top of Casing (TOC) Elev.:	103.166	Description of Top of Casing (TOC) Mark:	North

GROUNDWATER MEASUREMENTS AND PURGE CALCULATIONS

			Well Pipe Volume Table	
Depth to bottom of casing from TOC (0.00 ft.):		36.12		
	Depth to water from TOC (0.00 ft.):	— 28.74	Diameter	Gallons/Linear Foot
A	Depth to bottom of casing - Depth to water	7.38	2"	0.17
	Casing diameter (in.):	2"	3"	0.38
B	Gallons/Linear Foot (Refer to Table)	0.17	4"	0.66
C	Well volume (gal.) = A x B	1.25	6"	1.5
3 times well volume (gal.) = 3 x C		3.75	8"	2.6
5 times well volume (gal.) = 5 x C			Actual Water Purged (gal.):	4.6
Groundwater measurement equipment used:		Electric Tape		
Purge equipment used		___Bailer X Pump	___Dedicated X Non Dedicated	
Well evacuated to Dryness		___Yes X No		

PURGE PARAMETERS

Time	Temp. (C or F)	pH	Specific Conductivity (umhos)	Approximate Gallons Purged	Observations (clear, cloudy, odors)
6:03	13.2	6.50	2.26 ms	1	slightly foggy
6:04	12.8	6.09	2.28 ms	2	clear
6:05	12.4	6.28	2.34 ms	3	clear

STABLIZED GROUNDWATER SAMPLE PARAMETERS

Time	Temp. (C or F)	pH	Specific Conductivity (umhos)	Appearance (clear, cloudy, color)	Analysis	Preservatives
6:06	12.4	6.25	2.36 ms	clear	NH4N03	H2SO4

TIMES:

5:57pm UNLOCK WELL

5:58pm DECON EQUIPMENT

6:00pm MEASURE WELL

6:02pm START PURGE

6:09pm LOCK WELL

NOTES:

NUTRIENT TECHNOLOGIES

Groundwater Monitoring Results Report

Site Name	Sampling Date	Sampler	Sampler License #	Laboratory
AltEn, LLC	10/12/2020	Justin Sindelar	79763	Ward Laboratories, Inc.

Lab #	Well #	Sample #	Stabilized Temp. (C or F)	Stabilized pH	Stabilized Conductivity (uhmos)	Nitrate (ppm)	Chloride (ppm)	Ammonium (ppm)	Total Dissolved Solids (ppm)
23952	MW-1	ALT-F20-1	12.3 C	6.58	2.03 M	73.8	188.0	n.d.	1123
23953	MW-2	ALT-F20-2	12.2 C	6.47	2.04 M	50.3	167.0	n.d.	1112
23954	MW-3	ALT-F20-3	12.5 C	6.44	1703 u	57.3	117.0	n.d.	953
23955	MW-4	ALT-F20-4	12.4 C	6.25	2.36 M	84.8	96.0	n.d.	1330
23956	Duplicate	ALT-F20-5	12.3 C	6.58	2.03 M	74.8	190.0	n.d.	1130
23957	Field Blank	ALT-F20-6	n/a	n/a	n/a	n.d.	2	0.1	10

Well #	TOC Elev. (ft.)	Depth to Water (ft.)	Water Elev.	Amount Purged (gal.)
MW-1	114.77	36.18	78.59	4.10
MW-2	105.64	28.90	76.74	4.50
MW-3	110.30	34.08	76.22	4.25
MW-4	103.66	28.74	74.92	4.60

Parameter	EPA Method	Detection Limit (ppm)	Reporting Limit (ppm)
Nitrate	353.2	0.05	0.1
Sulfate	375.4	0.05	1
Chloride	325.1	0.1	1
Ammonium	350.1	0.01	0.1
Total Dissolved Solids	160.1	1	1

NUTRIENT ADVISORS

Groundwater Monitoring Results Report

Site Name	Sampling Date	Sampler	Sampler License #	Laboratory
AltEn, LLC	10/12/2020	Justin Sindelar	79763	SD Agricultural Laboratories

Lab #	Well #	Sample #	Stabilized Temp. (C or F)	Stabilized pH	Stabilized Conductivity (uhmos)	Azoxystrobin (ppb)	Clothianidin (ppb)	Glyphosate (ppb)	Thiabendazole (ppb)	Thiamethoxam (ppb)
20PE010845	MW-1	ALT-F20-1C	12.3 C	6.58	2.03 M	n.d.	n.d.	n.d.	n.d.	n.d.
20PE010846	MW-2	ALT-F20-2C	12.2 C	6.47	2.04 M	n.d.	n.d.	n.d.	n.d.	n.d.
20PE010847	MW-3	ALT-F20-3C	12.5 C	6.44	1703 u	n.d.	n.d.	n.d.	n.d.	n.d.
20PE010848	MW-4	ALT-F20-4C	12.4 C	6.25	2.36 M	n.d.	n.d.	n.d.	n.d.	22.6

Well #	TOC Elev. (ft.)	Depth to Water (ft.)	Water Elev.	Amount Purged (gal.)
MW-1	114.77	36.18	78.59	4.10
MW-2	105.64	28.90	76.74	4.50
MW-3	110.30	34.08	76.22	4.25
MW-4	103.66	28.74	74.92	4.60

Parameter	EPA Method	Detection Limit (ppb)	Reporting Limit (ppb)
Azoxystrobin	LCMS GCMS	1.80	10
Clothianidin	LCMS GCMS	3.00	10
Glyphosate	LCMS GCMS	0.05	10
Thiabendazole	LCMS GCMS	2.00	10
Thiamethoxam	LCMS GCMS	2.00	10

NUTRIENT ADVISORS

Laboratories, Inc.
Ag Testing - Consulting

Soil, Plant, & Water Program 2020 NAPT Participating Laboratory

Account No. : 20850

Water Analysis Report

NUTRIENT ADVISORS
449 E DEERE ST
WEST POINT NE 68788

Invoice No. : 1328992
Date Received : 10/14/2020
Date Reported : 10/15/2020

Lab Number : 23952

Results For : ALTEN LLC
Location :
Sample ID : ALT-F20-1

	ppm	EPA Method Number	Detection Limit	Reporting Limit
Nitrate, NO_3-N	73.8	353.2	0.05	0.1
Sulfate, SO_4-S	56	375.4	0.05	1
Chloride, Cl	188	325.1	0.1	1
Ammonium, NH_4-N	< 0.1	350.1	0.01	0.1
Total Dissolved Solids	1123	160.1	1	1

"<" - Not Detected / Below Detection Limit

Reviewed By : Raymond Ward **10/20/2020** **Copy : 1**

Bus: 308-234-2418
Fax: 308-234-1940
web site
www.wardlab.com
4007 Cherry Ave., P.O. Box 788
Kearney, Nebraska 68848-0788

WARD Laboratories, Inc.

Ag Testing - Consulting

Account No. : 20850

Water Analysis Report

NUTRIENT ADVISORS
449 E DEERE ST
WEST POINT NE 68788

Invoice No. : 1328992
Date Received : 10/14/2020
Date Reported : 10/15/2020

Lab Number : 23953

Results For : ALTEN LLC
Location :
Sample ID : ALT-F20-2

	ppm	EPA Method Number	Detection Limit	Reporting Limit
Nitrate, NO_3-N	50.3	353.2	0.05	0.1
Sulfate, SO_4-S	78	375.4	0.05	1
Chloride, Cl	167	325.1	0.1	1
Ammonium, NH_4-N	< 0.1	350.1	0.01	0.1
Total Dissolved Solids	1112	160.1	1	1

"<" - Not Detected / Below Detection Limit

Reviewed By : Raymond Ward **10/20/2020** **Copy : 1**

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Soil, Plant, & Water Program 2020 NAPT Participating Laboratory

Account No. : 20850

Water Analysis Report

NUTRIENT ADVISORS
449 E DEERE ST
WEST POINT NE 68788

Invoice No. : 1328992
Date Received : 10/14/2020
Date Reported : 10/15/2020

Lab Number : 23954

Results For : ALTEN LLC
Location :
Sample ID : ALT-F20-3

	ppm	EPA Method Number	Detection Limit	Reporting Limit
Nitrate, NO_3-N	57.3	353.2	0.05	0.1
Sulfate, SO_4-S	44	375.4	0.05	1
Chloride, Cl	117	325.1	0.1	1
Ammonium, NH_4-N	< 0.1	350.1	0.01	0.1
Total Dissolved Solids	953	160.1	1	1

"<" - Not Detected / Below Detection Limit

Reviewed By : Raymond Ward **10/20/2020** **Copy : 1**

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Account No. : 20850

Water Analysis Report

NUTRIENT ADVISORS
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Invoice No. : 1328992
Date Received : 10/14/2020
Date Reported : 10/15/2020

Lab Number : 23955

Results For : ALTEN LLC
Location :
Sample ID : ALT-F20-4

	ppm	EPA Method Number	Detection Limit	Reporting Limit
Nitrate, NO_3-N	84.8	353.2	0.05	0.1
Sulfate, SO_4-S	40	375.4	0.05	1
Chloride, Cl	96	325.1	0.1	1
Ammonium, NH_4-N	< 0.1	350.1	0.01	0.1
Total Dissolved Solids	1330	160.1	1	1

"<" - Not Detected / Below Detection Limit

Reviewed By : Raymond Ward 10/20/2020 Copy : 1

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Kearney, Nebraska 68848-0788

Soil, Plant, & Water Program 2020 NABP Participating Laboratory

Account No. : 20850

Water Analysis Report

NUTRIENT ADVISORS
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WEST POINT NE 68788

Invoice No. : 1328992
Date Received : 10/14/2020
Date Reported : 10/15/2020

Lab Number : 23956

Results For : ALTEN LLC
Location :
Sample ID : ALT-F20-5

	ppm	EPA Method Number	Detection Limit	Reporting Limit
Nitrate, NO_3-N	74.8	353.2	0.05	0.1
Sulfate, SO_4-S	56	375.4	0.05	1
Chloride, Cl	190	325.1	0.1	1
Ammonium, NH_4-N	< 0.1	350.1	0.01	0.1
Total Dissolved Solids	1130	160.1	1	1

"<" - Not Detected / Below Detection Limit

Reviewed By : Raymond Ward **10/20/2020** **Copy : 1**

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Account No. : 20850

Water Analysis Report

NUTRIENT ADVISORS
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WEST POINT NE 68788

Invoice No. : 1328992
Date Received : 10/14/2020
Date Reported : 10/15/2020

Lab Number : 23957

Results For : ALTEN LLC
Location :
Sample ID : ALT-F20-6

	ppm	EPA Method Number	Detection Limit	Reporting Limit
Nitrate, NO_3-N	< 0.1	353.2	0.05	0.1
Sulfate, SO_4-S	< 1	375.4	0.05	1
Chloride, Cl	2	325.1	0.1	1
Ammonium, NH_4-N	0.1	350.1	0.01	0.1
Total Dissolved Solids	10	160.1	1	1

"<" - Not Detected / Below Detection Limit

Reviewed By : Raymond Ward 10/20/2020 Copy : 1

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Fax: 308-234-1940
web site
www.wardlab.com
4007 Cherry Ave., P.O. Box 788
Kearney, Nebraska 68848-0788

Analyzed By:
South Dakota Agricultural Laboratories
1335 Western Avenue
Brookings,South Dakota 57006
Phone: 605-692-7325
E-Mail: regina.wixon@sdaglabs.com

Collected By:
AltEn LLC-Mead-M. Tingelhoff
1344 County Road 10
Mead, NE 68041
Phone: 402-624-2000
E-Mail: mtingelhoff@mrgkc.com

Report Date: 2021-01-04 **Final Report**

Report Of Analysis

Date Received : 2020-10-14
Package Id : 20201014-004

20PE010845 **Description: Water** **Date Collected: 2020-10-12**
ALT-F20-1C

Analyte	Result
Azoxystrobin	ND ppb
Clothianidin	ND ppb
Glyphosate	ND ppb
Thiabendazole	ND ppb
Thiamethoxam	ND ppb

20PE010846 **Description: Water** **Date Collected: 2020-10-12**
ALT-F20-2C

Analyte	Result
Azoxystrobin	ND ppb
Clothianidin	ND ppb
Glyphosate	ND ppb
Thiabendazole	ND ppb
Thiamethoxam	ND ppb

20PE010847 **Description: Water** **Date Collected: 2020-10-12**
ALT-F20-3C

Analyte	Result
Azoxystrobin	ND ppb
Clothianidin	ND ppb
Glyphosate	ND ppb
Thiabendazole	ND ppb
Thiamethoxam	ND ppb

20PE010848 **Description: Water** **Date Collected: 2020-10-12**
ALT-F20-4C

Analyte	Result
Azoxystrobin	ND ppb
Clothianidin	ND ppb
Glyphosate	ND ppb
Thiabendazole	ND ppb
Thiamethoxam	22.6 ppb

ND Not Detected

Reviewed By: Katie Ahlstrom.

The analytical results on this report reflect what was found in the laboratory sample as it was received at the laboratory.

WARD Laboratories, Inc.
4007 Cherry Ave, PO Box 788
Kearney, Nebraska 68848-0788
(308) 234-2418 Fax (308) 234-1940
www.wardlab.com

Sample Information

10/15

Also test:
Total Dissolved Solids
Total Kjeldahl Nitrogen

Submitted By
Nutrient Advisors
449 Deere St
West Point, NE 68788
Acct #20850

Sample Type (mark one)			
✔	Water		Wastewater
	Slurry		Potato
	Manure		Herbicide
	Fertilizer		Other

Sample Information	
Date	10/12/2020

For Lab Use	Results For	Sample ID 1	Description	Sub-Type	Test
23952	AltEn, LLC	ALT-F20-1	Water	GWM	201
53	AltEn, LLC	ALT-F20-2	Water	GWM	
54	AltEn, LLC	ALT-F20-3	Water	GWM	
55	AltEn, LLC	ALT-F20-4	Water	GWM	
56	AltEn, LLC	ALT-F20-5	Water	GWM	
57	AltEn, LLC	ALT-F20-6	Water	GWM	
		B=Acid			

Sample Sub-Types

Water
H = Household, I = Irrigation, L = Livestock
Slurry
H = Hog, B = Beef, P = Poultry, D = Dairy
Manure
H = Hog, B = Beef, P = Poultry, D = Dairy, C = Compost
Fertilizer
L = Liquid, D = Dry
Wastewater, Potato, Herbicide
none

Comments:

Chain of Custody			
Relinquished By	Date / Time	Received By	Date / Time
[signature]	10-13-20 3:00pm	Aleisha Zigerkin	10/14/20 11am
Ray Ward	10-20-20 11:45am		

Chain of Custody

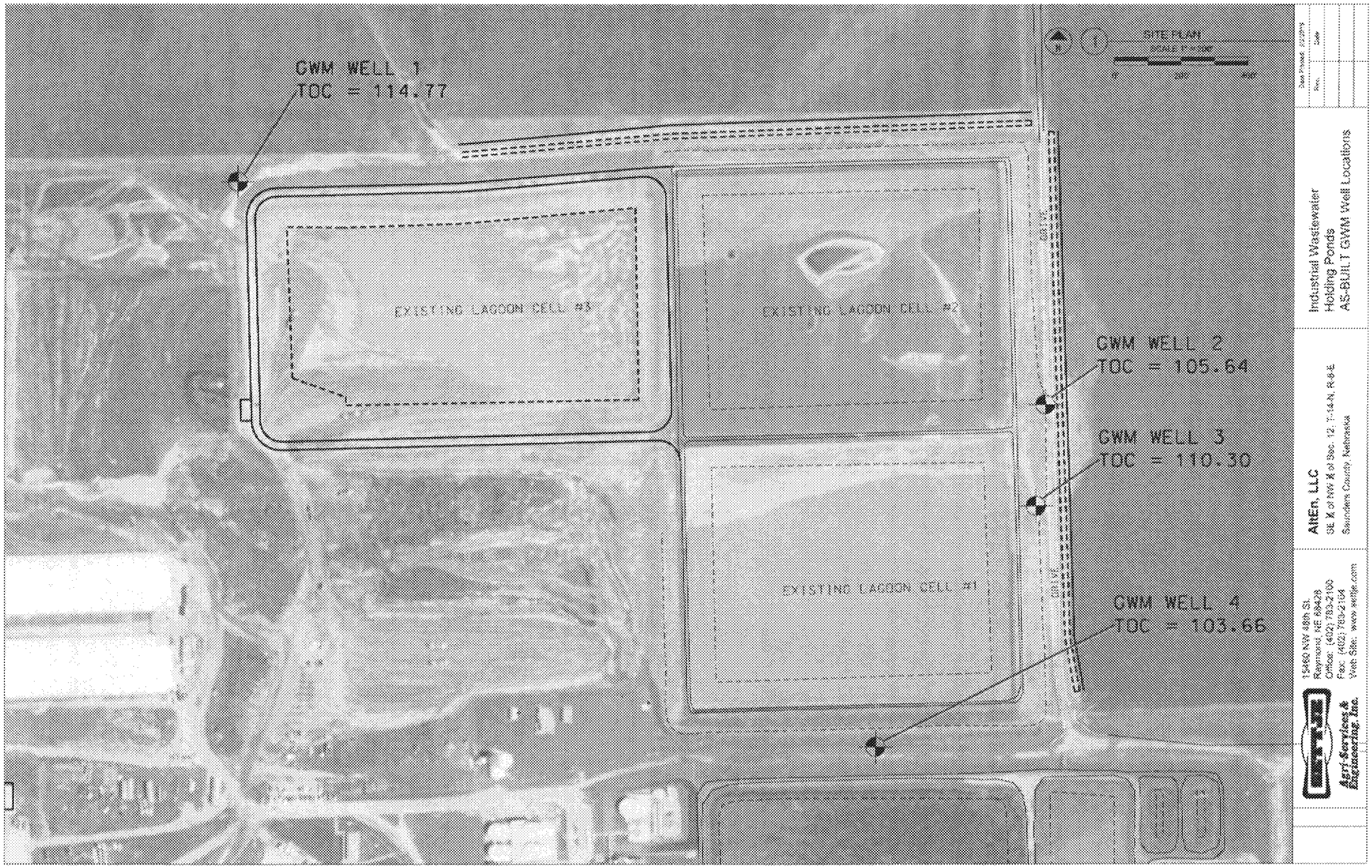
Site Name	IIS #	Sampler	Sampler (Signature)	Sample License #
AltEn, LLC	84069	Justin Sindelar	[signature]	79763

Lab Number (Lab Use)	Sample ID Number	Date	Time	Media	Number of Containers	Nitrate	Chloride	Ammonium	Sulfate	Total Disolved Solids	Total Kjeldahl Nitrogen	Preservation	Remarks
						Parameters and Lab Methods							
23952	ALT-F20-1	10/12/2020	4:55 PM	water	2	x	x	x	x	x	x	H2SO4,cool	
53	ALT-F20-2	10/12/2020	5:29 PM	water	2	x	x	x	x	x	x	H2SO4,cool	
54	ALT-F20-3	10/12/2020	5:48 PM	water	2	x	x	x	x	x	x	H2SO4,cool	
55	ALT-F20-4	10/12/2020	6:06 PM	water	2	x	x	x	x	x	x	H2SO4,cool	
56	ALT-F20-5	10/12/2020	n/a	water	2	x	x	x	x	x	x	H2SO4,cool	
57	ALT-F20-6	10/12/2020	4:40 PM	water	2	x	x	x	x	x	x	H2SO4,cool	

Relinquished By: (Signature)	Date/Time	Relinquished By: (Signature)		Date/Time
[signature]	10-13-20 3:00pm	[signature]	10-20-20	11:45AM
(Print)	Company	(Print)		Company
Justin Sindelar	Nutrient Advisors			
Received By: (Signature)	Date/Time	Received By: (Signature)		Date/Time
[signature]	10-14-20 1100am			
(Print)	Company	(Print)		Company
Alexsha Zigenbein	Ward Lab			

10/15

NUTRIENT ADVISORS


GWM WELL 1
TOC = 114.77
EXISTING LAGOON CELL #3
EXISTING LAGOON CELL #2
EXISTING LAGOON CELL #1
GWM WELL 2
TOC = 105.64
GWM WELL 3
TOC = 110.30
GWM WELL 4
TOC = 103.66
SITE PLAN
Industrial Wastewater
Holding Ponds
AS-BUILT GWM Well Locations
AltEn, LLC
Saunders County, Nebraska
Agri-Services & Engineering, Inc.

Well Registration or Area Permit

Fee Paid: $70.00 HHSS Fee: $30.00
DNR Cash Fund: $18.50 WWDF: $21.50
Billing ID: 69304

Source:	Nebraska On Line	Import Status:	Accepted	Use:	Monitoring (Ground Water Quality)	Owner ID:	138728
NoI ID:	160392873111244	Status:	Active Registered Well	Decommission Date:		Registration Number:	G-190723A
Well ID:	263366	NRD:	Lower Platte North			Registration Date:	10/29/2020
Last Change User:	lucas.hadenfeldt	Call Up Code:		Call Up Date:		Last Change Date:	10/29/2020

Owner: ☐ Show previous owners

	Contact ID	Type	Sequence	Begin Date	End Date	Name
Display	138728	Owner	1			AltEn LLC

Contractor:

	Contact ID	First Name	Last Name	Contact Type	License Information
Display	148089	Dustin Z	Humann	Water Well Professional	19311

Drilling Firm:

	Contact ID	Company	Contact Type	License Information
Display	144889	Olsson and Associates	Water Well Entity	Employer ID: 403006

A. Well Location: SW1/4NW1/4 of Section 12
Township 14 North, Range 8 (East E/W), Saunders County
B. Natural Resource District: Lower Platte North

	Latitude	Longitude
Well GPS Coordinates:	41° 12' 2.920"	-96° 28' 49.900"
Lat/Long DD	41.2008111100	-96.4805277700

C. The well is: 1608 feet from the N Section line and 899 feet from the W section line.
D. Street address or block, lot and subdivision: Addr/Sub Div ___ Block No ___ Lot ___
E. Location of water use, if applicable (give legal description): NA
G. Well reference letter(s) if applicable: MW-1

Well In A Series

Well Part of a Series with Site Plan: Yes
Series Reg # (External Source): ___

Series ID	# of Wells Registered	Total # of Wells	Acres	Acres Certified	Series Code-Description
270520	4	4		No	Mon-Monitoring Wells Part of a single site

WellID	Registration #	NRD Approved	Comment	Series Reg # (External Source)	Well Status	Completion Date	Start Da
263367		No			P-Partial Well Entry for Tracking of Incomplete Registration	9/25/2020	10/29/20
263368		No			P-Partial Well Entry for Tracking of Incomplete Registration	9/25/2020	10/29/20
263369		No			P-Partial Well Entry for Tracking of Incomplete Registration	9/25/2020	10/29/20
263366	G-190723A	No			A-Active Registered Well	9/25/2020	10/29/20

Permits

	Aprvd Date(s)				Aprvd Date(s)		
Area Permit	___	___	___	SWater App Code	___	___	___
GeoPermit	___	___	___	Industrial	___	___	___
MWF	___	___	___	Transfer	___	___	___
WSP	___	___	___	Swater Conduct Code	___	___	___
HHSS		___		Other		___	___
HHSS PWS ID		___		ITN		___	___
NDEQ		___					

5. Purpose of Well Monitoring (Ground Water Quality)
Other Use ___
Notes ___

7. Replacement well information.
Well Considered a replacement by NRD(WellID, RegCD) ___
A. Is this well a Replacement well? No Repl No ___ NRD Approval Date ___ Well Replacement Reg CD
B. Registration number of abandoned well: ___ If not registered, date abandoned well was constructed ___
C. Abandoned well last operated ___ D. Replacement well is ___ feet from abandoned well.
E. Original well pump column size: ___ inches.
F. ☐ Original water well decommissioned ___
☐ Original water well was modified ___
☐ I hereby certify that the original water well will be decommissioned within 180 days after such construction of the replacement water well.
☐ I hereby certify that the original water well will be modified and equipped to pump 50 gallons per minute or less within 180 days after such construction of the replacement water well.

- Livestock
- Monitoring
- Observation
- Nonconsumptive or de minimus use approved by the applicable natural resources district. ___
- Owner is not yet sure if they want to decommission or modify original well within 180 days.

G. Location of water use of original well: ___

Decommission Information
Decommission Date: ___

Decommissioned By:

8. Pump Information.

A. Is Pump installed at this time? No
Pump present but Well Inactive: No
Free Flowing Well: No
Well active, no pump installed: Yes
B. License No.
Pump Installer:

Pump Installer Firm:

C. Pumping Rate ___ gallons per minute.
D. Pumping water level ___ feet.
E. Drop pipe diameter ___ inches.
F. Length of pipe ___ in feet.
G. Pump equipment installed: ___
H. Pump Brand/Type ___
I. Will this well be used to pump 50 gpm or less? Yes

9. Well Construction Information

A. Total well depth: 40.5 feet.
B. Static water level 33.5 feet.
C. Well Construction began: 9/22/2020
D. Well Construction Completed: 9/25/2020 Days To Register: 34
E. Bore hole diameter in inches. Top 8.25 Bottom 8.25
F. Casing and Screen Joints are: Threaded
Other Joints description: ___
H. Total Estimate Capacity of Well 5 gallons per minute.
I. Pumping water level at capacity: 38 feet.

10. Well Construction (Casing & Screen) - c, d, e & f measurements should be in inches to three decimal places
Record Count = 2

WellID	FromDepth*	ToDepth*	Case/Screen	InsideDiam	OutsideDiam	CaseThickness	ScrnSlotSize	Material	ScreenTname
263366	0	30.5	casing	2.04	2.37	0.15		PVC	EMI
263366	30.5	40.5	screen	2.04	2.37	0.15	0.01	PVC	EMI

* are in Feet, all else is in inches

11. Grout and Gravel Pack
Record Count = 3

WellID	FromDepth	ToDepth	Grout/Gravel	Material Description[1]	Volume & Type Grout[3]	Quantity Gravel[2]
263366	0	22.5	grout	Bentonite Grout	8.5 Gallons	
263366	22.5	27.5	grout	Bentonite Chips	2 Bags	
263366	27.5	40.5	gravel	10/20 Silica Sand		10

* are in Feet, all else is in inches
[1]Description of gravel pack, i.e. engineered gravel pack, or gravel pit description (1/4 down) or brand name (best sand) natural formation, drilling cuttings, soil backfill
[2]Quantity #cubic yards, #Tons, #Sacks - (for drilling cuttings and soil backfill estimate quantity) Calculation assistance available on web
[3]Volume & Type: #gallons of a slurry, #Barrels of a slurry, #sacks used in the slurry, #Bags of non-slurry bentonite (chip-pellet-granular)

12. Well Geologic Materials Logged

WellID	FromDepth*	ToDepth*	Materials Drilled	Density/Hardness	Color	Other Material, Colors, Drilling Action, Note
263366	0	15	Clay	Dense/Stiff	Brown	
263366	15	40.5	Sand fine-med	Dense/Stiff	Tan	

* are in Feet.

Well Registration or Area Permit

Fee Paid: $70.00 HHSS Fee: $30.00
DNR Cash Fund: $18.50 WWDF: $21.50
Billing ID: 69305

Source:	Nebraska On Line	Import Status:	Accepted	Use:	Monitoring (Ground Water Quality)	Owner ID:	138728
NoI ID:	160393007932312	Status:	Active Registered Well	Decommission Date:		Registration Number:	G-190723B
Well ID:	263367	NRD:	Lower Platte North			Registration Date:	10/29/2020
Last Change User:	lucas.hedenfeldt	Call Up Code:		Call Up Date:		Last Change Date:	10/29/2020

Owner: ☐ Show previous owners

	Contact ID	Type	Salutation	Begin Date	End Date	Name
Display	138728	Owner 1				AltEn LLC

Contractor:

	Contact ID	First Name	Last Name	Contact Type	License Number
Display	148089	Dustin Z	Humann	Water Well Professional	19311

Drilling Firm:

	Contact ID	Contractor	Contact Type	License Number
Display	144889	Olsson and Associates	Water Well Entity	Employer ID: 403006

A. Well Location: SW1/4NE1/4 of Section 12
Township 14 North, Range 8 (East E/W), Saunders County
B. Natural Resource District: Lower Platte North

	Latitude	Longitude
Well GPS Coordinates:	41° 11' 57.480"	-96° 28' 24.920"
Lat/Long DD	41.1993000000	-96.4735888800

C. The well is: 2087 feet from the N Section line and 2661 feet from the E section line.
D. Street address or block, lot and subdivision: Addr/Sub Div ___ Block No ___ Lot ___
E. Location of water use, if applicable (give legal description): NA
G. Well reference letter(s) if applicable: MW-2

Well In A Series

Well Part of a Series with Site Plan: Yes
Series Reg # (External Source): ___

Series ID	# of Wells Registered	Total # of Wells	Acres	Acres Certified	Series Code Description
270520	4	4		No	Non-Monitoring Wells Part of a single site

WellID	Registration #	NRD Approved	Comment	Series Reg # (External Source)	Well Status	Completion Date	Start Da
263368		No			P-Partial Well Entry for Tracking of Incomplete Registration	9/25/2020	10/29/20
263369		No			P-Partial Well Entry for Tracking of Incomplete Registration	9/25/2020	10/29/20
263366	G-190723A	No			A-Active Registered Well	9/25/2020	10/29/20
263367	G-190723B	No			A-Active Registered Well	9/25/2020	10/29/20

Permits

		Aprvd Date(s)			
Area Permit	___	___	___	SWater App Code	___ ___ ___
GeoPermit	___	___	___	Industrial	___ ___ ___
MWF	___	___	___	Transfer	___ ___ ___
WSP	___	___	___	Swater Conduct Code	___ ___ ___
HHSS		___		Other	___ ___
HHSS PWS ID		___		ITN	___ ___
NDEQ		___			

5. Purpose of Well Monitoring (Ground Water Quality)
Other Use ___
Notes ___

7. Replacement well information.
Well Considered a replacement by NRD(WellID, RegCD) ___
A. Is this well a Replacement well? No Repl No ___ NRD Approval Date ___ Well Replacement Reg CD
B. Registration number of abandoned well: ___ If not registered, date abandoned well was constructed ___
C. Abandoned well last operated ___ D. Replacement well is ___ feet from abandoned well.
E. Original well pump column size: ___ inches.
F. Original water well decommissioned ___
Original water well was modified ___
I hereby certify that the original water well will be decommissioned within 180 days after such construction of the replacement water well.
I hereby certify that the original water well will be modified and equipped to pump 50 gallons per minute or less within 180 days after such construction of the replacement water well.

- Livestock
- Monitoring
- Observation
- Nonconsumptive or de minimus use approved by the applicable natural resources district. ___
- Owner is not yet sure if they want to decommission or modify original well within 180 days.

G. Location of water use of original well: ___

Decommission Information
Decommission Date: ___

Decommissioned By:

8. Pump Information.

A. Is Pump installed at this time? No
Pump present but Well Inactive: No
Free Flowing Well: No
Well active, no pump installed: Yes
B. License No.
Pump Installer:

Pump Installer Firm:

C. Pumping Rate ___ gallons per minute.
D. Pumping water level ___ feet.
E. Drop pipe diameter ___ inches.
F. Length of pipe ___ in feet.
G. Pump equipment installed: ___
H. Pump Brand/Type ___
I. Will this well be used to pump 50 gpm or less? Yes

9. Well Construction Information

A. Total well depth: 33.5 feet.
B. Static water level 26.5 feet.
C. Well Construction began: 9/22/2020
D. Well Construction Completed: 9/25/2020 Days To Register: 34
E. Bore hole diameter in inches. Top 8.25 Bottom 8.25
F. Casing and Screen Joints are: Threaded
Other Joints description: ___
H. Total Estimate Capacity of Well 5 gallons per minute.
I. Pumping water level at capacity: 32 feet.

10. Well Construction (Casing & Screen) - c, d, e & f measurements should be in inches to three decimal places
Record Count = 2

WellID	FromDepth*	ToDepth*	Case/Screen	InsideDiam	OutsideDiam	CaseThickness	ScrnSlotSize	Material	ScreenTrame
263367	0	23.5	casing	2.04	2.37	0.15		PVC	EMI
263367	23.5	33.5	screen	2.04	2.37	0.15	0.01	PVC	EMI

* are in Feet, all else is in inches

11. Grout and Gravel Pack
Record Count = 3

WellID	FromDepth	ToDepth	Grout/Gravel	Material Description[1]	Volume & Type Grout[3]	Quantity Gravel[2]
263367	0	15.5	grout	Bentonite Grout	6 Gallons	
263367	15.5	20.5	grout	Bentonite Chips	2 Bags	
263367	20.5	33.5	gravel	10/20 Silica Sand		10

* are in Feet, all else is in inches
[1]Description of gravel pack, i.e. engineered gravel pack, or gravel pit description (1/4 down) or brand name (best sand) natural formation, drilling cuttings, soil backfill
[2]Quantity #cubic yards, #Tons, #Sacks - (for drilling cuttings and soil backfill estimate quantity) Calculation assistance available on web
[3]Volume & Type: #gallons of a slurry, #Barrels of a slurry, #sacks used in the slurry, #Bags of non-slurry bentonite (chip-pellet-granular)

12. Well Geologic Materials Logged

WellID	FromDepth*	ToDepth*	Materials Drilled	Density/Hardness	Color	Other Material, Colors, Drilling Action, Note
263367	0	15	Clay	Dense/Stiff	Brown	
263367	15	33.5	Sand fine-med	Dense/Stiff	Tan	

* are in Feet.

Well Registration or Area Permit

Fee Paid: $70.00 HHSS Fee: $30.00
DNR Cash Fund: $18.50 WWDF: $21.50
Billing ID: 69306

Source:	Nebraska On Line	Import Status:	Accepted	Use:	Monitoring (Ground Water Quality)	Owner ID:	138728
NoI ID:	160393047731024	Status:	Active Registered Well	Decommission Date:	___	Registration Number:	G-190723C
Well ID:	263368	NRD:	Lower Platte North			Registration Date:	10/29/2020
Last Change User:	lucas.hadenfeldt	Call Up Code:	___	Call Up Date:	___	Last Change Date:	10/29/2020

Owner: ☐ Show previous owners

	ContactID	Type	SeqNum	Begin Date	End Date	Name
Display	138728	Owner	1			AltEn LLC

Contractor:

	Contact ID	First Name	Last Name	Contact Type	License Information
Display	148089	Dustin Z	Humann	Water Well Professional	19311

Drilling Firm:

	Contact ID	Employer	Contact Type	License Information
Display	144889	Olsson and Associates	Water Well Entity	Employer ID: 403006

A. Well Location: SW1/4NE1/4 of Section 12
Township 14 North, Range 8 (East E/W), Saunders County

B. Natural Resource District: Lower Platte North

	Latitude	Longitude
Well GPS Coordinates:	41° 11' 54.190"	-96° 28' 25.140"
Lat/Long DD	41.1983861100	-96.4736500000

C. The well is: 2418 feet from the N Section line and 2680 feet from the E section line.

D. Street address or block, lot and subdivision: Addr/Sub Div ___ Block No ___ Lot ___

E. Location of water use, if applicable (give legal description): NA

G. Well reference letter(s) if applicable: MW-3

Well In A Series

Well Part of a Series with Site Plan: Yes

Series Reg # (External Source): ___

Series ID	# of Wells Registered	Total # of Wells	Acres	Acres Certified	Series Code-Description
270520	4	4		No	Mon-Monitoring Wells Part of a single site

WellID	Registration #	NRD Approved	Comment	Series Reg # (External Source)	Well Status	Completion Date	Start Da
263369		No			P-Partial Well Entry for Tracking of Incomplete Registration	9/25/2020	10/29/20
263366	G-190723A	No			A-Active Registered Well	9/25/2020	10/29/20
263367	G-190723B	No			A-Active Registered Well	9/25/2020	10/29/20
263368	G-190723C	No			A-Active Registered Well	9/25/2020	10/29/20

Permits

	Aprvd Date(s)		Aprvd Date(s)
Area Permit	___ ___ ___	SWater App Code	___ ___ ___
GeoPermit	___ ___ ___	Industrial	___ ___ ___
MWF	___ ___ ___	Transfer	___ ___ ___
WSP	___ ___ ___	Swater Conduct Code	___ ___ ___
HHSS	___	Other	___ ___
HHSS PWS ID	___	ITN	___ ___
NDEQ	___		

5. Purpose of Well Monitoring (Ground Water Quality)
Other Use ___
Notes ___

7. Replacement well information.

Well Considered a replacement by NRD(WellID, RegCD) ___

A. Is this well a Replacement well? No Repl No ___ NRD Approval Date ___ Well Replacement Reg CD

B. Registration number of abandoned well: ___ If not registered, date abandoned well was constructed ___

C. Abandoned well last operated ___ D. Replacement well is ___ feet from abandoned well.

E. Original well pump column size: ___ inches.

F. ☐ Original water well decommissioned ___
☐ Original water well was modified ___
☐ I hereby certify that the original water well will be decommissioned within 180 days after such construction of the replacement water well.
☐ I hereby certify that the original water well will be modified and equipped to pump 50 gallons per minute or less within 180 days after such construction of the replacement water well.

- Livestock
- Monitoring
- Observation
- Nonconsumptive or de minimus use approved by the applicable natural resources district. ___
- Owner is not yet sure if they want to decommission or modify original well within 180 days.

G. Location of water use of original well: ___

Decommission Information
Decommission Date: ___

Decommissioned By:

8. Pump Information.

A. Is Pump installed at this time? No
Pump present but Well Inactive: No
Free Flowing Well: No
Well active, no pump installed: Yes
B. License No.
Pump Installer:

Pump Installer Firm:

C. Pumping Rate ___ gallons per minute.
D. Pumping water level ___ feet.
E. Drop pipe diameter ___ inches.
F. Length of pipe ___ in feet.
G. Pump equipment installed: ___
H. Pump Brand/Type ___
I. Will this well be used to pump 50 gpm or less? Yes

9. Well Construction Information

A. Total well depth: 38.5 feet.
B. Static water level 31.5 feet.
C. Well Construction began: 9/22/2020
D. Well Construction Completed: 9/25/2020 Days To Register: 34
E. Bore hole diameter in inches. Top 8.25 Bottom 8.25
F. Casing and Screen Joints are: Threaded
Other Joints description: ___
H. Total Estimate Capacity of Well 5 gallons per minute.
I. Pumping water level at capacity: 37 feet.

10. Well Construction (Casing & Screen) - c, d, e & f measurements should be in inches to three decimal places
Record Count = 2

WellID	FromDepth*	ToDepth*	Case/Screen	InsideDiam	OutsideDiam	CaseThickness	ScrnSlotSize	Material	ScreenThtime
263368	0	28.5	casing	2.04	2.37	0.15		PVC	EMI
263368	28.5	38.5	screen	2.04	2.37	0.15	0.01	PVC	EMI

* are in Feet, all else is in inches

11. Grout and Gravel Pack
Record Count = 3

WellID	FromDepth	ToDepth	Grout/Gravel	Material Description[1]	Volume &Type Grout[3]	Quantity Gravel[2]
263368	0	20.5	grout	Bentonite Grout	8 Gallons	
263368	20.5	25.5	grout	Bentonite Chips	2 Bags	
263368	25.5	38.5	gravel	10/20 Silica Sand		10

* are in Feet, all else is in inches
[1]Description of gravel pack, i.e. engineered gravel pack, or gravel pit description (1/4 down) or brand name (best sand) natural formation, drilling cuttings, soil backfill
[2]Quantity #cubic yards, #Tons, #Sacks - (for drilling cuttings and soil backfill estimate quantity) Calculation assistance available on web
[3]Volume & Type: #gallons of a slurry, #Barrels of a slurry, #sacks used in the slurry, #Bags of non-slurry bentonite (chip-pellet-granular)

12. Well Geologic Materials Logged

WellID	FromDepth*	ToDepth*	Materials Drilled	Density/Hardness	Color	Other Material, Colors, Drilling Action, Note
263368	0	15	Clay	Dense/Stiff	Brown	
263368	15	38.5	Sand fine-med	Dense/Stiff	Tan	

* are in Feet.

Well Registration or Area Permit

Fee Paid: $70.00 HHSS Fee: $30.00
DNR Cash Fund: $18.50 WWDF: $21.50
Billing ID: 69307

Source:	Nebraska On Line	Import Status:	Accepted	Use:	Monitoring (Ground Water Quality)	Owner ID:	138728
NoI ID:	160393067020221	Status:	Active Registered Well	Decommission Date:	___	Registration Number:	G-190723D
Well ID:	263369	NRD:	Lower Platte North			Registration Date:	10/29/2020
Last Change User:	lucas.hadenfeldt	Call Up Code:	___	Call Up Date:	___	Last Change Date:	10/29/2020

Owner: ☐ Show previous owners

	ContactID	Type	SeqNum	Begin Date	End Date	Name
Display	138728	Owner 1				AltEn LLC

Contractor:

	Contact ID	First Name	Last Name	Contact Type	License Information
Display	148089	Dustin Z	Humann	Water Well Professional	19311

Drilling Firm:

	Contact ID	Employer	Contact Type	License Information
Display	144889	Olsson and Associates	Water Well Entity	Employer ID: 403006

A. Well Location: NE1/4SW1/4 of Section 12
Township 14 North, Range 8 (East E/W), Saunders County

B. Natural Resource District: Lower Platte North

	Latitude	Longitude
Well GPS Coordinates:	41° 11' 49.360"	-96° 28' 29.490"
Lat/Long DD	41.1970444400	-96.4748583300

C. The well is: 2365 feet from the S Section line and 2441 feet from the W section line.

D. Street address or block, lot and subdivision: Addr/Sub Div ___ Block No ___ Lot ___

E. Location of water use, if applicable (give legal description): NA

G. Well reference letter(s) if applicable: MW-4

Well In A Series

Well Part of a Series with Site Plan: Yes

Series Reg # (External Source): ___

Series ID	# of Wells Registered	Total # of Wells	Acres	Acres Certified	Series Code-Description
270520	4	4		No	Mon-Monitoring Wells Part of a single site

WellID	Registration #	NRD Approved	Comment	Series Reg # (External Source)	Well Status	Completion Date	Start Date	End Date
263366	G-190723A	No			A-Active Registered Well	9/25/2020	10/29/2020	
263367	G-190723B	No			A-Active Registered Well	9/25/2020	10/29/2020	
263368	G-190723C	No			A-Active Registered Well	9/25/2020	10/29/2020	
263369	G-190723D	No			A-Active Registered Well	9/25/2020	10/29/2020	

Permits

		Aprvd Date(s)			Aprvd Date(s)
Area Permit	___ ___ ___		SWater App Code	___ ___ ___	
GeoPermit	___ ___ ___		Industrial	___ ___ ___	
MWF	___ ___ ___		Transfer	___ ___ ___	
WSP	___ ___ ___		Swater Conduct Code	___ ___ ___	
HHSS	___		Other	___ ___	
HHSS PWS ID	___		ITN	___ ___	
NDEQ	___				

5. Purpose of Well Monitoring (Ground Water Quality)
Other Use ___
Notes ___

7. Replacement well information.

Well Considered a replacement by NRD(WellID, RegCD) ___

A. Is this well a Replacement well? No Repl No ___ NRD Approval Date ___ Well Replacement Reg CD

B. Registration number of abandoned well: ___ If not registered, date abandoned well was constructed ___

C. Abandoned well last operated ___ D. Replacement well is ___ feet from abandoned well.

E. Original well pump column size: ___ inches.

F. Original water well decommissioned ___
Original water well was modified ___
I hereby certify that the original water well will be decommissioned within 180 days after such construction of the replacement water well.
I hereby certify that the original water well will be modified and equipped to pump 50 gallons per minute or less within 180 days after such construction of the replacement water well.

- Livestock
- Monitoring
- Observation
- Nonconsumptive or de minimus use approved by the applicable natural resources district. ___

Owner is not yet sure if they want to decommission or modify original well within 180 days.

G. Location of water use of original well: ___

Decommission Information
Decommission Date: ____

Decommissioned By:

8. Pump Information.

A. Is Pump installed at this time? No
Pump present but Well Inactive: No
Free Flowing Well: No
Well active, no pump installed: Yes
B. License No.
Pump Installer:

Pump Installer Firm:

C. Pumping Rate ___ gallons per minute.
D. Pumping water level ___ feet.
E. Drop pipe diameter ___ inches.
F. Length of pipe ___ in feet.
G. Pump equipment installed: ___
H. Pump Brand/Type ___
I. Will this well be used to pump 50 gpm or less? Yes

9. Well Construction Information

A. Total well depth: 33.5 feet.
B. Static water level 26.5 feet.
C. Well Construction began: 9/22/2020
D. Well Construction Completed: 9/25/2020 Days To Register: 24
E. Bore hole diameter in inches. Top 8.25 Bottom 8.25
F. Casing and Screen Joints are: Threaded
Other Joints description: ___
H. Total Estimate Capacity of Well 5 gallons per minute.
I. Pumping water level at capacity: 25 feet.

10. Well Construction (Casing & Screen) - c, d, e & f measurements should be in inches to three decimal places
Record Count = 2

WellID	Section*	Top*	Casing/Screen	Nominal Diameter	Outside Diameter	Wall Thickness	Slot Size	Material	Screen Type
263369	0	23.5	casing	2.04	2.37	0.15		PVC	EMI
263369	23.5	33.5	screen	2.04	2.37	0.15	0.01	PVC	EMI

* are in Feet, all else is in inches

11. Grout and Gravel Pack
Record Count = 3

WellID	Section*	Top*	Grout/Gravel	Material Description[1]	Volume & Type Grout[3]	Quantity Gravel[2]
263369	0	15.5	grout	Bentonite Grout	6 Gallons	
263369	15.5	20.5	grout	Bentonite Chips	2 Bags	
263369	20.5	33.5	gravel	10/20 Silica Sand		10

* are in Feet, all else is in inches
[1]Description of gravel pack, i.e. engineered gravel pack, or gravel pit description (1/4 down) or brand name (best sand) natural formation, drilling cuttings, soil backfill
[2]Quantity #cubic yards, #Tons, #Sacks - (for drilling cuttings and soil backfill estimate quantity) Calculation assistance available on web
[3]Volume & Type: #gallons of a slurry, #Barrels of a slurry, #sacks used in the slurry, #Bags of non-slurry bentonite (chip-pellet-granular)

12. Well Geologic Materials Logged

WellID	Section*	Top*	Geologic Material	Density/Hardness	Color	Size & Sorting	Other Qualifiers	Units
263369	0	15	Clay	Dense/Stiff	Brown			
263369	15	33.5	Sand fine-med	Dense/Stiff	Tan			

* are in Feet.

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