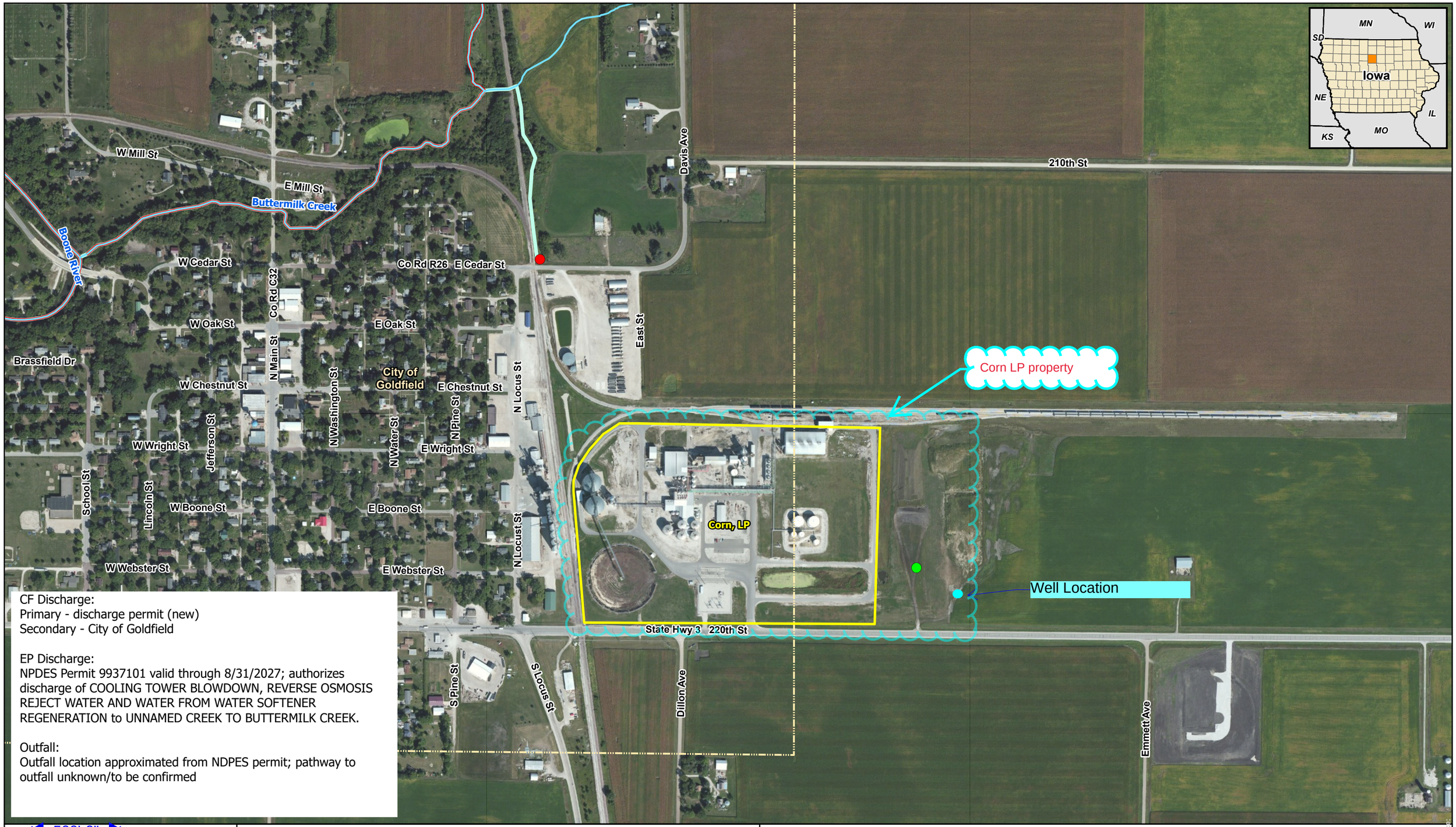


CF Discharge:
Primary - discharge permit (new)
Secondary - City of Goldfield

EP Discharge:
NPDES Permit 9937101 valid through 8/31/2027; authorizes discharge of COOLING TOWER BLOWDOWN, REVERSE OSMOSIS REJECT WATER AND WATER FROM WATER SOFTENER REGENERATION to UNNAMED CREEK TO BUTTERMILK CREEK.

Outfall:
Outfall location approximated from NDPES permit; pathway to outfall unknown/to be confirmed

500'-0"
0 250 500
Feet
1:6,000

N W E S

merjent
For Environmental Review Purposes Only

Aerial Facility and Outfall Map

Corn LP
Summit Carbon Solutions
Goldfield, Wright County, Iowa

- Facility Boundary
- Capture Facility Location
- Outfall Location
- Municipal Boundary
- NHD Waterbody (Flowline)
- Impaired Stream (2016)
- Designated River

Date: 02/10/2023 Source:

75348 WELL RECORD 1 of 2

PWTS Permit No. _____

Iowa Department of Natural Resources – Geological Survey
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

PWTS Well No. _____

County Permit No. 38078

Site identification

Property Owner Centurion Poultry Other ID 216444

Address _____

Tenant _____

Well Depth 255 ft. Date completed 8 / 14 / 12

Location

County Wright

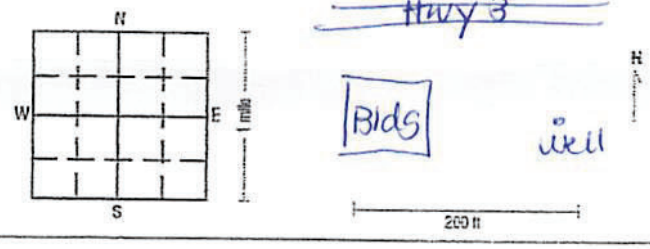
_____ mi. N/S and _____ mi. E/W of intersection of _____ and _____

_____ 1/4 of the _____ 1/4 of the _____ 1/4 of Sec _____ TWP _____ RNG _____ E/W

GPS Coordinates (NAD83 datum only) decimal degrees:

_____ N. Latitude _____ W. Longitude.

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



☐ upland ☐ hillside ☐ valley ☐ level surface Elevation (if known) _____

Formation log

From	To	Color	Hardness	Formation description
0	2	Black	S	Topsoil
2	12	yellow	S	Clay
12	14	brown	S	Clay
14	42	blue	S	Clay
42	45	dark blue	S	Shale & Sand
45	77	blue	S	Clay
77	110	blue	S	Sandy Clay
110	119	green	S	Shale
119	132	dark gray	S	Clay
132	135	yellow	S	Clay
135	162	yellow orange	S	Sand & Gravel
162	164	gray	S	Clay
164	165	red	S	Sand
165	166	gray	S	Clay

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)

RECEIVED NOV 2012 By

Well use

☐ Domestic ☐ Heat pump ☐ Commercial
☒ Livestock ☐ Municipal ☐ Monitoring
☐ Test well ☐ Public supply ☐ Other _____
☐ Irrigation

Drill method

☒ rotary ☐ auger ☐ cable other _____

Hole size

9 7/8 inch from 0 ft to 243 ft
5 7/8 inch from 243 ft to 255 ft

hole size continued

_____ inch from _____ ft to _____ ft
_____ inch from _____ ft to _____ ft

Record all depth measurements from ground level (GL). Use (+) for above GL measurements.

Casing

Drive shoe (yes / no) Pitless adapter (yes / no)

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
6 5/4	PVC	+2	243	245

Perforated or slotted casing? (yes / no)

Perforated / slotted from _____ ft to _____ ft
Perforated / slotted from _____ ft to _____ ft

Casing grouted? (yes / no)

Placement method _____

Type	Depth top	Depth bottom	Amount (vol/wt)
Benseal	0	243	22 bags

Well screen? (yes / no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
	0.____				
	0.____				

Bottom capped (yes / no) with _____
Seals / Packers (yes / no) kind _____ depth _____ ft
Gravel packed (yes / no) from _____ ft to _____ ft
type _____ amount _____

Well developed? (yes / no)

Explain _____

(pumped, airlifted, bailed) for _____ hrs at _____ GPM

Pump installed? (yes / no)

Date ____ / ____ / ____

Installer's name _____

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ Rated capacity _____ GPM

Water information

Aquifer: ☐ sand / gravel ☐ limestone ☐ sandstone

Main water-supply zone from 245 ft to 391 ft ☐ seepage well

Static water level 46 ft (below / above) GL; ☒ tape ☐ airline ☐ E-line ☐ estimate

Pumping water level 80 ft below GL; ☐ tape ☐ airline ☐ E-line ☒ estimate

At yield of 40 GPM; ☐ orifice ☐ volumetric ☐ estimate for 3 hours

Measurements taken at 3 : 00 (AM / PM) Date 8 / 14 / 12

Water quality test? (yes / no)

Date tested ____ / ____ / ____

Tested by _____

Contractor Schumacher Well Drilling

Address 2201 Slagle Dr. Algona

Driller Jeremy Walker Certification no. 6087

Send original form to: Iowa Department of Natural Resources – Geological Survey

Make photocopies for: Well Contractor, Customer, and County Health Department

DNR Iowa Department of Natural Resources

WELL RECORD FORM

2 of 2

Geological and Water Survey

PWTS No. *or* PWS No. _____ PWTS Permit No. 38079 GEOSAM Well No. *(DNR use only)* 75348

Site Identification

Property owner Centurion Poultry Other ID 216444

Address _____ City _____

Tenant _____

Well depth _____ ft Date completed ____/____/____

Location

County _____

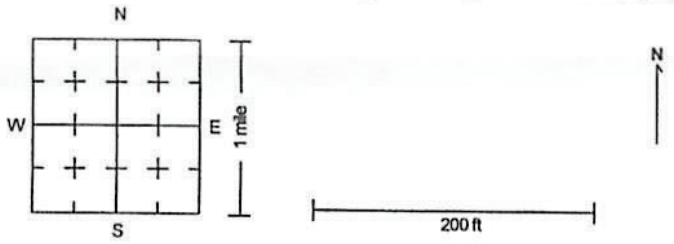
GPS coordinates (NAD83 datum)

_____ Latitude _____ Longitude

☐ Decimal Degrees ☐ Degrees, Decimal Minutes ☐ Degrees, Minutes, Seconds

____ 1/4 of the ____ 1/4 of the ____ 1/4 of Sec ____ TWP ____ RNG ____ E W

Show exact location of well in section grid with a dot (•). Sketch map of well location on property.



Formation Log

From	To	Color	Hardness	Formation description
166	167	brown white	MH	Limestone
167	180	white	S	Sand
180	182	yellow	S	Clay
182	194	white	S	Clay
194	198	red	S	Clay
198	212	white	S	Clay
212	218	yellow	S	Clay & Sandstone
218	226	blue	S	Shale
226	228	brown	S-M	Sandstone
228	233	brown	S	Shale
233	236	gray	S	Shale
236	241	brown	M	Sandstone & Shale
241	245	light brown	MH	Limestone
245	249	brown	Softer	Sandstone Black Shale Iron pyrite lots water
249	251	brown	MH	Frac Limestone
251	254	red brown	MH	Limestone / Broken limestone
254	255	gray	MH	Limestone

(use additional sheets as needed)

Remarks (including depth of lost drilling fluids, materials, or tools)

Well Use

☐ Domestic ☐ Public supply ☐ Livestock

☐ Heat pump ☐ Commercial ☐ Irrigation

# of borehole(s) ____ ☐ Monitoring ☐ Other _____

Drill Method

☐ Rotary ☐ Auger ☐ Cable ☐ Other _____

Hole size

____ inch from 0 ft to ____ ft

____ inch from ____ ft to ____ ft

hole size continued

____ inch from ____ ft to ____ ft

____ inch from ____ ft to ____ ft

Casing or Loop Pipe

Record all depth measurements from ground level (GL). Use + for above GL measurements.

Size (in)	Material	Depth Top	Depth Bottom	Perforated	Slotted	Screen
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____
				☐	☐	☐ slot size ____

Casing Grout

Placement method _____

Type	Depth top	Depth bottom
☐ Gravel packed variety _____		
☐ Seals/packers		

Pump Installation

Date ____/____/____

Type of pump _____ Depth to intake _____ ft

Pump diameter _____ in Rated capacity _____ GPM

Water Information

Date ____/____/____

Use + for above GL measurements.

Static Water Level	Pumping Water Level	Yield	Duration
____ ft	____ ft	____ GPM	____ hrs

Water level measurement: ☐ Sonic ☐ Tape ☐ Airline ☐ E-line ☐ Estimate

Water yield measurement: ☐ Orifice ☐ Volumetric ☐ Estimate

Main water-supply zone from _____ ft to _____ ft below GL

Well Development

☐ Physical explain: _____

☐ Chemical explain: _____

Contractor

Company Schumacher Well Drilling

Address _____

Driller JWalker Certification no. 6087

Revision Date: 10/2011

Send form to **Iowa Department of Natural Resources – Geological and Water Survey**
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH 319-335-1575 FAX 319-335-2754
Or click here to e-mail form to: IGWS.WellRecords@dnr.iowa.gov

Make photocopies for:
well contractor, customer, and county health department

Iowa Department of Natural Resources Geological Survey Bureau
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

WELL RECORD

60414 Permit No. 19554

Site identification

2109222

Property Owner Central Iowa Renewables Well Number ____

Address PO 280 Goldfield IA

Tenant Same 50542

Well Depth 387 ft Date completed 6/21/05

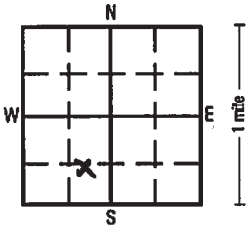
Location

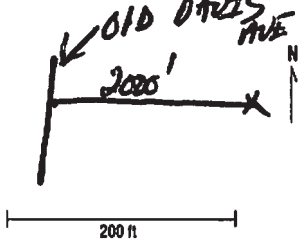
County WRIGHT

1/4 mi W S and 1/2 mi E W of Intersection of OLD DAVIS and HWY 3

NW 1/4 of the SE 1/4 of the SE 1/4 of Sec 34 TWP 92 RNG 26 E W

Show exact location of well in section grid with a dot (●). Sketch map of well location on property.





☒ Upland ☐ hillside ☐ valley Elevation (if known) ____

Formation log

From	To	Color	Hardness	Formation description
0	3	BLK	SOFT	SOIL
3	18	BRN	11	SANDY CLAY
18	118	GRY	11	11
118	120	MLCT	11	GRAVEL
120	141	TAN	11	SHALE
141	150	TAN	HRD	LIMESTONE & SHALE
150	165	GRY	11	11
165	180	BRN	11	11
180	185	TBRN	11	11
185	189	BRN	11	11
189	191	BLK	11	11
191	338	BRN	11	11
338	386	BRN GRY	11	11

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)

Well use

☐ Domestic ☐ Municipal ☒ Commercial
☐ Livestock ☐ Public supply ☐ Monitoring
☐ Test well ☐ Irrigation ☐ Other ____ (explain)

Drill method

☒ Rotary ☐ auger ☐ cable other ____

Hole size

12 1/4 inch from 0 ft to 158 ft
7 7/8 inch from 158 ft to 387 ft

hole size continued
____ inch from ____ ft to ____ ft
____ inch from ____ ft to ____ ft

Record all depth measurements from ground level (GL). Use (+) for above GL measurements.

Casing

Drive shoe (yes / no) Pitless adapter (yes / no)

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
6"	32# GALV	+2	158	160

Perforated or slotted casing? (yes / no)

Perforated / slotted from ____ ft to ____ ft
Perforated / slotted from ____ ft to ____ ft

Casing grouted? (yes / no) Placement method ____

Type	Depth Top	Depth bottom	Amount (vol/wt)
BENTONITE	0	158	20 BAG
			600 GAL

Well screen? (yes / no)

Diameter	Slot size	Depth Top	Depth Bottom	Length	Material
	0.___				
	0.___				

Bottom capped (yes / no) with ____
Seals / Packers (yes / no) kind ____ depth ____ ft
Gravel packed (yes / no) from ____ ft to ____ ft
type ____ amount ____

Well developed? (yes / no)

Explain ____
(pumped, shifted, bailed) for 3 hrs at 350 GPM.

Pump installed? (yes / no) Date ____/____/____

Installer's name ____
Type of pump ____ Depth to intake ____ ft
Pump diameter ____ Rated capacity ____ GPM

Water information

Aquifer: ☐ sand / gravel ☒ limestone ☐ sandstone
Main water-supply zone from 340 ft to 387 ft ☐ seepage well
Static water level 31 ft (below / above) GL; ☒ tape ☐ airline ☐ E-line ☐ estimate
Pumping water level 100 ft below GL; ☐ tape ☐ airline ☐ E-line ☒ estimate
At yield of 350 GPM; ☐ orifice ☒ volumetric ☐ estimate
Measurements taken at 10:00 (AM / PM) Date 6/21/05

Water quality test? (yes / no) Date tested ____/____/____

Tested by ____

MORI'S WELL CO.
BOX 715
LATIMER IA 50452

Contractor ____
Address ____
Driller ____ Certification no. 1887

white copy – Iowa DNR, Geological Survey Bureau blue copy – Well Contractor pink copy – Customer yellow copy – County Health Officer

Iowa Department of Natural Resources Geological Survey Bureau
109 Trowbridge Hall, Iowa City, IA 52242-1319 PH (319) 335-1575

WELL RECORD

WELL #4 61067 Permit No. 20011

Site identification

CENTRAL IA RENEWABLES 2110863

Property Owner CORN LP Well Number

Address PO 280 BOCKSFIELD, IA

Tenant SAME

Well Depth 270 ft Date completed 8 / 14 / 05

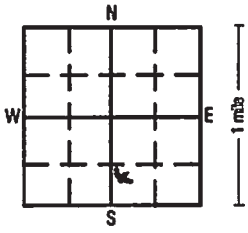
Location

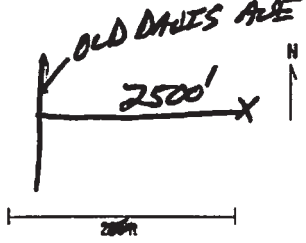
County WRIGHT

1/4 m N S and 5/8 m E W of intersection of DAVIS and HWY 3

NW 1/4 of the SW 1/4 of the SE 1/4 of Sec 34 TWP 92 RNG 26 E W

Show exact location of well in section grid with a dot (●). Sketch map of well location on property.





☒ upland ☐ hillside ☐ valley Elevation (if known)

Formation log

From	To	Color	Hardness	Formation description
0	4	BLK	SOFT	TOPSOIL
4	15	BRN	"	SANDY CLAY
15	60	GRY	"	"
60	79	GRY	"	SAND SEAMS
79	135	GRY	"	SANDY CLAY
135	178	GRY	"	SANDY CLAY SAND SEAMS
178	185	LT BRN	HARD	LIMESTONE
185	187	BRN	MED	SHALE
187	188	LT BRN	"	BROKEN LIMESTONE
188	226	"	"	LIMESTONE
226	230	"	"	BROKEN LIMESTONE
230	249	TAN WHT	HARD	LIMESTONE
249	252	LT BRN	"	BROKEN LIMESTONE
252	257			VOID
257	265	LT BRN	MED	BROKEN LIMESTONE
265	270		HARD	LIMESTONE

use additional sheets as needed

Remarks (including depth of lost drilling fluids, materials, or tools)

Well use

☐ Domestic ☐ Municipal ☒ Commercial
☐ Livestock ☐ Public supply ☐ Monitoring
☐ Test well ☐ Irrigation ☐ Other (explain)

Drill method

☒ rotary ☐ auger ☐ cable other

Hole size

7 7/8 inch from 0 ft to 189 ft

hole size continued

____ inch from ____ ft to ____ ft

7 7/8 inch from 189 ft to 270 ft

____ inch from ____ ft to ____ ft

Record all depth measurements from ground level (GL). Use (+) for above GL measurements.

Casing

Drive shoe (yes / no) Pitless adapter (yes / no)

Size (ID/OD)	Type / Wt	Depth top	Depth bottom	Amount (length)
8"	.322 WALL STEEL	+2	189	191

Perforated or slotted casing? (yes / no)

Perforated / slotted from ____ ft to ____ ft

Perforated / slotted from ____ ft to ____ ft

Casing grouted? (yes / no) Placement method TREMIE

Type	Depth Top	Depth bottom	Amount (vol/wt)
BENTONITE	0	189	48 BAGS
			1440 GAL

Well screen? (yes / no)

Diameter	Slot size	Depth Top	Depth Bottom	Length	Material
	0.___				
	0.___				

Bottom capped (yes / no) with

Seals / Packers (yes / no) kind depth ft

Gravel packed (yes / no) from ft to ft

type amount

Well developed? (yes / no)

Explain

(pumped, airlifted, bailed) for 24 hrs at 350 GPM.

Pump installed? (yes / no) Date ____ / ____ / ____

Installer's name

Type of pump Depth to intake ft

Pump diameter Rated capacity GPM

Water information

Aquifer: ☐ sand / gravel ☒ limestone ☐ sandstone

Main water-supply zone from 226 ft to 270 ft ☐ seepage well

Static water level 36 ft (below / above) GL; ☒ tape ☐ airline ☐ E-line ☐ estimate

Pumping water level 100 ft below GL; ☐ tape ☒ airline ☐ E-line ☐ estimate

At yield of 350+ GPM; ☐ orifice ☒ volumetric ☐ estimate

Measurements taken at 4 (AM / PM) Date 8 / 14 / 05

Water quality test? (yes / no) Date tested ____ / ____ / ____

Tested by

Contractor MORT'S WELL CO.

Address BOX 715

Driller LATIMER IA 50452 Certification no 1887

white copy – Iowa DNR, Geological Survey Bureau blue copy – Well Contractor pink copy – Customer yellow copy – County Health Officer