WELL RECORD 64764 PWTS Permit N 27403

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

PWTS Well No.: 2132384

County Permit No

Site identification

Property Owner: SYNGENTA SEEDS Fire Well Other ID

Address 5535 HWY 22 SE, LONE TREE IA 52755

Tenant

Well Depth: 1713 ft Date Completed: 4/10/2008

Location

County JOHNSON COUNTY HEALTH DEPT

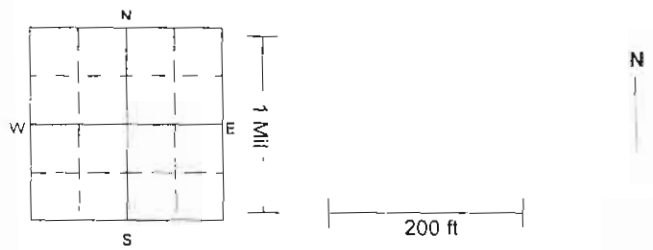
____mi. N/S and ____mi. E/W of intersection of _____ and _____

SW 1/4 of the SW 1/4 of the SE 1/4 of Sec 2 TW 77 RN 5W E/W

GPS Coordinateds (NAD83 datum only) decimal degrees

41.4945526 N. Latitude 91396110 W. Longilude

Show exat 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	29	YELLOW		CLAY
29	36	YELLOW		SAND
36	254	BLUE		CLAY W/SAND
254	310			SHALE
310	430			LIMESTONE
430	540			SILURIAN DOLOMITE
540	640			MAQUOKETA SHALE
640	780			LIMESTONE
780	1106			GALENA LIMESTONE
1109	1109	WHITE		SANDSTONE
1109	1127	GREEN		SHALE
1127	1140			ST PETER SANDSTONE
1140	1590			PRAIRIE DU CHIEN LIMESTONE
1590	1594			SHALEY
1594	1645			LIMESTONE

Remarks (including depth of lost drilling fluids, materials, or tools)
1645 1705 Sandstone
1705 1713 Dolomite

Well use
☐ Domestic ☐ Livestock ☐ Test Well
☐ Heat Pump ☐ Municipal ☐ Public Supply ☐ Irrigation
☐ Commerical ☐ Monitoring ☑ Other Fire Protection

Drill method ☑ rotary ☐ auger ☐ cable other

Hole size

26 inch	from	0 ft	t	325 ft	12.5 inch	from	1140 ft t 1713 ft
19 inch	from	325 ft	t	1139 ft	inch	from	ft t ft

Casing — Drive shoe (yes/no) — Pitless adaptor (yes/no)

Size (ID/OD)	Type/ Wt	Depth top	Depth bottom	Amount (length)
20	STEEL .375	5	325	520
14	STEEL 500	1	1139	1140

Perforated or slotted casing? ☐ Perforated casing ☐ Slotted casing

☐ Perforated ☐ Slotted from ft t ft

☐ Perforated ☐ Slotted from ft t ft

Casing grouted? ☑ Grouted Placement method: CEMENT

Type	Depth top	Depth bottom	Amount (vol/wt)
CEMENT	0	325	550
CEMENT	0	1140	1150

Well Screen? ☐ Screen

Diameter	Slot size	Depth top	Depth bottom	Lenght	Material

Bottom Capped ☐ with

Seals/Packers ☐ kind depth ft

Gravel packed ☐ from lo ft

type amount

Well developed? ☑ Well Developed

Explain

☐ pumped ☑ airlifted ☐ bailed for 3 hrs at 1500 GPM

Pump installed? ☐ Pump Installed Date

Installer's Name

Type of Pump Depth to Intake ft

Pump diameter Rated Capacity GPM GPM

Water information ☐ Sand/gravel ☐ Limestone ☑ Sandstone

Main water-supply zone from 1645 ft to 1705 ft ☐ seepage well

Static water level 218 ft (below/above) GL ☐ tap ☐ airline ☐ E-line ☑ estimate

Pump water level 388 ft (below GL ☐ tape ☐ airline ☐ E-line ☑ estimate

At yield of 1250 GPM; ☐ Orifice ☑ Volumetric ☐ Estimate for 24 hours

Measurement taken at 4:45:00 PM Date 4/15/2008

Water quality test? ☐ Date

Tested by

Contractor name GINGERICH WELL PUMP SERVICE, LLC

Adress 1331 HWY 1, KALONA, IA 52246

Driller KLINT GINGERICH Certification no 2639

Send original form to Iowa Department of Natural Resouces-Geological Survey

Make photocopies for Well Contractor, and County Health Department