80362

WELL RECORD FORM

PWSID# or PWTS No. 6367033 | PWTS Permit No. _____ | GeoSam WNumber (IGS use only) 80362

Site Identification

Property owner City of Pella Other ID _____

Address 100 Truman Rd City Pella

Tenant _____

Well depth 2189 ft Date completed 8 / 18 / 2015

Location

County Marion

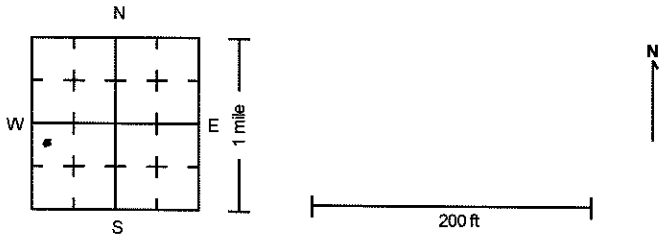
GPS coordinates (NAD83 datum)

N 41° 23' 1.4" Latitude W 92° 56' 48.9" Longitude

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

SW 1/4 of the NW 1/4 of the SW 1/4 of Sec 16 TWP 76 RNG 18 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
				See attached sheet
				(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

36 inch from 0 ft to 100 ft

28 inch from 100 ft to 549 ft

hole size continued

23 inch from 549 ft to 1709 ft

16 inch from 1709 ft to 2189 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
30	steel	0	100	☐	☐	☐ slot size
24	steel	+3	549	☐	☐	☐ slot size
18	steel	549	1709	☐	☐	☐ slot size
				☐	☐	☐ slot size
				☐	☐	☐ slot size

☐ Gravel packed amount _____ variety _____

☐ Seals/packers type _____

☐ Bottom capped with _____

Casing Grout

Placement method haliburton

Type	Depth Top	Depth Bottom	Amount (vol/wt)
neat cement	0	2189	

Pump Installation

Date 2 / 15 / 2016

Type of pump Goulds Depth to intake 450 ft

Pump diameter 14 in Rated capacity 1825 GPM

Water Information

Date 8 / 27 / 2015

Static Water Level	Pumping Water Level	Yield	Duration
291 ft	366 ft	1900 GPM	24 hrs

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

Water yield measurement: ☐ Orifice ☑ Volumetric ☐ Estimate

Main water-supply zone from 1709 ft to 2189 ft below GL

Well Development

☐ Physical explain: _____

☑ Chemical explain: hydrochloric

Contractor

Company Grosch Drilling Co.

Address 114 N. 6th. St O'Neill NE 68763

Driller Scott Grosch Certification no. 6743

IGS IIHR Hydroscience & Engineering The University of Iowa

Mail form to **Iowa Department of Natural Resources**: 502 E. 9th St., Des Moines, IA 50319-0034

Or click here to e-mail form to: well.records@dnr.iowa.gov

Make copies for **well contractor, customer, and county health department**

DNR

Rev. 2017 DNR Form 542-8170

80362

GROSCH DRILLING COMPANY

3110 33rd Rd
P.O. BOX 337
SILVER CREEK, NE 68663

Telephone 308-773-2261
Fax 308-773-2414

Water Systems Improvements
Division 2: Jordan Well
2102 Idaho Drive
Pella, Iowa

N 41 23 23
W 092 56 49.9

Drilling Completion Date 8-10-2015
Drillers – Scott Grosch – License # 6743
Mike Fritton – License # 6742

Lithology Log

0-3 – Top Soil
3-30 – Brown Clay – sand & gravel layers
30-53 – Gray Clay
53-79 – Gray clay w/ embedded sand & gravel (loose soft)–Coal @ 58' & 67'
79-92 – lighter gray shale
92-95 – shaley limestone
95-142 – light gray limestone
142-150 – gray limestone – sandstone layers
150-155 – sandstone
155-174 – tan limestone w/ green shale strips
174-190 - LOST CIRCULATION
190-200 – Limestone white w/ gypsum
200-208 – dark gray limestone
208-245 – dolomite & chert dark brown
245-252 – sandstone
252-275 – dolomite with some anhydrite
275-292 – gray sandstone
292-365 – dolomite & sandstone gray (dark & light)
365-382 – shale gray
382-390 – Limestone
390-416 – dolomite & chert little bit of shale
416-431 – dolomite & chert dark brown

431-440 – sandstone – gray –shale streaks
440-473 – dolomite – chert – shale light gray – dark strips - firm
473-492 – Mostly shale gray with brown limestone
492-541 – gray shale w/ dolomite (gray)
541-649 – gray dolomite w/ less shale
649-653 – blue shale w/ dolomite
653-716 – mostly dolomite & a little sandstone & shale strips
716-727 – dolomite – brown sand stone – trace blue shale
727-752 – gray dolomite - brown sandstone – firm blue shale – fractures – rough
752-766 – gray – dolomite – shale strips – Hard
766-861 – Brown Dolomite – sandstone – Firm
861-901 – Dolomite – brown
901-1041 – Dolomite – brown – gray limestone – some white – anahydrite layers
1041-1090 – chert – gray – fractured
1090-1100 – Gray limestone – reddish brown shale layers
1100-1228 – Gray limestone - bluish green/dark brown shale layers
1228-1280 – dark gray dolomite – shale layers
1280-1365 – Dark gray dolomite with light gray limestone
1365-1440 – tan limestone & green shale strips
1440-1530 – brown limestone dark w/ traces of tan limestone
1530-1538 – brown dolomite w/ more blue/gray shale
1538-1555 – brown dolomite
1555-1562 – brown dolomite with gray shale
1562-1572 – brown & gray dolomite
1572-1602 – shale green/blue soft
1602-1631 – Sandstone (St. Peter)
1631-1648 – light gray limestone – dark gray dolomite
1648–1832 – more light gray limestone some dark gray dolomite
1832-1839 – light tan sandstone (drilled smooth)
1839-1946 – medium tan dolomite w/ white limestone
1946-1953 – white/light tan fine sandstone
1953-1972 – light gray limestone
1972-2080 – Gray limestone & chert
2080-2107 – Gray sand w/ some limestone layers (Jordan Sand)
2107-2190 – tan & gray dolomite