Rapid Creek Well #2 — WELL AND PUMP DATA — 34554

Location of Well

County	Township Number	Range Number	Section No.	Fraction
Johnson	80N (N or S)	5W (E or W)	30	NW

Township

Street Address and City or Distance and Direction from Road Intersections
Running Deer Road, Johnson County, IA

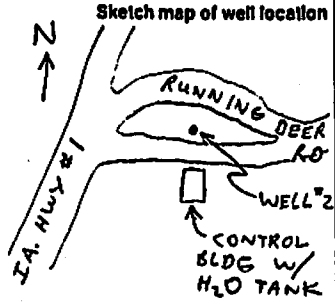
Property owner's name and address
Rapid Creek Ridge - North Half Homeowner's Association
Johnson County, Iowa

Show exact location of well in section grid with an 'x'

N / S — 1 mile

Addition Name
Block Number
Lot Number

Sketch map of well location



Well depth 444' | Datum point from which all measurements are taken

Method of Drilling
☐ Cable tool ☐ Hollow rod ☐ Driven ☐ Dug
☑ Direct rotary ☐ Air rotary ☐ Bucket auger ☐ _____
☐ Reverse rotary ☐ Jetted ☐ Flight auger

Use
☐ Domestic ☐ Public supply ☐ Industrial ☐ _____
☐ Irrigation ☑ Municipal ☐ Commercial
☐ Test Well ☐ Heating or cooling ☐ Monitoring

Casing Type
☑ Steel ☐ Threaded ☐ Welded ☐ Solvent welded
☐ Galv. ☐ PVC ☐ SS
Height above/below surface 2
Drive shoe? Yes ___ No X

					Hole diameter
16 in	to 73 ft	Wgt ___ lb/ft	Sch. No. ___		13 in to 234 ft
8 in	to 230 ft	Wgt ___ lb/ft	Sch. No. ___		___ in to ___ ft
___ in	to ___ ft	Wgt ___ lb/ft	Sch. No. ___		___ in to ___ ft

Remarks, Elevation, Source of Data, etc. lost circulation 75' - Karst Formation encountered - installed 16" ø steel casing to block off Karst topography

Borehole data

Formation Log	Color	Hardness	From	To
sandy clay	Yel/Brn	soft	0	10'
sandy clay	Red/Brn	soft	10'	30'
sandy clay	Yel/Brn	soft	30'	40'
clay	Blue	semi soft	40'	50'
limestone (weathered)	Grey	semi hard	50'	60'
sand	Yel/Brn	soft	60'	62'
Rock	Brn	hard	64'	69'
Devonian	Grey	hard	69'	80'
limestone	Grey/Grn	hard	80'	100'
limestone w/ streaks Chert	" "	" "	100'	164'
limestone streaks of soft rock	Grey	soft	164'	172'
limestone / streaks chert	Grey	hard	172'	205'
Silurian streaks of chert	Grey/white	very hard	205'	300'
Silurian/chert/limestone	" "	" "	300'	444'

Intake Portion of Well
Screen type NO SCREEN or open hole from ___ ft to ___ ft
Manufacturer ___
Material ___ Dia. ___
Fittings ___ Length ___
Set between ___ ft and ___ ft Slot ___
___ ft and ___ ft Slot ___
___ ft and ___ ft Slot ___
Method of installation ___

Filter Pack
Source ___ Gradation ___
Method of installation ___ Composition ___
Volume used ___ Depth to top of f.p. ___

Grout
Used? ☑ Yes ☐ No Volume used ___
☑ Neat Cement ☐ Bentonite ☐ ___
Method of installation Tremie pipe pumped
Depth: from 233' ft to 0 ft
from ___ ft to ___ ft

Development
Method Pumped Duration 3 hrs. 22 min
Dates 2-9-94 Sand content after ___ hrs ___
Chemicals used ___

Static Water Level
137.57 ft ☑ below ☐ above grade
Date measured 2/9/94

Pumping Water Level
153.75 ft ☑ below ☐ above grade Date 2/9/94
After 3 hrs. 22 min. hrs pumping at 115 gpm

Specific Capacity
115 gpm / 16.18 ft. = 7.1 gpm/ft gpm/ft of drawdown at 3 hrs. 22 min hours
Date 2-9-94

Pump
Date installed 5/93 Type Submersible
Manufacturer Grundfos Model No. ___
H.P. 7½ Volts 230 Capacity ___
Depth of pump intake setting 260' No. of stages ___
☐ Oil ☐ Water lubrication Power source ___
Material of drop pipe Sch 40 steel bowls ___
shafting ___ impellers ___ Bowl dia. ___
Column pipe dia. 3" Length 252' Modifications ___

Well Head Completion
☑ Pitless adaptor ☐ Basement offset Distance above grade ___

Nearest Sources of Possible Contamination
___ ft Direction ___ Type ___
Well disinfected upon completion? ☑ Yes ☐ No

Geophysical Logs Run

Contractor Name and Address
Name of Driller Jim Latta
State License Number ___

Water Quality
Sample taken? ☑ Yes ☐ No
Where analyzed Iowa Hygienic Lab

Date well completed 4/7/93

34373

Page 1 of 1

AQUIFER TEST DATA

Owner Rapid Creek Subdivision Address _____ County Johnson State IA

Date 2-9-94 Company performing test Leath + Son Well Drilling Inc. Measured by _____

Well No. 2 Distance from pumping well _____ Type of test _____ Test No. _____

Measuring equipment Water meter

Time Data
Pump on: Date 2/8/94 Time 9:45 am (c.)
Pump off: Date 2/9/94 Time 1:07 p.m. (c.)
Duration of aquifer test:
Pumping 3hr 22m Recovery 2min

Water Level Data
Static water level 137.57'
Measuring point 260'
Elevation of measuring point _____

Discharge Data
How Q measured water meter
Depth of pump/air line 260
Previous pumping? Yes ___ No X
Duration _____ End _____

Date	Clock time	Time since pump started t	Time since pump stopped t'	u/r		Water level measurement	Correction or Conversion	Water level	Water level change s or s'		Discharge measurement	Rate		Comments on factors affecting test data
2/9/94	9:46	1min				260'		137.57	—			115 gpm		
	9:47	2min						144.5	7.43					
	9:48	3min						144.5	7.93					
	9:49	4min						149.12	11.55					
	9:50	5min						149.12	11.55					
	9:55	10min						149.12	11.55					
	10:00	15min						149.12	11.55					
	10:05	20min						149.12	11.55					
	10:10	25min						149.12	11.55					
	10:15	30min						149.12	11.55					
	10:20	35min						149.12	11.55					
	10:25	40min						149.12	11.55					
	10:30	45min						151.43	13.86					
	10:35	50min						153.75	16.18					
	10:40	55min						153.75	16.18					
	10:45	1hr						153.75	16.18					
	11:00	1hr 15min						153.75	16.18					
	11:15	1hr 30min						153.75	16.18					
	11:30	1hr 45min						153.75	16.18					
	11:45	2hr.						153.75	16.18					
	12:15pm	2hr. 30min						153.75	16.18					
	12:45	3hr						153.75	16.18					
	1:07	3hr. 22min						153.75	16.18					
	1:08		1min					137.57	—					
	1:09		2min											

located on topo sheet by D. Latta
at T80N R5W Sec 30 BBBA
elev ~ 760

WELL RECORD #34554

Well is located N/E ____ miles S/W and ____ miles N/E S/W from

____ (Nearest Town) in ____ (County),

in the ____ ¼ ____ ¼ Sec. ____ T. ____ R. ____

Owner Rapid Creek Sub Well No. ____

Postoffice address ____

Contractor ____

Address ____

Driller LATTA + Sons

Well begun MARCH 1, 19 93

completed April 16, 19 93

Rig used—Cable, (Rotary,) Jet, or ____

Depth of well 474' (Feet) samples to 464 SG

Size of hole (note total amount of each size) 8 inch

Main water supply at 253'6" (Feet below surface)

Final water head ____ (Feet above or below surface)

Is well pumped? ____

Yield ____ (Gallons per minute)

Water level when pumping ____

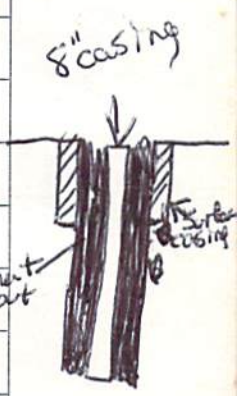
Position of well ____ (Upland, valley, side hill, etc.)

#34554

RECORD OF PERMANENT CASING

Size Pipe	Amount of Pipe	Depth to Bottom of Pipe	Depth to Top of Pipe	Type° and Weight of Pipe
8"	233'6"	233'6"		

DIAGRAM OF WELL



°As cast, wrought iron, steel, concrete, etc.

Is screen used? No Diameter _____ (Inches)

Length _____ (Feet) Depth to bottom _____

Depth to top _____ Slot size _____

Are packers or seals used? _____

Kind _____

Where used _____

Kind of pump _____ Dia. _____ (Inches)

Capacity of pump _____ (g.p.m.)

Power used _____ (Kind and amount)

Depth to bottom of pump line _____ feet,

including _____ feet tailpiece.

Remarks on construction of well _____

Full length grout

#34554

SAMPLE NO.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	0	5		yellow/brown sandy clay
	5	10		" " " "
	10	15		reddish/brown sandy clay
	15	20		" " " "
	20	25		" " " "
	25	30		" " " "
	30	35		yellow brown sandy clay
	35	40		" " " "
	40	45		blue clay
	45	50		" "
	50	55		" "
	55	60		" " limestone gravel
	60	65	62' SAND	4' blue clay
lost circulation 73'	65	70	69'6"	rock brown hard lost circulation crevices
	75	80		"Dewitt" Devonian
	80	85		Ext tyrnet grey/green
	85	90		grey/green limestone

#34554

SAMPLE NO.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	90	95		grey green limestone
	95	100		" "
	100	105		" " streaks of chert
	105	110		" "
	110	115		Grey limestone
	115	120		" very "
	120	125		" Hard "
	125	130		" "
	130	135		" "
	135	140		streaks of chert "
	140	145		" "
	145	150		" "
	150	155		" "
	155	160		" "
	160	165		164'-6" of soft rock
	165	170		grey limestone
	170	175		172'- two feet soft rock

#34554

SAMPLE NO.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	175	180		grey hard limestone
	180	185		with streaks of Chert
	185	190		" "
	190	195		" "
	195	200		streaks of white/grey limestone
	200	205		" "
	205	210		looks like Sil. streaks of chert
	210	215		" "
	215	220		streaks of chert
	220	225		" "
	225	230		" "
	230	235		Silurian white/grey
	235	240		" "
	240	245		" "
	245	250		streaks of chert
	250	255		" "
	255	260		Crevices
				" "
				" "

#34554

SAMPLE NO.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	260	265		Grey silurian rock
	265	270		" Grey silurian "
	270	275		" Grey silurian [redacted] some water loss "
	275	280		" and more crevises "
	280	285		
	285	290		grey silurian streaks chert / crevises
	290	295		" "
	295	300		" "
	300	305		" "
	305	310		grey/white silurian with streaks
	310	315		of chert
	315	320		notiecable water loss
	320	325		silurian grey, crevises
	325	330		" "
	330	335		" "
	335	340		" "
	340	345		" "

#34554

SAMPLE NO.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS — KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	345	350		grey/white silurian
	350	355		Streaks of chert
	355	360		and crevises
	360	365		" "
	365	370		" WATER LOSS "
	370	375		" "
	375	380		" "
	380	385		" "
	385	390		" "
	390	395		" "
	395	400		white-grey silurian
	400	405		noticeable water
	405	410		loss, crevises
	410	415		" "
	420	425		" "
	425	430		" "
	430	435		" "

#34554

SAMPLE NO.	DEPTH From	DEPTH To	THICKNESS	DESCRIPTION OF BEDS KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
	435	440		white grey silurian
	440	444		water loss
				creek