STATE OF MINNESOTA DEPARTMENT OF HEALTH

WATER WELL RECORD

Minnesota Statutes 156A.01-.08

MINNESOTA UNIQUE WELL NO. for Water Sample: ~~403424~~

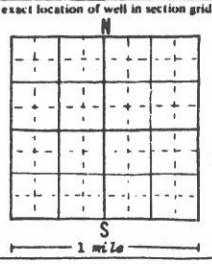
1. LOCATION OF WELL

County Name: Lyon

Township Name	Township Number	Range Number	Section No.	Fraction
Larchwood	100-N (N or S)	47-W (E or W)	30	NW ¼ SE ¼ SE ¼

Distance and Direction from Road Intersections or Street Address and City of Well Location

Show exact location of well in section grid with "X." Sketch map of well location.



Addition Name

Block Number

Lot Number

3. PROPERTY OWNER'S NAME: CITY OF LARCHWOOD [redacted] 30314

Address: LARCHWOOD, IOWA

4. WELL DEPTH (completed): 676 ft. ddep ft. Date of Completion: July 19, 1988

5. 1☐ Cable tool 2☐ Hollow rod 3☒ Rotary 4☐ Reverse 5☐ Air 6☐ Jetted 7☐ Driven 8☐ Bored 9☐ Power Auger 10☐ Dug 11☐

6. USE: 1☐ Domestic 2☐ Irrigation 3☐ Test Well 4☐ Public Supply 5☒ Municipal 6☐ Air Conditioning 7☐ Industry 8☐ Commercial 9☐

7. CASING: 1☒ Black 2☐ Galv. 3☐ Plastic 4☒ Threaded 5☐ Welded 6☐

Height: Above/Below — Surface 1'-6" ft. Drive Shoe? Yes ☒ No ☐

8 in. to 645 ft. Weight 30 lbs./ft.

_____ in. to _____ ft. Weight _____ lbs./ft.

_____ in. to _____ ft. Weight _____ lbs./ft.

HOLE DIAM: 12¼ in. to 645 ft. / 8 in. to 676 ft. / _____ in. to _____ ft.

8. SCREEN: Make Johnson Or open hole from _____ ft. to _____ ft.

Type 304 Stainless Dia. 4" pipe size

Slot/Gauze 25 slot Length 35'-0" SETTINGS:

Set between 641 ft. and 676 ft. screen

621 ft. and 641 ft. 4" riser pipe SS

9. STATIC WATER LEVEL: 191 ft. ☒ below ☐ above land surface Date Measured 7-19-88

10. PUMPING LEVEL (below land surface): 251 ft. after 5 hrs. pumping 200 g.p.m.

_____ ft. after _____ hrs. pumping _____ g.p.m.

11. WELL HEAD COMPLETION: ☒ Pitless adapter, manufacturer Baker model Monitor

2☐ Basement offset ☒ At least 12" above grade

12. WELL GROUTED? ☒ Yes ☐ No

1☒ Neat Cement 2☐ Bentonite 3☐ _____

Grout material Portland from 640 to 8 ft. Cu. Yds. 6

13. NEAREST SOURCES OF POSSIBLE CONTAMINATION: 75 feet North direction Old Well type

Well disinfected upon completion? Yes ☒ No ☐

14. PUMP

Date installed 7-24-88 ☐ Not installed

Manufacturer's Name Goulds Pump

Model Number 90L20 HP 20 Volts 230

Length of drop pipe 331 ft. capacity 135 g.p.m.

Material of drop pipe Galv.

Type: 1☒ Submersible 2☐ Jet 3☐ L. S. Turbine 4☐ Centrifugal 5☐ Reciprocating 6☐ _____

2. FORMATION LOG

FORMATION LOG	COLOR	HARDNESS OF FORMATION	FROM	TO
Top Soil	Black	S	0	2
Yellow Clay	Yellow	S	2	7
White Clay	White	S	7	11
Yellow Clay	Yellow	S	11	12
White Clay	White	S	12	15
Yellow Clay	Yellow	S	15	35
Pink Clay	Pink	S	35	36
Brown Clay	Brown	S	36	37
Green Clay	Green	S	37	38
Gravel	Yellow	S	38	39
Yellow Clay	Yellow	S	39	96
Blue Clay	Blue	S	96	125
Gravel	Blueish	S	125	126
Green Clay	Green	S	126	130
Blue Clay	Blue	S	130	135
Gravel	Whiteish	S	135	136
Green Clay	Green	S	136	138
Blue Clay	Blue	S	138	142
Gray Clay	Gray	S	142	147
Yellow Clay	Yellow	S	147	152
Green Clay	Green	S	152	161
Blue Clay	Blue	S	161	218
Granite- Rock	Red	H	218	219
Blue Clay	Blue	S	219	226
Granite- Rock	Red	H	226	227
Blue Clay	Blue	S	227	234
Dark Shale	Blue	S	234	241
Light Shale	Green	S	241	275
Sand & Gravel	Pinkish	H	275	302
Light Shale	Green	S	302	304
Sandstone	Pinkish	H	304	315
Coal	Black	S	315	316
Green Shale	Green	S	316	340
Dark Shale	Blueish	S	340	440
Dark Shale	Blue	H	440	493
Coal	Black	S	493	494
Sandstone	Grayish	H	494	503
Light Shale	Whiteish	S	503	518

Use a second

15. REMARKS, ELEVATION, SOURCE OF DATA, etc.

16. WATER WELL CONTRACTOR'S CERTIFICATION

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Licensee Business Name _____ License No. _____

Address _____

Signed _____ Date _____

Authorized Representative

Name of Driller _____ Date _____

MINN. GEOLOGICAL SURVEY COPY 403424

HE-01205-01

5/74 30M
7/76 30M
7/78 30M
2/82 10M

1. LOCATION OF WELL
County Name

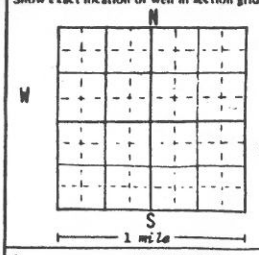
STATE OF [redacted] DEPARTMENT OF HEALTH
WATER WELL RECORD
Minnesota Statutes 156A.01-.08

[redacted] UNIQUE WELL NO. for Water Sample
~~403425~~

Township Name	Township Number N or S	Range Number E or W	Section No.	Fraction ¼ ¼ ¼

Distance and Direction from Road Intersections or Street Address and City of Well Location

Show exact location of well in section grid with "X."



Sketch map of well location.

Addition Name
Block Number
Lot Number

30314

3. PROPERTY OWNER'S NAME
CITY OF LARCHWOOD [redacted]
Address
Well # 4
LARCHWOOD, IOWA

4. WELL DEPTH (completed) 696 ft. deep
Date of Completion July 19, 1988

5. ☐1 Cable tool ☐4 Reverse ☐7 Driven ☐10 Dug
☐2 Hollow rod ☐5 Air ☐8 Bored ☐11 _____
☒ Rotary ☐6 Jetted ☐9 Power Auger

6. USE
☐1 Domestic ☐4 Public Supply ☐7 Industry
☐2 Irrigation ☒5 Municipal ☐8 Commercial
☐3 Test Well ☐6 Air Conditioning ☐9

7. CASING
☐1 Black ☐4 Threaded
☐2 Galv. ☐5 Welded
☐3 Plastic ☐6
HEIGHT: Above/Below
Surface _____ ft.
Drive Shoe? Yes ___ No ___
HOLE DIAM
___ in. to ___ ft. Weight ___ lbs./ft. ___ in. to ___ ft.
___ in. to ___ ft. Weight ___ lbs./ft. ___ in. to ___ ft.
___ in. to ___ ft. Weight ___ lbs./ft. ___ in. to ___ ft.

8. SCREEN
Make _____
Or open hole from _____ ft. to _____ ft.
Type _____ Dia. _____
Slot/Gauze _____ Length _____
FITTINGS:
Set between _____ ft. and _____ ft.
_____ ft. and _____ ft.

9. STATIC WATER LEVEL
_____ ft. ☐ below land surface ☐ above Date Measured _____

10. PUMPING LEVEL (below land surface)
_____ ft. after _____ hrs. pumping _____ g.p.m.
_____ ft. after _____ hrs. pumping _____ g.p.m.

11. WELL HEAD COMPLETION
☐1 Pitless adapter, manufacturer _____ model _____
☐2 Basement offset ☐3 At least 12" above grade

12. WELL GROUTED?
☐ Yes ☐ No
☐1 Neat Cement ☐2 Bentonite ☐3 _____
Grout material _____ from _____ to _____ ft., Cu. Yds. _____

13. NEAREST SOURCES OF POSSIBLE CONTAMINATION
_____ feet _____ direction _____ type
Well disinfected upon completion? Yes☐ No☐

14. PUMP
Date installed _____ ☐ Not installed
Manufacturer's Name _____
Model Number _____ HP _____ Volts _____
Length of drop pipe _____ ft. capacity _____ g.p.m.
Material of drop pipe _____
Type: ☐1 Submersible ☐3 L. S. Turbine ☐5 Reciprocating
☐2 Jet ☐4 Centrifugal ☐6 _____

2. FORMATION LOG	COLOR	HARDNESS OF FORMATION	FROM	TO
Sandstone	Grayish	H	518	537
Iron Pierite Pyrite	Gray	H	537	538
Shale	Grayish	S	538	539
Sandstone	Whiter	H	539	546
Shale	Gray	S	546	556
Coal	Black	S	556	557
Shale/Sandstone	White	S	557	620
Sandstone/Shale	Whiter	H	620	638
Fine Sandstone	White	H	638	645
Course Sandstone	Pinkish	H	645	676
White Shale	White	S	676	677
Rock	Red	H	677	----

Use a second sheet, if needed

15. REMARKS, ELEVATION, SOURCE OF DATA, etc.

16. WATER WELL CONTRACTOR'S CERTIFICATION
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

Licensee Business Name _____ License No. _____
Address _____
Signed _____ Date _____
Authorized Representative
Name of Driller _____ Date _____

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