

WELL RECORD

PWTS Permit No. 2008-433W

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

PWTS Well No. 7170040

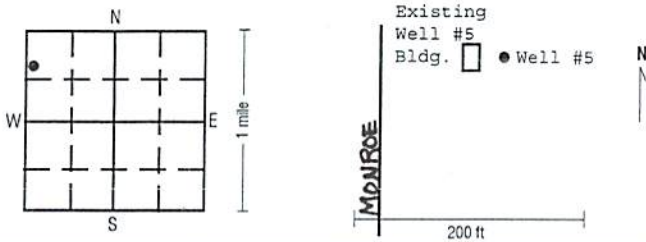
67649

County Permit No. _____

Site identification
 Property Owner City of Sheldon Other ID Well # 5
 Address 416 9th Street, Sheldon, IA 50201-0276
 Tenant City of Sheldon, Iowa
 Well Depth 29 ft Date completed 05 / 12 / 09

Location County O'Brien
3/4 mi. ^N and 1/32 mi. ^E of intersection of Monroe Ave. and Pine St.
NW 1/4 of the NW 1/4 of the NW 1/4 of Sec 29 TWP 97 RNG 42 ^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	4	Black		Topsoil
4	10	Tan		Fine-medium Sand
10	25	Gray		Gravel w/fine sand
25	31	Gray		Brown clay
use additional sheets as needed				

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

Well use

<input type="checkbox"/> Domestic	<input type="checkbox"/> Heat pump	<input type="checkbox"/> Commercial
<input type="checkbox"/> Livestock	<input checked="" type="checkbox"/> Municipal	<input type="checkbox"/> Monitoring
<input type="checkbox"/> Test well	<input type="checkbox"/> Public supply	<input type="checkbox"/> Other _____
	<input type="checkbox"/> Irrigation	

Drill method rotary auger cable other Reverse
Hole size
20 inch from 0 ft to 31 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)
12"	0.375"	8'	19'	11'

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)
Neat Cement	8'	14'	1/2 cyd

Well screen? (yes/no)

Diameter	Slot size	Depth top	Depth bottom	Length	Material
12"	0.100	19'	29'	10'	SST
	0.____				

Bottom capped (yes/no) with SST Plate Attached
 Seals / Packers (yes/no) kind Bentonite depth 14-16 ft
 Gravel packed (yes/no) from 16 ft to 31 ft
 type Northern #3 amount 1.5 Tons

Well developed? (yes/no)
 Explain Surge block, bailer, rawhiding
 pumped airlifted bailed for 4 hrs at 80-160 GPM

Pump installed? (yes/no) Date 05 / 12 / 09
 Installer's name D. Carlisle
 Type of pump Submersible Depth to intake 20 ft
 Pump diameter 6" Rated capacity 100 GPM

Water information Aquifer: sand / gravel limestone sandstone
 Main water-supply zone from 19 ft to 29 ft seepage well
 Static water level 11.8 ft (below/above) GL; tape airline E-line estimate
 Pumping water level 21.2 ft below GL; tape airline E-line estimate
 At yield of 124 GPM; orifice volumetric estimate for 24 hours
 Measurements taken at 1 : 00 (AM/PM) Date 03 / 05 / 09

Water quality test? (yes/no) Date tested 03 / 05 / 09
 Tested by City of Sheldon

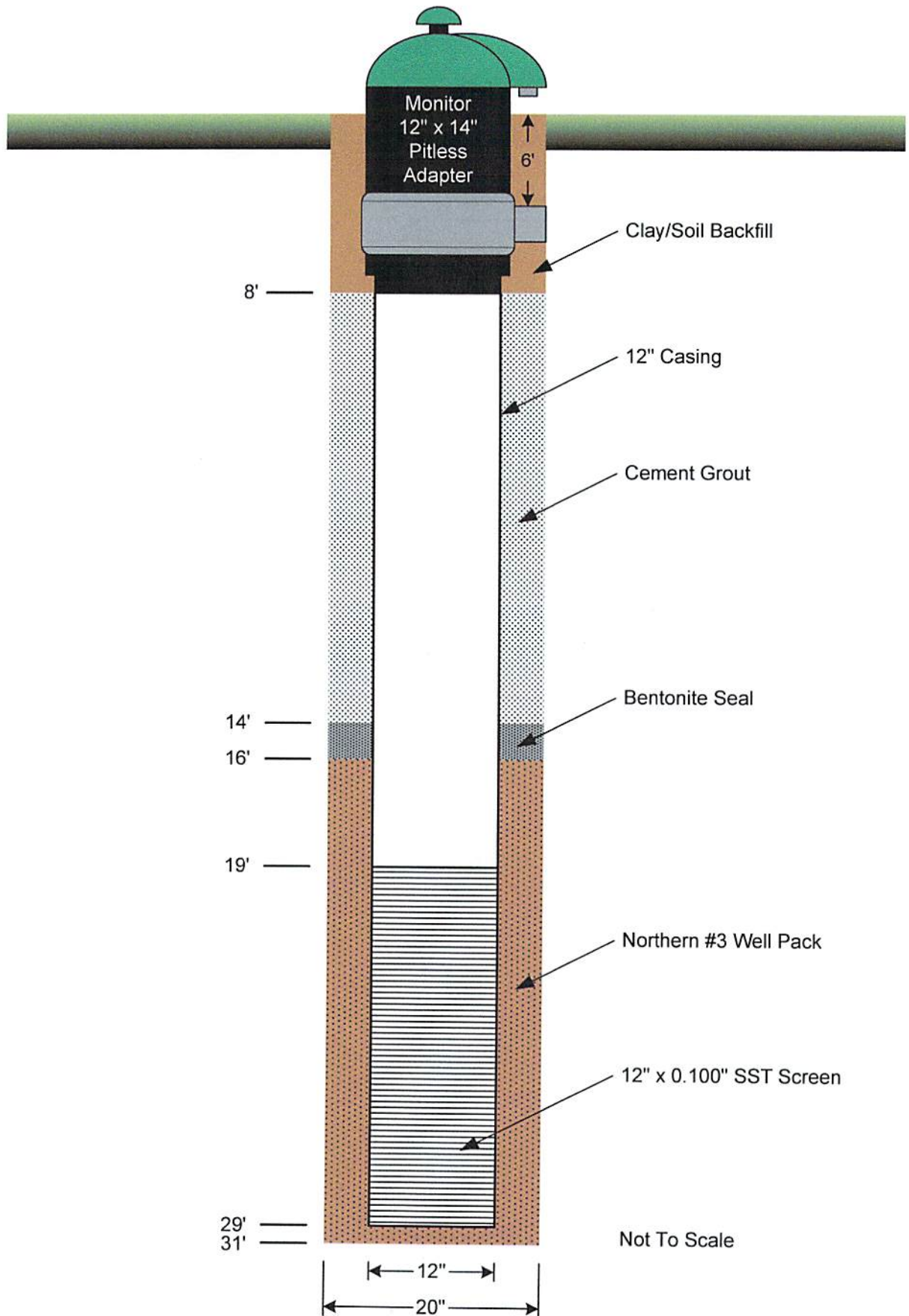
Contractor Layne-Western
 Address 5600 Gateway Drive, Suite B, Grimes, IA
 Driller Duane Trask Certification no. 5509

Well #5 Replacement Construction Detail

City of Sheldon, Iowa

February 5, 2009

67638



Layne-Western
5600 Gateway Drive, Suite B
Grimes, IA 50111
(515) 986-3462 / 3474 Fax

WELL TEST DATA REPORT



PROJECT: City of Sheldon
LOCATION: Sheldon, Iowa
WELL NO: 5-Replacement
WELL DIAMETER: 12.00 inches I.D.
WELL DEPTH: 29.0 feet - from grade
TOP OF SCREEN: 19.0 feet - from grade
STATIC LEVEL: 11.8 feet - from top of casing
ORIFICE SIZE: 4" x 2-1/2"

DATE TESTED: 3/4/09 - 3/5/09
TESTED BY: Dean Carlisle
DRIVER: 10-HP Submersible Motor
COLUMN AND SHAFT: 4" T&C Drop Pipe
BOWL SIZE & MAKE: _____
MANUFACTURER: _____
SERIAL NUMBER: _____

TIME	PIEZ. READ. (IN)	FLOW RATE (GPM)	WELL #5-R PWL (FEET)	DRAW DOWN (FEET)	SPECIFIC CAPACITY (GPM/FT)	Well #5 WL (FEET)	REMARKS
STATIC WATER LEVELS:			12			13.0	
1 min.		124	More details will be available upon download of Hermit Data.				
2		124					
3		124					
4		124					
5		124	17.6	5.8	21.4		
6		124	17.6	5.8	21.4		
7		124	17.6	5.8	21.4		
8		124	17.6	5.8	21.4		
9		124	17.6	5.8	21.4		
10		124	17.6	5.8	21.4		
12		124	17.6	5.8	21.4		
14		124	17.6	5.8	21.4		
16		124	17.7	5.9	21.0		
18		124	17.7	5.9	21.0		
20		124	17.8	6.0	20.7		
25		124	17.8	6.0	20.7	14.3	
30		124	17.8	6.0	20.7	14.3	
35		124	17.9	6.1	20.3		
40		124	18.0	6.2	20.0		
45		124	18.0	6.2	20.0		
50		124	18.0	6.2	20.0		
55		124	18.1	6.3	19.7		
60		124	18.1	6.3	19.7		
90		124	18.3	6.5	19.1	13.5	
120		124	18.4	6.6	18.8		
150		124	18.6	6.8	18.2	14.0	
180		124	18.7	6.9	18.0		
210		124	18.9	7.1	17.5		

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1 min.		0	More details will be available upon download of Hermit Data.				
2		0	15.6				
3		0					
4		0	14.5				
5		0					
6		0	14.3				
7		0					
8		0					
9		0					
10		0	14.2				
12		0					
14		0					
15		0	14.1				
18		0					
20		0					
25		0					
30		0	13.9				
35		0					
40		0					
45		0					
50		0					
55		0					
60		0	13.7				
6 hrs		0	12.7				