



Layne-Western Company, Inc.

WATER SUPPLY CONTRACTORS

705 SO. DUFF AVE.

AMES, IOWA 50010

Phone 515 232-3563

Name of Job City Water Works Date 4/11/84

City or Village Cedar Rapids, Iowa State _____

Well No.: 15 Drillers: Gale McIntosh & Dean Heldt

Well Location: _____ ft. (____) and _____ ft. (____) of the _____ corner of

Section _____, Twp. _____ (____), Range _____ (____) County.

Otherwise located as 300' South of Well No. 16

Work Began: 4/2/84 Work Completed: 4/13/84 Well Depth: 67'
All measurements made from existing ground level at time well was drilled.

Casing Record:

Amount	Dia.	Wt. or Thickness	Material
<u>60'</u>	<u>30</u>	<u>1/2 Wall</u>	<u>Steel with welded joints from 47 to +13</u>
_____	_____	_____	_____ with _____ joints from _____ to _____

Screen Record: Type Johnson

Amount	Dia.	Opening	Material
<u>20</u>	<u>30</u>	<u>.080</u>	<u>S.S. with welded joints from 67 to 47'</u>
_____	_____	_____	_____ with _____ joints from _____ to _____

Type of Seal at Bottom SS Plate

Hole Record:

<u>48</u>	<u>inch from</u>	<u>0</u>	<u>to</u>	<u>9</u>
<u>42</u>	<u>inch from</u>	<u>9</u>	<u>to</u>	<u>67</u>

Gravel Pack Record:

Amount	Size	Source	From	To
<u>30 tons</u>	<u>#3</u>	<u>Northern Gravel</u>	<u>20'</u>	<u>67'</u>
_____	_____	_____	_____	_____

Cementing Record: 4,000 lbs., 7 yards 0 to 18'

Backfill Record: Clay & Laynite 18' to 20'

County: LINN (T83N R7W Sec 17)

TD: 67

Elev: Log by: WHITSETT, THOMAS MICHAEL

Log date: 11/02/1995

Depth top	Depth bot	Lithologic description
0.0	5.0	Soil, m. brn.gr., sdy. (20%); Sd., clr. -> var.color, f. -> c., A. -> r. (80%); REM: incl. dessicated wood
5.0	8.0	Soil, dk. brn.gr., slty. & sdy. (10%); Sd., clr. -> var.color, c. -> v.c., A. -> R. (20%); Grav., var.color, v.f. -> m., A. -> R. (70%); REM: gr: qtz,cht,dk+lt ign
8.0	10.0	Clay, blk.; REM: fr. dnlr's log; silty
10.0	15.0	Sd., clr. -> var.color, c. -> v.c., A. -> R. (40%); Grav., var.color, f. -> c., a. -> R. (60%); REM: gr:cht,qtz,ign,phylite
15.0	20.0	Sd., clr. -> var.color, c. -> v.c., A. -> R. (40%); Grav., var.color, f. -> c., a. -> R. (60%); REM: gr. comp. a.a.
20.0	25.0	Sd., clr. -> lt. brn., m. -> v.c., A. -> r. (60%); Grav., var.color, f. -> c., a. -> r. (40%); REM: gr:ign,sltstn,qtz,cht,foss ls
25.0	30.0	Sd., wh. -> lt. brn., f. -> v.c., a. -> R. (80%); Grav., var.color, f. -> m., a. -> R. (20%); REM: gr: chert, qtz, ign
30.0	35.0	Sd., clr. -> lt. brn., m. -> v.c., A. -> R. (70%); Grav., var.color, f. -> c., a. -> R. (30%); REM: gr. comp. a.a.
35.0	40.0	Sd., clr. -> var.color, v.c., A. -> (40%); Grav., var.color, f. -> c., A. -> r. (60%); REM: gr:ign,cht,foss ls, sandstone
40.0	45.0	Grav., var.color, f. -> c., A. -> r. (60%); Sd., clr. -> var.color, c. -> v.c., A. -> R. (40%); REM: grav. comp. a.a.
45.0	50.0	Grav., var.color, f. -> c., A. -> r. (50%); Sd., clr. -> var.color, c. -> v.c., a. -> R. (50%); REM: gr:foss ls,dol,ign,cht,qtz,fes
50.0	55.0	Sd., clr. -> var.color, c. -> v.c., A. -> R. (60%); Grav., var.color, f. -> v.c., A. -> R. (40%); REM: grav. comp. a.a.
55.0	60.0	Sd., clr. -> var.color, c. -> v.c., A. -> R. (40%); Grav., var.color, f. -> v.c., A. -> R. (60%); REM: grav. comp. a.a.
60.0	65.0	Sd., clr. -> var.color, m. -> v.c., A. -> R. (70%); Grav., var.color, f. -> v.c., A. -> R. (30%); REM: gr:cht,ign,cht,'petoski'ls
65.0	67.0	Grav., var.color, f. -> v.c., A. -> R. (20%); Sd., clr. -> var.color, m. -> v.c., A. -> R. (80%); REM: gr. comp. a.a. + gneiss