



Layne-Western Company, Inc.

WATER SUPPLY CONTRACTORS

705 SO. DUFF AVE.

AMES, IOWA 50010

Phone 515 232-3563

Name of Job City of Adel Date 8/4/77

City or Village Adel, Iowa State _____

Well No.: 4 Drillers: Rich Pejsha

Well Location: _____ ft. (____) and _____ ft. (____) of the _____ corner of
Section _____, Twp. _____ (____), Range _____ (____) _____ County.

Otherwise located as West of Dam on Raccoon River, near the new Treatment Plant

Work Began: _____ Work Completed: _____ Well Depth: 66' from top of casing which is
All measurements made from existing ground level at time well was drilled.

Casing Record: Measurements from Top of Casing 7'5' above ground

Amount	Dia.	Wt. or Thickness	Material	
<u>51'</u>	<u>12"</u>	<u>3/8" Wall</u>	<u>Steel Pipe</u>	<u>with welded joints from 7' above ground to 45'</u>
<u>6'</u>	<u>12"</u>	<u>3/8" Wall</u>	<u>Steel Pipe</u>	<u>with welded joints from 55' to 61'</u>

Screen Record: Type _____

Amount	Dia.	Opening	Material	
<u>10'</u>	<u>12"</u>	<u>.080</u>	<u>SS</u>	<u>with welded joints from 45' to 55'</u>
<u>5'</u>	<u>12"</u>	<u>.080</u>	<u>SS</u>	<u>with welded joints from 61' to 66'</u>

Type of Seal at Bottom _____

Hole Record:

48" inch from ground level to 59'
_____ inch from _____ to _____

Gravel Pack Record:

Amount	Size	Source	From	To
<u>20 yds</u>	<u>#2</u>	<u>Northern Sand & Gravel</u>	<u>20' gr. level</u>	<u>59'</u>
<u>Muscatine, Iowa</u>				

Cementing Record: Ground level - 20'

Backfill Record: None

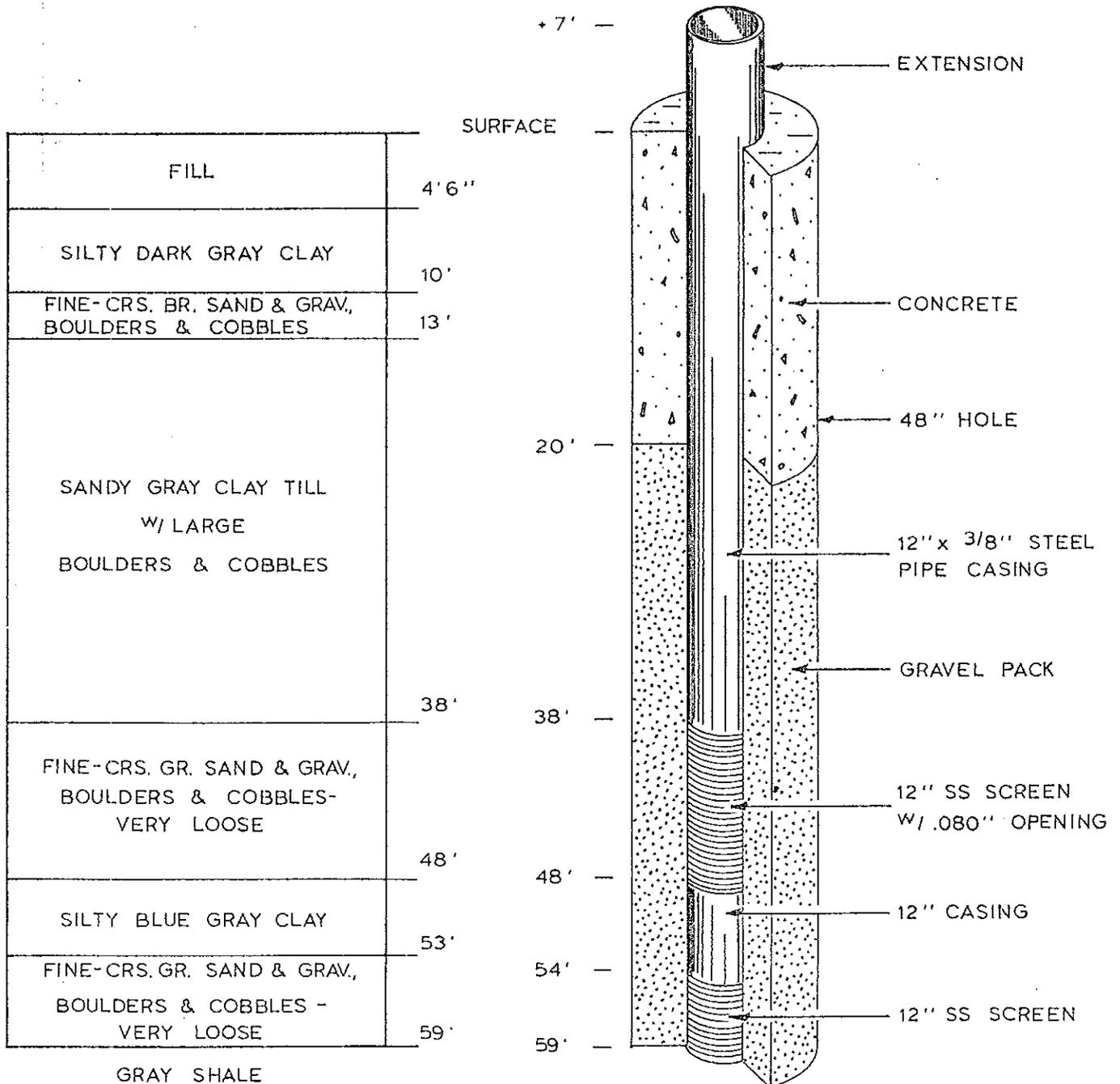
WELL NO. 4
CITY OF ADEL
ADEL, IOWA

LW Co. Inc., Ames, Ia.

8-77

GEOLOGICAL LOG

CONSTRUCTION DETAIL



WELL TEST DATA SHEET



Layne-Western Company, Inc.

WATER SUPPLY CONTRACTORS

705 SO. DUFF AVE.

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Phone 515 232-3563

Job..... City of Adel Well no. 4 Date Tested..... 8-2-77
 Location..... West of Dam on Racoon River Tested By..... Rick Pejsha-Jeff Owings
 Dia. of Well..... 12" Driver..... 450 Int. Engine
 Depth of Well..... 59' Pump Used: Column and Shaft..... 6" x 1½"
 Length of Airline..... 50' Bowls..... 10 stage 8" + HC 7' Long
 Non-Pumping Level..... 11' Manufacturer Layne
 Orifice Size..... 5" x 6" Serial No.....

Time	Pizometer Reading (in.)	G. P. M.	Air Gauge Reading (feet)	Pumping Level	Drawdown	Disch. Pressure		Total Pumping Head	Remarks
						Lbs.	Feet		
11:30			Started	Pumping				RPM	
11:45	6.5	316	29	21	10	15			
12:00	6.5	316	25	25	14	15			
12:30	6.5	316	23	27	16	12			Clear
1:00	6.5	316	20	30	19				Clear
2:00	6.5	316	18	32	21				Clear
3:00	6.5	316	15	35	24				Clear
4:00	6.5	316	15	35	24	12		1200	Clear
5:00	6.5	316	14	36	25	12		1200	Clear
6:00	6.5	316	13	37	26	12		1200	Clear
7:00	6.5	316	13	37	26	12		1200	Clear
8:00	6.5	316	12	38	27	12		1200	Clear
9:00	6.5	316	11	39	28	12		1200	Clear
10:00	6.5	316	11	39	28	12		1200	Clear
11:00	6.5	316	10	40	29	12		1200	Clear
12:00	6.5	316	10	40	29	12		1200	Clear
1:00	6.5	316	10	40	29	12		1200	Clear
2:00	6.5	316	10	40	29	12		1200	Clear
3:00	6.5	316	10	40	29	12		1200	Clear
4:00	6.5	316	9	41	30	12		1200	Clear
5:00	6.5	316	9	41	30	12		1200	Clear
6:00	6.5	316	9	41	30	12		1200	Clear
7:00	6.5	316	8	42	31	12		1200	Clear
8:00	6.5	316	8	42	31	12		1200	Clear
9:00	6.5	316	8	42	31	12		1200	Clear

WELL TEST DATA SHEET



Layne-Western Company, Inc.

WATER SUPPLY CONTRACTORS

705 SO. DUFF AVE.

AMES, IOWA 50010

Phone 515 232-3563

Job..... City of Adel Well no. 4 Date Tested..... 8-3-77

Location..... West of Dam on Racoon River Tested By..... Rick Pejsha -Jeff Owings

Dia. of Well..... 12" Driver..... 450 Int. Engine

Depth of Well..... 59' Pump Used: Column and Shaft..... 6" x 1½"

Length of Airline..... 50' Bowls..... 10 stage 8" + HC 7' Long

Non-Pumping Level..... 11' Manufacturer Layne

Orifice Size..... 5" x 6" Serial No.....

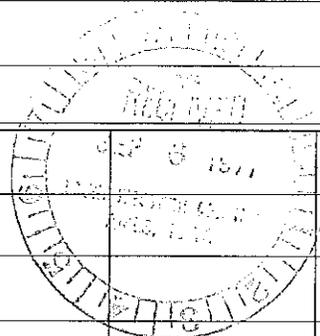
Time	Pizometer Reading (in.)	G. P. M.	Air Gauge Reading (feet)	Pumping Level	Drawdown	Disch. Pressure		Total Pumping Head	Remarks	
						Lbs.	Feet			
10:00	6.5	316	8	42	31	12		RPM 1200	Clear	
11:00	6.5	316	8	42	31	12		1200	Clear	
11:30	6.5	316	8	42	31	12		1200	Clear	
			Recovery							
11:32			14							
11:34			16							
11:36			16							
11:38			16							
11:40			17							
11:42			17							
11:45			18							
11:50			18							
11:55			19							
12:00			19							
12:10			20							
12:20			20							
12:30			21							
12:40			21							
12:50			22							
1:00			23							
1:10			24							
1:20			24							
1:30			24							
2:30			26							

CUSTOMER Layne Western Co.

DATE 8/15/77

ADDRESS Ames, Iowa

JOB NAME Adel, Iowa



SAMPLE NUMBER		77343			
DATE COLLECTED		8/3/77			
DATE RECEIVED		8/12/77			
SAMPLING POINT		Well #4			
		B-771			
CALCIUM	PPM AS	290			
	CaCO ₃				
MAGNESIUM	PPM AS	134			
	CaCO ₃				
SODIUM	PPM AS	0			
	CaCO ₃				
ALKALINITY (M)	PPM AS	307			
	CaCO ₃				
ALKALINITY (P)	PPM AS	0			
	CaCO ₃				
SULFATE	PPM AS	101			
	CaCO ₃				
CHLORIDE	PPM AS	16			
	CaCO ₃				
TOTAL HARDNESS	PPM AS	424			
	CaCO ₃				
NON CARBONATE HARD	PPM AS	117			
	CaCO ₃				
FREE CARBON DIOXIDE	CO ₂	39			
	PPM AS				
IRON	FE	1.96			
	PPM AS				
MANGANESE	MN	0.36			
	PPM AS				
pH		7.2			
TURBIDITY	TURBIDITY UNITS	30			
COLOR	AWWA				

REMARKS:

John Wiskus
CHEMIST