



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 with welded joints from 7' above ground to 45'</u>
<u>6'</u>	<u>12"</u>	<u>3/8" Wall</u>	<u>Steel Pipe 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 with welded joints from 45' to 55'</u>
<u>5'</u>	<u>12"</u>	<u>.080</u>	<u>SS 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>Muscataine, Iowa</u>		

Cementing Record: Ground level - 20'

Backfill Record: None

WELL LOG

[illegible]

Well Test Data: Static Level 11'; pumping level 42' after 24 hours pumping at 316 g.p.m.

Length of test 24 hrs. See Well Test Data Sheet Dated _____

REMARKS:

These measurements from ground level

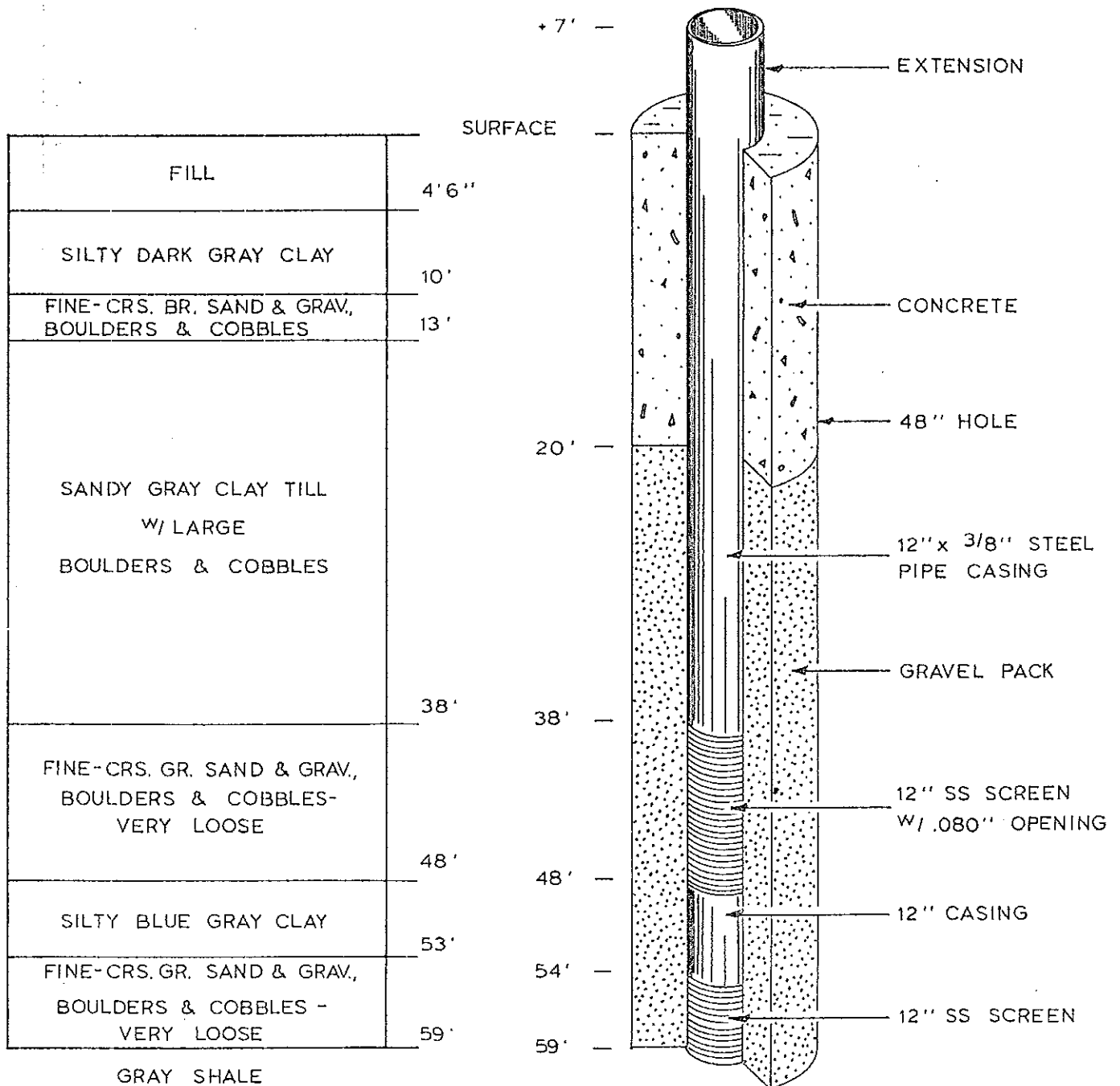
WELL NO. 4
CITY OF ADEL
ADEL, IOWA

LW Co. Inc., Ames, Ia.

8-77

GEOLOGICAL LOG

CONSTRUCTION DETAIL



WELL TEST DATA SHEET



Layne-Western Company, Inc.

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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



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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	Piezometer 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			
	CAC03				
MAGNESIUM	PPM AS	134			
	CAC03				
SODIUM	PPM AS	0			
	CAC03				
ALKALINITY (M)	PPM AS	307			
	CAC03				
ALKALINITY (P)	PPM AS	0			
	CAC03				
SULFATE	PPM AS	101			
	CAC03				
CHLORIDE	PPM AS	16			
	CAC03				
TOTAL HARDNESS	PPM AS	424			
	CAC03				
NON CARBONATE HARD	PPM AS	117			
	CAC03				
FREE CARBON DIOXIDE	CO2	39			
	PPM AS				
IRON	FE	1.96			
	PPM AS				
MANGANESE	MN	0.36			
pH		7.2			
TURBIDITY	TURBIDITY UNITS	30			
COLOR	AWWA				

REMARKS:

John Wiskus
CHEMIST