

206377

County Hennepin
 Quad Minneapolis
 Quad ID 104A

MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING REPORT
 Minnesota Statutes Chapter 1031

Entry Date 08/24/1991
 Update Date 02/08/2016
 Received Date

Well Name EDINA 5	Township 28	Range 24	Dir Section W 29	Subsection CCCBBA	Well Depth 443 ft.	Depth Completed 438 ft.	Date Well Completed 06/13/2002
Elevation 873 ft.	Elev. Method	7.5 minute topographic map (+/- 5 feet)			Drill Method	Cable Tool	Drill Fluid Water
Address					Use	community supply(municipal)	Status Active
Contact	4801 50TH ST W EDINA MN 55424				Well Hydrofractured?	Yes <input type="checkbox"/> No <input type="checkbox"/>	From To
Well	3850 69TH ST W EDINA MN 55435				Casing Type	Single casing	Joint
Stratigraphy Information					Drive Shoe?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Above/Below
Geological Material	From	To (ft.)	Color	Hardness	Casing Diameter	Weight	Hole Diameter
SAND & GRAVEL	0	37			24 in. To 136 ¹²⁵ ft.	lbs./ft.	10 in. To
CLAY	37	84			16 in. To 257 ft.	lbs./ft.	14 ⁴⁴³ ft.
MUDDY SAND	84	90			20 in. To 200 ft.	lbs./ft.	
SAND & GRAVEL	90	168					
SAND	168	180					
SAND & GRAVEL	180	185					
SANDSTONE	185	190					
CLAY	190	200					
ST. PETER	200	237					
SHAKOPEE LIMESTONE	237	365					
JORDAN SANDSTONE	365	443					
Static Water Level					Open Hole	From ²⁵⁷ ft.	To ⁴³³ ft.
75 ft. land surface					Screen?	<input type="checkbox"/>	Type Make
Measure 00/00/1954							
78							
Pumping Level (below land surface)							
89 ft. 24 hrs. Pumping at 1000 g.p.m.							
Wellhead Completion							
Pitless adapter manufacturer <i>pump house</i> Model							
<input type="checkbox"/> Casing Protection <input checked="" type="checkbox"/> 12 in. above grade							
<input type="checkbox"/> At-grade (Environmental Wells and Borings ONLY)							
Grouting Information							
Well Grouted? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Specified							
Nearest Known Source of Contamination							
feet Direction Type							
Well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No							
Pump <input type="checkbox"/> Not Installed Date Installed							
Manufacturer's name J-LINE							
Model Number 12 LC HP 100 Volt 220							
Length of drop pipe 138 ft Capacity 1000 g.p. Typ Turbine							
Abandoned							
Does property have any not in use and not sealed well(s)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Variance							
Was a variance granted from the MDH for this well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No							
Miscellaneous							
First Bedrock St. Peter Sandstone Aquifer Prairie Du Chien-							
Last Strat Jordan Sandstone Depth to Bedrock 200 ft							
Located by Minnesota Department of Health							
Locate Method GPS Differentially Corrected							
System UTM - NAD83, Zone 15, Meters X 474068 Y 4969468							
Unique Number Verification Input Date 07/21/1995							
Angled Drill Hole							
Well Contractor							
Bergerson-Caswell 27058 MANTHIR, D.							
Licensee Business L.c. or Reg. No. Name of Driller							
Remarks							
G.W.Q. NO. 0203.							
PROJECT #02-5PW (2002/07/09).							
THE WELL WAS ORIGINALLY DRILLED IN 1950. IT WAS RECONSTRUCTED IN 2002 BY 27058.							
<i>16" pip - rows to surface</i>							

AMENDED
MINNESOTA DEPARTMENT OF HEALTH
WELL AND BORING RECORD
 Minnesota Statutes Chapter 1031

MINNESOTA UNIQUE WELL NO.

206377

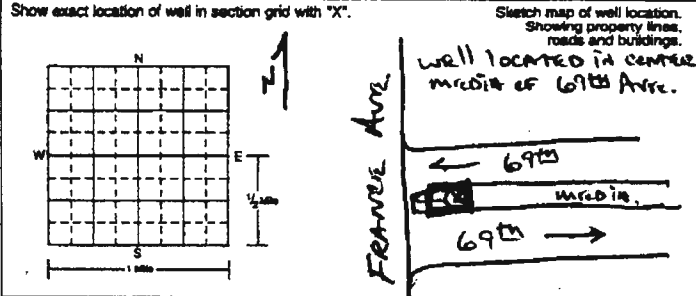
WELL LOCATION
 County Name
HENNEPIN

Township Name: **EDINA** Township No.: Range No.: Section No.: Fraction: % % %

WELL DEPTH (completed) **438** ft. Date Work Completed **1954 ?**
6-13-02

House Number, Street Name, City, and Zip Code of Well Location or Fire Number
3850 WEST 69th STREET AT FRANCE

DRILLING METHOD
 Cable Tool Driven Dug
 Auger Rotary Jetted



DRILLING FLUID **WATER** **WELL HYDROFRACTURED?** YES NO
 FROM _____ ft. to _____ ft.

USE
 Domestic Monitoring Heating/Cooling
 Irrigation Community PWS Industry/Commercial
 Environ. Bore Hole Noncommunity PWS Remedial
 Dewatering

CASING Drive Shoe? Yes No **HOLE DIAM.**
 Steel Threaded Welded
 Plastic

CASING DIAMETER **WEIGHT**
 _____ in. to _____ ft. _____ lbs./ft. _____ in. to _____ ft.
 _____ in. to _____ ft. _____ lbs./ft. _____ in. to _____ ft.
 _____ in. to _____ ft. _____ lbs./ft. _____ in. to _____ ft.

PROPERTY OWNER'S NAME
CITY OF EDINA

Property owner's mailing address if different than well location address indicated above.
5146 EDWIN AVENUE
EDINA, MN. 55436

SCREEN **OPEN HOLE**
 Make _____ from **252** ft. to **438** ft.
 Type _____ Diam. _____
 Slot/Gauze _____ Length _____
 Set between _____ ft. and _____ ft. FITTINGS: _____

WELL OWNER'S NAME
CITY OF EDINA

Well owner's mailing address if different than property owner's address indicated above.

STATIC WATER LEVEL
 _____ ft. below above land surface Date measured _____

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

WELL HEAD COMPLETION
 Pitless adapter manufacturer _____ Model _____
 Casing Protection _____
 At-grade (Environmental Wells and Borings ONLY) 12 in. above grade

GROUTING INFORMATION
 Well grouted? Yes No
 Grout Material: Neat cement Bentonite Concrete High Solids Bentonite
 from _____ to _____ ft. _____ yds. bags
 from _____ to _____ ft. _____ yds. bags
 from _____ to _____ ft. _____ yds. bags

GEOLOGICAL MATERIALS	COLOR	HARDNESS OF MATERIAL	FROM	TO
DRIFT			0	185
ST PIERRE			185	237
SHAKOPEE			237	365
JORDAN			365	443

NEAREST KNOWN SOURCE OF CONTAMINATION
 _____ feet _____ direction _____ type
 Well disinfected upon completion? Yes No

PUMP
 Not installed Date installed _____
 Manufacturer's name **J-LINE**
 Model number **12 LC** HP **100** Volts **220**
 Length of drop pipe **138'** ft. Capacity **1000** g.p.m.
 Type: Submersible L.S. Turbine Reciprocating Jet

ABANDONED WELLS
 Does property have any not in use and not sealed well(s)? Yes No

VARIANCE
 Was a variance granted from the MDH for this well? Yes No TN# _____

WELL CONTRACTOR CERTIFICATION
 This well was drilled under my supervision and in accordance with Minnesota Rules, Chapter 4725. The information contained in this report is true to the best of my knowledge.

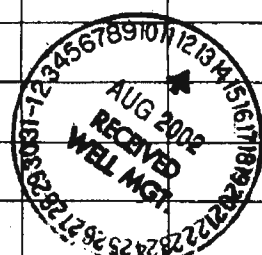
Berkerson Caswell Inc. **27058**
 Licensee Business Name Lic. or Reg. No.

John W. Howard
 Authorized Representative Signature **8-10-03**
 Date

DAVE MANTHIE **6-13-02**
 Name of Driller Date

REMARKS, ELEVATION, SOURCE OF DATA, etc.
WE BLASTED JORDAN S.S. WITH 200 lbs. OF TNT AND REMOVED 85 yds. OF S.S.

EDINA well #5



8-14-02 pd

LAYNE - MINNESOTA CO.

FIELD REPORT OF COMPLETED WELL

Name of Job Village of Edina Date started Nov. 5, 1953
 Address Edina Date completed May. 4, 1954
Minn. No. of days 17.5

LOG OF WELL

From	To	Material	From	To	Material
0	37	sand and gravel	185	190	sandstone
37	84	clay	190	200	clay
84	90	muddling sand	200	237	st. pite. sandstone
100	168	sand standard bldg.	237	365	sh. open. lime rock
168	180	sand	365	443	garden sandstone
180	185	sand and gravel			

Kind of plug in well none Static water level 70 feet
 Depth of well - ground level to top of plug 443

MATERIAL LEFT IN WELL

	Opening	Length - feet	Diameter - inches	Material
Screen				3/8
Inner casing		257	16 inch.	
Outer casing		200	20 inch	

Was outer casing cemented yes Amount _____
 Size of gravel used _____ in. to _____ in. Amount _____

TEST OF WELL

Hours Pumped		Yield gal. per min.	Water Level ft. below surface	Remarks
From	To			
2:41				
8:30 AM	Apr. 30	1500	19 feet	water level came
8:30 AM	May. 1			back to 70 feet in
				5 minutes

Did well clear up yes Time to clear 2 hours
 Date May. 4, 1954 Driller Truman Monson

RECEIVED
 MAY 5 1954
 LAYNE-MINNESOTA CO.

206377 W.L. E

LAYNE - MINNESOTA CO.

Handwritten initials
No. 5

FIELD REPORT OF COMPLETED WELL

Name of Job Village of Edina Date started Nov. 5, 1953
 Address Edina, Minnesota. *P.A. 73-1119* Date completed May 4, 1954
 No. of days 75

LOG OF WELL

From	To	Material	From	To	Material
0	37	Sand and gravel <i>QFOL</i>	185	190	Sandstone <i>QFOL</i>
37	84	Clay <i>QFOL</i>	190	200	Clay <i>QFOL</i>
84	90	Mudding sand <i>QFOL</i>	200	237	St. Peter sandstone <i>QFOL</i>
100	168	Sand, gravel & boulders <i>QFOL</i>	237	365	Shokapee lime rock <i>QFOL</i>
168	180	Sand <i>QFOL</i>	365	443	Jordan sand stone <i>QFOL</i>
180	185	Sand & Gravel <i>QFOL</i>			

Kind of plug in well None Static water level 70 feet
 Depth of well - ground level to top of plug 443

MATERIAL LEFT IN WELL

	Opening	Length - feet	Diameter - inches	Material
Screen				3/8
Inner casing		257 ft.	16 inch	
Outer casing		200 ft.	20 inch	

Was outer casing cemented Yes Amount _____
 Size of gravel used _____ in. to _____ in. Amount _____

TEST OF WELL

*M.D.H.
PWS 1270011504*

Hours Pumped		Yield gal. per min.	Water Level ft. below surface	Remarks
From	To			
24				
8:30 a.m. 4/30		1500	39 feet	Water level came back to
8:30 a.m. 5/1				70 feet in 5 minutes.

to

Did well clear up Yes Time to clear 2 hours
 Date May 4, 1954 Driller Truman Monson

WELL RECORD

#5 WE

KEYS WELL DRILLING COMPANY

WATER PRODUCERS

SAINT PAUL, MINNESOTA

206377 GWQ 203

Mpls. S. 5B p. 41

City EDINA, MINNESOTA Date Completed 1954

Location 2 1/2 Wirth & France P.A. 73-1119 Driller Lays-Minnesota

Well No. #5 Size Total Depth 643' Type

elev. 873±5

28-24-29 CCBCCD

DRILLERS LOG

0' to 200' Drift
200' to 237' St. Peter
237' to 266' Shakopee
266' to 443' Jordan



WELL MATERIALS

' of " diameter of Outer Casing
' of " diameter of Open Hole
' of " diameter of Inner Casing
' of " diameter of Open Hole
' to Mix grout (yds.) (Sacks)
' " diameter Screen

RECORD OF TEST PUMPING

Static Water Level 70 ft. from
1800 GPM 89' D.D. Hours
GPM D.D. Hours
GPM D.D. Hours
GPM D.D. Hours
GPM D.D. Hours

PERMANENT PUMP DATA

Mfg. Type Serial No.
Capacity GPM TDH
Motor Make Type
H.P. Volts Ph. RPM
ft. in Col. pipe in. Shaft
ft. in Bowls Stages Type
ft. in suction pipe &
ft. Total Length of Pump
ft. in. drop pipe & No. Cable
ft. in. air line
in. Pitless ft. bury in outlet

Remarks:
136' of 2 1/2" pipe O.D.
200' of 20" pipe O.D.
257' of 1 1/2" pipe O.D.

File No. 28-24-29
Well No. 28-24-29006

Mpls, S.
P.H. 5B

WELL LOG STATEMENT

GW 203

MAIL REPORT PROMPTLY TO DIRECTOR, DIVISION OF WATERS, STATE OFFICE BLDG., ST. PAUL 1, MINN.

Location of Well 69th + France Ave.
Hennepin County Edina City or Town

Locate Well on Plat of Section 28-24-29
Sec. 28
Twp. 24
Range 29

Describe Further by Lot, Block, Nearest Highway, Street and Number

Drilled for: VILLAGE OF EDINA
Address _____

Driller Layne - Minnesota
CCBBB
Address 28-24-29
CCBCC
ELEV. 873.25

Date of Completion 1954
Site Upland, Valley, Hillside, Etc.
Type of Well Dug, Driven, Bored, Drilled
Drill Rig Used _____
Diameter: Top 16" Bottom 19"
Depth of Well 443'
Ground Elevation 890
Sea Level Datum or Give Distance Above

REPORT OF FINAL PUMPING TEST
Date of Test _____
Duration of Test _____ Hrs. _____ Min. P.A. 73-119
Rate of Pumping 1000 GPM 845
Static Water Level 75 Ft. ✓
Water Level While Pumping 90 Ft. ✓
Drawdown 15 Ft. M.D.H.
Time Required for Recovery PWS 1270011504
Expected Average Yield _____ Gal. per day

Height of Casing Above Ground _____
Quality of Water _____
(Hard or Soft, Fresh or Salty, Etc.)
Temperature of Water _____
Was Laboratory Analysis Made? _____
For What Purpose Will Water Be Used? _____

RECEIVED
SEP 1 1959
DIVISION OF WATERS

Director		Hydro Stud	
Deputy		Records	
Secretary		Ground W.	
Records		Surface W.	
Permits			
Inspection			
Drainage			

Is Well Pumped? Yes Pump Capacity 1000 GPM
Was Well Sealed on Completion? Sealed
Does Well Overflow Without Pumping? _____
Yes or No
Natural Flow _____ GPM
What Pressure, or Head, at Ground Level? _____
Principal Aquifer Penetrated _____

THE DATA CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE BY DIV. OF WATERS IN ACCORDANCE WITH MSA 4.005 Plat 0001

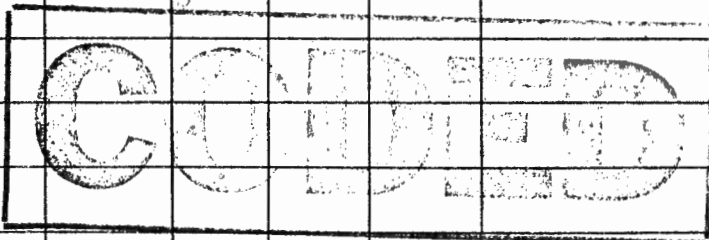
CONFIDENTIAL

- 5 - Info. From Owner
- 6 - Info. From Neighbor
- 7 - Other M.D.H. Robert Smuder
- E - EMS Number
- S - Site Plan
- T - Tag on Well
- X - Tax Records

ACKNOWLEDGED
9/1/59
ms

206377
890

WELL LOG

Geologic Formations Kind, Color, Hard or Soft	Thickness of Formation	Depth in Feet		Casing Diam.	Water Conditions Found
		From	To		
Sand & Gravel SAND, GRAVEL	37	0	37	16"	QFUU
Clay CLAY	47	37	84	16"	QTUU
Gravelly Sand SAND	16	84	90	16"	QFUU
Sand & Gravel SAND, GRAVEL	178	90	168	16"	QFUU
Sand SAND	12	168	180	16"	QFUU
Sand & Gravel SAND, GRAVEL	5'	180	185	16"	QFUU
Sandstone SAND	5'	185	190	16"	QFUU
Clay CLAY	10'	190	200	16"	QTUU
Siltstone SANDS					
Siltstone SANDS	37'	200	237	16"	690(37)
Shale SLTMT	128	237	365	19"	Open Rock 653(128)
JDN Jordan SANDS	78	365	443		525(78)
8/2 773					Aquifer
00 736	973				OPDC-CJDN
					
Indicate Size, Type, & Location of Any Screens, Gravel Packs, Grouting, or Other Development					

I hereby certify that, to the best of my knowledge, the data presented in this statement is a true and correct representation of conditions encountered in the construction of this well.

Dated at Columbia this 26 day of Aug., 1959



(Firm Name) Wilcox & Associates

By Bern E. Wilcox

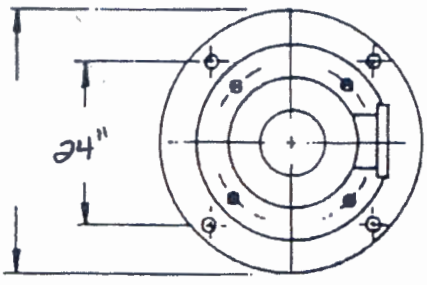
Title Supt.

CUSTOMER NAME EDINA #5

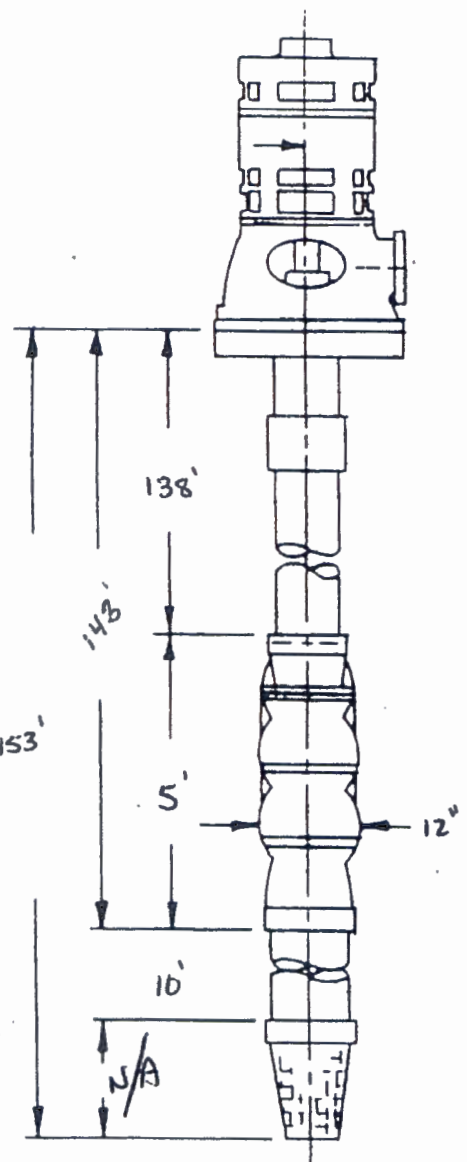
Date 6-13-02 Job # F02-14053

VERTICAL TURBINE PUMP

Motor Data



Date installed 6-13-02
 Model # A504P
 Manufacturer A.O. SMITH
 Serial # _____
 HP. 100 Service Factor _____
 Code CB * 39 3/8" RPM 1760
 Name Plate Voltage 220/440 Running Voltage 220
 Full Load Amps 228 Phase 3 Cycle 60
 Running Amps A 212 B 231 C 221
 NRR YES
 no

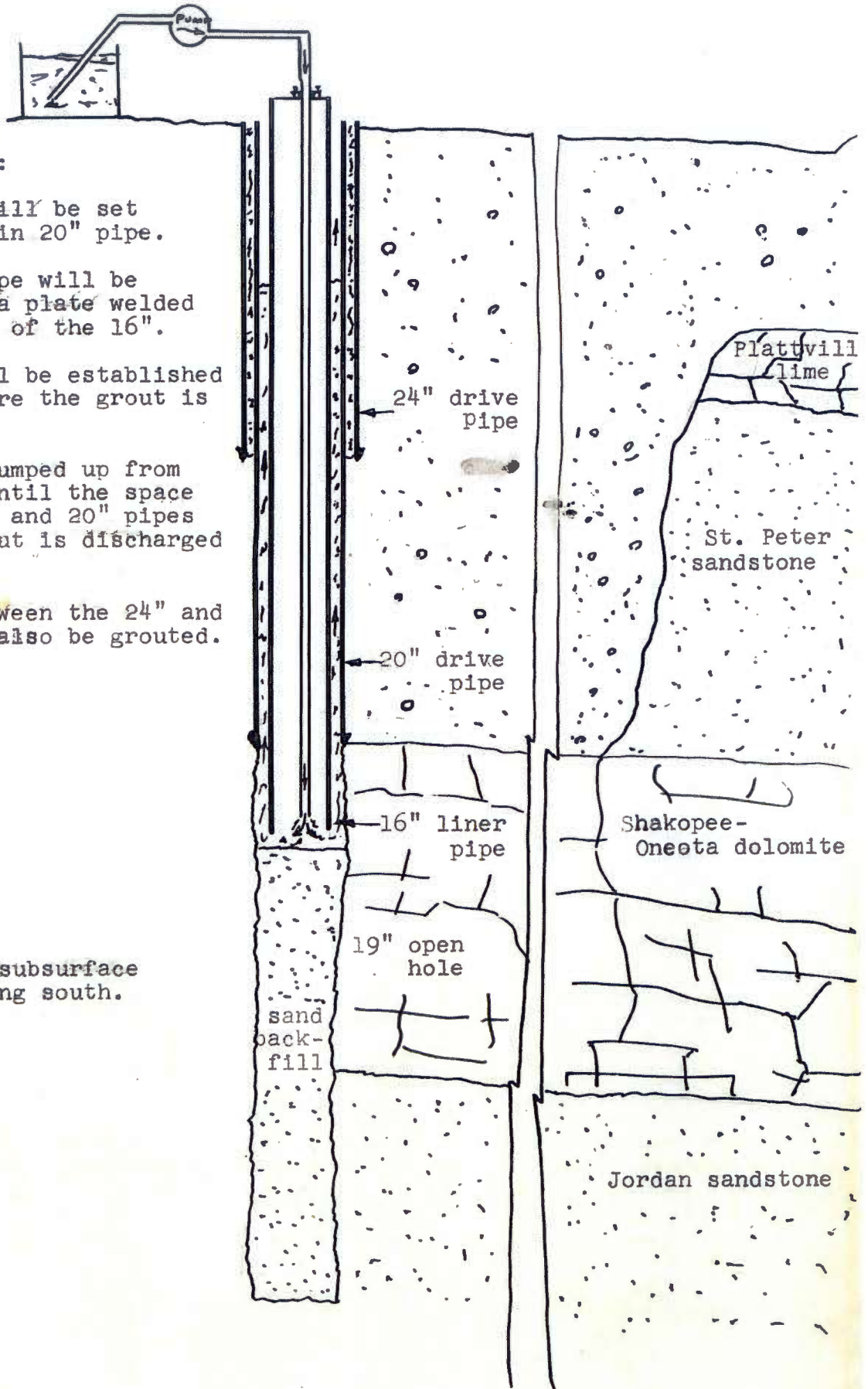


Base Size 10" x 24" Discharge Size 10"
 Column Size 10" Thread 8
 Length 45 1/2" Straight
 Spider Thickness 3/4" Type DROP IN.
 Shaft Projection 11 3/4"
 Shaft Dia. 1 1/16" S.S. w/straws
 Bowl MFG J-LINE Size 12 LCA-5
 Stages 5 STAGES Bowl stick up 12 3/8"

Suction Size 8" x 10'
 1" poly installed w/FLUID TRAK LEVEL INDICATOR
 Well Data
 Well Size 16" CASRD to 250' reduced to _____
 dia depth dia
 Bottom 426' Static 78'
 depth
 Pumping level 90' @ 1,000 GPM

BERGERSON-CASWELL, INC.	
TURBINE PUMP	

PROPOSED METHOD OF CASING AND GROUTING
SOUTHDALE WELL



Grouting procedure:

1. 16" O.D. pipe will be set concentrically in 20" pipe.
2. 2" cementing pipe will be sealed through a plate welded through the top of the 16".
3. Circulation will be established with water before the grout is pumped.
4. Grout will be pumped up from bottom to top until the space between the 16" and 20" pipes is full and grout is discharged at surface.
5. The annulus between the 24" and 20" pipes will also be grouted.

Notes:

1. Section of the subsurface structure looking south.

Variable

Top of well casing shall be left 10" above the future pump house floor of the elev determined by the Engr.

GROUND 00

DRIFT

24" O. D. Drive Pipe

PLATTVILLE LIMESTONE

80

Drive shoe

Fill space with 1:1 Grout

110

ST. PETER SANDSTONE

*Indication of
4' of St Peter at 670'*

16" O. D. Casing

270

610

ONECTA SHAKOPEE

270

*Valley of 8' diam - elev. 875
0-62 drift
62-97 Plattville
97-212 St Peter
212-385 Shakopee
385-410 Jordan*

19" Open Rock Hole

January 25, 1954

Mr. S. R. Mitchell
Village Manager
Edina Village Hall
Minneapolis 10, Minn.

Re: Southdale Project Water Well

Dear Sir:

The following is a resume of our discussion and proposal at the meeting in your office Friday afternoon, January 22nd.

From the available geological data we had on the area immediately surrounding the well site prior to the bid-letting, we had expected to encounter the following formations:

- 0 - 80' Glacial drift, including sand, gravel, and clay
- 80 - 125' Plattville limestone
- 125 - 250' St. Peter sandstone

However, we have already driven our 24" pipe to approximately 150' and we are still in glacial formation. It is a generally known fact that glacial and water erosion had cut deep troughs in the bed-rock through certain areas of South Minneapolis and the North bank of the Minnesota river. These have been plotted approximately by Dr. George Schwartz of the University of Minnesota Department of Geology, and his map in Bulletin 27 of the Minnesota Geological Survey shows the edge of the canyon running somewhat East and South of the site.

More than 110' of the pipe which we have in the ground has been driven through clean sand and gravel. Progress has been extremely slow for the past 30' of driving, and the friction of this material on the outside of the pipe is such that it has now been driven to what is known as refusal. In such a case, additional impact will be introducing a serious hazard - that of telescoping the pipe.

Mr. S. R. Mitchell

We propose, therefore, to reduce the diameter of drive pipe to 20", and to continue driving the 20" string to bed-rock. Since the erosion was vigorous enough to scour away the hard Plattville, we have little hope of finding any St. Peter sandstone, and the bed-rock will no doubt be Shakopee Limestone.

The specifications require a 19" open hole to be drilled through the water producing Shakopee limestone and Jordan sandstone, after which a 16" O. D. liner is to be grouted so as to seat firmly in Shakopee. We can comply with this specification. However, we propose to introduce our grout by the pressure method, pumping it from the bottom up to surface since it cannot be done by means of treamie pipes. (See attached sketch.) It is our opinion that although the treamie method of grouting is a good one, there is no more possitive method of sealing a well than by the pressure method using a pure grout mixture.

The question was raised as to what sort of guarantee the Village will have that this type of seal will prevent the well from pumping sand from above the Shakopee formation. The sand-free clause of the specifications will still apply. Furthermore, we will guarantee, unconditionally, that our pressure grouting will prevent pumping of St. Peter or other sand above the Shakopee limestone.

The enclosed sketch shows the proposed method of completing this well assuming that the Shakopee is encountered at 250'. The schedule of rates at which we propose to do this work are as follows:

(1) Furnishing and driving 20" O. D. pipe	\$ 14.00/ ft.
(2) Furnishing and placing 20" O. D. pipe, 3/8 wall, to surface	7.75/ ft.
(3) Furnishing and placing grout seal, consisting of pure portland cement	18.00/yard

We will concede the fact that the specifications make no mention of what procedure should be followed in such a case, but the specifications and bid form were based on the best available information, that is, that bed rock would be the Plattville. Our bid was based on driving approximately 100' of 24" pipe. Had we known what we know now, our price on this item would have been considerably higher. The above price on the 20" casing placed in the hole inside the 24" is warehouse cost, and there is no charge for hauling, handling, or welding. We bid the original grouting item on a one to one mix. With a pure cement grout, our cost on the cement alone will be at least \$30.00 per yard, excluding rigging up the mixing equipment, cementing pump and lines, and getting water for mixing to the site.

Mr. S. R. Mitchell

What we wish to point out is that our costs will be considerably higher than if we had encountered bed-rock where expected, or even say at 140'. If we could yet land the 24" drill pipe in rock without jeopardizing the entire well, we surely would, but we now know that to be impossible.

Our primary interest is to end up with the best kind of a well for the Village of Edina. The procedure outlined will enable the completion of a 19" hole through the producing zones, with a pressure grout job which will protect the 16" casing completely and seal off sand positively.

We would suggest that if you would care to obtain further information concerning the drilling and geological conditions from a disinterested source, you might seek advice from Dr. George Schwartz of the Department of Geology at the University.

Respectfully submitted,

LAYNE-MINNESOTA CO.

Robert R. Melcher
Contracting Engineer

RRM:lmc

Group To Continue

The Edina village council has decided to continue the services of the Edina youth council. The council originally was set up to operate until June 1, 1954. Chairman Mervin Dillner has said he is not wish to serve in that capacity for another term.

Dillner and Judy Hansord and Richard Schneider, Edina-Morningside high school students and members of the Youth council, attended the governor's conference on youth held at Hotel Nicolet last week.

A resume of the recent Youth survey taken at Edina-Morningside high school will be released in a few days, Dillner said.

Highway Victim Some Improved

Robert Gust, 12, was reported "slightly improved" today, after being confined to Deaconess hospital since he was struck by an auto on Highway 100 near Valley View road last Thursday.

The boy, son of Mr. and Mrs. Robert Gust, Sr., 5808 Bernard Place, suffered a concussion and several broken bones. The accident happened about 5:30 p.m. as he was delivering newspapers.

Ironically, Robert had polio two years ago and only in recent weeks had he begun to show complete recovery from the disease.

Poppies Go On Sale May 19, 20

Red crepe paper poppies, handmade by disabled veterans, will be sold in Edina and Morningside the evening of May 19 and all day Thursday, May 20.

The annual project, sponsored by the American Legion auxiliary, gives employment to disabled veterans at the auxiliary work room in Minneapolis' Walker building. Over 1,083 handicapped veterans have been employed there since its beginning.

Mrs. Frank George is poppy chairman for the Edina and Morningside area.

A total of 1,235,150 poppies were made in 1953 in Minnesota.

Women's Fellowship To Meet May 19

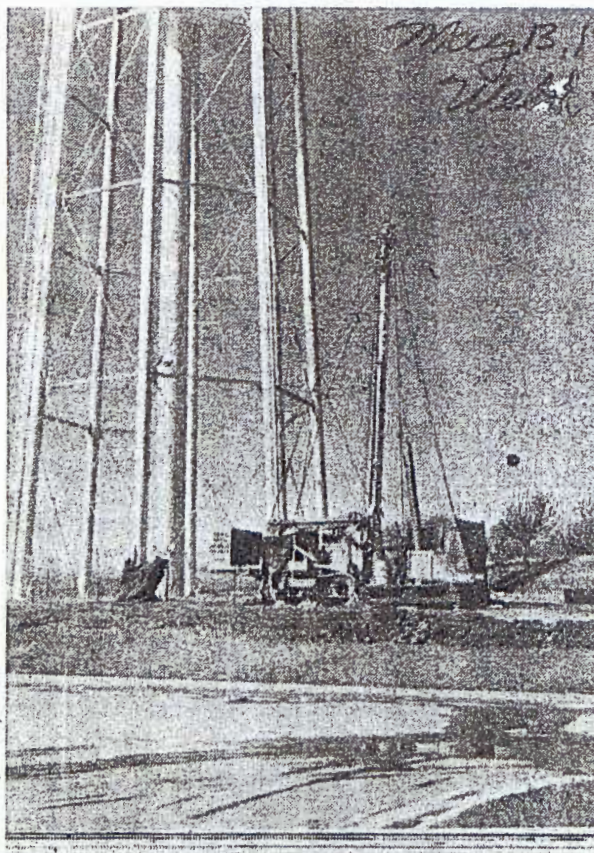
The Women's Fellowship of the Edina-Morningside church will hold their monthly meeting May 19. A 12:30 luncheon will be followed by a book review, "Cyclone in Calico" given by Faith Beale.

Well, Well

Well #5



"It's good! It's really good!" That was the reaction of Mayor Reuben Erickson, right, and Councilman Fred Child, left, as they sampled the first gush of water from Southdale's new well. The artesian well, drilled to accommodate the new civic and commercial developments in Edina was turned on for the first time May 1st. According to Lee Rogers, president of the Layne-Minnesota Company, who drilled the well, the water comes from a depth of 440 feet and flows at a rate of 1500 gallons per minute.



Edina was doing very well with wells, apparently, as workmen were busy near the high school, drilling a new deep well at the base of the water tower. The new one will supplement our water supply.

The race settled at five candidates as filings closed last Thursday, with Mrs. Adeline C. Lindboe the last to file just a few hours before the midnight deadline.

Orrin Knutson, 4520 Drexel avenue, was the first to file and had his hat thrown in several weeks before the election. Knutson was followed by Frank B. Jewett, 4905 Sunnyside road, and Robert Parrott, 4506 Edina boulevard. Gene Christensen, 4624 W. Fifty-sixth street, became the fourth member in the contest.

Mrs. Adeline C. Lindboe, the last to file, lives at 5208 Grove avenue.

Voting will be at Cahill, Woodale and Morningside grade schools next Tuesday, May 18, from 4 to 8 p.m.

E-M Musicians Score High In State Contest

Edina-Morningside high school students scored 15 "A" ratings; out of 21 entries in the state music contest at the University of Minnesota earlier this month.

Winners included Marilyn Laughlin, flute solo; John Hardisty flute solo; Winnie Fierke, clarinet solo; Bob Tucker, French horn solo; Dave Linne, Baritone solo; Curt Carlson, trombone solo; Jerry Gilbert, trombone solo; Sandra Lofgren, snare drum solo; Arnold Coppe, snare drum solo;

Flute Quartet—John Hardisty, Marilyn Laughlin, Mary Elle Franzer, Phil Swanson;

Clarinet Duet—Winnie Fierke, Chris Porterfield;

Flute Duet—John Hardisty, Marilyn Laughlin;

Clarinet Quartet—Winnie Fierke, Joan Hackborn, Ron LePaul Russell;

Horn Quartet—Bob Tucker, Pattie Rockstad, Sharon Hamilton, Doug Olson;

Snare Drum Duet—Sandra Lofgren, Arnold Coppe.

Brookside PTA Plans Carnival May 21

The Brookside PTA will do out gaiety on May 21 with a carnival complete with big top, merry-go-round, plane and rides all out of doors.

Inside the school will be cake walks, movies, bingo game and food concessions.

Chairman of the carnival Mrs. Clyde Russ, 4900 Vallach

EDINA
February 1985
(continued on next two pages)

73-1119

System Data

PWS ID: 1270011
Population Served: 46000
Service Connections: 13360
Plant Classification: B

Plant Data (1000 gal.)

Design Capacity: 21800
Emergency Capacity: 0
Avg. Daily Prod.: 7400

Storage Data (1000 gal.)

Elevated: 2000
Ground: 4000
Pressure Tank: 0
Total: 6000

Comments:

Source Name

205399 Well #2
240630 Well #3
200561 Well #4
206377 Well #5
200561 Well #6
200471 Well #7

Source Data

	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7
Availability	P	P	P	P	P	P
Year Installed	1935	1949	1950	1954	1954	1955
Casing Diameter (in)	12	12	16	16	16	16
Casing Depth (ft)	250	265	265	257	316	350
Screen Length (ft)			90			
Well Depth (ft)	460	496	495	443	505	547
Water-Bearing Formation	Shakopee	Shakopee	Shakopee	Shakopee	Shakopee	Shakopee
Static Level (ft)	73	72	89	75	107	143
Drawdown (ft)	13	31	77	18	42	29
Pump Type	VT	VT	VT	VT	VT	VT
and Capacity	1000	800	650	850	1090	900

Treatment

	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7
Disinfection	Dc	Dc	Dc	Dc	Dc	Dc
Aeration	Ap		Ap		Ap	
Coagulation						
Sedimentation						
Filtration	Fa		Fa		Fa	
Corrosion Control & Stabilization						
Softening						
Taste & Odor						
Ammoniation						
Fluoridation	Va	Va	Va	Va	Va	Va
Other						

Chemical Analyses

	Well #2	Well #3	Well #4	Well #5	Well #6	Well #7
Date of sample	3/73	3/73	3/73	3/73	3/73	3/73
Total Hardness (mg/l)	290	220	210	200	300	190
Alkalinity (mg/l)	280	190	200	190	310	180
Calcium (mg/l)	190	150	120	100	190	120
Magnesium (mg/l)	100	70	90	100	110	70
Iron (mg/l)	.93	<.01	.65	.39	.1	<.01
Manganese (mg/l)	.1	<.01	.05	.05	<.02	<.01
Chloride (mg/l)	21	12	2.2	5	2	5
Sulfate (mg/l)	15	16	5.8	14	<5	12
Potassium (mg/l)	1	2	2	2	1	2
Total Solids (mg/l)	390	340	320	320	310	320
Specific Cond.						
pH	7.3	7.3	7.4	7.5	7.5	7.5
Arsenic (ug/l)						

P.A. 73-1119
28-24-18 dda c b d
elev. 877±5'
104-A
M.G.S. Owner
M.D.H. Robert Snude
M.D.H. PWS 1270011502

Edina

427-6100

Mr. Lee Libby
 Now Mr. Dick Pelinka

927-8861

- | | | | |
|--------|-------------------|--|--------|
| No. 1 | | 4521 50 th St,
Abandoned | 205591 |
| No. 2 | | (20' So. of No. 1 | 208399 |
| No. 3 | | Halifax + 53 rd | 240630 |
| No. 4 | Bergerson-Caswell | Concord Ave. +
Southview Lane | 200561 |
| No. 5 | Layne | 69 th + France Ave | 206377 |
| No. 6 | | Hwy 100 at H. S.
at Water Tower | 200564 |
| No. 7 | Keys | 5308 Sherwood Ave. | 206474 |
| No. 8 | Bergerson-Caswell | 66 th + Ridgview | 204884 |
| No. 9 | Keys | 59 th St + Hanson Rd. | 206588 |
| No. 10 | Bergerson-Caswell | 76 th + Kellogg | 206184 |
| No. 11 | Bergerson-Caswell | 76 th + Kellogg | 206183 |
| No. 12 | Keys | Belmore Park | 203614 |
| No. 13 | Keys | Belmore Park | 203613 |

No. 6		Hwy 100 at H. S. at Water Tower	200564
No. 7	Keys	5308 Sherwood Ave.	206474
No. 8	Bergerson-Caswell	66 th + Ridgeview	204884
No. 9	Keys	59 th St + Hanson Rd.	206588
No. 10	Bergerson-Caswell	76 th + Kellogg	206184
No. 11	Bergerson-Caswell	76 th + Kellogg	206183
No. 12	Keys	Belmore Park	203614
No. 13	Keys	Belmore Park	203613
No. 14	Mueller Bros	Braemar Golf Course	200913
No. 15	Layne	Interlachen Rd + Mirror Lake	207674
No. 16	Layne	Gleason Rd. + Crosstown	203101
No. 17	Keys	Pamela Park 59 th + ^{View} Terrace	200914
No. 18	Keys	York Ave between 44 th + 45 th	200918

Get No. 18