45474

STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND & WATER
Alaska Hydrologic Survey

WATER WELL LOG Revised 08/18/2016

Drilling Started: ___/___/_____ Completed: 2 / 14 / 1977 Pump Install: ___/___/_____

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Kenai Peninsula Borough	NA		NA	Kenai Water System AK,

Well location: Latitude 60.56480099999999 **Longitude** -151.121727
Meridian S Township 006N Range 011W Section 36 , NW 1/4 of SW 1/4 of NE 1/4 of SE 1/4

BOREHOLE DATA: (from ground surface)
Suggest T.**M. Hanna's hydrogeologic classification system***
https://my.ngwa.org/NC__Product?id=a185000000BYub3AAD

	Depth From	Depth To
SANDY CLAY BROWN BLUE	0	108
GRAVELLY CLAY	108	112
SANDY CLAY	112	116
HEAVING SAND CLAY	116	128
HARDPAN	128	139
SOFT SILT SAND	139	141
FINE COARSE SAND	141	154
SAND CEMENTED GRAVEL AND SAND	154	167
FINE TO MEDIUM SAND	167	172
CEMENTED SAND AND GRAVEL	172	175
BROWN CLAY	175	195
FINE MEDIUM SAND	195	196
FINE TO COARSE SAND	196	218
GRAY HARDPAN WITH CLAY SILT BALLS SAND	218	240

Include description or sketch of well location (include road names, buildings, etc.):

North

AS 41.08.020(b)(4) and AAC 11 AAC 93.140(a) require that a copy of the well log be submitted to the Department of Natural Resources within **45 days of well completion**. Well logs may be submitted using the online well log reporting system available at:

https://dnr.alaska.gov/welts/

OR email electronic well logs to

dnr.water.reports@alaska.gov

Drilling method: ☐ Air rotary, ☐ Cable tool, ☐ Other _____
Well use: ☒ Public supply, ☐ Domestic, ☐ Reinjection, ☐ Hydrofracking
☐ Commercial, ☐ Observation/Monitoring, ☐ Test/Exploratory, ☐ Cooling,
☐ Irrigation/Agriculture, ☐ Grounding, ☐ Recharge/Aquifer Storage,
☐ Heating, ☐ Geothermal Exploration, ☐ Other _____
Fluids used: _____

Depth of hole: 240 ft Casing stickup: _____ft
Casing type: _____ Casing thickness: _____ inches
Casing diameter: 12 inches Casing depth: _____ ft
Liner type: _____ Depth: _____ ft Diameter: _____inches
Note: _____

Well intake opening type: ☐ Open end, ☐ Open hole, ☒ Other screened
Screen type: SLOT, Screen mesh size: _____
Screen start: 156 ft, Screen stop: 225 ft, Perforated ☐ Yes ☒ No
Perforation description: _____ Perf from: _____ ft, Perf to: _____ft, Perf from: _____ ft, Perf to: _____ ft
Gravel packed ☐ Yes ☒ No Gravel start: _____ ft , Gravel stop:_____ ft
Note: _____

Static water (from top of casing): _____ ft on___/___/_____ Artesian well ☐
Pumping level & yield: _____ feet after _____ hours at _____ gpm
Method of testing: _____
Development method: _____ Duration: _____
Recovery rate: _____ gpm

Grout type: _____ Volume _____
Depth: From _____ft, To _____ft

Final pump intake depth: _____ ft Model: _____
Pump size: _____ hp Brand name: _____

Was well disinfected upon completion? ☐ Yes ☒ No
Method of disinfection: _____
Was water quality tested? ☐ Yes ☒ No
Water quality parameters tested: _____

Well driller name: .....
Company name: JONES & YOUNG DRILLING .....
Mailing address: .....
City: _____ State: AK Zip: _____
Phone number: (_____) _____- _____
Driller's signature: _____
Date: _____/_____/_____

Anchorage Municipal Code 15.55.060(I) and North Pole Ordinance 13.32.030(D) require that a copy of this well log be submitted to the Development Services Department/City within **30 days of well completion**.

City Permit Number: _____
Date of Issue: _____/___/_____

Parcel Identification Number: _____-_____-_____

*Guide for Using the Hydrogeologic Classification System for Logging Water Well Boreholes by Thomas M. Hanna NGWA Press

45474

WH 2

Jones & Young Drilling Company
Water Well Drilling & Development
Box 4-1680
Anchorage, Alaska 99509

February 14, 1977

City of Kenai
P.O. Box 580
Kenai, Alaska

Subject: Kenai Water Well
Well Logs

Gentlemen:

The following is the well log for the 12" well on the subject project:

At 108 ft. the Inspector took a sample - sandy clay brownish blue color.

At 112 ft., more gravelly clay.

At 116 ft., sandy clay.

At 128 ft., heaving sand with stratified clay.

At 139 ft., hard pan.

At 141 ft., soft silt with some sand.

At 151 ft. 6 in., fine sand, sample taken.

At 154 ft. 6 in., coarser sand, sample taken.

At 162 ft., sand and gravel, alternate from coarse sand to coarse gravel, stratified, sample taken.

At 163'6", cemented gravel, losing static, gravel and clay - no water.

At 167 ft., cemented gravel and sand.

At 168 ft., medium sand and clay - caving after 1 ft. of drilling.

At 169 ft., medium sand, water bearing, regain static level.

At 172 ft., fine to medium sand - sample taken.

At 175 ft., Cemented sand and gravel, color brown.

At 176 ft., brown clay, and fine sand.

At 177 ft., sample taken - no change.

At 183 ft., sample taken - static still 25 ft. Can also bail down.

At 188 ft., sample taken.

At 195 ft., sample taken - no change.

At 196 ft., fine sand with some medium sand.

At 198 ft., fine to coarse sand sampled. Two or three samples taken - fine sand.

At 216 ft., sample - no change.

At 218 ft., sample - no change. Cased hole after sand pumping, drew static down to 48 ft.

At 225 ft., formation changed to grey hard pan with clay and silt balls with sand. Drilled open hole from 232 ft. to 240 ft. depth - still in hard pan.

JONES & YOUNG DRILLING CO., INC.

Tom Bolen

cc: Harold Galliett

manufacturer to the stainless-steel ring.

The blank section shall be 10" x 0.25" wall-thickness Schedule 20 mild-steel pipe. This blank section shall be beveled for welding and welded as specified for well casing. The length of this blank section shall be such as to permit slotted screen to extend to the 175.0 and 195.0 depths.

Screen depth versus slot size shall be as follows:

Well #2

Depth	Slot Size	Remarks
156.5 - 158.5	50	
158.5 - 164.0	90	
164.0 - 171.0	150	One butt welding joint about midway between 155.0 and 175.0
171.0 - 175.0	25	
175.0 - 195.0	BLANK	End slots at 175.0
195.0 - 200.0	18	Start slots at 195.0
200.0 - 203.0	40	
203.0 - 208.0	9	
208.0 - 218.0	13	Two butt welding joints about equally spaced between 195.0 and 225.0
218.0 - 225.0	11	
		End slots at 225.0

Screen shall be closed with a heavy, welded, stainless-steel end plate at the bottom.

Screen shall rest in the hole on clean sandy-gravel, which shall have been thoroughly tamped into a dense supporting bed by the impact of drilling tools.

Very truly yours,

Well #2

Harold H. Galliett, Jr.

Harold H. Galliett, Jr.,
Registered Civil Engineer

HG:mg

P.S. I have revised this letter to start slots at 156.5, instead of at 155.0. This was done to reduce the risk that subsidence, caused by withdrawal of casing and development, would bring undesirable fine material down through the top of the formerly specified screen.

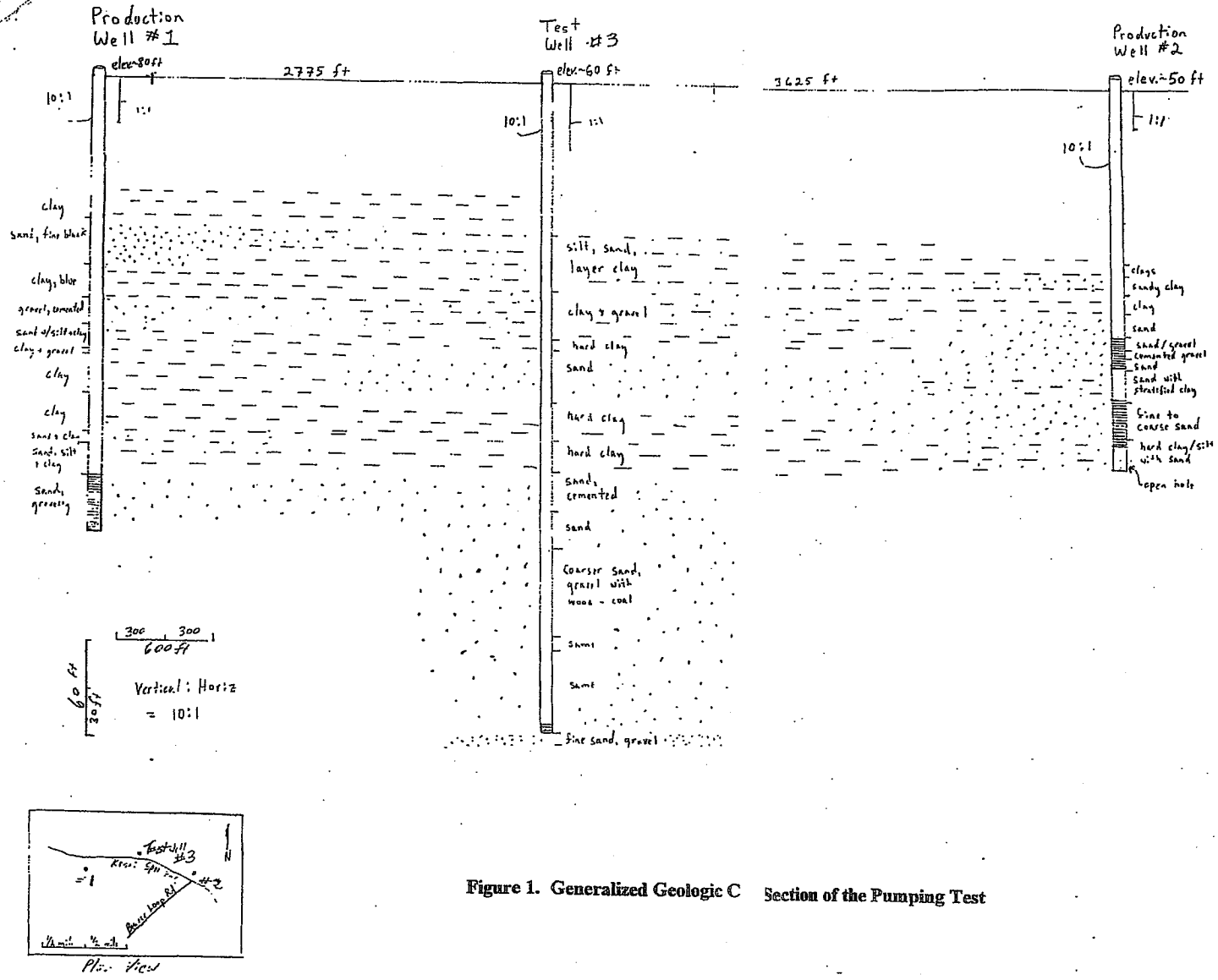

Figure 1. Generalized Geologic C Section of the Pumping Test

CITY OF KENAI WATER SYSTEM