



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=a18500000BYub3AAD <div style="text-align: center;"> Depth From To </div>			Drilling method: <input type="checkbox"/> Air rotary, <input type="checkbox"/> Cable tool, <input type="checkbox"/> Other _____ Well use: <input checked="" type="checkbox"/> Public supply, <input type="checkbox"/> Domestic, <input type="checkbox"/> ReInjection, <input type="checkbox"/> Hydrofracking <input type="checkbox"/> Commercial, <input type="checkbox"/> Observation/Monitoring, <input type="checkbox"/> Test/Exploratory, <input type="checkbox"/> Cooling, <input type="checkbox"/> Irrigation/Agriculture, <input type="checkbox"/> Grounding, <input type="checkbox"/> Recharge/Aquifer Storage, <input type="checkbox"/> Heating, <input type="checkbox"/> Geothermal Exploration, <input type="checkbox"/> Other _____ Fluids used: _____	
			Depth of hole: <u>240</u> ft Casing stickup: _____ ft Casing type: _____ Casing thickness: _____ inches Casing diameter: <u>12</u> inches Casing depth: _____ ft Liner type: _____ Depth: _____ ft Diameter: _____ inches Note: _____	
SANDY CLAY BROWN BLUE	0	108	Well intake opening type: <input type="checkbox"/> Open end, <input type="checkbox"/> Open hole, <input checked="" type="checkbox"/> Other screened Screen type: <u>SLOT</u> , Screen mesh size: _____ Screen start: <u>156</u> ft, Screen stop: <u>225</u> ft, Perforated <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Perforation description: _____ Perf from: _____ ft, Perf to: _____ ft, Perf from: _____ ft, Perf to: _____ ft Gravel packed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Gravel start: _____ ft , Gravel stop: _____ ft Note: _____ Static water (from top of casing): _____ ft on ___/___/___ Artesian well <input type="checkbox"/> 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	
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.):

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

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

WH2

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:

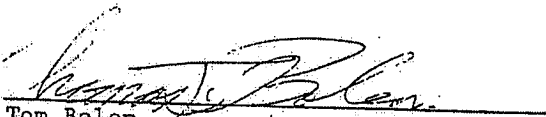
The following is the well log for the 12" well on the subject project:

- 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.

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February 14, 1977
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- 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:

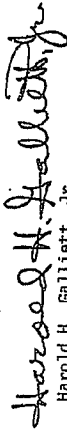
Depth	Slot Size	Remarks
156.5 - 158.5	50	
158.5 - 164.0	90	
164.0 - 171.0	150	One butt welding joint about midway between 155.0 and 175.0
171.0 - 175.0	25	
175.0 - 195.0	BLANK	End slots at 175.0
195.0 - 200.0	18	Start slots at 195.0
200.0 - 203.0	40	
203.0 - 208.0	9	
208.0 - 218.0	13	Two butt welding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

WU #2

Very truly yours,

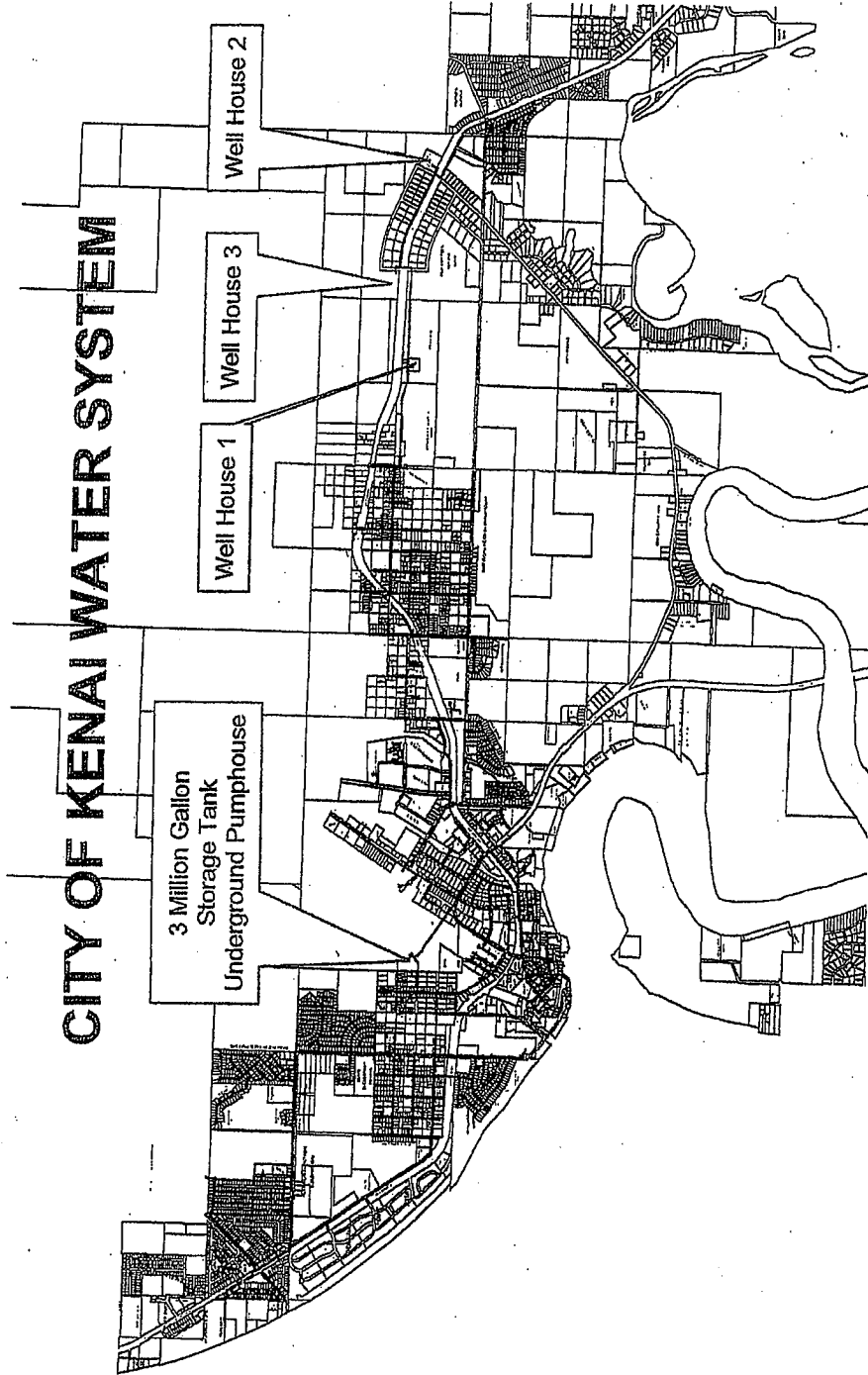


Harold H. Galliett, Jr.,
Registered Civil Engineer

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.

CITY OF KENAI WATER SYSTEM



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