



STATE OF ALASKA 36670  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND & WATER  
Alaska Hydrologic Survey

**WATER WELL LOG** Revised 08/18/2016

Drilling Started: 5 / 13 / 2013 Completed: 5 / 22 / 2013 Pump Install:     /    /    

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Bristol Bay Borough				<b>Silver Bay Seafoods AK,</b>

**Well location: Latitude** 58.7453957 **Longitude** -156.955475  
Meridian S Township 016S Range 046W Section 33 , SW 1/4 of NE 1/4 of NW 1/4 of SE 1/4

<p><b>BOREHOLE DATA:</b> (from ground surface) Suggest T.M. Hanna's hydrogeologic classification system* <a href="https://my.ngwa.org/NC_Product?id=a18500000BYub3AAD">https://my.ngwa.org/NC_Product?id=a18500000BYub3AAD</a></p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">Depth</th> </tr> <tr> <th style="width:50%;">From</th> <th style="width:50%;">To</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	Depth		From	To																																																			<p><b>Drilling method:</b> <input checked="" type="checkbox"/> Air rotary, <input type="checkbox"/> Cable tool, <input type="checkbox"/> Other _____  <b>Well use:</b> <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 _____  <b>Fluids used:</b> _____  <b>Depth of hole:</b> <u>262</u> ft <b>Casing stickup:</b> <u>3</u> ft  <b>Casing type:</b> <u>Steel</u> <b>Casing thickness:</b> <u>0.322</u> inches  <b>Casing diameter:</b> <u>6</u> inches <b>Casing depth:</b> <u>252</u> ft  <b>Liner type:</b> _____ <b>Depth:</b> _____ ft <b>Diameter:</b> _____ inches  <b>Note:</b> _____  <b>Well intake opening type:</b> <input type="checkbox"/> Open end, <input type="checkbox"/> Open hole, <input checked="" type="checkbox"/> Other <u>screened</u>  <b>Screen type:</b> <u>Stainless Steel</u>, <b>Screen mesh size:</b> <u>0.06</u>  <b>Screen start:</b> <u>252</u> ft, <b>Screen stop:</b> <u>262</u> ft, Perforated <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Perforation description:</b> _____ <b>Perf from:</b> _____ ft, <b>Perf to:</b> _____ ft, <b>Perf from:</b> _____ ft, <b>Perf to:</b> _____ ft  <b>Gravel packed</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <b>Gravel start:</b> _____ ft , <b>Gravel stop:</b> _____ ft  <b>Note:</b> _____  <b>Static water (from top of casing):</b> <u>62</u> ft on <u>10 / 2 / 2013</u> <b>Artesian well</b> <input type="checkbox"/>  <b>Pumping level &amp; yield:</b> <u>160</u> feet after <u>2</u> hours at <u>435</u> gpm  <b>Method of testing:</b> _____  <b>Development method:</b> _____ <b>Duration:</b> _____  <b>Recovery rate:</b> _____ gpm  <b>Grout type:</b> <u>Bentonite</u> <b>Volume</b> <u>10 Bags</u>  <b>Depth:</b> From _____ ft, To <u>20</u> ft  <b>Final pump intake depth:</b> <u>210</u> ft <b>Model:</b> _____  <b>Pump size:</b> <u>30</u> hp <b>Brand name:</b> _____  <b>Was well disinfected upon completion?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>Method of disinfection:</b> <u>Sodium Hypochlorite 50+ ppm</u>  <b>Was water quality tested?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  <b>Water quality parameters tested:</b> _____  <b>Well driller name:</b> .....  <b>Company name:</b> <u>Johnson Drilling Co.</u>.....  <b>Mailing address:</b>.....  <b>City:</b> _____ <b>State:</b> <u>AK</u> <b>Zip:</b> _____  <b>Phone number:</b> ( _____ ) _____ - _____  <b>Driller's signature:</b> _____  <b>Date:</b> _____ / _____ / _____  <b>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.</b>  <b>City Permit Number:</b> _____  <b>Date of Issue:</b> _____ / _____ / _____  <b>Parcel Identification Number:</b> _____ - _____ - _____</p>
Depth																																																							
From	To																																																						

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](mailto:dnr.water.reports@alaska.gov)

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



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

WATER WELL LOG

Drilling Started: 5 / 13 / 2013 Completed: 5 / 22 / 2013 Pump Install: 10 / 2 / 2-13

City/Borough:	Subdivision:	Block	Lot	Property Owner Name & Address:
Naknek				Silver Bay Seafoods Well #3
Latitude 58° 41' 42.88"N		Longitude 156° 57' 18.53"W		
Meridian		Township	Range	Section
				1/4 of 1/4 of 1/4 of 1/4
<b>BOREHOLE DATA:</b> (from ground surface) Suggest T.M. Hanna's hydrogeologic classification system * <a href="https://info.ngwa.org/servicecenter/shopper/ProductDetail.cfm?ProdCompanyPassed=ngw&amp;ProdCdPassed=ngw-11030">https://info.ngwa.org/servicecenter/shopper/ProductDetail.cfm?ProdCompanyPassed=ngw&amp;ProdCdPassed=ngw-11030</a>				Drilling method: <input checked="" type="checkbox"/> Air rotary, <input type="checkbox"/> Cable tool, <input type="checkbox"/> Other
Depth From To				Well use: <input checked="" type="checkbox"/> Public supply, <input type="checkbox"/> Domestic, <input type="checkbox"/> ReInjection, <input type="checkbox"/> Hydrofracking
Fine Brown Sand 0 - 25				Fluids used: None
Medium Brown Sand, Wet 25 - 30				<input type="checkbox"/> Other
Medium Sand and Gravel, Wet 30 - 35				Depth of hole: 262 ft Casing stickup: 3 ft
Silty Sand and Gravel 35 - 50				Casing type: Steel Wall thickness .322 inches
Clay, Gravel and Sand Mixed 50 - 70				Casing diameter: 8 inches Casing depth 252 ft
Silty Sand and Gravel 70 - 110				Liner type: none Depth: ft Diameter: inches
Clay and Large Rocks 110 - 120				Well intake opening type: <input type="checkbox"/> Open end, <input type="checkbox"/> Open hole, <input type="checkbox"/> Other
Medium Gravel and Sand, Dry 120 - 130				Screen type: Stainless Steel Assembly From: 252 ft To 262 ft
Clayey Sand and gravel 130 - 150				Slot size 60 From: 252 ft To 262 ft
Coarse Sand and Gravel, Dry 150 - 180				Slot size From: ft To ft
Mixed Sand, Gravel, and Clay 180 - 210				<input type="checkbox"/> Perforation description From: ft To ft
Mixed Sand, Gravel, and Clay 210 - 230				From: ft To ft From: ft To ft
Clayey Sand and Pea Gravel 230 - 235				Gravel packed <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No From ft To ft
Clay and Pea Gravel 235 - 245				Static water (from top of casing): 62 ft on 10 / 2 / 2013
Coarse Sand and Gravel 245 - 262				Pumping level & yield: 180 feet after 2 hours at 435 gpm
				Method of testing: Submersible Pump 30 HP
				Development method: Air Surge Duration: 8 Hrs
				Recovery rate: 3 min gpm
				Grout type: Standing Bentonite Column Volume 10 bags
				Depth: From Surface ft To 20 ft
				Final pump intake depth: 210 ft Model: 7CLC 3Stage Goulds
				Pump size 30 hp Brand name Groundfos Motor
				Was well disinfected upon completion? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				Method of disinfection: Sodium Hypochlorite 50+ PPM
				Was water quality tested? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
				Water quality parameters tested: PRWA + Arsenic
				Well driller name: Steve Thomas
				Company name: Johnson Drilling Co.
				Mailing address: 3705 Arctic #412
				City: Anchorage State: AK Zip 99503
				Phone number: (907) 250 5051
				Driller's signature: <i>Steve Thomas</i>
				Date: 6 / 10 / 2013

AS 41.08.020(b)(4) and AAC 11.AAC 93.140(a) require that a copy of the well log be forwarded to the Department of Natural Resources within 45 days of well completion. Please email well logs to:

[dnr.water.reports@alaska.gov](mailto:dnr.water.reports@alaska.gov) OR send to

Alaska DNR, MLW, Alaska Hydrologic Survey  
550 West 7<sup>th</sup> Avenue, Suite 1020  
Anchorage, AK 99501

Anchorage Municipal Code 15.55.060(l) requires that a copy of this well log be forwarded to the Development Services Department within 30 days of well completion.

City Permit Number: \_\_\_\_\_  
Date of Issue: \_\_\_\_\_

Parcel Identification Number: \_\_\_\_\_

Is well located at approved permit location?  Yes  No

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