47713

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: 3 / 1 / 2006 Pump Install: ___/___/_____

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Bristol Bay Borough	NA		NA	National Park Service - King Salmon AK,

Well location: Latitude 58.6805763 **Longitude** -156.666901
Meridian S Township 017S Range 045W Section 26 , SE 1/4 of NE 1/4 of NE 1/4 of NW 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	To
Gravel fill	0	1
Fine brown sand	1	13
Sand and gravel with water	13	15
Dry gray clay	15	20
Gray clay and sand	20	32
Clay and gravel	32	40
Wet gray clay	40	50
Wet clay and sand	50	53
Coarse sand and small gravel	53	62
Silty sand and gravel	62	66
Silty gravel with lots of water	66	87
Hard packed clay and gravel	87	98
Mixed sand and silty gravel	98	106

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

North

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: 106 ft Casing stickup: 3 ft
Casing type: A53B Steel Casing thickness: .28 inches
Casing diameter: 6 inches Casing depth: _____ ft
Liner type: _____ Depth: _____ ft Diameter: _____ inches
Note: 6" .28 wall steel casing ERW Type A-53B

Well intake opening type: ☐ Open end, ☐ Open hole, ☒ Other screened
Screen type: Stainless Steel, Screen mesh size: 50
Screen start: _____ ft, Screen stop: _____ 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: Stainless steel well screen by Johnson Division U.O.P. # 50 slot Welded plate bottom.

Static water (from top of casing): 9 ft on ___/___/_____ Artesian well ☐
Pumping level & yield: _____ feet after 24 hours at 50 gpm
Method of testing: Submersible pump
Development method: Air surge Duration: 10 hours
Recovery rate: _____ gpm

Grout type: Bentonite Chips Volume _____
Depth: From 10 ft, To 30 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: Steve Thomas
Company name: JOHNSON DRILLING CO
Mailing address: 3705 ARCTIC BLVD
City: ANCHORAGE State: AK Zip: 99503
Phone number: (_____) _____-_____
Driller's signature: _____
Date: _____/_____/_____

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

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

JOHNSON DRILLING CO.
KING SALMON, ALASKA
AS-BUILT DRAWING
FOR: Paug-Vik Dev

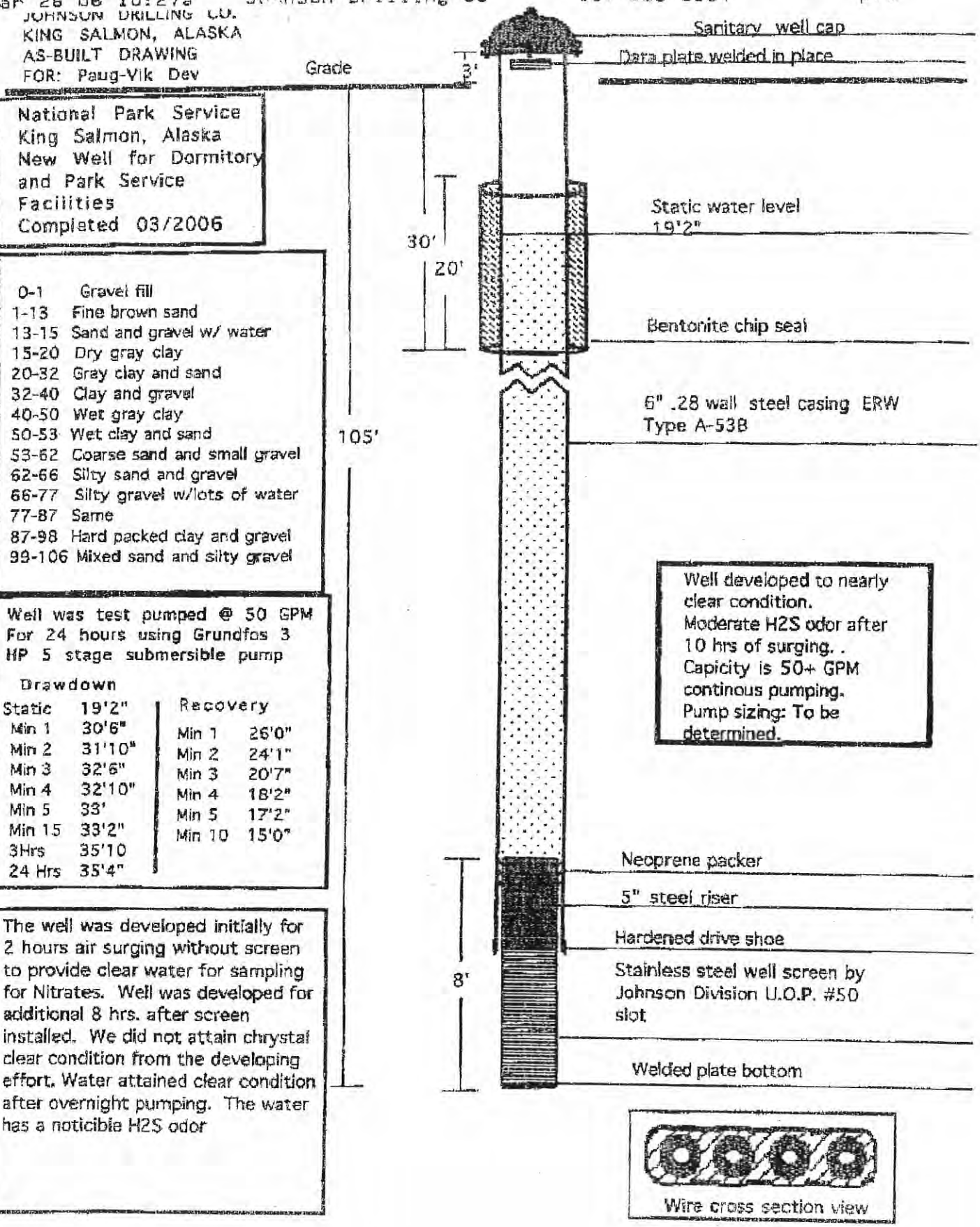
National Park Service
King Salmon, Alaska
New Well for Dormitory and Park Service Facilities
Completed 03/2006

0-1	Gravel fill
1-13	Fine brown sand
13-15	Sand and gravel w/ water
15-20	Dry gray clay
20-32	Gray clay and sand
32-40	Clay and gravel
40-50	Wet gray clay
50-53	Wet clay and sand
53-62	Coarse sand and small gravel
62-66	Silty sand and gravel
66-77	Silty gravel w/lots of water
77-87	Same
87-98	Hard packed clay and gravel
99-106	Mixed sand and silty gravel

Well was test pumped @ 50 GPM For 24 hours using Grundfos 3 HP 5 stage submersible pump

Drawdown		Recovery	
Static	19'2"		
Min 1	30'6"	Min 1	26'0"
Min 2	31'10"	Min 2	24'1"
Min 3	32'6"	Min 3	20'7"
Min 4	32'10"	Min 4	18'2"
Min 5	33'	Min 5	17'2"
Min 15	33'2"	Min 10	15'0"
3Hrs	35'10		
24 Hrs	35'4"		

The well was developed initially for 2 hours air surging without screen to provide clear water for sampling for Nitrates. Well was developed for additional 8 hrs. after screen installed. We did not attain chrystal clear condition from the developing effort. Water attained clear condition after overnight pumping. The water has a noticible H2S odor



Well developed to nearly clear condition. Moderate H2S odor after 10 hrs of surging. . Capicity is 50+ GPM continous pumping. Pump sizing: To be determined.

Wire cross section view