



STATE OF ALASKA 60789  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING, LAND & WATER  
Alaska Hydrologic Survey

WATER WELL LOG Revised 08/18/2016

Drilling Started: \_\_\_\_/\_\_\_\_/\_\_\_\_ Completed: 6 / 11 / 2002 Pump Install: \_\_\_\_/\_\_\_\_/\_\_\_\_

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
				Arctic Interagency Visitor Center AK,

Well location: Latitude 67.252632 Longitude -150.185635  
Meridian F Township 028N Range 012W Section 16 SW 1/4 of SE 1/4 of SE 1/4 of NE 1/4

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

	Depth	
	From	To
D-1 compacted fill	0	5
Decaying organics (wood)	5	6
Gray silt	6	7
Course quartz sand	7	9
Brown sand	9	12
Rounded river rock 2"-4"	12	16
Weathered brown mica-schist (sand/deposited)	16	33
Fine gray sand	33	48
Gray sand with some gravel	48	56
Course quartz sand	56	68

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

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: 68 ft Casing stickup: 1.5 ft  
Casing type: Steel Casing thickness: \_\_\_\_\_ inches  
Casing diameter: 6 inches Casing depth: \_\_\_\_\_ ft  
Liner type: \_\_\_\_\_ Depth: \_\_\_\_\_ ft Diameter: \_\_\_\_\_ inches  
Note: \_\_\_\_\_

Well intake opening type: ☐ Open end, ☐ Open hole, ☒ Other screened  
Screen type: Stainless steel, Screen mesh size: 0.1  
Screen start: 63 ft, Screen stop: 68 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): 15.5 ft on 6 / 11 / 2002 Artesian well ☐  
Pumping level & yield: \_\_\_\_\_ feet after \_\_\_\_\_ hours at \_\_\_\_\_ gpm  
Method of testing: \_\_\_\_\_  
Development method: Airlift Duration: 12 hours  
Recovery rate: \_\_\_\_\_ gpm

Grout type: Bentonite and Cement Volume 300lbs of bentonite, 4 yds of cement.  
Depth: From 14.5 ft, To 35 ft

Final pump intake depth: 35 ft Model: \_\_\_\_\_  
Pump size: 5 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: NORTHERN 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: \_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_

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)

WELL LOG ID 60789

STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF MINING & WATER MGMT  
WATER WELL RECORD

## LOCATION OF WELL

BOROUGH	SUBDIVISION	LOT	BLOCK	SECTION QTRS	SECTION	TOWNSHIP <input type="checkbox"/> N <input type="checkbox"/> S	RANGE <input type="checkbox"/> E <input type="checkbox"/> W	MERIDIAN
LOCATION/SKETCH:					WELL OWNER: ARCTIC INTERAGENCY VISITOR CENTER COLDFOOT, ALASKA			
DEPTHS MEASURED FROM: <input checked="" type="checkbox"/> casing top <input type="checkbox"/> ground surface					WELL DEPTH: DATE OF COMPLETION			
BOREHOLE DATA: Material Type and Color					Depth From To			
CASING STICK UP	0	18"	Depth of hole: 70' ft Depth of casing: 65' ft 06 / 11 / 02					
D-1 COMPACTED FILL	18"	7'	DEPTH TO STATIC WATER LEVEL: 15' 6" ft below <input checked="" type="checkbox"/> top of casing <input type="checkbox"/> ground surface Date: 6 / 11 / 02					
DECAYING ORGANICS (WOOD)	7'	8'	METHOD OF DRILLING: <input checked="" type="checkbox"/> air rotary <input type="checkbox"/> cable tool <input type="checkbox"/> other					
GRAY SILT (CLAY-LIKE)	8'	9' 6"	USE OF WELL: <input type="checkbox"/> domestic <input type="checkbox"/> irrigation <input type="checkbox"/> monitor <input checked="" type="checkbox"/> public supply <input checked="" type="checkbox"/> other FIRE PROTECTION					
COURSE QUARTZ SAND	9' 6"	11'	CASING STICK-UP: 1' 6" ft. Diam: 6 in. to 65 ft Casing type: STEEL 6 in. to 65 ft					
BROWN SAND	11'	14'	WELL INTAKE OPENING TYPE: <input type="checkbox"/> open end <input checked="" type="checkbox"/> screened <input type="checkbox"/> perforated <input type="checkbox"/> open hole Depths of openings: 65' to 70' ft					
ROUNDED RIVER ROCK 2" - 4"	14'	18'	SCREEN TYPE: STAINLESS ST Diam: 6 in. Slot/Mesh Size: .10 Length: 5 ft					
WEATHERED BROWN MICA-SCHIST (sand/deposited)	18'	35'	GRAVEL PACK TYPE: Volume used: Depth to top:					
FINE GRAY SAND	35'	50'	GROUT TYPE: Bent./Cement Volume: 300 lbs Bent. Depth: from 14' 6" ft to 35' ft 4 Yards Cement					
GRAY SAND WITH SOME GRAVEL	50'	58'	DEVELOPMENT METHOD: Air-Lift/Pumping Duration: 12 hours					
COURSE QUARTZ SAND	58'	70'	PUMPING LEVEL AND YIELD: 18' 6" ft after 10 hrs pumping 50 gpm					
			PUMP INTAKE DEPTH: 35 ft Horsepower: 5 WELL DISINFECTED UPON COMPLETION? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO					

## CONTRACTOR INFORMATION:

## REMARKS:

NORTHERN DRILLING INC.

Registered Business Name

Signature of Authorized Representative

JOHN NEAL, Certified Well Driller

6-15-02  
Date

PLEASE MAIL WHITE COPY OF LOG TO:  
DNR/DIVISION OF MINING & WATER MGMT  
3601 C St, Suite 800  
ANCHORAGE AK 99503-5935

Phone (907)269-8639, Fax (907)582-1324

**NORTHERN DRILLING INC.**

**610 GOLDSTREAK RD.**

**FAIRBANKS, ALASKA 99712**

**907-456-4963**

**907-479-4963 FAX**

**SUBS: Well Construction and Testing Report  
Arctic Interagency Visitor Center**

**Well construction and pump test were completed as planned in accordance with specifications.**

**Well was drilled, cased and developed with screen placed in clean, coarse quartz sand at 65' to 70'.**

**Water Quality seemed to be excellent and produced greater than required flow rate at 50 gallons per minute.**

**Casing was grouted successfully using 300 lbs of bentonite followed by 4 yards of cement grout. Because of the type of formation to 35', the hole stayed open to that depth, taking much greater than expected amount of grout.**

**Coarse clean sand from 58 to 70' provided an excellent match to the .10 slot stainless steel screen installed.**

**Well was developed using air-lift from drill rig for 2 hours followed by pumping for a duration of 10 hours at a rate of 50 gallons per minute.**

**During well testing and development, well was pumped @ 50 GPM for 10 hours.**

**Well draw down after 10 hours was 3 feet. When pumping ceased, well recovered to static level within 10 minutes. Specific capacity of well is 50 GPM.**

**Pump was set 21' below pitless adapter which was installed @ 14'. Pump intake depth was 35'. 1/8" weep hole was drilled 3 feet above pump**

*J. Neal*

☒ **APPROVED** ☐ **APPROVED AS NOTED**  
BY *cy*  
DATE 6-24-02 TITLE \_\_\_\_\_

# NORTHERN DRILLING INC.

## WATER WELL LOG

**WELL OWNER:** ARCTIC INTERAGENCY VISITOR CENTER

**LOCATION OF WELL:** COLDFOOT, ALASKA

**WELL DEPTH:** 70' **CASING SIZE, MATERIAL & AMT:** 65' OF 6" STEEL

**SCREEN:** STAINLESS: .10" x 5' AT 65 TO 70' **STATIC WATER LEVEL:** 15' 6"

**CAPACITY:** 50 GPM

**DEVELOPMENT METHOD:** AIR LIFT /PUMP 12 HOURS

**METHOD OF DRILLING:** AIR ROTARY

**DATE DRILLED:** 6/11/02

**WELL DRAW DOWN:** 3' WHEN PUMPED AT 50 GPM FOR 12 HOURS

### FORMATION LOG

<b>FROM:</b> 0	<b>TO:</b> 18"	CASING STICK-UP
18"	7'	D-1 COMPACTED FILL
7'	8'	DECAYING ORGANICS (WOOD)
8'	9'6"	GRAY SILT (CLAY LIKE)
11'	14'	BROWN SAND
14'	18'	ROUNDED RIVER ROCK 2"- 4"
18'	35'	WEATHERED BROWN MICA-SCHIST (SAND)
35'	50'	FINE GRAY SAND
50'	58'	GRAY SAND WITH GRAVEL
58'	70'	COARSE QUARTZ SAND

### PUMP INFORMATION

**DATE INSTALLED:** 06/11/02 **MANUFACTURER:** GOULDS

**MODEL:** 33GS50

**HORSEPOWER:** 5

**VOLTAGE:** 208 3 PHASE

**CAPACITY:** 33 GPM

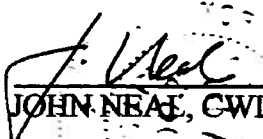
**DROP PIPE:** 21' OF 2" GALV. STEEL

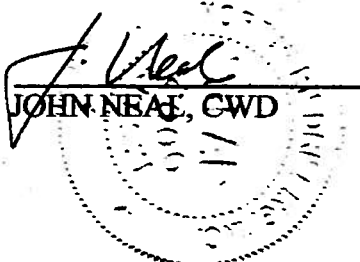
**DEPTH:** 35'

**PUMP CABLE:** 8-3

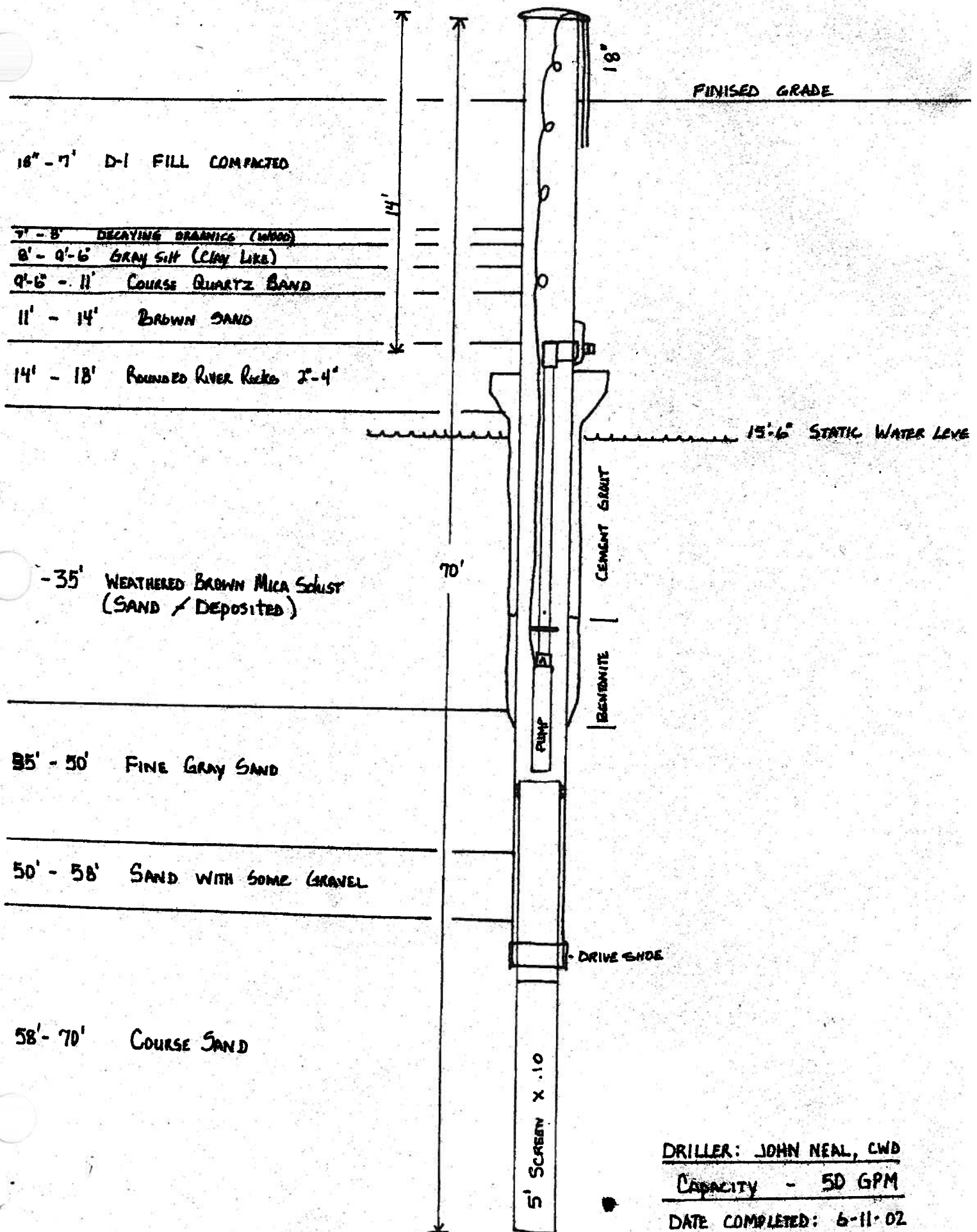
**HEAT CABLE:** N/A **PITLESS ADAPTER:** 6" X 2" MAAS WELD-ON AT 14'

**DRILLER NAME/ SIGNATURE:**

  
JOHN NEALE, CWD



# COLDFOOT VISITORS CENTER - AS-BUILT DIAG. #1



DRILLER: JOHN NEAL, CWD

CAPACITY - 50 GPM

DATE COMPLETED: 6-11-02