38870

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

WATER WELL LOG Revised 08/18/2016

Drilling Started: 10 / 23 / 2014 Completed: 10 / 23 / 2014 Pump Install: ___/___/_____

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Matanuska-Susitna Borough	KNIK HEIGHTS WEST		D3	MATANUSKA SUSITNA BOROUGH 350 E. DAHLIA AVENUE AK, 99645

Well location: Latitude 61.499494 **Longitude** -149.693757
Meridian S Township 016N Range 002W Section 06 , NE 1/4 of SW 1/4 of SE 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	To
TOPSOIL, GRAVEL	0	2
SILT, GRAVEL	2	56
WET SILTY GRAVEL	56	67
SILT, GRAVEL	67	84
DAMP SILT GRAVEL	84	119
SAND, GRAVEL, SILT	119	129
SAND, GRAVEL, WATER	129	139

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: 139 ft Casing stickup: 2 ft
Casing type: STEEL Casing thickness: .25 inches
Casing diameter: 8 inches Casing depth: 129 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:
Screen start: 129 ft, Screen stop: 139 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: TWO SIZE SCREENS: 129'-134': 60SLOT 134'-139': 40SLOT

Static water (from top of casing): 114 ft on 10 / 23 / 2014 Artesian well ☐
Pumping level & yield: 115 feet after 24 hours at 125 gpm
Method of testing: FLOW METER
Development method: AIR Duration: 6HR
Recovery rate: 300 gpm

Grout type: BENTONITE Volume 9BAGS
Depth: From 0 ft, To 20 ft

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

Was well disinfected upon completion? ■ Yes ☐ No
Method of disinfection: CHLORINE RECIRCULATION
Was water quality tested? ☐ Yes ■ No
Water quality parameters tested:

Well driller name: BEN MATTSON
Company name: WHEATON WATER WELL, INC
Mailing address: 1190 N. WASILLA-FISHHOOK ROAD
City: WASILLA State: AK Zip: 99654
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

38870

Wheaton Water Well, Inc.

1190 N. Wasilla-Fishhook Road
Wasilla, AK 99654
(907)376-2041

Name: Matanuska-Susitna Borough
Address: 350 East Dahlia Avenue
City: Palmer **State:** AK **Zip Code:** 99645

Well Site: T16N, R2W, S6 **Lot:** D3 **Block:**
Additional: Dena'ina Elementary School

Well Depth:	141 ft.
Below Ground:	139 ft.
Above Ground:	2 ft.
Gal/Min:	250 +
Static Level:	114 ft.
Casing:	131' of 8" ID Steel
Liner Pipe:	none
Screened:	see side
Perforated:	none
Grouted:	see side
Depth:	20' +
Develop. Method:	Air
Use of Well:	Commercial
Drilling Method:	Rotary
Fluids Used:	none
Pump Installed:	none
Other:	none

From:	To:	Formation:
0	4	topsoil, gravel
4	58	silt, gravel
58	69	wet silty gravel
69	86	silt, gravel
86	121	damp silt, gravel
121	131	sand, gravel, silt
131	141	sand, gravel, water
131	136	60 slot screen
136	141	40 slot screen
		grouted 20' plus with a 10" surface seal using 9 bags of bentonite

Date Drilled: 10-23-2014 **Driller:** Ben Mattson

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

38870

WATER WELL LOG

Drilling Started: 10 / 17 / 2014 Completed: 10 / 23 / 2014 Pump Install: none

City/Borough	Subdivision:	Block	Lot	Property Owner Name & Address:
Mat-Su	T16N, R2W Section 16		D3	Mat-Su Borough 350 E Dahlia Avenue Palmer, AK 99645

Latitude _____ Longitude _____
Meridian Seward Township 16N Range 2W Section 16 . ____ 1/4 of ____ 1/4 of ____ 1/4 of ____ 1/4

BOREHOLE DATA: (from ground surface)
Suggest T.M. Hanna's hydrogeologic classification system *
https://info.ngwa.org/servicecenter/shopper/ProductDetail.cfm?ProdCompanyPassed=ngw&ProdCdPassed=ngw-t1030

	Depth From	Depth To
Topsoil, gravel	0	4
silt, gravel	4	58
wet silty gravel	58	69
silt, gravel	69	86
damp silt gravel	86	121
sand, gravel, silt	121	131
sand, gravel, water	131	141
recommend pump be set at 128'		

Drilling method: [X] Air rotary, [ ] Cable tool, [ ] Other _____
Well use: [X] Public supply, [ ] Domestic, [ ] Reinjection, [ ] Hydrofracking
Fluids used: none
[ ] Other _____

Depth of hole: 141 ft, Casing stickup: 2 ft
Casing type: Steel Wall thickness .25 inches
Casing diameter: 8 inches Casing depth 131 ft
Liner type: none Depth: ____ ft Diameter: ____ inches

Well intake opening type: [ ] Open end, [ ] Open hole, [X] Other
Screen type: Stainless Assembly From: 131 ft, To 141 ft
Slot size 60 From: 131 ft, To 136 ft
Slot size 40 From: 136 ft, To 141 ft
[ ] Perforation description N/A From: ____ ft, To ____ ft
From: ____ ft, To ____ ft From: ____ ft, To ____ ft
Gravel packed [ ] Yes [X] No From ____ ft, To ____ ft

Static water (from top of casing): 114 ft on 10 / 23 / 2014
Pumping level & yield: 115 feet after 24 hours at 125 gpm
Method of testing: flow meter
Development method: Air Duration: 16 hours
Recovery rate: ~300 gpm

Grout type: Bentonite Volume 9 bags
Depth: From 0 ft, To 20+ ft

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

Was well disinfected upon completion? [X] Yes [ ] No
Method of disinfection: Chlorine recirculation
Was water quality tested? [X] Yes [ ] No
Water quality parameters tested: _____

Well driller name: Ben Mattson
Company name: Wheaton Water Well, Inc
Mailing address: 1190 N. Wasilla-Fishhook Road
City: Wasilla State: AK Zip 99654
Phone number: (907) 376-2041
Driller's signature: _____
Date: 10 / 23 / 2014

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 OR send to

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

Anchorage Municipal Code 15.55.060(I) 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

38870

Wheaton Water Well, Inc.

907-376-2041 - Fax: 907-376-2030 - email: cp650wheaton@gmail.com
1190 Wasilla-Fishhook Road
Wasilla, AK 99654

Dena'ina Elementary School

Sieve Analysis Report

132' - 60% sand is plus 0.060 inch

140' - 60% sand is plus 0.060 inch

38870

Wheaton Water Well Inc.

Plumbness & Alignment Report

Dena'ina 8" Test Well

For testing we lowered a 7.5" X 11' length of pipe to a depth of 131' encountering no obstructions or binding. Also the 6" X 7' test pump on 3" galvanized pipe was lowered to 133' without encountering any obstructions or binding.

Brian R. Wille

President

Wheaton Water Well Inc.

10/29/2014

38870

Wheaton Water Well, Inc.

1190 N. Wasilla-Fishhook Road
Wasilla, AK 99654
(907)376-2041

WELL FLOW TEST

Project: Dena'ina Elementary School
Well Site: T16N, R2W, S6 Lot D3
Well Depth: 141'
Static Water Level: 114 ft.
Date Drilled: 10-23-2014

Date of Test: 10-28-2014
Casing: 131' of 8" ID Steel
Screen: 5'of 40 slot & 5' of 60 slot
Date Level Taken: 10-23-2014
Drilled By: Wheaton Water Wells

Elapsed Time In Minutes	Depth To Water	Gallons Per Minute	Remarks
0	113.57'	0	9:21 am
0	113.54'	0	10:28 am
0	113.57'	0	10:45 am Start Pumping
1	114.28'	70	
2	114.26'		
14	114.26'	70	
15	114.70'		open valve
21	114.71'	110	
31	114.71'	110	
33	114.92'	125	open valve fully
38	114.92'	125	45 minutes - sand is 3.48 ppm
114	114.87'	125	sand is 3.48 ppm
315	114.80'	125	sand is 3.48 ppm
380	114.80'	125	
442	114.80'	125	
511	114.80'	125	
575	114.80'	125	
638	114.80'	125	
702	114.80'	125	
768	114.80'	125	
830	114.80'	125	
890	114.80'	125	
955	114.80'	125	
1018	114.80'	125	
1083	114.80'	125	
1150	114.80'	125	
1210	114.80'	125	
1263	114.80'	125	
1304	114.80'	125	sand is 3.4 ppm
1469	115.02'	125	sand is 1.0 ppm
1473	115.02'	125	Stopped Pumping

38870

Wheaton Water Well, Inc.

1190 N. Wasilla-Fishhook Road
Wasilla, AK 99654
(907)376-2041

WELL FLOW TEST

Project: Dena'ina Elementary School
Well Site: T16N, R2W, S6 Lot D3
Well Depth: 141'
Static Water Level: 114 ft.
Date Drilled: 10-23-2014

Date of Test: 10-28-2014
Casing: 131' of 8" ID Steel
Screen: 5'of 40 slot & 5' of 60 slot
Date Level Taken: 10-23-2014
Drilled By: Wheaton Water Wells

Draw Down/Recovery

0	115.02'	Stopped Pumping
1	113.91'	
2	113.90'	70% of drawdown recovery
3	113.90'	is 113.99'
35	113.90'	

The water discharge point is 210' Southwest of well. Water dissipated into the ground.