69435

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: 4 / 15 / 2020 Pump Install: ___/___/_____

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Matanuska-Susitna Borough	ARKOSE WDS PH I	1	8	Home Water Llc PO BOX 520777 AK, 99652-0777

Well location: Latitude 61.6791878 **Longitude** -149.21727
Meridian S Township 018N Range 001E Section 02 , SE 1/4 of SE 1/4 of SW 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

	Depth From	To
Top soil	0	2
Sand-gravel	2	42
Clay gravel	42	57
Hardpan gravel	57	62
Clay gravel	62	115
Water-sandy gravel	115	123
Water sandy gravel	123	143
Bedrock	143	144

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: 144 ft Casing stickup: 3 ft
Casing type: A53B Steel Casing thickness: 0.25 inches
Casing diameter: 6 inches Casing depth: 128 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: 80
Screen start: 131 ft, Screen stop: 146 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: 60 slot (128-138); 80-slot (138-143)

Static water (from top of casing): 101 ft on 9 / 16 / 2020 Artesian well ☐
Pumping level & yield: 105.6 feet after 24 hours at 77.6 gpm
Method of testing: Aquifer test
Development method: Air and test pump Duration: 1 hour
Recovery rate: _____ gpm

Grout type: None Volume _____
Depth: From _____ ft, To _____ 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: William Bean
Company name: E AND D WATER WELLS
Mailing address: 3530 W. Spence lane
City: Wasilla State: AK Zip: 99623
Phone number: (907) 373 - 1598
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

WELTS 69435

E&D Water Wells

3530 West Spence Ln.
Wasilla, AK 99623
(907) 373-1598 Fax: (907) 357-1598

Well 2

Well 2?

Borough	Subdivision	Lot	Block	Section QTRS.	Section	Township	Range	Meridian
MatSu	NW corner of future L8	A3			2	18N	1E	Seward

Location / Sketch: SECOND WELL
9161 E. MILE 4 ROAD

Well Owner: WM CONSTRUCTION

Depths Measured From: ☒ Casing Top ☐ Ground Surface

Well Depth: near — Date Of Completion: 4/15/20

Depth of Hole: 146 Ft.
Depth of Casing: 131 Ft.

Borehole Data: Material Type & Color	Depth From	Depth To
Stick up	0	3
Top Soil	3	5
Sand-Gravel	5	45
Clay Gravel	45	60
Hardpan Gravel	60	65
Clay Gravel	65	118
water-Sandy Gravel	118	126
water Sandy Gravel	126	142
Bed Rock	147	

Depth To Static Water Level:
103.4 Ft. Below ☒ Top of Casing ☐ Ground Surface
Date: 6/5/20 From Arctic Pump and Well report attached

Method Of Drilling: ☒ Air Rotary ☐ Cable Tool
☐ Other: _____

Use Of Well: ☒ Domestic ☐ Irrigation ☐ Monitor
☒ Public Supply ☐ Other

Casing Stick-Up: 3' Ft. Diam: 6" In. to _____ Ft.
Casing Type: ASTM A53 SCH 40 In. to _____ Ft.

Well Intake Opening Type: ☐ Open End ☒ Screened
☐ Perforated ☐ Open Hole

Depths Of Openings: 146 To: 131 Ft.

Screen Type: STAINLESS STEEL In. 6"
Slot/Mesh Size: 60-80 Length: _____ Ft. _____

Gravel Pack Type: NONE
Volume Used: _____ Depth to Top: _____

Grout Type: NONE Volume: _____
Depth: From _____ Ft. to _____ Ft. _____

Development Method: AIR - TEST PUMP
Duration: 1 HOUR

Pumping Level & Yield:
_____ Ft. After 1 Hrs. Pumping 42 + gpm

Pump Intake Depth: Ft. Horsepower:
Well Disinfected Upon Completion? ☐ Yes ☒ No

CONTRACTOR INFORMATION:

E & D WATER WELLS
Registered Business Name

Ed Bem
Signature of Authorization Representative Date

REMARKS: To be test pumped
15' of stainless steel screen
10' of 60 slot and 5' of 80 slot
Job #033041520

Arctic Pump & Well Inc.
Jim Sullivan, CPI
PO Box 770197
Eagle River, AK 99577
(907) 688-2510
(907) 243-2282
jim@arcticpump.com

Six Mile Subdivision
Well 1

Actually Well 2

June 10, 2020
Flow Test Report

Project Name:

Duration (in minutes)	*Water Level*	*Flow Rate*
0	103.4	0
1		
5	103.8	35
10		
15	104	44
20		
25	104.1	56
30		
35	104.2	71
40		
45	104.4	75
50		
55		
60	104.4	75
90		
120		
150		
180		
210		
240		
270		
300		

June 10, 2020

Flow Test Report

Project Name: Six Mile subdivision

Well 1 **Well 2**

Well Flow Test Recovery Report:

Duration (in minutes)	***Water Level***
0	
5	
10	
15	
20	103.4
25	
30	
35	
40	

Well 2 - 2nd flow test

WATERWELL - TEST PUMP REPORT

Conducted by Anchorage Well & Pump Service

330 E 76th Avenue, Anchorage AK 99518-2840

Ph: (907) 243-0740 Fax: (907) 243-0742

6-Mile Subdivision

Owner:	WM Construction LLC
Address:	PO BOX 4042
	Palmer, AK 99645
Well Location:	9101 E Mile 6 Road

PUMP INFORMATION

Intake Depth:	
Static Water Level:	104
Max Drawdown:	1.6 feet
Air Line Depth:	
Average Discharge:	77.6 gallons/minute

PUMP ON	Time:	11:33 am	Date:	9/16/2020
PUMP OFF	Time:	11:46 am	Date:	9/17/2020

WELL INFORMATION

Total Depth:	146
Depth of Casing:	131
Static Water Level:	104
Casing Size:	6"
Screen Slot:	10' 60slot/5' 80slot
Screened From:	131
Screened To:	146
GPS:	

Remarks:

- 24 hour test. Goal 75 gpm - 100% of Engineered Design
- Near Well
- Well 2

NEAR WELL FlowTest

Beginning Flowmeter:	14105300	
Ending Flowmeter:	14217000	
Total Gallons Pumped:	111700	gallons
Elapsed Time:	1440	minutes
Calculated GPM Pumped:	**77.6**	

Drawdown on Pumped Well: 105.6-104 = **1.6 feet**

Date	Time	Water Level	Flowmeter	Calc. Flow	E. Time	GPM	Note	
9/16/2020	11:27am	104					SWL	
9/16/2020	11:33am	104.4	14105300				Start	
9/16/2020	11:35	104.5	14105470	170	2	85	85 gpm	
9/16/2020	11:36	104.6	14105550	80	1	80		
9/16/2020	11:37	104.6	14105640	90	1	90		
9/16/2020	11:38	104.6	14105720	80	1	80		
9/16/2020	11:39	104.65	14105800	80	1	80		
9/16/2020	11:40	104.65	14105880	80	1	80		
9/16/2020	11:41	104.65	14105960	80	1	80		
9/16/2020	11:42	104.65	14106045	85	1	85		
9/16/2020	11:47	104.7	14106480	435	5	87		
9/16/2020	11:52	104.75	14106830	350	5	70		
9/16/2020	11:57	104.8	14107230	400	5	80		

9/17/2020	12:02pm	104.85	14107640	410	5	82		
9/17/2020	12:07	104.9	14108010	370	5	74		
9/17/2020	12:12	104.9	14108400	390	5	78	Slow down flow	
9/17/2020	12:17	104.9	14108760	360	5	72		
9/17/2020	12:22	105	14109100	340	5	68		
9/17/2020	12:37	105	14110245	1145	15	76		
9/17/2020	12:52	105.05	14111340	1095	15	73		
9/17/2020	3:46	105.4	14125650	14310	234	61		
9/17/2020	7:00	105.5	14140170	14520	194	75		
9/17/2020	10:00	105.6	14153970	13800	180	77		
9/17/2020	1:15am	105.5	14168790	14820	195	76		
9/17/2020	4:11	105.5	14182280	13490	176	77		
9/17/2020	7:00	105.6	14195130	12850	169	76		
9/17/2020	10:00	105.6	14208920	13790	180	77		
9/17/2020	11:46am	105.6	14217000	8080	106	76		

Recovery

9/17/2020	11:47am	104.9
9/17/2020	11:48	104.9
9/17/2020	11:49	104.9
9/17/2020	11:50	104.9
9/17/2020	11:51	104.9
9/17/2020	11:56	104.8
9/17/2020	12:11	104.6
9/17/2020	12:26pm	104.6
9/17/2020	4:00pm	104