



3040

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: 11 / 30 / 1982 Pump Install: ___/___/___

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Municipality of Anchorage	SPRING FOREST			Spring Forest Homeowners Association ,

Well location: Latitude 61.1279411 **Longitude** -149.773392
 Meridian S _____ Township 012N Range 003W Section 14 _____, NW 1/4 of SW 1/4 of NW 1/4 of SW 1/4

<p>BOREHOLE DATA: (from ground surface) Suggest T.M. Hanna's hydrogeologic classification system* https://my.ngwa.org/NC_Product?id=a18500000BYub3AAD</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2"></th> <th colspan="2" style="text-align: center;">Depth</th> </tr> <tr> <th style="text-align: center;">From</th> <th style="text-align: center;">To</th> </tr> </thead> <tbody> <tr><td>Black topsoil</td><td style="text-align: center;">0</td><td style="text-align: center;">4</td></tr> <tr><td>Tan gravel with clay and silt</td><td style="text-align: center;">4</td><td style="text-align: center;">48</td></tr> <tr><td>Tan gravel with water</td><td style="text-align: center;">48</td><td style="text-align: center;">62</td></tr> <tr><td>Gray silty gravel - damp</td><td style="text-align: center;">62</td><td style="text-align: center;">91</td></tr> <tr><td>Gray gravel with water - 10gpm</td><td style="text-align: center;">91</td><td style="text-align: center;">96</td></tr> <tr><td>Gray gravel with silty and clay - damp</td><td style="text-align: center;">96</td><td style="text-align: center;">130</td></tr> <tr><td>Gray silty gravel</td><td style="text-align: center;">130</td><td style="text-align: center;">179</td></tr> <tr><td>Brown gravel with water - 3gpm</td><td style="text-align: center;">179</td><td style="text-align: center;">193</td></tr> <tr><td>Brown silty gravel</td><td style="text-align: center;">193</td><td style="text-align: center;">219</td></tr> <tr><td>Brown gravel with water - 25gpm</td><td style="text-align: center;">219</td><td style="text-align: center;">234</td></tr> <tr><td>Brown silty gravel</td><td style="text-align: center;">234</td><td style="text-align: center;">236</td></tr> <tr><td>Brown gravel with water - 25gpm</td><td style="text-align: center;">236</td><td style="text-align: center;">241</td></tr> <tr><td>Brown silty gravel</td><td style="text-align: center;">241</td><td style="text-align: center;">258</td></tr> <tr><td>Brown gravel with water - 5-15gpm</td><td style="text-align: center;">258</td><td style="text-align: center;">273</td></tr> <tr><td>Brown gravel with water - 30gpm, open end</td><td style="text-align: center;">273</td><td style="text-align: center;">304</td></tr> <tr><td>Brown silty clay and gravel</td><td style="text-align: center;">304</td><td style="text-align: center;">308</td></tr> </tbody> </table>		Depth		From	To	Black topsoil	0	4	Tan gravel with clay and silt	4	48	Tan gravel with water	48	62	Gray silty gravel - damp	62	91	Gray gravel with water - 10gpm	91	96	Gray gravel with silty and clay - damp	96	130	Gray silty gravel	130	179	Brown gravel with water - 3gpm	179	193	Brown silty gravel	193	219	Brown gravel with water - 25gpm	219	234	Brown silty gravel	234	236	Brown gravel with water - 25gpm	236	241	Brown silty gravel	241	258	Brown gravel with water - 5-15gpm	258	273	Brown gravel with water - 30gpm, open end	273	304	Brown silty clay and gravel	304	308	<p>Drilling method: <input type="checkbox"/> Air rotary, <input type="checkbox"/> Cable tool, <input type="checkbox"/> Other _____</p> <p>Well use: <input 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 _____</p> <p>Fluids used: _____</p> <p>Depth of hole: 308 _____ ft Casing stickup: 2 _____ ft Casing type: A53B Steel Casing thickness: .25 _____ inches Casing diameter: 6 _____ inches Casing depth: _____ ft Liner type: _____ Depth: _____ ft Diameter: _____ inches</p> <p>Note: _____</p> <p>Well intake opening type: <input type="checkbox"/> Open end, <input type="checkbox"/> Open hole, <input checked="" type="checkbox"/> Other screened Screen type: _____, Screen mesh size: _____ Screen start: _____ ft, Screen stop: _____ ft, Perforated <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perforation description: _____ Perf from: 224 _____ ft, Perf to: 244 _____ ft, Perf from: _____ ft, Perf to: _____ ft Gravel packed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Gravel start: _____ ft, Gravel stop: _____ ft</p> <p>Note: _____</p> <p>Static water (from top of casing): _____ ft on ___/___/___ Artesian well <input type="checkbox"/> Pumping level & yield: _____ feet after _____ hours at 105 _____ gpm Method of testing: _____ Development method: _____ Duration: _____ Recovery rate: _____ gpm</p> <p>Grout type: _____ Volume _____ Depth: From _____ ft, To _____ ft</p>
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Include description or sketch of well location (include road names, buildings, etc.):

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: Wayne Westberg
Company name: M-W DRILLING
Mailing address: P.O. BOX 110378
City: ANCHORAGE **State:** AK **Zip:** 99511
Phone number: (907) 945 - 3287

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

3040

M-W DRILLING, Inc.

P.O. Box 10-378 • 10300 Old Seward Highway
(907) 349-8535
ANCHORAGE, ALASKA 99511

WELTS ID 3040

DRILLING LOG

Spring Forest Home owners Assn.

Well Owner Joseph P. Cange Use of Well Commercial

Location (address of: Township, Range, Section, if known; or distance main road _____)

Tract X^C Spring Forest Subdivision (Corner Birch Road & Craig Street)
12N 3W Sec 14

Size of casing 6" Depth of Hole 310 feet Cased to 285 feet

Static water level 138 ft. (~~above~~) (below) land surface. Finish of well (check one) open end () ;

Screen (X); Perforated () .

Describe screen or perforation 150 Slot Screen 278'-304.5'

Well pumping test at 105 gallons per (~~hour~~) (minute) for 21 hours with 34.2 ft. of drawdown from static level.

Date of completion November 30, 1982

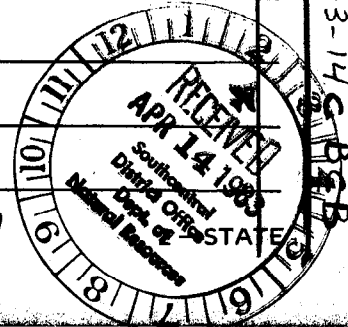
WELL LOG

LAS 3844

Depth in feet from ground surface	Give details of formations penetrated, size of material, color and hardness
<u>0 TO 2</u>	<u>Casing Stick-up</u>
<u>2 TO 6</u>	<u>Black Topsoil</u>
<u>6 TO 50</u>	<u>Tan Gravel W/Clay & Silt</u>
<u>50 TO 64</u>	<u>Tan Gravel W/Water</u>
<u>64 TO 93</u>	<u>Grey Silty Gravel - Damp</u>
<u>93 TO 98</u>	<u>Grey Gravel W/Water - 10 Gpm</u>
<u>98 TO 132</u>	<u>Grey Gravel W/Silty & Clay - Damp</u>
<u>132 TO 181</u>	<u>Grey Silty Gravel</u>
<u>181 TO 195</u>	<u>Brown Gravel w/Water - 3 Gpm</u>
<u>195 TO 221</u>	<u>Brown Silty Gravel</u>
<u>221 TO 236</u>	<u>Brown Gravel w/Water - 25 Gpm</u>
<u>236 TO 238</u>	<u>Brown Silty Gravel</u>
<u>238 TO 243</u>	<u>Brown Gravel w/Water - 25 Gpm</u>
<u>243 TO 260</u>	<u>Brown Silty Gravel</u>
<u>260 TO 275</u>	<u>Brown Gravel w/Water - 5-15 Gpm</u>
<u>275 TO 306</u>	<u>Brown Gravel w/Water - 30 Gpm, OPEN END</u>
<u>306 TO 310</u>	<u>Brown Silty Clay & Gravel</u>

W. A. ...

NWWA Certified Contractor
Certificate No's. 814 & 978



SITE ID LOCAL NO. SB 12-3-14-5-858

DRILLING LOG

Well Owner Joseph P. Cange Use of Well Commercial

Location (address of: Township, Range, Section, if known; or distance main road _____)

Tract A, Spring Forest Subdivision (Corner Birch Road & Craig Street)

Size of casing 6" Depth of Hole 310 feet Cased to 285 feet

Static water level 138 ft. (~~shows~~) (below) land surface. Finish of well (check one) open end ();
Screen (); Perforated ().

Describe screen or perforation ~~150 Slot Screen 278-304-5'~~ Perf-trows 224-244

Well pumping test at 105 ¹⁵⁰ gallons per (hour) (minute) for 27 1/2 hours with 34.2 30 ft. of drawdown from static level.

Date of completion Perforation 7/10/10 November 30, 1982

WELL LOG

Depth in feet from ground surface	Give details of formations penetrated, size of material, color and hardness
0 TO 2	Casing Stick-up <i>Note: June 2010</i>
2 TO 6	Black Topsoil <i>Csg. apparently rusted thru</i>
6 TO 50	Tan Gravel W/Clay & Silt <i>@ 276'± of screen filled</i>
50 TO 64	Tan Gravel W/Water <i>with sand & gravel-per</i>
64 TO 93	Grey Silty Gravel - Damp <i>Video Insp. Pump dropped</i>
93 TO 98	Grey Gravel W/Water - 10 Gpm <i>during removal-destroyed</i>
98 TO 132	Grey Gravel W/Silty & Clay - Damp <i>top of screen. Filled</i>
132 TO 181	Grey Silty Gravel <i>w/bentonite chips to 265'±</i>
181 TO 195	Brown Gravel w/Water - 3 Gpm <i>Perforate 4 rows 224 to</i>
195 TO 221	Brown Silty Gravel <i>244. Production of</i>
221 TO 236	Brown Gravel w/Water - 25 Gpm <i>new completion similar</i>
236 TO 238	Brown Silty Gravel <i>to original.</i>
238 TO 243	Brown Gravel w/Water - 25 Gpm <i>Bill Kravich</i>
243 TO 260	Brown Silty Gravel <i>Northern Utility Svcs.</i>
260 TO 275	Brown Gravel w/Water - 5-15 Gpm
275 TO 306	Brown Gravel w/Water - 30 Gpm, OPEN END
306 TO 310	

M-W Drilling, Inc.

♦P.O. Box 110389♦ Anchorage, AK 99511♦
♦907-345-4000 ♦ 907-345-3287 Fax♦

Job No. ORIG: 82-221
NEW: 10-126

82-221 Amended Upgrade
Re-do under 10-126

GROUNDWATER WELL AS-BUILT & LOG

Well Owner: Spring Forest Homeowners Assoc. Use of Well: Class A Public
Legal Description: Tract A, Spring Forest Subdivision (Corner Birch Road & Craig Street)
Anchorage, AK 5920 West Tree

CONSTRUCTION

Drill Method: N/A Hole Size & Depth: 310'
Casing Size: 6" Cased to: 285' Material: A53 Steel Wall: 0.250"
Well Completion: Open end Screen X Perforated X Method: Downhole wheel perforator
Screen/Perforation description: 150 Slot Screen 278' - 304.5' 7/10/10: Perf'd 4 rows 224' - 244', slots
Backfilled with chips to 271'; test pumped 150 GPM w/40' drawdown from static of 121'
Grout Notes: (5) Sack(s) of Bentonite chips - 3/4" minus
Well Development: Airlift - 1 hour; well is clean
Well Disinfected: Y Method: Circulated clorox
Yield test at 150 GPM for 2 hour(s) with 40' of drawdown (DD) from static level(SWL).
Method: Submersible Static Water Level (SWL): 121
Start Date: 6/29/10 Completion Date: 7/19/10
Test Pump Date: 7/10/10 Final Pump Install Date: 7/20/10

WELL LOG

Depth in feet from top of casing.	Details of formations penetrated, size of material, color and miscellaneous details.	
0 TO 2	Casing Stick Up	
2 TO 6	Black Topsoil	
6 TO 50	Tan Gravel w/Clay & Silt	
50 TO 64	Tan Gravel w/Water	
64 TO 93	Gray Silty Gravel - Damp	
93 TO 98	Gray Gravel w/Water - 10 GPM	
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306 TO 310	Brown Silty Clay & Gravel	

DEPT. OF NATURAL RESOURCE
DIV. OF MINING, LAND & WATER

SEP - 7 2011

DIRECTORS OFFICE
ANCHORAGE

WAYNE E. WESTBERG

President, M-W Drilling, Inc.

NGWA Certified Master Groundwater Contractor
AK Gen Contr Lic No 1000

NW4 SW4 NW4 SW4, Sec. 14, T. 12N., R. 3W., S.M.

3-24-89

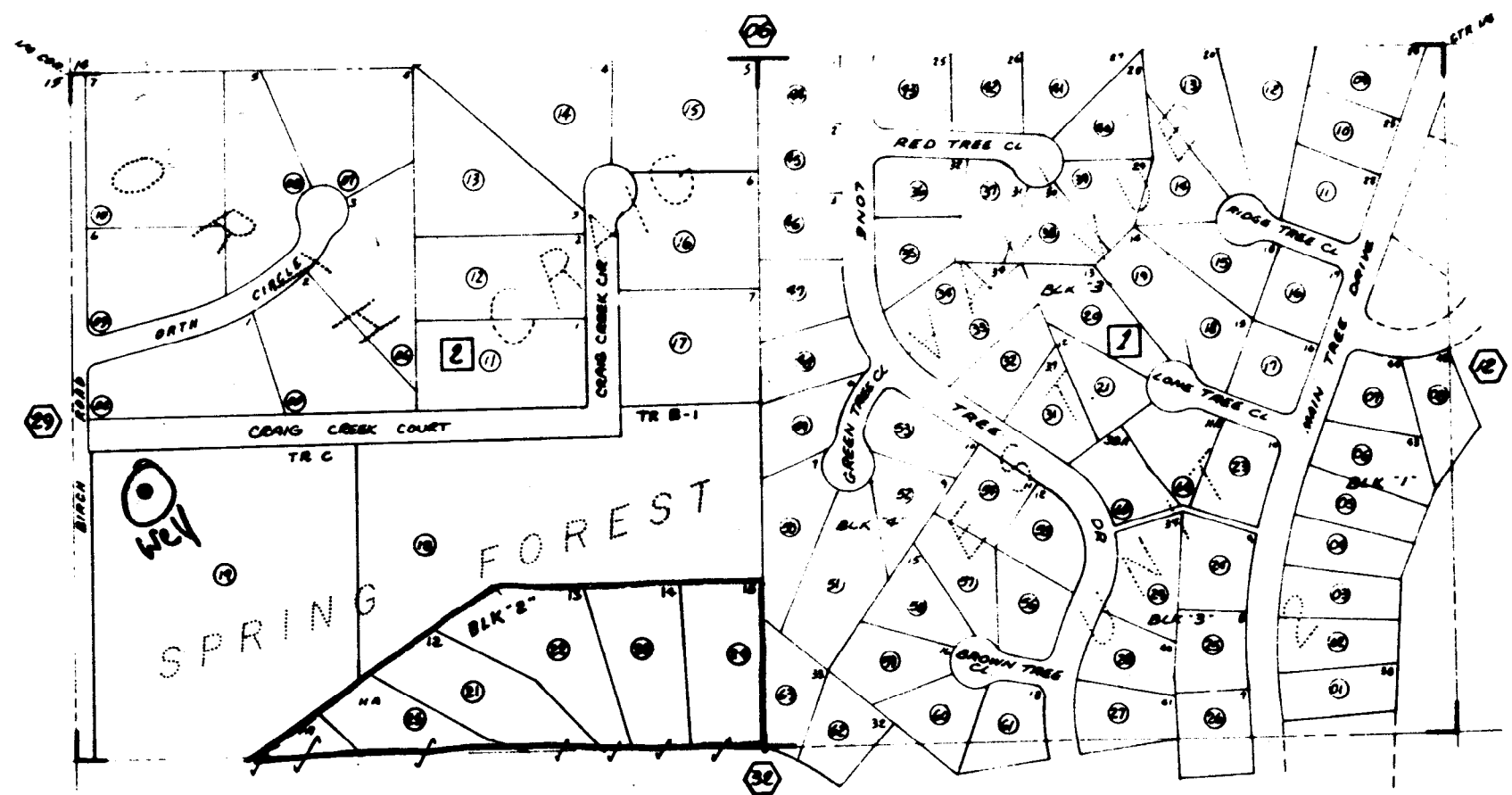
Date Computed 2-22-89 Revised 2-27-89

Grid 2538

Tax Area Code

015-34

SUBDIVIDED LAND & N 1/2 SW 1/4, SEC. 14, T12N, R3W, S.M.



Adjoining Page No.  Assessor's Parcel No. 
 Adjoining Tax Book No.  Assessor's Block No. 

Assessor's Map Bk. 015 Pg. 34

015-321-281 282 015-342-20 NOW 015-321-20 015-342-25 015-429 10-26-88
 015-321-04 NOW 015-321-05 015-342-04 015-342-04 015-342-04 01-01-88
 015-342-02 NOW 015-342-11 THRU 17 10-26-77
 015-342-03 NOW 015-321-03 015-342-03 10-01-76
 015-341-22 015-341-23 015-341-24 015-341-25 015-341-26 015-341-27 015-341-28 015-341-29 015-341-30 015-341-31 015-341-32 015-341-33 015-341-34 015-341-35 015-341-36 015-341-37 015-341-38 015-341-39 015-341-40 015-341-41 015-341-42 015-341-43 015-341-44 015-341-45 015-341-46 015-341-47 015-341-48 015-341-49 015-341-50 015-341-51 015-341-52 015-341-53 015-341-54 015-341-55 015-341-56 015-341-57 015-341-58 015-341-59 015-341-60 015-341-61 015-341-62 015-341-63 015-341-64 015-341-65 015-341-66 015-341-67 015-341-68 015-341-69 015-341-70 015-341-71 015-341-72 015-341-73 015-341-74 015-341-75 015-341-76 015-341-77 015-341-78 015-341-79 015-341-80 015-341-81 015-341-82 015-341-83 015-341-84 015-341-85 015-341-86 015-341-87 015-341-88 015-341-89 015-341-90 015-341-91 015-341-92 015-341-93 015-341-94 015-341-95 015-341-96 015-341-97 015-341-98 015-341-99 015-341-100

2-27-89

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SB12-3-14 C8CB