

Certified Drilling Log

WELTS ID 86537



OWNER OF LAND: VSW

ADDRESS: Kachemak Selo

LEGAL DESCRIPTION Well 1B

DATE: 10-28-25

PERMIT NUMBER: _____ DATE OF ISSUE: _____

TAX IDENTIFICATION NUMBER _____

Is well located at approved permit location: ☐ Yes ☐ No

Method of Drilling: ☒ air rotary ☐ cable tool

Depth of Well: _____

Casing Type: Steel Wall thickness .250 inches

Diameter: 6 inches, depth 54' feet

Liner type _____

Static Water Level: 13 feet

Recovery Rate 50+ ☒ gpm ☐ gph

Method of Testing Pump test

Well Intake Opening Type: ☐ open end ☒ open hole

☒ Screened Start 54 feet Stopped 85

☐ Perforations Start _____ feet Stopped _____

Grout Type: Bentonite Volume: 200lbs

Depth: from 2 feet, to 42+ feet

Well Disinfected Upon Completion: ☒ yes ☐ no

Method of Disinfection: Chlorine 50 PPM

Comments:

31' of 4" .010 slot PVC screen exposed for maximum
Yield.

Bore Hole Data

Depth

From

To

0

2

Casing Stickup

2

10

Overburden

10

20

Silt and sands

20

30

Sandstone w/ coal seams

30

60

Sandstone

60

82

Sandstone W/ coal seams

82

83

Sandstone conglomerate

83

85

Clay

Drillers Name: Cole Sullivan

b. Wellfield

In October 2025, Sullivan Water Wells drilled four wells in Kachemak Selo. Well 1A and Well 1B were drilled on the proposed site. Well 2 and Well 3 were drilled east of Kachemak Selo. Well 2 and Well 3 did not produce usable water³. Field reports are included in Appendix C. Well logs are included in Appendix D. Table 4-2 summarizes the well details from March 2026.

For all of the wells, a dual rotary air drill was used. The annular space between the casing and the bore hole was sealed using granulated bentonite. Bentonite seal depths were estimated based on volumes of bentonite used. Casings lengths were welded together, and each has a sanitary survey. All wellheads are two feet above grade. None of the well sites are in low lying areas or flood zones. The driller submitted well logs to the State of Alaska's Well Log Tracking System.

Table 4-2: Well Details

Item	Well 1A	Well 1B	Well 2	Well 3
Casing Diameter (in)	6	6	6	6
Well Depth (ft)	150	85	150	110
Water Encountered	Yes	Yes	No	No
Estimated Flow Rate (gpm)	3	30	N/A	N/A
Static Water Depth (ft btc)	54	16	N/A	N/A
Latitude/Longitude	59.79649 N 151.07966 W	59.79652 N 151.07966 W	59.80222 N 151.05951 W	59.80519 N 151.05707 W

Well 1A was the first well drilled. Well 1A had two distinct water layers.⁴ The first layer was between 50 and 100 feet btc in a silty sand. This layer is likely a confined layer because between 28 to 33 feet btc there was a dry medium plasticity silt with sand. Below that there was a dry layer of silt with sand between 33 to 50 feet btc. The second water layer was found between 140 and 150 feet. A gray, soft clay separated the two layers. The drillers reported that the first layer of water was clear and tasted good. They reported that the second layer of water was less clear and was salty. The casing when down to 105 feet below top of casing (btc) and remaining 46 feet was left unscreened. The static water level was 13 feet (btc) in October 2025. In March 2026, at the start of the pump test, the static water level had dropped to 54 feet btc. The drillers were directed to drill an adjacent well to tap into the first layer of water.

The next well (Well 1B) was drilled 20 feet north of Well 1A⁵. The well has similar geology as Well 1A. Well 1B was drilled to a depth of 85 feet and stopped at a clay layer. Thirty-one feet of four-inch 0.010 slot PVC well screen was installed from approximately 54 to 85 feet depth. This was done to maximize

³ During drilling, Well 2 had less than 7 gpm of water at 70 feet btc. No water was found between 70 to 130 feet btc. At 150 feet btc, less than 1 gpm of flow was found. In December 2025, the driller attempted to pump Well 2, but the flow was so low that it made pumping and sampling the water impractical. No water was encountered in Well 3. The driller began decommissioning Well 2 and Well 3 in March 2026 but did not finish because of frozen ground. The driller plans to complete decommissioning once the ground is thawed.

⁴ The driller well logs and WSP field well logs use different terminology when classifying soils. WSP field wells log terminology matches the soil lab test results. WSP field well log are the ones referenced in this report.

⁵ WSP was not on site when Well 1B was drilled, so there are no WSP field well logs for Well 1B.

Wellfield Feasibility Study

Kachemak Selo, Alaska



Owner:

Village of Kachemak Selo Water Company, Inc

P.O. Box 258

Homer, Alaska 99603

Prepared for:

Village Safe Water

555 Cordova Street, 4th Floor

Anchorage, Alaska 99501

Prepared by:

Kuna Engineering

4041 B Street

Anchorage, Alaska 99503



FINAL REPORT

APRIL 2026

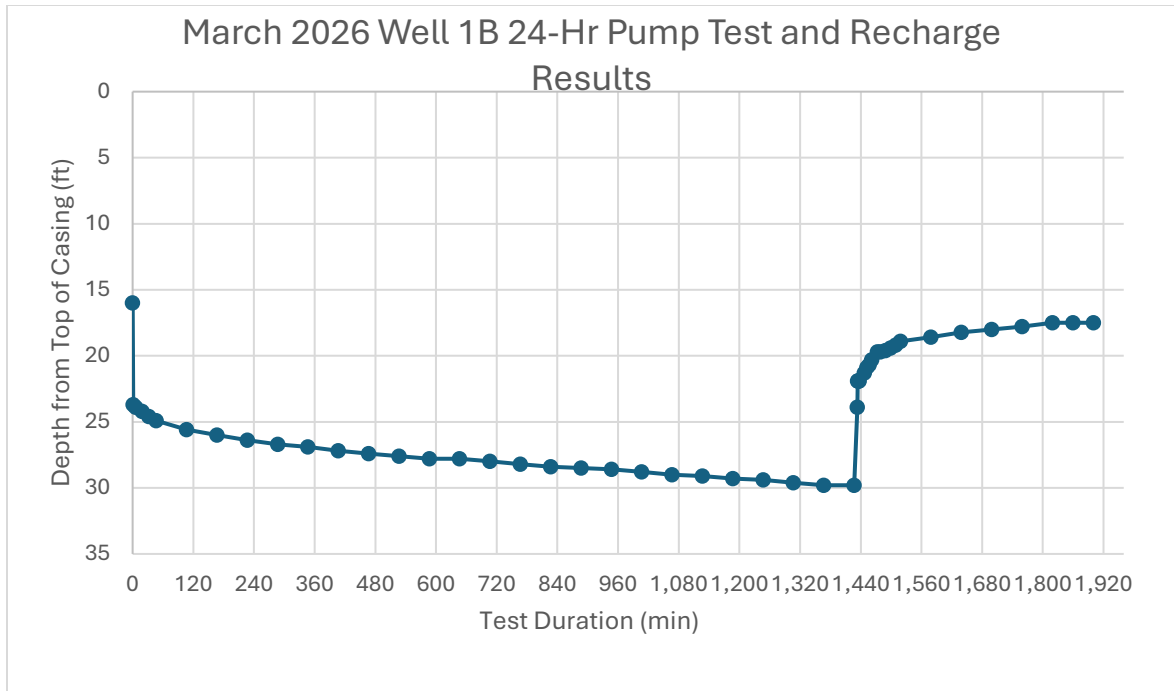


Figure 2: March 2026 Well 1B 24-Hour Pump Test and Recharge Results

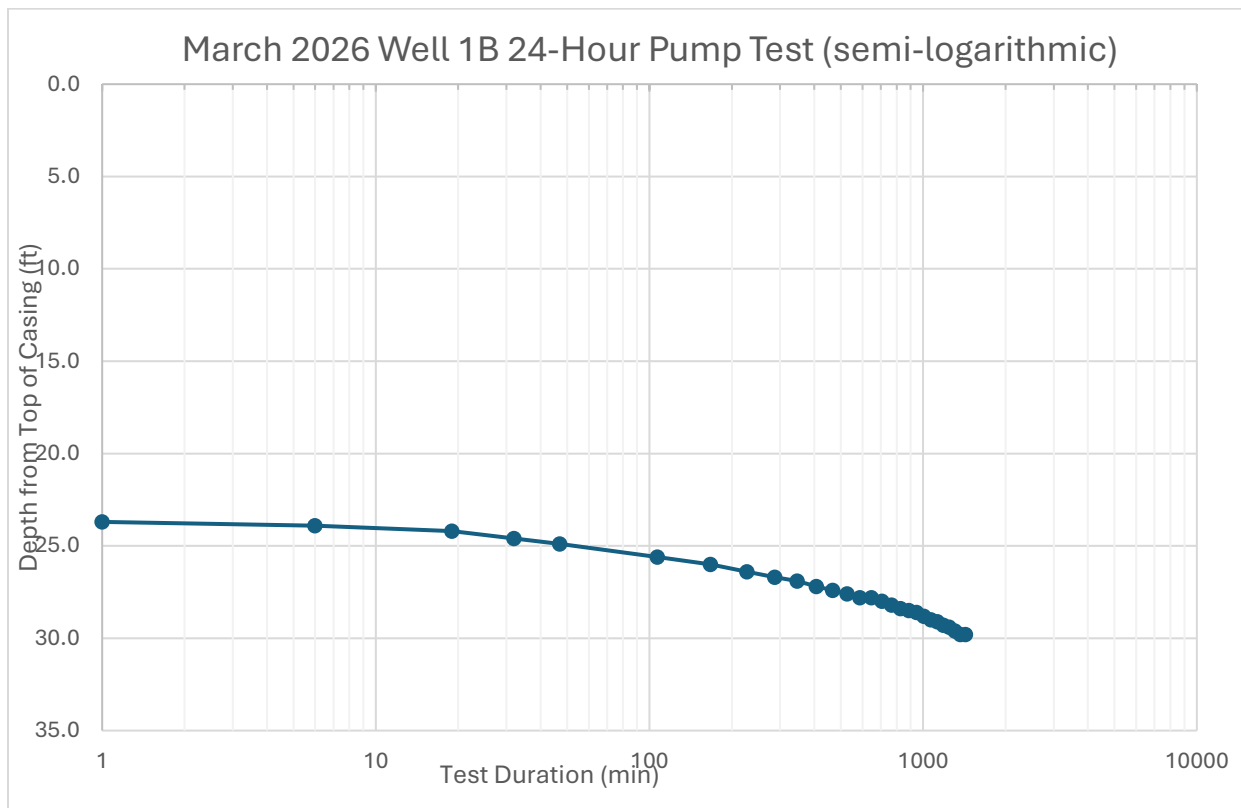


Figure 3: Well 1B 24-Hour Pump Test Results (semi-logarithmic)

Well 1B recharged 5.9 feet in the first five minutes after the pumps were turned off. The well recharged at 3.4 feet per hour for the next hour and had recharged 73 percent. The recharge rate was 1.04 feet per hour for the next hour, and had recharged 81 percent. The next five hours the recharge rate was approximately 0.25 feet per hour. After eight hours the water level was 17.5 feet btc or 89 percent recharge. The recharge rate was estimated using the trendline of the semi logarithmic graph (Figure 4). It estimates full recharge in 15 hours. The recharging rate slows down as the water level nears the static level. This is likely due to the increased head loss due to increased water head.

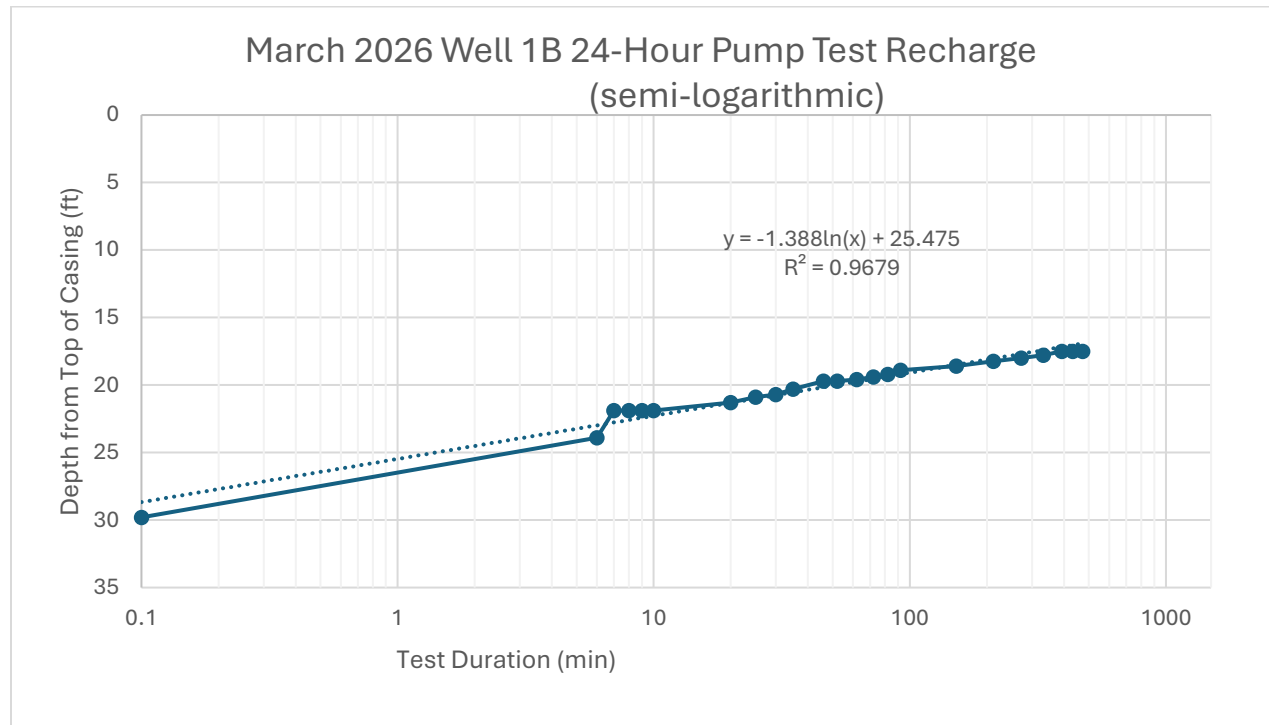


Figure 4: March 2026 Well 1B 24-Hour Pump Test Recharge (semi-logarithmic)

It appears that Well 1B can sustain a pumping rate of approximately 33 gpm which is four times the average daily demand and more than the max hourly flow rate. 47,500 gallons were pumped out of Well 1B during the 24-hour pump test. This is equivalent to 4.1 days of the design daily demand. The well recharged 89 percent in seven hours and fully recharged in 15 hours. Well 1B is expected to meet VKSWC's water capacity needs.

d. Water Quality

Well 1A

The drillers described Well 1A's water as salty. A pump test was not performed when the well was drilled in October 2025. An initial water sample was taken immediately after drilling but prior to well development or pump testing. The sample was tested for inorganic chemicals, metals, total coliform, volatile organic chemicals (VOC), and other water properties. The test results can be found in Appendix E.

The sample had high concentrations of arsenic, chromium, iron, lead, sodium, manganese, magnesium, and total suspended solids. Arsenic was seven times higher than EPA drinking water standards. Since the

well had not been developed, the sample was not a true representation of the groundwater. The sample was used to help determine if it was worth developing. It was decided that Well 1A should be developed and a true representative sample collected.

In March 2026, a 24-hour pump test was attempted. The pump test stopped after 7.5 hours because the water level dropped too close to the pump. A water sample was collected at that time. Many of the results decreased, which is to be expected after the well was developed. Arsenic levels had decreased to 9.42 nanograms per liter ($\mu\text{g/L}$) which is less than the 10.0 $\mu\text{g/L}$ Maximum Contaminant Level (MCL) set by the EPA. Additional testing would be necessary to confirm that arsenic levels are actually below the MCL. There were no other drinking water contaminants that exceeded their MCL. Manganese was detected above EPA's Secondary Maximum Contamination Levels (SMCL). SMCLs are recommended levels and are not enforceable and are mostly for aesthetics (i.e., taste, odor, color, etc.). These SMCLs do not reflect health or safety issues. There are no SMCLs for sodium, silicon, or potassium, but they are considered secondary contaminants. The high levels of sodium and potassium were likely the cause of the salty taste.

Well 1A would require additional water treatment to remove arsenic and manganese and make the water palatable. This may not be feasible with the community's allowable treatment methods per their religious beliefs.

Well 1B

Water samples were taken from Well 1B in November 2025 after the eight-hour pump test. Another set of water samples were taken from Well 1B in March 2026 after the 24-hour pump test. The samples were tested for inorganic chemicals, metals, total coliform, VOCs, and other water properties.

No arsenic or lead was detected. No VOCs were detected except for toluene and chloroform, which were above Detection Limits but below the Limit of Quantification (LOQ). LOQ is the lowest concentration that can be measured with acceptable accuracy and precision. Toluene and chloroform are common laboratory contaminants.

No primary drinking water contaminants tested above the EPA's MCLs. Well 1B water quality tests indicate the water meets minimum standards for health and safety without treatment. Manganese was detected above the EPA's SMCLs. Manganese levels were high enough that some water treatment will be required to reduce the manganese levels.

Potassium, silicon, and sodium concentrations were relatively high. The levels were lower than Well 1A and will have less impact on the water's aesthetics. Any water treatment used to remove manganese will also reduce potassium, silicon, and sodium levels, improving the water aesthetics.

Total Hardness was calculated using calcium and magnesium concentrations. The Total Hardness ranged from 101 to 105 milligrams per liter (mg/L), indicating a moderately hard water, which should reduce corrosion in the pipes. Total Alkalinity was measured at 210 mg/L using a field sampling kit. Alkalinity acts as a pH buffer. The typical ideal range is 80 to 120 mg/L , where it stabilizes the pH, prevents pipe corrosion, and has a neutral taste. If the alkalinity level is below 80 mg/L the water becomes more corrosive. If the alkalinity level is above 120 mg/L the water can become bitter and cloudy and is more likely to scale. Well 1B has high Total Hardness and high alkalinity. These two properties react in complicated ways. Water hardness and alkalinity are used to calculate Langelier Saturation Index (LSI) which attempts to quantify a water's overall likeliness of scaling or corrosion. Small shifts in numbers,

particularly with alkalinity and pH, can have huge impacts on LSI results. A positive LSI means the water is more likely to scale and a negative LSI is more likely to be corrosive. An LSI of 0.0 indicates perfect equilibrium, but recommended ranges are between 1.0 and -1.0. Well 1B's LSI ranges between -0.6 and -0.9 meaning it is slightly corrosive.

The full water sampling reports and calculations are in Appendix E.

Table 4-5: Well 1B Water Quality Testing to Date – Detectable Results Summary⁶⁷⁸

Test Type	Parameter	Unit	8 hr Pump Results (December 2025)	24 hr Pump Results (March 2026)	MCL	Recommended Levels
Inorganic Chemicals/ Metals	Barium (µg/L)	µg/L	123	129	<20,000	
	Calcium	µg/L	41,100	39,600		<60,000
	Copper	µg/L	1.25J	2.83J	<1,000	1,000
	Iron	µg/L	277	214		<300
	Magnesium	µg/L	13,500	14,800		<35,000
	Manganese	µg/L	652	602		50
	Molybdenum	µg/L	1.29J	1.25J		<40
	Nickel	µg/L	1.62J	1.37J	<100	<20
	Potassium	µg/L	9,900	10,400		
	Silicon	µg/L	16,400	16,800		
	Sodium	µg/L	19,400	21,000		
	Zinc	µg/L	UD	6.62J		<5,000
Microbiology	E. Coli	100 mL	Negative	Negative	Negative	
	Total Coliform	100 mL	Negative	Negative	Negative	
Volatile Organics	Chloroform	µg/L	0.322J	UD	<80	
	Toluene	µg/L	0.298J	0.275J	<1,000	
Water Properties	Total Nitrate/Nitrite-N	mg/L	0.483	0.554	1.0	
	Total Suspended Solids	mg/L	1.0	0.909J		
	Total Dissolved Solids	mg/L	NT	253.0		500
	pH	pH units	NT	7.0		6.5-8.5
Estimated Properties	Total Hardness	mg/L	101	105		60-120
	Total Alkalinity	mg/L	NT	210		80-120
	Langelier Saturation Index	ratio	NT	-0.6 to -0.9		+1 to -1

⁶ J means a result is above detection limit but below LOQ.

⁷ UD means that parameter was not detected in that water sample.

⁸ NT means that parameter was not tested in the water sample.

e. Flavor Rating Assessment

Taste is an important factor in determining suitability of a water source. Once water testing was completed, it was determined that Well 1B water was safe enough to perform a Flavor Rating Assessment (FRA). Well 1A's arsenic levels were too high to safely test.

FRA is used to determine whether a sample of water is acceptable for daily consumption. The test does not try to identify flavor profiles or issues but determines if water users would or would not enjoy drinking the water as their daily water source.

American Water Works Association's Standard Method 2160 FRA method was modified for this test. Distilled water was used as the reference water instead of tap water filtered through an activated carbon filter. A panel of ten testers were used. They were presented with water from three sources; Well 1B, Anchorage tap water, and Arrowhead brand bottled water. Testers did not know which sample they were testing each time. After tasting each sample, they evaluated the water for taste, odors, and feel. They then scored the sample on a 1 to 9 scale, with 9 being the best. After all scoring was completed, the testers were told which sample was which and questioned about why they scored a sample a specific way.

The results are summarized in Table 4-6. Sample 1 was the Anchorage tap water. Sample 2 was Well 1B water, and Sample 3 was Arrowhead bottled water. The totals are how many people gave a sample the same rating.

Table 4-6: Flavor Rating Assessment Summary

Rating	Description	1 Tap	2 Well 1B	3 Bottled
1	I would be very happy to accept this water as my everyday drinking water.	1		1
2	I would be happy to accept this water as my everyday drinking water.	4	5	2
3	I am sure that I could accept this water as my everyday drinking water.	2	2	2
4	I could accept this water as my everyday drinking water.	2	1	4
5	Maybe I could accept this water as my everyday drinking water.	1	1	
6	I don't think I could accept this water as my everyday drinking water.		1	
7	I couldn't accept this water as my everyday drinking water.			1
8	I could never drink this water.			
9	I can't stand this water in my mouth, and I could never drink it.			

Well 1B was ranked very similar to Anchorage tap water and in general testers preferred the bottled water least. Eight of the ten testers scored Well 1B at 4 or higher.

People's sensitivity to taste and odors vary greatly. Well 1B received two scores below 4. These testers both smelled a slight musty flavor on the first sip, but not the second. No one else noticed any odors. The odor detected may be due to the high manganese levels. Manganese is known to have a slight musty odor at high concentrations. Well 1B scored better than the other two samples with testers who did not get their water from Anchorage tap water.

A Well 1B sample was boiled. Heating water can sometimes change the color, precipitation minerals, or release odors. There were no color changes, no precipitate particles, and no odors were detected.

It is likely that Well 1B water would be acceptable to VKSWC residents.

f. Groundwater Determination

The State of Alaska Drinking Water Program (DWP) is responsible for classifying wells as groundwater or GWUDI. There are five criteria for screening wells to determine if there is a likelihood of a well being classified as GWUDI. A well has a higher likelihood of being classified as GWUDI if three or more of the following criteria are met. In April 2026, DWP did an initial review of Well 1B. The email response to that review is attached in Appendix E.

Criteria 1: Proximity to surface water

The Swift River is approximately 430 feet away from Well 1B, which is less than the minimum of 500 feet. DWP will need further review of this criterion. The Swift River's surface is lower than the top of the well screen and the static water level. It appears that the hydraulic gradient flows to the river. There are no surface drainages channels around the wellhead either. It is unlikely that the Swift River is directly influencing Well 1B.

Criteria 2: Depth to the first opening

The first well opening for Well 1B is the top of the well screen. It is 52 feet btc. This is more than the 50-foot minimum. This criterion is not met, so no additional review is needed.

Criteria 3: Aquifer characteristics

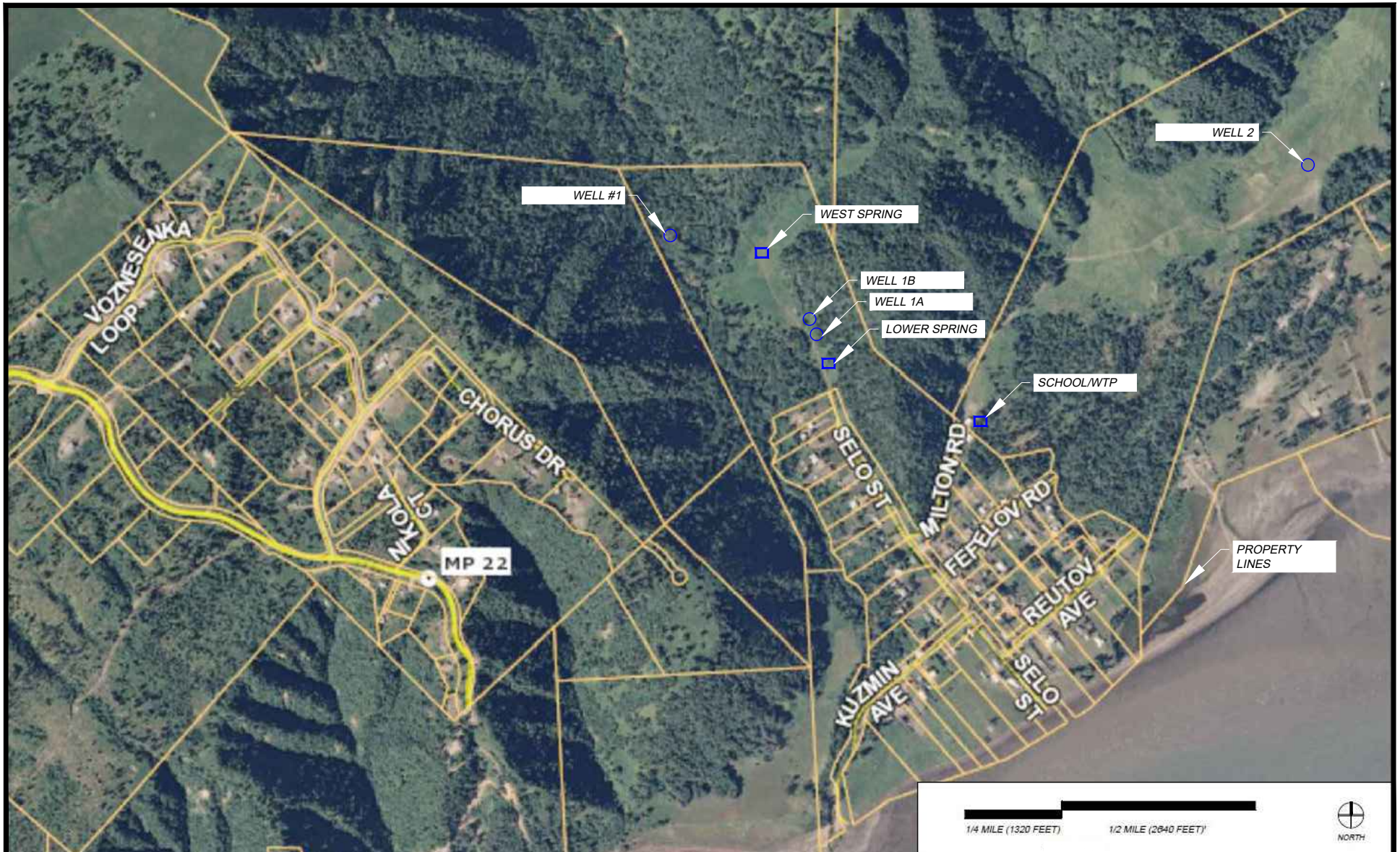
The static water level is 16 feet btc which is above the top of the screen. There are layers of dry silt with sand above where water was found at 50 ft btc. This is evidence that Well 1B's aquifer is in a confining layer. The pump tests showed that Well 1A and Well 1B are not connected hydrologically. Well 1B is scheduled to be decommissioned. It is our opinion that this criterion is not met, so no additional review is needed.

Criteria 4: Raw water quality

There have been no positive total coliform tests. The high amounts of elements in solution (sodium, manganese, etc.) indicate that the water in this aquifer is spending some time in the subsurface to pick up that amount of sodium and manganese in solution. There is no indication that the water quality fluctuates seasonally. It is our opinion that this criterion is not met, so no additional review is needed.

Criteria 5: Well construction

The well casing is aboveground by two feet and has a sanitary seal. The drillers used a dual air rotary drill. The annular space between the bore hole and casing was filled with granulated bentonite. The driller estimates the bentonite seal is down approximately 42 feet btc based volume of bentonite used. The wellhead is not in a lowlying area or in danger of flooding. There are no drainage channels leading to the wellhead. The area around the wellhead will be regraded. It is our opinion that this criterion is not met, so no additional review is needed.



WELL FIELD FEASIBILITY STUDY KACHEMAK SELO, AK

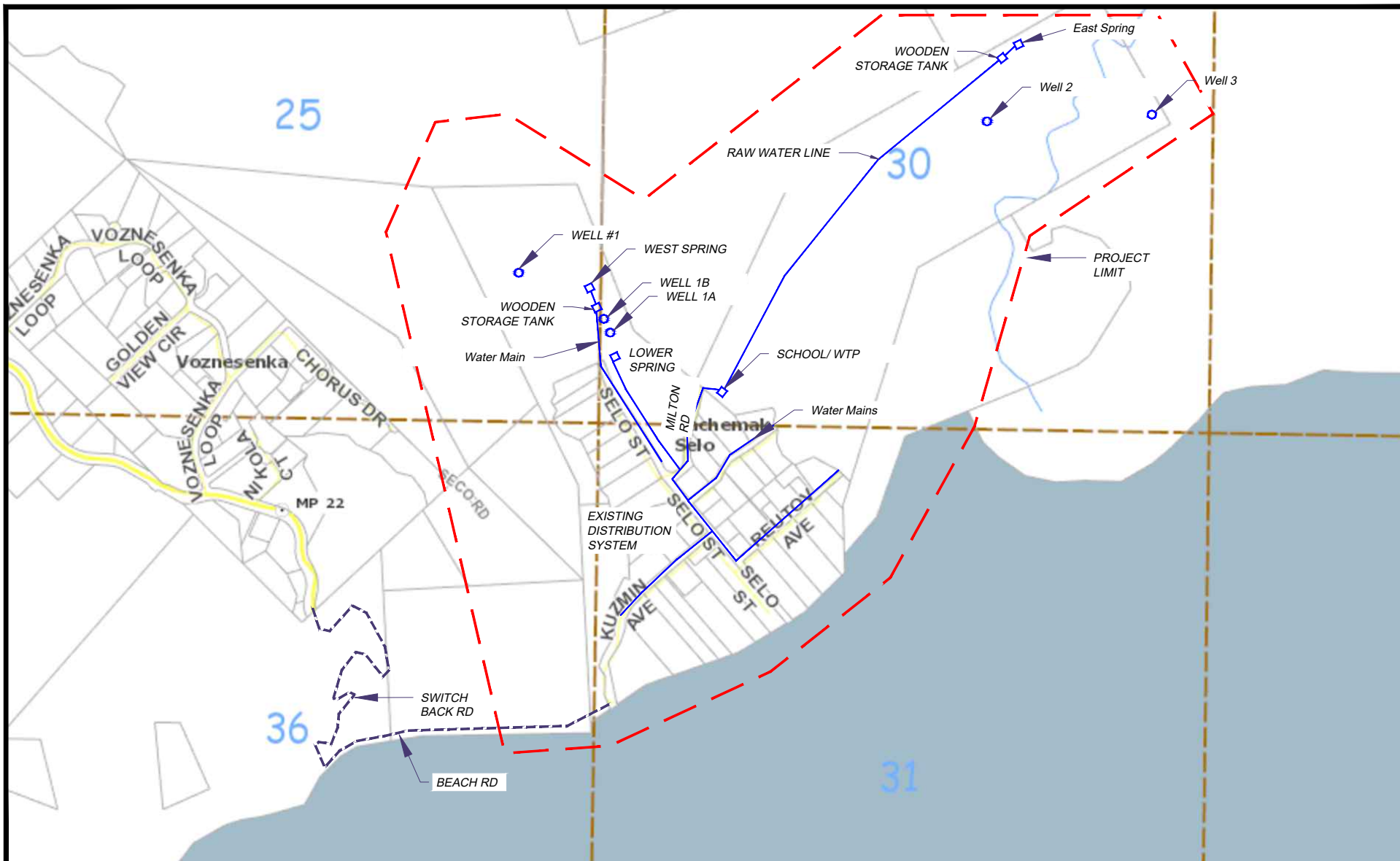
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CHECKED	DEN
DATE	3/27/26



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COMMUNITY MAP

A.1



WELL FIELD FEASIBILITY STUDY

KACHEMAK SELO, AK

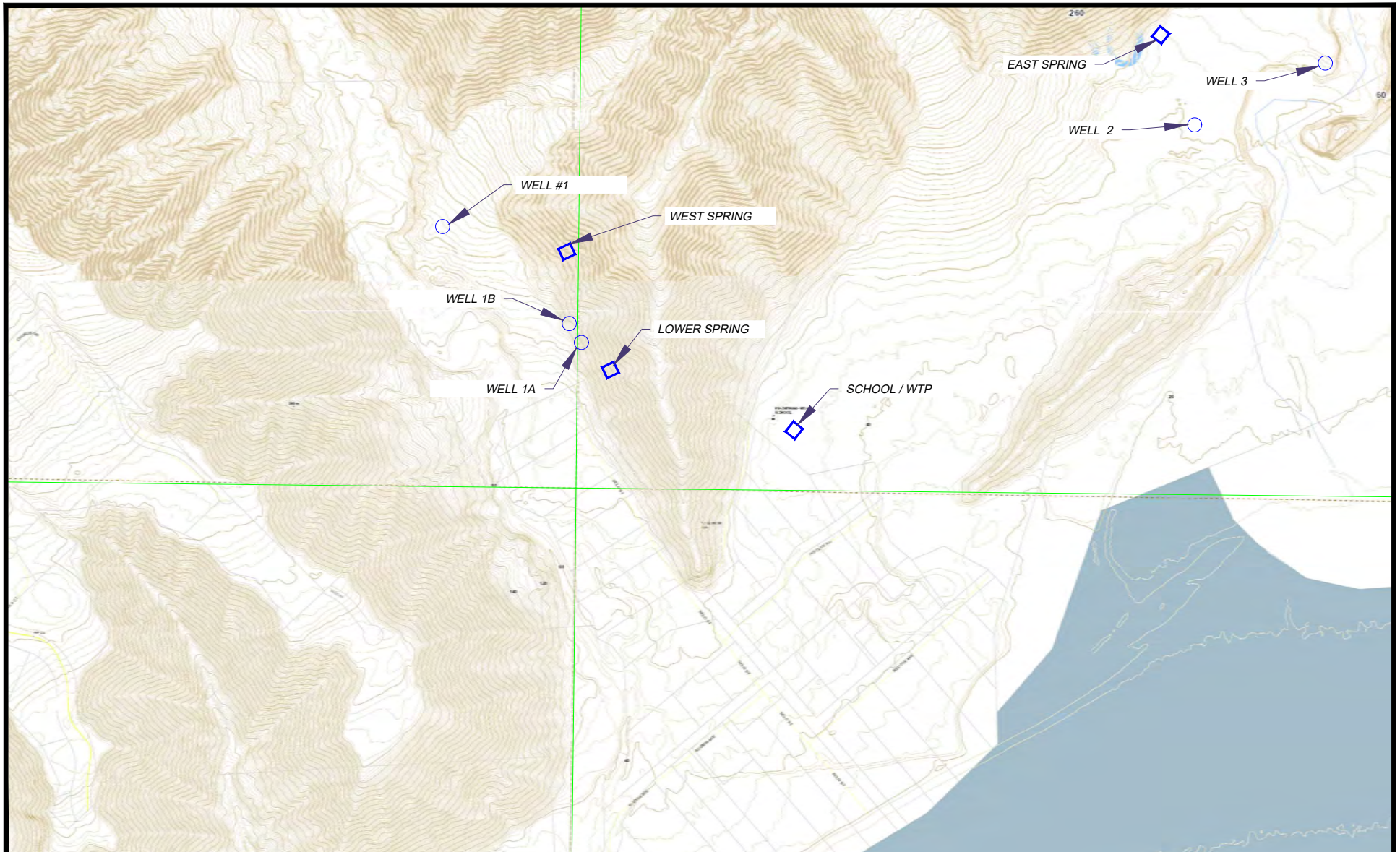
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EXISTING SYSTEM

A.2



WELL FIELD STUDY FEASIBILITY STUDY

KACHEMAK SELO, AK

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TOPOGRAPHY

A.3

Well Pump Test

Project: Kachemak Selo Water Source Improvements

Driller: Sullivan Water Wells

Well: 1B

Date: December 11, 2025

Static Water Level: 13 ft below top of casing

Pump: 22 gpm, Grundfos 3-inch, 1.5 HP submersible pump (22SQE15C)

Pump Set Depth: 65 ft ~~below~~ top of casing

Pump Rate: 20 gpm

Duration: 8 hours

Time (24 hr)	Duration (hh:mm)	Water Level Below Top of Casing(ft)	Drawdown (ft)	Notes
11:03	0	13	0	Static water level. Started pumping at 20 gpm
11:08	0:05	16	3	
11:13	0:10	16	3	
11:18	0:15	16	3	
11:23	0:20	16	3	
11:28	0:25	16	3	
11:33	0:30	16	3	
11:43	0:40	16	3	
11:53	0:50	16	3	
12:03	1:00	16	3	
12:13	1:10	16	3	
12:23	1:20	16	3	
13:33	2:30	16	3	
14:33	3:30	16	3	
15:33	4:30	16	3	
16:33	5:30	16	3	
17:33	6:30	16	3	Water samples collected at 17:40
17:50	6:47	16	3	Pump was shutoff
17:51	6:48	13	0	Recharged to static water level in 30 sec.

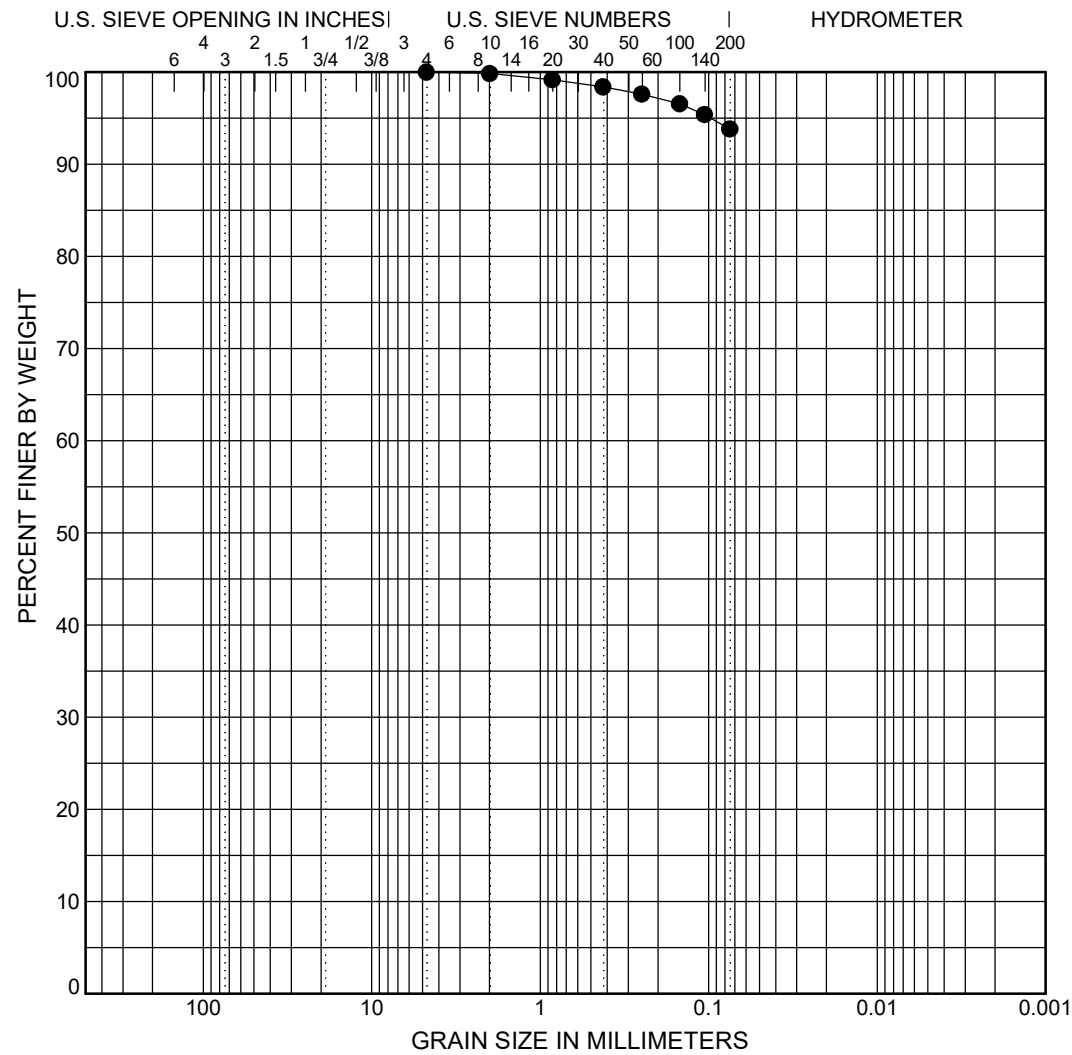


US0042674.1165_KUNA SELO WATER WELL INSTALLATION MONITORING.GPJ LIBRARY-ANC(2025-05-28).GLB [ANC LAB GRAIN SIZE FULL] USDW707996 11/21/25

FIGURE B-2: SUMMARY OF PARTICLE SIZE DISTRIBUTION RESULTS

Reference(s)
ASTM C136,
D7928 and D6913

Client:	Kuna Engineering	Location:	Kachemak, AK	Reviewed By:	D. Stankewitz	Date:	11/20/2025
Project:	Kuna Selo Water Well Installation Monitoring	Project No.:	US0042674.1165				



Sample Location	Well 1A			
Sample #	1			
Depth (ft)	100.0			
Total Sample (g)	256.3			
MC (%)	54.3			
LL	43			
PI	17			
% Passing Sieve (interpolated if not measured)	3"			
	2"			
	1.5"			
	1"			
	3/4"			
	1/2"			
	3/8"			
	#4	100.0		
	#10	99.8		
	#20	99.2		
% <0.02 mm	#40	98.4		
	#60	97.6		
	#100	96.6		
	#140	95.4		
	#200	93.8		
	% Gravel	0.0		
	% Sand	6.2		
USCS Classification	% Fines	93.8		
	D100	4.8		
	D60			
	D50			
	D30			
	D10			
	Cc			
USCS Classification	Cu			
	clay (CL)			

WELL 1B 24-HOUR PUMP TEST RESULTS

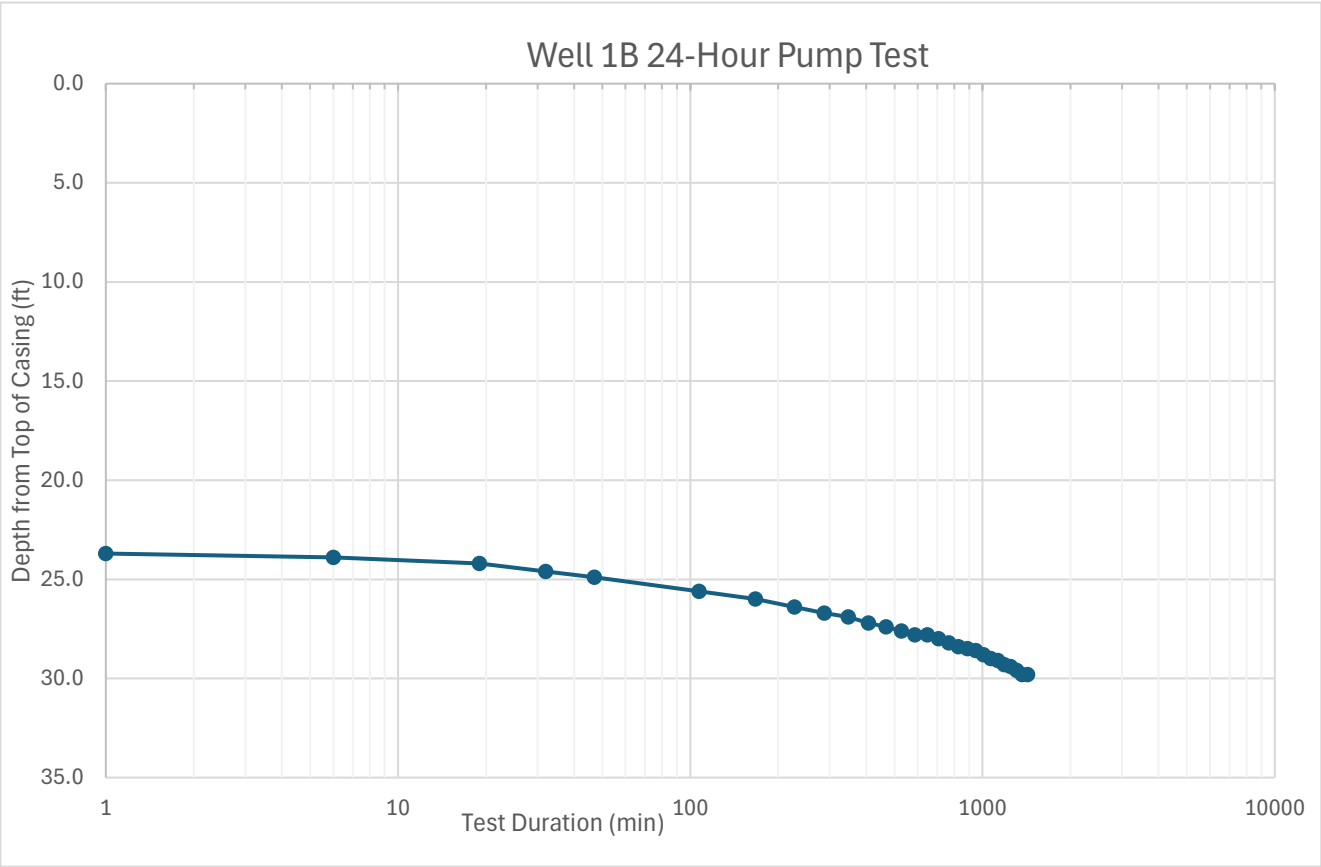
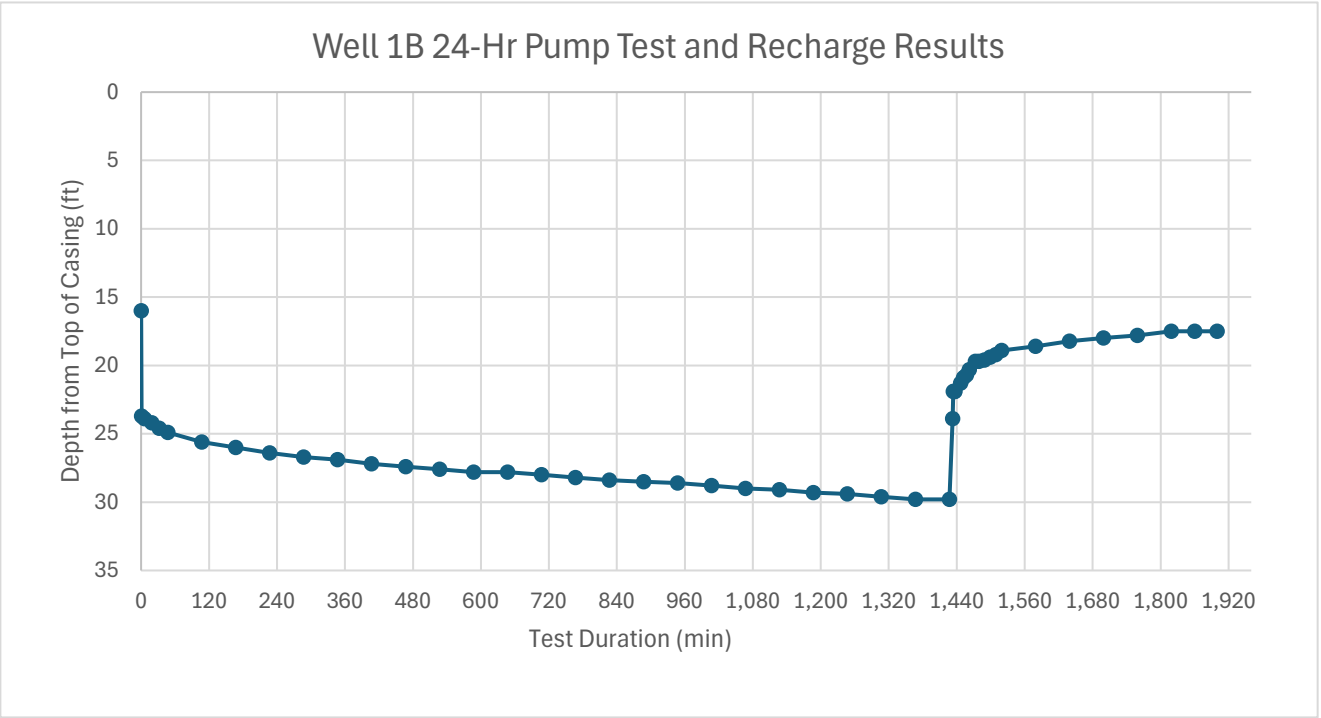
Project: Kachemak Selo Water Source Improvements
 Driller: Sullivan Water Wells
 Well: 1B
 Date: March 3, 2026
 Static Water Level: 16 ft below top of casing
 Pump: 32 gpm, Grundfos 1.5-inch, 1.5 HP submersible pump (22SQE15-220)
 Pump Set Depth: 65 ft below top of casing
 Pump Rate: 33 gpm
 Duration: 24 hours

Drawdown Test					
Time (24 hr)	Duration (hh:mm)	Water Level Below Top of Casing(ft)	Drawdown (ft)	Rate of Change (ft/min)	Notes
13:00	0:00	16.0	0.0	0.0	Pump test started.
13:24	0:24	23.7	7.7	-7.7	
13:29	0:29	23.9	7.9	-0.2	
13:42	0:42	24.2	8.2	-0.3	
13:55	0:55	24.6	8.6	-0.4	
14:10	1:10	24.9	8.9	-0.3	31 gpm average
15:10	2:10	25.6	9.6	-0.7	32 gpm average
16:10	3:10	26.0	10.0	-0.4	
17:10	4:10	26.4	10.4	-0.4	
18:10	5:10	26.7	10.7	-0.3	33 gpm average
19:10	6:10	26.9	10.9	-0.2	
20:10	7:10	27.2	11.2	-0.3	
21:10	8:10	27.4	11.4	-0.2	
22:10	9:10	27.6	11.6	-0.2	
23:10	10:10	27.8	11.8	-0.2	
0:10	11:10	27.8	11.8	0.0	
1:10	12:10	28.0	12.0	-0.2	
2:10	13:10	28.2	12.2	-0.2	
3:10	14:10	28.4	12.4	-0.2	
4:10	15:10	28.5	12.5	-0.1	
5:10	16:10	28.6	12.6	-0.1	
6:10	17:10	28.8	12.8	-0.2	
7:10	18:10	29.0	13.0	-0.2	
8:10	19:10	29.1	13.1	-0.1	
9:10	20:10	29.3	13.3	-0.2	
10:10	21:10	29.4	13.4	-0.1	
11:10	22:10	29.6	13.6	-0.2	
12:10	23:10	29.8	13.8	-0.2	33 gpm average
13:10	24:10	29.8	13.8	0.0	Water samples collected

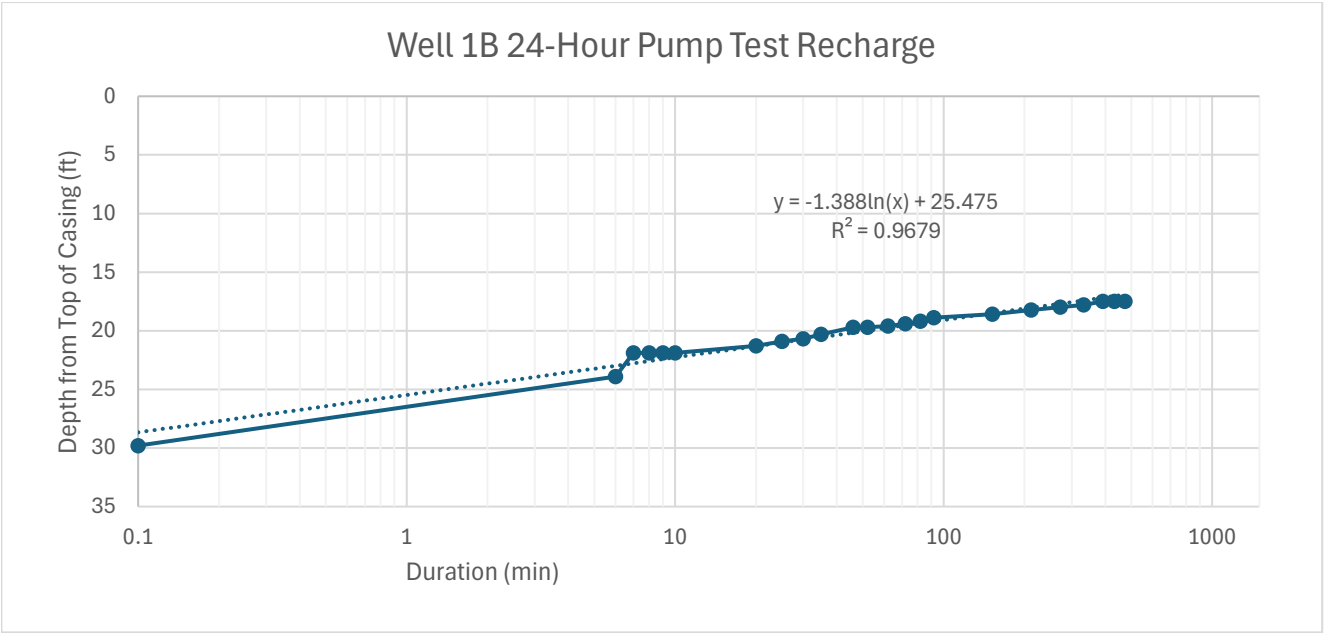
WELL 1B 24-HOUR PUMP TEST RESULTS

Recharge Rate					
Time (24 hr)	Duration (hh:mm)	Water Level Below Top of Casing (ft)	Recovery (ft)		Notes
13:15	0:00	29.8	0.0	0.00	Pump shut off
13:16	0:01	23.9	5.9	0.98	
13:17	0:01	21.9	7.9	2.00	
13:18	0:02	21.9	7.9	0.00	
13:19	0:03	21.9	7.9	0.00	
13:20	0:04	21.9	7.9	0.00	
13:30	0:14	21.3	8.5	0.06	
13:35	0:19	20.9	8.9	0.08	
13:40	0:24	20.7	9.1	0.04	
13:45	0:29	20.3	9.5	0.08	
14:06	0:50	19.7	10.1	0.05	
14:20	1:04	19.7	10.1	0.00	
14:30	1:14	19.6	10.2	0.01	
14:40	1:24	19.4	10.4	0.02	
14:50	1:34	19.2	10.6	0.02	
15:20	2:04	18.9	10.9	0.03	
16:20	3:04	18.6	11.2	0.00	
17:20	4:04	18.2	11.6	0.01	
18:20	5:04	18.0	11.8	0.00	
19:20	6:04	17.8	12.0	0.00	
20:20	7:04	17.5	12.3	0.01	
21:05	7:49	17.5	12.3	0.00	
21:45	8:29	17.5	12.3	0.00	Last water level recorded

WELL 1B 24-HOUR PUMP TEST RESULTS



WELL 1B 24-HOUR PUMP TEST RESULTS



Detectable Results Summary

Client Sample ID: **SELO-OIF** **Well 1B**

Lab Sample ID: 1256186001

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	27300	ug/L
Antimony	1.12	ug/L
Arsenic	15.5	ug/L
Barium	430	ug/L
Beryllium	0.990	ug/L
Cadmium	0.315J	ug/L
Calcium	53100	ug/L
Chromium	81.3	ug/L
Cobalt	26.9	ug/L
Copper	69.2	ug/L
Iron	60900	ug/L
Lead	13.0	ug/L
Magnesium	21400	ug/L
Manganese	2380	ug/L
Molybdenum	15.3	ug/L
Nickel	63.2	ug/L
Phosphorus	2750	ug/L
Potassium	12600	ug/L
Silicon	47500	ug/L
Silver	0.895J	ug/L
Sodium	87700	ug/L
Tin	0.960J	ug/L
Titanium	1480	ug/L
Vanadium	85.5	ug/L
Zinc	134	ug/L
Total Nitrate/Nitrite-N	0.225	mg/L
Total Suspended Solids	1140	mg/L

Waters Department

Results of SELO-OIF

Client Sample ID: **SELO-OIF** **Well 1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186001
 Lab Project ID: 1256186

Collection Date: 11/05/25 19:00
 Received Date: 11/10/25 08:59
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	27300		5000	1500	3750	ug/L	100		11/14/25 12:37
Antimony	1.12		1.00	0.310	0.750	ug/L	1		11/14/25 10:55
Arsenic	15.5 *		5.00	1.50	3.75	ug/L	1	(<10)	11/14/25 10:55
Barium	430		30.0	9.40	22.5	ug/L	10	(<2000)	11/14/25 12:34
Beryllium	0.990		0.400	0.130	0.300	ug/L	1		11/14/25 10:55
Cadmium	0.315 J		0.500	0.150	0.375	ug/L	1	(<5)	11/14/25 10:55
Calcium	53100		500	150	375	ug/L	1		11/14/25 10:55
Chromium	81.3		5.00	2.50	3.75	ug/L	1	(<100)	11/14/25 10:55
Cobalt	26.9		4.00	1.20	3.00	ug/L	1		11/14/25 10:55
Copper	69.2		3.00	1.00	2.25	ug/L	1	(<1000)	11/14/25 10:55
Iron	60900		2500	780	1875	ug/L	10		11/14/25 12:34
Lead	13.0		2.00	0.500	1.50	ug/L	1	(<15)	11/14/25 10:55
Magnesium	21400		50.0	15.0	37.5	ug/L	1		11/14/25 10:55
Manganese	2380		10.0	3.50	7.50	ug/L	10		11/14/25 12:34
Molybdenum	15.3		2.00	0.620	1.50	ug/L	1		11/14/25 10:55
Nickel	63.2		20.0	6.20	15.0	ug/L	10	(<100)	11/14/25 12:34
Phosphorus	2750		200	62.0	150	ug/L	1		11/14/25 10:55
Potassium	12600		500	150	375	ug/L	1		11/14/25 10:55
Selenium	3.75 U		5.00	1.50	3.75	ug/L	1	(<50)	11/14/25 10:55
Silicon	47500		10000	3100	7500	ug/L	10		11/14/25 12:34
Silver	0.895 J		1.00	0.310	0.750	ug/L	1		11/14/25 10:55
Sodium	87700		5000	1500	3750	ug/L	10		11/14/25 12:34
Thallium	0.750 U		1.00	0.310	0.750	ug/L	1		11/14/25 10:55
Tin	0.960 J		1.00	0.310	0.750	ug/L	1		11/14/25 10:55
Titanium	1480		250	77.5	188	ug/L	10		11/14/25 12:34
Vanadium	85.5		20.0	6.20	15.0	ug/L	1		11/14/25 10:55
Zinc	134		10.0	3.10	7.50	ug/L	1	(<5000)	11/14/25 10:55

Results of SELO-OIF

Client Sample ID: **SELO-OIF Well 1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186001
 Lab Project ID: 1256186

Collection Date: 11/05/25 19:00
 Received Date: 11/10/25 08:59
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Metals by ICP/MS

Batch Information

Analytical Batch: MMS12946
 Analytical Method: EP200.8
 Analyst: MCP
 Analytical Date/Time: 11/14/25 10:55
 Container ID: 1256186001-A

Prep Batch: MXX38096
 Prep Method: E200.2
 Prep Date/Time: 11/13/25 13:27
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12946
 Analytical Method: EP200.8
 Analyst: MCP
 Analytical Date/Time: 11/14/25 12:34
 Container ID: 1256186001-A

Prep Batch: MXX38096
 Prep Method: E200.2
 Prep Date/Time: 11/13/25 13:27
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12946
 Analytical Method: EP200.8
 Analyst: MCP
 Analytical Date/Time: 11/14/25 12:37
 Container ID: 1256186001-A

Prep Batch: MXX38096
 Prep Method: E200.2
 Prep Date/Time: 11/13/25 13:27
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of SELO-OIF

Client Sample ID: **SELO-OIF** **Well 1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186001
 Lab Project ID: 1256186

Collection Date: 11/05/25 19:00
 Received Date: 11/10/25 08:59
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,1,1-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<200)	11/13/25 19:14
1,1,2,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,1,2-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:14
1,1-Dichloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,1-Dichloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<7)	11/13/25 19:14
1,1-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,2,3-Trichlorobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,2,3-Trichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,2,4-Trichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<70)	11/13/25 19:14
1,2,4-Trimethylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,2-Dibromo-3-chloropropane	1.50	U	2.00	0.620	1.50	ug/L	1		11/13/25 19:14
1,2-Dibromoethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,2-Dichlorobenzene	0.375	U	0.500	0.250	0.375	ug/L	1	(<600)	11/13/25 19:14
1,2-Dichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:14
1,2-Dichloropropane	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	11/13/25 19:14
1,3,5-Trimethylbenzene	0.750	U	1.00	0.150	0.750	ug/L	1		11/13/25 19:14
1,3-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1		11/13/25 19:14
1,3-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
1,4-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<75)	11/13/25 19:14
2,2-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
2-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
4-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
4-Isopropyltoluene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Benzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	11/13/25 19:14
Bromobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Bromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Bromodichloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Bromoform	0.375	U	0.500	0.250	0.375	ug/L	1		11/13/25 19:14
Bromomethane	2.25	U	3.00	0.940	2.25	ug/L	1		11/13/25 19:14
Carbon tetrachloride	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:14
Chlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<100)	11/13/25 19:14
Chloroethane	0.750	U	1.00	0.310	0.750	ug/L	1		11/13/25 19:14
Chloroform	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Chloromethane	1.50	U	2.00	0.600	1.50	ug/L	1		11/13/25 19:14
cis-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<70)	11/13/25 19:14
cis-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14

Print Date: 11/17/2025 3:18:36PM

J flagging is activated

Results of SELO-OIF

Client Sample ID: **SELO-OIF**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186001
 Lab Project ID: 1256186

Well 1B

Collection Date: 11/05/25 19:00
 Received Date: 11/10/25 08:59
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Dibromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Dibromomethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Dichlorodifluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Ethylbenzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<700)	11/13/25 19:14
Hexachlorobutadiene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Isopropylbenzene (Cumene)	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Methylene chloride	0.375	U	0.500	0.400	0.375	ug/L	1	(<5)	11/13/25 19:14
Methyl-t-butyl ether	0.750	U	1.00	0.310	0.750	ug/L	1		11/13/25 19:14
Naphthalene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
n-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
n-Propylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
o-Xylene	0.375	U	0.500	0.200	0.375	ug/L	1		11/13/25 19:14
P & M -Xylene	0.375	U	0.500	0.400	0.375	ug/L	1		11/13/25 19:14
sec-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Styrene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	11/13/25 19:14
tert-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Tetrachloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:14
Toluene	0.375	U	0.500	0.200	0.375	ug/L	1	(<1000)	11/13/25 19:14
Total Trihalomethanes	1.50	U	2.00	0.600	1.50	ug/L	1	(<80)	11/13/25 19:14
trans-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	11/13/25 19:14
trans-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Trichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	11/13/25 19:14
Trichlorofluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:14
Vinyl chloride	0.300	U	0.400	0.200	0.300	ug/L	1	(<2)	11/13/25 19:14
Xylenes (total)	0.500	U	0.500	0.500	0.375	ug/L	1	(<10000)	11/13/25 19:14

Surrogates

1,2-Dichloroethane-D4 (surr)	99	70-130	%	1	11/13/25 19:14
4-Bromofluorobenzene (surr)	96.7	70-130	%	1	11/13/25 19:14
Toluene-d8 (surr)	97.9	70-130	%	1	11/13/25 19:14

Batch Information

Analytical Batch: VMS25069
 Analytical Method: EPA 524.2
 Analyst: NRB
 Analytical Date/Time: 11/13/25 19:14
 Container ID: 1256186001-D

Prep Batch: VXX43989
 Prep Method: SW5030B
 Prep Date/Time: 11/13/25 06:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL

Results of SELO-OIF

Client Sample ID: **SELO-OIF** **Well 1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186001
 Lab Project ID: 1256186

Collection Date: 11/05/25 19:00
 Received Date: 11/10/25 08:59
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result</u> <u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	1140	28.6	8.86	21.5	mg/L	1		11/11/25 12:08

Batch Information

Analytical Batch: STS8404
 Analytical Method: SM21 2540D
 Analyst: DAT
 Analytical Date/Time: 11/11/25 12:08
 Container ID: 1256186001-B

<u>Parameter</u>	<u>Result</u> <u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.225	0.200	0.0500	0.150	mg/L	2	(<10)	11/12/25 12:47

Batch Information

Analytical Batch: WFI3222
 Analytical Method: SM21 4500NO3-F
 Analyst: DAT
 Analytical Date/Time: 11/12/25 12:47
 Container ID: 1256186001-C

**SGS North America Inc.**

200 W. Potter Dr., Anchorage, AK 3180 Pagar Rd, Ste. 190,
99518 (ph) 907-882-2343, (fax) Fairbanks, AK 99709 (ph) 907-
907-581-5301 474-8058



Pickup Date/Time OR Ship Date:

10/21/25 12:00

Shipping Carrier:

None-Client will pickup at SGS

Packing Rules:

Ground/Maritime - DOT 49CFR 173.4

Invoicing

Note: Shipments should be ready for pickup by Alert Courier at 3:30 p.m. on the day specified, unless other arrangements have been made. SGS's Account will be used for shipping unless otherwise specified above. Choose IATA for samples that will be shipped via Air and DOT for samples shipping via Ground. For shipping preferences see form FS-0150.

Kit request taken by: **CJW**Date: **December 10, 2025**

Kit prepared by:

Date:

Kit checked by:

Date:

Kit packed & shipped by:

Date:

*Remember to verify lid tightness when checking preserved bottles***Project Information**

Client Name:	Kuna Engineering
Contact:	Dan Nichols
Email:	dnichols@kunaeng.com
Project Name:	Kachemak Wells
LIMS Profile	374586
Shipping Address (if Needed)	

Filename:

SKIT_Kuna Engineering_Kachemak Wells_2025-12-10

Sample Container Information

									Department of Defense		
									No		
Number	Matrix	Method and Analysis	# of Containers per sample	Container Size	Container Type	Preservative	# Total Bottles	# Trip Blanks	Bottle Lot Number	Preservative Lot Number	Trip Blank Lot Number
3	9-DW no PWS	200.8 Metals	1	125-mL	HDPE	HNO3	3				
3	9-DW no PWS	TSS	1	1-L	HDPE	None	3				
3	9-DW no PWS	Nitrate+Nitrite	1	60-mL	HDPE	H2SO4	3				
3	9-DW no PWS	VOC	1	40-mL	VOA Vial	HCl	3	1			
							0				
							0				
							0				
							0				
							0				
							0				
							0				
							0				
							0				

Note: The first 10 Analysis and Preservative columns will auto-fill up to the capacity of the associated COC.

Additional Information			Notes for Kit Prep	
Coolers:	Yes			
Gel Ice/Temperature Blanks?	Yes			
Labels:	Yes			
Custody Seals:	Yes			
Paper Chain of Custody:	Yes - Custom (Attached)		Number of Copies:	1
Additional Notes:				

Attention Client/Sampler:

1. Do not rinse container, be aware of any acid pr
2. Fill container, but do not overfill (except vials)
3. Label the container with your sample ID and de
4. Fill out the Chain of Custody.
5. Add frozen gel packs to your cooler and pack it
6. If you have any questions please contact your

1256615

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
12112025-1B (WELL 1B)	1256615001	12/11/2025	12/12/2025	Drinking Water
Trip Blank	1256615002	12/11/2025	12/12/2025	Drinking Water

<u>Method</u>	<u>Method Description</u>
EP200.8	Metals in Water by ICP-MS
SM21 4500NO3-F	Nitrate/Nitrite Flow injection Pres.
SM21 9223B	Total Coliform P/A Qualitative
SM21 2540D	Total Suspended Solids SM20 2540D
EPA 524.2	Volatile Organics by 524.2 (DW)

Print Date: 12/23/2025 11:16:54AM

Detectable Results Summary

Client Sample ID: **12112025-1B** **Well 1B**

Lab Sample ID: 1256615001

	<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Metals by ICP/MS	Barium	123	ug/L
	Calcium	41100	ug/L
	Copper	1.25J	ug/L
	Iron	277	ug/L
	Magnesium	13500	ug/L
	Manganese	652	ug/L
	Molybdenum	1.29J	ug/L
	Nickel	1.62J	ug/L
	Potassium	9900	ug/L
	Silicon	16400	ug/L
	Sodium	19400	ug/L
	E. Coli	Negative	100mL
	Total Coliform	Negative	100mL
Microbiology Laboratory			
Volatile GC/MS	Chloroform	0.322J	ug/L
	Toluene	0.298J	ug/L
Waters Department	Total Nitrate/Nitrite-N	0.483	mg/L
	Total Suspended Solids	1.00	mg/L

Print Date: 12/23/2025 11:16:56AM

SGS North America Inc.

200 West Potter Drive, Anchorage, AK 99518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

**Results of 12112025-1B**

Client Sample ID: **12112025-1B**
Client Project ID: **Kachemak Wells**
Lab Sample ID: 1256615001
Lab Project ID: 1256615

Well 1B

Collection Date: 12/11/25 16:18
Received Date: 12/12/25 16:06
Matrix: Drinking Water
Solids (%):
Location:

Results by Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	37.5	U	50.0	15.0	37.5	ug/L	1		12/18/25 11:51
Antimony	0.750	U	1.00	0.310	0.750	ug/L	1		12/18/25 11:51
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1	(<10)	12/18/25 11:51
Barium	123		3.00	0.940	2.25	ug/L	1	(<2000)	12/18/25 11:51
Beryllium	0.300	U	0.400	0.130	0.300	ug/L	1		12/18/25 11:51
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	12/18/25 11:51
Calcium	41100		2500	750	1875	ug/L	5		12/18/25 14:35
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1	(<100)	12/18/25 11:51
Cobalt	3.00	U	4.00	1.20	3.00	ug/L	1		12/18/25 11:51
Copper	1.25	J	3.00	1.00	2.25	ug/L	1	(<1000)	12/18/25 11:51
Iron	277		250	78.0	188	ug/L	1		12/18/25 11:51
Lead	1.50	U	2.00	0.500	1.50	ug/L	1	(<15)	12/18/25 11:51
Magnesium	13500		50.0	15.0	37.5	ug/L	1		12/18/25 11:51
Manganese	652		5.00	1.75	3.75	ug/L	5		12/18/25 14:35
Molybdenum	1.29	J	2.00	0.620	1.50	ug/L	1		12/18/25 11:51
Nickel	1.62	J	2.00	0.620	1.50	ug/L	1	(<100)	12/18/25 11:51
Phosphorus	150	U	200	62.0	150	ug/L	1		12/18/25 11:51
Potassium	9900		500	150	375	ug/L	1		12/18/25 11:51
Selenium	3.75	U	5.00	1.50	3.75	ug/L	1	(<50)	12/18/25 11:51
Silicon	16400		1000	310	750	ug/L	1		12/18/25 11:51
Silver	0.750	U	1.00	0.310	0.750	ug/L	1		12/18/25 11:51
Sodium	19400		500	150	375	ug/L	1		12/18/25 11:51
Thallium	0.750	U	1.00	0.310	0.750	ug/L	1		12/18/25 11:51
Tin	0.750	U	1.00	0.310	0.750	ug/L	1		12/18/25 11:51
Titanium	18.8	U	25.0	7.75	18.8	ug/L	1		12/18/25 11:51
Vanadium	15.0	U	20.0	6.20	15.0	ug/L	1		12/18/25 11:51
Zinc	7.50	U	10.0	3.10	7.50	ug/L	1	(<5000)	12/18/25 11:51

Print Date: 12/23/2025 11:16:58AM

J flagging is activated

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

Results of 12112025-1B

Client Sample ID: **12112025-1B** **Well 1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256615001
 Lab Project ID: 1256615

Collection Date: 12/11/25 16:18
 Received Date: 12/12/25 16:06
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Metals by ICP/MS

Batch Information

Analytical Batch: MMS12974
 Analytical Method: EP200.8
 Analyst: MCP
 Analytical Date/Time: 12/18/25 11:51
 Container ID: 1256615001-A

Prep Batch: MXX38138
 Prep Method: E200.2
 Prep Date/Time: 12/17/25 08:46
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Analytical Batch: MMS12974
 Analytical Method: EP200.8
 Analyst: MCP
 Analytical Date/Time: 12/18/25 14:35
 Container ID: 1256615001-A

Prep Batch: MXX38138
 Prep Method: E200.2
 Prep Date/Time: 12/17/25 08:46
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of 12112025-1B

Client Sample ID: 12112025-1B
 Client Project ID: Kachemak Wells
 Lab Sample ID: 1256615001
 Lab Project ID: 1256615

Well 1B

Collection Date: 12/11/25 16:18
 Received Date: 12/12/25 16:06
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Microbiology Laboratory

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
E. Coli	Negative		1	1	0.8	100mL	1		12/12/25 17:04
Total Coliform	Negative		1	1	0.8	100mL	1		12/12/25 17:04

Batch Information

Analytical Batch: BTF22092
 Analytical Method: SM21 9223B
 Analyst: HBL
 Analytical Date/Time: 12/12/25 17:04
 Container ID: 1256615001-M

Results of 12112025-1B

Client Sample ID: **12112025-1B** **Well 1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256615001
 Lab Project ID: 1256615

Collection Date: 12/11/25 16:18
 Received Date: 12/12/25 16:06
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,1,1-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<200)	12/16/25 22:17
1,1,2,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,1,2-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	12/16/25 22:17
1,1-Dichloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,1-Dichloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<7)	12/16/25 22:17
1,1-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,2,3-Trichlorobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,2,3-Trichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,2,4-Trichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<70)	12/16/25 22:17
1,2,4-Trimethylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,2-Dibromo-3-chloropropane	1.50	U	2.00	0.620	1.50	ug/L	1		12/16/25 22:17
1,2-Dibromoethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,2-Dichlorobenzene	0.375	U	0.500	0.250	0.375	ug/L	1	(<600)	12/16/25 22:17
1,2-Dichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	12/16/25 22:17
1,2-Dichloropropane	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	12/16/25 22:17
1,3,5-Trimethylbenzene	0.750	U	1.00	0.150	0.750	ug/L	1		12/16/25 22:17
1,3-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1		12/16/25 22:17
1,3-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
1,4-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<75)	12/16/25 22:17
2,2-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
2-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
4-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
4-Isopropyltoluene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Benzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	12/16/25 22:17
Bromobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Bromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Bromodichloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Bromoform	0.375	U	0.500	0.250	0.375	ug/L	1		12/16/25 22:17
Bromomethane	2.25	U	3.00	0.940	2.25	ug/L	1		12/16/25 22:17
Carbon tetrachloride	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	12/16/25 22:17
Chlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<100)	12/16/25 22:17
Chloroethane	0.750	U	1.00	0.310	0.750	ug/L	1		12/16/25 22:17
Chloroform	0.322	J	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Chloromethane	1.50	U	2.00	0.600	1.50	ug/L	1		12/16/25 22:17
cis-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<70)	12/16/25 22:17
cis-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17

Print Date: 12/23/2025 11:16:58AM

J flagging is activated

Results of 12112025-1B

Client Sample ID: **12112025-1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256615001
 Lab Project ID: 1256615

Well 1B

Collection Date: 12/11/25 16:18
 Received Date: 12/12/25 16:06
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Dibromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Dibromomethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Dichlorodifluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Ethylbenzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<700)	12/16/25 22:17
Hexachlorobutadiene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Isopropylbenzene (Cumene)	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Methylene chloride	0.375	U	0.500	0.400	0.375	ug/L	1	(<5)	12/16/25 22:17
Methyl-t-butyl ether	0.750	U	1.00	0.310	0.750	ug/L	1		12/16/25 22:17
Naphthalene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
n-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
n-Propylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
o-Xylene	0.375	U	0.500	0.200	0.375	ug/L	1		12/16/25 22:17
P & M -Xylene	0.375	U	0.500	0.400	0.375	ug/L	1		12/16/25 22:17
sec-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Styrene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	12/16/25 22:17
tert-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Tetrachloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	12/16/25 22:17
Toluene	0.298	J	0.500	0.200	0.375	ug/L	1	(<1000)	12/16/25 22:17
Total Trihalomethanes	1.50	U	2.00	0.600	1.50	ug/L	1	(<80)	12/16/25 22:17
trans-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	12/16/25 22:17
trans-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Trichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	12/16/25 22:17
Trichlorofluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		12/16/25 22:17
Vinyl chloride	0.300	U	0.400	0.200	0.300	ug/L	1	(<2)	12/16/25 22:17
Xylenes (total)	0.500	U	0.500	0.500	0.375	ug/L	1	(<10000)	12/16/25 22:17
Surrogates									
1,2-Dichloroethane-D4 (surr)	99.9		70-130			%	1		12/16/25 22:17
4-Bromofluorobenzene (surr)	96.2		70-130			%	1		12/16/25 22:17
Toluene-d8 (surr)	95.7		70-130			%	1		12/16/25 22:17

Batch Information

Analytical Batch: VMS25120
 Analytical Method: EPA 524.2
 Analyst: NRB
 Analytical Date/Time: 12/16/25 22:17
 Container ID: 1256615001-G

Prep Batch: VXX44060
 Prep Method: SW5030B
 Prep Date/Time: 12/16/25 13:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL

Results of 12112025-1B

Client Sample ID: **12112025-1B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256615001
 Lab Project ID: 1256615

Well 1B

Collection Date: 12/11/25 16:18
 Received Date: 12/12/25 16:06
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Waters Department

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Suspended Solids	1.00		1.00	0.310	0.750	mg/L	1		12/16/25 12:27

Batch Information

Analytical Batch: STS8426
 Analytical Method: SM21 2540D
 Analyst: DAT
 Analytical Date/Time: 12/16/25 12:27
 Container ID: 1256615001-C

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Total Nitrate/Nitrite-N	0.483		0.200	0.0500	0.150	mg/L	2	(<10)	12/17/25 14:28

Batch Information

Analytical Batch: WFI3228
 Analytical Method: SM21 4500NO3-F
 Analyst: DAT
 Analytical Date/Time: 12/17/25 14:28
 Container ID: 1256615001-E

The remaining pages are for the results of the trip blanks. They have not been included. The results were submitted to VSW previously.

Detectable Results Summary

Client Sample ID: Well Water B

Lab Sample ID: 1260798002

Metals by ICP/MS

Parameter	Result	Units
Barium	129	ug/L
Calcium	39600	ug/L
Copper	2.83J	ug/L
Iron	214J	ug/L
Magnesium	14800	ug/L
Manganese	602	ug/L
Molybdenum	1.25J	ug/L
Nickel	1.37J	ug/L
Potassium	10400	ug/L
Silicon	16800	ug/L
Sodium	21000	ug/L
Zinc	6.62J	ug/L
E. Coli	Negative	100mL
Total Coliform	Negative	100mL
Toluene	0.275J	ug/L
Total Nitrate/Nitrite-N	0.554	mg/L
pH	7.0	pH units
Total Dissolved Solids	253	mg/L
Total Suspended Solids	0.909J	mg/L

Microbiology Laboratory

Volatile GC/MS

Waters (Provisional as of 12/29/25)

Waters Department

Results of Well Water B

Client Sample ID: **Well Water B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798002
 Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Metals by ICP/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Aluminum	37.5	U	50.0	15.0	37.5	ug/L	1		03/10/26 16:15
Antimony	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:15
Arsenic	3.75	U	5.00	1.50	3.75	ug/L	1	(<10)	03/10/26 16:15
Barium	129		3.00	0.940	2.25	ug/L	1	(<2000)	03/10/26 16:15
Beryllium	0.300	U	0.400	0.130	0.300	ug/L	1		03/10/26 16:15
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/10/26 16:15
Calcium	39600		2500	750	1875	ug/L	5		03/10/26 17:01
Chromium	3.75	U	5.00	2.50	3.75	ug/L	1	(<100)	03/10/26 16:15
Cobalt	3.00	U	4.00	1.20	3.00	ug/L	1		03/10/26 16:15
Copper	2.83	J	3.00	1.00	2.25	ug/L	1	(<1000)	03/10/26 16:15
Iron	214	J	250	78.0	188	ug/L	1		03/10/26 16:15
Lead	1.50	U	2.00	0.500	1.50	ug/L	1	(<15)	03/10/26 16:15
Magnesium	14800		50.0	15.0	37.5	ug/L	1		03/10/26 16:15
Manganese	602		5.00	1.75	3.75	ug/L	5		03/10/26 17:01
Molybdenum	1.25	J	2.00	0.620	1.50	ug/L	1		03/10/26 16:15
Nickel	1.37	J	2.00	0.620	1.50	ug/L	1	(<100)	03/10/26 16:15
Phosphorus	150	U	200	62.0	150	ug/L	1		03/10/26 16:15
Potassium	10400		500	150	375	ug/L	1		03/10/26 16:15
Selenium	3.75	U	5.00	1.50	3.75	ug/L	1	(<50)	03/10/26 16:15
Silicon	16800		1000	310	750	ug/L	1		03/10/26 16:15
Silver	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:15
Sodium	21000		500	150	375	ug/L	1		03/10/26 16:15
Thallium	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:15
Tin	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:15
Titanium	18.8	U	25.0	7.75	18.8	ug/L	1		03/10/26 16:15
Vanadium	15.0	U	20.0	6.20	15.0	ug/L	1		03/10/26 16:15
Zinc	6.62	J	10.0	3.10	7.50	ug/L	1	(<5000)	03/10/26 16:15

Results of Well Water B

Client Sample ID: **Well Water B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798002
 Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Metals by ICP/MS

Batch Information

Analytical Batch: MMS13035
 Analytical Method: EP200.8
 Analyst: HBL
 Analytical Date/Time: 03/10/26 16:15
 Container ID: 1260798002-A

Prep Batch: MXX38227
 Prep Method: E200.2
 Prep Date/Time: 03/09/26 12:08
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Analytical Batch: MMS13035
 Analytical Method: EP200.8
 Analyst: HBL
 Analytical Date/Time: 03/10/26 17:01
 Container ID: 1260798002-A

Prep Batch: MXX38227
 Prep Method: E200.2
 Prep Date/Time: 03/09/26 12:08
 Prep Initial Wt./Vol.: 20 mL
 Prep Extract Vol: 50 mL

Results of Well Water B

Client Sample ID: **Well Water B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798002
 Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Microbiology Laboratory

<u>Parameter</u>	<u>Result</u> <u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DE</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
E. Coli	Negative	1	1	0.8	100mL	1		03/06/26 17:53
Total Coliform	Negative	1	1	0.8	100mL	1		03/06/26 17:53

Batch Information

Analytical Batch: BTF22240
 Analytical Method: SM21 9223B
 Analyst: M.A
 Analytical Date/Time: 03/06/26 17:53
 Container ID: 1260798002-H

Results of Well Water B

Client Sample ID: Well Water B
Client Project ID: Kachemak Wells
Lab Sample ID: 1260798002
Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
Received Date: 03/06/26 08:45
Matrix: Drinking Water
Solids (%):
Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
1,1,1,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,1,1-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<200)	03/06/26 20:30
1,1,2,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,1,2-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/06/26 20:30
1,1-Dichloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,1-Dichloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<7)	03/06/26 20:30
1,1-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,2,3-Trichlorobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,2,3-Trichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,2,4-Trichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<70)	03/06/26 20:30
1,2,4-Trimethylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,2-Dibromo-3-chloropropane	1.50	U	2.00	0.620	1.50	ug/L	1		03/06/26 20:30
1,2-Dibromoethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,2-Dichlorobenzene	0.375	U	0.500	0.250	0.375	ug/L	1	(<600)	03/06/26 20:30
1,2-Dichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/06/26 20:30
1,2-Dichloropropane	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	03/06/26 20:30
1,3,5-Trimethylbenzene	0.750	U	1.00	0.150	0.750	ug/L	1		03/06/26 20:30
1,3-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1		03/06/26 20:30
1,3-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
1,4-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<75)	03/06/26 20:30
2,2-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
2-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
4-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
4-Isopropyltoluene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Benzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	03/06/26 20:30
Bromobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Bromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Bromodichloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Bromoform	0.375	U	0.500	0.250	0.375	ug/L	1		03/06/26 20:30
Bromomethane	2.25	U	3.00	0.940	2.25	ug/L	1		03/06/26 20:30
Carbon tetrachloride	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/06/26 20:30
Chlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<100)	03/06/26 20:30
Chloroethane	0.750	U	1.00	0.310	0.750	ug/L	1		03/06/26 20:30
Chloroform	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Chloromethane	1.50	U	2.00	0.600	1.50	ug/L	1		03/06/26 20:30
cis-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<70)	03/06/26 20:30
cis-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30

Print Date: 03/13/2026 4:17:16PM

J flagging is activated

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518
t 907.562.2343 f 907.561.5301 www.us.sgs.com

Member of SGS Group

Results of Well Water B

Client Sample ID: **Well Water B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798002
 Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Volatile GC/MS

Parameter	Result	Qual	LOQ/CL	DL	LOD	Units	DF	Allowable Limits	Date Analyzed
Dibromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Dibromomethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Dichlorodifluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Ethylbenzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<700)	03/06/26 20:30
Hexachlorobutadiene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Isopropylbenzene (Cumene)	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Methylene chloride	0.375	U	0.500	0.400	0.375	ug/L	1	(<5)	03/06/26 20:30
Methyl-t-butyl ether	0.750	U	1.00	0.310	0.750	ug/L	1		03/06/26 20:30
Naphthalene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
n-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
n-Propylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
o-Xylene	0.375	U	0.500	0.200	0.375	ug/L	1		03/06/26 20:30
P & M -Xylene	0.375	U	0.500	0.400	0.375	ug/L	1		03/06/26 20:30
sec-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Styrene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	03/06/26 20:30
tert-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Tetrachloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/06/26 20:30
Toluene	0.275	J	0.500	0.200	0.375	ug/L	1	(<1000)	03/06/26 20:30
Total Trihalomethanes	1.50	U	2.00	0.600	1.50	ug/L	1	(<80)	03/06/26 20:30
trans-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	03/06/26 20:30
trans-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Trichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	03/06/26 20:30
Trichlorofluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:30
Vinyl chloride	0.300	U	0.400	0.200	0.300	ug/L	1	(<2)	03/06/26 20:30
Xylenes (total)	0.500	U	0.500	0.500	0.375	ug/L	1	(<10000)	03/06/26 20:30
Surrogates									
1,2-Dichloroethane-D4 (surr)	99.9		70-130			%	1		03/06/26 20:30
4-Bromofluorobenzene (surr)	94		70-130			%	1		03/06/26 20:30
Toluene-d8 (surr)	95.8		70-130			%	1		03/06/26 20:30

Batch Information

Analytical Batch: VMS25232
 Analytical Method: EPA 524.2
 Analyst: NRB
 Analytical Date/Time: 03/06/26 20:30
 Container ID: 1260798002-D

Prep Batch: VXX44212
 Prep Method: SW5030B
 Prep Date/Time: 03/06/26 14:00
 Prep Initial Wt./Vol.: 5 mL
 Prep Extract Vol: 5 mL

Results of Well Water B

Client Sample ID: **Well Water B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798002
 Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Waters (Provisional as of 12/29/25)

<u>Parameter</u>	<u>Result</u>	<u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.554		0.200	0.0500	0.150	mg/L	2	(<10)	03/10/26 09:34

Batch Information

Analytical Batch: WFI3246
 Analytical Method: SM21 4500NO3-F
 Analyst: AJP
 Analytical Date/Time: 03/10/26 09:34
 Container ID: 1260798002-C

Results of Well Water B

Client Sample ID: **Well Water B**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798002
 Lab Project ID: 1260798

Collection Date: 03/04/26 12:50
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Waters Department

<u>Parameter</u>	<u>Result</u> <u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Dissolved Solids	253	10.0	3.10	7.50	mg/L	1		03/09/26 15:44

Batch Information

Analytical Batch: STS8459
 Analytical Method: SM21 2540C
 Analyst: DAT
 Analytical Date/Time: 03/09/26 15:44
 Container ID: 1260798002-G

<u>Parameter</u>	<u>Result</u> <u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Suspended Solids	0.909 J	1.01	0.313	0.758	mg/L	1		03/10/26 12:01

Batch Information

Analytical Batch: STS8460
 Analytical Method: SM21 2540D
 Analyst: DAT
 Analytical Date/Time: 03/10/26 12:01
 Container ID: 1260798002-B

<u>Parameter</u>	<u>Result</u> <u>Qual</u>	<u>LOQ/CL</u>	<u>DL</u>	<u>LOD</u>	<u>Units</u>	<u>DF</u>	<u>Allowable</u> <u>Limits</u>	<u>Date Analyzed</u>
pH	7.0	0.100	0.100	0.0750	pH units	1		03/06/26 13:36

Batch Information

Analytical Batch: WT16846
 Analytical Method: SM21 4500-H B
 Analyst: AJP
 Analytical Date/Time: 03/06/26 13:36
 Container ID: 1260798002-G

REMAINING PAGES ARE THE TRIP BLANKS AND THEY ARE NOT INCLUDED

WELL 1B ALKALINITY, TOTAL HARDNESS, AND LSI CALCULATIONS

Project: Kachemak Selo Water Source Improvements

Driller: Sullivan Water Wells

Well: 1B

Date: March 3, 2026

Engineer: Daniel Nichols

Total Alkalinity, A (From Field Test)

A = 210 mg/L

Total Hardness, H

Calcium (Ca) = 39.6 mg/L

Magnesium (Mg) = 14.8 mg/l

$$H = Ca \cdot (2.495) + Mg \cdot (4.114)$$

H = 160 mg/L

Alkalinity Tests:

