



STATE OF ALASKA 86536
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND & WATER
Alaska Hydrologic Survey

WATER WELL LOG Revised 08/18/2016

Drilling Started: ____ / ____ / ____ Completed: 10 / 23 / 2025 Pump Install: ____ / ____ / ____

City/Borough	Subdivision	Block	Lot	Property Owner Name & Address
Kenai Peninsula Borough				VSW ,

Well location: Latitude 59.796490000000006 Longitude -151.07966
Meridian S Township 004S Range 011W Section 25 , SE 1/4 of NE 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
peat/organics	0	8
silt and sands	8	18
coal	18	26
silty sandstone	26	31
sandstone	31	58
sandstone with coal seams	58	88
sandstone conglomerate	88	98
gray soft shale	98	118
gray shale with sand	118	128
sandstone conglomerate	128	138
sandstone conglomerate water	138	148

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: 148 ft Casing stickup: 2 ft

Casing type: steel Casing thickness: .25 inches

Casing diameter: 6 inches Casing depth: 102 ft

Liner type: _____ Depth: _____ ft Diameter: _____ inches

Note: _____

Well intake opening type: ☐ Open end, ☒ Open hole, ☐ Other open hole

Screen type: _____, Screen mesh size: _____

Screen start: _____ ft, Screen stop: _____ ft, Perforated ☐ Yes ☒ No

Perforation description: _____ Perf from: _____ ft, Perf

to: _____ ft, Perf from: _____ ft, Perf to: _____ ft

Gravel packed ☐ Yes ☒ No Gravel start: _____ ft, Gravel stop: _____ ft

Note: _____

Static water (from top of casing): _____ ft on ____ / ____ / ____ Artesian well ☐

Pumping level & yield: _____ feet after _____ hours at _____ gpm

Method of testing: airlift

Development method: _____ Duration: _____

Recovery rate: 15 gpm

Grout type: bentonite Volume 200lbs

Depth: From 0 ft, To 40 ft

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: chlorine 50ppm

Was water quality tested? ☒ Yes ☐ No

Water quality parameters tested: see well log

Well driller name: _____

Company name: SULLIVAN WATER WELLS

Mailing address: _____

City: _____ State: AK Zip: _____

Phone number: (_____) _____ - _____

Driller's signature: _____

Date: ____ / ____ / ____

Anchorage Municipal Code 15.55.060(I) and North Pole Ordinance 13.32.030(D) require that a copy of this well log be submitted to the Development Services Department/City within 30 days of well completion.

City Permit Number: _____

Date of Issue: ____ / ____ / ____

Parcel Identification Number: _____ - _____ - _____

AS 41.08.020(b)(4) and AAC 11 AAC 93.140(a) require that a copy of the well log be submitted to the Department of Natural Resources within 45 days of well completion. Well logs may be submitted using the online well log reporting system available at:

<https://dnr.alaska.gov/welts/>

OR email electronic well logs to

dnr.water.reports@alaska.gov

WELTS ID 86536



OWNER OF LAND: VSW

ADDRESS: Kachemak Selo

LEGAL DESCRIPTION	Well 1A
-------------------	---------

DATE: 10-23-25

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: 150'

Casing Type: Steel Wall thickness .250 inches

Diameter: 6 inches, depth 104 feet

Liner type _____

Static Water Level:	13	feet
---------------------	----	------

Recovery Rate 15+  gpm  gph

Method of Testing	Air lift
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Well Intake Opening Type: ☐ open end ☒ open hole

Screened Start feet Stopped

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:

First water encountered at 41'

Heavy gravel zone and lots of water from 96-98

First drilling encountered foaming saltwater at 140'

Returned to well to run more casing to avoid cross contamination of well 1B. Salt content appeared to drop significantly and no longer had foaming characteristics.

Bore Hole Data	
1	10
2	20
3	30
4	40
5	50
6	60
7	70
8	80
9	90
10	100

[illegible]

Casing Stickup

Peat/Organics

Silt and sands

Coal

Silty sandstone

Sandstone

Sandstone W/ Coal seams

Sandstone conglomerate

Gray soft shale

Gray shale with sand

Sandstone conglomerate

Sandstone conglomerate Water

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.

- A 24-hour test on Well 1A that was stopped after three hours due to a lack of water in March 2026.

Well pumping field notes and pump test results are found in Appendix D.

Well 1A

No pump test was done after Well 1A was drilled in December 2025. A 24-hour steady rate pump test was attempted in March 2026. When the driller arrived the static water level had dropped from 16 feet btc to 54 feet btc since November 2025. The driller installed a temporary submersible well pump at 100 feet btc. The driller began pumping at a steady rate at 33 gpm. The pump cavitated after three minutes. The driller stopped pumping and allowed the well to recharge for 20 minutes. The water level rose to 88.0 feet btc. The driller restarted pumping at a steady rate of 2.5 to 3 gpm. The water level dropped 10.6 feet to 98.6 feet btc in 1.8 hours. The driller stopped the test to protect the pump from cavitating again.

Well 1A recharged 38.6 feet in 75 minutes. The recharge rate was estimated using the trendline of the semi logarithmic graph (Figure 1). It estimates a full recharge to a static level of 54 feet btc in 3.5 hours.

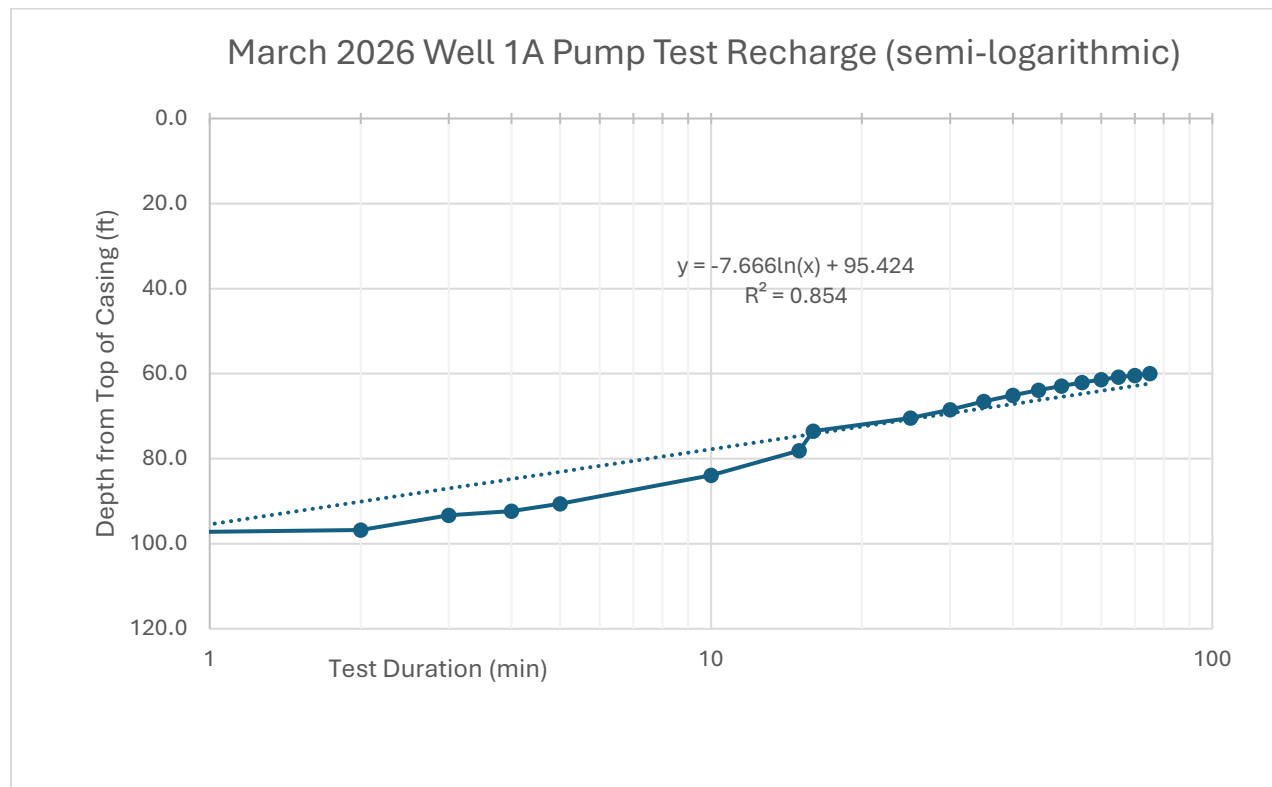
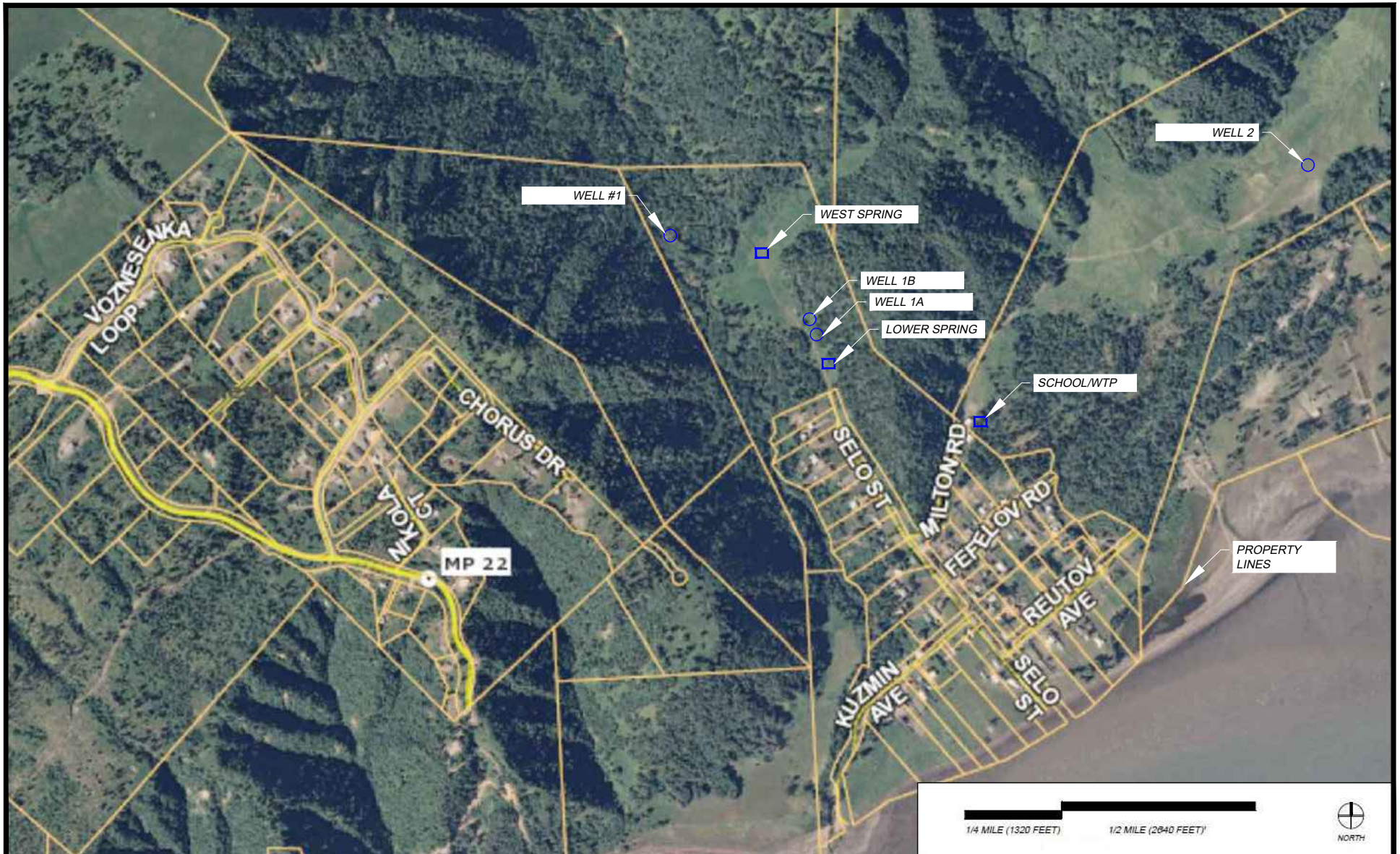


Figure 1: March 2026 Well 1A Pump Test Recharge (semi-logarithmic)

It is estimated that starting at static water level pumping at 2.5 gpm would run Well 1A dry in 7.5 hours. It is assumed that a full recharge would take 3.5 hours. Well 1A's sustainable pumping rate is less than 2 gpm. This is 25 percent of the average daily demand. It will not meet VKSWC's water needs.



WELL FIELD FEASIBILITY STUDY KACHEMAK SELO, AK

PROJ. NO.	165.030662
DRAWN	HH
CHECKED	DEN
DATE	3/27/26



4041 B Street
Anchorage, AK 99503
907-339-6500 Fax 907-339-5327
www.kunaeng.com License #: AELS129381

COMMUNITY MAP

A.1

FIELD LOG FOR BORING NUMBER:

PROJECT NUMBER: U5004126 74.1165

PROJECT: Kachemach Selo

LOCATION: Kachemach Selo

START DATE/TIME: 10/23/25 12:20

COMPLETED DATE/TIME:

LOGGED BY: A. Young

DATUM: WGS84

GPS:

COORDS:

ACCURACY:

SHEET 1 of 1

DEPTH (ft)

BORING METHOD

SOIL PROFILE

VEGETATION:

SNOW THICKNESS:

ICE THICKNESS:

DECK TO MUDLINE:

DEPTH -- BOTTOM: LITH. DESC.

USCS / GRAPHIC

ICE BOND

NUMBER

TYPE

BLOWS PER 6 INCHES

REC ATT (ft)

SAMPLE

GRAVEL

SAND

CLAY / SILT

ICE % CLASS. WL REL. MOISTURE

CONSTITUENTS

% PROPORTION SIZE, SHAPE, GRADING, PLASTICITY, ETC.

DRILLING CO.: S.W. W

EQUIPMENT: DR10

DRILLER: Levi Ueli

SAMPLER HAMMER: ☐ AUTO, ☐

ROPE&CATHEAD: ☐ 140 lb, ☐ 300 lb, ☐ 340 lb

DEPTH -- BOTTOM: SAMP. DESC. & DRILLING NOTES

0-10 ft

No Sample

Driller said pipe/drill just pushed right in. No Sample recovered

10-20 feet

Grey, moist, Sand-fine med plasticity

20-21 ft

Reddish-brown, moist Sand v-f-f, low plasticity

21-28 ft

Coal / Sand

Smells organic Sand - F-M

28-33 ft

Greyish-brown, some red Dry, Sand - v-f-f med plasticity

33-50 ft

Grey-brown, dry till 41 ft Silty Sand, No plasticity Sand - v-f-m

Peat/organics

No Sample

Silt w/sand

Silt w/sand

Coal

Silt w/sand

0

15

85

0

20

80

0

85

15

0

80

20

ABBREVIATIONS:

ANG ANGULAR

BX BEDROCK

C COARSE

CO COHESIVE

EL ELONGATED

F FINE

FL FLAT

HO HOMOGENEOUS

HP HIGH PLASTICITY

LP LOW PLASTICITY

M MEDIUM

MP MEDIUM PLASTICITY

MST MOIST

NP NON-PLASTIC

ORG ORGANIC

PG POORLY GRADED

PP POCKET PENETROM

REC RECOVERED

REF REFUSAL

RX ROCK

RND ROUNDED

SAG SUBANGULAR

SRD SUBROUND

TV TOR VANE

WG WELL-GRADED

WL WATER LEVEL

WH WEIGHT OF HAMMER

WR WEIGHT OF RODS

W* WEATHERED (RX/BX)

wsp

LIBRARY-ANC/2023-10-04-FULL WSP LOGO GLB [ANC 2013 FIELD LOG - %COMP] 4/22/25

FIELD LOG FOR BORING NUMBER:

PROJECT NUMBER: 4500412674.1165

START DATE/TIME: 10/23/25

DATUM: WGS84

GPS:

ACCURACY:

COORDS:

SHEET

2 of 2

PROJECT:

COMPLETED DATE/TIME:

LOCATION: Kachemach Selo

LOGGED BY: A. Pains

DRILLING CO.: S.W.W

EQUIPMENT: DRI

DRILLER: Levi Ueli

SAMPLER HAMMER: ☐ AUTO, ☐ROPE&CATHEAD: ☐ 140 lb, ☐ 300 lb, ☐ 340 lb

DEPTH - BOTTOM: SAMP. DESC. & DRILLING NOTES

DEPTH (ft)	BORING METHOD	SOIL PROFILE		SAMPLE		CONSTITUENTS				ICE % CLASS. WL REL. MOISTURE	DEPTH - BOTTOM: SAMP. DESC. & DRILLING NOTES
		VEGETATION: SNOW THICKNESS: ICE THICKNESS: DECK TO MUDLINE:	USCS / GRAPHIC ICE BOND	NUMBER	TYPE	BLOWS PER 6 INCHES	REC ATT (in)	GRAVEL	SAND		
40											
41											
42											
43											
44											
45											
46											
47											
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78											
79											
80											

wsp

ABBREVIATIONS:
 ANG ANGULAR
 BX BEDROCK
 C COARSE
 CO COHESIVE
 EL ELONGATED

F FINE
 FL FLAT
 HO HOMOGENEOUS
 HP HIGH PLASTICITY
 LP LOW PLASTICITY
 M MEDIUM

MP MEDIUM PLASTICITY
 MST MOIST
 NP NON-PLASTIC
 ORG ORGANIC
 PG POORLY GRADED
 PP POCKET PENETROM.

REC RECOVERED
 REF REFUSAL
 RX ROCK
 RND ROUNDED
 SAG SUBANGULAR
 SRD SUBROUND

TV TOR VANE
 WG WELL-GRADED
 WL WATER LEVEL
 WH WEIGHT OF HAMMER
 WR WEIGHT OF RODS
 W* WEATHERED (RX, BX)

FIELD LOG FOR BORING NUMBER:										DATUM: WGS84		SHEET	
PROJECT NUMBER: <u>U50042674.1165</u>										START DATE/TIME: <u>10/23/25</u>		GPS:	
PROJECT: <u>Kachemak selo</u>										COMPLETED DATE/TIME: <u>ongoing</u>		ACCURACY:	
LOCATION: <u>Kachemak selo</u>										COORDS:		3 of 3	
LOGGED BY: <u>A. Young</u>										DRILLING CO.: <u>S.W.W</u>			
										EQUIPMENT: <u>DDO</u>			
										DRILLER: <u>Levi Keli</u>			
										SAMPLER HAMMER: ☐ AUTO, ☐			
										ROPE&CATHEAD: ☐ 140 lb, ☐ 300 lb, ☐ 340 lb			
										DEPTH -- BOTTOM: SAMP. DESC. & DRILLING NOTES			
80	BORING METHOD	SOIL PROFILE		SAMPLE			CONSTITUENTS			80-90ft Drilling slowed down. Driller estimates water at 40 gpm. Same as above. Silty Sand w/ trace coal			
		VEGETATION: SNOW THICKNESS: ICE THICKNESS: DECK TO MUDLINE: DEPTH -- BOTTOM: LITH. DESC.	USCS / GRAPHIC	ICE BOND	NUMBER	TYPE	BLOWS PER 8 INCHES	REC ATT (%)	GRAVEL				
90		SM								90-100ft Change of lithology observed at 92ft. Slow Drilling Grey, some red, wet Silty Sand w/ gravel gravel angular w/ red staining 1", S-F, no plasticity			
100		Silty Sand w/ gravel					25 60 15			Drilling stopped at 100ft. There is too much water to continue. Driller estimates 75 gpm. will resume at later date w/ different drill bit			
110		End 10/24/25 To be continued 10/27/25											
120													

LIBRARY-ANC(2023-10-04)-FULL WSP LOGO GLB [ANC 2013 FIELD LOG - %COMP] 4/22/25

wsp

 ABBREVIATIONS:
 ANG ANGULAR
 BX BEDROCK
 C COARSE
 CO COHESIVE
 EL ELONGATED

 F FINE
 FL FLAT
 HO HOMOGENEOUS
 HP HIGH PLASTICITY
 LP LOW PLASTICITY
 M MEDIUM

 MP MEDIUM PLASTICITY
 MST MOIST
 NP NON-PLASTIC
 ORG ORGANIC
 PG POORLY GRADED
 PP POCKET PENETROM

 REC RECOVERED
 REF REFUSAL
 RX ROCK
 RND ROUNDED
 SAG SUBANGULAR
 SRD SUBROUND

 TV TOR VANE
 WG WELL-GRADED
 WL WATER LEVEL
 WH WEIGHT OF HAMMER
 WR WEIGHT OF RODS
 W* WEATHERED (RX/BX)

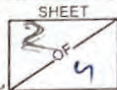
Well 1A

LIBRARY-ANC(2023-10-04)-FULL WSP LOGO GLB [ANC 2013 FIELD LOG - %COMP] 4/22/25

Well 2

FIELD LOG FOR BORING NUMBER: SELB-02
 PROJECT NUMBER: 130072674.116 START DATE/TIME: 11-3-25
 PROJECT: Water Well Installation COMPLETED DATE/TIME:
 LOCATION: Kachemak Seale LOGGED BY: Dodge S.

DATUM: WGS84
 GPS:
 COORDS:



DRILLING CO.: Sullivan Bros
 EQUIPMENT:
 DRILLER: Levi Wel
 SAMPLER HAMMER: ☐ AUTO, ☐
 ROPE&CATHEAD: ☐ 140 lb, ☐ 300 lb, ☐ 340 lb

DEPTH (ft)	BORING METHOD	SOIL PROFILE			SAMPLE				CONSTITUENTS				
		VEGETATION: SNOW THICKNESS: ICE THICKNESS: DECK TO MUDLINE: DEPTH -- BOTTOM: LITH. DESC.	USCS / GRAPHIC	ICE BOND	NUMBER	TYPE	BLOWS PER 6 INCHES	REC ATT (inch)	% PROPORTION SIZE SHAPE GRADING, PLASTICITY, ETC	GRAVEL	SAND	CLAY / SILT	ICE % CLASS WL REL MOISTURE
		30-40 ft			#5					0	25	75	
		1 gal/min											
		40-50 ft (water appears for first time)			#6					10	25	65	
										70	20	10	
		50-60 ft			#7								
										75	20	5	
		60-72 ft			#8								
										75	20	5	

DEPTH -- BOTTOM: SAMP. DESC. & DRILLING NOTES

~~grey~~ grey sandy silt with organics. Some fine sand.

grey sandy silty clay with few small pink rock chunks the size of ~~thumb~~ coarse sand. Much more granular and chunky than previous

[significant shaking at 48 ft]

@ 48 ft we get gravel with the pink rocks being up to 2 inches and the coal being more common. Large pebbles of coal common as well

@ 55 ft it's back into the grey clay

@ 60 ft it's back into the gravel found at 48 ft.

[Drill bouncing]

more sandy silt and gravel, grey color with few pink pebbles.

Gravel becomes extensive at 72 ft

5 gal/min

6

wsp		ABBREVIATIONS:	F	FINE	MP	MEDIUM PLASTICITY	REC	RECOVERED	TV	TOR VANE
		ANG ANGULAR	FL	FLAT	MST	MOIST	REF	REFUSAL	WG	WELL-GRADED
		BX BEDROCK	HO	HOMOGENEOUS	NP	NON-PLASTIC	RX	ROCK	WL	WATER LEVEL
		C COARSE	HP	HIGH PLASTICITY	ORG	ORGANIC	RND	ROUNDED	WH	WEIGHT OF HAMMER
		CO COHESIVE	LP	LOW PLASTICITY	PG	POORLY GRADED	SAG	SUBANGULAR	WR	WEIGHT OF RODS
		EL ELONGATED	M	MEDIUM	PP	POCKET PENETROM.	SRD	SUBROUND	W*	WEATHERED ('RX/BX)



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

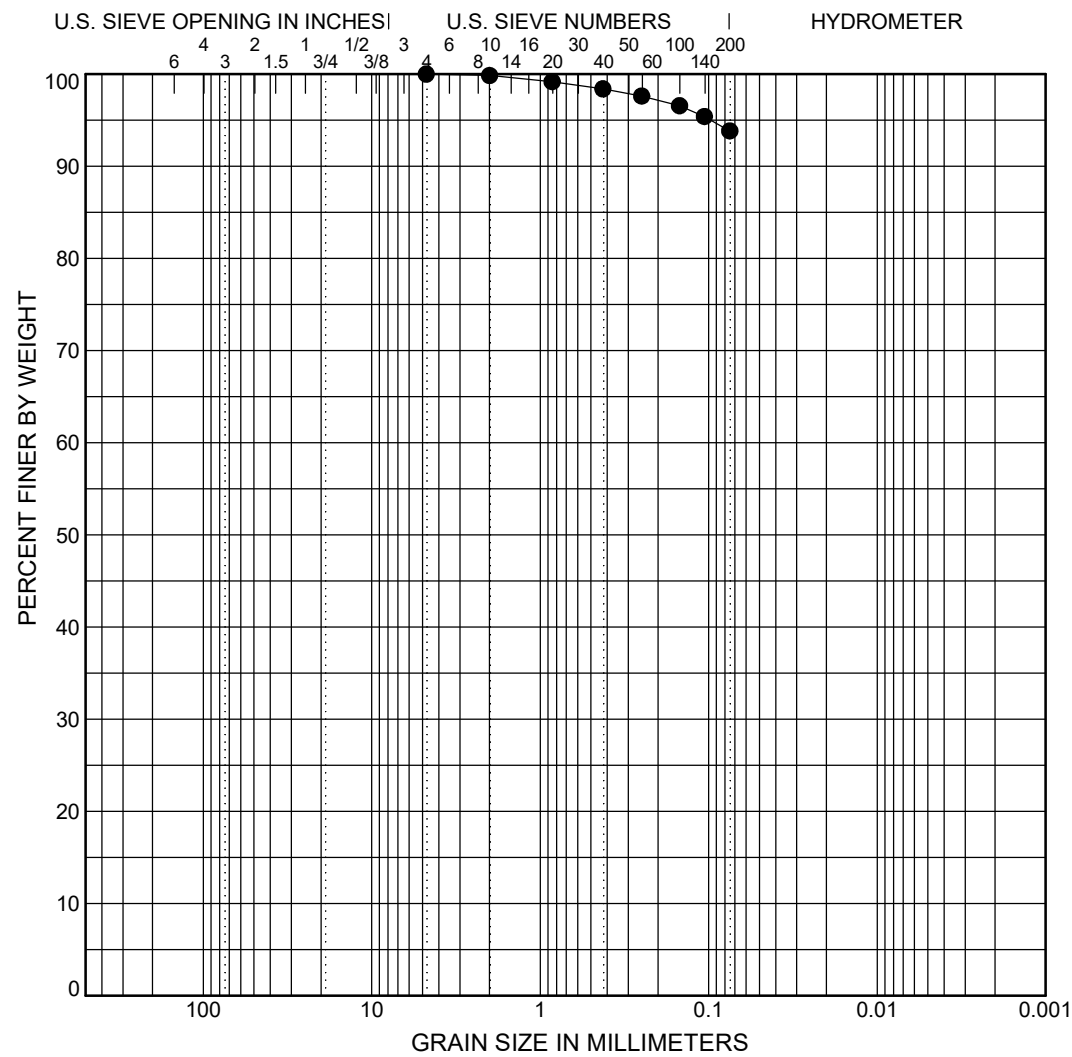
Location: Kachemak, AK

Project: Kuna Selo Water Well Installation Monitoring

Project No.: US0042674.1165

Reviewed By: D. Stankewitz

Date: 11/20/2025



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

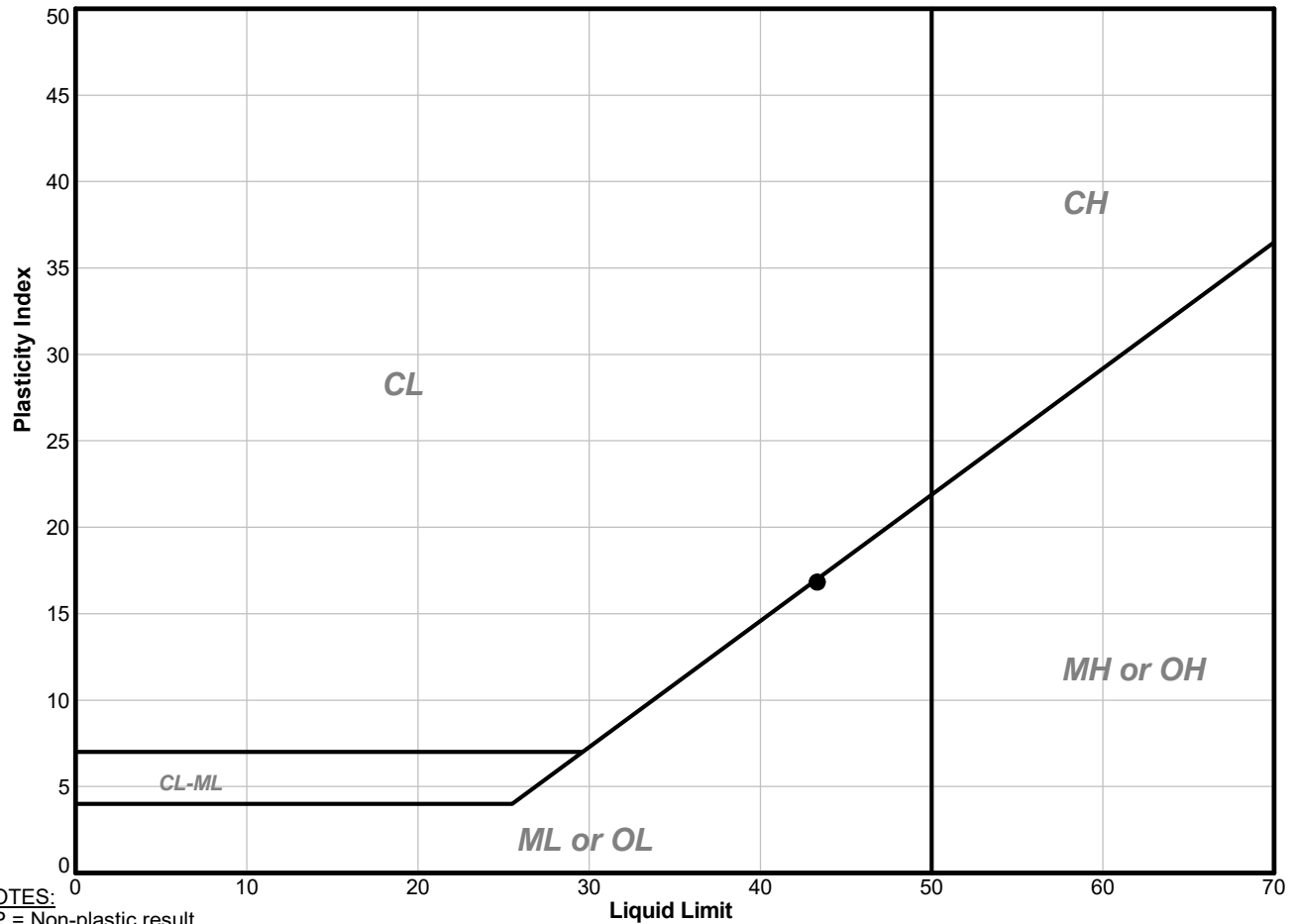
Sample Location	Well 1A			
Sample #	1			
Depth (ft)	100.0			
Total Sample (g)	256.3			
MC (%)	54.3			
LL	43			
PI	17			
% Passing Sieve (interpolated if not measured)	3"			
	2"			
	1.5"			
	1"			
	3/4"			
	1/2"			
	3/8"			
	#4	100.0		
	#10	99.8		
	#20	99.2		
% <0.02 mm	#40	98.4		
	#60	97.6		
	#100	96.6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

FIGURE B-3: LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX

Reference(s)
ASTM D4318

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

PLASTICITY CHART



NOTES:
NP = Non-plastic result
Plastic Limit test performed by hand rolling
Liquid Limit test performed using mechanical device

	Sample Location	Sample Number	Depth (ft)	Bottom (ft)	Passing #40 Sieve (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index	USCS	Natural Moisture Content (%)
●	Well 1A	1	100.0	100.5	98	43	26	17	CL	54

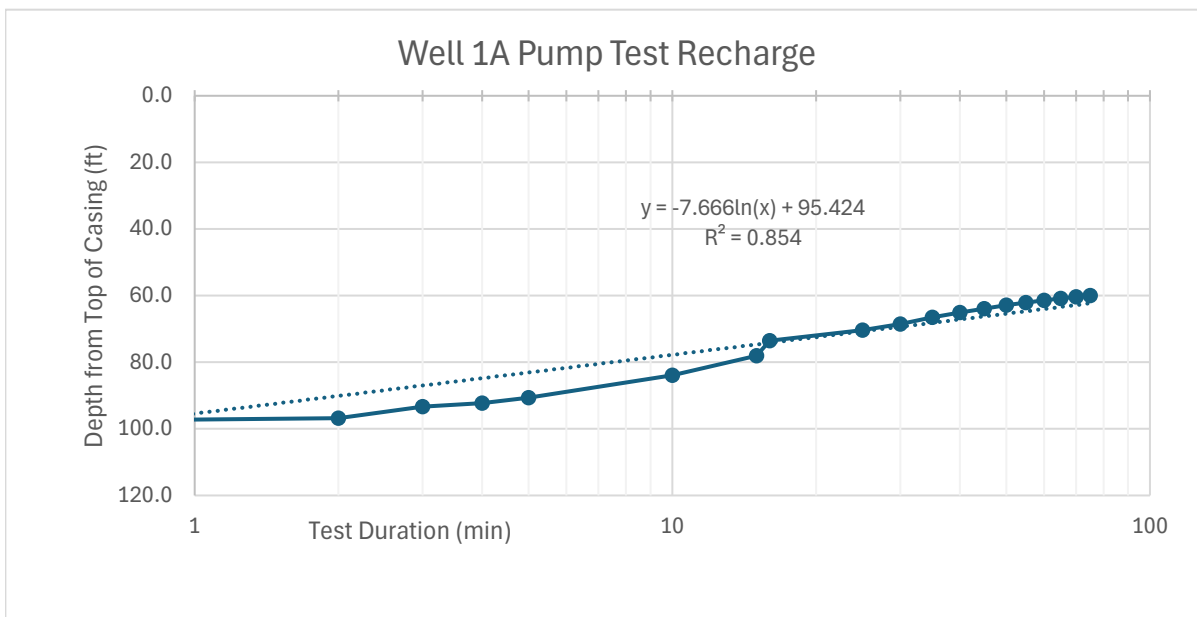
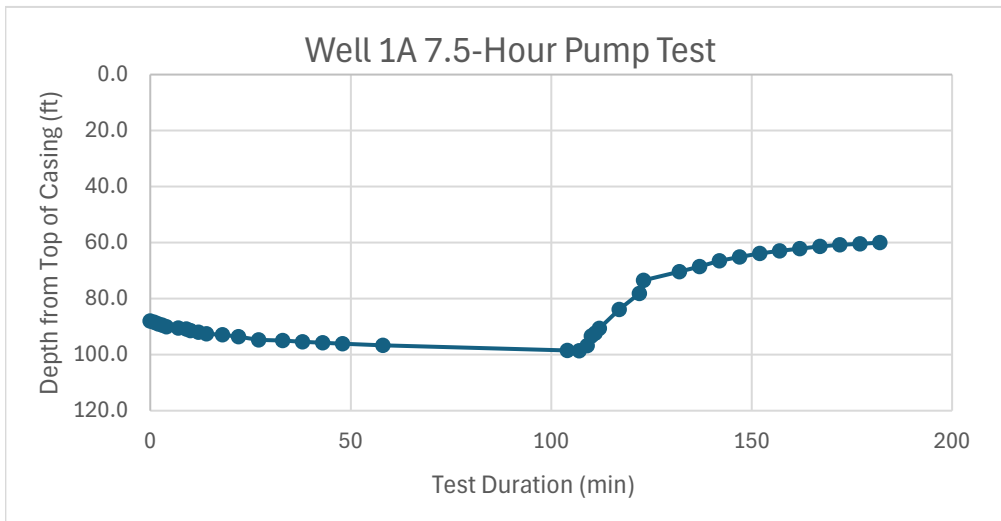
WELL 1A 7.5-HOUR PUMP TEST

Project: Kachemak Selo Water Source Improvements
 Driller: Sullivan Water Wells
 Well: 1A
 Date: March 4, 2026
 Static Water Level: 88.0 ft below top of casing
 Pump: 22 gpm, Grundfos 1.5-inch, 1.5 HP submersible pump (22SQE15-220)
 Pump Set Depth: 100 ft below top of casing
 Pump Rate: 2 gpm
 Duration: 1:44 Hour

Time (24 hr)	Duration (hh:mm)	Water Level (ft btc)	Drawdown (ft)	Rate of Change (ft/min)	Notes
19:52	0	88.0	0.0	0.0	Pumping started, 2 gpm average
19:53	0:01	88.4	0.4	0.4	
19:54	0:02	89.0	0.6	0.6	
19:55	0:03	89.5	0.5	0.5	
19:56	0:04	90.0	0.5	0.5	
19:59	0:07	90.5	0.5	0.2	
20:01	0:09	90.8	0.3	0.1	
20:02	0:10	91.4	0.6	0.6	
20:04	0:12	92.0	0.6	0.3	
20:06	0:14	92.5	0.5	0.3	
20:10	0:18	92.9	0.4	0.1	
20:14	0:22	93.6	0.7	0.2	
20:19	0:27	94.7	1.1	0.2	
20:25	0:33	95.0	0.3	0.0	
20:30	0:38	95.4	0.4	0.1	
20:35	0:43	95.8	0.4	0.1	
20:40	0:48	96.1	0.3	0.1	
20:50	0:58	96.7	0.6	0.1	
21:36	1:44	98.5	1.8	0.0	Water Sample Collected
21:39	1:47	98.6	0.1	0.0	Stopped pumping
21:41	1:49	96.8	-1.8	-0.9	
21:42	1:50	93.3	-3.5	-3.5	
21:43	1:51	92.3	-1.0	-1.0	
21:44	1:52	90.6	-1.7	-1.7	
21:49	1:57	83.9	-6.7	-1.3	
21:54	2:02	78.1	-5.8	-1.2	
21:55	2:03	73.5	-4.6	-4.6	
22:04	2:12	70.4	-3.1	-0.3	

WELL 1A 7.5-HOUR PUMP TEST

Time (24 hr)	Duration (hh:mm)	Water Level (ft btc)	Drawdown (ft)	Rate of Change (ft/min)	Notes
22:09	2:17	68.5	-1.9	-0.4	
22:14	2:22	66.5	-2.0	-0.4	
22:19	2:27	65.1	-1.4	-0.3	
22:24	2:32	63.9	-1.2	-0.2	
22:29	2:37	62.9	-1.0	-0.2	
22:34	2:42	62.1	-0.8	-0.2	
22:39	2:47	61.4	-0.7	-0.1	
22:44	2:52	60.8	-0.6	-0.1	
22:49	2:57	60.4	-0.4	-0.1	
22:54	3:02	60.0	-0.4	-0.1	



Detectable Results Summary

Client Sample ID: **SELO-OIE**

Lab Sample ID: 1256186002

Well 1A

Metals by ICP/MS

<u>Parameter</u>	<u>Result</u>	<u>Units</u>
Aluminum	15100	ug/L
Antimony	2.22	ug/L
Arsenic	69.3	ug/L
Barium	660	ug/L
Beryllium	0.428	ug/L
Cadmium	0.525	ug/L
Calcium	49300	ug/L
Chromium	31.4	ug/L
Cobalt	44.1	ug/L
Copper	53.6	ug/L
Iron	38500	ug/L
Lead	8.21	ug/L
Magnesium	18800	ug/L
Manganese	6180	ug/L
Molybdenum	12.6	ug/L
Nickel	44.5	ug/L
Phosphorus	1740	ug/L
Potassium	11500	ug/L
Selenium	3.05J	ug/L
Silicon	41500	ug/L
Sodium	22300	ug/L
Tin	0.445J	ug/L
Titanium	744	ug/L
Vanadium	59.8	ug/L
Zinc	79.4	ug/L
Total Nitrate/Nitrite-N	0.393	mg/L
Total Suspended Solids	612	mg/L

Waters Department

Print Date: 11/17/2025 3:18:34PM

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Results of SELO-OIE

Client Sample ID: **SELO-OIE** **Well 1A**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186002
 Lab Project ID: 1256186

Collection Date: 10/27/25 16:00
 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	15100		5000	1500	3750	ug/L	100		11/14/25 12:43
Antimony	2.22		1.00	0.310	0.750	ug/L	1		11/14/25 10:58
Arsenic	69.3 *		5.00	1.50	3.75	ug/L	1	(<10)	11/14/25 10:58
Barium	660		30.0	9.40	22.5	ug/L	10	(<2000)	11/14/25 12:40
Beryllium	0.428		0.400	0.130	0.300	ug/L	1		11/14/25 10:58
Cadmium	0.525		0.500	0.150	0.375	ug/L	1	(<5)	11/14/25 10:58
Calcium	49300		500	150	375	ug/L	1		11/14/25 10:58
Chromium	31.4		5.00	2.50	3.75	ug/L	1	(<100)	11/14/25 10:58
Cobalt	44.1		4.00	1.20	3.00	ug/L	1		11/14/25 10:58
Copper	53.6		3.00	1.00	2.25	ug/L	1	(<1000)	11/14/25 10:58
Iron	38500		2500	780	1875	ug/L	10		11/14/25 12:40
Lead	8.21		2.00	0.500	1.50	ug/L	1	(<15)	11/14/25 10:58
Magnesium	18800		50.0	15.0	37.5	ug/L	1		11/14/25 10:58
Manganese	6180		10.0	3.50	7.50	ug/L	10		11/14/25 12:40
Molybdenum	12.6		2.00	0.620	1.50	ug/L	1		11/14/25 10:58
Nickel	44.5		2.00	0.620	1.50	ug/L	1	(<100)	11/14/25 10:58
Phosphorus	1740		200	62.0	150	ug/L	1		11/14/25 10:58
Potassium	11500		500	150	375	ug/L	1		11/14/25 10:58
Selenium	3.05 J		5.00	1.50	3.75	ug/L	1	(<50)	11/14/25 10:58
Silicon	41500		10000	3100	7500	ug/L	10		11/14/25 12:40
Silver	0.750 U		1.00	0.310	0.750	ug/L	1		11/14/25 10:58
Sodium	22300		500	150	375	ug/L	1		11/14/25 10:58
Thallium	0.750 U		1.00	0.310	0.750	ug/L	1		11/14/25 10:58
Tin	0.445 J		1.00	0.310	0.750	ug/L	1		11/14/25 10:58
Titanium	744		250	77.5	188	ug/L	10		11/14/25 12:40
Vanadium	59.8		20.0	6.20	15.0	ug/L	1		11/14/25 10:58
Zinc	79.4		10.0	3.10	7.50	ug/L	1	(<5000)	11/14/25 10:58

Results of SELO-OIE

Client Sample ID: **SELO-OIE**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186002
 Lab Project ID: 1256186

Well 1A

Collection Date: 10/27/25 16:00
 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 10:58
 Container ID: 1256186002-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 12:40
 Container ID: 1256186002-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 12:43
 Container ID: 1256186002-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-OIE

Client Sample ID: **SELO-OIE**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186002
 Lab Project ID: 1256186

Well 1A

Collection Date: 10/27/25 16:00
 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 19:39
1,1,1-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<200)	11/13/25 19:39
1,1,2,2-Tetrachloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,1,2-Trichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:39
1,1-Dichloroethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,1-Dichloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<7)	11/13/25 19:39
1,1-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,2,3-Trichlorobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,2,3-Trichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,2,4-Trichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<70)	11/13/25 19:39
1,2,4-Trimethylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,2-Dibromo-3-chloropropane	1.50	U	2.00	0.620	1.50	ug/L	1		11/13/25 19:39
1,2-Dibromoethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,2-Dichlorobenzene	0.375	U	0.500	0.250	0.375	ug/L	1	(<600)	11/13/25 19:39
1,2-Dichloroethane	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:39
1,2-Dichloropropane	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	11/13/25 19:39
1,3,5-Trimethylbenzene	0.750	U	1.00	0.150	0.750	ug/L	1		11/13/25 19:39
1,3-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1		11/13/25 19:39
1,3-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
1,4-Dichlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<75)	11/13/25 19:39
2,2-Dichloropropane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
2-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
4-Chlorotoluene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
4-Isopropyltoluene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Benzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	11/13/25 19:39
Bromobenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Bromochloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Bromodichloromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Bromoform	0.375	U	0.500	0.250	0.375	ug/L	1		11/13/25 19:39
Bromomethane	2.25	U	3.00	0.940	2.25	ug/L	1		11/13/25 19:39
Carbon tetrachloride	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:39
Chlorobenzene	0.375	U	0.500	0.150	0.375	ug/L	1	(<100)	11/13/25 19:39
Chloroethane	0.750	U	1.00	0.310	0.750	ug/L	1		11/13/25 19:39
Chloroform	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Chloromethane	1.50	U	2.00	0.600	1.50	ug/L	1		11/13/25 19:39
cis-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<70)	11/13/25 19:39
cis-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39

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

J flagging is activated



Results of SELO-OIE

Client Sample ID: **SELO-OIE**
Client Project ID: **Kachemak Wells**
Lab Sample ID: 1256186002
Lab Project ID: 1256186

Well 1A

Collection Date: 10/27/25 16:00
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 19:39
Dibromomethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Dichlorodifluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Ethylbenzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<700)	11/13/25 19:39
Hexachlorobutadiene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Isopropylbenzene (Cumene)	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Methylene chloride	0.375	U	0.500	0.400	0.375	ug/L	1	(<5)	11/13/25 19:39
Methyl-t-butyl ether	0.750	U	1.00	0.310	0.750	ug/L	1		11/13/25 19:39
Naphthalene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
n-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
n-Propylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
o-Xylene	0.375	U	0.500	0.200	0.375	ug/L	1		11/13/25 19:39
P & M -Xylene	0.375	U	0.500	0.400	0.375	ug/L	1		11/13/25 19:39
sec-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Styrene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	11/13/25 19:39
tert-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Tetrachloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	11/13/25 19:39
Toluene	0.375	U	0.500	0.200	0.375	ug/L	1	(<1000)	11/13/25 19:39
Total Trihalomethanes	1.50	U	2.00	0.600	1.50	ug/L	1	(<80)	11/13/25 19:39
trans-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	11/13/25 19:39
trans-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Trichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	11/13/25 19:39
Trichlorofluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		11/13/25 19:39
Vinyl chloride	0.300	U	0.400	0.200	0.300	ug/L	1	(<2)	11/13/25 19:39
Xylenes (total)	0.500	U	0.500	0.500	0.375	ug/L	1	(<10000)	11/13/25 19:39

Surrogates

1,2-Dichloroethane-D4 (surr)	102	70-130	%	1	11/13/25 19:39
4-Bromofluorobenzene (surr)	96.4	70-130	%	1	11/13/25 19:39
Toluene-d8 (surr)	98.5	70-130	%	1	11/13/25 19:39

Batch Information

Analytical Batch: VMS25069
Analytical Method: EPA 524.2
Analyst: NRB
Analytical Date/Time: 11/13/25 19:39
Container ID: 1256186002-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

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

J flagging is activated

SGS North America Inc.

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Results of SELO-OIE

Client Sample ID: **SELO-OIE** **Well 1A**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1256186002
 Lab Project ID: 1256186

Collection Date: 10/27/25 16:00
 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	612	20.0	6.20	15.0	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: 1256186002-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	0.393	0.200	0.0500	0.150	mg/L	2	(<10)	11/12/25 12:48

Batch Information

Analytical Batch: WFI3222
 Analytical Method: SM21 4500NO3-F
 Analyst: DAT
 Analytical Date/Time: 11/12/25 12:48
 Container ID: 1256186002-C

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: Kachemak selo Well Water

Lab Sample ID: 1260798001

Metals by ICP/MS

Parameter	Result	Units
Aluminum	2710	ug/L
Antimony	0.355J	ug/L
Arsenic	9.42	ug/L
Barium	250	ug/L
Calcium	29000	ug/L
Chromium	5.85	ug/L
Cobalt	2.56J	ug/L
Copper	6.69	ug/L
Iron	5310	ug/L
Lead	1.70J	ug/L
Magnesium	7850	ug/L
Manganese	497	ug/L
Molybdenum	4.81	ug/L
Nickel	5.59	ug/L
Phosphorus	806	ug/L
Potassium	9550	ug/L
Silicon	23200	ug/L
Sodium	119000	ug/L
Titanium	190	ug/L
Vanadium	7.54J	ug/L
Zinc	19.2	ug/L

Microbiology Laboratory

E. Coli	Negative	100mL
Total Coliform	Negative	100mL

Volatile GC/MS

Toluene	2.38	ug/L
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Waters (Provisional as of 12/29/25)

Total Nitrate/Nitrite-N	0.0980J	mg/L
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Waters Department

pH	7.6	pH units
Total Dissolved Solids	464	mg/L
Total Suspended Solids	120	mg/L

Sample Summary

<u>Client Sample ID</u>	<u>Lab Sample ID</u>	<u>Collected</u>	<u>Received</u>	<u>Matrix</u>
Kachemak selo Well Water WELL 1A	1260798001	03/04/2026	03/06/2026	Drinking Water
Well Water B WELL 1B	1260798002	03/04/2026	03/06/2026	Drinking Water
Trip Blank	1260798003	03/04/2026	03/06/2026	Drinking Water
Trip Blank	1260798004	03/04/2026	03/06/2026	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 4500-H B	pH Analysis
SM21 9223B	Total Coliform P/A Qualitative
SM21 2540C	Total Dissolved Solids SM18 2540C
SM21 2540D	Total Suspended Solids SM20 2540D
EPA 524.2	Volatile Organics by 524.2 (DW)

Print Date: 03/13/2026 4:17:12PM

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Results of Kachemak selo Well Water

Client Sample ID: Kachemak selo Well Water
 Client Project ID: Kachemak Wells
 Lab Sample ID: 1260798001
 Lab Project ID: 1260798

Collection Date: 03/04/26 20:45
 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	2710		500	150	375	ug/L	10		03/10/26 16:58
Antimony	0.355	J	1.00	0.310	0.750	ug/L	1		03/10/26 16:12
Arsenic	9.42		5.00	1.50	3.75	ug/L	1	(<10)	03/10/26 16:12
Barium	250		3.00	0.940	2.25	ug/L	1	(<2000)	03/10/26 16:12
Beryllium	0.300	U	0.400	0.130	0.300	ug/L	1		03/10/26 16:12
Cadmium	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/10/26 16:12
Calcium	29000		5000	1500	3750	ug/L	10		03/10/26 16:58
Chromium	5.85		5.00	2.50	3.75	ug/L	1	(<100)	03/10/26 16:12
Cobalt	2.56	J	4.00	1.20	3.00	ug/L	1		03/10/26 16:12
Copper	6.69		3.00	1.00	2.25	ug/L	1	(<1000)	03/13/26 11:23
Iron	5310		250	78.0	188	ug/L	1		03/10/26 16:12
Lead	1.70	J	2.00	0.500	1.50	ug/L	1	(<15)	03/10/26 16:12
Magnesium	7850		50.0	15.0	37.5	ug/L	1		03/10/26 16:12
Manganese	497		1.00	0.350	0.750	ug/L	1		03/10/26 16:12
Molybdenum	4.81		2.00	0.620	1.50	ug/L	1		03/10/26 16:12
Nickel	5.59		2.00	0.620	1.50	ug/L	1	(<100)	03/10/26 16:12
Phosphorus	806		200	62.0	150	ug/L	1		03/10/26 16:12
Potassium	9550		500	150	375	ug/L	1		03/10/26 16:12
Selenium	3.75	U	5.00	1.50	3.75	ug/L	1	(<50)	03/10/26 16:12
Silicon	23200		10000	3100	7500	ug/L	10		03/10/26 16:58
Silver	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:12
Sodium	119000		5000	1500	3750	ug/L	10		03/10/26 16:58
Thallium	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:12
Tin	0.750	U	1.00	0.310	0.750	ug/L	1		03/10/26 16:12
Titanium	190		25.0	7.75	18.8	ug/L	1		03/10/26 16:12
Vanadium	7.54	J	20.0	6.20	15.0	ug/L	1		03/10/26 16:12
Zinc	19.2		10.0	3.10	7.50	ug/L	1	(<5000)	03/10/26 16:12

Results of Kachemak selo Well Water

Client Sample ID: Kachemak selo Well Water
 Client Project ID: Kachemak Wells
 Lab Sample ID: 1260798001
 Lab Project ID: 1260798

Collection Date: 03/04/26 20:45
 Received Date: 03/06/26 08:45
 Matrix: Drinking Water
 Solids (%):
 Location:

Results by Metals by ICP/MS

Batch Information

Analytical Batch: MMS13040
 Analytical Method: EP200.8
 Analyst: HBL
 Analytical Date/Time: 03/13/26 11:23
 Container ID: 1260798001-A

Prep Batch: MXX38238
 Prep Method: E200.2
 Prep Date/Time: 03/12/26 10:33
 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 16:12
 Container ID: 1260798001-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 16:58
 Container ID: 1260798001-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

WELL 1A

Results of Kachemak selo Well Water

Client Sample ID: Kachemak selo Well Water
 Client Project ID: Kachemak Wells
 Lab Sample ID: 1260798001
 Lab Project ID: 1260798

Collection Date: 03/04/26 20:45
 Received Date: 03/06/26 08:45
 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		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: 1260798001-H

Results of Kachemak selo Well Water

Client Sample ID: Kachemak selo Well Water

Client Project ID: Kachemak Wells

Lab Sample ID: 1260798001

Lab Project ID: 1260798

Collection Date: 03/04/26 20:45

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

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

J flagging is activated

SGS North America Inc.

200 West Potter Drive Anchorage, AK 95518
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Member of SGS Group

Results of Kachemak selo Well Water

Client Sample ID: Kachemak selo Well Water
 Client Project ID: Kachemak Wells
 Lab Sample ID: 1260798001
 Lab Project ID: 1260798

Collection Date: 03/04/26 20:45
 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 20:06
Dibromomethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Dichlorodifluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Ethylbenzene	0.375	U	0.500	0.200	0.375	ug/L	1	(<700)	03/06/26 20:06
Hexachlorobutadiene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Isopropylbenzene (Cumene)	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Methylene chloride	0.375	U	0.500	0.400	0.375	ug/L	1	(<5)	03/06/26 20:06
Methyl-t-butyl ether	0.750	U	1.00	0.310	0.750	ug/L	1		03/06/26 20:06
Naphthalene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
n-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
n-Propylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
o-Xylene	0.375	U	0.500	0.200	0.375	ug/L	1		03/06/26 20:06
P & M -Xylene	0.375	U	0.500	0.400	0.375	ug/L	1		03/06/26 20:06
sec-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Styrene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	03/06/26 20:06
tert-Butylbenzene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Tetrachloroethene	0.375	U	0.500	0.150	0.375	ug/L	1	(<5)	03/06/26 20:06
Toluene	2.38		0.500	0.200	0.375	ug/L	1	(<1000)	03/06/26 20:06
Total Trihalomethanes	1.50	U	2.00	0.600	1.50	ug/L	1	(<80)	03/06/26 20:06
trans-1,2-Dichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<100)	03/06/26 20:06
trans-1,3-Dichloropropene	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Trichloroethene	0.375	U	0.500	0.200	0.375	ug/L	1	(<5)	03/06/26 20:06
Trichlorofluoromethane	0.750	U	1.00	0.250	0.750	ug/L	1		03/06/26 20:06
Vinyl chloride	0.300	U	0.400	0.200	0.300	ug/L	1	(<2)	03/06/26 20:06
Xylenes (total)	0.500	U	0.500	0.500	0.375	ug/L	1	(<10000)	03/06/26 20:06
Surrogates									
1,2-Dichloroethane-D4 (surr)	106		70-130			%	1		03/06/26 20:06
4-Bromofluorobenzene (surr)	92.2		70-130			%	1		03/06/26 20:06
Toluene-d8 (surr)	95.6		70-130			%	1		03/06/26 20:06

Batch Information

Analytical Batch: VMS25232
 Analytical Method: EPA 524.2
 Analyst: NRB
 Analytical Date/Time: 03/06/26 20:06
 Container ID: 1260798001-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

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

J flagging is activated

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Member of SGS Group

Results of Kachemak selo Well Water

Client Sample ID: **Kachemak selo Well Water**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798001
 Lab Project ID: 1260798

Collection Date: 03/04/26 20:45
 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</u> <u>Limits</u>	<u>Date Analyzed</u>
Total Nitrate/Nitrite-N	0.0980 J	0.200	0.0500	0.150	mg/L	2	(<10)	03/10/26 09:33

Batch Information

Analytical Batch: WFI3246
 Analytical Method: SM21 4500NO3-F
 Analyst: AJP
 Analytical Date/Time: 03/10/26 09:33
 Container ID: 1260798001-C

Results of Kachemak selo Well Water

Client Sample ID: **Kachemak selo Well Water**
 Client Project ID: **Kachemak Wells**
 Lab Sample ID: 1260798001
 Lab Project ID: 1260798

Collection Date: 03/04/26 20:45
 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	464		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: 1260798001-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	120		5.00	1.55	3.75	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: 1260798001-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	7.6		0.100	0.100	0.0750	pH units	1		03/06/26 13:29

Batch Information

Analytical Batch: WTI6846
 Analytical Method: SM21 4500-H B
 Analyst: AJP
 Analytical Date/Time: 03/06/26 13:29
 Container ID: 1260798001-G