

From: [Petrone, Kevin C \(DNR\)](#)
To: [Tucker, Jonathan R \(DNR\)](#)
Cc: [Brooks, Henry C \(DNR\)](#); [Barrett, Tom R \(DNR\)](#)
Subject: RE: RE: Cone of Influence for Water Right Application LAS 35255
Date: Friday, November 22, 2024 3:41:35 PM
Attachments: [Eklutna wells 2.pdf](#)
[image001.png](#)
[eklutna wells.xlsx](#)

Hi Jonathan,

I am away all next week so wanted to give you an assessment of the groundwater yields and potential interactions below. Please see attached xls with well/aquifer details and google map of well locations.

I do not anticipate an interaction between LAS 35310 Bottling Plant and the other three wells in question to the north/east. LAS 35310 well is deeper (215 ft bgs) and separated by confining layer of silt from the other wells with depths ranging from 65 to 80 ft bgs (LAS 28399, LAS 35255, LAS 35281).

The closest distance between wells is ~400 ft from LAS 28399 Eklutna to LAS 35255 Udelhoven. The pump test from LAS 28399 showed 11 ft of drawdown @ 175 gpm while the permitted amount is 70 gpm, and will likely result in less drawdown than observed in the pump test.

Overall, the sand and gravel aquifer (65 to 80 ft bgs) containing wells for LAS 28399, LAS 35255, LAS 35281 appears capable of yielding between 70 to 175 gpm with minimal drawdown. I do not anticipate an overlapping cone of influence between the four wells in question. Also, we can see almost immediate recovery to swl during pump test for LAS 35281. As a result, the aquifer will have ample time to recover between pumping events.

Please let me know if you have additional questions,

-Kevin

From: Tucker, Jonathan R (DNR) <jonathan.tucker@alaska.gov>
Sent: Tuesday, November 19, 2024 9:38 AM
To: Petrone, Kevin C (DNR) <kevin.petrone@alaska.gov>
Cc: Brooks, Henry C (DNR) <henry.brooks@alaska.gov>
Subject: FW: RE: Cone of Influence for Water Right Application LAS 35255

Kevin,

We have another water right application in close proximity to the area of concern we've discussed in Eklutna. The water bottling plant has now applied for their own water right (LAS 35310) from a drilled well, 215 feet deep, within the NE corner of their parcel. They've requested 80,000 gallons/day year-round for the plant. They did not specify whether it's water for bottling or for facilities management (processing machinery). The following list is a breakdown of who is requesting what from where:

File #	Priority Date	Amount	WELTS Log	Depth
Yield	Location			
LAS 28399 (Eklutna Inc)	1/31/2012	30,000 gpd	33444	69' 175
gpm	61.457566N, 149.351288W			
	10/11/2024	<u>+ 70,000 gpd</u>		
		100,000 gpd		
LAS 35255 (Udelhoven)	9/18/2024	115,200 gpd	4008	80' 80
gpm	61.457930N, 149.353552W			
LAS 35281 (Udelhoven)	10/10/2024	100,800 gpd	85112	77' 70
gpm	61.460037N, 149.350011W			
LAS 35310 (Bottling Plant)	11/18/2024	80,000 gpd	Attached	215' 1,000
gpm?	61.458996N, 149.358787W			(see flow test)

I have attached all four associated well logs in hopes that you can determine a cumulative cone of influence for the area. Well log 33444 states that a 24-hour pump test was conducted, with 12 feet of drawdown at 70 gpm. Well logs 85112 and the recently received well log for LAS 35310 both have flow tests attached. As of yet, Udelhoven has not supplied additional data for well log 4008. There also appears to be three other relevant wells in near proximity to these casefiles, WELTS 220, 44337, and 64174.

Please let me know if this is sufficient to determine a cone of influence that may affect these users as well as the well users across the highway.

Thank you,

Jonathan Tucker

Natural Resources Specialist II
 Division of Mining, Land & Water
 Department of Natural Resources
 State of Alaska

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Anchorage, Alaska 99501-3562
Phone: 907-269-8663

From: Tucker, Jonathan R (DNR)
Sent: Friday, October 11, 2024 2:21 PM
To: Petrone, Kevin C (DNR) <kevin.petrone@alaska.gov>
Subject: FW: RE: Cone of Influence for Water Right Application LAS 35255

Kevin,

The cascade effect from the public notice for the application submitted by Eklutna Inc., LAS 28399, has ballooned into something a bit more involved. Udelhoven's application, LAS 35255, was submitted in response to the public notice for LAS 28399. As a result, Udelhoven has submitted a second application (LAS 35281) for another well near the wells for LAS 28399 and LAS 35255. The application for LAS 35281 is requesting 100,800 gallons/day year-round from a drilled well, 77 feet deep, located within Tract 1 of Village South Subdivision, approximately 990 feet northeast of Udelhoven's well associated with LAS 35255 and approximately 930 feet north-northeast of Eklutna's well associated with LAS 28399.

Now, as a result of Udelhoven's subsequent public notice for LAS 35255, Eklutna Inc. has submitted an updated application for LAS 28399, increasing their request to 100,000 gpd from the subject well. This now puts a total potential demand on the associated aquifer at 316,000 gallons/day year-round from three wells within 1,000 feet of each other. Please let me know if this affects how you conduct your review and cone of influence assessment for LAS 35255.

Thanks,

Jonathan Tucker

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From: Tucker, Jonathan R (DNR)
Sent: Thursday, October 10, 2024 10:21 AM
To: Petrone, Kevin C (DNR) <kevin.petrone@alaska.gov>
Subject: RE: Cone of Influence for Water Right Application LAS 35255

Kevin,

A prior appropriator has responded to the public notice for Water Right Application LAS 35255 (Udelhoven) and is requesting drawdown data and a cone of influence for WELTS Well Log # 4008. As for the drawdown information, the well log states that static water level was at 35 feet at time of drilling in 1983, with a 100% drawdown at 4,800 gallons/hour (80 gallons/minute). The well is listed having 10 feet of screening at the bottom of them well (70 to 80 feet deep). This would imply an effective drawdown of 35 feet at the given yield rate at the well site. Both Lesli and I suspect that the subject well is being considered as a purchase site for water for the water bottling plant southwest of the subject well but that has not been confirmed by the applicant.

As for the cone of influence, I will defer to you for the expected zone of influence. The respondent's well is WELTS Well Log 1423 and is approximately 1,600 feet WNW of the subject well. Please let me know what the expected effect might be on the respondent's well and any other wells if additional drawdown is potentially noticeable.

All relevant prior appropriators within ½-mile of the subject well were notified, as well as ADEC-CS, ADEC-DW, ADEC-SW, and MOA/AWWU. I have attached a copy of the respondent's email, as well as copies of the subject application and an email clarifying potential use, for your reference. Please contact me by email with any questions.

Regards,

Jonathan Tucker

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