

From: [Kijun Hong](#)
To: [Campbell, Peter C \(DEC\)](#)
Cc: [Quinn Meehan](#)
Subject: RE: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter
Date: Thursday, June 1, 2023 1:42:30 PM

Hey Pete, please find below the addendum for the 2023 Swanson River Electric Shop GWM Work Plan. As previously discussed, we will forego the well surveys this year.

The monitoring work is scheduled for June 12th and 13th (possible into the 14th if necessary). Well decommissioning will most likely occur in July dependent on the drill rig schedule.

Please let us know if there is anything else we can provide in the meantime.

Thanks!
Kijun

The 2023 Swanson River Field Electric Shop groundwater monitoring will be performed in accordance with the *2021 Groundwater Monitoring Program Work Plan for the Swanson River Field Electric Shop*, dated June 2021 and the recommendations from the *2021 Groundwater Monitoring Program Report for the Swanson River Field Electric Shop*, dated October 2021. Per the 2021 report recommendations, the following activities are proposed during the 2023 event:

- Monitor and remove LNAPL in monitoring wells ESMW-A, KSW-2, and KSW-5. If LNAPL is not observed, sample well(s) for DRO, GRO, petroleum-related VOCs (including BTEX), and PAHs.
- Sample monitoring wells ESMW-1, KSW-1, KSW-4, KSW-6, KSW-7R, and KSW-8 for benzene, ethylbenzene, and naphthalene. Additionally, sample monitoring well KSW-8 for GRO as well.
- Inspect and Gauge all viable monitoring wells to:
 - Document well conditions
 - Create a groundwater contour model for the deep water-bearing interval around former tanks TK-300 and TK-301 (KSW-1, KSW-4, KSW-5, and KSW-6).
 - Create a groundwater contour model for the shallow water-bearing interval around the Electric Shop (ESMW-1, ESMW-3, ESMW-5, KSW-7R, and KSW-8).
- Visually assess the vegetation at and surrounding the Electric Shop site for potential offsite migration of contaminants and focus on signs of stressed vegetation and/or impacts, including any impacts to wetlands and surface water.
- Decommission monitoring wells KSW-3, ESMW-2, and ESMW-4.

Site-specific groundwater monitoring information and 2023 recommendations are summarized in the Well Status Table below.

SRF Electric Shop 2023 Well Status Table

Well ID	Sample ID	QC		2021 Notes	2023 Analysis	Contamination Level (LNAPL, High, Moderate, Low, None)
		Dup	MS/MSD			
ESMW-A	Gauge and Product Recovery			Sock removed prior to groundwater measurement and replaced. Sheen detected with oil-water interface probe – no measurable product.	Gauge and product recovery If no measurable product, sample for: DRO (AK102), GRO (AK101), Petroleum-related VOCs (SW8260D), and PAHs (SW8270SIM)	LNAPL
KSW-1	SRFES-KSW1-23			Soft hit at bottom.	Benzene, ethylbenzene, and naphthalene (SW8260D)	None
KSW-2	Gauge and Product Recovery			Sock replaced. Loose monument and PVC tilted against monument. Soft hit at bottom.	Gauge and product recovery If no measurable product, sample for: DRO (AK102), GRO (AK101), Petroleum-related VOCs (SW8260D), and PAHs (SW8270SIM)	LNAPL
KSW-3	To be decommissioned; severely heaved, can be replaced by ESMW-1 in monitoring program.					
KSW-4	SRFES-KSW4-23		x	Soft hit at bottom.	Benzene, ethylbenzene, and naphthalene (SW8260D)	Low
KSW-5	Gauge and Product Recovery			No product detected, samples collected for the first time.	Gauge and product recovery If no measurable product, sample for: DRO (AK102), GRO (AK101), Petroleum-related VOCs (SW8260D), and PAHs (SW8270SIM)	High
KSW-6	SRFES-KSW6-23			Soft hit at bottom.	Benzene, ethylbenzene, and naphthalene (SW8260D)	Low
KSW-7	Decommissioned in 2021; replaced with KSW-7R.					
KSW-7R	SRFES-KSW7R-23			Installed in 2021 after gauging and sampling activities.	Benzene, ethylbenzene, and naphthalene (SW8260D)	None

KSW-8	SRFES-KSW8-23	x	x (GRO only)	Soft hit at bottom. Well restored to its original flush mount finish.	GRO (AK101), benzene, ethylbenzene, and naphthalene (SW8260D)	Low
ESMW-1	SRFES-ESMW1-23			PVC tilted against monument. Soft hit at bottom.	Benzene, ethylbenzene, and naphthalene (SW8260D)	None
ESMW-2	To be decommissioned.					
ESMW-3	Gauge only		Plug added. Hard hit at bottom.		Gauge only	None
ESMW-4	To be decommissioned.					
ESMW-5	Gauge only		Soft hit, monument lid destroyed, plug placed.		Gauge only	None

Notes:

Monitoring wells in **red bold** type denote wells that historically contained LNAPL.

Monitoring wells in gray bold type denote wells that have been removed from the monitoring program.

Assume monitoring wells have stick-up monuments with 2-inch diameter PVC casing, unless otherwise noted.

Assume monitoring wells are locked, labeled, and have a well plug or cap, unless otherwise noted.

Contamination levels are determined by most recent analytical concentrations available. "LNAPL" = product expected to be present, "High" = more than two exceedances, "Moderate" = two or less exceedances, "Low" = detection(s), "None" = non-detect(s).

Kijun Hong

Office (907) 335-7475

Cell (505) 436-8457

From: Kijun Hong <khong@harvestmidstream.com>

Sent: Friday, May 26, 2023 9:32 PM

To: Campbell, Peter C (DEC) <peter.campbell@alaska.gov>

Cc: Quinn Meehan <Quinn.Meehan@aar.alautfederal.com>

Subject: RE: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter

Great, will do!

We will get you a work plan addendum email for this shortly.

Have a great long weekend!

Kijun

Kijun Hong

Office (907) 335-7475

Cell (505) 436-8457

From: Campbell, Peter C (DEC) <peter.campbell@alaska.gov>

Sent: Friday, May 26, 2023 2:05 PM

To: Kijun Hong <khong@harvestmidstream.com>

Cc: Quinn Meehan <Quinn.Meehan@aar.alautfederal.com>

Subject: RE: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter

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I think that would be ok to skip the survey for now, but as usual look for well damage/frost heave.

Pete Campbell

ADEC Soldotna

From: Kijun Hong <khong@harvestmidstream.com>

Sent: Thursday, May 25, 2023 9:17 AM

To: Campbell, Peter C (DEC) <peter.campbell@alaska.gov>

Cc: Quinn Meehan <Quinn.Meehan@aar.alautfederal.com>

Subject: RE: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter

Great!

One more questions, would you be OK with foregoing the survey this time around and focus on pulling the 3 damaged wells?

Kijun Hong

Office (907) 335-7475

Cell (505) 436-8457

From: Campbell, Peter C (DEC) <peter.campbell@alaska.gov>
Sent: Friday, May 19, 2023 10:56 AM
To: Kijun Hong <khong@harvestmidstream.com>
Subject: RE: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter

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Hello Kijun,
Conducting work under the 2021 work plan is acceptable.
Thank you
Pete Campbell
ADEC Soldotna

From: Kijun Hong <khong@harvestmidstream.com>
Sent: Friday, May 19, 2023 10:01 AM
To: Campbell, Peter C (DEC) <peter.campbell@alaska.gov>
Cc: Quinn Meehan <Quinn.Meehan@aar.alaetfederal.com>
Subject: RE: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter

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Hey Pete,
We are gearing up for our biannual GW Monitoring out at the Swanson River Electric Shop.

Would you be OK with us conducting this work under the 2021 work plan? If so, I can put together a more formal email with a brief addendum for your approval.

Thanks!
Kijun

Kijun Hong
Office (907) 335-7475
Cell (505) 436-8457

From: Campbell, Peter C (DEC) <peter.campbell@alaska.gov>
Sent: Monday, December 20, 2021 3:41 PM
To: Kijun Hong <khong@harvestmidstream.com>
Cc: Kimi Lloyd <klloyd@briceeng.com>
Subject: [EXTERNAL] Swanson River Electrical Shop 2021 Report - ADEC Report Approval Letter

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