

October 25, 2019

Janine Boyette
Response & Remediation SME
Alyeska Pipeline Company

Re: Happy Valley West Monitoring Well Decommissioning Report

Dear Ms. Boyette,

This memorandum describes the decommissioning of three groundwater monitoring wells at the Happy Valley West site (Figure 1). The monitoring wells were decommissioned in accordance with ADEC-approved work plan memorandum dated May 31, 2019 (SLR, 2019). As described in the last monitoring report (SLR, 2018), groundwater hydrocarbon concentrations for wells Sentry-1, Sentry-2, and Sentry-3 (Figure 2) were below ADEC groundwater cleanup levels for four consecutive years and no impacts were observed in surface water for three consecutive years.

Monitoring well decommissioning was conducted in accordance with the *ADEC Monitoring Well Guidance* (ADEC, 2013). Decommissioning included removal of 4-inch polyvinyl chloride (PVC) outer casing 2-inch inner well casing to approximately 0.5 feet below ground surface. The casings were backfilled with 3/8'-inch bentonite chips, with an additional layer of chips added as a surface seal (Attachment 1, Photograph 2). Bentonite was hydrated with water before adding gravel until flush with the surrounding grade. Decommissioning was documented in the field notebook (Attachment 2).

No future activities are planned for the Happy Valley West Site. SLR recommends that Alyeska request conditional site closure with institutional control designation.

Sincerely,

SLR International Corporation



Christophe Venot
Senior Scientist

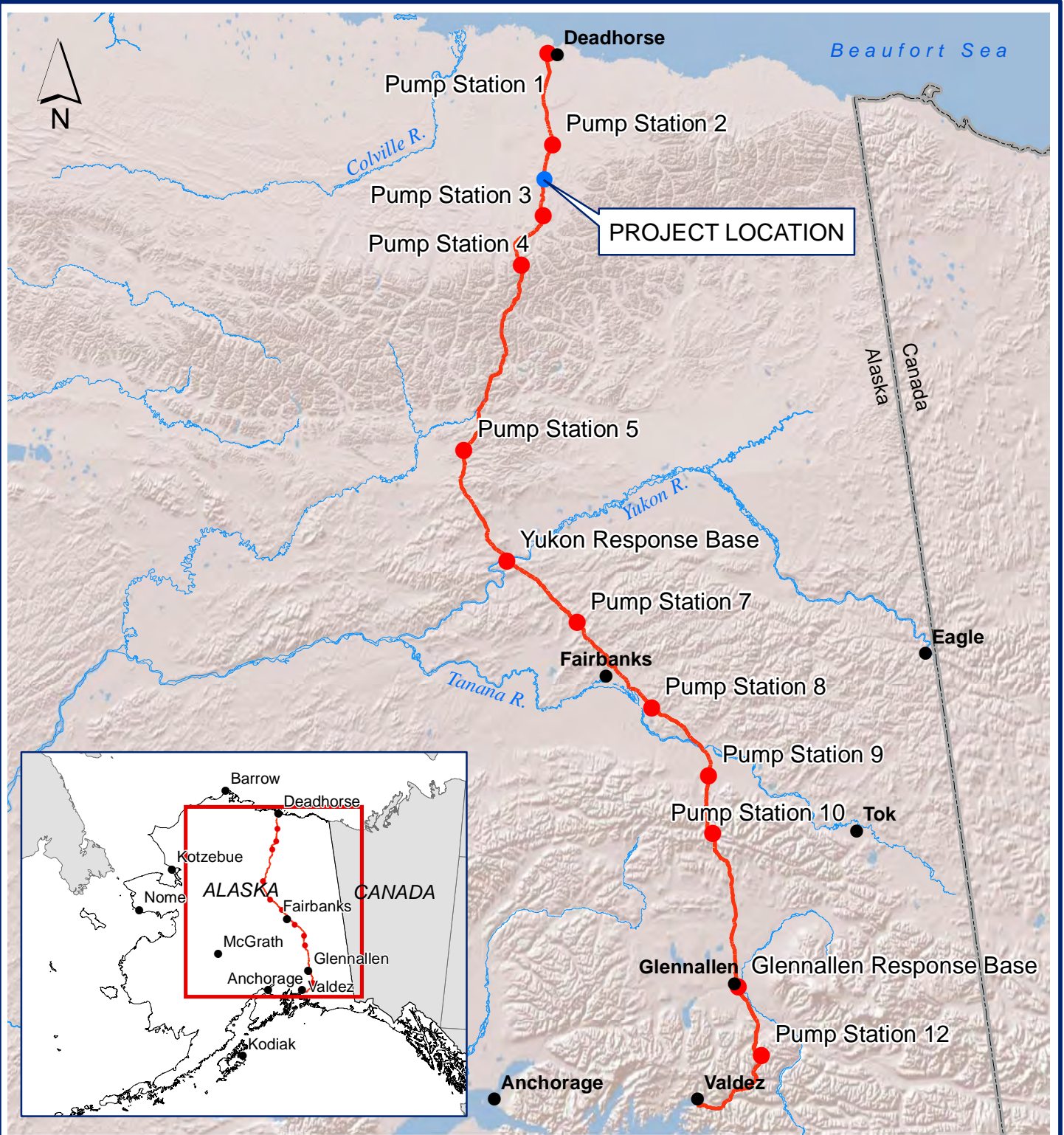


Carl Benson
Principal Scientist

Enc Figure 1: Site Location
 Figure 2: Happy Valley West Monitoring Well Locations
 Attachment 1: Photograph Log
 Attachment 2: Field Notes

References

Alaska Department of Environmental Conservation ADEC, 2013. Alaska Administrative Code (18 AAC 75 and 78), Monitoring Well Guidance. As amended through November.
SLR, 2018. 2017 Water Monitoring Report, Happy Valley West. January.
SLR, 2019. Happy Valley West Monitoring Well Decommissioning Work Plan. May 31.



Legend

- City
- Pump Station
- Trans Alaska Pipeline

0 20 40 80 120 160 Miles

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY.
ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.



Site

ALYESKA PIPELINE SERVICE COMPANY
HAPPY VALLEY WEST
PIPELINE MILEPOST 82

Report

HAPPY VALLEY WEST WELL
DECOMMISSIONING REPORT

Drawing

SITE LOCATION MAP

Drawing

September 2019

File Name

F1 Happy Valley WP_17.mxd

Scale

As Shown

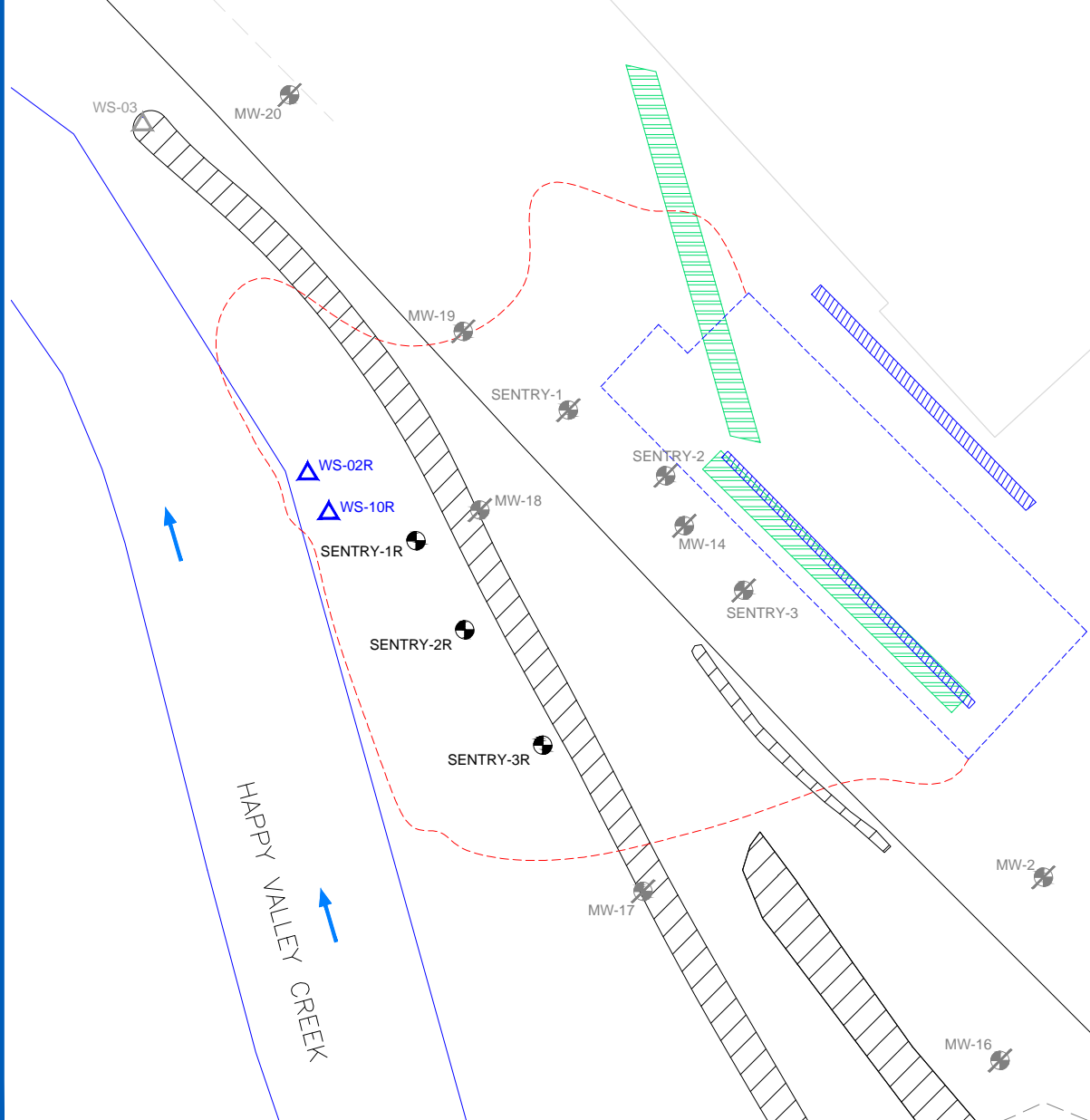
Project No.

105.01288.19038

Fig. No.

1

THIS DRAWING IS FOR CONCEPTUAL PURPOSES ONLY. ACTUAL LOCATIONS MAY VARY AND NOT ALL STRUCTURES ARE SHOWN.



LEGEND

- SURFACE WATER SAMPLE LOCATION
- PREVIOUS SURFACE WATER SAMPLE LOCATION SENTRY
- WELL LOCATION (DECOMMISSIONED IN 2019)
- PREVIOUS MONITORING WELL / SENTRY WELL LOCATION
- 2004 ORC TRENCHES
- 2001 ORC TRENCHES
- 1970'S INTERCEPT TRENCHES
- 2004 EXCAVATION AREA PERIMETER
- 2001 EXCAVATION AREA PERIMETER
- CREEK FLOW DIRECTION

NOTES

PREVIOUS MONITORING WELL, SENTRY WELL, AND SURFACE WATER SAMPLING LOCATIONS HAVE BEEN REMOVED, DECOMMISSIONED, OR DESTROYED AND ARE NO LONGER AVAILABLE FOR SAMPLING.

Site
ALYESKA PIPELINE SERVICE COMPANY
HAPPY VALLEY WEST
PIPELINE MILEPOST 82

Report
HAPPY VALLEY WEST WELL
DECOMMISSIONING REPORT

Drawing
SITE DETAIL

Date September 2019

Scale 1"=40'

Fig. No.

File Name F2 HVW RPT_16

Project No. 105.01288.19038

2



SCALE: 1" = 40'
WHEN PLOTTED AT 11 x 17 PAGE SIZE
0 40' 80' 120'





Photograph 1: Monitoring wells prior to decommissioning, view facing north (August 1, 2017).



PHOTOGRAPH LOG
October 2019

2019 Happy Valley
Well Decommissioning Report

Job No: 105.01288.19038



Photograph 2: Monitoring well Sentry-1R following removal of above-grade PVC and backfilling with bentonite chips (July 11, 2019)



PHOTOGRAPH LOG
October 2019

2019 Happy Valley
Well Decommissioning Report

Job No: 105.01288.19038

C. VENOT / B. STWEEC

13

Happy Valley Well Decom. 7/11/19

1345 - Arrive at Site, Tailgate
Safety (use MLV HSEP).

Sentry-3

Sentry-2

Sentry-1



DTW 7.15

8.85

8.43

TOT 9.20

12.34

10.70

Stitch-
up 3.00

3.55

3.10



1400 - attempt to pull well casings,
hi-lift Jack r/ttn cannot pull well.

1430 - break/cut off 4" and 2" casings
6-8" below ground surface.

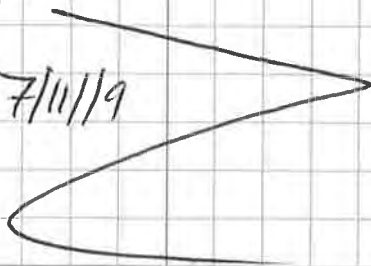
1445 - fill well casing & annular space/
surface with 3/8" chip bentonite

1450 - hydrate bentonite and backfill
with soil/rocks. See photos.

1510 - Depart for P504, End

C. Venot

7/11/19



Rite in the Rain