

Table A1: Monitoring Stations and Frequencies for the 2020 - 2021 Pelly River Aquatics Programs at the Faro Mine Complex

Old Station Name	New Station Name	Description	UTM Coordinates			Notes	Water Quality		Special Tests?	Hydrology
			Easting	Northing	Zone		Sample M42	Sampling Frequency		
A1	AC-SW01	Ank Creek at mouth	549575	692410	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October. Fenox and tri-nitro anilines were added in 2018 in water analysis in 2020	Yes	SA	Fenox/bi-tri-nitro	Y [C] -Minor upgrades to logger housing
C1S1	NW-SW03	MWD Channel downstream of D1-SW02 and NW-SW05 and in confluence with Rose Creek	579480	691462	GOLDR	Station added in April 2018. Winter sampling frequency and sampling parameters in 2020.	Yes	M	Fenox/bi-tri-nitro	Y [M]
C1S2	D1-SW02	MWD Channel downstream of M3 and prior to confluence with MWD channel	579176	691436	GOLDR	Station added in April 2018. Winter sampling frequency and sampling parameters in 2020.	Yes	M	Fenox/bi-tri-nitro	Y [M]
C1S3	NW-SW02	MWD Channel prior to confluence with M3 channel	579235	691480	GOLDR	Station added in April 2018. Winter sampling frequency and sampling parameters in 2020.	Yes	M	Fenox/bi-tri-nitro	Y [M]
FC	FS-SW01	Fan Creek above diversion channel	582363	691975	GOLDR	Winter sampling frequency and parameters in 2020	Yes	M	-	Y [M]
FD-4	FS-SW04	Fan Creek Diversion Channel	582368	691469	GOLDR	Replaced station FRO2 in 2018.	Yes	M	-	Y [M]
GOLV	SF-SW02	South Fork Rose Creek @ Road Road and W Access Road	588671	691786	GOLDR	Station monitored monthly until March 2018. Sampling frequency changed to once a year during the September sampling event.	Yes	A	-	Y [M] (Similar to 2018)
KB	SF-SW03	Recreational Creek @ W Access Road	588438	691031	GOLDR	Station monitored monthly until March 2018. Sampling frequency changed to once a year during the September sampling event.	Yes	A	-	Y [M] (Similar to 2018)
MWD	NW-SW01	North Wall Interceptor upstream of diversion point	582262	691463	GOLDR	Maintain sampling frequency. Flow measurements changed to continuous (during open water) in 2018.	Yes	M	-	Y [C] -Minor upgrades to logger housing
P1	PR-SW01	Pelly River US of Vargata Creek	585919	688474	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October. Fenox and tri-nitro anilines were added in 2018 in water analysis in 2020	Yes	SA	Fenox/bi-tri-nitro	Y [M] (Similar to 2018)
P2	PR-SW02	Pelly River ds of Vargata site	582378	688476	GOLDR	Station was relocated in April 2018 to access contaminated effluent the Pelly River from Vargata Creek. Change frequency to 5 times per year remove November sampling and move September sampling to early October.	Yes	SA	Fenox/bi-tri-nitro	Y [M] (Similar to 2018)
P3	PR-SW03	Pelly River ds of Ank Creek	543732	682244	GOLDR	Station added in 2018 to support the AMP. Redesign access only. Change frequency to 5 times per year remove November sampling and move September sampling to early October.	Yes	SA	Fenox/bi-tri-nitro	Y [M] (Similar to 2018)
P4	PR-SW04	Pelly River ds of Ank Creek	543825	682424	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October.	Yes	SA	Fenox/bi-tri-nitro	Y [M]
R1	SF-SW01	Rose Creek upstream of Pump House Pond	584011	691244	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [C] -Recommended as hydrologic superstation
R3	RC-SW03	Rose Creek between RC-SW04 and RC-SW025	573260	691635	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October. Flow measurements were added in 2018.	Yes	SA	Fenox/bi-tri-nitro	Y [C] [M]
R4	RC-SW05	Rose Creek upstream of Ank Creek	567620	691711	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October. Continuous flow measurements added in 2018.	Yes	SA	Fenox/bi-tri-nitro	Y [C] -Minor upgrades to logger housing
R5	RC-SW03	Ank Creek downstream of Rose Creek	567598	692238	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October.	Yes	SA	Fenox/bi-tri-nitro	Y [C] [M]
R6A	RC-SW04	Ank Creek upstream of Rose Creek	567692	692183	GOLDR	Change frequency to 5 times per year remove November sampling and move September sampling to early October. Continuous flow measurements added in 2018.	Yes	SA	Fenox/bi-tri-nitro	Y [C] -Minor upgrades to logger housing
USFR	SF-SW01	SF Rose @ US Road Rd	588371	691786	GOLDR	Maintain sampling frequency. Monthly flow measurements were added in 2018.	Yes	M	-	Y [M]
Y17A	WCSW02	On Transfer Pad Runoff	591529	690640	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [M]
Z0A	DC-SW01	Down Creek @ of mine effluent	592723	692281	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [M]
V1T	VC-SW03	Vargata Creek just ds of Shimp Cr	591950	691653	GOLDR	Station relocated in 2018 to support the AMP. Redesign access only. Change frequency to 5 times per year remove November sampling and move September sampling to early October.	Yes	SA	-	Y [C] -Minor upgrades to logger housing
V4	DC-SW04	Shimp Creek, east of Vargata Creek	591628	691423	GOLDR	Station relocated in 2018 to support the AMP. Redesign access only. Change frequency to 5 times per year remove November sampling and move September sampling to early October.	Yes	SA	-	Y [C] -Minor upgrades to logger housing
V5	WCSW06	N/E west bank Vargata Creek	598122	690912	GOLDR	Sampling was changed from Parsons in Golden in 2018. Maintain sampling frequency and parameters in 2020.	Yes	M	-	Y [M]
V8	VC-SW05	N/E lower Vargata Creek	594765	690938	GOLDR	Sampling was changed from Parsons in Golden in 2018. Maintain sampling frequency and parameters in 2020.	Yes	M	-	Y [C] [M]
YCAM	VC-SW04	Main Stem Vargata Creek, lower	598761	690427	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [C] [M]
V1R	WCSW01	W Fork of Vargata Creek @ Road	590704	690622	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [C] -needed for AEMP
V1W1	WCSW03	W Fork Vargata Creek @ ds of bridge and ds of Down W17 bridge	598931	690433	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [M]
V1W2	WCSW04	Fin Dewatering Channel West Lake	597280	690731	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [C] [M]
V1W3	WCSW05	W Fork Vargata Creek @ ds of AEG Crank	598099	690615	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [C] [M]
W10	UC-SW01	Upper Garbathouse Creek @ Mill Dump	582330	691580	GOLDR	Maintain sampling frequency and parameters in 2020	Yes	M	-	Y [C] -Minor upgrades to logger housing
W8	UC-SW02	Upper Garbathouse Creek @ ds of Mill Dump	582348	691628	GOLDR	Station relocated in 2018 to support the AMP. Maintain sampling frequency and parameters in 2020.	Yes	M	-	Y [M] (Similar to 2018)
X10	RC-SW010	RDC below weirs	579401	691463	GOLDR	Maintain sampling frequency and parameters in 2020.	Yes	M	Fenox/bi-tri-nitro	Y [M]
X14	RC-SW014	Rose Cr downstream of Redhesion channel	579338	691588	GOLDR	Maintain sampling frequency	Yes	W/DW	Fenox/bi-tri-nitro	Y [C]
X3A	RC-SW001	Rose Creek @ ds of confluence of North and South Forks	582760	691937	GOLDR	Sampling was changed from Parsons in Golden in 2018. Maintain sampling frequency and parameters in 2020.	Yes	M	-	Y [C]
X3B	RC-SW002	Approximate halfway between wells CH15-201-MW03 and CH15-201-MW01	582808	691274	GOLDR	New station added in April 2018. Winter sampling frequency and parameters in 2020.	Yes	M	-	Y [M] (Recommended relocating Pelly Program developer from 2014 to 1514)

Notes:
Seven OTP stations will be sampled in the subzone near the South One Transfer Pad from May to November 2020.



Table A2: Monitoring Stations and Frequencies for the 2020 - 2021 Groundwater Programs at the Faro Mine Complex

Station Name	Reach/Area	Purpose	UTM Coordinates		2020 Sampling Frequency			
			Easting	Northing	Annual Monitoring Sampling Frequency	CWM Program Frequency	Special Tests	Comments
P09-ETA1	ETA/Mill Area	EC	582702	6913809.9	A	-	-	Monitor water quality below ETA
P09-8A	ETA/Mill Area	D	583224	6914074.4	A	-	-	Continue minimal monitoring of groundwater in ETA
P09-8B	ETA/Mill Area	D	583224	6914074.5	A	-	-	Continue minimal monitoring of groundwater in ETA
SRK05-ETA-BR1	ETA/Mill Area	EC	582666	6914021.4	A	-	-	Similar depth and chem to SRK04-3A
SRK05-ETA-BR2	ETA/Mill Area	EC	582882	6914000.1	A	-	-	Continue minimal monitoring of groundwater in ETA
P09-ETA2	ETA/Mill Area	EC	582701	6913807.9	A	-	-	Monitor water quality in bedrock below ETA
BH13B	NFRC Reach	AM, D, C	585750	6914495	4x	-	-	Monitor for AMP event NFRC-2, stable concentrations; increased sampling frequency as per AMP recommendations
BH14A	NFRC Reach	AM, D, C	585583	6914011.8	4x	-	-	Monitor for AMP event NFRC-2, increasing concentrations of diss. Zinc; increased sampling frequency as per AMP recommendations
BH14B	NFRC Reach	AM, D, C	585583	6914011.7	4x	-	-	Monitor for AMP event NFRC-2, increasing concentrations of diss. Zinc;
CH15-107-MW029	NFRC Reach	CWM	585765	6914129.2	A	2x	CWM	Modest impact, stable, will detect metals breakthrough or increased SO4 between NEWRO and NFRC, CWM
CH15-107-MW030	NFRC Reach	CWM	585832	6914180.2	A	2x	CWM	Modest impact, small seasonal variation, stable, CWM
CH15-107-MW032	NFRC Reach	AM	585763	6914249.1	4x	-	-	Monitoring for AMP event NFRC-2, increasing SO4; increased frequency as per AMP recommendations
CH15-107-MW033	NFRC Reach	AM, CWM	585764	6914248	4x	2x	CWM	Monitoring for AMP event NFRC-2, stable concentrations, CWM, increased frequency as per AMP recommendations
CH15-107-MW034	NFRC Reach	AM	585752	6914496.1	4x	-	-	Monitoring for AMP event NFRC-2, stable or decreasing concentrations; increased frequency as per AMP recommendations
CH14-107-MW008A	NFRC Reach	EC	584665	6913000.8	B	-	-	Continue monitoring shallow GW downstream of rock drain; recommendation may change base on conclusion of s-cluster hydrogeology investigation; sampled Sept. 2019
CH14-107-MW008B	NFRC Reach	EC	584666	6913003.3	B	-	-	Continue monitoring shallow GW downstream of rock drain; sampled Sept. 2019
MW14-04S	NFRC Reach	EC	584654	6913323	-	-	-	SO4 high and increasing in rock drain footprint; blocked has not been sampled in last 3 years
MW14-05	NFRC Reach	EC	584693	6913354	-	-	-	SO4 high and increasing in rock drain footprint; blocked has not been sampled in last 3 years
P09-6	NFRC Reach	D, CWM	584904	6913313.1	B	2x	CWM	CWM, Moderate impact, relatively stable. Monitor conditions below Int WRD above haul road; sampled Sept. 2019
CH14-107-MW007A	NFRC Reach	AM, D, P	584491	6913091.3	4x	-	-	Monitoring for AMP event NFRC-5, stable concentrations; increased frequency as per AMP recommendations
CH14-107-MW007B	NFRC Reach	AM, D, P	584489	6913091.9	4x	-	-	Monitoring for AMP event NFRC-5, increasing concentrations of sulphate; increased frequency as per AMP recommendations
CH14-107-MW009	NFRC Reach	D, P, AM, CWM	584499	6913099.1	4x	2x	CWM	Monitoring for AMP event NFRC-5, CWM, increasing conc. Sulphate, diss. iron, and diss. zinc; increased frequency as per AMP recommendations
CH14-107-MW010	NFRC Reach	AM, D, P	584497	6913098.4	4x	-	-	Monitoring for AMP event NFRC-5, increasing conc. sulphate and diss. iron; frozen June 2018 and 2019; frequency reduced to annual
CH15-107-MW019	NFRC Reach	AM, D, P	584288	6912966.2	2x	-	-	Monitoring for AMP event NFRC-4, event currently inactive
CH15-107-MW022	NFRC Reach	D, P	584375	6913049.4	A	-	-	Monitor impact from from WRDs downstream of S-Well. May show increasing impact; decommissioned as part of North Fork Rose Creek Re-alignment construction.
CH15-107-MW023	NFRC Reach	D, P	584119	6912961.9	B	-	-	Unimpacted, senary well. Monitor impact from WRDs downstream of S-wells. Reduce to biennial frequency as per recommendation from 2018 report; sampled Sept. 2019.
CH15-107-MW025	NFRC Reach	D, P	584136	6912881.2	2x	-	-	No obstruction observed 2018, monitoring for AMP NFRC-4, event
CH15-107-MW026	NFRC Reach	D, P	584099	6912930.5	2x	-	-	Monitoring for AMP event NFRC-4
P09-SIS1	NFRC Reach	D, P	584480	6913128.8	A	-	-	SIS performance monitoring, increased SO4 in 2018
P09-SIS3	NFRC Reach	D, P	584496	6913119.1	A	-	-	SIS performance monitoring.
P09-SIS4	NFRC Reach	D, P	584511	6913111.4	A	-	-	Similar in depth, chemistry and location to SRK05-SP4B. Discontinue sampling if similar in 2020. Adequately covered by P09-SIS6 and SRK05-SP4B
P09-SIS6	NFRC Reach	D, P	584519	6913108.7	A	-	-	SIS performance monitoring
P09-7	NFRC Reach	D	584126	6913286.1	A	-	-	Improved in 2009, but may be deteriorating slowly. Monitor conditions at toe of WRD downstream of SIS
S1A	NFRC Reach	AM, D, P	584433	6913116.9	-	-	-	Monitoring for AMP event NFRC-5; destroyed, stable conc.
S1B	NFRC Reach	D, P	584433	6913116.9	-	-	-	SIS performance monitoring, destroyed
S2A	NFRC Reach	AM, D, P	584472	6913118.2	-	-	-	Monitoring for AMP event NFRC-5, increasing conc. of diss. zinc, well found blocked in September 2019; may be able to repair easy because block at 1.57m and no metal casing present.
S2B	NFRC Reach	AM, D, P	584472	6913118.5	4x	-	-	Monitoring for AMP event NFRC-5; increasing conc. of diss. iron and diss. zinc, highly elevated sulphate (max. 12,500 mg/L) and sulphate (max. 1,230 mg/L) for the area.; increased frequency as per AMP recommendations
SRK05-SP1A	NFRC Reach	D, P, CWM	584621	6913075.7	B	A	CWM	CWM; sampled Sept. 2019
SRK05-SP1B	NFRC Reach	D, P, CWM	584621	6913075.9	B	2x	CWM	CWM; sampled Sept. 2019
SRK05-SP2	NFRC Reach	D, P, CWM	584685	6913036.3	B	2x	CWM	CWM; sampled Sept. 2019
SRK05-SP3A	NFRC Reach	D, P, CWM	584545	6913099	B	2x	CWM	CWM; sampled Sept. 2019
SRK05-SP3B	NFRC Reach	D, P	584546	6913098.6	B	-	-	sampled Sept. 2019
SRK05-SP4A	NFRC Reach	D, P, CWM	584506	6913114	2x	2x	CWM	CWM
SRK05-SP4B	NFRC Reach	D, P	584505	6913114.2	2x	-	-	Similar in depth and location to P09-SIS4 but slightly more impacted.
SRK05-SP5	NFRC Reach	D, P	584470	6913131	2x	-	-	Highly impacted; Monitor SIS performance
SRK08-SBR2	NFRC Reach	D, P	584486	6913125.7	A	-	-	Monitor SIS performance. Stable. Small seasonal variation. Reduce to annual.
SRK08-SBR3	NFRC Reach	D, P, CWM	584396	6913151.4	2x	2x	CWM	CWM
SRK08-SBR4	NFRC Reach	D, P	584448	6913139.4	A	-	-	High impact, stable. Monitor SIS performance. Small or inconsistent seasonal variation. Reduce to annual.
SRK08-SP7A	NFRC Reach	D, P	584437	6913095.5	4x	-	-	Monitoring for AMP event NFRC-5, increasing conc. of sulphate, dis. iron and diss. zinc; increased frequency as per AMP recommendations
SRK08-SP7B	NFRC Reach	CWM, AM	584439	6913095	4x	2x	CWM	Monitoring for AMP event NFRC-4, CWM, stable conc.; increased frequency as per AMP recommendations
SRK08-SP8A	NFRC Reach	CWM, AM	584297	6912954.7	-	-	-	Monitoring for AMP event NFRC-4, CWM, event currently inactive; decommissioned as part of North Fork Rose Creek Re-alignment Project
SRK08-SP8B	NFRC Reach	CWM, AM	584296	6912952.3	-	-	-	Monitoring for AMP event NFRC-4, CWM, event currently inactive; decommissioned as part of North Fork Rose Creek Re-alignment Project
BH1	NFRC Reach	C, CWM	585160	6913706	-	-	-	CWM @ monthly until decommissioned; decommissioned winter 2019 as part of NFRC Re-alignment Project

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BH10A	NFRC Reach	D, CWM	585085	6913707.7	B	A	CWM	Part of CWM; sampled Sept. 2019
BH10B	NFRC Reach	D, CWM	585085	6913707.6	B	A	CWM	Part of CWM; sampled Sept. 2019
BH2	NFRC Reach	CWM	585100	6913697.8	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
BH5	NFRC Reach	D, CWM	585088	6913552.1	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
BH6	NFRC Reach	D, CWM	585092	6913641.4	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
BH8	NFRC Reach	D	585144	6913777.5	A	-	-	Key well in Zone II Outwash, increasing trends
CH14-107-MW001	NFRC Reach	CWM	585079	6913406.2	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW002	NFRC Reach	CWM	585078	6913510.8	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW003	NFRC Reach	EC, D	585088	6913591.1	-	-	-	Deep sentry well - currently unimpacted; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW004	NFRC Reach	EC, D	585098	6913607.2	-	-	-	Deep sentry well - currently unimpacted; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW005A	NFRC Reach	CWM	585163	6913656.7	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW005B	NFRC Reach	CWM	585161	6913654.5	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW006A	NFRC Reach	CWM	585105	6913575.2	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
CH14-107-MW006B	NFRC Reach	CWM	585106	6913578	-	-	-	CWM @ monthly until destroyed; decommissioned winter 2019 as part of NFRC Realignment Project
PO5-04	NFRC Reach	D, CWM	585118	6913650	B	2x	CWM	CWM; sampled Sept. 2019
SRK08-P12A	NFRC Reach	D, P	585229	6913689.1	-	-	-	Decommissioned March 2019 as part of NFRC Realignment Project
SRK08-P12B	NFRC Reach	D, P	585227	6913690.5	-	-	-	Decommissioned March 2019 as part of NFRC Realignment Project
BH-BGC18-017	NFRC Reach	CWM, D	585870	6914254.9	-	-	2x CWM	CWM
BH-BGC18-01S	NFRC Reach	CWM, D	585060	6913407	A	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-02	NFRC Reach	CWM, D	585059	6913493	A	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-03S	NFRC Reach	CWM, D	585049	6913555	B	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-03D	NFRC Reach	EC	585049	6913555	2x	-	-	Replacement well for CH14-107-MW003/MW004; Frozen June and Sept 2019; continue to monitor 2x
BH-BGC18-04S	NFRC Reach	CWM, D	585081	6913647	-	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-04D	NFRC Reach	CWM, D	585082	6913649	-	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-05S	NFRC Reach	CWM, D	585085	6913701	-	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-06S	NFRC Reach	CWM, D	585150	6913695	A	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
BH-BGC18-06D	NFRC Reach	CWM, D	585152	6913697	-	4x	CWM	Replacement wells in Zone II Outwash. To be monitored monthly until October 2019.
CH15-201-MW001	Rose Creek Valley	EC, P	582678	6912846	A	-	-	Frozen in June 2018 and 2019 therefore frequency reduced to annual sampling
CH15-201-MW002	Rose Creek Valley	EC, P	582669	6912834.6	A	-	-	Frozen in June 2018 and 2019 therefore frequency reduced to annual sampling
CH15-201-MW003	Rose Creek Valley	EC, P	582970	6912673.6	A	-	-	Frozen in June 2018 and 2019 therefore frequency reduced to annual sampling
CH15-201-MW004	Rose Creek Valley	EC, P	582961	6912664.3	A	-	-	Frozen in June 2018 and 2019 therefore frequency reduced to annual sampling
CH15-201-MW005	Rose Creek Valley	EC, P	583152	6912564	2x	-	-	Monitoring another year at 2x monitoring to evaluate seepage to RCD. Could reduce to low wells after 2020 if data needs satisfied
CH15-201-MW006	Rose Creek Valley	EC, P	583151	6912560	2x	-	-	Monitoring another year at 2x monitoring to evaluate seepage to RCD. Could reduce to low wells after 2020 if data needs satisfied
MW-17-24	Rose Creek Valley	D, P	582963	6912663	4x	-	-	Frozen June 2018 and 2019; SO4 increase Sept - Dec. Possible seasonal variation therefore frequency kept; you want to consider reducing here
MW-17-25	Rose Creek Valley	D, P	583153	6912549	4x	-	-	Seasonal differences, sample 4x.
CH12-204-MW005A	Rose Creek Valley	EC, D	579455	6914978.1	B	-	-	Similar in location and depth to MW-17-01S; sampled Sept. 2019
CH12-204-MW005B	Rose Creek Valley	EC, D	579458	6914977	B	-	-	Similar in location and depth to MW-17-01S; sampled Sept. 2019
CH12-204-MW006A	Rose Creek Valley	EC, D	579346	6915089.7	B	-	-	Furthest downgradient well - Sentinel well. Continue monitoring biennially to delineate extent of plume; sampled Sept. 2019
CH12-204-MW006B	Rose Creek Valley	EC, D	579348	6915088.3	B	-	-	Furthest downgradient well - Sentinel well. Continue monitoring biennially to delineate extent of plume; sampled Sept. 2019
P01-01A	Rose Creek Valley	EC, D	579700	6914854.7	2x	-	-	Keep high sampling density in down valley area to support SIS design
P01-01B	Rose Creek Valley	EC, D	579700	6914854.7	2x	-	-	Keep high sampling density in down valley area to support SIS design
X16A	Rose Creek Valley	EC, D	579446	6914841.6	A	-	-	Keep high sampling density in down valley area to support SIS design
X16B	Rose Creek Valley	EC, D	578446	6914841.7	A	-	-	Keep high sampling density in down valley area to support SIS design
X17A	Rose Creek Valley	D, AM	579756	6914647.7	2x	-	-	Monitoring for AMP event RC-3; increasing conc. SO4
X17B	Rose Creek Valley	D, AM	579756	6914646.5	2x	-	-	Monitoring for AMP event RC-3; increasing SO4 and diss. Fe
X18A	Rose Creek Valley	D, AM	579986	6914713	2x	-	-	Monitoring for AMP event RC-3; increasing SO4 and diss. Fe
X18B	Rose Creek Valley	D, AM	579986	6914713.1	2x	-	-	Monitoring for AMP event RC-3; increasing SO4
MW-17-01D	Rose Creek Valley	D	579516	6914962	4x	-	-	Little seasonal variation, keep at 4x to develop sampling record; AMP event; if still little seasonal variation after 2020 consider reducing frequency
MW-17-01M	Rose Creek Valley	D	579516	6914962	4x	-	-	Little seasonal variation, keep at 4x to develop sampling record; if still little seasonal variation after 2020 consider reducing
MW-17-01S	Rose Creek Valley	D	579518	6914962	4x	-	-	Some seasonal variation, keep at 4x to develop sampling record; if still little seasonal variation after 2020 consider reducing
MW-17-02D	Rose Creek Valley	D	579499	6914895	4x	-	-	Frozen June 2018 and 2019, reduced to 3x to develop sampling record.
MW-17-02M	Rose Creek Valley	D	579499	6914895	4x	-	-	Frozen June 2018 and 2019, reduced to 3x to develop sampling record.
MW-17-02S	Rose Creek Valley	D	579498	6914894	4x	-	-	Little seasonal variation, keep at 4x to develop sampling record.
MW-17-03D	Rose Creek Valley	D	579700	6914781	4x	-	-	keep at 4x to develop sampling record and accommodate seasonal differences.
MW-17-03M	Rose Creek Valley	D	579700	6914781	4x	-	-	keep at 4x to develop sampling record and accommodate seasonal differences.

Table A2: Monitoring Stations and Frequencies for the 2020 - 2021 Groundwater Programs at the Faro Mine Complex

Station Name	Reach/Area	Purpose	UTM Coordinates		2020 Sampling Frequency			
			Eastings	Northing	Annual Monitoring Sampling Frequency	CMM Program Frequency	Special Tests	Comments
MW-17-03S	Rose Creek Valley	D	579702	6914779	4x	-	-	Keep at 4x to develop sampling record and accommodate seasonal differences.
MW-17-04D	Rose Creek Valley	D	579646	6914709	4x	-	-	Keep at 4x to develop sampling record and accommodate seasonal differences.
MW-17-04S	Rose Creek Valley	D	579646	6914709	4x	-	-	Keep at 4x to develop sampling record and accommodate seasonal differences.
MW-17-05D	Rose Creek Valley	D	579561	6914583	4x	-	-	Frozen June 2018; little variation Sept - Dec; sampled June 2019 keep at 4x to develop sampling record.
MW-17-05S	Rose Creek Valley	D	579561	6914583	4x	-	-	Frozen June 2018, little variation Sept - Dec, keep at 4x to develop sampling record; dry during fall and spring 2019 sampling events.
MW-17-06D	Rose Creek Valley	AM, D	579836	6914717	4x	-	-	Included in AMP event RC-3; no trends based on limited data, keep at 4x to help understand seasonal variability.
MW-17-06M	Rose Creek Valley	AM, D	579836	6914717	4x	-	-	Included in AMP event RC-3; no trends based on limited data, keep at 4x to help understand seasonal variability.
MW-17-06S	Rose Creek Valley	AM, D	579835	6914715	4x	-	-	Included in AMP event RC-3; no trends based on limited data, replacement well be needed to help understand seasonal variability; not sampled since February 2019 due to damage.
MW-17-07D	Rose Creek Valley	AM, D	579750	6914581	4x	-	-	Included in AMP event RC-3; no trends based on limited data, keep at 4x to help understand seasonal variability.
MW-17-07S	Rose Creek Valley	AM, D	579750	6914581	4x	-	-	Included in AMP event RC-3; no trends based on limited data, keep at 4x to help understand seasonal variability.
MW-17-08D	Rose Creek Valley	AM, D	579904	6914507	4x	-	-	Included in AMP event RC-3; no trends based on limited data, keep at 4x to help understand seasonal variability.
MW-17-08M	Rose Creek Valley	D	579904	6914507	4x	-	-	Keep at 4x to develop sampling record.
MW-17-08S	Rose Creek Valley	AM, D	579903	6914506	4x	-	-	Included in AMP event RC-3; no trends based on limited data, keep at 4x to help understand seasonal variability; PVC loose should be fixed, damage did not prevent sample collection.
MW-17-09D	Rose Creek Valley	AM, D	579867	6914417	4x	-	-	Included in AMP event RC-3; frozen in Jun. and Sept. 2018 and Sept. 2019, keep at 4x to determine if thaw pattern; thawed June 2019.
MW-17-09S	Rose Creek Valley	AM, D	579867	6914417	4x	-	-	Included in AMP event RC-3 @ 2x; frozen during 2018, frozen in Jun. 2019, sampled in Sept. 2019. keep at 4x to determine if thawed at any point in year.
MW-17-10D	Rose Creek Valley	AM, D	579818	6914334	4x	-	-	Included in AMP event RC-3 @ 2x. Keep at 4x to develop sampling record.
MW-17-10S	Rose Creek Valley	AM, D	579818	6914334	4x	-	-	Included in AMP event RC-3 @ 2x. Keep at 4x to develop sampling record.
MW-17-11D	Rose Creek Valley	D	579722	6914830	4x	-	-	Frozen June 2018 and 2019; increase in SO4 from Sept - Dec. Keep at 4x to see if well thaws in June 2020.
MW-17-11S	Rose Creek Valley	D	579722	6914830	4x	-	-	Frozen June 2018 and 2019. Juen event removed; little variation Sept - Dec. Keep at 3x to develop sampling record.
MW-17-12D	Rose Creek Valley	D	579672	6914741	4x	-	-	Frozen June 2018 and 2019. Juen event removed consider reducing spring sampling event. keep at 3x to develop sampling record.
MW-17-12M	Rose Creek Valley	D	579672	6914741	4x	-	-	Frozen June, Dec 2018, and June 2019, June event removed. Keep at 3x to develop sampling record.
MW-17-12S	Rose Creek Valley	D	579672	6914741	4x	-	-	Frozen June, Dec 2018 and June 2019, June event removed. Keep at 3x to develop sampling record.
MW-17-21D	Rose Creek Valley	D	579592	6915087	4x	-	-	Chronically dry. Check 2020 and consider reducing frequency if dry in 2020.
MW-17-21S	Rose Creek Valley	D	579592	6915087	4x	-	-	Chronically dry. Check 2020 and consider reducing frequency if dry in 2020.
MW18-30	Rose Creek Valley	D, P	579581	6915093.7	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-31S	Rose Creek Valley	D, P	579526	6915001.4	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-31D	Rose Creek Valley	D, P	579526	6915001.3	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-33S	Rose Creek Valley	D, P	579815	6914987.5	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-33D	Rose Creek Valley	D, P	579815	6914987.6	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-34S	Rose Creek Valley	D, P	579797	6914874	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-34D	Rose Creek Valley	D, P	579797	6914874	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-36S	Rose Creek Valley	D, P	580013	6914871.2	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-36D	Rose Creek Valley	D, P	580013	6914871.3	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-37S	Rose Creek Valley	D, P	579892	6914769.9	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-37D	Rose Creek Valley	D, P	579892	6914769.9	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-32	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.
MW18-35	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year.

Table A2: Monitoring Stations and Frequencies for the 2020 - 2021 Groundwater Programs at the Faro Mine Complex

Station Name	Reach/Area	Purpose	UTM Coordinates		2020 Sampling Frequency			
			Easting	Northing	Annual Monitoring Sampling Frequency	CIWM Program Frequency	Special Tests	Comments
MW18-38S	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year
MW18-38D	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year
MW18-39S	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year
MW18-39D	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year
MW18-40S	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year
MW18-40D	Rose Creek Valley	D, P	-	-	4x	-	-	New wells in the down valley area to support design, construction and monitoring of the down valley SIS. Re-evaluate sampling frequency after 1 year
P01-03	Rose Creek Valley	EC, D	580520	6914253	2x	-	-	Key well - rapidly increasing SO4, Zn
P01-04A	Rose Creek Valley	EC, D	580377	6914074.9	A	-	-	Relabel - switched with P01-04B, frozen June 2017, 2018 and 2019 therefore reduced to annual
P01-04B	Rose Creek Valley	EC, D	580377	6914075	A	-	-	Relabel - switched with P01-04A, reduce to annual, often frozen in June and little seasonal variation
X24-96D	Rose Creek Valley	EC, D	580549	6914299.2	2x	-	-	Key well - rapidly increasing SO4, Zn
X25-96A	Rose Creek Valley	EC, D	580415	6914121.1	2x	-	-	Increasing metals, SO4 stable
X25-96B	Rose Creek Valley	EC, D	580415	6914121.1	A	-	-	Increasing SO4, metals stable, little seasonal variation
CH13-204-MW016B	Rose Creek Valley		581026	6914159.5	A	-	-	Added to program to support geochemical modeling as request of SRK; frozen in Sept. 2019
X21-96A	Rose Creek Valley	EC	581885	6913592.1	A	-	-	Monitor source area (tailings). Support Geochemical modeling. Increased to annual at SRK request.
X21-96B	Rose Creek Valley	EC	581885	6913592.1	A	-	-	Monitor source area (tailings). Support Geochemical modeling. Increased to annual at SRK request.
MW-17-13D	Rose Creek Valley	D, P	582193	6913072	4x	-	-	Slight downward trend in SO4 over 2018. Reduce to key wells after secondary dam seepage evaluated.
MW-17-13S	Rose Creek Valley	D, P	582193	6913072	4x	-	-	Slight upward trend in SO4 over 2018. Reduce to key wells after secondary dam seepage evaluated.
MW-17-14D	Rose Creek Valley	D, P	582369	6913023	4x	-	-	Strong upward trend in SO4 over 2019. Reduce to key wells after secondary dam seepage evaluated.
MW-17-14S	Rose Creek Valley	D, P	582369	6913023	4x	-	-	Strong upward trend in SO4 over 2019. Reduce to key wells after secondary dam seepage evaluated.
MW-17-15D	Rose Creek Valley	D, P	582485	6912965	4x	-	-	little variation Sept-Dec. Reduce to key wells after secondary dam seepage evaluated.
MW-17-15S	Rose Creek Valley	D, P	582485	6912965	-	-	-	Blocked or frozen, attempt again in 2019 then consider removing from program.
CH14-015-MW001A	Rose Creek Valley	EC, D	582626	6913602.6	A	-	-	Monitor source area (tailings). Increased to annual to support geochemical modeling (SRK)
CH14-015-MW001C	Rose Creek Valley	EC, D	582624	6913600.6	A	-	-	Monitor source area (tailings)
CH14-015-MW002A	Rose Creek Valley	EC, D	582716	6913503.4	A	-	-	Monitor source area (tailings). Increased to annual to support geochemical modeling (SRK)
P03-01-02	Rose Creek Valley	D	583197	6912754.8	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-01-04	Rose Creek Valley	EC	583197	6912754.8	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-01-06	Rose Creek Valley	EC	583184	6912761.4	A	-	-	Monitor source area (tailings). Support Geochemical modeling
P03-01-07	Rose Creek Valley	EC	583184	6912761.4	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-01-08	Rose Creek Valley	EC	583184	6912761.4	A	-	-	Monitor source area (tailings). Support Geochemical modeling
P03-01-09	Rose Creek Valley	EC	583184	6912761.5	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK)
P03-02-03	Rose Creek Valley	EC	583018	6912753.2	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-02-04	Rose Creek Valley	EC	583018	6912753.2	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-02-05	Rose Creek Valley	EC	583018	6912753.2	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-02-07	Rose Creek Valley	EC	583018	6912753.2	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK)
P03-02-09	Rose Creek Valley	EC	583018	6912753.2	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK)
P03-03-02	Rose Creek Valley	EC	582950	6912879.9	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-03-04	Rose Creek Valley	EC	582950	6912879.9	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-03-06	Rose Creek Valley	EC	582950	6912879.9	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); insufficient volume Sept. 2019
P03-03-08	Rose Creek Valley	EC	582950	6912879.9	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK); insufficient volume Sept. 2019
P03-03-09	Rose Creek Valley	EC	582950	6912879.9	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK); insufficient volume Sept. 2019
P03-04-08	Rose Creek Valley	EC	581968	6913366.9	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK)
P03-05-02	Rose Creek Valley	EC	582488	6913115.3	A	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK)
P03-05-04	Rose Creek Valley	EC	582488	6913115.3	A	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK)
P03-05-05	Rose Creek Valley	EC	582488	6913115.2	A	-	-	Monitor source area (tailings). Support Geochemical modeling
P03-05-06	Rose Creek Valley	EC	582488	6913115.2	A	-	-	Added back to program to support geochemical modeling and evolution of source area (SRK)

Table A2: Monitoring Stations and Frequencies for the 2020 - 2021 Groundwater Programs at the Faro Mine Complex

Station Name	Reach/Area	Purpose	UTM Coordinates		2020 Sampling Frequency			Comments
			Easting	Northing	Annual Monitoring Sampling Frequency	CWM Program Frequency	Special Tests	
P03-05-08	Rose Creek Valley	EC	582488	6913115.2	A	-	-	Monitor source area (tailings). Support Geochemical modeling; insufficient volume Sept. 2019
P03-06-01	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-06-02	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); sampled Sept. 2019
P03-06-03	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); insufficient volume Sept. 2019
P03-06-04	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Monitor source area (tailings). Support Geochemical modeling; insufficient volume Sept. 2019
P03-06-05	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Important well for understanding of breakthrough of tailings into aquifer (added for SRK); insufficient volume Sept. 2019
P03-06-06	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Monitor source area (tailings). Support Geochemical modeling; kept at background level volume Sept. 2019
P03-06-07	Rose Creek Valley	EC	582454	6913490.3	B	-	-	Monitor source area (tailings). Support Geochemical modeling; insufficient volume Sept. 2019
P01-02A	Rose Creek Valley	EC,D	579962	6914224.4	2x	-	-	Keep high density in down valley area to support SIS design
P01-02B	Rose Creek Valley	EC,D	579962	6914224.5	2x	-	-	Keep high density in down valley area to support SIS design; pur riser PVC; flowline wellhead above MCL 4.001.026
P01-11	Rose Creek Valley	AM, D	580095	6914487.5	2x	-	-	Key well at toe of CVD; keep high density to support SIS design
P03-09-02	Rose Creek Valley	AM, D	579948	6914409.9	2x	-	-	Monitoring for AMP event RC-3; increasing conc. SO4 and diss. Fe
P03-09-04	Rose Creek Valley	AM, D	579948	6914410	2x	-	-	Monitoring for AMP event RC-3; increasing conc. SO4
P03-09-06	Rose Creek Valley	AM, D	579948	6914410	-	-	-	Monitoring for AMP event RC-3; increasing conc. SO4; blocked Sept. 2019
P03-09-08	Rose Creek Valley	AM, D	579948	6914409.9	2x	-	-	Monitoring for AMP event RC-3; increasing conc. SO4
P03-09-09	Rose Creek Valley	AM, D	579948	6914410	2x	-	-	Monitoring for AMP event RC-3; increasing conc. SO4
P05-01-01	Rose Creek Valley	AM, D	580059	6914510	2x	-	-	
P05-01-03	Rose Creek Valley	AM, D	580061	6914509.5	2x	-	-	
P05-01-05	Rose Creek Valley	D	580061	6914509.5	A	-	-	Chemistry is very similar to P05-01-03. Monitoring annually.
P05-02	Rose Creek Valley	AM, D	580038	6914439.7	4x	-	-	Key well at toe of CVD. Keep high density to support SIS design. Deteriorating WQ but limited seasonal variation. Frozen past 3 years during June sampling event; reduce sampling frequency to fall only.
P05-03	Rose Creek Valley	EC, D	579982	6914346.1	2x	-	-	Key well at toe of CVD. Keep high density to support SIS design. Deteriorating WQ.
TH86-17	Rose Creek Valley	EC	583845	6912658.9	B	-	-	Upgradient well to provide background conditions; sampled Sept. 2019
TH86-2	Rose Creek Valley	EC	583537	6912494.1	A	-	-	Continue annual monitoring to evaluate slight elevation in SO4.
TH86-5	Rose Creek Valley	EC	583591	6912570.4	B	-	-	Upgradient well to provide background conditions; sampled Sept. 2019
P09-GS1A	Grum Mine Site	D	592485	6904832.4	A	-	-	Monitor water quality below Grum Pit
P09-GS1B	Grum Mine Site	D	592487	6904833.1	A	-	-	Monitor water quality below Grum Pit
P96-9A	Grum Mine Site	D	592650	6903346.8	2x	-	-	Zinc increasing. SO4 relatively stable. Monitor water quality below Grum WRD
SRK05-05C	Grum Mine Site	EC,D	592767	6903383.5	B	-	-	Little impact; relatively stable. Monitor water quality below Grum WRD; sampled Sept. 2019
SRK05-07	Grum Mine Site	EC,D	592371	6903186.6	A	-	-	SO4 increasing slowly; monitor water quality below Grum WRD; continue to monitor annual; insufficient volume to sample Sept. 2019
SRK05-08	Grum Mine Site	EC,D	592584	6903238.4	A	-	-	SO4 increasing slowly; monitor water quality below Grum WRD
SRK08-P14	Grum Mine Site	EC	591763	6903698.8	B	-	-	Continue monitoring below Grum WRD; sampled Sept. 2019
SRK08-P15	Grum Mine Site	EC	591963	6903534.1	B	-	-	Continue monitoring below Grum WRD; dry Sept. 2019
SRK08-P16	Grum Mine Site	EC	592204	6903146.6	B	-	-	Continue monitoring below Grum WRD; consistently dry; continue to monitoring biennial
BH05-9B-R	Grum Mine Site	D			B	-	-	Unimpacted. Monitor bedrock water quality below Grum WRD
P09-LCD1	Vangorda Mine Site	D	593362	6903313.3	A	-	-	Monitor groundwater quality below little creek dam; most impacted of LCD wells
P09-LCD4	Vangorda Mine Site	D	593330	6903271.9	-	-	-	Monitor groundwater quality below little creek dam; well blocked Sept. 2019
P09-LCD6	Vangorda Mine Site	D	593315	6903248.3	A	-	-	Monitor groundwater quality below little creek dam
P09-VC1	Vangorda Mine Site	D	593521	6903419.1	B	-	-	Monitor water quality downgradient of Vangorda Pit; sampled Sept. 2019
P09-VC2	Vangorda Mine Site	D	593518	6903431.1	B	-	-	Monitor water quality downgradient of Vangorda Pit; sampled Sept. 2019
P2001-02A	Vangorda Mine Site	D	593134	6902864.9	2x	-	-	Continue monitoring below Vangorda WRD
P2001-02B	Vangorda Mine Site	D	593135	6902864.4	2x	-	-	Continue monitoring below Vangorda WRD
P2001-03	Vangorda Mine Site	D	593099	6902881.9	B	-	-	Continue monitoring below Vangorda WRD; out of reach of hydrofract Sept. 2019
V34	Vangorda Mine Site	EC	593431	6902476.6	A	-	-	Monitor water quality at toe of Vangorda WRD
V35	Vangorda Mine Site	EC	593180	6902555.1	A	-	-	Monitor water quality at toe of Vangorda WRD
V36	Vangorda Mine Site	EC	593137	6902937.7	A	-	-	Monitor water quality at toe of Vangorda WRD
V37	Vangorda Mine Site	EC	593314	6903080.9	A	-	-	Monitor water quality at toe of Vangorda WRD

Notes:

New naming convention will be used and station names will be updated on the Proposal for 2021-2022

CWMP = Contact Water Monitoring Plan

WRD = Waste Rock Dump

SIS = Seepage Interception System

Purpose	Note: stations may have more than one purpose. Where possible, primary purpose should be identified.
Design (D)	Station provides information to inform design.
Existing Conditions (EC)	Station monitors existing conditions - either on site or off site.
Performance (P)	Station monitors performance of mine facilities or activities.
Adaptive Management (AM)	Station monitors trends in areas of expected change, to inform adaptive management decisions.
Interested Party (IP)	Station established as result of request from interested party
Compliance (C)	Station an established monitoring location in old water license

Table A3: Monitoring Stations and Frequencies for the 2020-2021 Seepage Water Programs at the Faro Mine Complex

Station Name	Reach/Area	Purpose	UTM Coordinates		2019 Seep Classification	Monitoring Sampling Frequency	Notes	2020 Sampling Frequency			
			Easting	Northing				Field	Column	C/N	CWMP
CH-FD-98	ETAMI Area	EC	583248	6914435	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
CH-FD-64	ETAMI Area	EC	583075	6914156	Internal	2x	Key seep for understanding cooling conditions in waste rock/pad area. Retained for SRK	x	-	-	-
CH-FD-66	ETAMI Area	EC	582886	6914582	Internal	2x	Flows to SRK-FD-01 (SRK)	x	-	-	-
CH-FD-71	ETAMI Area	EC	583071	6914163	Internal	2x	Tends to be dry. Key seep for understanding evolving conditions in waste rock/pad area. Retained for SRK	x	-	-	-
CH-MLL-01	ETAMI Area	EC	582882	6914168	Internal	2x	Tends to be dry. Internal (SRK)	x	x	-	-
CH-MLL-02	ETAMI Area	EC	582900	6914576	Internal	2x	Little to no flow. Internal (SRK)	x	-	-	-
CH-MLL-03	ETAMI Area	EC	583046	6914267	Internal	2x	Little to no flow. Internal (SRK)	x	-	-	-
CH-MLL-04	ETAMI Area	EC	583038	6914323	Internal	2x	Tends to be dry. Internal (SRK)	x	-	-	-
FCS-2	ETAMI Area	EC	582846	6913952	Internal	2x	Main discharge beneath haul road to top of Faro Creek Canyon	x	x	x	-
FCS-3	ETAMI Area	EC	582798	6913919	Internal	2x	Small, internal seep. Incorporated in sampling at ETA Combined	x	x	x	-
SRK-FD-01	ETAMI Area	EC	582896	6914584	Internal	2x	Keep. Main channel draining to Lower Guardhouse Creek (ultimately to tailings)	x	x	-	-
SRK-FD-02	ETAMI Area	EC	583014	6914627	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-04	ETAMI Area	EC	583308	6914410	Internal	2x	Little flow. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-32	ETAMI Area	EC	583093	6914198	Internal	2x	Key seep for understanding cooling conditions in waste rock/pad area. Retained for SRK	x	x	-	-
SRK-FD-35	ETAMI Area	EC	583017	6914248	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-37	ETAMI Area	EC	583476	6914408	Internal	2x	Little to no flow. Internal. Highly concentrated and hard on equipment	x	x	-	-
SRK-FD-46	ETAMI Area	EC	583084	6914164	Internal	2x	Key seep for understanding cooling conditions in waste rock/pad area. Retained for SRK	x	x	-	-
SRK-FD-24	Faro Pit	EC	585018	6914588	-	2x	Key seep for understanding waste rock evolution (SRK)	x	x	-	-
SRK-FD-40	Faro Pit	EC	585018	6914588	-	2x	Key seep for understanding waste rock evolution (SRK)	x	x	-	-
CH-FD-56	Intermediate WRD	EC	584515	6913149	Perimeter	2x	Evaluate seepage upgradient of SIS to help evaluate SIS performance	x	x	-	-
SRK-FD-08	Intermediate WRD	EC	584630	6913419	Perimeter	2x	Continue monitoring perimeter seeps.	x	x	-	-
SRK-FD-13	Intermediate WRD	EC	584520	6914062	Internal	2x	Waste rock evolution (SRK)	x	-	-	-
SRK-FD-47	Intermediate WRD	EC	584423	6913334	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-48	Intermediate WRD	EC	584707	6914036	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-52	Intermediate WRD	EC, D, P	584555	6913142	Perimeter	2x	CWMP. Monitor seepage upgradient of SIS to help evaluate SIS performance	x	x	-	x
SRK-FD-53	Intermediate WRD	EC	584555	6913416	Perimeter	2x	Continue monitoring perimeter seeps. Field parameters only	x	-	-	-
SRK-FD-54	Intermediate WRD	EC, D, P	584528	6913140	Perimeter	2x	CWMP. Monitor seepage upgradient of SIS to help evaluate SIS performance	x	x	-	x
SRK-FD-55	Intermediate WRD	EC	584377	6913185	Perimeter	2x	Continue monitoring perimeter seeps. Generally dry.	x	x	-	-
CH-FD-67	Main WRD	EC	583781	6914475	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-09	Main WRD	EC	583281	6914065	Internal	2x	Keep in program for understanding of waste rock evolution (SRK)	x	x	-	-
SRK-FD-59	Main WRD	EC	584553	6913542	Internal	2x	Little to no flow. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-FD-31	Main WRD	EC	583263	6914108	Internal	2x	Flows to X23	x	x	-	-
NE1	NFRC Reach	EC	586011	6914352	Receiving	2x	Flows or may flow to receiving environment. One of the main perimeter seeps from Northeast WRD	x	x	-	-
NE2	NFRC Reach	EC	585790	6914154	Receiving	2x	Flows or may flow to receiving environment. One of the main perimeter seeps from Northeast WRD	x	x	-	-
SRK-FD-05	NFRC Reach	EC, D, P	585750	6914242	Perimeter	2x	Large perimeter seep below North East WRD included in CWMP	x	x	-	x
SRK-FD-06	NFRC Reach	EC, D, P	585718	6914198	Perimeter	2x	Large perimeter seep below North East WRD included in CWMP	x	x	-	x
CH-FD-88	Northeast WRD	EC	584427	6914513	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
CH-FD-79	Northeast WRD	EC	585121	6914282	Internal	2x	Internal seep with significant flow. Continue to monitor	x	x	-	-
SRK-FD-21	Northeast WRD	EC	584512	6914524	Internal	2x	Little to no flow. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-FD-22	Northeast WRD	EC	585171	6914672	Internal	2x	Key seep for understanding waste rock evolution (SRK)	x	-	-	-
SRK-FD-23	Northeast WRD	EC	584992	6914718	Internal	2x	Little to no flow. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-FD-26	Northeast WRD	EC	585081	6914218	Internal	2x	Internal seep with significant flow. Continue to monitor	x	x	-	-
SRK-FD-51	Northeast WRD	EC	585110	6914763	Internal	2x	Key seep for understanding waste rock evolution (SRK)	x	-	-	-
SRK-FD-16	Northwest WRD	EC	583225	6915455	Receiving	2x	Flows or may flow to receiving environment. Seasonal variations.	x	-	-	-
SRK-FD-17	Northwest WRD	EC	583234	6915431	Receiving	2x	Flows or may flow to receiving environment. Seasonal variations.	x	-	-	-
SRK-FD-18	Northwest WRD	EC	583246	6915411	Receiving	2x	Flows or may flow to receiving environment. Seasonal variations.	x	-	-	-

Table A3: Monitoring Stations and Frequencies for the 2020-2021 Seepage Water Programs at the Faro Mine Complex

Station Name	Reach/Area	Purpose	UTM Coordinates		2019 Seep Classification	Monitoring Sampling Frequency	Notes	2020 Sampling Frequency			
			Easting	Northing				F	C	N	W
SRK-FD-19	Northwest WRD	EC	583392	6914739	Internal	2x	May be considered perimeter. Continue monitoring.	x	x	-	-
CH-RCTA-07	Rose Creek Valley	EC	582225	6913024	Internal	2x	Ratam for study of seepage through Secondary Dam	x	x	x	-
CH-RCTA-08	Rose Creek Valley	EC	582210	6913051	Internal	2x	Main channel below lip dump	x	-	-	-
CH-RCTA-09	Rose Creek Valley	EC	582420	6912982	Internal	2x	Ratam for study of seepage through Secondary Dam	x	-	-	-
FCS-5	Rose Creek Valley	EC	581974	6913823	Internal	2x	Main seep flowing into valleys area	x	x	x	-
CH-FD-06	Stockpile C	EC	584172	6914532	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-FD-38	Stockpile C	EC	584182	6914545	Internal	2x	Liable to no flow. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-FD-29	Upgradient	EC	585176	6916290	Reference	2x	Originals upgradient of Faro Pit. Continue monitoring for reference.	x	-	-	-
CH-FD-08	Zone I WRD	EC	585101	6914205	Internal	2x	Liable to no flow. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-44	Zone I WRD	EC	584776	6913992	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-50	Zone I WRD	EC	585044	6914032	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-FD-14	Waste Rock Dumps	EC	584840	6914168	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
CH-FD-02	Waste Rock Dumps	EC	584510	6913154	Perimeter	2x	Evaluate seepage upgradient of SS to help evaluate SS performance	x	x	-	-
CH-FD-03	Waste Rock Dumps	EC	584132	6913287	Perimeter	2x	Continue monitoring perimeter seeps. Generally dry.	x	x	-	-
CH-FD-04	Waste Rock Dumps	EC	585145	6913786	Perimeter	2x	Continue monitoring perimeter seeps. Generally dry.	x	x	-	-
CH-FD-05	Waste Rock Dumps	EC	583218	6915105	Receiving	2x	Flows or may flow to receiving environment.	x	x	-	-
CH-GD-25	Grum WRD	EC	592338	6903265	Perimeter	2x	Continue monitoring perimeter seeps. Field parameters only.	x	-	-	-
SRK-GD-01	Grum WRD	EC	592600	6903997	Receiving	2x	Flows or may flow to receiving environment.	x	x	-	-
SRK-GD-02	Grum WRD	EC	592597	6903984	Receiving	2x	Flows or may flow to receiving environment.	x	-	-	-
SRK-GD-04	Grum WRD	EC	592577	6903438	perimeter	2x	Continue monitoring perimeter seeps.	x	x	-	-
SRK-GD-06	Grum WRD	EC	592484	6903279	perimeter	2x	Continue monitoring perimeter seeps.	x	x	-	-
SRK-GD-08	Grum WRD	EC	592401	6903262	perimeter	2x	Continue monitoring perimeter seeps. Field parameters only.	x	-	-	-
SRK-GD-07	Grum WRD	EC	591900	6904749	Internal	2x	Liable to no flow. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-GD-08	Grum WRD	EC	591483	6905030	Perimeter	2x	Continue monitoring perimeter seeps. Field parameters only.	x	-	-	-
SRK-GD-09	Grum WRD	EC	591367	6904775	Perimeter	2x	Continue monitoring perimeter seeps. Generally dry.	x	x	-	-
SRK-GD-10	Grum WRD	EC	591468	6904633	Internal	2x	Waste rock evolution (SRK)	x	-	-	-
SRK-GD-11	Grum WRD	EC	592038	6904423	Internal	2x	Waste rock evolution (SRK)	x	-	-	-
SRK-GD-12	Grum WRD	EC	591492	6904558	Internal	2x	Waste rock evolution (SRK)	x	-	-	-
SRK-GD-13	Grum WRD	EC	591013	6904388	Receiving	2x	Flows or may flow to receiving environment.	x	x	-	-
SRK-GD-16	Grum WRD	EC	592298	6903247	Perimeter	2x	Continue monitoring perimeter seeps. Field parameters only.	x	-	-	-
SRK-GD-18	Grum WRD	EC	591687	6904266	Receiving	2x	Flows or may flow to receiving environment.	x	-	-	-
SRK-GD-19	Grum WRD	EC	592261	6904390	Internal	2x	Waste rock evolution (SRK)	x	x	-	-
SRK-GD-20	Grum WRD	EC	592363	6904400	Internal	2x	Waste rock evolution (SRK)	x	-	-	-
SRK-GD-21	Grum WRD	EC	592538	6903383	perimeter	2x	Continue monitoring perimeter seeps.	x	x	-	-
SRK-GD-22	Grum WRD	EC	591688	6903823	Receiving	2x	Flows or may flow to receiving environment.	x	x	-	-
SRK-GD-24	Grum WRD	EC	592188	6903381	Perimeter	2x	Continue monitoring perimeter seeps.	x	-	-	-
SWEET CREEK	Grum WRD	EC	592471	6902968	Receiving	2x	Flows or may flow to receiving environment.	x	-	-	-
WGD01	Grum WRD	EC	591990	6903318	Perimeter	2x	Continue monitoring perimeter seeps.	x	-	-	-
WTAR2	Grum WRD	EC	591812	6903041	Receiving	2x	Flows or may flow to receiving environment.	x	x	-	-
GRS B-5	Grum WRD	EC	592541	6903011	Receiving	2x	Flows or may flow to receiving environment.	x	-	-	-
SHEEP CREEK	Grum WRD	EC	592266	6902923	Receiving	2x	Flows or may flow to receiving environment.	x	-	-	-
GAL-GD-02	Ore Transfer Pad	EC, D	591844	6906000	Receiving	2x	Sample seeps below OTP for impact on V17A	x	x	-	-
GAL-GD-03	Ore Transfer Pad	EC, D	591907	6906005	Receiving	2x	Sample seeps below OTP for impact on V17A	x	x	-	-
GAL-GD-04	Ore Transfer Pad	EC, D	591841	6905982	Receiving	2x	Sample seeps below OTP for impact on V17A	x	x	-	-
SRK-GD-23	Ore Transfer Pad	EC	592831	6905965	Receiving	2x	Flows or may flow to receiving environment.	x	-	-	-
CH-VP-17	Vangorda Pit	EC	594033	6903424	Internal	2x	Drains to Vangorda Pit along road. Main channel.	x	x	-	-
VP11	Vangorda Pit	EC	594465	6902946	Internal	2x	Tends to be dry. Internal.	x	-	-	-
SRK-VD-01	Vangorda WRD	EC	593864	6902622	Perimeter	2x	Continue monitoring perimeter seeps.	x	x	-	-
SRK-VD-06	Vangorda WRD	EC	593636	6903004	Perimeter	2x	Continue monitoring perimeter seeps. Field parameters only.	x	-	-	-
SRK-VD-07	Vangorda WRD	EC	593920	6902626	Perimeter	2x	Continue monitoring perimeter seeps. Field parameters only.	x	-	-	-
SRK-VD-08	Vangorda WRD	EC	593927	6902864	Internal	2x	Tends to be dry. Internal. Waste rock evolution (SRK)	x	-	-	-
SRK-VD-09	Vangorda WRD	EC	593920	6902892	Internal	2x	Liable to no flow. Internal. Waste rock evolution (SRK)	x	x	-	-
SRK-VD-12	Vangorda WRD	EC	593784	6902518	Perimeter	2x	Liable to no flow, unlikely to reach receiving environment.	x	x	-	-

Notes:

New naming convention will be used and station names will be updated on the Proposal for 2021-2022
C&M = Care and Maintenance. Locations monitored by Parsons as part of the care and maintenance program.
CWMP = Contact Water Monitoring Plan
WRD = Waste Rock Dump

2019 Seep Classification - Seeps were classified as internal, perimeter, receiving or reference based on field observations during the June and September 2019 field programs

Purpose	Note: stations may have more than one purpose. Where?
Design (D)	Station provides information to inform design.
Existing Conditions (EC)	Station monitors existing conditions either on site or off site.
Performance (P)	Station monitors performance of mine facilities or activities.
Adaptive Management (AM)	Station monitors trends in areas of expected change, to inform adaptive management decisions.
Interested Party (IP)	Station established as result of request from interested party.
Compliance (C)	Station an established monitoring location in old water license.

Objective	Definition
Reference (Ref)	Station established in order to determine reference water
Internal (Int)	Station within disturbed footprint of mine
Released to the environment (ENV)	Station where FAC water is either discharged purposefully to the environment or is known to seep into the environment.
Receiving (Rec)	Station within a receiving environment that supports aquatic