AGNICO EAGLE

Daily Field Report

Client Groupe Gilbert – KCG	Inspection Date 2020-03-25
Site Amaruq	☐ Drill and Blast ☐ Expertise
	☐ Foundation Prep. ☐ Vibration Monitoring
Project Whale Tail Dike	☒ Rockfill Placement ☒ Water Management
	☒ Sampling ☐ Grout curtain
	☐ Compaction ☐ Liner / Geotextile
	☐ Secant Wall
Project Nº : 11204932-B1	☐ Other (specify):

I HAVE: ☒ my JSEAs ☒ my PPE ☒ Proper Training
I SEE: ☐ Unexpected Hazards **I NEED**: ☐ an S-RAF

-20 ˚C

Field Results

- Injection on the Whale Tail Dike ; Downstream : Q-664 ; Q-523 and Q-478
- Upstream : P-679
- Checking injection, Marsh test, gravity test, bleeding and check the temperature of the grout are done every 5 batches.
- All the measurements (casings lengths, waters, stick-up and rocks) have been take and compare to the Qc program or Grout curtain register and the workers work with the injection directive sheet prepared every day by the assistant project manager.

Corrective action to be taken:

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-

Follow up visit required: Yes ☒ No ☐

Site Representative :

Inspector : Jean-Philippe Boutin (Print Name)

From :

Signature* : JPBF

Project Manager : Marc-Olivier Parent

Time on site : 12h

* *By signing this form I acknowledge that I have consulted the appropriate JSEA for the current project and I am in compliance with the JSEA procedures for this site at this time.*

D-7 QC Grout Register

FRESH GROUT TESTS & INFORMATION

General Information				Grout																Water			Cement He		Conditions		Sample		
								Filter Press (initial volume of grout:				Cohesion Test		Bleeding at 2 hours			Vicat Needle (Method A -												
Date	# Hole	Stage	Type of MIX	Time of test (hh:mm)	Specific Gravity (Mud Balance) (g/cm³)	Viscosity (Marsh Cone) (sec.)	Temp. (°C)	Volume (ml)	Filtration time (min)	Pressure filtration test (Kpf)	Cake (mm)	Cohesion, C (Pa)	Relative Cohesion, Cr (mm)	Expansion (%)	Final Bleeding (%)	Bleeding #	Initial Set Time (min.)	Final Set Time (min.)	Vicat test #	Clearness (C or NC)	Temp. (°C)	Ph	Storage conditions (C or NC)	Temp. (°C)	Outdoor Temp. (°C)	Indoor Temp. (°C)	Time (hh:mm)	Sample Number	Tech.
2019-11-14			Trial Mix A	15H15	1.62	30	18.0	---	---	---	---	---	---	-5	5	3	---	---	---	C	10.0	---	C	17.0	-30	24.0	15H15	1	JPBF (GHD)
			Trial Mix B	15H30	1.73	41	20.0	---	---	---	---	---	---	-1	1	1	---	---	---	C	10.0	---	C	17.0		24.0	15h30	2	JPBF (GHD)
			Trial Mix C	16H00	1.80	77	20.0	---	---	---	---	---	---	0	0	2	---	---	---	C	10.0	---	C	17.0		24.0	---	---	JPBF (GHD)
2019-11-17			Trial Mix A+	14H00	1.62	30	23.0	---	---	---	---	---	---	-1.8	1.8	5	---	---	---	C	12.2	---	C	18.0	-31	24.0	---	---	JPBF (GHD)
			Trial Mix B+	14H30	1.67	32	23.0	---	---	---	---	---	---	-3.81	3.81	4	---	---	---	C	12.2	---	C	18.0		24.0	---	---	JPBF (GHD)
2019-11-19	T-749.5	Plug	Mix C	9h25	1.82	57	23.5	---	---	---	---	---	---	-2	2	6	---	---	---	C	12.8	---	C	21.0	-27	25.0	---	---	JPBF (GHD)
	S-734.5	Plug	Mix C	14h00	1.80	62	23.9	---	---	---	---	---	---	-1	1	7	---	---	---	C	15.2	---	C	29.0		25.0	---	---	JPBF (GHD)
2019-11-20	P-704.5	Plug	Mix C	8h00	1.77	61	22.2	---	---	---	---	---	---	-1	0.8	8	---	---	---	C	14.5	---	C	25.5	-20	25.0	---	---	JPBF (GHD)
	T-689.5	Plug	Mix C	14h20	1.80	68	25.6	90	11.0	0.060	65	---	---	-1.01	1.01	9	---	---	---	C	18.5	---	C	12.0		25.0	---	---	JPBF (GHD)
	T-701.5	Plug	Mix C	10h30	---	62	19.8	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	17.5		25.0	---	---	JPBF (GHD)
2019-11-21	T-650.5	Plug	Mix C	11h00	1.80	56	21.0	---	---	---	---	---	---	-1	1	10	---	---	---	C	14.0	---	C	11.0	-30	24.0	---	---	JPBF (GHD)
	T-641.5	plug	Mix C	14h40	1.62	57	17.0	---	---	---	---	---	---	-2	2	11	---	---	---	C	14.5	---	C	11.5		24.0	---	---	JPBF (GHD)
2019-11-24	P-632.5	Plug	Mix C	9h00	1.75	95	22.0	---	---	---	---	---	---	0	0	12	---	---	---	C	12.0	---	C	22.0	-35	24.0	---	---	JMR (GHD)
	T-617.5	Plug	Mix C	14h00	1.74	65	22.0	---	---	---	---	---	---	-1	1	13	---	---	---	C	12.5	---	C	22.1		24.0	---	---	JMR (GHD)
2019-11-25	T-557.5	Plug	Mix C	09h00	1.75	63	28.0	---	---	---	---	---	---	-1	1	14	---	---	---	C	18.7	---	C	19.2	-24	25.0	---	---	JMR (GHD)
	S-542.5	Plug	Mix C	14h00	1.67	62	25.0	---	---	---	---	---	---	-1	1	15	---	---	---	C	17.3	---	C	18.9		23.0	---	---	JMR (GHD)
	P-533.5	Plug	Mix C	15h00	1.70	67	26.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.5	---	C	18.7		22.5	---	---	JMR (GHD)
2019-11-26	S-530.5	Plug	Mix C	10h00	1.75	80	28.0	---	---	---	---	---	---	-1	1	16	---	---	---	C	14.5	---	C	29.0	-26.8	27.0	---	---	JMR (GHD)
	T-515.5	Plug	Mix C	13h15	1.69	67	27.1	---	---	---	---	---	---	-1	1	17	---	---	---	C	16.1	---	C	27.3		24.0	---	---	JMR (GHD)
2019-11-27	T-491.5	Plug	Mix C	7h20	1.74	76	25.4	---	---	---	---	---	---	0	0	18	---	---	---	C	26.2	---	C	27.5	-35	20.6	---	---	JMR (GHD)
	T-485.5	Plug	Mix C	8h30	1.69	62	26.9	---	---	---	---	---	---	---	---	---	---	---	---	C	24.5	---	C	26.4		21.6	---	---	JMR (GHD)
	T-473.5	Plug	Mix C	13h30	1.73	66	29.6	---	---	---	---	---	---	-1	1	19	---	---	---	C	23.6	---	C	28.2		21.7	---	---	JMR (GHD)
	S-470.5	Plug	Mix C	15h00	1.71	71	26.5	---	---	---	---	---	---	---	---	---	---	---	---	C	22.1	---	C	25.3		23.4	---	---	JMR (GHD)
	P-464.5	Plug	Mix C	16h30	1.56	41	27.3	---	---	---	---	---	---	---	---	---	---	---	---	C	22.4	---	C	24.6		23.3	---	---	JMR (GHD)
2019-11-30	P-740.5	Stage 1	Mix C	14h30	1.71	74	24.5	---	---	---	---	---	---	-1	1	20	---	---	---	C	18.1	---	C	22.0	-10	16.5	---	---	JMR (GHD)
	P-740.6	Stage 1	Mix C	15h10	1.77	276	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.3	---	C	20.5		21.2	---	---	JMR (GHD)
	P-740.7	Stage 1	Mix C	15h40	1.72	90	22.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.0	---	C	24.3		24.5	---	---	JMR (GHD)
	P-740.8	Stage 1	Mix C	16h10	1.70	ee comme	20.0	---	---	---	---	---	---	---	---	---	---	---	---	C	14.3	---	C	20.6		23.7	---	---	JMR (GHD)
2019-12-01	P-728.5	Stage 1	Mix C	7h15	1.74	71	27.6	---	---	---	---	---	---	-1	1	21	---	---	---	C	29.5	---	C	26.7	-17	21.4	---	---	JMR (GHD)
	P-728.6	Stage 1	Mix C	8h20	1.76	67	26.9	---	---	---	---	---	---	---	---	---	---	---	---	C	28.7	---	C	25.9		20.4	---	---	JMR (GHD)
	P-716.5	Stage 1	Mix C	10h15	1.77	ee comme	31.5	---	---	---	---	---	---	---	---	---	---	---	---	C	27.9	---	C	26.0		22.1	---	---	JMR (GHD)
	P-716.6	Stage 1	Mix C	10h35	1.77	ee comme	29.0	---	---	---	---	---	---	---	---	---	---	---	---	C	28.1	---	C	23.4		17.6	---	---	JMR (GHD)
	P-716.7	Stage 1	Mix C	10h55	1.76	ee comme	30.0	---	---	---	---	---	---	---	---	---	---	---	---	C	26.4	---	C	22.6		20.6	---	---	JMR (GHD)
	P-704.5	Stage 1	Mix C	14h55	1.78	73	23.5	---	---	---	---	---	---	-1.5	1.5	22	---	---	---	C	13.5	---	C	22.6		18.6	---	---	JMR (GHD)
	P-704.5	Stage 1	Mix C	15h35	1.77	71	20.4	---	---	---	---	---	---	---	---	---	---	---	---	C	13.2	---	C	23.1		17.1	---	---	JMR (GHD)
	P-704.5	Stage 1	Mix C	16h05	1.80	ee comme	21.3	---	---	---	---	---	---	---	---	---	---	---	---	C	12.8	---	C	22.7		23.2	---	---	JMR (GHD)
	P-704.5	Stage 1	Mix C	16h25	1.77	ee comme	20.5	---	---	---	---	---	---	---	---	---	---	---	---	C	13.4	---	C	23.0		19.3	---	---	JMR (GHD)
2019-12-02	P-692.5	Stage 1	x C with Celb	9H45	1.81	R	21.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.5	---	C	35.0	-26	---	---	---	MC (Sana)
	P-680.5	Stage 1	Mix C	13H45	1.70	63	22.5	---	---	---	---	---	---	-2	2.0	23	---	---	---	C	16.0	---	C	---		---	---	---	MC (Sana)
	P-680.5	Stage 1	Mix C	14H55	1.80	R	31.0	---	---	---	---	---	---	---	---	---	---	---	---	C	16.5	---	C	37.0		---	---	---	PF (Sana)
	P-680.5	Stage 1	x C with Celb	15H25	1.79	R	24.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.5	---	C	21.0		---	---	---	MC (Sana)
	P-680.5	Stage 1	x C with Celb	15H50	1.80	R	23.5	---	---	---	---	---	---	---	---	---	---	---	---	C	---	---	C	---		---	---	---	PF (Sana)
2019-12-03	P-668.5	Stage 1	Mix C	7H40	1.80	80	35.0	---	---	---	---	---	---	---	---	---	---	---	---	C	30.0	---	C	11.2	-20	---	---	---	MC (Sana)
	P-668.5	Stage 1	x C with Celb	9H10	1.79	R	28.0	---	---	---	---	---	---	-2	2.0	24	---	---	---	C	17.5	---	C	15.1		---	---	---	MC (Sana)
	P-665.5	Plug	Mix C	12H35	1.78	61	23.5	---	---	---	---	---	---	---	---	---	---	---	---	C	19.0	---	C	11.0		---	---	---	MC (Sana)
2019-12-04	P-716.5	Refill	Mix C	7H45	1.82	105	26.5	---	---	---	---	---	---	---	---	---	---	---	---	C	20.5	---	C	20.0	-36	---	---	---	MC (Sana)
	P-716.5	Refill	x C with Celb	8H35	1.81	R	22.0	---	---	---	---	---	---	-2	2	25	279	---	1	C	20.0	---	C	10.0		---	---	---	MC (Sana)
	P-716.5	Refill	Mix D	9H05	1.80	R	21.0	---	---	---	---	---	---	---	---	---	---	---	---	C	18.5	---	C	---		---	---	---	MC (Sana)
	P-740.5	Stage 1	Mix D	14H42	1.75	R	25.9	---	---	---	---	---	---	-2	2	26	---	---	---	C	16.8	---	C	6.7		---	---	---	MB (GHD)
2019-12-05	P-680.5	Stage 1	Mix C	9H30	1.73	R	24.3	---	---	---	---	---	---	-0.8	0.8	27	---	---	---	C	13.2	---	C	26.0	-40	---	---	---	MB (GHD)
	P-680.5	Stage 1	Mix D	10H10	1.81	R	17.3	---	---	---	---	---	---	-1	1	28	---	---	---	C	14.2	---	C	19.5		16.1	---	---	MB (GHD)
	P-680.5	Stage 1	Mix E	10H48	1.80	R	25.0	---	---	---	---	---	---	---	---	---	---	---	---	C	12.9	---	C	16.5		21.6	---	---	MB (GHD)
	P-704.5	Stage 1	x C with Celb	14H35	1.76	R	22.0	---	---	---	---	---	---	---	---	---	---	Between 279 & 925	2	C	14.0	---	C	34.4		---	---	---	MB (GHD)
2019-12-07	P-740.5	Stage 1	Mix C	14H15	1.72	45.6	18.0	---	---	---	---	---	---	-2.8	2.8	29	---	---	---	C	8.6	7.07	C	26.1	-36	20.1	---	---	MB (GHD)
2019-12-08	P-680.5	Stage 1	Mix C	7H30	1.74	75	20.4	---	---	---	---	---	---	-2	2	30	---	---	---	C	6.9	---	C	20.0	-48	13.8	---	---	MB (GHD)
	P-668.5	Stage 1	Mix C	10H00	1.73	57	21.3	---	---	---	---	---	---	---	---	---	---	---	---	C	8.3	---	C	14.4		15.6	---	---	MB (GHD)
	P-668.5	Stage 1	Mix C	11h00	1.72	45	18.9	---	---	---	---	---	---	---	---	---	---	---	---	C	6.9	---	C	4.8		9.6	---	---	MB (GHD)
	P-668.5	Stage 1	Mix C	11H50	1.76	76	24.1	---	---	---	---	---	---	---	---	---	---	---	---	C	6.1	---	C	28.9		16.4	---	---	MB (GHD)
2019-12-09	P-656.5	Stage 1	Mix C	13H30	1.73	69	17.8	---	---	---	---	---	---	-2.4	2.4	31	---	---	---	C	13.4	---	C	11.6	-47	14.8	---	---	MB (GHD)
	P-656.5	Stage 1	Mix D	14H00	1.80	R	15.8	---	---	---	---	---	---	---	---	---	---	---	---	C	7.9	---	C	-1.2		16.7	---	---	MB (GHD)

2019-12-09	P-656.5	Stage 1	Mix D	14H30	1.79	R	12.6	---	---	---	---	---	---	---	---	---	---	---	---	C	8.6	---	C	10.9	-47	23.6	---	---	MB (GHD)
	P-656.5	Stage 1	x C with Celb	14H45	1.81	R	13.3	---	---	---	---	---	---	---	---	---	---	---	---	C	9.1	---	C	14.2		20.9	---	---	MB (GHD)
2019-12-11	P-644.5	Stage 1	Mix C	7h50	1.76	50	26.2	---	---	---	---	---	---	-1	1	32	---	---	---	C	18.5	---	C	13.0	-28	22.0	---	---	JPBF (GHD)
	P-620.5	Stage 1	Mix C	9h10	1.76	55	27.1	---	---	---	---	---	---	---	---	---	---	---	---	C	18.5	---	C	13.0		22.5	---	---	JPBF (GHD)
	P-620.5	Stage 1	Mix D	9h30	1.78	NA	26.0	---	---	---	---	---	---	-0.4	0.4	33	---	---	---	C	16.0	---	C	21.5		22.5	---	---	JPBF (GHD)
	P-620.5	Stage 1	Mix D	10h00	1.80	NA	28.1	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	19.5		22.0	---	---	JPBF (GHD)
	P-632.5	Stage 1	Mix C	14h00	1.79	66	25.0	---	---	---	---	---	---	-1	1	34	---	---	---	C	22.0	---	C	13.5		19.0	---	---	JPBF (GHD)
	P-632.5	Stage 1	Mix D	14h30	1.82	NA	20.2	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	10.5		19.0	---	---	JPBF (GHD)
	P-632.5	Stage 1	Mix D	15h00	1.80	NA	22.4	---	---	---	---	---	---	---	---	---	---	---	---	C	17.0	---	C	11.0		19.0	---	---	JPBF (GHD)
	P-632.5	Stage 1	Mix D	15h30	1.82	NA	24.5	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	15.5		28.0	---	---	JPBF (GHD)
2019-12-12	P-596.5 B	Plug	Mix C	7h30	1.78	57	28.2	---	---	---	---	---	---	-1	1	35	---	---	---	C	19.5	---	C	24.0	-30	22.0	---	---	JPBF (GHD)
	P-632.5	Stage 1 Regrout	Mix C	9h30	1.82	63	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.0	---	C	21.5		22.5	---	---	JPBF (GHD)
	S-746.5	Stage 1	Mix C	13h30	1.80	58	27.2	---	---	---	---	---	---	---	---	---	---	---	---	C	18.5	---	C	23.5		22.5	---	---	JPBF (GHD)
	S-734.5	Stage 1	Mix C	14h00	---	---	---	---	---	---	---	---	---	0	0	36	---	---	---	---	---	---	---	---		20.0	---	---	JPBF (GHD)
	S-710.5	Stage 1	Mix C	15h00	1.78	57	24.6	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	20.4		21.0	---	---	JPBF (GHD)
	S-722.5	Stage 1	Mix C	15h30	1.80	58	22.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	20.0		20.5	---	---	JPBF (GHD)
	S-722.5	Stage 1	Mix C	16h00	1.82	65	19.5	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	13.0		20.5	---	---	JPBF (GHD)
2019-12-13	S-698.5	Stage 1	Mix C	8h00	1.76	63	25.5	---	---	---	---	---	---	-1	1	37	---	---	---	C	14.0	---	C	25.5	-33	20.0	---	---	JPBF (GHD)
	S-686.5	Stage 1	Mix C	9h00	1.80	65	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	21.0		21.0	---	---	JPBF (GHD)
	S-662.5	Stage 1	Mix C	13h30	1.67	47	26.5	---	---	---	---	---	---	-1	1	38	---	---	---	C	19.0	---	C	24.5		20.0	---	---	JPBF (GHD)
	S-638.5	Stage 1	Mix C	14h00	1.76	59	23.5	---	---	---	---	---	---	---	---	---	---	---	---	C	19.0	---	C	20.0		21.0	---	---	JPBF (GHD)
2019-12-14	---	---	Mix C	8h30	---	---	21.5	---	---	---	---	---	---	---	---	---	262	555	3	C	17.0	---	C	18.0	-28	21.0	---	---	JPBF (GHD)
	S-526.5	Stage 1	Mix C	10h00	1.72	41	20.0	---	---	---	---	---	---	-1	1	39	---	---	---	C	19.0	---	C	20.0		20.0	---	---	JPBF (GHD)
	P-596.5 B	Stage 1	Mix C	13h30	1.75	43	24.8	---	---	---	---	---	---	-1.6	1.6	40	---	---	---	C	17.0	---	C	16.5		20.0	---	---	JPBF (GHD)
	S-674.5	Stage 1	Mix C	15h45	1.77	50	24.2	---	---	---	---	---	---	---	---	---	---	---	---	C	18.5	---	C	14.0		20.0	---	---	JPBF (GHD)
2019-12-15	S-686.5	Stage 1	Mix C	8h25	---	107	28.2	---	---	---	---	---	---	-1	1	41	---	---	---	C	14.5	---	C	27.0	-33	23.0	---	---	JPBF (GHD)
	S-686.5	Stage 1	Mix C	8h45	1.77	59	28.2	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	27.0		23.0	8h45	3	JPBF (GHD)
	S-686.5	Stage 1	Mix D	9h20	1,80	NA	26.0	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	19.0		20.0	---	---	JPBF (GHD)
	S-686.5	Stage 1	Mix D	10h00	1.82	NA	24.5	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	18.0		19.0	---	---	JPBF (GHD)
	S-698.5	Stage 1	Mix C	13h45	1.78	62	25.5	---	---	---	---	---	---	-1	1	42	---	---	---	C	16.0	---	C	26.5		20.0	---	---	JPBF (GHD)
	S-698.5	Stage 1	Mix D	14h15	1.81	NA	27.5	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	27.5		20.0	---	---	JPBF (GHD)
	S-698.5	Stage 1	Mix D	15h00	1.82	NA	28.0	---	---	---	---	---	---	0	0	43	---	---	---	C	16.0	---	C	27.0		20.0	---	---	JPBF (GHD)
	S-698.5	Stage 1	Mix C	15h45	1.78	75	27.0	---	---	---	---	---	---	---	---	---	---	---	---	C	15.5	---	C	27.0		20.0	---	---	JPBF (GHD)
2019-12-16	S-686.5	Stage 1 Regrout	Mix C	8h30	1.82	91	26.8	---	---	---	---	---	---	-1	1	44	---	---	---	C	12.0	---	C	26.0	-35	20.0	---	---	JPBF (GHD)
	S-686.5	Stage 1 Regrout	Mix C	9h00	1.79	67	22.5	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	15.5		20.0	---	---	JPBF (GHD)
	S-698.5	Stage 1 Regrout	Mix C	9h40	1.80	75	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	17.0		20.0	---	---	JPBF (GHD)
	S-746.5	Stage 1	Mix C	13h30	1.74	57	26,2	---	---	---	---	---	---	-1.6	1.6	45	---	---	---	C	18.0	---	C	13.0		20.0	---	---	JPBF (GHD)
	S-746.5	Stage 1	Mix D	14h00	1.79	NA	24.2	---	---	---	---	---	---	-1	1	46	---	---	---	C	17.5	---	C	13.0		20.0	---	---	JPBF (GHD)
	S-746.5	Stage 1	Mix D	14h45	1.82	NA	22.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.5	---	C	13.0		20.0	---	---	JPBF (GHD)
	S-734.5	Stage 1	Mix C	15h30	1.76	61	20.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	12.0		20.0	---	---	JPBF (GHD)
2019-12-17	S-734.5	Stage 1	Mix C	9h00	1.76	50	22.2	---	---	---	---	---	---	-1.6	1.6	47	---	---	---	C	14.5	---	C	21.0	-37	20.0	---	---	JPBF (GHD)
	S-746.5	Stage 1	Mix C	9h45	1.79	65	23.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	23.0		20.0	---	---	JPBF (GHD)
	S-746.5	Stage 1	Mix C	10h15	1.80	70	24.0	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	24.0		20.0	---	---	JPBF (GHD)
	S-722.5	Stage 1	Mix C	14h00	1.80	99	24.5	---	---	---	---	---	---	-1	1	48	---	---	---	C	14.0	---	C	19.0		22.0	---	---	JPBF (GHD)
	S-710.5	Stage 1	Mix C	14h30	1.78	62	20.5	---	---	---	---		---	---	---	---	---	---	---	C	12.0	---	C	14.0		22.0	---	---	JPBF (GHD)
2019-12-18	S-650.5	Stage 1	Mix C	8h15	1.75	51	23.0	---	---	---	---	---	---	-1	1	49	---	---	---	C	12.0	---	C	18.0	-31	22.0	---	---	JPBF (GHD)
	S-650.5	Stage 1	Mix D	9h00	1.81	NA	25.2	---	---	---	---	---	---	0	0	50	---	---	---	C	12.5	---	C	19.0		22.0	---	---	JPBF (GHD)
	S-650.5	Stage 1	Mix D	9h30	1.82	NA	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	18.0		22.0	---	---	JPBF (GHD)
	S-662.5	Stage 1	Mix C	10h15	1.75	65	20.0	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	16.5		22.0	---	---	JPBF (GHD)
	S-662.5	Stage 1	Mix D	10h45	1.80	NA	21.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	15.0		22.0	---	---	JPBF (GHD)
	S-662 Regrout	Stage 1	Mix C	14h15	1.77	70	18.0	---	---	---	---	---	---	-1.6	1.6	51	---	---	---	C	12.0	---	C	14.0		22.0	---	---	JPBF (GHD)
	S-662.5 Regrout	Stage 1	Mix C	14h45	1.78	65	18.5	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	13.0		22.0	---	---	JPBF (GHD)
2019-12-19	---	---	Mix C	7h00	---	NA	23.5	---	---	---	---	---	---	---	---	---	248	570	4	C	14.0	---	C	19.5	-41	20.0	---	---	JPBF (GHD)
2020-01-11	S-638.5	Stage 1	Mix C	9h50	1.78	60	24.0	---	---	---	---	---	---	-1	1	52	---	---	---	C	9.4	---	C	34.0	-36	22.0	---	---	JMR (GHD)
	S-590.5	Plug	Mix C	13h50	1.76	70	27.2	---	---	---	---	---	---	-1	1	53	---	---	---	C	16.4	---	C	27.8		18.3	---	---	JMR (GHD)
2020-01-12	T-575.5	Plug	Mix C	9h30	1.76	46	23.5	---	---	---	---	---	---	-1.5	1.5	54	---	---	---	C	16.7	---	C	25.5	-36	17.9	---	---	JMR (GHD)
	T-749.5	Stage 1	Mix C	14h25	1.78	69	30.2	---	---	---	---	---	---	-1	1	55	---	---	---	C	20.4	---	C	44.0		23.4	---	---	JMR (GHD)
2020-01-13	T-737.5	Stage 1	Mix C	7h55	1.77	77	23.4	---	---	---	---	---	---	-1	1	56	---	---	---	C	25.4	---	C	14.0	-32	17.1	---	---	JMR (GHD)
	T-737.5	Stage 1	Mix D	9h20	1.78	NA	28.1	---	---	---	---	---	---	0	0	57	285	---	5	C	16.9	---	C	41.0		18.8	---	---	JMR (GHD)
	T-731.5	Stage 1	Mix C	13h10	1.75	67	24.9	---	---	---	---	---	---	-1.5	1.5	58	---	---	---	C	18.0	---	C	30.0		8.6	---	---	JMR (GHD)
2020-01-14	T-707.5	Stage 1	Mix C	7h10	1.78	66	25.1	---	---	---	---	---	---	-1	1	59	---	---	---	C	14.2	---	C	31.3	-36	28.9	---	---	JMR (GHD)
	T-707.5	Stage 1	Mix D	8h50	1.78	NA	32.7	---	---	---	---	---	---	0	0	60	---	---	---	C	13.5	---	C	38.5		19.5	---	---	JMR (GHD)
	T-701.5	Stage 1	Mix C	9h35	1.69	50	26.7	---	---	---	---	---	---	---	---	---	---	---	---	C	14.2	---	C	35.4		26.5	---	---	JMR (GHD)
	T-695.5	Stage 1	Mix D	11h00	1.80	NA	25.6	---	---	---	---	---	---	---	---	---	---	---	---	C	14.6	---	C	30.2		24.9	---	---	JMR (GHD)
	T-695.5	Stage 1	Mix D	11h30	1.77	NA	27.5	---	---	---	---	---	---	---	---	---	---	---	---	C	13.6	---	C	28.7		23.2	---	---	JMR (GHD)
	T-689.5	Stage 1	Mix C	14h45	1.69	42	23.3	---	---	---	---	---	---	-1	1	61	---	---	---	C	12.7	---	C	35.0		23.5	---	---	JMR (GHD)
	T-689.5	Stage 1	Mix D	15h20	1.77	NA	23.1	---	---	---	---	---	---	0	0	62	---	---	---	C	17.7	---	C	29.3		20.7	---	---	JMR (GHD)
	T-683.5	Stage 1	Mix C	7h50	1.75	61	30.2	---	---	---	---	---	---	-1	1	63	---	---	---	C	15.9	---	C	31.5		19.7	---	---	JMR (GHD)

2020-01-15	T-683.5	Stage 1	Mix D	8h25	1.78	NA	27.7	---	---	---	---	---	---	0	0	64	---	---	---	C	11.8	---	C	30.1	-30	12.1	---	---	JMR (GHD)
	T-683.5	Stage 1	Mix D	9h30	1.77	NA	30.7	---	---	---	---	---	---	---	---	---	---	---	---	C	14.1	---	C	27.5		19.3	---	---	JMR (GHD)
	T-677.5	Stage 1	Mix C	13h45	1.74	71	20.4	---	---	---	---	---	---	-1	1	65	---	---	---	C	11.8	---	C	30.9		10.1	---	---	JMR (GHD)
2020-01-16	T-665.5	Stage 1	Mix C	7h00	1.74	56	29.6	---	---	---	---	---	---	-1	1	66	---	---	---	C	21.1	---	C	22.5	-20	20.9	---	---	JMR (GHD)
	T-665.5	Stage 1	Mix D	7h25	1.74	NA	22.9	---	---	---	---	---	---	0	0	67	---	---	---	C	14.2	---	C	16.9		13.4	---	---	JMR (GHD)
	T-665.5	Stage 1	Mix D	8h30	1.75	NA	24.9	---	---	---	---	---	---	---	---	---	---	---	---	C	14.1	---	C	22.5		13.2	---	---	JMR (GHD)
	T-659.5	Stage 1	Mix C	10h50	1.78	Stopped	20.9	---	---	---	---	---	---	---	---	---	---	---	---	C	13.7	---	C	19.8		19.7	---	---	JMR (GHD)
	T-653.5	Stage 1	Mix C	14h20	1.76	106	20.6	---	---	---	---	---	---	-1	1	68	---	---	---	C	12.3	---	C	22.5		13.8	---	---	JMR (GHD)
	T-653.5	Stage 1	Mix D	14h40	1.74	NA	22.7	138	25	0.061	62	---	---	0	0	69	---	---	---	C	12.1	---	C	21.3		10.6	---	---	JMR (GHD)
2020-01-17	T-641.5	Stage 1	Mix C	7h00	1.73	58	32.8	---	---	---	---	---	---	-1.5	1.5	70	---	---	---	C	28.3	---	C	27.8	-26	14.9	---	---	JMR (GHD)
	T-725.5	Stage 1	Mix C	9h15	1.78	86	33.4	---	---	---	---	---	---	---	---	---	---	---	---	C	19.4	---	C	42.4		15.9	---	---	JMR (GHD)
	T-719.5	Stage 1	Mix C	10h40	1.76	77	27.3	---	---	---	---	---	---	---	---	---	---	---	---	C	22.1	---	C	26.9		9.9	---	---	JMR (GHD)
	S-686.5	Stage 1	Mix A	14h45	1.59	32	19.0	---	---	---	---	---	---	-2.5	2.5	71	---	---	---	C	11.8	---	C	27.0		11.9	---	---	JMR (GHD)
2020-01-18	T-629.5	Stage 1	Mix C	8h50	1.76	50	28.9	---	---	---	---	---	---	-1	1	72	---	---	---	C	12.8	---	C	29.9	-26	10.5	---	---	JMR (GHD)
	T-623.5	Stage 1	Mix C	10h00	1.79	86	27.2	---	---	---	---	---	---	---	---	---	---	---	---	C	15.4	---	C	24.0		26.5	---	---	JMR (GHD)
2020-01-20	S-626.5	Stage 1	Mix C	7h40	1.75	72	19.8	---	---	---	---	---	---	-1	1	73	---	---	---	C	7.6	---	C	34.3	-22	28.9	---	---	JMR (GHD)
	S-626.5	Stage 1	Mix C	8h20	1.75	NA	16.0	---	---	---	---	---	---	0	0	74	---	---	---	C	9.8	---	C	27.5		21.9	---	---	JMR (GHD)
	T-593.5	Plug	Mix C	10h15	1.75	60	19.5	---	---	---	---	---	---	---	---	---	---	---	---	C	10.2	---	C	23.4		19.6	---	---	JMR (GHD)
	S-554.5	Plug	Mix C	14h15	1.76	48	21.6	---	---	---	---	---	---	-1	1	75	---	---	---	C	12.8	---	C	22,4		13.9	---	---	JMR (GHD)
2020-01-21	T-617.5	Stage 1	Mix C	7h40	1.80	88	29.5	---	---	---	---	---	---	-1	1	76	---	---	---	C	14.0	---	C	39.1	-32	18.9	---	---	JMR (GHD)
	S-602.5	Stage 1	Mix C	9h55	1.74	67	18.4	---	---	---	---	---	---	---	---	---	---	---	---	C	13.2	---	C	40.1		22.5	---	---	JMR (GHD)
	S-602.5	Stage 1	Mix D	13h25	1.72	NA	29.4	---	---	---	---	---	---	---	---	---	---	---	---	C	15.1	---	C	25.0		27.5	---	---	JMR (GHD)
	P-584.5	Stage 1	Mix C	15h00	1.72	51	15.9	---	---	---	---	---	---	---	---	---	---	---	---	C	13.7	---	C	26.1		15.9	---	---	JMR (GHD)
	P-584.5	Stage 1	Mix C	15h05	1.76	74	15.9	---	---	---	---	---	---	0	0	77	---	---	---	C	13.7	---	C	26.1		15.9	---	---	JMR (GHD)
2020-01-22	P-572.5	Stage 1	Mix C	8h35	1.77	60	18.8	---	---	---	---	---	---	-1	1	78	---	---	---	C	11.5	---	C	14.9	-40	16.0	---	---	JMR (GHD)
	P-572.5	Stage 1	Mix D	9h15	1.73	NA	16.6	---	---	---	---	---	---	0	0	79	---	---	---	C	13.8	---	C	0.6		18.7	---	---	JMR (GHD)
	P-572.5	Stage 1	Mix D	9h50	1.76	NA	17.6	---	---	---	---	---	---	---	---	---	---	---	---	C	11.3	---	C	7.5		11.0	---	---	JMR (GHD)
	S-602.5	Stage 1	Mix C	13h50	1.73	75	20.1	---	---	---	---	---	---	-1	1	80	---	---	---	C	12.1	---	C	15.7		20.2	---	---	JMR (GHD)
	S-602.5	Stage 1	Mix C	14h45	1.75	63	19.3	---	---	---	---	---	---	---	---	---	---	---	---	C	13.7	---	C	8.0		12.7	---	---	JMR (GHD)
2020-01-23	P-572.5	Stage 1	Mix C+	7h40	1.75	63	33.9	---	---	---	---	---	---	-1.5	1.5	81	---	---	---	C	14.7	---	C	26.0	-42	33.6	---	---	JMR (GHD)
	P-560.5	Stage 1	Mix C	9h35	1.72	52	23.5	---	---	---	---	---	---	---	---	---	---	---	---	C	16.8	---	C	27.1		20.9	---	---	JMR (GHD)
	P-536.5	Stage 1	Mix C	13h50	1.72	61	26.4	---	---	---	---	---	---	-1	1	82	---	---	---	C	14.7	---	C	15.6		24.8	---	---	JMR (GHD)
2020-01-25	P-524.5	Stage 1	Mix C	8h00	1.81	75	28.5	---	---	---	---	---	---	-1.5	1.5	83	---	---	---	C	17.0	---	C	28.0	-33	25.0	---	---	JPBF (GHD)
	P-512.5	Stage 1	Mix C	13h45	1.75	93	27.0	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	NC	38.0		25.0	---	---	JPBF (GHD)
	P-512.5	Stage 1	Mix D	14h20	1.79	NA	24.5	---	---	---	---	---	---	-1	1	84	---	---	---	C	14.0	---	C	20.0		25.0	---	---	JPBF (GHD)
	P-500.5	Stage 1	Mix C	15h15	1.78	74	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	17.5		25.0	---	---	JPBF (GHD)
2020-01-26	P-488.5	Stage 1	Mix C	7h30	1.76	81	29.5	---	---	---	---	---	---	-1	1	85	---	---	---	C	15.5	---	C	28.5	-23	25.5	---	---	JPBF (GHD)
2020-01-27	P-476.5	Stage 1	Mix C	7h15	1.78	85	26.5	---	---	---	---	---	---	-2	2	86	---	---	---	C	15.5	---	NC	35.0	-28	24.5	---	---	JPBF (GHD)
	P-464.5	Stage 1	Mix C	8h00	1.72	45	25.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.0	---	NC	33.0		24.0	---	---	JPBF (GHD)
	P-461.5	Plug	Mx C	9h00	1.76	65	18.0	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	15.5		20.5	---	---	JPBF (GHD)
	S-590.5	Stage 1	Mix C	14h00	1.76	77	22.0	---	---	---	---	---	---	-1.5	1.5	87	---	---	---	C	13.5	---	C	11.0		21.5	---	---	JPBF (GHD)
	S-578.5	Stage 1	Mix C	15h00	1.78	84	22.5	---	---	---	---	---	---	---	---	---	---	---	---	C	---	---	C	17.0		18.0	---	---	JPBF (GHD)
2020-01-29	S-566.5	Stage 1	Mix C	7h00	1.78	60	18.5	---	---	---	---	---	---	-1	1	88	---	---	---	C	11.5	---	NC	35.0	-20	15.0	---	---	JPBF (GHD)
	S-542.5	Stage 1	Mix C	8h00	1.76	58	18.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	NC	32.5		15.0	---	---	JPBF (GHD)
	S-530.5	Stage 1	Mix C	9h00	1.76	55	14.5	---	---	---	---	---	---	---	---	---	---	---	---	C	11.5	---	C	15.0		15.0	---	---	JPBF (GHD)
	S-524.5	Stage 1	Mix C	10h00	1.78	65	19.0	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	17.5		20.0	---	---	JPBF (GHD)
	S-524.5	Regrout	Mix D	13h30	1.79	NA	21.0	---	---	---	---	---	---	0	0	89	---	---	---	C	12.0	---	C	15.0		20.0	---	---	JPBF (GHD)
	S-524.5	Regrout	Mix D	14h00	1.81	NA	18.0	---	---	---	---	---	---	---	---	---	---	---	---	C	12.5	---	C	14.0		20.0	---	---	JPBF (GHD)
	S-524.5	Regrout	Mix D	14h30	1.83	NA	19.5	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	17.0		21.0	---	---	JPBF (GHD)
2020-01-31	S-524.5	Stage 1 Regrout	Mix C	13h30	1.77	65	19.5	---	---	---	---	---	---	-1.5	1.5	90	---	---	---	C	10.5	---	C	27.0	-20	22.0	---	---	JPBF (GHD)
	S-524.5	Stage 1 Regrout	Mix C	14h00	1.78	71	15.5	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	15.0		20.0	---	---	JPBF (GHD)
	S-524.5	Stage 1 Regrout	Mix C	14h30	1.78	66	17.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	16.5		20.0	---	---	JPBF (GHD)
	S-524.5	Stage 1 Regrout	Mix C	15h00	1.80	82	21.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.5	---	C	17.5		20.0	---	---	JPBF (GHD)
2020-02-01	S-518.5	Stage 1	Mix C	7h00	1.78	75	21.0	---	---	---	---	---	---	---	---	---	---	---	---	C	12.5	---	C	15.0	-28	20.0	---	---	JPBF (GHD)
	S-506.5	Stage 1	Mix C	9h00	1.77	58	20.5	---	---	---	---	---	---	-1	1	91	---	---	---	C	12.0	---	C	15.0		20.0	---	---	JPBF (GHD)
	S-494.5	Stage 1	Mix C	9h30	1.79	77	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	21.0		20.0	---	---	JPBF (GHD)
	S-470.5	Stage 1	Mix C	11h00	1.76	55	24.5	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	18.0		22.0	---	---	JPBF (GHD)
	S-446.5	Stage 1	Mix C	14h00	1.79	82	21.5	---	---	---	---	---	---	-1.5	1.5	92	---	---	---	C	13.0	---	C	14.0		22.0	---	---	JPBF (GHD)
2020-02-02	S-422.5	Plug	Mx C	9h00	1.75	52	24.0	---	---	---	---	---	---	-1.5	1.5	93	---	---	---	C	14.0	---	C	18.0	-26	22.0	---	---	JPBF (GHD)
	T-413.5	Plug	Mix C	10h30	1.77	65	26.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.5	---	C	26.0		22.5	---	---	JPBF (GHD)
	T-407.5	Plug	Mix C	14h00	1.79	80	27.5	---	---	---	---	---	---	-1.5	1.5	94	---	---	---	C	15.0	---	C	27.0		21.0	---	---	JPBF (GHD)
	P-392.5	Plug	Mix C	15h30	1.78	71	25.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	25.5		25.5	---	---	JPBF (GHD)
2020-02-03	T-389.5	Plug	Mix C	7h00	1.76	54	25.5	---	---	---	---	---	---	-1.5	1.5	95	---	---	---	C	16.5	---	C	21.0	-36	23.0	---	---	JPBF (GHD)
	T-371.5	Plug	Mix C	9h15	1.78	65	28.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	26.0		21.0	---	---	JPBF (GHD)
	T-605.5	Stage 1	Mix C	13h30	1.78	63	29.0	---	---	---	---	---	---	-1.5	1.5	96	---	---	---	C	15.0	---	C	26.0		23.0	---	---	JPBF (GHD)
	T-593.5	Stage 1	Mix C	15h00	1.79	65	26.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.5	---	C	24.0		21.0	---	---	JPBF (GHD)
	T-575.5	Stage 1	Mix C	7h00	1.80	75	29.0	---	---	---	---	---	---	-1	1	97	---	---	---	C	17.5	---	C	28.0		23.0	---	---	JPBF (GHD)

2020-02-04	T-563.5	Stage 1	Mix C	8h45	1.78	77	27.0	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	26.0	-35	21.0	---	---	JPBF (GHD)
	T-563.5	Stage 1	Mix D	9h15	1.81	NA	25.5	---	---	---	---	---	---	0	0	98	---	---	---	C	16.0	---	C	25.0		22.0	---	---	JPBF (GHD)
	T-563.5	Stage 1	Mix D	9h45	1.81	NA	19.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.5	---	C	11.0		22.5	---	---	JPBF (GHD)
	T-557.5	Stage 1	Mix C	14h30	1.77	66	24.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	27.5		23.0	---	---	JPBF (GHD)
	T-551.5	Stage 1	Mix C	15h30	1.78	71	19.5	---	---	---	---	---	---	---	---	---	---	---	---	C	14.5	---	C	13.0		23.0	---	---	JPBF (GHD)
2020-02-05	T-545.5	Stage 1	Mix C	10h15	1.76	53	18.5	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	13.0	-38	23.0	---	---	JPBF (GHD)
	T-539.5	Stage 1	Mix C	14h00	1.78	64	19.5	---	---	---	---	---	---	-1	1	99	---	---	---	C	11.5	---	C	12.0		22.0	---	---	JPBF (GHD)
	T-533.5	Stage 1	Mix C	15h00	1.78	62	14.5	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	10.5		22.0	---	---	JPBF (GHD)
	T-533.5	Stage 1	Mix D	15h30	1.81	NA	14.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	11.5		24.0	---	---	JPBF (GHD)
	T-533.5	Stage 1	Mix D	16h00	1.82	NA	16.5	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	14.5		23.0	---	---	JPBF (GHD)
2020-02-06	P-428.5	Stage 1	Mix C	8h30	1.78	64	19.5	---	---	---	---	---	---	-1.5	1.5	100	---	---	---	C	11.0	---	C	22.0	-35	19.0	---	---	JPBF (GHD)
	P-404.5	Stage 1	Mix C	10h30	1.77	59	18.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.5	---	C	19.5		21.0	---	---	JPBF (GHD)
	P-392.5	Stage 1	Mix C	13h45	1.78	71	18.5	---	---	---	---	---	---	-1.5	1.5	101	---	---	---	C	11.0	---	C	15.5		20.0	---	---	JPBF (GHD)
	P-380.5	Stage 1	Mix C	15h00	1.76	60	16.5	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	14.0		21.0	---	---	JPBF (GHD)
2020-02-08	T-365.5	plug	Mix C	6h 45	1.75	61	20.0	---	---	---	---	---	---	-1	1	102	---	---	---	C	18.0	---	C	21.0	-38	22.0	---	---	PH (GHD)
	T347.5	plug	Mix C	13H 30	1.74	62	19.0	---	---	---	---	---	---	-0.8	0.8	103	---	---	---	C	18.5	---	C	20.0		21.0	---	---	PH (GHD)
2020-02-09	T-329.5	Plug	Mix C	7H30	1.78	64	23.0	---	---	---	---	---	---	-0.8	0.8	104	---	---	---	C	21.0	---	C	24.0	-34	22.0	---	---	PH (GHD)
	T-299.5	Plug	Mix C	13H30	1,78	49	24.0	---	---	---	---	---	---	-1	1	105	---	---	---	C	22.0	---	C	23.0		21.5	---	---	PH (GHD)
2020-02-10	T-275.5	Plug	Mix C	9H00	1.80	149	24.5	---	---	---	---	---	---	-0.6	0.6	106	---	---	---	C	20.0	---	C	22.0	-38	20.0	---	---	PH (GHD)
	T-257.5	Plug	Mix C	14H30	1.77	52	18.0	---	---	---	---	---	---	-1	1	107	---	---	---	C	21.0	---	C	22.0		21.5	---	---	PH (GHD)
2020-02-11	T-527.5	Stage 1	Mix C	8H30	1.79	96	13.0	---	---	---	---	---	---	-1	1	108	---	---	---	C	13.5	---	C	14.5	-42	22.0	---	---	PH (GHD)
	T-515.5	Stage 1	Mix C	10H 30	1.77	57	21.0	---	---	---	---	---	---	-1	1	109	---	---	---	C	15.5	---	C	14.0	-43	20.0	---	---	PH (GHD)
2020-02-12	T-497.5	Stage 1	Mix C	9H00	1.77	62	30.0	---	---	---	---	---	---	-1	1	110	---	---	---	C	25.0	---	C	15.0	-34	20.5	---	---	PH(GHD)
	T-485.5	Stage 1	Mix C	13H30	1.75	95	15.5	---	---	---	---	---	---	-1	1	111	---	---	---	C	15.0	---	C	14.5	-34	21.5	---	---	PH(GHD)
	T-479.5	Stage 1	Mix C	14H 30	1.78	78	25.8	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	15.5	-34	21.0	---	---	PH(GHD)
	T-479.5	Stage 1	Mix D	15H30	1.77	NA	15.2	---	---	---	---	---	---	0	0	112	---	---	---	C	16.5	---	C	13.5	-34	21.0	---	---	PH(GHD)
2020-02-13	T-473.5	Stage 1	Mix C	8H00	1.76	62	25.0	---	---	---	---	---	---	-1	1	113	---	---	---	C	25.0	---	C	14.0	-33	22.0	---	---	PH(GHD)
	T-455.5	Stage 1	Mix B	14H00	1.67	44	23.0	---	---	---	---	---	---	-2	2	114	---	---	---	C	23.0	---	C	15.5	-33	19.0	---	---	PH(GHD)
	T-461.5	Stage 1	Mix C	11H00	1.74	60	30.5	---	---	---	---	---	---	---	---	---	---	---	---	C	30.5	---	C	14.5	-33	21.5	---	---	PH(GHD)
	T-449.5	Stage 1	Mix C	16H00	1.76	84	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	23.0	---	C	15.0	-33	20.5	---	---	PH(GHD)
2020-02-16	S-434.5	Stage 1	Mix C	7H30	1.74	64	37.0	---	---	---	---	---	---	-1	1	115	---	---	---	C	37.0	---	C	17.0	-38	21.0	---	---	PH(GHD)
	S-422.5	Stage 1	Mix C	8H30	1.73	53	31.0	---	---	---	---	---	---	---	---	---	---	---	---	C	34.0	---	C	15.5	-38	20.5	---	---	PH(GHD)
	S-410.5	Stage 1	Mix C	11H00	1.75	95	25.0	---	---	---	---	---	---	---	---	---	---	---	---	C	31.0	---	C	16.0	-38	19.5	---	---	PH(GHD)
	P-356.5	Stage 1	Mix C	13H30	1.78	72	28.0	---	---	---	---	---	---	-1	1	116	---	---	---	C	28.0	---	C	15.0	-38	22.0	---	---	PH(GHD)
2020-02-17	P-320.5	Stage 1	Mix C	8H00	1.74	58	30.5	---	---	---	---	---	---	-1	1	117	---	---	---	C	30.5	---	C	16.0	-33	21.0	---	---	PH(GHD)
	P-308.5	Stage 1	Mix C	10H00	1.76	72	32.5	---	---	---	---	---	---	-1	1	118	---	---	---	C	32.5	---	C	15.5	-33	22.0	---	---	PH(GHD)
	P-284.5	Stage 1	Mix C	14H00	1.76	54	22.5	---	---	---	---	---	---	-1	1	119	---	---	---	C	22.5	---	C	16.5	-33	21.5	---	---	PH(GHD)
2020-02-18	P-260.5	Stage 1	Mix B	9H30	1.68	40	19.0	---	---	---	---	---	---	-2	2	120	---	---	---	C	22.0	---	C	17.0	-34	22.0	---	---	PH(GHD)
	T-245.5	Stage 1	Mix C	14H00	1.75	52	16.0	---	---	---	---	---	---	-1	1	121	---	---	---	C	18.0	---	C	16.0	-34	21.5	---	---	PH(GHD)
2020-02-19	S-230.5	Stage 1	Mix C	7H30	1.76	80	24.0	---	---	---	---	---	---	-1	1	122	---	---	---	C	24.0	---	C	11.0	-32	22.0	---	---	PH(GHD)
	P-212.5	Stage 1	Mix C	9H00	1.75	56	27.5	---	---	---	---	---	---	---	---	---	---	---	---	C	25.0	---	C	15.0	-32	22.0	---	---	PH(GHD)
	T-203.5	Stage 1	Mix C	14H00	1.78	77	19.0	---	---	---	---	---	---	-1	1	123	---	---	---	C	21.0	---	C	16.0	-32	22.0	---	---	PH(GHD)
2020-02-20	T-191.5	Stage 1	Mix C	7H30	1.76	61	24.0	---	---	---	---	---	---	-1	1	124	---	---	---	C	24.0	---	C	19.0	-34	22.0	---	---	PH(GHD)
2020-02-22	T-437.5	Stage 1	Mix B	9h00	1.72	51	27.0	---	---	---	---	---	---	-2	2	125	---	---	---	C	25.0	---	C	18.0	-33	22.0	---	---	JPBF (GHD)
	T-425.5	Stage 1	Mix B	14h00	1.72	48	24.0	---	---	---	---	---	---	---	---	---	---	---	---	C	22.0	---	C	14.0		22.0	---	---	JPBF (GHD)
	T-407.5	Stage 1	Mix B	16h00	1.73	49	24.5	---	---	---	---	---	---	-2	2	126	---	---	---	C	22.5	---	C	14.5		23.0	---	---	JPBF (GHD)
2020-02-23	T-401.5	Stage 1	Mix B	7h30	1.70	54	26.0	---	---	---	---	---	---	-2	2	127	---	---	---	C	23.0	---	C	21.0	-34	22.0	---	---	JPBF (GHD)
	T-401.5	Stage 1	Mix C	8h30	1.76	64	25.0	---	---	---	---	---	---	---	---	---	---	---	---	C	22.0	---	C	20.0		20.0	---	---	JPBF (GHD)
	T-383.5	Stage 1	Mix B	14h30	1.71	48	21.0	---	---	---	---	---	---	-2.5	2	128	---	---	---	C	17.5	---	C	10.5		22.0	---	---	JPBF (GHD)
2020-02-24	S-350.5	Stage 1	Mix B	7h30	1.72	51	19.5	---	---	---	---	---	---	-2	2	129	---	---	---	C	11.0	---	C	24.0	-30	21.0	---	---	JPBF (GHD)
	S-314.5	Stage 1	Mix B	10h30	1.72	54	18.0	---	---	---	---	---	---	---	---	---	---	---	---	C	14.0	---	C	17.5		23.0	---	---	JPBF (GHD)
	S-302.5	Stage 1	Mix B	13h30	1.73	55	18.5	---	---	---	---	---	---	-2	2	130	---	---	---	C	14.5	---	C	18.0		20.0	---	---	JPBF (GHD)
2020-02-25	S-266.5	Stage 1	Mix B	8h30	1.72	57	24.0	---	---	---	---	---	---	-2	2	131	---	---	---	C	15.5	---	C	29.0	-33	22.0	---	---	JPBF (GHD)
	S-224.5	Stage 1	Mix B	14h15	1.68	45	23.0	---	---	---	---	---	---	-2	2	132	---	---	---	C	15.0	---	C	21.0		22.0	---	---	JPBF (GHD)
2020-02-26	P-188.5	Stage 1	Mix B	7h00	1.71	52	27.5	---	---	---	---	---	---	-2.9	2.4	133	---	---	---	C	18.5	---	C	27.5	-34	23.0	---	---	JPBF (GHD)
	P-176.5	Stage 1	Mix B	8h00	1.72	55	24.0	---	---	---	---	---	---	---	---	---	---	---	---	C	18.5	---	C	18.0		22.0	---	---	JPBF (GHD)
2020-02-27	S-254.5	Stage 1	Mix B	14h00	1.72	46	23.5	---	---	---	---	---	---	-2	2	134	---	---	---	C	16.0	---	C	25.0	-31	23.0	---	---	JPBF (GHD)
	S-242.5	Stage 1	Mix C	15h00	1.75	65	22.0	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	21.0		22.0	---	---	JPBF (GHD)
	S-242.5	Stage 1	Mix D	15h30	1.81	NA	21.0	---	---	---	---	---	---	-1	1	135	---	---	---	C	16.0	---	C	20.5		22.0	---	---	JPBF (GHD)
2020-02-28	S-230.5	Stage 1	Mix B	7h30	1.71	53	20.0	---	---	---	---	---	---	-3	3	136	---	---	---	C	14.0	---	C	29.0	-28	22.0	---	---	JPBF (GHD)
	S-206.5	Stage 1	Mix B	9h30	1.70	46	19.0	---	---	---	---	---	---	---	---	---	---	---	---	C	12.5	---	C	24.0		21.0	---	---	JPBF (GHD)
	S-194.5	Stage 1	Mix C	11H00	1.76	62	16.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	18.0		22.0	---	---	JPBF (GHD)
	S-194.5	Stage 1	Mix D	11h15	1.80	NA	17.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	18.0		22.0	---	---	JPBF (GHD)
	S-194.5	Stage 1	Mix D	14h00	1.79	NA	18.5	---	---	---	---	---	---	0	0	137	---	---	---	C	11.5	---	C	13.0		23.0	---	---	JPBF (GHD)
	S-194.5	Stage 1	Mix D	15h00	1.83	NA	15.5	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	14.5		22.0	---	---	JPBF (GHD)
2020-02-29	S-182.5	Stage 1	Mix B	7h30	1.73	57	20.5	---	---	---	---	---	---	-3	3	138	---	---	---	C	10.0	---	C	23.0	-22	24.0	---	---	JPBF (GHD)
	T-377.5	Stage 1	Mix B	9h00	1.70	49	17.0	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	21.0		21.0	---	---	JPBF (GHD)
	T-377.5	Stage 1	Mix C	9h45	1.78	NC	24.0	---	---	---	---	---	---	---	---	---	---	---	---	C	13.0	---	C	25.0		22.0	---	---	JPBF (GHD)
	T-353.5	Stage 1	Mix B	14h30	1.69	58	20.0	---	---	---	---	---	---	-4	3	139	---	---	---	C	10.0	---	C	25.0		23.0	---	---	JPBF (GHD)
2020-03-01	T-341.5	Stage 1	Mix B	7h00	1.72	53	20.5	---	---	---	---	---	---	-2	2	140	---	---	---	C	10.5	---	NC	34.0	-20	22.0	---	---	JPBF (GHD)
	T-317.5	Stage 1	Mix B	9h00	1.72	60	20.5	---	---	---	---	---	---	---	---	---	---	---	---	C	10.5	---	C	29.0		22.0	---	---	JPBF (GHD)
	T-299.5	Stage 1	Mix B	14h00	1.71	55	19.0	---	---	---	---	---	---	-2	2	141	---	---	---	C	11.0	---	C	23.0		22.0	---	---	JPBF (GHD)
	T-293.5	Stage 1	Mix B	7h30	1.68	45	16.5	---	---	---	---	---	---	-3	3	142	---	---	---	C	10.0	---	C	21.0		22.0	---	---	JPBF (GHD)

2020-03-02	T-293.5	Stage 1	Mix C	9h00	1.78	65	17.5	---	---	---	---	---	---	-1.5	1.5	143	---	---	---	C	10.0	---	C	18.0	-32	22.0	---	---	JPBF (GHD)
	T-293.5	Stage 1	Mix D	9h15	1.83	NA	16.0	---	---	---	---	---	---	---	---	---	---	---	---	C	10.0	---	C	18.0		22.0	---	---	JPBF (GHD)
	T-281.5	Stage 1	Mix B	14h15	1.73	49	14.0	---	---	---	---	---	---	-2	2	144	---	---	---	C	10.5	---	C	16.0		23.0	---	---	JPBF (GHD)
2020-03-03	T-269.5	Stage 1	Mix B	10h00	1.70	47	14.5	---	---	---	---	---	---	-2	2	145	---	---	---	C	11.0	---	C	14.0	-35	23.0	---	---	JPBF (GHD)
	T-251.5	Stage 1	Mix B	14h15	1.71	49	16.0	---	---	---	---	---	---	-2.5	2.5	146	---	---	---	C	10.5	---	C	17.0		22.0	---	---	JPBF (GHD)
2020-03-04	T-233.5	Stage 1	Mix B	7h15	1.72	50	14.5	---	---	---	---	---	---	-2	2	147	---	---	---	C	11.0	---	C	29.0	-31	21.0	---	---	JPBF (GHD)
	T-233.5	Stage 1	Mix C	8h00	1.77	100	16.0	---	---	---	---	---	---	-1	1	148	---	---	---	C	11.0	---	C	23.0		22.0	---	---	JPBF (GHD)
	T-221.5	Stage 1	Mix C	10h00	1.79	72	17.5	---	---	---	---	---	---	---	---	---	---	---	---	C	10.0	---	C	22.0		22.0	---	---	JPBF (GHD)
	T-221.5	Stage 1	Mix D	10h30	1.82	NA	16.0	---	---	---	---	---	---	---	---	---	---	---	---	C	10.0	---	C	22.0		22.0	---	---	JPBF (GHD)
	T-221.5	Stage 1	Mix D	11h00	1.83	NA	17.0	---	---	---	---	---	---	---	---	---	---	---	---	C	10.5	---	C	23.0		22.0	---	---	JPBF (GHD)
	T-215.5	Stage 1	Mix B	15h00	1.68	48	17.5	---	---	---	---	---	---	---	---	---	---	---	---	NC	9.0	---	C	18.0		22.0	---	---	JPBF (GHD)
2020-03-05	T-209.5	Stage 1	Mix B	7h15	1.73	53	23.5	---	---	---	---	---	---	-2	2	149	---	---	---	C	12.0	---	C	27.0	-25	22.0	---	---	JPBF (GHD)
	T-197.5	Stage 1	Mix B	8h30	1.70	48	22.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.5	---	C	22.0		22.0	---	---	JPBF (GHD)
	T-197.5	Stage 1	Mix C	8h40	1.79	NC	16.5	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	18.5		22.0	---	---	JPBF (GHD)
	T-197.5	Stage 1	Mix C	8h45	1.79	72	16.5	---	---	---	---	---	---	---	---	---	---	---	---	C	12.0	---	C	18.5		22.0	---	---	JPBF (GHD)
	T-197.5	Stage 1	Mix D	9h15	1.80	NA	17.0	---	---	---	---	---	---	0	0	150	---	---	---	C	12.0	---	C	18.0		22.0	---	---	JPBF (GHD)
	T-197.5	Stage 1	Mix D	10h00	1.83	NA	19.0	---	---	---	---	---	---	---	---	---	---	---	---	C	11.0	---	C	15.0		22.0	---	---	JPBF (GHD)
2020-03-07	T-191.5	Stage 1	Mix C	7:45	1.75	NA	18.0	---	---	---	---	---	---	-1	1	151	---	---	---	C	15.0	---	C	11.0	-42	16.5	---	---	PH(GHD)
	T-185.5	Stage 1	Mix B	8:15	1.63	42	14.5	---	---	---	---	---	---	-2	2	152	---	---	---	C	18.0	---	C	11.5	-42	21.0	---	---	PH(GHD)
	T-179.5	Stage 1	Mix B	14:00	1.67	55	28.0	---	---	---	---	---	---	-2	2	153	---	---	---	C	19.0	---	C	12.0	-39	27.0	---	---	PH(GHD)
2020-03-08	Q-697	Stage 1	Mix C	13:00	1.69	48	24.0	---	---	---	---	---	---	-1	1	154	---	---	---	C	21.0	---	C	16.0	-39	26.0	---	---	PH(GHD)
	Q-694	Stage 1	Mix C	13:30	1.74	65	24.5	---	---	---	---	---	---	-1	1	155	---	---	---	C	18.0	---	C	14.0	-39	25.0	---	---	PH(GHD)
2020-03-09	Q-667	Stage 1	Mix C	7:30	1.75	NA	27.0	---	---	---	---	---	---	-1	1	156	---	---	---	C	18.0	---	C	7.0	-39	22.0	---	---	PH(GHD)
	T-652	Stage 1	Mix C	13:30	1.70	50	23.0	---	---	---	---	---	---	-1	1	157	---	---	---	C	17.0	---	C	11.0	-39	24.0	---	---	PH(GHD)
2020-03-10	Q-739	Stage 1	Mix B	7:30	1.65	39	28.5	---	---	---	---	---	---	-2	2	158	---	---	---	C	20.0	---	C	10.0	-25	24.0	---	---	PH(GHD)
	Q-718	Stage 1	Mix C	8:30	1.72	63	34.0	---	---	---	---	---	---	-1	1	159	---	---	---	C	18.0	---	C	11.0	-25	22.0	---	---	PH(GHD)
	Q-691	Stage 1	MiX B	13:30	1.65	51	24.0	---	---	---	---	---	---	-2	2	160	---	---	---	C	18.5	---	C	8.5	-25	20.5	---	---	PH(GHD)
	Q-685	Stage 1	Mix C	14:30	1.69	56	29.5	---	---	---	---	---	---	-1	1	---	---	---	---	C	17.0	---	C	8.0	-25	21.0	---	---	PH(GHD)
2020-03-11	P-739	Stage 1	Mix C	7:30	1.73	>100	33.0	---	---	---	---	---	---	---	---	---	---	---	---	C	22.0	---	C	26.0	-30	22.0	---	---	PH(GHD)
	P-727	Stage 1	Mix C	9:00	1.74	79	29.0	---	---	---	---	---	---	-1	1	161	---	---	---	C	21.5	---	C	32.0	-30	21.0	---	---	PH(GHD)
	P-715	Stage 1	Mix C	13:30	1.73	70	28.3	---	---	---	---	---	---	-1	1	162	---	---	---	C	22.5	---	C	29.0	-30	23.5	---	---	PH(GHD)
2020-03-12	S-697	Stage 1	Mix C	7:30	1.71	52	24.5	---	---	---	---	---	---	-1	1	163	---	---	---	C	23.0	---	C	34.0	-39	21.0	---	---	PH(GHD)
	P-679	Stage 1	Mix C	13:30	1.70	56	26.5	---	---	---	---	---	---	-1	1	164	---	---	---	C	22.0	---	C	12.0	-39	17.5	---	---	PH(GHD)
	T-676	Stage 1	Mix C	14:00	1.71	65	27.0	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	C	8.0	-39	18.0	---	---	PH(GHD)
2020-03-13	P-619	Stage 1	Mix C	8:30	1.74	85	22.5	---	---	---	---	---	---	-1	1	165	---	---	---	C	21.5	---	C	14.5	-39	16.5	---	---	PH(GHD)
	T-604	Stage 1	Mix C	15:00	1.73	65	23.0	---	---	---	---	---	---	-1	1	166	---	---	---	C	22.0	---	C	16.5	-39	20.5	---	---	PH(GHD)
2020-03-14	T-592	Stage 1	Mix C	8:00	1.74	93	22.7	---	---	---	---	---	---	---	---	---	---	---	---	C	22.0	---	C	11.0	-43	22.5	---	---	PH(GHD)
	T-586	Stage 1	Mix C	9:00	1.74	64	23.0	---	---	---	---	---	---	-1	-1	167	---	---	---	C	21.5	---	C	12.0	-43	18.0	---	---	PH(GHD)
2020-03-15	P-571	Stage 1	Mix C	8:00	1.74	54	30.0	---	---	---	---	---	---	-1	1	168	---	---	---	C	26.0	---	C	28.0	-17	26.0	---	---	PH(GHD)
	P-559	Stage 1	Mix C	10:30	1.74	64	26.0	---	---	---	---	---	---	---	---	---	---	---	---	C	22.5	---	C	26.0	-17	21.5	---	---	PH(GHD)
	S-553	Stage 1	Mix C	14:00	1.72	65	29.0	---	---	---	---	---	---	-1	1	169	---	---	---	C	23.0	---	C	31.0	-17	23.0	---	---	PH(GHD)
2020-03-16	T-538	Stage 1	Mix C	8:30	1.74	64	29.5	---	---	---	---	---	---	-1	1	170	---	---	---	C	23.0	---	C	28.5	-41	21.0	---	---	PH(GHD)
	Q-526	Stage 1	Mix C	9:00	1.74	52	28.5	---	---	---	---	---	---	---	---	---	---	---	---	C	26.0	---	C	---	-41	22.0	---	---	PH(GHD)
	Q-523	Stage 1	Mix C	14:00	1.72	77	29.5	---	---	---	---	---	---	-1	1	171	---	---	---	C	23.5	---	C	28.0	-41	19.0	---	---	PH(GHD)
2020-03-17	P-499	Stage 1	Mix C	7:30	1.74	98	29.9	---	---	---	---	---	---	-1	1	172	---	---	---	C	27.0	---	C	26.5	-35	18.5	---	---	PH(GHD)
	Q-293	Stage 1	Mix C	14:00	1.76	99	28.3	---	---	---	---	---	---	-1	1	173	---	---	---	C	23.0	---	C	25.0	-35	24.0	---	---	PH(GHD)
2020-03-18	S-601	Stage 1	Mix C	8:00	1.72	72	27.0	---	---	---	---	---	---	-1	1	174	---	---	---	C	24.5	---	C	28.0	-37	22.5	---	---	PH(GHD)
	S-613	Stage 1	Mix C	14:30	1.71	80	27.5	---	---	---	---	---	---	-1	1	175	---	---	---	C	25.0	---	C	28.5	-37	24.0	---	---	PH(GHD)
2020-03-21	T-664	Plug	Mix C	9h30	1.71	50	20.0	---	---	---	---	---	---	-1.5	1.5	176	---	---	---	C	14.5	---	C	11.0	-10	22.0	---	---	JPBF (GHD)
	T-742	Plug	Mix C	13h00	1.73	77	22.5	---	---	---	---	---	---	-2	2	177	---	---	---	C	17.0	---	C	12.0		22.0	---	---	JPBF (GHD)
	Q-736	Stage 1	Mix B	14h30	1.68	46	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	17.0	---	C	18.0		23.0	---	---	JPBF (GHD)
	Q-694	Stage 1	Mix B	16h00	1.63	39	24.5	---	---	---	---	---	---	---	---	---	---	---	---	C	22.0	---	C	16.0		22.5	---	---	JPBF (GHD)
2020-03-22	Q-682	Stage 1	Mix B	8h00	1.68	47	27.5	---	---	---	---	---	---	-1.5	1.5	178	---	---	---	C	20.0	---	C	27.0	-10	20.0	---	---	JPBF (GHD)
	Q-667	Stage 1	Mix B	14h45	1.68	45	25.5	---	---	---	---	---	---	-2	2	179	---	---	---	C	21.0	---	C	22.0		24.0	---	---	JPBF (GHD)
	Q-628	Stage 1	Mix B	16h00	1.71	58	21.5	---	---	---	---	---	---	---	---	---	---	---	---	C	21.0	---	C	12.5		21.0	---	---	JPBF (GHD)
2020-03-23	P-609.1	Stage 1	Mix B	7h45	1.65	50	26.0	---	---	---	---	---	---	-2	2	180	---	---	---	C	24.0	---	C	20.0	-20	23.0	---	---	JPBF (GHD)
	Q-526	Stage 1	Mix B	13h00	1.65	42	20.0	---	---	---	---	---	---	-2	2	181	---	---	---	C	20.0	---	C	---		21.0	---	---	JPBF (GHD)
	P-739	Stage 1	Mix B	15h20	1.70	45	18.5	---	---	---	---	---	---	---	---	---	---	---	---	C	21.5	---	C	11.5		22.0	---	---	JPBF (GHD)
2020-03-24	P-727	Stage 1	Mix B	8h45	1.68	42	19.5	---	---	---	---	---	---	-1.5	1.5	182	---	---	---	C	12.5	---	C	21.0	-25	23.0	---	---	JPBF (GHD)
	P-715	Stage 1	Mix B	13h00	1.70	44	23.5	---	---	---	---	---	---	-1.5	1.5	183	---	---	---	C	15.5	---	C	17.0		22.0	---	---	JPBF (GHD)
	P-715	Stage 1	Mix C	13h25	---	NC	23.0	---	---	---	---	---	---	-1	1	184	---	---	---	C	16.0	---	C	16.0		22.0	---	---	JPBF (GHD)
	P-715	Stage 1	Mix C	13h30	1.77	103	23.0	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	16.0		22.0	---	---	JPBF (GHD)
	P-703	Stage 1	Mix B	14h15	1.67	42	20.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.0	---	C	15.5		22.0	---	---	JPBF (GHD)
	P-703	Stage 1	Mix C	14h30	1.76	63	22.5	---	---	---	---	---	---	---	---	---	---	---	---	C	15.0	---	C	15.0		22.0	---	---	JPBF (GHD)
	P-691	Stage 1	Mix B	15h50	1.69	45	19.0	---	---	---	---	---	---	---	---	---	---	---	---	C	19.0	---	C	12.0		22.0	---	---	JPBF (GHD)
2020-03-25	P-679	Stage 1	Mix B	7h15	1.66	46	24.5	---	---	---	---	---	---	-2	2	185	---	---	---	C	15.5	---	C	27.0	-20	23.0	---	---	JPBF (GHD)
	Q-523	Stage 1	Mix B	9h40	1.64	43	21.5	---	---	---	---	---	---	---	---	---	---	---	---	C	16.0	---	C	12.0		25.0	---	---	JPBF (GHD)

COMPRESSIVE STRENGHT RESULTS

Sample #	Date of Sampling	Date of test	Age of the specimen (days)	Length				Height				Surface (mm²)	Load (KN)	Strength (Mpa)	Average (Mpa)
				1 (mm)	2 (mm)	3 (mm)	Average (mm)	1 (mm)	2 (mm)	3 (mm)	Average (mm)				
1 (mix B)	2019-11-14	2019-11-21	7	50.01	50.00	49.99	50.00	49.98	50.00	50.02	50.00	**2500.00**		**30.81**	**30.85**
	2019-11-14	2019-11-21	7	50.02	49.98	48.99	49.66	50.01	50.03	50.00	50.01	**2483.83**		**32.07**	
	2019-11-14	2019-11-21	7	50.02	50.01	49.97	50.00	50.03	50.01	50.00	50.01	**2500.67**		**29.67**	
	2019-11-14	2019-12-12	28	50.02	50.03	50.02	50.02	50.02	50.02	50.03	50.02	**2502.33**	**100.1**	**40.12**	**39.59**
	2019-11-14	2019-12-12	28	50.01	50.02	50.01	50.01	50.02	50.03	50.01	50.02	**2501.67**	**94.6**	**37.88**	
	2019-11-14	2019-12-12	28	50	50.01	50.01	50.01	50.02	50.02	50.03	50.02	**2501.50**	**101.8**	**40.78**	
2 (Mix C)	2019-11-14	2019-11-21	7	50.00	50.00	49.99	50.00	50.01	50.30	50.04	50.12	**2505.67**		**46.8**	**43.68**
	2019-11-14	2019-11-21	7	49.99	49.99	50.01	50.00	50.01	49.99	50.01	50.00	**2500.00**		**43.06**	
	2019-11-14	2019-11-21	7	49.88	50.00	50.02	49.97	49.99	50.04	49.99	50.01	**2498.67**		**41.18**	
	2019-11-14	2019-12-12	28	50.01	50.01	50.02	50.01	50.02	50.03	50	50.02	**2501.50**	**125.4**	**50.21**	**49.92**
	2019-11-14	2019-12-12	28	50	50.02	50.03	50.02	50.01	50.01	50.02	50.01	**2501.50**	**126.1**	**50.53**	
	2019-11-14	2019-12-12	28	50.03	50.03	50.02	50.03	50.02	50.02	50.03	50.02	**2502.50**	**122.3**	**49.03**	
3 (Mix D)	2019-12-15	2020-01-12	28	50.02	50.02	49.99	50.01	50.02	50.03	48.99	49.68	**2484.50**	**141.7**	**56.8**	**44.93**
	2019-12-15	2020-01-12	28	49.99	50.01	50.02	50.01	49.99	50.02	50.01	50.01	**2500.67**	**108.2**	**43.36**	
	2019-12-15	2020-01-12	28	50	49.97	50.02	50.00	50.01	49.98	49.99	49.99	**2499.50**	**86.4**	**34.64**	
	2019-12-15	2020-01-12	28	50.01	49.99	49.98	49.99	49.99	50.03	50.02	50.01	**2500.33**	**122.4**	**49.95**	**49.61**
	2019-12-15	2020-01-12	28	49.97	50.02	50.02	50.00	49.98	50.02	48.99	49.66	**2483.33**	**109.6**	**43.94**	
	2019-12-15	2020-01-12	28	50.02	50.01	50.01	50.01	50.03	49.98	50.01	50.01	**2501.00**	**137.1**	**54.94**	

Vicat Initial Set Time (ASTM C191 - 13, Method A)

General information							Readings				Results			
Vicat #	Type of Mix	date of sampling & test	time of sampling	Temperature of the Grout at Sampling (°C)	Temperature in the laboratory (°C)	beginning of the test	Last reading > 25mm (mm), *C*	Time (min.), *E*	First Reading < 25mm (mm), *D*	Time (min.), *H*	Initial Set Time (min.)	Final set time (min.)	QC Representative	Comments
1	C with Celbex	2019-12-04	8H35	22	20	8H45	39	265	5	300	**279**		M. C. (Sana)	
2	C with Celbex		14:35			14:40	---	---	---	---	**#VALUE!**	**between 279 minutes & 925 minutes**	M.C (Sana)	Final set happenned during the night. Any technician was present to collect the data. The last reading has been taken on the next day shift at 6 o'clock.
3	Mix C	2019-12-14	8H30	21.5	21	8H45	27	255	9	315	**262**	**555 minutes**	JPBF (GHD)	Mix C in the Lab
4	Mix C	2019-12-19	7h00	23.5	20	7h00	27	240	12	300	**248**	**570 minutes**	JPBF (GHD)	Mx C in the Lab
5	Mix D	2020-01-13	9h20	28.1	18.8	9h25	28	280	5	315	**285**	**405 minutes**	JMR (GHD)	Mix D in the Lab
6	Mix B	2020-02-26	7h10	27.5	21.5	7h20	29	360	15	390	**369**	**630 minutes**	JPBF (GHD)	Mix B in the Lab
7														

General information					Casing					Drilled Bedrock @5m or 1.5m								Drilled Bedrock @ 3.5m stage								Plug			
Hole #	Type	Station	Ground Elev.	Theorical Bedrock Elev.	Bottom Casing Elevation	Anchor of the casing (m)	Stick-up (m)	Lengh (m)	Encountered bedrock depth (m)	Encountered Bedrock Elev.	Drilling Date	Final depth (m)	Added casing length (m)	Total casing length (m)	Bottom casing to end of hole (m)	Lost of water return (Yes/no)	Depth of lost (m)	Drilling Date	Final depth (m)	Added casing length (m)	Total casing length (m)	Bottom casing to end of hole (m)	Lost of water return (Yes/no)	Depth of lost (m)	BACKFILLED	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)
1	P	176.5	159.110	151.970	151.510	0	0.35	7.95	NOT FOUND	NOT FOUND																			
1B	P	176.5	159.110	151.970	151.120	0.30	0.29	8.28	7.69	151.420	2020-02-21	13.4		8.28	5.41	NO	-								BACKFILLED	2020-02-20	C	38.2	1.38
2	T	179.5	159.112	151.970	151.112	0.14	0.35	8.35	7.86	151.252	2020-03-02	13.4		8.35	5.40	NO	-								BACKFILLED	2020-02-20	C	26.8	1.42
3	S	182.5	159.117	151.620	151.527	0.30	0.35	7.94	7.29	151.827	2020-02-27	12.8		7.94	5.21	NO	-								BACKFILLED	2020-02-20	C	28.3	1.60
4	T	185.5	159.135	151.540	150.825	1.00	0.35	8.66	7.31	151.825	2020-03-02	13.7		8.66	5.39	NO	-								BACKFILLED	2020-02-20	C	25	1.94
5	P	188.5	159.150	151.600	151.050	0	0.35	8.45	NOT FOUND	NOT FOUND				8.45															
5B	P	188.5	159.150	151.500	150.720	0.30	0.35	8.78	8.13	151.020	2020-02-21	13.9		8.78	5.47	NO	-								BACKFILLED	2020-02-20	C	28.3	1.60
6	T	191.5	159.102	151.500	150.652	-0.25	0.35	8.8	8.70	150.402	2020-03-02	14.2		8.80	5.75	NO	-								BACKFILLED	2020-02-20	C	16.9	1.98
7	Q	193			-10.060	0.30	0.24	10.3	9.76					10.30												2020-03-17	C	24.9	2.05
8	S	194.5	159.036	150.630	149.416	0.32	0.35	9.97	9.30	149.736	2020-02-27	15		9.97	5.38	NO	-								BACKFILLED	2020-02-19	C	143.1	2.26
9	Q	197			-10.560	0.30	0.24	10.8	10.26					10.80												2020-03-17	C	19.1	2.16
10	T	197.5	159.084	149.980	150.584	-0.34	0.35	8.85	8.84	150.244	2020-03-02	14.4		8.85	5.90	NO	-								BACKFILLED	2020-03-05	D	67.1	4.14
11	Q	199			-9.720	0.30	0.24	9.96	9.42					9.96												2020-03-17	C	143.3	0.25
12	P	200.5	159.122	149.650	149.072	0.33	0.35	10.4	9.72	149.402	2020-02-21	15.3		10.40	5.25	NO	-								BACKFILLED	2020-02-19	C	23.2	2.16
13	T	203.5	159.186	149.580	149.036	0.11	0.35	10.5	10.04	149.146	2020-03-02	15.5		10.50	5.35	NO	-								BACKFILLED	2020-02-19	C	18	2.47
14	S	206.5	159.265	149.360	149.015	0.22	0.35	10.6	10.03	149.235	2020-02-26	15.7		10.60	5.45	NO	-								BACKFILLED	2020-02-19	C	23.1	2.06
15	T	209.5	159.258	149.270	149.168	0.49	0.35	10.44	9.60	149.658	2020-03-02	15.5		10.44	5.41	NO	-								BACKFILLED	2020-02-19	C	173.3	\
16	P	212.5	159.216	149.630	149.286	0.33	0.35	10.28	9.60	149.616	2020-02-21	15.1		10.28	5.17	NO	-								BACKFILLED	2020-02-19	C	20.2	1.95
17	T	215.5	159.280	149.530	148.980	0.30	0.35	10.65	10.00	149.280	2020-03-02	15.7		10.65	5.40	NO	-								BACKFILLED	2020-02-19	C	20.5	1.94
18	S	218.5	159.148	149.530	148.598	0.35	0.35	10.9	10.20	148.948	2020-02-26	15.8		10.90	5.25	NO	-								BACKFILLED	2020-02-19	C	177.2	1.11
19	Q	220			-10.760	0.30	0.27	11.03	10.46					11.03												2020-03-17	C	20.7	2.12
20	T	221.5	159.103	149.270	148.793	0.51	0.35	10.66	9.80	149.303	2020-03-02	15.7		10.66	5.39	NO	-								BACKFILLED	2020-02-19	C	19.6	1.85
21	Q	223			-9.890	0.30	0.30	10.19	9.59					10.19												2020-03-17	C	48.2	1.73
22	P	224.5	159.068	149.270	150.168	-0.10	0.35	9.25	9.00	150.068	2020-02-21	14.6		9.25	5.70	NO	-								BACKFILLED	2020-02-19	C	36.8	1.44
23	T	227.5	159.042	150.120	150.142	-0.11	0.35	9.25	9.01	150.032	2020-03-01	14.4		9.25	5.50	NO	-								BACKFILLED	2020-02-19	C	15.5	0.12
24	S	230.5	159.067	150.130	150.217	-0.15	0.35	9.2	9.00	150.067	2020-02-26	14.2		9.20	5.35	NO	-								BACKFILLED	2020-02-19	C	179.9	0.17
25	T	233.5	159.072	150.020	150.182	0.26	0.35	9.24	8.63	150.442	2020-03-01	14.2		9.24	5.31	NO	-								BACKFILLED	2020-02-18	C	333	3.03
26	P	236.5	159.126	150.220	150.046	0.13	0.35	9.43	8.95	150.176	2020-02-21	14.5		9.43	5.42	NO	-								BACKFILLED	2020-02-18	C	25.5	2.12
27	T	239.5	159.149	150.580	150.199	0.30	0.35	9.3	8.65	150.499	2020-03-01	14.3		9.30	5.35	NO	-								BACKFILLED	2020-02-18	C	153.7	0.47
28	S	242.5	159.203	150.590	150.063	0.14	0.35	9.49	9.00	150.203	2020-02-26	14.3		9.49	5.16	NO	-								BACKFILLED	2020-02-18	C	20	1.98
29	T	245.5	159.278	150.840	150.298	0.30	0.35	9.33	8.68	150.598	2020-03-01	14.4		9.33	5.42	NO	-								BACKFILLED	2020-02-18	C	151.2	1.34
30	P	248.5	159.265	150.480	149.995	0.30	0.35	9.62	8.97	150.295	2020-02-21	14.5		9.62	5.23	NO	-								BACKFILLED	2020-02-18	C	158	0.80
31	T	251.5	159.323	150.250	150.273	0.09	0.35	9.4	8.96	150.363	2020-03-01	14.5		9.40	5.45	NO	-								BACKFILLED	2020-02-10	C	20.2	2.04
32	S	254.5	159.163	150.410	149.893	0.27	0.35	9.62	9.00	150.163	2020-02-26	14.8		9.62	5.53	NO	-								BACKFILLED	2020-02-10	C	156.9	0.06
33	T	257.5	159.158	150.620	149.978	0.28	0.35	9.53	8.90	150.258	2020-03-01	14.6		9.53	5.42	NO	-								BACKFILLED	2020-02-10	C	19.3	2.01
34	P	260.5	159.153	150.510	149.683	0.32	0.35	9.82	9.15	150.003	2020-02-12	14.5		9.82	5.03	NO	-								BACKFILLED	2020-02-10	C	162.6	0.09
35	T	263.5	159.151	150.410	149.901	0.35	0.35	9.6	8.90	150.251	2020-02-29	14.5		9.60	5.25	NO	-								BACKFILLED	2020-02-10	C	38.7	2.16
36	S	266.5	159.085	150.460	149.915	0.25	0.35	9.52	8.92	150.165	2020-02-21	14.5		9.52	5.33	NO	-								BACKFILLED	2020-02-10	C	30.5	1.76
37	T	269.5	159.081	150.430	150.011	0.30	0.35	9.42	8.77	150.311	2020-02-26	14.4		9.42	5.33	NO	-								BACKFILLED	2020-02-10	C	75.3	1.53
38	P	272.5	159.137	150.710	150.537	0	0.35	8.95	NOT FOUND	NOT FOUND				8.95											BACKFILLED				
38B	P	272.5	159.137	151.120	150.387	0.12	0.35	9.1	8.63	150.507	2020-02-12	14		9.10	5.25	NO	-								BACKFILLED	2020-02-10	C	32.8	1.32
39	T	275.5	159.142	151.120	149.932	0.30	0.35	9.56	8.91	150.232	2020-02-26	14.5		9.56	5.29	NO	-								BACKFILLED	2020-02-10	C	27.5	1.58
40	S	278.5	159.152	150.720	150.222	0.35	0.35	9.28	8.58	150.572	2020-02-18	14.3		9.28	5.37	NO	-								BACKFILLED	2020-02-10	C	26.6	1.46
41	T	281.5	159.094	150.610	149.984	0.42	0.35	9.46	8.69	150.404	2020-02-26	14.4		9.46	5.29	NO	-								BACKFILLED	2020-02-10	C	27.8	1.51
42	P	284.5	159.122	150.470	150.122	0.30	0.35	9.35	8.70	150.422	2020-02-12	14.2		9.35	5.20	NO	-								BACKFILLED	2020-02-10	C	28.5	1.75
43	T	287.5	159.090	150.940	150.560	0.30	0.35	8.88	8.23	150.860	2020-02-26	13.9		8.88	5.37	NO	-								BACKFILLED	2020-02-10	C	20.4	1.77
44	S	290.5	159.177	150.980	150.277	0.28	0.35	9.25	8.62	150.557	2020-02-18	14.4		9.25	5.50	NO	-								BACKFILLED	2020-02-09	C		
45	Q	292			-8.900	0.30	0.26	9.16	8.60					9.16												2020-03-17	C	23.4	1.95
46	T	293.5	159.226	150.900	150.326	0.19	0.35	9.25	8.71	150.516	2020-02-25	14.1		9.25	5.20	NO	-								BACKFILLED	2020-02-09	C	28.8	1.40
47	Q	295			-8.980	0.30	0.26	9.24	8.68					9.24												2020-03-17	C	149.6	0.25
48	P	296.5	159.203	150.820	150.873	0.30	0.31	8.64	8.03	151.173	2020-02-12	13.4		8.64	5.07	NO	-								BACKFILLED	2020-02-09	C	151.2	0.20
49	T	299.5	159.201	151.060	151.401	0.30	0.35	8.15	7.50	151.701	2020-02-25	13.2		8.15	5.40	NO	-								BACKFILLED	2020-02-09	C	26.4	2.01
50	S	302.5	159.195	151.160	150.545	0.30	0.35	9	8.35	150.845	2020-02-18	14.1		9.00	5.45	NO	-								BACKFILLED	2020-02-09	C	22.1	2.02
51	T	305.5	159.172	150.910	151.112	0.30	0.35	8.41	7.76	151.412	2020-02-25	13.6		8.41	5.54	NO	-								BACKFILLED	2020-02-09	C	28.3	1.51
52	P	308.5	159.161	151.000	151.211	0.05	0.35	8.3	7.90	151.261	2020-02-12	13		8.30	5.05	NO	-								BACKFILLED	2020-02-09	C	38.3	1.55
53	T	311.5	159.182	151.680	149.912	0	0.35	9.62	NOT FOUND	NOT FOUND				9.62															
53B	T	311.5	159.182	151.330	150.802	0.30	0.35	8.73	8.08	151.102	2020-02-25	13.9		8.73	5.52	NO	-								BACKFILLED	2020-02-09	C	24.9	1.56
54	S	314.5	159.165	151.330	150.085	0.33	0.35	9.43	8.75	150.415	2020-02-18	14.5		9.43	5.42	NO	-								BACKFILLED	2020-02-09	C	23.4	1.44
55	T	317.5	159.178	150.750	149.598	0.18	0.35	9.93	9.40	149.778	2020-02-25	15		9.93	5.42	NO	-								BACKFILLED	2020-02-09	C	31.3	1.57
56	P	320.5	159.185	150.030	148.855	0.33	0.35	10.68	10.00	149.185	2020-02-11	15.2		10.68	4.87	NO	-								BACKFILLED	2020-02-09	C	23.9	2.04
57	T	323.5	159.145	149.570	148.675	0.30	0.35	10.82	10.17	148.975	2020-02-25	15.7		10.82	5.23	NO	-								BACKFILLED	2020-02-09	C	25.5	1.70
58	S	326.5	159.094	149.070	148.074	0.30	0.35	11.37	10.72	148.374	2020-02-18	16.6		11.37	5.58	NO	-								BACKFILLED	2020-02-09	C	184.1	0.20
59	T	329.5	159.092	148.630	148.032	0.30	0.35	11.41	10.76	148.332	2020-02-25	16.4		11.41	5.34	NO	-								BACKFILLED	2020-02-09	C	60.3	1.66
60	P	332.5	159.097	148.160	147.347	0.35	0.35	12.1	11.40	147.697	2020-02-11	16.5		12.10	4.75	NO	-								BACKFILLED	2020-02-08	C	28.39	1.63
61	T	335.5		147.710						0.000				0.00															
62	S	338.5	159.098		146.348	0	0.35	13.1	NOT FOUND	NOT FOUND				13.10															
62B	S	338.5	159.098	146.940	145.188	0.30	0.35	14.26	13.61	145.488	2020-02-18	19.3		14.26	5.39	NO	-								BACKFILLED	2020-02-08	C	21.77	2.01
63	T	341.5	159.095	146.940	146.745	0.35	0.35	12.7	12.00	147.095	2020-02-25	17.9		12.70	5.55	NO	-								BACKFILLED	2020-02-08	C	43.79	2.70
64	P	344.5	159.129	146.920	146.179	0	0.35	13.3	NOT FOUND	NOT FOUND				13.30											BACKFILLED				
64B	P	344.5	159.129	146.740	145.699	0.30	0.35	13.78	13.13	145.999	2020-02-11	18.4		13.78	4.97	NO	-								BACKFILLED	2020-02-08	C	32.65	1.95
65	T	347.5	159.112	146.740	145.982	1.19	0.35	13.48	11.94	147.172	2020-02-25	18.4		13.48	5.27	NO	-								BACKFILLED	2020-02-08	C	24.46	1.75
66	S	350.5	159.136	146.480	145.556	0.16	0.35	13.93	13.42	145.716	2020-02-17	18.5		13.93	4.92	NO	-								BACKFILLED	2020-02-08	C	24.31	1.95
67	T	353.5	159.248	146.430	145.398	0	0.35	14.2	NOT FOUND	NOT FOUND				14.20															
67B	T	353.5	159.248	146.290	144.638	0.30	0.35	14.96	14.31	144.938	2020-02-25	19.9		14.96	5.29	NO	-								BACKFILLED	2020-02-08	C	22	1.88
68	P	356.5	159.284	146.290	144.654	0	0.35	14.98	NOT FOUND	NOT FOUND				14.98											BACKFILLED				
68B	P	356.5	159.284	145.520	143.804	0.30	0.35	15.83	15.18	144.104	2020-02-10	20.3		15.83	4.82	NO	-								BACKFILLED	2020-02-08	C	173.9	2.14
69	T	359.5		145.520						0.000				0.00															
70	S	362.5	159.137		143.237	0.30	0.35	16.25	15.60	143.537	2020-02-17	20.6		16.25	4.70	NO	-								BACKFILLED	2020-02-08	C	32.29	2.26
71	T	365.5	159.071	143.680	142.021	0.30	0.35	17.4	16.75	142.321	2020-02-25	22.3		17.40	5.25	NO	-								BACKFILLED	2020-02-08	C	25.48	2.20
72	P	368.5	158.970	143.650	143.540	0.30	0.35	15.78	15.13	143.840	2020-02-10	20.6		15.78	5.17	NO	-								BACKFILLED	2020-02-06	C	105.5	2.16
73	T	371.5	159.064	144.210	146.164	0.35	0.35	13.25	12.55	146.514	2020-02-25	18.2		13.25	5.30	NO	-								BACKFILLED	2020-02-03	C	216.3	1.37
74	S	374.5	159.083	145.670	147.643	0.35	0.35	11.79	11.09	147.993	2020-02-17	16.4		11.79	4.96	NO	-								BACKFILLED	2020-02-03	C	38.6	1.66

75	T	377.5	159.001	147.750	147.371	0.30	0.35	11.98	11.33	147.671	2020-02-25	16.9		11.98	5.27	NO	-								BACKFILLED	2020-02-03	C	22	1.67
76	P	380.5	158.945	148.070	148.005	0	0.35	11.29	NOT FOUND	NOT FOUND				11.29											BACKFILLED				
76B	P	380.5 B	158.945	148.310	146.495	0.30	0.35	12.8	12.15	146.795	2020-02-04	17.7		12.80	5.25	NO	-								BACKFILLED	2020-02-03	C	31.2	1.91
77	T	383.5	158.943	148.310	147.003	0.30	0.35	12.29	11.64	147.303	2020-02-17	17.3		12.29	5.36	NO	-								BACKFILLED	2020-02-03	C	21.3	2.48
78	S	386.5	158.991	147.390	146.031	0.30	0.35	13.31	12.66	146.331	2020-02-10	17.7		13.31	4.74	NO	-								BACKFILLED	2020-02-03	C	27	2.25
79	T	389.5	159.011	147.130	147.621	0	0.35	11.74	NOT FOUND	NOT FOUND				11.74															
79B	T	389.5 B	159.011	148.260	146.191	0.30	0.35	13.17	12.52	146.491	2020-02-17	18.2		13.17	5.38	NO	-								BACKFILLED	2020-02-03	C	63	2.00
80	P	392.5	158.981	148.260	146.881	0	0.35	12.45	NOT FOUND	NOT FOUND				12.45											BACKFILLED				
80B	P	392.5 B	158.981	147.910	146.301	0.30	0.35	13.03	12.38	146.601	2020-02-04	17.8		13.03	5.12	NO	-								BACKFILLED	2020-02-02	C	59.6	1.87
81	T	395.5	158.978	147.910	146.688	0.23	0.35	12.64	12.06	146.918	2020-02-17	17.4		12.64	5.11	NO	-								BACKFILLED	2020-02-02	C	18	1.94
82	S	398.5	158.978	147.500	147.728	0.30	0.35	11.6	10.95	148.028	2020-02-10	16		11.60	4.75	NO	-								BACKFILLED	2020-02-02	C	27.4	1.90
83	T	401.5	158.944	147.680	147.584	0.30	0.35	11.71	11.06	147.884	2020-02-17	16.5		11.71	5.14	NO	-								BACKFILLED	2020-02-02	C	19.9	1.82
84	P	404.5	158.944	147.940	145.504	0	0.35	13.79	NOT FOUND	NOT FOUND				13.79											BACKFILLED				
84B	P	404.5 B	158.944	146.520	144.324	0.30	0.35	14.97	14.32	144.624	2020-02-03	19.8		14.97	5.18	NO	-								BACKFILLED	2020-02-02	C	20.4	1.95
85	T	407.5	158.945	146.520	146.695	0.25	0.35	12.6	12.00	146.945	2020-02-17	17.4		12.60	5.15	NO	-								BACKFILLED	2020-02-02	C	82.6	1.82
86	S	410.5	158.943	146.880	148.133	0.36	0.35	11.16	10.45	148.493	2020-02-09	15.5		11.16	4.69	NO	-								BACKFILLED	2020-02-02	C	47	1.84
87	T	413.5	158.940	148.250	147.800	0.30	0.35	11.49	10.84	148.100	2020-02-17	16.4		11.49	5.26	NO	-								BACKFILLED	2020-02-02	C	18	1.82
88	P	416.5	158.963	148.250	148.013	0.29	0.35	11.3	10.66	148.303	2020-02-03	16.2		11.30	5.25	NO	-								BACKFILLED	2020-02-02	C	23.5	1.84
89	T	419.5	158.971	148.190	148.161	0.33	0.35	11.16	10.48	148.491	2020-02-17	15.7		11.16	4.89	NO	-								BACKFILLED	2020-02-02	C	31.9	1.74
90	S	422.5	159.026	148.380	148.456	0.30	0.35	10.92	10.27	148.756	2020-02-09	15.5		10.92	4.93	NO	-								BACKFILLED	2020-02-02	C	40.2	1.80
91	T	425.5	159.046	148.650	148.136	0.30	0.35	11.26	10.61	148.436	2020-02-17	15.8		11.26	4.89	NO	-								BACKFILLED	2020-02-01	C	184.9	0.60
92	P	428.5	158.931	148.410	148.441	0.30	0.35	10.84	10.19	148.741	2020-02-03	15.7		10.84	5.21	NO	-								BACKFILLED	2019-11-29	C	29.53	1.73
93	T	431.5	159.052	148.710	148.522	0.30	0.35	10.88	10.23	148.822	2020-02-17	15.4		10.88	4.87	NO	-								BACKFILLED	2019-11-29	C	176.4	1.52
94	S	434.5	159.061	148.840	148.871	0.30	0.35	10.54	9.89	149.171	2020-02-09	15		10.54	4.81	NO	-								BACKFILLED	2020-02-01	C	20.7	1.64
95	T	437.5	159.179	148.950	148.879	0.30	0.35	10.65	10.00	149.179	2020-02-17	15.8		10.65	5.50	NO	-								BACKFILLED	2019-11-29	C	21.62	1.63
96	P	440.5		148.910						0.000				0.00															
97	T	443.5	159.034	148.930	148.434	0.21	0.35	10.95	10.39	148.644	2020-02-02	15.8		10.95	5.20	NO	-								BACKFILLED	2019-11-28	C	177.3	0.46
98	S	446.5	159.031	148.930	148.311	0.30	0.35	11.07	10.42	148.611	2020-01-29	16.3	0.8	11.87	4.78	YES	14.1								BACKFILLED	2020-01-27	C	16.3	1.24
99	T	449.5	159.044	149.060	147.924		0.00	11.12	-	-	2020-02-02	16		11.12	4.88	NO	-								BACKFILLED	2019-11-28	C	23.44	1.66
100	P	452.5	159.033	148.980	148.873	0.68	0.35	10.51	9.48	149.553	2020-01-21	15.4		10.51	5.24	YES	14.8								BACKFILLED	2019-11-28	C	28.09	1.51
101	T	455.5	159.054	148.970	148.514	0.30	0.38	10.92	10.24	148.814	2020-02-02	15.8		10.92	5.26	NO	-								BACKFILLED	2019-11-28	C	88.5	1.56
102	S	458.5	159.044	149.000	148.474	0.30	0.35	10.92	10.27	148.774	2020-01-28	16		10.92	5.43	NO	-								BACKFILLED	2019-11-28	C	19.29	1.57
103	T	461.5	159.039	149.070	148.579	0.30	0.35	10.81	10.16	148.879	2020-02-02	15.8		10.81	5.34	NO	-								BACKFILLED	2020-01-27	C	4.2	1.09
104	P	464.5	159.045	149.040	148.835	0.30	0.35	10.56	9.91	149.135	2020-01-21	15.2		10.56	4.99	NO	-								BACKFILLED	2019-11-27	C	147.8	1.49
105	T	467.5	158.999	149.280	148.799	0.30	0.35	10.55	9.90	149.099	2020-02-02	15.5		10.55	5.30	NO	-								BACKFILLED	2019-11-27	C	172.7	0.02
106	S	470.5	159.016	149.460	148.916	0.30	0.35	10.45	9.80	149.216	2020-01-28	15.1		10.45	5.00	NO	-								BACKFILLED	2019-11-27	C	20.56	1.48
107	T	473.5	159.019	149.540	149.269	0.30	0.35	10.1	9.45	149.569	2020-02-02	15		10.10	5.25	NO	-								BACKFILLED	2019-11-27	C	163.1	0.02
108	P	476.5	159.036	149.680	148.996	0.30	0.35	10.39	9.74	149.296	2019-11-30	15.2		10.39	5.16	NO	-								BACKFILLED	2019-11-27	C	24.95	1.61
109	Q	478		149.590	148.945	0.30	0.25	10.35	9.80	149.245	2020-03-24	15.3		10.35	5.20	NO	-								BACKFILLED	2020-03-17	C	55.4	1.78
110	T	479.5	158.996	149.534	148.856	1.10	0.40	10.54	9.04	149.956	2020-02-02	15.4		10.54	5.26	NO	-								BACKFILLED	2019-11-27	C	27.93	1.51
111	Q	481		149.540	148.847	0.30	0.25	10.45	9.90	149.147	2020-03-21	15.2		10.45	5.00	NO	-								BACKFILLED	2020-03-17	C	21.1	2.08
112	S	482.5	159.005	149.690	150.025	0.30	0.40	9.38	8.68	150.325	2020-01-28	14.2		9.38	5.22	NO	-								BACKFILLED	2019-11-27	C	28.12	1.62
113	T	485.5	158.989	149.620	149.209	0.30	0.40	10.18	9.48	149.509	2020-02-02	15.1		10.18	5.32	NO	-								BACKFILLED	2019-11-27	C	19.1	1.45
114	P	488.5	158.967	149.670	148.837	0.35	0.35	10.48	9.78	149.187	2019-11-30	15.1		10.48	4.97	NO	-								BACKFILLED	2019-11-27	C	60.2	1.68
115	T	491.5	159.004	149.600	149.034	0.23	0.40	10.37	9.74	149.264	2020-02-02	15.1		10.37	5.13	NO	-								BACKFILLED	2019-11-27	C	18.54	1.52
116	S	494.5	158.989	149.590	148.999	0.15	0.35	10.34	9.84	149.149	2020-01-27	15.3		10.34	5.31	NO	-								BACKFILLED	2019-11-26	C	22.24	1.49
117	T	497.5	159.027	149.660	148.237	0.29	0.35	11.14	10.50	148.527	2020-02-02	16		11.14	5.21	NO	-								BACKFILLED	2019-11-26	C	29.2	2.00
118	P	500.5	159.037	149.580	148.537	0.11	0.35	10.85	10.39	148.647	2019-11-30	15.4		10.85	4.90	NO	-								BACKFILLED	2019-11-26	C	18.34	1.63
119	T	503.5	158.991	149.500	148.901	0.46	0.35	10.44	9.63	149.361	2020-02-02	15.3		10.44	5.21	NO	-								BACKFILLED	2019-11-26	C	20.21	1.61
120	S	506.5	159.019	149.650	148.699	0.65	0.35	10.67	9.67	149.349	2020-01-26	15.7		10.67	5.38	NO	-								BACKFILLED	2019-11-26	C	26.87	1.60
121	T	509.5	159.063	149.660	147.863	0.58	0.40	11.6	10.62	148.443	2020-02-02	16.4		11.60	5.20	NO	-								BACKFILLED	2019-11-26	C	25.53	1.95
122	P	512.5	159.048	149.650	148.548	0.30	0.40	10.9	10.20	148.848	2019-11-30	16.8		10.90	6.30	NO	-								BACKFILLED	2019-11-26	C	25.82	1.78
123	T	515.5	159.020	149.650	148.030	0.90	0.40	11.39	10.09	148.930	2020-02-02	16.2		11.39	5.21	NO	-								BACKFILLED	2019-11-26	C	21.75	1.70
124	S	518.5	158.999	149.650	148.879	0.12	0.40	10.52	10.00	148.999	2020-01-26	15.3		10.52	5.18	YES	12.9								BACKFILLED	2019-11-26	C	49.35	1.25
125	T	521.5	159.001	149.550	149.071	0.33	0.40	10.33	9.60	149.401	2020-02-02	15.2		10.33	5.27	NO	-								BACKFILLED	2019-11-25	C	88.3	1.60
126	Q	523		149.560	148.983	0.30	0.25	10.37	9.82	149.283	2020-03-24	15.3		10.37	5.18	NO	-								BACKFILLED	2020-03-16	C	20.2	1,98
127	P	524.5	158.986	149.617	148.016	0.32	0.40	11.37	10.65	148.336	2019-11-30	15.9		11.37	4.93	NO	-								BACKFILLED	2019-11-25	C	19.94	1.80
128	Q	526		149.530	147.796	0.30	0.25	11.57	11.02	148.096	2020-03-21	16.4		11.57	5.08	NO	-								BACKFILLED	2020-03-16	C	23.1	2.20
129	T	527.5	158.988	149.554	148.828	0.51	0.40	10.56	9.65	149.338	2020-02-02	15.4		10.56	5.24	NO	-								BACKFILLED	2019-11-25	C	20.62	1.93
130	S	530.5	159.048	149.550	149.018	0.85	0.40	10.43	9.18	149.868	2020-01-26	15.4		10.43	5.37	YES	12.8								BACKFILLED	2019-11-26	C	19.92	1.63
131	T	533.5	158.983	149.530	148.083	0	0.40	11.3	NOT FOUND	NOT FOUND				11.30															
131B	T	533.5 B	158.983	149.590	146.453	0.30	0.35	12.88	12.23	146.753	2020-02-01	18.7		12.88	6.17	NO	-								BACKFILLED	2020-01-20	C	18.81	1.69
132	P	536.5	158.978	149.590	149.088	0.30	0.40	10.29	9.59	149.388	2019-11-30	14.6		10.29	4.71	NO	-								BACKFILLED	2019-11-25	C	22.67	1.66
133	T	539.5	158.988	149.530	149.118	0.30	0.40	10.27	9.57	149.418	2020-02-01	15.2		10.27	5.33	NO	-								BACKFILLED	2019-11-25	C	21.92	1.56
134	S	542.5	159.016	149.390	150.046	0.30	0.40	9.37	8.67	150.346	2020-01-26	14.4		9.37	5.43	YES	12.1								BACKFILLED	2019-11-25	C	19.28	1.52
135	T	545.5	159.001	149.430	149.881	0.30	0.40	9.52	8.82	150.181	2020-02-01	16.6		9.52	7.48	NO	-								BACKFILLED	2019-11-25	C	17.88	1.50
136	P	548.5	159.003	149.540	148.743	0.41	0.40	10.66	9.85	149.153	2020-01-21	14.9		10.66	4.64	NO	-								BACKFILLED	2020-01-20	C	173.1	1.05
137	T	551.5	159.001	149.420	148.811	0.32	0.40	10.59	9.87	149.131	2020-02-01	15.4		10.59	5.21	NO	-								BACKFILLED	2019-11-25	C	17.88	1.48
138	S	554.5	159.080	149.520	148.150	0.93	0.40	11.33	10.00	149.080	2020-01-26	16.3		11.33	5.37	NO	-								BACKFILLED	2020-01-20	C	22.73	1.97
139	T	557.5	158.980	149.440	148.550	0.30	0.40	10.83	10.13	148.850	2020-02-01	15.8		10.83	5.37	NO	-								BACKFILLED	2019-11-25	C	64.94	1.67
140	P	560.5	158.970	149.380	149.170	0.30	0.35	10.15	9.50	149.470	2020-01-21	15		10.15	5.20	NO	-								BACKFILLED	2020-01-20	C	174.4	-0.18
141	T	563.5	158.977	149.640	147.977	0.30	0.34	11.34	10.70	148.277	2020-02-01	16.2		11.34	5.20	NO	-								BACKFILLED	2020-01-12	C	18.74	1.62
142	S	566.5	159.038	149.640	148.088	0.30	0.35	11.3	10.65	148.388	2020-01-25	16.2		11.30	5.25	NO	-								BACKFILLED	2020-01-12	C	19.56	1.89
143	T	569.5	159.042	149.530	147.292	0.30	0.35	12.1	11.45	147.592	2020-02-01	17		12.10	5.25	NO	-								BACKFILLED	2020-01-20	C	197	0.36
144	P	572.5	159.029	149.320	145.739	0.30	0.35	13.64	12.99	146.039	2020-01-14	18.6		13.64	5.31	NO	-								BACKFILLED	2020-01-12	C	222	-0.02
145	T	575.5	159.042	149.380	147.312	0.30	0.35	12.08	11.43	147.612	2020-02-01	17.4	0.75	12.83	4.92	NO	-								BACKFILLED	2020-01-12	C	197.3	-0.15
146	S	578.5	159.001	149.050	146.981	0.30	0.35	12.37	11.72	147.281	2020-01-25	17.3		12.37	5.28	YES	14.1								BACKFILLED	2020-01-11	C	201.2	0.22
147	T	581.5	158.961	148.830	146.951	0.30	0.35	12.36	11.71	147.251	2020-02-01	17.2		12.36	5.19	NO	-								BACKFILLED	2020-01-11	C	25.65	2.01
148	P	584.5	158.989	148.860	146.079	0.31	0.35	13.26	12.60	146.389	2020-01-14	18.3		13.26	5.39	NO	-								BACKFILLED	2020-01-11	C	39.17	2.11
149	T	587.5	158.993	148.820	146.563	0.30	0.35	12.78	12.13	146.863	2020-02-01	17.8		12.78	5.37	NO	-								BACKFILLED	2020-01-11	C	24.04	2.09
150	S	590.5	158.983	148.710	146.073	0.30	0.35	13.26	12.61	146.373	2020-01-25	18.2		13.26	5.29	YES	14.7								BACKFILLED	2020-01-11	C	16.22	2.34
151	T	593.5	158.934	148.700	146.134	0.32	0.35	13.15	12.48	146.454	2020-01-29	18		13.15	5.20	NO	-								BACKFILLED	2020-01-20	C	18.26	2.02
152	P	596.5	158.941	148.450	146.871	0	0.40	12.47	NOT FOUND	NOT FOUND				12.47															
152B	P	596.5 B	158.941	148.140	146.011	0.17	0.35	13.28	12.76	146.181	2019-12-13	18		13.28	5.07	NO									BACKFILLED	2019-12-12	C	53.19	1.93
153	T	599.5	158.934	148.140	147.054	0	0.40	12.28	NOT FOUND	NOT FOUND	2020-01-25	18.3	1	13.28	5.42	NO	-								BACKFILLED	2019-11-24	C	200.7	0.48
154	S	602.5	158.935	148.120	146.665	0	0.40	12.67	NOT FOUND	NOT FOUND	2019-12-15	19.4		12.67	7.13	NO	-								BACKFILLED	2019-11-24	C	39	2.14
155	T	605.5	158.972	147.360	146.522	0.33	0.40	12.85	12.12	146.852	2020-01-25	17.9		12.85	5.45	NO	-								BACKFILLED	2019-11-24	C	17.08	2.21
156	P	609.1	159.046	146.950	146.026	0.30	0.30	13.32	12.72	146.326	2020-03-14	18.3		13.32	5.28	NO	-								BACKFILLED	2020-03-09	C	50.7	2.01
157	T	611.5	159.011	147.218	146.941	0.29	0.40	12.47	11.78	147.231	2020-01-13	16.9		12.47	4.83	NO	-								BACKFILLED	2019-11-24	C	26.25	2.03
158	S	614.5	159.004	147.230	147.764	0.30	0.40	11.64	10.94	148.064	2019-12-13	12.94		11.64	1.70	NO	-	2019-12-15	16.3		11.640	3.360	YES	13.2	BACKFILLED	2019-11-24	C	20.41	1.93

159	**T**	617.5	158.978	147.820	147.718	0.30	0.40	11.66	10.96	148.018	2020-01-13	16.9		11.66	5.64	NO	-								BACKFILLED	2019-11-24	C	26.37	2.11
160	**P**	620.5	158.969	147.970	147.319	0.30	0.40	12.05	11.35	147.619	2019-11-30	16.4		12.05	4.75										BACKFILLED	2019-11-24	C	20.88	1.94
161	**T**	623.5	159.002	147.820	146.822	0.36	0.40	12.58	11.82	147.182	2020-01-12	17.3		12.58	5.12	NO	-								BACKFILLED	2019-11-24	C	16.47	1.87
162	**S**	626.5	159.014	147.510	147.134	0.38	0.40	12.28	11.50	147.514	2019-12-12	13.58		12.28	1.70	NO	-	2019-12-15	16.9		12.280	3.320	YES	13.5	BACKFILLED	2019-11-24	C	18.44	2.03
163	**Q**	628	159.128	147.500	146.758	0.30	0.23	12.6	12.07	147.058	2020-03-14	17.6		12.60	5.23	NO	-								BACKFILLED	2020-03-09	C	19.8	2.23
164	**T**	629.5	159.053	147.487	146.883	0.18	0.40	12.57	11.99	147.063	2020-01-13	17.1		12.57	4.93	NO	-								BACKFILLED	2019-11-24	C	31.98	2.01
165	**P**	632.5	159.049	147.580	146.669	0	0.40	12.78	NOT FOUND	NOT FOUND	2019-11-30	18.1		12.78	5.72										BACKFILLED	2019-11-24	C	24.87	1.92
166	**T**	635.5	159.034	147.530	147.314	0.30	0.40	12.12	11.42	147.614	2020-01-12	17.1		12.12	5.38	NO	-								BACKFILLED	2019-11-21	C	18.2	1.68
167	**S**	638.5	159.023	147.690	147.993	0.24	0.40	11.43	10.79	148.233	2019-12-12	12.73		11.43	1.70	NO	-	2019-12-15	16.2		11.430	3.470	YES	13.6	BACKFILLED	2019-11-21	C	20.92	1.55
168	**T**	641.5	159.056	148.100	148.046	0.30	0.40	11.41	10.71	148.346	2020-01-13	16.4		11.41	5.39	NO	-								BACKFILLED	2019-11-21	C	23.95	1.75
169	**P**	644.5	158.989	148.210	147.699	0.41	0.40	11.69	10.88	148.109	2019-11-29	16.5		11.69	5.21	NO	-								BACKFILLED	2019-11-21	C	29.43	2.10
170	**T**	647.5	159.012	148.050	147.312	0.22	0.40	12.1	11.48	147.532	2020-01-13	16.8		12.10	5.10	NO	-								BACKFILLED	2019-11-21	C	35.79	1.88
171	**S**	650.5	159.030	147.890	147.640	0.72	0.40	11.79	10.67	148.360	2019-12-12	13.09		11.79	1.70	NO	-	2019-12-15	16.59		11.790	3.500	YES	13.6	BACKFILLED	2019-11-21	C	19.32	1.89
172	**T**	653.5	159.041	147.840	147.771	0.30	0.40	11.67	10.97	148.071	2020-01-13	16.5		11.67	5.23	NO	-								BACKFILLED	2019-11-21	C	127.2	1.93
173	**P**	656.5	159.088	147.680	147.188	0.19	0.40	12.3	11.71	147.378	2019-11-29	16.8		12.30	4.90	NO	-								BACKFILLED	2019-11-21	C	26.08	1.91
174	**T**	659.5	159.035	147.720	148.135	1.00	0.40	11.3	9.90	149.135	2020-01-13	16.1		11.30	5.20	NO	-								BACKFILLED	2019-11-21	C	27.9	1.80
175	**S**	662.5	159.083	148.130	148.063	0.32	0.40	11.42	10.70	148.383	2019-12-12	12.72		11.42	1.70	NO	-	2019-12-15	16.22		11.420	3.500	YES	13.4	BACKFILLED	2019-11-21	C	18.94	1.88
176	**Q**	664	159.176	148.390	148.526	0.30	0.28	10.93	10.35	148.826	2020-03-24	15.7		10.93	5.05	NO	-								BACKFILLED	2020-03-09	C	18.5	1.87
177	**T**	665.5	158.897	148.700	148.437	0.30	0.40	10.86	10.16	148.737	2020-01-13	15.9		10.86	5.44	NO	-								BACKFILLED	2019-12-03	C	12.64	1.67
178	**Q**	667	159.213	148.700	148.353	0.30	0.28	11.14	10.56	148.653	2020-03-12	15.8		11.14	4.94	NO	-								BACKFILLED	2020-03-09	C	20.42	0.40
179	**P**	668.5	159.147	148.666	148.207	0.30	0.40	11.34	10.64	148.507	2019-12-01	16.6		11.34	5.66	NO	-								BACKFILLED	2019-11-20	C	28.29	1.88
180	**T**	671.5	159.036	148.680	148.776	0.31	0.35	10.61	9.95	149.086	2020-01-13	15.5		10.61	5.24	NO	-								BACKFILLED	2019-12-03	C	17.72	1.73
181	**S**	674.5	159.047	148.650	148.167	0.30	0.35	11.23	10.58	148.467	2019-12-11	12.58		11.23	1.70	NO	-	2019-12-14	16.14		11.230	3.560	YES	13.2	BACKFILLED	2019-12-03	C	16.98	1.77
182	**T**	677.5	159.126	148.800	148.146	0	0.40	11.38	NOT FOUND	NOT FOUND	2020-01-12	16.3		11.38	5.32	NO	-								BACKFILLED	2019-11-20	C	19.96	1.89
183	**P**	680.5	159.103	148.810	148.703	0.00	0.40	10.8	10.40	148.703	2019-11-29			10.80															
183B	**P**	680.5-B	159.103	148.980	147.013	0.34	0.35	12.44	11.75	147.353	2019-12-01	17.6		12.44	5.51	NO	-								BACKFILLED				
184	**Q**	682	159.201	148.980	148.731	0.30	0.30	10.77	10.17	149.031	2020-03-12	15.4		10.77	4.93	NO	-								BACKFILLED	2020-03-08	C	16.4	2.03
185	**T**	683.5	159.071	149.256	148.461	0.31	0.46	11.07	10.30	148.771	2020-01-12	15.7		11.07	5.09	NO	-								BACKFILLED	2019-11-20	C	20.22	1.93
186	**Q**	685	159.195	149.060	147.995	0.30	0.30	11.5	10.90	148.295	2020-03-09	14		11.50	2.80	NO	-									2020-03-08	C	26.5	1.99
187	**S**	686.5	159.063	149.140	149.093	0.30	0.43	10.4	9.67	149.393	2019-12-11	11.67		10.40	1.70	YES	10.4	2019-12-13	15		10.400	3.330	YES	13	BACKFILLED	2019-11-20	C	18.52	3.22
188	**Q**	688	159.190	149.150	148.630	0.30	0.30	10.86	10.26	148.930	2020-03-12	15.5		10.86	4.94	NO	-								BACKFILLED	2020-03-08	C	20.4	1.95
189	**T**	689.5	159.063	149.191	148.883	0.30	0.40	10.58	9.88	149.183	2020-01-12	15.4		10.58	5.22	NO	-								BACKFILLED	2019-11-20	C	21.58	1.76
190	**Q**	691	159.161	149.210	148.541	0.30	0.28	10.9	10.32	148.841	2020-03-09	15.4		10.90	4.78	NO										2020-03-08	C	17.9	1.96
191	**P**	692.5	159.041	149.268	148.191	0.30	0.40	11.25	10.55	148.491	2019-11-28	16		11.25	5.15	NO	-								BACKFILLED	2019-11-20	C	9.63	2.92
192	**Q**	694	159.134	149.290	149.294	0.30	0.28	10.12	9.54	149.594	2020-03-12	14.9		10.12	5.06	NO	-								BACKFILLED	2020-03-08	C	16.4	2.03
193	**T**	695.5	159.041	149.401	148.651	0.23	0.40	10.79	10.16	148.881	2020-01-12	15.8		10.79	5.41	NO	-								BACKFILLED	2019-11-20	C	65.37	1.80
194	**Q**	697	159.143	149.420	148.883	0.30	0.28	10.54	9.96	149.183	2020-03-09	15.3		10.54	5.04	NO	-									2020-03-08	C	23.5	1.92
195	**S**	698.5	159.008	149.691	148.998	0.11	0.40	10.41	9.90	149.108	2019-12-11	11.71		10.41	1.70	NO	-	2019-12-13	15.2		10.410	3.490	YES	12.5	BACKFILLED	2019-11-20	C	169.2	0.84
196	**T**	701.5	159.035	149.620	149.035	1.00	0.40	10.4	9.00	150.035	2020-01-12	15.4		10.40	5.40	NO	-								BACKFILLED	2019-11-20	C	44.56	1.54
197	**P**	704.5	158.994	149.800	149.004	1.17	0.40	10.39	8.82	150.174	2019-11-28	14.8		10.39	4.81	NO	-								BACKFILLED	2019-11-20	C	168.5	0.92
198	**T**	707.5	159.063	150.070	146.923	0.28	0.35	12.49	11.86	147.203	2020-01-12	17.5		12.49	5.36	NO	-								BACKFILLED	2019-12-03	C	24.56	2.01
199	**S**	710.5	159.060	150.200	145.730	0.30	0.35	13.68	13.03	146.030	2019-12-11	15.03		13.68	1.70	NO	-	2019-12-13	18.65		13.680	3.620	YES	17	BACKFILLED	2019-12-03	C	24.8	2.04
200	**T**	713.5	159.042	150.210	145.232	0.31	0.35	14.16	13.50	145.542	2020-01-12	19.2		14.16	5.39	NO	-								BACKFILLED	2019-12-03	C	18.42	2.20
201	**P**	716.5	159.001	150.080	147.071	0.30	0.35	12.28	11.63	147.371	2019-11-28	16.6		12.28	4.67	YES	12.5								BACKFILLED				
202	**Q**	718	159.101	149.860	147.191	0.30	0.28	12.19	11.61	147.491	2020-03-09	16.6		12.19	4.69	NO	-									2020-03-08	C	18.91	1.98
203	**T**	719.5	158.998	149.910	148.998	0.30	0.35	10.35	9.70	149.298	2020-01-12	16.3	1.5	11.85	4.80	NO	-								BACKFILLED	2019-12-03	C	22.97	1.65
204	**S**	722.5	158.933	150.150	149.883	0	0.35	9.4	NOT FOUND	NOT FOUND	2019-12-12	13.95	3.4	12.80	1.50	NO	-	2019-12-13	17.9	3.4	12.800	3.950	YES	15.9	BACKFILLED	2019-11-19	C	154.3	0.50
205	**T**	725.5	159.011	150.280	149.761	0	0.35	9.6	NOT FOUND	NOT FOUND	2020-01-11	16.6	2.2	11.80	5.15	NO	-								BACKFILLED	2019-11-19	C	2.99	3.02
206	**P**	728.5	158.928	150.130	149.778	0.34	0.40	9.55	8.81	150.118	2019-11-27	16.2	1.67	11.22	5.38	NO	-								BACKFILLED	2019-11-19	C	4.59	2.95
207	**T**	731.5	159.042	150.080	149.342	0	0.40	10.1	NOT FOUND	NOT FOUND	2020-01-11	16		10.10	6.30	NO	-								BACKFILLED	2019-11-19	C	3.62	2.90
208	**Q**	733	159.130	150.241	149.000	0.32	0.28	10.41	9.81	149.320	2020-03-09	15.3		10.41	5.17	NO	-									2020-03-08	C	19.6	1.98
209	**S**	734.5	159.039	150.210	149.849	0.30	0.40	9.59	8.89	150.149	2019-12-11	10.89		9.59	1.70	NO	-	2019-12-13	14.39		9.590	3.500	YES	12.8	BACKFILLED	2019-11-19	C	28.62	1.64
210	**Q**	736	159.123	150.182	149.093	0.30	0.28	10.31	9.73	149.393	2020-03-12	14.8		10.31	4.77	NO	-								BACKFILLED	2020-03-08	C	25.5	1.86
211	**T**	737.5	159.062	150.180	149.892	0.29	0.40	9.57	8.88	150.182	2020-01-11	14.7		9.57	5.53	NO	-								BACKFILLED	2019-11-19	C	31.15	1.83
212	**Q**	739	159.185	150.200	148.685	0.30	0.30	10.8	10.20	148.985	2020-03-09	15.4		10.80	4.90	NO	-									2020-03-08	C	24.3	1.88
213	**P**	740.5	159.023	150.410	149.623	0	0.40	9.8	NOT FOUND	NOT FOUND	2019-11-26	14.5		9.80	5.10	NO	-								BACKFILLED	2019-11-19	C	62.75	2.04
214	**T**	743.5	159.031	150.730	148.401	0.98	0.45	11.08	9.65	149.381	2020-01-11	15.4		11.08	4.77	NO	-								BACKFILLED	2019-11-19	C	18.44	2.17
215	**S**	746.5	159.007	150.650	149.667	0.40	0.35	9.69	8.94	150.067	2019-12-11	11.04		9.69	1.70	NO	-	2019-12-13	14.7		9.690	3.660	YES	13.4	BACKFILLED	2019-11-19	C	32.02	1.69
216	**T**	749.5	159.029	150.600	148.939	0	0.40	10.49	NOT FOUND	NOT FOUND	2020-01-11	17.5		10.49	7.41	NO	-								BACKFILLED	2019-11-19	C	12.65	1.42

General information					Stages																														QC Representative
					Stage 1 (5m)					Stage 1 (REGROUT 1)				Stage 1 (REGROUT 2)				Stage 1 (REGROUT 3)				Stage 1 (1.5m)				Stage 2 (3.5m)					Stage 2 (REGROUT 1)				
Hole #	Type	Station	Ground Elev.	Theorical Bedrock Elev.	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Depth after grouting (before backfill)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Depth after grouting (before backfill)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	
1	P	176.5	159.110	151.970																															
1B	P	176.5	159.110	151.970	2020-02-26	B	508.7	3.00	---																										JPBF
2	T	179.5	159.112	151.970	2020-03-07	B	52.8	3.05																											
3	S	182.5	159.117	151.620	2020-02-29	B	112.2	2.96	---																										JPBF
4	T	185.5	159.135	151.540	2020-03-07	B	53.4	2.80																											
5	P	188.5	159.150	151.600																															
5B	P	188.5	159.150	151.500	2020-02-26	B	403.5	2.94	---																										JPBF
6	T	191.5	159.102	151.500	2020-03-07	B	116.6	2.94																											
7	Q	193																																	
8	S	194.5	159.036	150.630	2020-02-28	B, C, D	1863.2	4.34	7.50																										JPBF
9	Q	197																																	
10	T	197.5	159.084	149.980	2020-03-05	B, C, D	1742	4.01	7.60																										JPBF
11	Q	199																																	
12	P	200.5	159.122	149.650	2020-02-25	B	40.5	2.93																											JPBF
13	T	203.5	159.186	149.580	2020-03-05	B	107.9	2.82	---																										JPBF
14	S	206.5	159.265	149.360	2020-02-28	B	75.7	3.18	---																										JPBF
15	T	209.5	159.258	149.270	2020-03-05	B	271.5	3.53	---																										JPBF
16	P	212.5	159.216	149.630	2020-02-25	B	62.4	3.15																											JPBF
17	T	215.5	159.280	149.530	2020-03-04	B	324.7	3.44	---																										JPBF
18	S	218.5	159.148	149.530	2020-02-28	B	56.2	3.24	---																										JPBF
19	Q	220																																	
20	T	221.5	159.103	149.270	2020-03-04	B, C, D	1584	3.98	8.30																										JPBF
21	Q	223																																	
22	P	224.5	159.068	149.270	2020-02-25	B	63.3	2.98																											JPBF
23	T	227.5	159.042	150.120	2020-03-04	B	64.1	2.93	---																										JPBF
24	S	230.5	159.067	150.130	2020-02-28	B	257.2	3.05	---																										JPBF
25	T	233.5	159.072	150.020	2020-03-04	B, C	688.3	3.06	---																										JPBF
26	P	236.5	159.126	150.220	2020-02-25	B	53.9	2.95	---																										JPBF
27	T	239.5	159.149	150.580	2020-03-03	B	54.9	3.24	---																										JPBF
28	S	242.5	159.203	150.590	2020-02-27	B, C, D	988	3.45	9.00																										JPBF
29	T	245.5	159.278	150.840	2020-03-03	B	65.7	3.07	---																										JPBF
30	P	248.5	159.265	150.480	2020-02-25	B	66.7	3.21	---																										JPBF
31	T	251.5	159.323	150.250	2020-03-03	B	80.6	3.17	---																										JPBF
32	S	254.5	159.163	150.410	2020-02-27	B	50.9	2.97	---																										JPBF
33	T	257.5	159.158	150.620	2020-03-03	B	50.7	3.22	---																										JPBF
34	P	260.5	159.153	150.510	2020-02-18	B	262.7	2.44																											JPBF
35	T	263.5	159.151	150.410	2020-03-03	B	54.1	3.39	---																										JPBF
36	S	266.5	159.085	150.460	2020-02-25	B	46.1	3.34	---																										
37	T	269.5	159.081	150.430	2020-03-03	B	54.5	3.09	---																										JPBF
38	P	272.5	159.137	150.710																															
38B	P	272.5	159.137	151.120	2020-02-17	C	205.6	2.94																											
39	T	275.5	159.142	151.120	2020-03-02	B	129.6	3.27	---																										JPBF
40	S	278.5	159.152	150.720	2020-02-25	B	51.7	2.26	---																										JPBF
41	T	281.5	159.094	150.610	2020-03-02	B	81.6	2.99	---																										JPBF
42	P	284.5	159.122	150.470	2020-02-17	C	101.6	2.97																											
43	T	287.5	159.090	150.940	2020-03-02	B	88.5	3.02	---																										JPBF
44	S	290.5	159.177	150.980	2020-02-24	B	69.5	2.91	---																										JPBF
45	Q	292																																	
46	T	293.5	159.226	150.900	2020-03-02	B, C, D	1270	3.54	6.70 m																										JPBF
47	Q	295																																	
48	P	296.5	159.203	150.820	2020-02-17	C	54.6	2.81																											
49	T	299.5	159.201	151.060	2020-03-01	B	46	3.26	---																										JPBF
50	S	302.5	159.195	151.160	2020-02-24	B	45.6	2.72	---																										JPBF
51	T	305.5	159.172	150.910	2020-03-01	B	44.1	2.81	---																										JPBF
52	P	308.5	159.161	151.000	2020-02-17	C	85.9	2.81																											
53	T	311.5	159.182	151.680																															
53B	T	311.5	159.182	151.330	2020-03-01	B	73.7	3.18	---																										JPBF
54	S	314.5	159.165	151.330	2020-02-24	B	58	2.95	---																										JPBF
55	T	317.5	159.178	150.750	2020-03-01	B	47.9	2.99	---																										JPBF
56	P	320.5	159.185	150.030	2020-02-17	C	61.2	3.67																											
57	T	323.5	159.145	149.570	2020-03-01	B	93.8	2.92	---																										JPBF
58	S	326.5	159.094	149.070	2020-02-24	B	56.1	3.52	---																										JPBF
59	T	329.5	159.092	148.630	2020-03-01	B	42.3	2.83	---																										JPBF
60	P	332.5	159.097	148.160	2020-02-17	C	38.1	3.14																											
61	T	335.5		147.710																															
62	S	338.5	159.098																																JPBF
62B	S	338.5	159.098	146.940	2020-02-24	B	64	3.98	---																										
63	T	341.5	159.095	146.940	2020-03-01	B	64.1	3.64	---																										JPBF
64	P	344.5	159.129	146.920																															
64B	P	344.5	159.129	146.740	2020-02-16	C	61.2	3.32																											
65	T	347.5	159.112	146.740	2020-02-29	B	86.9	3.37	---																										JPBF
66	S	350.5	159.136	146.480	2020-02-24	B	63.6	3.07	---																										JPBF
67	T	353.5	159.248	146.430																															
67B	T	353.5	159.248	146.290	2020-02-29	B	124.1	4.00	---																										JPBF
68	P	356.5	159.284	146.290																															
68B	P	356.5	159.284	145.520	2020-02-16	C	98.1	3.50																											
69	T	359.5		145.520																															
70	S	362.5	159.137		2020-02-23	B	75.9	3.27	---																										JPBF
71	T	365.5	159.071	143.680	2020-02-29	B	95.3	3.75	---																										JPBF
72	P	368.5	158.970	143.650	2020-02-16	C	75.1	3.71																											
73	T	371.5	159.064	144.210	2020-02-29	B	170.3	3.26	---																										JPBF
74	S	374.5	159.083	145.670	2020-02-23	B	76	2.93	---																										JPBF

75	**T**	377.5	159.001	147.750	2020-02-29	B, C	705.2	3.15	---																										JPBF
76	**P**	380.5	158.945	148.070																															
76B	**P**	380.5 B	158.945	148.310	2020-02-06	C	180.7	3.43	11.23																										JPBF
77	**T**	383.5	158.943	148.310	2020-02-23	B	74	3.09	---																										JPBF
78	**S**	386.5	158.991	147.390	2020-02-16	C	152.5	3.02																											JPBF
79	**T**	389.5	159.011	147.130																															
79B	**T**	389.5 B	159.011	148.260	2020-02-23	B	100.1	3.30	---																										JPBF
80	**P**	392.5	158.981	148.260																															
80B	**P**	392.5 B	158.981	147.910	2020-02-06	C	115.6	3.68	12.00																										JPBF
81	**T**	395.5	158.978	147.910	2020-02-23	B	96.5	3.32	---																										JPBF
82	**S**	398.5	158.978	147.500	2020-02-16	C	89.3	2.75																											JPBF
83	**T**	401.5	158.944	147.680	2020-02-23	B, C	630.6	3.41	---																										JPBF
84	**P**	404.5	158.944	147.940																															
84B	**P**	404.5 B	158.944	146.520	2020-02-06	C	140.8	2.69	14.10																										JPBF
85	**T**	407.5	158.945	146.520	2020-02-22	B	132.6	3.06	---																										JPBF
86	**S**	410.5	158.943	146.880	2020-02-16	C	67.9	3.19																											JPBF
87	**T**	413.5	158.940	148.250	2020-02-22	B	68	3.44	---																										JPBF
88	**P**	416.5	158.963	148.250	2020-02-06	C	69.2	3.23	11.00																										JPBF
89	**T**	419.5	158.971	148.190	2020-02-22	B	75.8	3.07	---																										JPBF
90	**S**	422.5	159.026	148.380	2020-02-16	C	45.4	3.08																											JPBF
91	**T**	425.5	159.046	148.650	2020-02-22	B	40.3	3.10	---																										JPBF
92	**P**	428.5	158.931	148.410	2020-02-06	C	68	3.30	10.80																										
93	**T**	431.5	159.052	148.710	2020-02-22	B	41.7	3.16	---																										JPBF
94	**S**	434.5	159.061	148.840	2020-02-16	C	301.6	2.91																											JPBF
95	**T**	437.5	159.179	148.950	2020-02-22	B	47.8	3.37	---																										JPBF
96	**P**	440.5		148.910																															
97	**T**	443.5	159.034	148.930	2020-02-13	B,C	271.3	3.02																											
98	**S**	446.5	159.031	148.930	2020-02-01	C	72.8	2.94	9.50 m																										JPBF
99	**T**	449.5	159.044	149.060	2020-02-13	B	73.5	2.72																											
100	**P**	452.5	159.033	148.980	2020-01-27	C	87.5	3.02	9.70 m																										JPBF
101	**T**	455.5	159.054	148.970	2020-02-13	B	66.4	2.59																											
102	**S**	458.5	159.044	149.000	2020-02-01	C	57.5	1.38	10.20 m																										JPBF
103	**T**	461.5	159.039	149.070	2020-02-13	C	423.9	3.06																											
104	**P**	464.5	159.045	149.040	2020-01-27	C	65.9	3.26																											JMR + JPBF
105	**T**	467.5	158.999	149.280	2020-02-13	C	70.6	3.05																											JMR
106	**S**	470.5	159.016	149.460	2020-02-01	C	70.4	3.04	9.00 m																										JMR + JPBF
107	**T**	473.5	159.019	149.540	2020-02-13	C	211.9	2.99																											JMR
108	**P**	476.5	159.036	149.680	2020-01-27	C	75.8	3.28	9.77 m																										JMR + JPBF
109	**Q**	478		149.590	---	---	---	---	---																										JPBF
110	**T**	479.5	158.996	149.534	2020-02-12	C,D	2301	0.39	10.00 m																										JMR
111	**Q**	481		149.540	2020-03-23	B	220.8	3.03																											JPBF
112	**S**	482.5	159.005	149.690	2020-02-01	C	71.8	3.04	8.00 m																										JMR + JPBF
113	**T**	485.5	158.989	149.620	2020-02-12	C	45.6	3.06																											JMR
114	**P**	488.5	158.967	149.670	2020-01-26	C	313.9	2.81	9.00 m																										JMR + JPBF
115	**T**	491.5	159.004	149.600	2020-02-12	C	371.8	3.04																											JMR
116	**S**	494.5	158.989	149.590	2020-02-01	C	120.6	3.02	9.50 m																										JMR + JPBF
117	**T**	497.5	159.027	149.660	2020-02-12	C	63.3	3.44																											JMR
118	**P**	500.5	159.037	149.580	2020-01-25	C	59.4	4.34																											JMR + JPBF
119	**T**	503.5	158.991	149.500	2020-02-11	C	123.2	3.11																											JMR
120	**S**	506.5	159.019	149.650	2020-02-01	C	208.8	2.96	9.48 m																										JMR + JPBF
121	**T**	509.5	159.063	149.660	2020-02-11	C	75.8	3.36																											JMR
122	**P**	512.5	159.048	149.650	2020-01-25	C, D	680.1	3.47	9.10 m																										JMR + JPBF
123	**T**	515.5	159.020	149.650	2020-02-11	C	467.6	3.42																											JMR
124	**S**	518.5	158.999	149.650	2020-02-01	C	94.9	3.38	9.80 m																										JMR + JPBF
125	**T**	521.5	159.001	149.550	2020-02-11	C	133.3	3.10																											JMR
126	**Q**	523		149.560	2020-03-25	B	107.1	3.29																											JPBF
127	**P**	524.5	158.986	149.617	2020-01-25(29	C (C, D)	67.8 (2434.8	3.15 (0.917	2.50 m	2020-01-31	C, C +(1.3%)	1580	10.00																						JMR + JPBF
128	**Q**	526		149.530	2020-03-23	B	55.5	3.35																											JPBF
129	**T**	527.5	158.988	149.554	2020-02-11	C	38.4	0.30																											JMR
130	**S**	530.5	159.048	149.550	2020-01-29	C	396.6	3.47	9.70 m																										JMR
131	**T**	533.5	158.983	149.530																															
131B	**T**	533.5 B	158.983	149.590	2020-02-05	C, D	1288	4.49	11.10																										JMR + JPBF
132	**P**	536.5	158.978	149.590	2020-01-23	C	177.6	3.05																											JMR
133	**T**	539.5	158.988	149.530	2020-02-05	C	241.3	2.97	7.00																										JMR + JPBF
134	**S**	542.5	159.016	149.390	2020-01-29	C	351.9	3.17	8.26																										JMR
135	**T**	545.5	159.001	149.430	2020-02-05	C	230.6	3.89	8.90																										JMR + JPBF
136	**P**	548.5	159.003	149.540	2020-01-23	C	61.02	2.93																											JMR
137	**T**	551.5	159.001	149.420	2020-02-04	C, D	360.9	2.62	10.12																										JMR + JPBF
138	**S**	554.5	159.080	149.520	2020-01-29	C	52.5	3.28	no																										JMR
139	**T**	557.5	158.980	149.440	2020-02-04	C	53	3.98	11.35																										JMR + JPBF
140	**P**	560.5	158.970	149.380	2020-01-23	C	158.9	2.97																											JMR
141	**T**	563.5	158.977	149.640	2020-02-04	C, D	1663	3.96	9.70																										JMR + JPBF
142	**S**	566.5	159.038	149.640	2020-01-29	C	48.8	3.18	no																										JMR
143	**T**	569.5	159.042	149.530	2020-02-04	C	56.6	2.98	11.35																										JMR + JPBF
144	**P**	572.5	159.029	149.320	2020-01-22	C, D	2334	1.55		2020-01-23	C	386	3.63																						JMR
145	**T**	575.5	159.042	149.380	2020-02-04	C	250.9	3.43	12.00																										JMR + JPBF
146	**S**	578.5	159.001	149.050	2020-01-27	C	361.1	3.40	10.80																										JMR
147	**T**	581.5	158.961	148.830	2020-02-03	C	214.5	3.39	11.50																										JMR
148	**P**	584.5	158.989	148.860	2020-01-21	C	167.8	3.43																											JMR
149	**T**	587.5	158.993	148.820	2020-02-03	C	79.2	3.66	11.07																										JMR
150	**S**	590.5	158.983	148.710	2020-01-27	C	120.1	3.49	11.0 m																										JMR
151	**T**	593.5	158.934	148.700	2020-02-03	C	205.8	3.41	12.70																										JMR
152	**P**	596.5	158.941	148.450																															
152B	**P**	596.5 B	158.941	148.140	2019-12-14	C	126	3.53																											JPBF
153	**T**	599.5	158.934	148.140	2020-02-03	C	150.6	3.90	12.50																										JMR + JPBF
154	**S**	602.5	158.935	148.120	2020-01-21	C, D	914 ; 410.7	1.65 ; 4.54		2020-01-22	C+(1.4%)	1175	6.72																						JMR
155	**T**	605.5	158.972	147.360	2020-02-03	C	77.9	4.03	12.20																										JMR + JPBF
156	**P**	609.1	159.046	146.950	2020-03-23	B	90.2	3.36																											JMR + JPBF
157	**T**	611.5	159.011	147.218	2020-01-21	C	47.71	3.50																											JMR
158	**S**	614.5	159.004	147.230																	2019-12-14	C	20.3	2.08	2020-01-21	C	69.68	4.28						JMR

159	**T**	617.5	158.978	147.820	2020-01-21	C	60.64	3.65																													JMR
160	**P**	620.5	158.969	147.970	2019-12-11	C, D	1322	3.59																													JMR, JPF
161	**T**	623.5	159.002	147.820	2020-01-18	C	261.6	3.61																													JMR
162	**S**	626.5	159.014	147.510																			2019-12-14	C	34.6	2.17	2020-01-20	C, D	1513	1.23							JMR, JPBF
163	**Q**	628	159.128	147.500	2020-03-22	B	103.5	2.89																													JPBF
164	**T**	629.5	159.053	147.487	2020-01-18	C	531.9	3.61																													JMR
165	**P**	632.5	159.049	147.580	2019-12-11	C, D	1427	4.37		2019-12-12	C, D	167.4	2.58																								JMR, JPF
166	**T**	635.5	159.034	147.530	2020-01-17	C	64.44	3.49																													JMR
167	**S**	638.5	159.023	147.690																			2019-12-13	C	16.63	2.19	2020-01-11	C	67.29	4.77							JPBF / JMR
168	**T**	641.5	159.056	148.100	2020-01-17	C	111.1	3.70																													JMR
169	**P**	644.5	158.989	148.210	2019-12-11	C	109.1	3.05																													JPBF
170	**T**	647.5	159.012	148.050	2020-01-16	C	165.7	3.37																													JMR
171	**S**	650.5	159.030	147.890																			2019-12-13	C	16.65	1.31	2019-12-18	C, D	822	4.32							JPBF
172	**T**	653.5	159.041	147.840	2020-01-16	C, D	847	3.67																													JMR
173	**P**	656.5	159.088	147.680	2019-12-09	C	1067	2.41																													
174	**T**	659.5	159.035	147.720	2020-01-16	C	326.7	3.36																													JMR
175	**S**	662.5	159.083	148.130																			2019-12-13	C	49.67	2.15	2019-12-18	C, D	961	4.97		2019-12-18	C+(0.7%)	484.2	4.94		JPBF
176	**Q**	664	159.176	148.390	2020-03-25	B	116.4	3.20																													JPBF
177	**T**	665.5	158.897	148.700	2020-01-16	C, D	2213	4.09																													JMR
178	**Q**	667	159.213	148.700	2020-03-22	B	87.9	3.13																													JPBF
179	**P**	668.5	159.147	148.666	2019-12-04	C, C+(0.2%)	2327	2.76		2019-12-08	C,C+(0.2%)	1113	2.31																								JPBF
180	**T**	671.5	159.036	148.680	2020-01-15	C	184.3	3.30																													JMR
181	**S**	674.5	159.047	148.650																			2019-12-13	C	90.1	2.27	2019-12-14	C	90.1	2.27							JPBF
182	**T**	677.5	159.126	148.800	2020-01-15	C	67.97	3.54																													JPBF
183	**P**	680.5	159.103	148.810																																	
183B	**P**	680.5-B	159.103	148.980	2019-12-02	C, C+(0.2%)	2064	1.20		2019-12-05	C, D, E	1383	1.14	2019-12-08	C, C+(0.2%)	342.9	38.32																				
184	**Q**	682	159.201	148.980	2020-03-22	B	512.1	2.95																													JPBF
185	**T**	683.5	159.071	149.256	2020-01-15	C, D	1156	3.90																													JPBF
186	**Q**	685	159.195	149.060	2020-03-10	B,C	524.7	3.03																													
187	**S**	686.5	159.063	149.140	2020-01-17	A	61.8	1.92															2019-12-13	C	188	1.94	2019-12-15	C, D	1582	0.44		2019-12-16	C, D, C+(0.7%)	664.5	3.41		JPBF
188	**Q**	688	159.190	149.150	2020-03-21	B	183.7	3.21																													JPBF
189	**T**	689.5	159.063	149.191	2020-01-14	C, D	1176	3.79																													JPBF
190	**Q**	691	159.161	149.210	2020-03-10	B	111.1	3.23																													
191	**P**	692.5	159.041	149.268	2019-12-02	C, C+(0.2%)	2076	1.12																													JPBF
192	**Q**	694	159.134	149.290	2020-03-21	B	146.2	3.21																													JPBF
193	**T**	695.5	159.041	149.401	2020-01-14	C, D	2194	0.58																													JPBF
194	**Q**	697	159.143	149.420	2020-03-10	B	223.4	3.20																													
195	**S**	698.5	159.008	149.691																			2019-12-13	C	106.2	1.90	2019-12-15	D, C+(0.7	1838	0.54		2019-12-16	C, D, C+(0.3%)	177.7	3.96		JPBF
196	**T**	701.5	159.035	149.620	2020-01-14	C, D	190.5	3.12																													JPBF
197	**P**	704.5	158.994	149.800	2019-12-01	C, C+(0.2%)	1901	0.72		2019-12-05	C, C+(0.2%), D	5.538	1.98																								JPBF
198	**T**	707.5	159.063	150.070	2020-01-14	C, D	863	3.86																													JMR
199	**S**	710.5	159.060	150.200																			2019-12-12	C	218.8	2.45	2019-12-17	C	264.4	4.61							JPBF
200	**T**	713.5	159.042	150.210	2020-01-13	C	161.3	3.70																													JMR
201	**P**	716.5	159.001	150.080	2019-12-01	C, C+(0.2%)	1958	0.47		2019-12-04	C, C+(0.2%), D	1247	1.48																								
202	**Q**	718	159.101	149.860	2020-03-10	B,C	669.3	3.55																													
203	**T**	719.5	158.998	149.910	2020-01-17	C	524.3	1.20																													JMR
204	**S**	722.5	158.933	150.150																			2012-12-12	C	447.9	1.63	2019-12-17	C	138.6	3.97							JPBF
205	**T**	725.5	159.011	150.280	2020-01-17	C	472.2	2.06																													JPBF
206	**P**	728.5	158.928	150.130	2019-12-01	C, C+(0.2%)	428.8	3.45																													JPBF
207	**T**	731.5	159.042	150.080	2020-01-13	C	2.1	3.93																													JPBF
208	**Q**	733	159.130	150.241	2020-03-10	B	105.1	3.10																													
209	**S**	734.5	159.039	150.210																			2019-12-12	C	72.14	1.97	2019-12-16	C, D	649.9	4.61		2019-12-17	C	108.9	3.87		JPBF
210	**Q**	736	159.123	150.182	2020-03-21	B	77.6	2.78																													JPBF
211	**T**	737.5	159.062	150.180	2020-01-13	C, D	1381	3.23																													JPBF
212	**Q**	739	159.185	150.200	2020-03-10	B,C	111.2	3.50																													
213	**P**	740.5	159.023	150.410	2019-11-30	C, C+(0.2%)	2079	0.08		2019-12-04	C, C+(0.2%), D	1401	1.89	2019-12-04	C, C+(0.2%), D	445.1	1.05	2019-12-07	C, C+(0.2%)	238.9	19.20																JPBF/JMR (stage 1)
214	**T**	743.5	159.031	150.730	2020-01-12	C	421.6	3.12																													JMR
215	**S**	746.5	159.007	150.650																			2019-12-12	C	18.95	1.96	2019-12-16	C, D	1042	4.14		2019-12-17	C, D, C+(0.5%)	544	3.49		JPBF
216	**T**	749.5	159.029	150.600	2020-01-12	C	50.22	3.00																													JMR

General information					Casing					Drilled Bedrock @5M or XM								Stages										
																			Plug				Stage 1 (5m)					
Hole #	Type	Station	Ground Elev.	Theorical Bedrock Elev.	Bottom Casing Elevation	Anchor of the casing (m)	Stick-up (m)	Lengh (m)	Encountered bedrock depth (m)	Encountered Bedrock Elev.	Drilling Date	Final depth (m)	Added casing length (m)	Total casing length (m)	Bottom casing to end of hole (m)	Lost of water return (Yes/no)	Depth of lost (m)	BACKFILLED	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Poured date	Type of Mix	Total Volume injected (L)	Pressure (BAR)	Depth after grouting (before backfill)	QC Representative
209	P	P-487		149.620	159.056	0.30	0.26	11.44	10.88					11.44					2020-03-17	C	30.6	2.29						
210	Q	Q-488.5		149.600																								
211	T	T-490		149.590																								
212	Q	Q-491.5		149.590																								
213	S	S-493		149.640	148.906	0.30	0.26	10.39	9.83					10.39					2020-03-17	C	18.6	1.96						
214	Q	Q-494.5		149.660																								
215	T	T-496		149.660																								
216	Q	Q-497.5		149.580																								
217	P	P-499		149.550	148.113	0.30	0.26	11.24	10.68					11.24					2020-03-17	C	17.4	2.29						
218	Q	Q-500.5		149.500																								
219	T	T-502		149.530																								
220	Q	Q-503.5		149.650																								
221	S	S-505		149.660	148.425	0.30	0.26	10.93	10.37					10.93					2020-03-16	C	74.3	2.03						
222	Q	Q-506.5		149.660																								
223	T	T-508		149.700																								
224	Q	Q-509.5		149.650																								
225	P	P-511		149.620	148.698	0.30	0.25	10.64	10.09					10.64					2020-03-16	C	37.5	1.87						
226	Q	Q-512.5		149.650																								
227	T	T-514		149.640																								
228	Q	Q-515.5		149.650																								
229	S	S-517		149.710	148.299	0.30	0.26	11.04	10.48					11.04					2020-03-16	C	8.7	2.00						
230	Q	Q-518.5		149.550																								
231	T	T-520		149.520																								
232	Q	Q-521.5		149.560																								
233	P	P-523		149.590	148.970	0.30	0.26	10.37	9.81					10.37														
234	Q	Q-524.5		149.530																								
235	T	T-526		149.520	148.254	0.30	0.25	11.03	10.48					11.03					2020-03-16	C	60.7	1.80						
236	Q	Q-527.5		149.550																								
237	S	S-529		149.520	149.915	0.30	0.29	9.41	8.82					10.47					2020-03-16	C	24.3	2.00						
238	Q	Q-530.5		149.530																								
239	T	T-532		149.570	148.436	0.30	0.26	10.87	10.31					10.87					2020-03-16	C	23.5	2.07						
240	Q	Q-533.5		149.590																								
241	P	P-535		149.590	148.715	0.30	0.26	10.59	10.03					10.59					2020-03-16	C	25.8	1.98						
242	Q	Q-536.5		149.530																								
243	T	T-538		149.430	148.988	0.30	0.26	10.32	9.76					10.32					2020-03-16	C	171	1.84						
244	Q	Q-539.5		149.390																								
245	S	S-541		149.370	149.128	0.30	0.26	10.21	9.65					10.21					2020-03-15	C	84.8	1.98						
246	Q	Q-542.5		149.430																								
247	T	T-544		149.500	149.209	0.30	0.26	10.1	9.54					10.10					2020-03-15	C	62.2	1.98						
248	Q	Q-545.5		149.540																								
249	P	P-547		149.450	148.559	0.30	0.25	10.77	10.22					10.77					2020-03-15	C	20.8	2.00						
250	Q	Q-548.5		149.420																								
251	T	T-550		149.470	149.170	0.31	0.26	10.17	9.60					10.17					2020-03-15	C	58	1.92						
252	Q	Q-551.5		149.520																								
253	S	S-553		149.470	149.108	0.30	0.26	10.26	9.70					10.26					2020-03-15	C	25.1	1.97						
254	Q	Q-554.5		149.440																								
255	T	T-556		149.380	148.936	0.30	0.26	10.43	9.87					10.43					2020-03-15	C	171.5	0.24						
256	Q	Q-557.5		149.380																								
257	P	P-559		149.400	148.393	0.30	0.26	10.95	10.39					10.95					2020-03-15	C	55.1	2.13						
258	Q	Q-560.5		149.640																								
259	T	T-562		149.670	149.026	0.30	0.25	10.27	9.72					10.27					2020-03-15	C	51.7	2.08						
260	Q	Q-563.5		149.640																								
261	S	S-565		149.600	146.887	0.30	0.25	12.41	11.86					12.41					2020-03-15	C	28	2.13						
262	Q	Q-566.5		149.530																								
263	T	T-568		149.410	146.302	0.30	0.30	13.08	12.48					13.08					2020-03-15	C	229.2	0.19						
264	Q	Q-569.5		149.320																								
265	P	P-571		149.300	145.801	0.30	0.25	13.56	13.01					13.56					2020-03-15	C	220.5	1.07						
266	Q	Q-572.5		149.380																								
267	T	T-574		149.250	147.579	0.30	0.26	11.82	11.26					11.82					2020-03-15	C	24	2.00						
268	Q	Q-575.5		149.050																								
269	S	S-577		148.820	147.444	0.30	0.26	11.95	11.39					11.95					2020-03-15	C	21.5	2.18						
270	Q	Q-578.5		148.830																								
271	T	T-580	159.129	148.900	147.429	0.30	0.26	11.96	11.40					11.96					2020-03-14	C	25.9	1.96						
272	Q	Q-581.5		148.860																								
273	P	P-583	159.129	148.830	146.489	0.30	0.27	12.91	12.34					12.91					2020-03-14	C	73.1	2.29						
274	Q	Q-584.5		148.820																								
275	T	T-586	159.126	148.750	147.026	0.30	0.26	12.36	11.80					12.36					2020-03-14	C	199.6	0.77						
276	Q	Q-587.5		148.710																								
277	S	S-589	159.147	148.710	146.687	0.30	0.26	12.72	12.16					12.72					2020-03-14	C	67.6	2.34						
278	Q	Q-590.5		148.700																								
279	T	T-592	159.173	148.540	147.313	0.30	0.26	12.12	11.56					12.12					2020-03-14	C	83.7	2.18						
280	Q	Q-593.5		148.450																								
281	P	P-595	159.148	148.160	146.958	0.30	0.28	12.47	11.89					12.47					2020-03-13	C	127.6	2.36						
282	Q	Q-596.5		148.140																								
283	T	T-598	159.151	148.160	146.601	0.30	0.25	12.8	12.25					12.80					2020-03-18	C	208.4	1.91						
284	Q	Q-599.5		148.120																								
285	S	S-601	159.122	147.730	146.732	0.30	0.25	12.64	12.09					12.64					2020-03-18	C	22.3	2.18						
286	Q	Q-602.5		147.360																								
287	T	T-604	159.026	147.080	146.156	0.27	0.28	13.15	12.60					13.15					2020-03-13	C	23.01	2.12						
288	Q	Q-605.5		146.950																								
289	P	P-607	159.047	146.900	146.017	0.30	0.28	13.31	12.73					13.31					2020-03-13	C	25.6	2.09						
290	Q	Q-608.5		146.970																								
291	T	T-610	159.039	147.170	146.189	0.30	0.28	13.13	12.55					13.13					2020-03-13	C	86.7	2.17						
292	Q	Q-611.5		147.230																								

293	**S**	S-613	159.039	147.660	146.849	0.30	0.20	12.39	11.89					12.39					2020-03-18	C	5.8	2.80						
294	**Q**	Q-614.5		147.820																									
295	**T**	T-616	159.055	147.960	147.845	0.30	0.26	11.47	10.91					11.47					2020-03-18	C	39.3	2.13						
296	**Q**	Q-617.5		147.970																									
297	**P**	P-619	159.056	147.890	147.576	0.30	0.26	11.74	11.18					11.74					2020-03-13	C	37.5	1.81						
298	**Q**	Q-620.5		147.820																									
299	**T**	T-622	159.076	147.550	147.386	0.30	0.26	11.95	11.39					11.95					2020-03-13	C	37.5	1.81						
300	**Q**	Q-623.5		147.510																									
301	**S**	S-625	159.075	147.480	146.065	0.30	0.28	13.29	12.71					13.29					2020-03-12	C	106.6	2.23						
302	**Q**	Q-626.5		147.500																									
303	**T**	T-628	159.096	147.490	147.016	0.30	0.26	12.34	11.78					12.34					2020-03-12	C	84.1	2.21						
304	**Q**	Q-629.5		147.580																									
305	**P**	P-631	159.112	147.630	146.622	0.30	0.15	12.64	12.19					12.64					2020-03-12	C	197.6	0.36						
306	**Q**	Q-632.5		147.530																									
307	**T**	T-634	159.135	147.590	146.605	0.30	0.28	12.81	12.23					12.81					2020-03-12	C	40.5	2.20						
308	**Q**	Q-635.5		147.690																									
309	**S**	S-637	159.102	147.800	147.762	0.30	0.28	11.62	11.04					11.62					2020-03-18	C	98.5	2.11						
310	**Q**	Q-638.5		148.100																									
311	**T**	T-640	159.107	148.250	147.737	0.30	0.28	11.65	11.07					11.65					2020-03-09	C	59.9	1.79						
312	**Q**	Q-641.5		148.210																									
313	**P**	P-643	159.051	148.180	147.521	0.30	0.28	11.81	11.23					11.81					2020-03-09	C	75.5	1.96						
314	**Q**	Q-644.5		148.050																									
315	**T**	T-646	159.078	147.980	147.568	0.30	0.26	11.77	11.21					11.77					2020-03-18	C	191.3	0.82						
316	**Q**	Q-647.5		147.890																									
317	**S**	S-649	159.070	147.850	147.450	0.30	0.26	11.88	11.32					11.88					2020-03-18	C	87	1.99						
318	**Q**	Q-650.5		147.840																									
319	**T**	T-652	159.078	147.780	147.038	0.30	0.26	12.3	11.74					12.30					2020-03-09	C	18.3	2.16						
320	**Q**	Q-653.5		147.680																									
321	**P**	P-655	159.081	147.590	146.391	0.30	0.28	12.97	12.39					12.97															
322	**Q**	Q-656.5		147.720																									
323	**T**	T-658	159.106	148.190	147.586	0.30	0.28	11.8	11.22					11.80					2020-03-21	C	191.6	1.32						
324	**Q**	Q-659.5		148.130																								JPBF	
325	**S**	S-661	159.095	148.230	147.575	0.30	0.21	11.73	11.22					11.73					2020-03-09	C	20.1	2.03						
326	**Q**	Q-662.5		148.390																									
327	**T**	T-664	159.171	148.520	147.661	0.30	0.28	11.79	11.21					11.79					2020-03-21	C	29.7	1.94						JPBF
328	**Q**	Q-665.5		148.700																									
329	**P**	P-667		148.680																									
330	**Q**	Q-668.5		148.680																									
331	**T**	T-670		148.610																									
332	**Q**	Q-671.5		148.650																									
333	**S**	S-673	159.079	148.780	148.099	0.30	0.30	11.28	10.68					11.28					2020-03-12	C	16.5	2.31						
334	**Q**	Q-674.5		148.800																									
335	**T**	T-676	159.155	148.810	148.395	0.30	0.26	11.02	10.46					11.02					2020-03-12	C	179.9	0.40						
336	**Q**	Q-677.5		148.810																									
337	**P**	P-679	159.125	148.830	147.825	0.30	0.28	11.58	11.00	148.125	2020-03-23	16.4		11.58	5.10	NO	-	BACKFILLED	2020-03-12	C	24.6	2.08	2020-03-25	B	146	3.37		JPBF
338	**Q**	Q-680.5		148.980																									
339	**T**	T-682	159.143	149.020	148.553	0.30	0.28	10.87	10.29					10.87					2020-03-12	C	18.9	2.04						
340	**Q**	Q-683.5		149.060																									
341	**S**	S-685	159.140	149.140	147.920	0.30	0.28	11.5	10.92					11.50					2020-03-12	C	18.2	2.08						
342	**Q**	Q-686.5		149.150																									
343	**T**	T-688	159.199	149.190	148.639	0.30	0.28	10.84	10.26					10.84					2020-03-12	C	18.6	1.92						
344	**Q**	Q-689.5		149.210																									
345	**P**	P-691	159.125	149.230	148.275	0.30	0.28	11.13	10.55	148.575	2020-03-22	16		11.13	5.15	YES	15.5	BACKFILLED	2020-03-12	C	18.4	1.96	2020-03-24	B	278.7	3.34		JPBF
346	**Q**	Q-692.5		149.290																									
347	**T**	T-694	159.145	149.340	148.325	0.30	0.30	11.12	10.52					11.12					2020-03-12	C	32.2	1.94						
348	**Q**	Q-695.5		149.420																									
349	**S**	S-697	159.110	149.540	148.220	0.30	0.28	11.17	10.59					11.17					2020-03-12	C	181.2	0.84						
350	**Q**	Q-698.5		149.620																									
351	**T**	T-700	159.152	149.750	148.292	0.30	0.28	11.14	10.56					11.14					2020-03-11	C	181.3	0.25						
352	**Q**	Q-701.5		149.800																									
353	**P**	P-703	159.127	150.000	148.027	0.30	0.28	11.38	10.80	148.327	2020-03-22	16.5		11.38	5.40	YES	15.2	BACKFILLED	2020-03-11	C	185.6	0.42	2020-03-24	B, C	838	3.53		JPBF
354	**Q**	Q-704.5		150.070																									
355	**T**	T-706	159.098	150.060	148.098	0.30	0.28	11.28	10.70					11.28					2020-03-11	C	18.2	2.02						
356	**Q**	Q-707.5		150.200																									
357	**S**	S-709	159.096	150.260	146.286	0.30	0.30	13.11	12.51					13.11					2020-03-11	C	213	0.62						
358	**Q**	Q-710.5		150.210																									
359	**T**	T-712	159.099	150.140	145.489	0.30	0.30	13.91	13.31					13.91					2020-03-11	C	57.5	2.25						
360	**Q**	Q-713.5		150.080																									
361	**P**	P-715	159.082	149.930	145.462	0.30	0.30	13.92	13.32	145.762	2020-03-22	14.5		13.92	0.88	YES	14.3		2020-03-11	C	16.4	2.16	2020-03-24	B, C	627.8	1.05		JPBF
362	**Q**	Q-716.5		149.860																									
363	**T**	T-718	159.072	149.840	145.492	0.30	0.33	13.91	13.28					13.91					2020-03-11	C	18.7	2.31						
364	**Q**	Q-719.5		149.910																									
365	**S**	S-721	159.066	150.050	147.016	0.30	0.28	12.33	11.75					12.33					2020-03-11	C	200.1	0.52						
366	**Q**	Q-722.5		150.150																									
367	**T**	T-724	159.088	150.260	146.988	0.30	0.28	12.38	11.80					12.38					2020-03-11	C	201.1	0.52						
368	**Q**	Q-725.5		150.280																									
369	**P**	P-727	159.057	150.210	147.417	0.31	0.25	11.89	11.33	147.727	2020-03-22	16.6		11.89	4.96	NO	-	BACKFILLED	2020-03-11	C	137.8	2.07	2020-03-24	B	94.7	3.56		JPBF
370	**Q**	Q-728.5		150.130																									
371	**T**	T-730	159.128	150.140	148.598	0.30	0.28	10.81	10.23					10.81					2020-03-11	C	17.6	1.97						
372	**Q**	Q-731.5		150.080																									
373	**S**	S-733	159.085	150.240	149.115	0.30	0.28	10.25	9.67					10.25					2020-03-11	C	24.3	1.95						
374	**Q**	Q-734.5		150.210																									
375	**T**	T-736	159.109	150.180	149.689	0.30	0.18	9.6	9.12					9.60					2020-03-11	C	33.3	1.72						
376	**Q**	Q-737.5		150.180																									
377	**P**	P-739	159.128	150.190	149.388	0.30	0.30	10.04	9.44	149.688	2020-03-22	14.8		10.04	5.06	NO	-	BACKFILLED	2020-03-11	C	23.9	2.03	2020-03-23	B	392.5	3.13		JPBF
378	**Q**	Q-740.5		150.410																									
379	**T**	T-742	159.125	150.690	149.715	0.30	0.20	9.61	9.11					9.61					2020-03-21	C	49.6	1.84						JPBF
380	**Q**	Q-743.5		150.730																									
381	**S**	S-745	159.150	150.710	150.050	0.30	0.25	9.35	8.80					9.35					2020-03-21	C	152.8	1.18						
382	**Q**	Q-746.5		150.650																								JPBF	
383	**T**	T-748	159.149	150.610	149.969	0.30	0.30	9.48	8.88					9.48					2020-03-10	C	20.2	2.16						

384	**Q**	Q-749.5																										

D-8 Contractor NCR

Groupe GILBERT

NON-CONFORMITY REPORT

NC : 15

Non-Conformity relative to ☒ Product ☐ System, Concerned by ☒ Quality ☐ Environment ☐ Health & Safety ☐ Geotechnical

Project Title : South Whale Tail Dike

Contract # : 11-911

Contractor : KCG(TCG)

Subcontractor :

NCR Title: Non-conform injection zones

1. Description of the Non-Conformity

Two zones haven't been drilled and injected accordingly to the specifications. The tertiary holes around the secondary holes S-614.5 and S-626.5 have been drilled 5m into the bedrock before the stage 2 injection of those secondary holes was completed.

Responsible : William Lavoie *Signature* *Date* 2020-02-06

2. Root Cause

The injection technician though that those secondary holes had already been injected. When he realised his mistake, it was too late.

3. Resolution/Disposition Proposed :

☐ Leave as is. See document: _____
☐ Repair as per attached instruction
☒ Rework to specification / drawing requirements
☐ Scrap (Not to be used or incorporated in the work)

Corrective Action

Is a corrective action necessary? ☒ Yes ☐ No

If yes, describe the corrective action :

The injection procedure for those holes is changed. The tertiary holes need to be injected first while the secondary holes in-between have an inflated packer at the bottom of their casing. When done, if there's any kind of communication between the secondary and tertiary holes, the secondary needs to be injected right away.

Proposed by : Muhammad Saleem, M.Eng., P.Eng., Geotechnical Eng. *Signature* *Date* 08/02/2020

4. Acceptance of resolution/Disposition proposed ☒ YES ☐ NO

Commentaries

Responsible : Pier-Eric McDonald, Geotechnical Eng. *Signature* *Date* 03/02/2020

5. Vérification of the treatment / Close Out

Responsible of the treatment : William Lavoie *Date* 2020-02-06 *Client Representative : Pier-Eric McDonald, Geotechnical Eng., AEM* *Date* 03/02/2020

Groupe GILBERT

NON-CONFORMITY REPORT

NC : 16

Non-Conformity relative to ☒ Product ☐ System, Concerned by ☒ Quality ☐ Environment ☐ Health & Safety ☐ Geotechnical

Project Title : Whale Tail Dike injection

Contract # : 11-811

Contractor : KCG(TCG)

Subcontractor :

NCR Title: Stuck packer in station T-719.5

1. Description of the Non-Conformity

While injecting station T-719.5, grout went over the packer, pushing the water out of the casing. The injection rods could be removed, but the packer remained stuck.

Responsible : William Lavoie *Signature :* *Date* 2020-02-06

2. Root Cause

The packer was supposed to be in-between the rock and the casing. Perhaps, it somehow got lowered under the casing. Since the rock is altered, the grout infiltrated it and went above the packer.

3. Resolution/Disposition Proposed :

☒ Leave as is
☐ Repair as per attached instruction
☐ Rework to specification / drawing requirements
☐ Scrap (Not to be used or incorporated in the work)

Muhammad Saleem, M.Eng., P.Eng., Geotechnical Eng. called *Tom Xue, P.Eng., Geotechnical Eng.* and they decided to leave it as is since the other holes around where low takers and the pressure was building up before the injection stopped.

Corrective Action
Is a corrective action necessary? ☐ Yes ☒ No
If yes, describe the corrective action :

Proposed by : Muhammad Saleem, M.Eng., P.Eng., Geotechnical Eng. *Signature :* *Date* 08/02/2020

4. Acceptance of resolution/Disposition proposed ☒ YES ☐ NO

Commentaries

Responsible : Pier-Eric McDonald, Geotechnical Eng., AEM *Signature :* *Date* 03/02/2020

5. Verification of the treatment / Close Out

Responsible of the treatment :William Lavoie *Date* 2020-02-06 *Client Representative : Pier-Eric McDonald, Geotechnical Eng.* *Date* 03/02/2020

Groupe GILBERT

NON-CONFORMITY REPORT

NC : 17

Non-Conformity relative to ☒ Product ☐ System, Concerned by ☒ Quality ☐ Environment ☐ Health & Safety ☐ Geotechnical

Project Title : Whale Tail Dike injection

Contract # : 11-811

Contractor : KCG(TCG)

Subcontractor :

NCR Title: Stuck packer in station P-524.5

1. Description of the Non-Conformity

The grouting of the hole P-524.5 went well. No regrout needed. When the workers started to pull out the packer, it was stuck in the hole. They tried everything to get it out but no result.

Responsible : Alex Penney *Signature :* *Date* 03/02/2020

2. Root Cause

Bad condition of the interior of the casing or deformation of the casing at the bottom of the hole.

3. Resolution/Disposition Proposed :

☒ Leave as is
☐ Repair as per attached instruction
☐ Rework to specification / drawing requirements
☐ Scrap (Not to be used or incorporated in the work)

Sébastien Viau, ing., P.Eng., Geology Eng., spoke with *Tom Xue, P.Eng., Geotechnical Eng.* and they gave there approbation to backfill over it.

Corrective Action

Is a corrective action necessary? ☐ Yes ☒ No

If yes, describe the corrective action :

Proposed by : Sébastien Viau, ing., P.Eng., Geology Eng. *Signature :* *Date* 03/02/2020

4. Acceptance of resolution/Disposition proposed ☒ YES ☐ NO

Commentaries

Responsible : Pier-Eric McDonald, Geotechnical Eng., AEM *Signature :* 03/02/2020 *Date*

5. Verification of the treatment / Close Out

Responsible of the treatment :Alex Penney *Date* 03/02/2020 *Client Representative : Pier-Eric McDonald, Geotechnical Eng.* 03/02/2020 *Date*

D-9 Rock Stage Data

KIVALLIQ CONTRACTORS GROUP LTD

Injection Stage Plug – 2019-11-18

PM Station	Rods	Stick-Up	Pression (Bar) Mix C	Total (L)
S-722.5	5.0	0.90	1.58	154.04
T-725.5	5.0	0.80	1.63	155.66
P-728.5	5.0	0.85	1.63	154.85
T-731.5	5.0	0.30	1.77	163.77
S-734.5	5.0	0.81	1.61	155.50
T-737.5	5.0	0.83	1.59	155.17
P-740.5	5.0	0.60	1.63	158.90
T-743.5	6.0	0.82	1.75	179.66
S-746.5	5.0	0.71	1.65	157.12
T-749.5	6.0	1.41	1.36	170.09

*** La pression correspond à la pression maximale à ne pas dépasser. Si le coulis circule avec une pression plus basse, c'est parfait.

*** The pression corresponds to the maximum allowed pression for each hole. If the grout is flowing properly at a lower pression, keep it like that.

KIVALLIQ CONTRACTORS GROUP LTD

Injection Stage Plug – 2019-11-20

PM Station	Rods	Stick-Up	Pression (Bar) Mix C	Total (L)
P-704.5	6.0	1.51	1.60	168.47
T-701.5	6.0	1.5	1.55	168.63
S-698.5	6.0	1.49	1.59	168.79
T-695.5	6.0	1.11	1.70	174.96
P-692.5	6.0	0.65	1.83	182.42
T-689.5	6.0	1.32	1.58	171.55
S-686.5	6.0	1.5	1.54	168.63
T-683.5	6.0	1.29	1.63	172.04
P-680.5	6.0	1.1	1.68	175.12
T-677.5	6.0	0.52	1.84	184.52
P-668.5	6.00	0.56	1.84	183.87
T-665.5	6.00	1.04	1.65	176.09
S-662.5	6.00	0.48	1.81	185.17
T-659.5	6.00	0.6	1.83	183.23
P-656.5	7.00	1.1	1.81	199.44
T-653.5	6.00	0.23	1.90	189.23
S-650.5	7.00	1.61	1.72	191.17
T-647.5	7.00	1.3	1.81	196.20
P-644.5	6.00	0.21	1.96	189.55
T-641.5	6.00	0.49	1.88	185.01
S-638.5	6.00	0.47	1.89	185.33

*** La pression correspond à la pression maximale à ne pas dépasser. Si le coulis circule avec une pression plus basse, c'est parfait.

*** The pression corresponds to the maximum allowed pression for each hole. If the grout is flowing properly at a lower pression, keep it like that.

KIVALLIQ CONTRACTORS GROUP LTD

Injection Stage Plug – 2019-11-21

PM Station	Rods	Stick-Up	Pression (Bar) Mix C	Total (L)
T-635.5	**7**	**1.28**	**1.697**	**196.52**
P-632.5	**7**	**0.62**	**2.071**	**207.22**
T-629.5	**7**	**0.83**	**1.927**	**203.82**
S-626.5	**7**	**1.12**	**1.813**	**199.12**
T-623.5	**7**	**0.82**	**1.926**	**203.98**
P-620.5	**7**	**1.35**	**1.839**	**195.39**
T-617.5	**6**	**0.24**	**2.011**	**189.06**
S-614.5	**6**	**0.26**	**1.969**	**188.74**
T-611.5	**7**	**0.93**	**1.951**	**202.20**
T-605.5	**7**	**0.55**	**1.776**	**208.36**
S-602.5	**7**	**0.73**	**1.985**	**205.44**
T-599.5	**7**	**1.12**	**1.851**	**199.12**
P-596.5	**7**	**0.93**	**1.88**	**202.20**

*** La pression correspond à la pression maximale à ne pas dépasser. Si le coulis circule avec une pression plus basse, c'est parfait.

*** The pression corresponds to the maximum allowed pression for each hole. If the grout is flowing properly at a lower pression, keep it like that.

KIVALLIQ CONTRACTORS GROUP LTD

2019-11-24

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-557.5	6	1.07	**1.67**	175.60
***S-554.5**	6	0.57	**1.78**	183.71
T-551.5	6	1.31	**1.55**	171.71
***P-548.5**	6	1.24	**1.56**	172.85
T-545.5	5	0.88	**1.51**	154.36
S-542.5	5	1.03	**1.44**	151.93
T-539.5	6	1.63	**1.45**	166.52
P-536.5	6	1.61	**1.46**	166.85
T-533.5	6	0.60	**1.81**	183.23
S-530.5	5	0.52	**1.60**	160.20

*Holes got filled with mud and need to be analysed on the field before injection (see pre-injection measurements)

KIVALLIQ CONTRACTORS GROUP LTD

2019-11-25

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-557.5	6	1.07	**1.67**	175.60
*S-554.5	6	0.57	**1.78**	183.71
T-551.5	6	1.31	**1.55**	171.71
*P-548.5	6	1.24	**1.56**	172.85
T-545.5	5	0.88	**1.51**	154.36
S-542.5	5	1.03	**1.44**	151.93
T-539.5	6	1.63	**1.45**	166.52
P-536.5	6	1.61	**1.46**	166.85
**T-533.5	6	0.60	**1.81**	183.23
S-530.5	5	0.52	**1.60**	160.20
T-527.5	6	1.34	**1.61**	171.23
P-524.5	6	0.53	**1.86**	184.36
T-521.5	6	1.57	**1.55**	167.50
S-518.5	6	1.38	**1.55**	170.58
T-515.5	6	1.11	**1.63**	174.96
P-512.5	6	1.00	**1.68**	176.74
T-509.5	6	0.70	**1.92**	181.60
S-506.5	6	1.58	**1.59**	167.34
T-503.5	6	1.46	**1.60**	169.28
P-500.5	6	1.05	**1.63**	175.93

*Holes got filled with mud and need to be analysed on the field before injection (see measurements)

**Casing didn't reach bedrock. It won't be grouted before it's been redrilled

KIVALLIQ CONTRACTORS GROUP LTD

2019-11-26

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-497.5	6	0.76	**1.73**	180.63
S-494.5	6	1.56	**1.49**	167.66
T-491.5	6	1.53	**1.48**	168.15
P-488.5	6	1.42	**1.58**	169.93
T-485.5	6	1.72	**1.42**	165.07
S-482.5	5	1.02	**1.51**	152.09
T-479.5	6	1.36	**1.53**	170.90
P-476.5	6	1.51	**1.53**	168.47
T-473.5	5	0.30	**1.69**	163.77

KIVALLIQ CONTRACTORS GROUP LTD

2019-11-27

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
S-470.5	6	1.45	**1.53**	169.44
T-467.5	6	1.35	**1.53**	171.06
P-464.5	6	1.34	**1.51**	171.23
*T-461.5	6	1.09	**1.53**	175.28
S-458.5	6	0.98	**1.61**	177.06
T-455.5	6	0.98	**1.62**	177.06
P-452.5	6	1.39	**1.50**	170.42
T-449.5	6	0.78	**1.68**	180.31
*S-446.5	6	0.83	**1.67**	179.50
T-443.5	6	0.95	**1.64**	177.55
T-437.5	6	1.25	**1.52**	172.69
T-431.5	6	1.02	**1.61**	176.42
P-428.5	6	1.06	**1.66**	175.77
T-425.5	6	0.64	**1.78**	182.58
S-422.5	6	0.98	**1.61**	177.06
T-419.5	6	0.74	**1.70**	180.96
P-416.5	6	0.60	**1.70**	183.23
*T-413.5	6	0.41	**1.67**	186.31
S-410.5	6	0.74	**1.57**	180.96
T-407.5	7	0.80	**1.69**	204.30
**P-404.5	8	1.11	**1.85**	223.60

*Holes got filled with tight stuff (secant pile cement) and need to be analysed on the field before injection

**Casing didn't reach bedrock. It won't be grouted before it's been redrilled

KIVALLIQ CONTRACTORS GROUP LTD

2019-11-30

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)	Pre-fill (L)
P-740.5	6	0.70	**3.21**	**2120**	32.9
P-728.5	7	0.46	**3.45**	**2104**	32.6
P-716.5	8	1.17	**3.30**	**1948**	30.2

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-20

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-593.5	7	0.25	2.14	213
T-569.5	7	1.30	1.85	196
P-560.5	5	0.25	1.78	165
S-554.5	6	0.57	1.87	184
P-548.5	6	1.24	1.64	173
T-533.5 B	7	0.52	1.66	183

KIVALLIQ CONTRACTORS GROUP LTD

2019-01-20

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-626.5	8	1.12	**3.90**	**4.57**	**1328**	20.6
T-617.5	8	1.44	**3.53**	**4.19**	**2456**	38.1
T-611.5	8	0.63	**3.43**	**4.10**	**2128**	33.0
S-614.5	7	0.26	**4.00**	**4.66**	**1344**	20.9
S-602.5	8	0.43	**4.18**	**4.85**	**2932**	45.5

KIVALLIQ CONTRACTORS GROUP LTD

2019-01-21

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-617.5	8	1.44	**3.53**	**4.19**	**2456**	38.1
T-611.5	8	0.63	**3.43**	**4.10**	**2128**	33.0
S-614.5	7	0.26	**4.00**	**4.66**	**1344**	20.9
S-602.5	8	0.43	**4.18**	**4.85**	**2932**	45.5
P-584.5	9	1.34	**3.50**	**4.17**	**2360**	36.6
P-572.5	9	0.96	**3.59**	**4.27**	**2324**	36.1

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-22

Rock injection datas - Re-grout

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-602.5	8	1.23	4.25	4.92	1200	51.3

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-22

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-572.5	9	0.96	**3.59**	**4.27**	**2324**	36.1
P-560.5	7	1.45	**3.04**	**3.70**	**2280**	35.4
P-548.5	7	0.94	**3.06**	**3.72**	**2100**	32.6
P-536.5	7	1.31	**2.87**	**3.52**	**2084**	32.3

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-23

Rock injection datas - Re-grout

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-572.5	9	1.76	3.63	4.30	1200	39.8

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-23

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-560.5	7	1.45	**3.04**	**3.70**	**2280**	35.4
P-548.5	7	0.94	**3.06**	**3.72**	**2100**	32.6
P-536.5	7	1.31	**2.87**	**3.52**	**2084**	32.3

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-25

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-524.5	7	0.23	**3.28**	**3.94**	**2180**	33.8
P-512.5	7	0.70	**3.60**	**4.26**	**2720**	42.2
P-500.5	7	0.75	**3.09**	**3.75**	**2084**	32.3
P-488.5	7	1.12	**3.08**	**3.74**	**2208**	34.3
P-476.5	7	1.21	**3.00**	**3.66**	**2264**	35.1

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-26

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-461.5	6	1.09	1.59	175
S-446.5	5	0.33	2.00	179

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-27

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-590.5	9	1.34	**3.48**	**4.15**	**2316**	35.9
S-578.5	8	0.73	**3.48**	**4.15**	**2312**	35.9
S-566.5	7	0.30	**3.43**	**4.08**	**2300**	35.7

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-27

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-464.5	7	1.04	**3.00**	**3.66**	**2196**	34.1
P-452.5	7	1.09	**3.10**	**3.76**	**2448**	38.0

Plug stage datas

S-446.5	5	0.33	2.00		**179**	
T-461.5	6	1.09	1.59		**175**	

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-28

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-554.5	7	0.27	**3.47**	**4.13**	**2600**	40.3
S-542.5	6	0.73	**3.12**	**3.77**	**2372**	36.8
S-530.5	7	1.17	**3.22**	**3.87**	**2568**	39.9
P-524.5	**BACKFILL**					

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-30

Rock injection datas - Re-grout

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-524.5	5	1.03	3.27	3.92	1200	36.8

KIVALLIQ CONTRACTORS GROUP LTD

2020-01-30

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-518.5	7	1.08	**3.10**	**3.76**	**2200**	34.1
S-506.5	7	0.93	**3.22**	**3.88**	**2492**	38.7
S-494.5	7	1.26	**3.09**	**3.75**	**2264**	35.1
S-482.5	6	0.72	**3.09**	**3.74**	**2288**	35.5
S-470.5	7	1.15	**2.99**	**3.65**	**2200**	34.1
S-458.5	7	0.68	**3.26**	**3.92**	**2372**	36.8
S-446.5	8	1.23	**3.07**	**3.74**	**2112**	32.8

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-01

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
S-434.5	6	1.36	1.55	171
T-425.5	6	0.64	1.81	183
S-422.5	6	0.98	1.71	177
T-419.5	6	0.74	1.75	181
P-416.5	6	0.60	1.76	183
T-413.5	6	0.41	1.77	186
S-410.5	6	0.74	1.76	181
T-407.5	7	0.80	1.78	204
P-404.5 B	9	1.43	1.91	224
T-401.5	6	0.19	1.78	190

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-01

Rock injection datas - Re-grout(2)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-524.5	5	1.03	3.27	3.92	1200	36.8

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-01

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-518.5	7	1.08	**3.10**	**3.76**	**2200**	34.1
S-506.5	7	0.93	**3.22**	**3.88**	**2492**	38.7
S-494.5	7	1.26	**3.09**	**3.75**	**2264**	35.1
S-482.5	6	0.72	**3.09**	**3.74**	**2288**	35.5
S-470.5	7	1.15	**2.99**	**3.65**	**2200**	34.1
S-458.5	7	0.68	**3.26**	**3.92**	**2372**	36.8
S-446.5	8	1.23	**3.07**	**3.74**	**2112**	32.8

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-02

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
S-434.5	6	1.36	1.55	171
T-425.5	6	0.64	1.81	183
S-422.5	6	0.98	1.71	177
T-419.5	6	0.74	1.75	181
P-416.5	6	0.60	1.76	183
T-413.5	6	0.41	1.77	186
S-410.5	6	0.74	1.76	181
T-407.5	7	0.80	1.78	204
P-404.5 B	9	1.43	1.91	224
T-401.5	6	0.19	1.78	190

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-03

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
S-398.5	6	0.30	1.82	188
T-395.5	7	0.76	1.89	205
P-392.5 B	7	0.37	1.94	202
T-389.5 B	7	0.23	2.11	190
S-386.5	7	0.09	2.00	216
T-383.5	7	1.11	2.59	199
P-380.5 B	7	0.60	1.98	183
T-377.5	7	1.42	1.71	194
S-374.5	6	0.11	1.86	191
T-371.5	7	0.15	1.97	215

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-03

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-605.5	8	0.25	**3.74**	**4.40**	**2392**	37.1
T-599.5	9	1.32	**3.47**	**4.15**	**2248**	34.9
T-593.5	9	1.45	**3.37**	**4.04**	**2288**	35.5
T-587.5	8	0.32	**3.61**	**4.27**	**2348**	36.4
T-581.5	8	0.74	**3.41**	**4.08**	**2276**	35.3
T-575.5	8	0.27	**3.47**	**4.13**	**2168**	33.6
T-569.5	8	1.00	**3.36**	**4.03**	**2300**	35.7
T-563.5	7	0.26	**3.39**	**4.05**	**2280**	35.4

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-04

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-557.5	7	0.77	**3.25**	**3.91**	**2348**	36.4
T-551.5	7	1.01	**3.11**	**3.77**	**2292**	35.6
T-545.5	6	0.58	**3.88**	**4.53**	**3192**	49.5
T-539.5	7	1.33	**3.08**	**3.73**	**2332**	36.2
T-533.5 B	8	0.22	**3.89**	**4.55**	**2668**	41.4
T-527.5	7	1.04	**3.11**	**3.77**	**2380**	36.9
T-521.5	7	1.27	**3.11**	**3.76**	**2320**	36.0
T-515.5	7	0.21	**3.38**	**4.04**	**2524**	39.2

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-05

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-428.5	7	0.76	**3.21**	**3.87**	**2284**	35.4
P-416.5	7	0.30	**3.34**	**3.99**	**2296**	35.6
P-404.5 B	10	1.13	**3.35**	**4.03**	**2272**	35.3
P-392.5 B	8	0.07	**3.45**	**4.11**	**2248**	34.9
P-380.5 B	8	0.30	**3.39**	**4.05**	**2300**	35.7

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-10

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
S-266.5	5	0.88	1.61	154
T-263.5	5	0.80	1.56	156
P-260.5	5	0.58	1.62	159
T-257.5	5	0.87	1.53	155
S-254.5	5	0.78	1.56	156
T-251.5	5	1.00	1.50	152
P-248.5	5	0.78	1.54	156
T-245.5	5	1.07	1.48	151
S-242.5	5	0.91	1.53	154
T-239.5	5	1.10	1.47	151
P-236.5	5	0.97	1.52	153
T-233.5	5	1.16	1.45	150
S-230.5	5	1.20	1.45	149
T-227.5	5	1.15	1.45	150
P-224.5	5	1.15	1.45	150
T-221.5	6	1.24	1.61	173
S-218.5	6	1.00	1.68	177

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-11

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-527.5	7	1.04	**3.14**	**3.79**	**2380**	36.9
T-521.5	7	1.27	**3.12**	**3.78**	**2320**	36.0
T-515.5	7	0.21	**3.42**	**4.08**	**2524**	39.2
T-509.5	8	1.50	**3.28**	**3.94**	**2392**	37.1
T-503.5	7	1.16	**3.11**	**3.77**	**2348**	36.4
T-497.5	7	0.46	**3.32**	**3.98**	**2280**	35.4
T-491.5	7	1.23	**3.03**	**3.68**	**2224**	34.5
T-485.5	7	1.42	**3.11**	**3.77**	**2328**	36.1

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-12

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-479.5	7	1.06	**3.10**	**3.75**	**2624**	40.7
T-473.5	7	1.50	**2.95**	**3.60**	**2300**	35.7
T-467.5	7	1.05	**3.10**	**3.76**	**2320**	36.0
T-461.5	7	0.79	**3.18**	**3.84**	**2336**	36.2
T-455.5	7	0.68	**3.18**	**3.83**	**2304**	35.8
T-449.5	7	0.48	**3.31**	**3.96**	**2152**	33.4
T-443.5	7	0.65	**3.21**	**3.87**	**2244**	34.8

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-13

Rock injection datas

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-434.5	7	1.06	**2.91**	**3.57**	**2124**	33.0
S-422.5	7	0.68	**3.07**	**3.73**	**2172**	33.7
S-410.5	7	0.44	**3.07**	**3.73**	**2100**	32.6
S-398.5	8	1.50	**2.79**	**3.46**	**2100**	32.6
S-386.5	9	1.29	**3.04**	**3.71**	**2096**	32.5

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-16

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-368.5	10	0.32	**3.64**	**4.32**	**2268**	35.2
P-356.5 B	10	0.27	**3.51**	**4.19**	**2128**	33.0
P-344.5 B	9	0.82	**3.30**	**3.97**	**2188**	34.0
P-332.5	8	1.00	**3.00**	**3.66**	**2120**	32.9
P-320.5	7	0.92	**3.09**	**3.75**	**2160**	33.5

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-22

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-437.5	7	0.95	**3.26**	**3.92**	**2260**	35.1
T-431.5	7	0.72	**3.07**	**3.73**	**2008**	31.2
T-425.5	7	0.34	**3.17**	**3.82**	**2016**	31.3
T-419.5	7	0.44	**3.08**	**3.74**	**2028**	31.5
T-413.5	7	0.11	**3.51**	**4.17**	**2164**	33.6
T-407.5	8	0.50	**3.07**	**3.74**	**2100**	32.6
T-401.5	8	1.39	**2.92**	**3.59**	**2116**	32.8
T-395.5	8	0.46	**3.26**	**3.92**	**2076**	32.2

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-23

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-389.5 B	9	1.43	2.34	**3.26**	**3.92**	**2352**	36.5
T-383.5	8	0.81	2.32	**3.24**	**3.91**	**2344**	36.4
S-374.5	8	1.31	2.02	**2.95**	**3.61**	**2204**	34.2
S-362.5	11	1.35	2.49	**3.39**	**4.08**	**2080**	32.3
S-350.5	9	0.67	2.30	**3.21**	**3.88**	**2112**	32.8
S-338.5 B	9	0.34	3.49	**4.40**	**5.07**	**2356**	36.6
S-326.5	7	0.23	2.16	**3.09**	**3.75**	**2432**	37.7
S-314.5	6	0.67	2.01	**2.96**	**3.61**	**2380**	36.9
S-302.5	6	1.10	2.01	**2.96**	**3.61**	**2380**	36.9
S-290.5	6	0.85	2.13	**3.08**	**3.73**	**2392**	37.1

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-25

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-278.5	6	0.82	2.10	**3.05**	**3.70**	**2368**	36.7
S-266.5	6	0.58	2.30	**3.25**	**3.90**	**2312**	35.9
P-248.5	6	0.48	2.05	**2.99**	**3.65**	**2292**	35.6
P-236.5	6	0.67	2.10	**3.03**	**3.68**	**2300**	35.7
P-224.5	6	0.85	2.22	**3.15**	**3.80**	**2320**	36.0
P-212.5	7	1.32	2.20	**3.14**	**3.79**	**2280**	35.4
P-200.5	7	1.20	2.24	**3.18**	**3.84**	**2312**	35.9
P-188.5 B	6	1.32	2.02	**2.97**	**3.62**	**2388**	37.1
P-176.5 B	5	0.32	2.05	**3.01**	**3.65**	**2364**	36.7

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-27

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
S-254.5	6	0.48	2.06	**3.01**	**3.66**	**2400**	37.2
S-242.5	6	0.61	1.97	**2.91**	**3.56**	**2200**	34.1
S-230.5	6	0.90	2.02	**2.95**	**3.60**	**2160**	33.5
S-218.5	7	0.70	2.21	**3.15**	**3.81**	**2320**	36.0
S-206.5	7	1.00	2.29	**3.22**	**3.88**	**2348**	36.4
S-194.5	6	0.13	2.19	**3.13**	**3.79**	**2360**	36.6
S-182.5	5	0.66	1.86	**2.81**	**3.46**	**2284**	35.4

KIVALLIQ CONTRACTORS GROUP LTD

2020-02-29

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-377.5	8	1.12	2.22	**3.14**	**3.81**	**2308**	35.8
T-371.5	9	1.35	2.51	**3.43**	**4.10**	**2340**	36.3
T-365.5	11	0.20	2.86	**3.75**	**4.44**	**2300**	35.7
T-353.5 B	10	1.14	2.59	**3.50**	**4.17**	**2316**	35.9
T-347.5	9	1.12	2.28	**3.24**	**3.91**	**2664**	41.3
T-341.5	8	0.40	2.42	**3.34**	**4.01**	**2440**	37.9
T-329.5	7	0.19	1.78	**2.72**	**3.38**	**2336**	36.2
T-323.5	7	0.78	2.05	**2.98**	**3.64**	**2292**	35.6

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-01

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-317.5	6	0.17	2.02	**2.96**	**3.61**	**2320**	36.0
T-311.5 B	6	1.37	2.06	**3.01**	**3.66**	**2408**	37.4
T-305.5	5	0.19	1.96	**2.91**	**3.56**	**2416**	37.5
T-299.5	5	0.45	1.96	**2.92**	**3.56**	**2360**	36.6
T-293.5	6	0.85	2.05	**2.99**	**3.64**	**2236**	34.7
T-287.5	6	1.22	2.01	**2.96**	**3.60**	**2348**	36.4
T-281.5	6	0.64	2.05	**3.00**	**3.65**	**2364**	36.7
T-275.5	6	0.54	2.16	**3.10**	**3.75**	**2316**	35.9

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-02

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-269.5	6	0.68	2.15	**3.10**	**3.75**	**2332**	36.2
T-263.5	6	0.50	2.22	**3.17**	**3.82**	**2320**	36.0
T-257.5	6	0.57	2.10	**3.04**	**3.69**	**2360**	36.6
T-251.5	6	0.70	2.17	**3.10**	**3.75**	**2296**	35.6
T-245.5	6	0.77	2.14	**3.09**	**3.74**	**2368**	36.7
T-239.5	6	0.80	2.09	**3.03**	**3.68**	**2340**	36.3
T-233.5	6	0.86	2.06	**3.01**	**3.66**	**2308**	35.8
T-227.5	6	0.85	2.16	**3.09**	**3.74**	**2236**	34.7

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-04

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
T-221.5	7	0.94	2.23	**3.18**	**3.83**	**2440**	37.9
T-215.5	7	0.95	2.44	**3.38**	**4.03**	**2360**	36.6
T-209.5	7	1.16	2.26	**3.21**	**3.87**	**2440**	37.9
T-203.5	7	1.10	2.25	**3.17**	**3.83**	**2264**	35.1
T-197.5	6	0.95	2.21	**3.12**	**3.77**	**2304**	35.8
T-191.5	6	1.30	2.14	**3.06**	**3.71**	**2280**	35.4
T-185.5	6	1.44	1.97	**2.95**	**3.60**	**2636**	40.9
T-179.5	5	0.25	2.05	**2.99**	**3.64**	**2296**	35.6

	*** Packer Half and Half Bottom Casing ***

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-10

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
Q-739	7	0.80	2.32	**3.26**	**3.92**	**2160**	33.5
Q-733	7	1.19	2.30	**3.24**	**3.90**	**2276**	35.3
Q-718	8	0.91	2.38	**3.31**	**3.97**	**2076**	32.2
Q-697	7	1.06	2.31	**3.25**	**3.90**	**2216**	34.4
Q-691	7	0.70	2.26	**3.19**	**3.85**	**2112**	32.8
Q-685	7	0.10	1.64	**2.57**	**3.23**	**1320**	20.5

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-11

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-748	5	0.92	1.45	154
P-739	5	0.36	1.78	163
T-736	5	0.80	1.78	156
S-733	5	0.15	1.86	166
T-730	6	1.09	1.71	175
P-727	7	1.51	2.02	193
T-724	7	1.02	2.06	201
S-721	7	1.07	2.04	200
T-718	8	0.99	2.21	226
P-715	8	0.98	2.16	226
T-712	8	0.99	2.22	226
S-709	7	0.29	2.12	213
T-706	6	0.62	1.91	183
P-703	6	0.52	1.94	185
T-700	6	0.76	1.92	181

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-13

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
P-595	7	0.93	2.25	202
T-592	7	1.28	2.20	197
S-589	7	0.68	2.20	206
T-586	7	1.04	1.96	200
P-583	7	0.49	2.19	209
T-580	7	1.44	2.07	194
S-577	7	1.45	2.11	194
T-574	6	0.08	2.05	192
P-571	8	1.34	1.93	220
T-568	7	0.32	2.20	212
S-565	7	0.99	2.13	201
T-562	5	0.13	2.08	167
P-559	6	0.95	2.17	178
T-556	6	1.47	2.09	169
S-553	5	0.14	2.02	166

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-15

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-550	5	0.23	1.88	165
P-547	6	1.13	1.88	175
T-544	5	0.30	1.92	164
S-541	5	0.19	1.89	166
T-538	6	1.58	1.94	167
P-535	6	1.31	1.86	172
T-532	6	1.03	1.84	176
S-529	6	1.43	1.27	170
T-526	6	0.87	2.00	179
S-517	6	0.86	1.88	179
P-511	6	1.26	1.64	173
S-505	6	0.97	2.08	177
P-499	6	0.66	2.07	182
S-493	6	1.51	1.63	168
P-487	6	0.46	2.12	185

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-15

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
Q-526	6	0.33	1.86	181
Q-523	6	1.53	1.75	168
Q-481	6	1.45	1.75	170
Q-478	6	1.55	1.79	179
Q-295	5	1.16	1.71	149
Q-292	5	1.24	1.70	144
Q-223	5	0.21	1.67	173
Q-220	6	0.87	1.75	177
Q-199	5	0.44	1.64	143
Q-197	6	1.10	1.67	162
Q-193	5	0.10	1.74	143

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-18

Injection datas (plug stage)

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Total (L)
T-598	7	0.60	2.28	208
S-601	7	0.76	2.19	205
S-613	7	1.01	2.22	201
T-616	6	0.43	2.09	186
S-637	6	0.28	2.08	188
T-646	6	0.13	1.98	191
S-649	7	1.52	2.11	193
T-658	6	0.10	2.10	191
T-664	6	0.11	2.10	191
T-742	5	0.79	1.74	156
S-745	5	1.05	1.69	152

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-23

Rock injection datas - Upstream Rock

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-739	7	1.56	**3.17**	**3.83**	**2224**	34.5
P-727	8	1.21	**3.39**	**4.05**	**2188**	34.0
P-715	9	0.68	**2.20**	**2.87**	**552**	8.6
P-703	7	0.22	**3.44**	**4.10**	**2360**	36.6
P-691	7	0.47	**3.36**	**4.02**	**2260**	35.1

***** P-715 is grouted in two stages. The hole caved at 1m under the bottom of the casing**

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-25

Rock grouting data

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix B	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
Q-664	7	0.67	2.27	**3.20**	**3.86**	**2220**	34.4
Q-523	7	1.23	2.38	**3.32**	**3.97**	**2272**	35.3
Q-478	7	1.25	2.34	**3.27**	**3.93**	**2280**	35.4

KIVALLIQ CONTRACTORS GROUP LTD

2020-03-24

Rock injection datas - Upstream Rock

PM Station	Rods	Stick-up (m)	Pressure (Bar) for Mix C	Pressure (Bar) for Mix D	Total (L)	Pre-fill (L)
P-679	8	1.52	**3.29**	**3.95**	**2240**	34.8

D-10 Equipment Calibration Certificate

Saleem, Muhammad

From: Pier-Eric McDonald <pier-eric.mcdonald@agnicoeagle.com>
Sent: December 4, 2019 11:58 AM
To: Quan, Nina; Jesse Clark; Audrey Bilodeau Groupe Gilbert; Jeannot Gagnon
Cc: Frederick Bolduc; Patrice Gagnon; Thomas Lepine; Xue, Tom; El Bensi, Abdellah; Du, Jin Dong; Saleem, Muhammad; Alexandre Lavallee
Subject: RE: [EXTERNAL] RE: 669034- Remediation Work for WTD Seepage : Downstream Blanket Grouting Submittals
Attachments: 9- SNC submittals.zip

Hi Nina,

Yes, I am sorry for the delay, find information attached as well as an update in red of submittal section 2.5.
AEM, its here on the network: P:\Engineering\05-Geotechnic\14- Amaruq\01 - Dewatering Dikes\1 - Whale Tail Dike\3 - Construction\2- Remedial Grouting 2019-2020\1 - Planning

a. Manufacturer's specifications and material safety data sheets of the proposed products; See in attached folder
b. Drilling and grouting method statement including details of drilling, water testing and grouting procedures, the proportions of the proposed grout mixes, mixing procedure, the type of admixtures proposed and specifications and photographs of all equipment to be used in water pressure testing, batching, transporting, pumping and monitoring of the grout, inclusive of proposed standby equipment; See in attached folder
c. Test results of the proposed grout mixes; See in attached folder
d. Effective and gauge pressures chart based on pressure head loss in the grout lines, grout column and water level in the hole using different type of grout mixes; See in attached folder (should have been carried out in field trials with QA, I don,t have this information)
e. Layout showing location and elevations of equipment in relation to discharge point, as well as proposed pumping distances including characteristics and dimensions of the shelter proposed to perform grouting works, including heating and water supply systems; Not available now, could be produced if its really needed, would an overview photo work out since a photo is worth a thousand words?
f. All equipment calibration certificates be calibrated based on the manufacturer's recommendations; As per Ken Lachance, All the equipment is new from manufacturer, therefore no certicate of calibration exists when equipment is new from what he tells me. If you want to calibrate once in awhile, a method could be proposed by SNC to do double checks.
g. Proposed work schedule detailing the number of shifts and size of crews; See attached
h. CVs of the proposed drilling and grouting specialists and field supervisors. KCG looking into providing CV of key personal. Audrey please follow up.

Please tell us if this is suitable.

Pier-Eric McDonald | Geotechnical Engineer
pier-eric.mcdonald@agnicoeagle.com | Direct 819.759.3555 x4606726 |
Agnico Eagle Mines Limited - Meadowbank Division, Suite 540 - Baker Lake, Nunavut, Canada X0C 0A0

agnicoeagle.com
Sent from Amaruq

From: Quan, Nina [mailto:Nina.Quan@snclavalin.com]
Sent: December 4, 2019 10:42 AM
To: Pier-Eric McDonald <pier-eric.mcdonald@agnicoeagle.com>; Jesse Clark <jesse.clark@agnicoeagle.com>
Cc: Frederick Bolduc <frederick.bolduc@agnicoeagle.com>; Patrice Gagnon <patrice.gagnon@agnicoeagle.com>; Thomas Lepine <thomas.lepine@agnicoeagle.com>; Xue, Tom <Tom.Xue@snclavalin.com>; El Bensi, Abdellah <Abdellah.ElBensi@snclavalin.com>; Du, Jin Dong <JinDong.Du@snclavalin.com>; Saleem, Muhammad <Muhammad.Saleem@snclavalin.com>; Alexandre Lavallee <alexandre.lavallee@agnicoeagle.com>
Subject: [EXTERNAL] RE: 669034- Remediation Work for WTD Seepage : Downstream Blanket Grouting Submittals

CAUTION: EXTERNAL

Hi Pier-Eric and Jesse
Just want to follow up with the request below regarding the submittals for drilling and grouting works. Do you have those documents for us? Attached are the documents we received last year for reference.
Thanks in advance
Best Regards

Nina Quan, *P. Eng.*
Ingénieur en Géotechnique/Geotechnical Engineer
Capital de mantien/Sustainable Capital Toronto Office
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From: Quan, Nina
Sent: November 28, 2019 3:35 PM
To: Alexandre Lavallee <alexandre.lavallee@agnicoeagle.com>
Cc: 'Frederick Bolduc' <frederick.bolduc@agnicoeagle.com>; 'Patrice Gagnon' <patrice.gagnon@agnicoeagle.com>; Pier-Eric McDonald <pier-eric.mcdonald@agnicoeagle.com>; 'Thomas Lepine' <thomas.lepine@agnicoeagle.com>; Xue, Tom <Tom.Xue@snclavalin.com>; El Bensi, Abdellah <Abdellah.ElBensi@snclavalin.com>; Baba, Hafeez <Hafeez.Baba@snclavalin.com>; Du, Jin Dong <JinDong.Du@snclavalin.com>; Saleem, Muhammad <Muhammad.Saleem@snclavalin.com>
Subject: 669034- Remediation Work for WTD Seepage : Downstream Blanket Grouting Submittals

Hi Alexandre

Our field engineer mentioned that there is a possibility that grouting will start within few days. As required in the technical specifications, we would like to have the submittals for drilling and grouting works from the contractor prior to start for approval.
Thank you very much in advance for the information.

Best Regards

Nina Quan, *P. Eng.*
Ingénieur en Géotechnique/Geotechnical Engineer
Capital de mantien/Sustainable Capital Toronto Office
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D-11 KGC Rock Drilling Report

47
70
~~16~~

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: ALEX PARÉ

#Foreuse: 9932

Date: 26-11-19

Jour : ☑

Nuit : ☐

	Station	Rock depth (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
P	26-11-19 0+740.5	NOT FOUND	~~8.6~~ 9.4	5	~~13.6~~ 14.5	N	—		Sim at 43 to 45' (13 to 13.6m) Good at 13.2m
P	Started 27 0+728.5 Ended: 28-11-19	8.8	11.2	5	16.2	N	—		add 1.67m welding ~~1.67~~ of casing Good at 16.2m
P	28-11-19 0+716.5	11.6	11.6	5	16.6	Y	12.5		Hole is Good At 15.5m "Bad rock"
P	28-11-19 0+704.5	8.8	9.8	5	14.8	N			Good At 13.8m "Good rock"
P	28-11-19 0+692.5	10.6	10.6	5	16.0	N			Good At 16m. "Repass 3 times"
P	28-11-19 0+680.5	10.4	~~10.4~~	5	~~15.4~~	N			

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: ALEX. PARÉ

#Foreuse: 9932

Date: 29-11-19

Jour : ☑

Nuit : ☐

Station	Rock depth (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
0+680.5	NOT FOUND	not found	—	9.7m	Y	10.3		In fine filter "not good" "not touch rock"
~~0+668.5~~	~~10.6~~							enable for drilling "small shack on the line"
0+656.5	*11.71	11.7	5m	16.8	N			Hole is sad at 16.8 "sad rock"
0+644.5	*10.88	11.3	5m	16.5	N			Hole is sad At 16.5m. "sad rock"
~~0+632.5~~	NOT FOUND							
~~0+620.5~~	~~11.4~~							
~~0+596.5~~	NOT FOUND							

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: ALEXANDRE PARÉ

#Foreuse: 9932

Date: 30-11-19

Jour : ☒

Nuit : ☐

Station	Rock depth (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
0+632.5	NOT FOUND	12.6	5	18.1	N	—	2min	Good at 18.1 "Good rock"
0+620.5	11.4	11.4	5	16.4	N	—	2min	Good at ~~15.4~~ 16.4 "Good rock"
0+536.5	9.6	9.6	5	14.6	N	—	2min	Good at 14.4 End of the Hole Bad rock at (14m) to 14.6m
0+524.5	10,65	10.9	5	15.9	N	—	2min	Good at 15.9 "Good rock"
0+512.5	10.2	~~10.9~~ 11.6	5	~~15.9~~ 16.8	N	—	2min	Good at 16.8 "Good rock"
0+500.5	10.4	10.4	5	15.4	N	—	2min	Good at 15.4 "Good rock"
0+488.5	9.8	10.1	5	15.1	N	—	2min	Good at 15.1 "Good rock"
0+476.5	9.7	10.2	5	15.2	N	—	2min	Good at 15.2 "Good rock"

Bedrock drilling report

KIVALLIQ CONTRACTORS GROUP LTD

11.5m. 12.3

Employé: ALEX. PARÉ

#Foreuse: 9932

Date: 01-12-19

Jour : ☒

Nuit : ☐

Station	Rock depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
0+680.	NOT FOUND	12.4 6	12.6	5	17.6	N	—	2 min	Good at 17.6 "Good rock"
668.5	11.6		11.0	5	16.6	N	—	2 min	Good at 16.6 Sim At 15.5 to 16m.

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Ordet

#Foreuse: 9932

Date: 11-12-19

Jour : ☒

Nuit : ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth drilled into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
746,5	9,54			1,5	11,04	N		2min	
734,5	9,39			1,5	10,89	N		2min	
722,5	9,40*			1,5	10,90	Y	10m	2min	*Rock not found
710,5	13,53			1,5	15,03	N		2min	
698,5	10,21			1,5	11,71	N		2min	
686,5	10,17			1,5	11,67	Y	10,4	2min	
674,5	11,08			1,5	12,58	N		2min	

- Depth drilled to reach bedrock ⇒ Ex. S-662.5 : 11.42 − 0.40 + 0.20 = 11.22 m
  (stick up) (Bit length)
- Rock Depths come from the casing drilling reports

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Ordet
#Foreuse: 9932
Date: 12-12-19

Jour: ☒
Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth drilled into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-662.5	10.70	11.42	11.22	1,5	12,72	N		2	
S-650.5	10.67	11.79	11.59	1,5	13,09	N		2	
S-638.5	10.79	11.43	11.23	1,5	12,73	N		2	
S-626.5	11.50	12.28	12.08	1,5	13,58	N		2	
~~S-614.5~~	~~10.94~~	~~11.64~~	~~11.44~~						
~~S-602.5~~	NOT found	~~12.67~~	~~12.47~~						
[redacted]									
S-720.5	see casing report	12.8	12.45	1.5	13.95	NO		2	AT 13m lot of water

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 13-12-19

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth drilled into the bedrock (m)	Final depth (m)	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
P-596.5	12.76	13.28	13.13	up to 5m	18.00	N		2	
~~S-602.5~~	NOT found	~~12.07~~	~~12.47~~	~~1.5~~					
S-614.5	10.94	11.64	11.44	1.5	12,9				

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 13-12-19

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth drilled into the bedrock (m)	Final depth (m)	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-746.5	8.94	9.69	9.54	5	14,7	Y	13,4		
S-734.5	8.89	9.59	9.39	5	13,1	Y	12,8		try to keep the hole at 14,39 But no good
S-722.5	12.45	12.80	12.65	5	17,9	Y	15,9		
S-710.5	13.03	13.68	13.53	5	18,65	Y	17,0		15,3 Broken Rock rotation stop
S-698.5	9.90	10.41	10.21	5	15,2	Y	12,5		
S-686.5	9.67	10.40	10.17	5	13,0	Y	13,0		Not able to keep the hole at 15m
									very Bad Rock

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2019-12-14(15)

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
(2019-12-14) S-674.5	10.58	11.23	11.08	5	16,1	16,1	Y	13,2		
S-662.5	10.70	11.42	11.22	5	16,22	15,9	Y	13,4		Bad Rock in the bottom
S-650.5	10.67	11.79	11.59	5	16,59	16,6	Y	13,6		
S-638.5	10.79	11.43	11.23	5	16,2	16,1	Y	13,6		
S-626.5	11.50	12.28	11.88	5	16,9	17,0	Y	13,5		
S-614.5	10.94	11.64	11.24	5	16,3	16,3	Y	13,2		
S-602.5		12.67	14,4	1.5	15,9	15,9	N			The hole is good even if the casing isn't into the bedrock, no losses

Bedrock drilling report

KIVALLIQ CONTRACTORS GROUP LTD

Employé: Alexandre Paré
#Foreuse: 9932
Date: 2020-01-11 (12)

Jour: [X]
Nuit: [ ]

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-749.5	-	10.49		5	17.5	17.5	N	—	2min	12.5m reach rock / Drill 17.5m
~~T-743.5~~ 737	~~9.65~~	~~11.08~~ ?		5	~~14.7~~	~~14.7~~	~~N~~	~~-~~	~~2min~~	~~9.7m reach rock sin at 11.9 at 12.5m~~
T-737.5	8.88	9.57		5	14.7	14.7	N	-	2min	9,7 reach rock sin at 11.9 at 12.5m. (enable to keep good.)
T-731.5	-	10.10		5	16.0	15m	N	-	2min	11m reach rock (no good)
T-725.5	-	9.60		5	13.6	9.8	N	-	—	11.6m reach rock (No good)
T-719.5	9.70	10.35		5	13.4	9.6	N	—	—	11.3m reach rock
T-713.5	13.50	14.16	X	5	19.2	19.2	N	—	2min	14.2m reach rock
T-707.5	11.86	12.49	X	5	17.5	17.5	N	-	2min	12.5m " "
T-701.5	9.00	10.40	X	5	15.4	15.5	N	-	2min	10.4 " "
T-695.5	10.16	10.79	~~X~~	5	15.8	15.8	N	-	2min	10.8 " "
T-743.5	9.65	11.08 ?	X	5	15.4	15.4	N	-	2min	10.4 reach rock

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. Paré

#Foreuse: 9932

Date: 2020-01-12

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
~~T-675.5~~	~~10.16~~	~~10.79~~	—	—	—	—	—	—	—	—
T-689.5	9.88	10.58	10.4	5	15.4	15.8	—	—	2min	10.4
T-683.5	10.30	11.07	10.7	5	15.7	15.7	—	—	2min	
T-677.5	—	11.38	11.3	~~16.3~~	16.3	16.5	—	—	2min	
~~T-671.5~~	~~9.95~~	~~10.61~~								

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. Paré

#Foreuse: 9932

Date: 13-01-20

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-671.5	9.95	10.61	10.5	5	15.5	15.5	N	—	2min	Good rock
T-665.5	10.16	10.86	10.9	5	15.9	15.9	N	—	2min	Good rock
T-659.5	9.90	11.30	11	~~16~~ 5	16	16.1	N	—	2min	good rock
T-653.5	10.97	11.67	11.5	~~16.5~~ 5	16.5	16.5	N	—	2min	Good rock
T-647.5	11.48	12.10	11.8	5	16.8	16.8	N	—	2min	good rock
T-641.5	10.71	11.41	11.3	~~16.83~~ 5	16.3	16.4	N	—	2min	Good rock
T-635.5	11.42	12.12	12	~~17~~ 5	17	17.1	N	—	2min	Good rock
T-629.5	11.97	12.57	12.1	5	17.1	17.1	N	—	2min	Good rock
T-623.5	11.92	12.58	12.3	5	17.3	17.3	N	—	2min	Good rock
T-617.5	10.96	11.66	11.4	5	16.4	16.4	N	—	2min	Good rock
T-611,5	11,78	12,47	11.9	5	16.9	16.9	N	—	2min	Good rock
~~T-605,5~~	~~12,12~~	~~12,85~~		~~5~~						
~~T-599,5~~	—	~~12,28~~		~~5~~						
Clean ~~S-626,5~~	11,50	12,28	—	—	16,9	17.1				Clean
Clean ~~S-614,5~~	10.94	11.64	—	—	16,3	16.3				Clean.
Clean ~~S-602,5~~	—	12.67	—	—	19,4					

(+3.5)

Bedrock drilling report

KIVALLIQ CONTRACTORS GROUP LTD

Employé: Alex. Pesé

#Foreuse: 1, 9932

Date: 2020-01-14

Jour: ☒ Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
~~T-605.5~~	~~12,12~~	~~12,65~~	~~—~~	~~5~~						
~~T-591.5~~	~~—~~	~~12,26~~		~~5~~						
clean S-602,5	—	12,67	—	—	19,4	19,4	N	—	2min	good rock (but sim at 19.4)
P-584.5	12,60	13,26	13,3	5	18.3	18.2	N	—	2min	Good rock
~~P-572.5~~	~~12,99~~	~~13,64~~	~~13,3~~	~~5~~	~~18.3~~					
P-572.5	12.99	13,64	13,6	5	18,6	19	N	—	2min.	Good rock
clean T-569.5	11,45	12,10	—	—	11.8					
clean P-560.5	9,50	10,15	—	—	9.8					
clean S-554,5	10,00	11,33	—	—	10.3					
clean P-548,5	9,85	10,66	—	—	10.2					
clean T-533,5	12,23	12,88	—	—	12,7					
T-461.5	10,16	10,81	—	—	10.3					
S-446.5	10,42	11,07	—	—	10.4					Lot of cutting.

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. Paré

#Foreuse: 9932

Date: 2020-01-15

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments New casing length
Push down casing - rock drill 5m	T-725.5	—	9.60	11.6	5	16.6	16.5	N	—	2min	Added casing length: 2.2 = 11.8m.
	T-719.5	9930	10.35	11.3	5	16.3	16.1	N	—	2min	Added casing length: 1.5 = 11.85m
											719.5 after 4 time good
											at 16.1m. "Drilled. 16.5m"

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Doiet

#Foreuse: 9932

Date: 2020-01-21

Jour: ☒

Nuit: ☐

	Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
Verify	P-584.5					15.30	✓				
Verify	P-572.5					18.60	✓				
	P-560.5	9.50	10.15		5	15,0	✓				
	P-548.5	9.55	10.66		5	14,9	✓				
Verify	P-536.5					14.60	✓				
Verify	P-524.5					15.90	✓				
Verify	P-512.5					16,50	✓				
Verify	P-500.5					15.40	✓				
Verify	P-488.5					15.10	✓				
Verify	P-476.5					15.20	✓				
	P-464.5	9.91	10.56		5	15,2	✓				
	P-452,5	9,48	10,51		5	15.4	✓	Y	14.8		

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-01-25

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-605.5	12.12	12.85	12.65	5	17,9		N			
T-599.5	NOT FOUND	12.28	(13,2)	5	18,3		N			Need to add a lenght of casing (1m)
S-590.5	12.61	13.26	13.11	5	18,2		Y	14,7		
S-578.5	11.72	12.37	12.22	5	17,3		Y	14,1		
S-566.5	10.65	11.30	11.15	5	16,2		N			
S-554.5	10.00	11.33	11.13	5						
S-542.5	8.67	9.37	9.17	5						

Clean-up before Plug grouting

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9937

Date: 2020-01-25

Jour : ☑

Nuit : ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
T-461.5	10.16	10.46			10,8					
S-446.5	10.42	10.07			10,5					

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-01-26

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-554.5	10.00	11.33	11.13	5	16,3		N			
S-542.5	8.67	9.37	9.17	5	14,4		Y	12,1		
S-530.5	9,18	10.43	10.23	5	15,4		Y	12,8		
S-518.5	10.00	10.52	10.32	5	15,3		Y	12,9		
S-506.5	9.67	10.67	10.52	5	15,7		N			

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9432

Date: 2020-01-27

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-494.5	9.84	10.34	10.19	5	15,3		N			

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-01-28

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
S-482.5	8.68	9.38	9.18	5	14.2		N			
S-470.5	9.80	10.45	10.30	5	15.1		N			
S-458.5	10.27	10.92	10.77	5	16.0		N			
S-446.5	10.42	11.07	10.92	5						
T-593.5	12.48	13.15	13.00	5						

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9939

Date: 2020-01-28 (29)

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
S-482.5	8.68	9.38	9.18	5	14,2		N			
S-470.5	9.80	10.45	10.30	5	15,1		N			
2020-01-28 ↑ S-458.5	10.27	10.92	10.77	5	16,0		N			
S-446.5	10.42	11.07	10.92	5	16,3		Y	14,1		Need to add 0,8m of casing
T-593.5	12.48	13.15	13.00	5	18,0		N			

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: ~~Dominic Drolet~~ Alexanie PARÉ

#Foreuse: 9932

Date: 2020-01-30

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-587.5	12.13	12.78	12.63	5	17.7	17.8	N	—	2min	
T-581.5	11.71	12.36	12.21	5	17.2	17.2	N	—	2min	
T-575.5	11.43	12.08	11.93	5	17.5	17.4	N	—	2min	(Rock at 12.5m) add casing .75m new casing length = 12.83
T-569.5	11.45	12.10	11.95	5	17	17	N	—	2min	
T-563.5	10.70	11.34	11.20	5	16.2	16.2	N	—	2min	
T-557.5	10.13	10.83	10.63	5	15.7	15.8	N	—	2min	
T-551.5	9.87	10.59	10.39	5	15.4	15.4	N	—	2min	
T-545.5	8.82	9.52	9.32	5	16.6	16.6	N	—	2min	Rock at 11.6m. No add casing (Hole is good at 16.6m) ~~Rock at 13.3~~
T-539.5	9.57	10.27	10.07	5	15.1	15.2	N	—	2min	
T-533.5	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	5	18.7	18.7	N	—	2min	Rock at 13.7. (Hole is good at 19.7m)
	12.23	12.88	12.73							

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex Paré

#Foreuse: 9932

Date: 2020-02-02

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-527.5	9.65	10.56	10.36	5	15.4	15.4	N	—	6min	
T-521.5	9.60	10.33	10.13	5	15.2	15.2	N	—	6min	
T-515.5	10.09	11.39	11.19	5	16.2	16.2	N	—	6min	
T-509.5	10.62	11.60	11.40	5	16.4	16.4	N	—	6min	
T-503.5	9.63	10.44	10.29	5	15.3	15.3	N	—	6min	
T-497.5	10.50	11.14	10.99	5	16	16	N	—	6min	
T-491.5	9.74	10.37	10.17	5	15.2	15.1	N	—	6min	
T-485.5	9.48	10.18	9.98	5	15	15.1	N	—	6min	
T-479.5	9.04	10.34	10.34	5	15.4	15.4	N	—	6min	
T-473.5	9.45	10.10	9.95	5	15	15	N	—	6min	
T-467.5	9.90	10.55	10.40	5	15.5	15.5	N	—	6min	
T-461.5	10.16	10.81	10.66	5	15.7	15.8	N	—	6min	
T-455.5	10.24	10.92	10.74	5	15.8	15.8	N	—	6min	
*OK ~~T-449.5~~	~~-~~	~~11.12~~	~~11.32~~	~~5~~	16	16	N	—	6min	TOUCH THE ROCK AT 18m.
T-443.5	10.39	10.95	10.80	5	15.8	15.8	N	—	6min	

* Casing cleaning before grout plugs *

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex Paré

#Foreuse: 9932

Date: 2020-02-02

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	~~Depth drilled to reach bedrock (m)~~ clean up to:	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
~~S-434.5~~		~~10.54~~	~~10.39~~							
T-413.5		11.49	11.34		11.2					
T-401.5		11.71	11.56		11.5					
T-383.5		12.29	12.14		12.1					
T-371.5		13.25	13.10							

* Cleaning before grout plugs *

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex Paré

#Foreuse: 9932

Date: 2020-02-03

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	~~Depth drilled to reach bedrock (m)~~ Clean up to:	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
P-368.5		15.78	15.63		~~15.6~~	16.2				
T-341.5		12.70	12.55			12.5				
S-338.5B		14.26	14.11			14.1				

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex Paré

#Foreuse: 9932

Date: 2020-02-03

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
P-428.5	10.19	10.84	10.69	5	15.7	15.7	N	—	6min	
P-416.5	10.66	11.30	11.15	5	16.2	16.2	N	—	6min	
P-404.5B	14.32	14.97	14.82	5	19.8	19.8	N	—	6min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex Paré

#Foreuse: 9932

Date: 2020-02-04

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
P-392.5B	12.38	13.03	12.88	5	17.9	17.8	N	—	6 min	
P-380.5B	12.15	12.80	12.65	5	17.7	17				After 3 times Hole good at 17m
										392.5: water After: 5min = 9.2m
										After: 10min = 9.2m
										After: 15min = 9.2m
										After: 30 min = 9.2m.
										After: 45 min = 9.1m.
										380.5: After drilling the
										water is at 8.8m.

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. PARÉ

#Foreuse: 9432

Date: 2020-02-09

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-434.5	9.99	10.54	10	5	15	15	N	-	6	
S-422.5	10.27	10.92	10.5	5	15.5	15.5	N	-	6	
S-410.5	10.45	11.16	10.5	5	15.5	15.5	N	-	6	
~~S-398.5~~	~~10.95~~	~~11.60~~								
~~S-386.5~~	~~12.66~~	~~13.31~~								
~~P-368.5~~	~~15.13~~	~~15.78~~								

not done yet

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. PARÉ

#Foreuse: 9932

Date: 10-02-2020

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
S-395.5	10.95	11.60	11	5	16	16	N	–	6	
S-386.5	12.66	13.31	12.7	5	17.7	18	N	–	6	
P-366.5	15.13	15.78	15.6	5	20.6	20.7	N	–	6	
P-356.5	15.18	15.83	15.3	5	20.3	20.3	N	–	6	
~~P-344.5~~	~~13.13~~	~~13.78~~								
~~P-332.5~~	~~11.40~~	~~12.10~~								
~~P-320.5~~	~~10.00~~	~~10.68~~								
~~P-308.5~~	~~7.40~~	~~8.50~~								
~~P-296.5~~	~~8.03~~	~~8.04~~								

not done yet

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. Paré

#Foreuse: 9932.

Date: 11-02-2020

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
P-344.5	13.13	13.78	13.5	5	18.5	18.4	N	—	6min	
P-332.5	11.40	12.10	11.5	5	16.5	16.5	N	—	6min	
P-320.5	10.0	10.68	10.2	5	15.2	15.2	N	—	6min	
~~P-308.5~~	~~7.90~~	~~8.30~~		~~5~~						
~~P-296.5~~	~~8.03~~	~~8.64~~		~~5~~						
~~P-284.5~~	~~8.70~~	~~9.35~~		~~5~~						
~~P-272.5~~	~~8.63~~	~~9.10~~		~~5~~						
~~P-260.5~~	~~9.15~~	~~9.82~~		~~5~~						

not done yet

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex Pare

#Foreuse: 9932

Date: 12-02-2020

Jour: ☐

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
P-308.5	7.90	8.30	8	5	13	13	N	—	6min	
P-296.5	8.03	8.64	8.2	5	13.2	13.4	N	—	6min	
P-284.5	8.70	9.35	9.1	5	14.1	14.2	N	—	6min	
P-272.5	8.63	9.10	8.8	5	13.8	14	N	—	6min	
P-260.5	9.15	9.82	9.3	5	14.3	14.5	N	—	6min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-02-17

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drilled into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-437.5	10.0	10.7		5	15,8	→	N	—	6	
T-431.5	10.2	10.9		5	15,4	→	N	—	6	
T-425.5	10.6	11.3		5	15,8	→	N	—	6	
T-419.5	10.5	11.2		5	15,7	→	N	—	6	
T-413.5	10.4	11.5		5	16,4	→	N	—	6	
T-407.5	12.0	12.6		5	17,4	→	N	—	6	
T-401.5	11.1	11.7		5	16,5	→	N	—	6	
T-395.5	12.1	12.6		5	17,4	→	N	—	6	
T-389.5	—	13.2		5	18,2	→	N	—	6	Rock at 13,4
T-383.5	11.6	12.3		5	17,3	→	N	—	6	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-02-17

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-374.5	11.1	11.8		5	16,4	→	N	–	6	
S-362.5	15.6	16.3		5	20,6	→	N	–	6	
S-350.5	13.4	13.9		5	18,5	→	N	–	6	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020 - 02 - 18

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-338.5	13.6	14.3		5	19,3 →		N	—	6	
S-326.5	10.7	11.4		5	16,6 →		N	—	6	
S-314.5	8.8	9.4		5	14,5 →		N	—	6	
★ S-302.5	8.4	9.0		5	14,1 →		N	—	6	
S-290.5	8.6	9.3		5	14,4 →		N	—	6	
S-278.5	8.6	9.3		5	14,3 →		N	—	6	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 21/02/2020

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
S-266.5	8.92	9.17	9.37	5	14,5		N		6min	
P-248.5	8.97	9.27	9.47	5	14,5		N		"	
P-236.5	8.95	9.08	9.28	5	14,5		N		"	
P-224.5	9.00	9.30	9.50	5	14,6		N		"	
P-212.5	9.60	9.93	10.13	5	15,1		N		"	
P-200.5	9.72	10.05	10.25	5	15,3		N		"	
P-188.5B	8.13	8.43	8.63	5	13,9		N		"	
P-176.5B	7.69	7.99	8.19	5	13,4		N		"	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-07-25

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-377.5	11.33	11.98	11.83	5	16,9		N		6 min	
T-371.5	12.55	13.25	13.10	5	18.2		N		"	
T-365.5	16.75	17.40	17.25	5	22,3		N		"	
T-353.5B	14.31	14.96	14.81	5	19,9		N		"	
T-347.5	11.94	13.48	13.33	5	18,4		N		"	
T-341.5	12.00	12.70	12.55	5	17,9		N		"	
T-329.5	10.76	11.41	11.26	5	16,4		N		"	
T-323.5	10.17	10.82	10.67	5	15,7		N		"	
T-317.5	9.40	9.93	9.78	5	15,0		N		"	
T-311.5 D	8.08	8.73	8.58	5	13,9		N		"	
T-305.5	7.76	8.41	8.26	5	13,6		N		"	
T-299.5	7.50	8.15	8.00	5	13,2		N		"	
T-293.5	8.71	9.25	9.10	5	14,1		N		"	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-02-26

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
T-287.5	8.23	8.88	8.73	5	13,9		N		6 min	
T-281.5	8.69	9.46	9.31	5	14,4		N		"	
T-275.5	8.91	9.56	9.41	5	14,5		N		"	
T-269.5	8.77	9.42	9.27	5	14,4		N		"	
S-254.5	9.00	9.62	9.47	5	14,6		N		"	
S-242.5	9.00	9.49	9.34	5	14,3		N		"	
** S-230.5	9.00	9.20	9.05	5	14,2		N		"	
S-218.5	10.20	10.90	10.75	5	15,8		N		"	
S-206.5	10.03	10.60	10.45	5	15,7		N		"	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-02-27

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
S-194,5	9,30	9,97	9,82	5	15,0		N		6min	
S-182,5	7,29	7,94	7,79	5	12,8		N		6min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alexandre Paré

#Foreuse: 9932

Date: 2020-02-29

Jour : ☑

Nuit : ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
T-263.5	8.90	9.60	9.45	5	14.5		N	–	6	
T-257.5	8.90	9.53								
T-251.5	8.96	9.40								
T-245.5	8.68	9.33								
T-239.5	8.65	9.30								
T-233.5	8.63	9.24								
T-227.5	9.01	9.25								
T-221.5	9.80	10.66								
T-215.5	10.00	10.65								
T-209.5	9.60	10.44								
T-203.5	10.04	10.50								
T-197.5	8.84	8.85								
T-191.5	8.70	8.80								
T-185.5	7.31	8.66								
T-179.5	7.86	8.35								

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alexandre Paré

#Foreuse: 9932

Date: 2020-02-29 (2020-03-01), (2020-03-02)

Jour: ☑ Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
T-263.5	8.90	9.60	9.45	5	14.5	14.5	N	—	6min	
T-257.5	8.90	9.53	9.6	5	14.6	14.6	N	—	6min	
T-251.5	8.96	9.40	9.5	5	14.5	14.6	N	—	6min	
T-245.5	8.68	9.33	9.4	5	14.4	14.6	N	—	6min	
T-239.5	8.65	9.30	9.3	5	14.3	14.3	N	—	6min	
T-233.5	8.63	9.24	9.2	5	14.2	14.1	N	—	6min	
T-227.5	9.01	9.25	9.4	5	14.4	14.4	N	—	6min	
T-221.5	9.80	10.66	10.7	5	15.7	15.7	N	—	6min	
T-215.5	10.00	10.65	10.7	5	15.7	15.9	N	—	6min	
T-209.5	9.60	10.44	10.5	5	15.5	15.8	N	—	6min	
T-203.5	10.04	10.50	10.5	5	15.5	15.5	N	—	6min	
T-197.5	8.84	8.85	9.4	5	14.4	14.3	N	—	6min	TOUCH the rock at (9.4 m)
T-191.5	8.70	8.80	9.2	5	14.2	14.1	N	—	6min	" " " " (9.2m)
T-185.5	7.31	8.66	8.7	5	13.7	13.7	N	—	6min	
T-179.5	7.86	8.35	8.4	5	13.4	13.4	N	—	6min	

(2020-03-01)

(2020-03-02)

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alex. PARÉ

#Foreuse: 9932

Date: 09-03-2020

Jour: ☑

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
Q-739	10.20	10.8	10.4	5	15.4	15.2	N	—	6min	- lot water and after 3 times good at 15.2m
Q-733	9.8	10.4	10.3	5	15.3	15.3	N	—	6min	
Q-697	10.0	10.5	10.3	5	15.3	15.3	N	—	6min	
Q-691	10.3	10.9	10.4	5	15.4	15.4	N	—	6min	
Q-685	10.9	11.5	11.3	5	16.3	14	N	—	6min	- After 3 Times good at 14m. - Big chunck exit the Hole (very Bad rock)
Q-718	11.6		12.6	5	16.6	16.6	N	—	6min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Alexandre Paré

#Foreuse: 9932

Date: 2020-03-12

Jour: ☒

Nuit: ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
Q-736	9.7	10.3	9.8	5	14.8	14.8	N	—	6min	
Q-694	9.5	10.1	9.7	5	14.7	14.9	N	—	6min	
Q-688	10.3	10.9	10.5	5	15.5	15.5	N	—	6 min	
Q-682	10.2	10.8	10.4	5	15.4	15.4	N	—	6 min	
Q-667	10.6	11.1	10.8	5	15.8	15.8	N	—	6min	
~~Q-628~~	~~12.1~~	~~12.6~~		5						
~~P-609.1~~	~~12.7~~	~~13.3~~		5						

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-03-14

Jour : ☒

Nuit : ☐

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
Q-628	12.1	12.6	12.6	5	17.6	17.6	N	-	6min	very soft Rock
P-609.1	12.7	13.3	13.3	5	18.3	18.3	N	-	6min	
CLEANS										
S-745										
T-712										
T-664										
T-658										
S-649										
T-646										
S-637										
T-617										
S-613										
S-601										
T-598										

TO BE DONE LATER

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-03-21

Jour: ☑

Nuit: ☐

	Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
cleaning	S-745 up										
cleaning	S-742 up										
cleaning	Q-736 Down										
	P-										
Cleaning	Q-628 Down										
	Q-536 Down	11.02	11.32		5		16.4	N		6 min	
	Q-481 Down	9.90	10.20		5		15.2	N		6 min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-03-22

Jour: ☑

Nuit: ☐

UPSTREAM

Station	Rock Depth (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
P-739	9.44	9.74		5		14,8	N		6min	
P-727	11.33	11.64		5		16.6	N		6min	
P-715	13.32	13.62		5	18,8	14,5	Y	14,3	6min	Big chunck coming out not able
P-703	10.80	11.10		5		16,5	Y	15,2	6min	to keep the hole
P-691	10.55	10.85		5		16.0	Y	15,5	6min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-03-23

Jour : ☑

Nuit : ☐

	Station	Rock ~~Depth~~ (m) contact	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y / N)	Water loss depth (m)	Washing time (min)	Comments
Downstream	Q-664	10.35	10.65		5						
pstream	P-679	11.00	11.30		5		16.4	N		6min	

KIVALLIQ CONTRACTORS GROUP LTD

Bedrock drilling report

Employé: Dominic Drolet

#Foreuse: 9932

Date: 2020-03-24

Jour: ☑

Nuit: ☐

Station	Rock ~~Depth~~ contact (m)	Casing length (m)	Depth drilled to reach bedrock (m)	Depth to drill into the bedrock (m)	Final depth (m)	Final Measured Depth	Water loss (Y/N)	Water loss depth (m)	Washing time (min)	Comments
Q-664	10.35	10.65		5		15,7	N		6min	
Q-523	9.82	10.12		5		15,3	N		6min	
Q-478	9.80	10.10		5		15,3	N		6min	

Appendix E

Construction Photographs

Photo 1: View of the WTD with injection unit and drilling rig dome

Photo 2: Inside view of the Injection unit

Photo 3: Inside view of the grout batching area

Photo 4: Moving injection unit

Photo 5: 1000 kg HE cement bag

Photo 6: Cement screening and placing into 20 kg bucket

Photo 7: Seepage collection trench along downstream toe of dike

Photo 8: 20 kg cement buckets stored in heated C-can

Photo 9: Calibration of Marsh Funnel

Photo 10: Performing marsh test to calculate marsh seconds

Photo 11: Preparing sample for filtration test

Photo 12: Performing Filtration Test

Photo 13: Performing Vicat Test

Photo 14: Performing Mud Balance Test

Photo 15: Casing Installation

Photo 16: Checking Casing Installation

Photo 17: Casing installed showing casing offset from instrumentation cables

Photo 18: Pressure and Flow control unit

Photo 19: Set up of packer and collar gauge for blanket grouting

Photo 20: Adding celbex through open throat pump

Photo 21: Showing pressure comparision at the colar gauge and monitor

Photo 22: Setting up of dummy packer while grouting tertiary hole when adjacent secondary hole was not grouted yet

Photo 23: Backfilling hole after pressure grouting completed

Appendix F

Daily Construction Meeting Reports (AEM Reports)

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 11/6/2019

Time: 7h30

Presents:

AEM: LC, PEM.

KCG: FC, AB.

QA: ——— QC: ———

Health & Safety & Environment:

Lots of new personnel onsite. Lots of structure & training given.
Procedure sent for casing installation
QA to come onsite saturday in KCG pick up convoy & training.

Daily Advance:

KCG:

4 casings NS & 3 casings DS done in last 24 hrs.
Need to send FC. total casings & strategy
↳ total for Blanket of 576 casings (more to come w/ exclusion zones).
AEM: > 3 months storage found for heated location @ AMQ maintenance shop.

QA/QC:

- ~~Less~~ Great hit than in the first few days.
- Water hit 2m above BR around 0+675.
- In that cement zone mostly all holes encounter Bedrock i.e. Ø cut/max reached unlike the first few holes.

General Planning/Comments:

KCG:

- Maintenance (optimization) will be done on drill this morning.
- 4 racks on going for cement buckets.
- Set up for Turnpock water tank & genset.
- Organize logistics for bringing API filter press & vicat needle.
- Sort out inclinometer problem, it disconnects with the cold.

~~QA/QC~~: AEM:

- Grout committee meeting minutes to be sent. (PEM)
- LC to take care of Coordinates following up.
- Electrical connection to be done for Grout dome, KCG Dry
- ENV needs weekly report of Grout qty injected.

Report By: P-E McDonald

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 11/07/2019

Time: 7h30

Presents:

KCG : Audrey Bilodeau, Pierre Gauthier

AEM : PEM, LC

QA: —— QC: ——

Health & Safety & Environment:

- Make sure welder & grinder wear faceshield.
- Lots of cuttings projection around drill, make workers aware of alternative to use goggles

Daily Advance:

KCG :

- 1 hole DS & 5 holes done on NS
- Supplier contacted (inclinometer) for trouble shooting.
- Yesterday the drill got optimized - maintenance done.
- Preparation on-going for injection

AEM: Location found for admixture storage in Mechanic shop (heated location). Plywood w/ fast fighter put around frozen admixtures tote. ↳ TEMPORARY. Celbex received onsite.

QA/QC: All holes drilled encountered bedrock, within +/- 0.5m of expected values

General Planning/Comments:

KCG : - Crosshifting of drilling superintendants : Dale Burton replaces François Collard,
- tests to be done inside injection unit for carbon monoxyde alarm device.
- Continue casing drilling
- KCG to send all drill logs & QC sheets to distribution list.
- Sylvain Serrard to continue injection preparation

QA/QC : Ø

AEM : - Discussion held w/ SNC: If max BR is reached on 2 straight holes → skip 5 & leave area on side b
- 2 offices (seacans) to come & get installed @ SAWA offices (from Baker).
- Follow up with EBI for plugging electricity on dry.
- Follow up on admixtures location and logistics to bring them back onsite. (LC)

Report By: Pier-Eric McDonald

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 11 / 8 / 2019

Time: 7h30

Presents:

AEM: Alex Lavallée, Pier-Eric McDonald

KCG: Dale Burton, Sabin Larouche, Audrey Bilodeau

QA: —— QC: ——

Health & Safety & Environment:

New workers arriving today, PPE to be distributed.
Work methods will be presented to the workers to their specific job.

Daily Advance:

KCG: - Preparation for plan B for heated admixtures.
- Saline ditch: 2nd culvert (close to Nemo Road) on-going → ripping + excavation
- casing: 4 holes DS 623.5 to 632.5, 4 holes NS 635.5 to 596.5
  ↳ 30 holes done excl. last 24 hrs
- Centralizer for inclinometer to come on plane Monday.

QA/QC: All holes reached bedrock, all lower than expected bedrock.

AEM: - Admixtures: - Celbex, Mastermatrix & Masterset in heated mechanical shop. (→ was frozen)
- Waiting news from Wardrome for Calcium & Sodium Silicate.
- trampolette borrowed from U/G for duration of works ↳ Kelco-crete coming on the plane this week.

General Planning/Comments:

KCG: - Continue preparation for injection
- Arrival of new injection team. → trainings in MBK.
- Continue drilling the casings
- Continue culvert excavation & Saline ditch.

AEM: ~~QA/QC~~: - Need to check with ENV for batch disposal area
- Send grout committee minutes
- Weekly construction meeting.
- SNC QA arrival, to follow SOP training tomorrow & get onsite w/ KCG @
- Larry leaves today. ∅ earthwork foreman until JF Beland arrival on Wednesday noon.

Report By: Pier-Eric McDonald

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 11/9/2019.

Time: 7h30

Presents:

AEM: P-E McDonald.

KCG: Sabin Larouche, Pierre Gauthier, Charles Dufour.

QA: —— QC: ——

Health & Safety & Environment:

- tests done for carbon monoxyde
- Water shower placed in injection unit.
- Blizzard (→ eye) stopped operations from 2AM
- Visitors travel on the dike, sensibilization to be done.

Daily Advance:

KCG:

- Continue set up. to get ready
- Arrival of injection crew.
- 605 – 596 on DS & 0+545 to 0+536 NS for casing installation
- Saline ditch excavated, bedding backfilled. Work stopped @ 17h for blizzard
  → 46 holes total are done.

QA/QC:

- On DS, only 1 borehole reached bedrock
- on NS, BR reached on all holes, on 2 70.8m higher than expected
- CB reached on 3 holes mid wall @ ≈ 5m depth, the other hole, CB was @ bottom

- AEM: - Saleem arrived to AMQ, following SOP training today.
  - Minutes sent to KCG & all stakeholders for Grout committee.

General Planning/Comments:

KCG:

- Optimization on-going for big bags unloading
- Backfill culverts for saline ditch.
- Continue casing installation
- Injection crew preparation / arrival of 2nd half.
- KCG to send proposal for grout dump location

QA/QC: Ø

AEM: - Sit down w/ Saleem for establishing grout test program.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 11/10/2019

Time: 7h30

Presents:

AEM: Alex Lavallée, P-E McDonald

KCG: AB, PG, DB, SL, SF

QA: SM QC: HP.

Health & Safety & Environment:

Yesterday's work had to stop a few hours for wind, (2.25 hrs)

Daily Advance:

KCG:

- Casings advance: DS: 0+548.5 to 0+554.5 & NS: 0+557 to 0+509.
- Injection set up preparation
- MBK injection crew was stuck @ MBK due to road closed - Blizzard
- AB said that finally Ø centralizing specific to our casings are available, therefore last year's strategy to be adopted i.e. stick instrument on casing side to get Z axis readings

QA/QC:

- the last hole drilled on DS has seen grout
- Bedrock reached @ expected values on each hole.

AEM: - shop supervisor Regis Bouffard advised us to use asap clean space in shop for admixtures before anybody takes it.

General Planning/Comments:

KCG: - Continue drilling casings
- Grout dump location proposed, PEM: West abutment is better for Ø having same problem
- Injection preparation on-going. Should be fully operational tuesday as this year
  ↳ need for welder
- Injection crew arrival
- AB to validate QC name. Placeholders may have been used.
- Continue saline ditch culvert installation & sump #4 muck for pad Reader

QA/QC:

- SM: Short term actions when Injection unit will be ready:
  1) head loss calculation for every mix in lines.
  2) Mix tests, SJ w/ QC in the afternoon
- SM: investigate negative casing anchor value for hole 0+683.5

AEM: TH value to be provided to SNC (BR to) & PEM to check for Calcium Chloride.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 2019 / 11 / 11

Time: 7h30

Presents:

AEM: P-E McDonald

KCG: AB, DB, AP.

QA: SM QC: HP, JPB

Health & Safety & Environment:

2 hrs meeting w/ new crew to go over procedures
Visit on regular basis to make sure PPE & procedures are followed.
SM: lots of dust last year in injection unit.

Daily Advance: Slow down on the dike → email to send.

KCG:

- trouble with 0+521.5 & 0+524.5, hammer broke in hole, left @ bottom & holes moved on E-W axis along 0.7 offset alignment. → to be filled when grouting
- DS: 2 holes 518.5 – 520.5 / NS: 524.5 to 533.5 (not finished), ≈ 150 holes.
- Culvert works for saline ditch.

QA/QC:

- on NS: reminder that casing has to be anchored in rock (weak or competent).

AEM: need to check grout pond, location

General Planning/Comments:

KCG:
- Continue casing drilling
- start injection unit & tests. (mixes & pressure loss)
- Make sure admixtures are brought inside mechanic shop.

QA/QC:
- test set up → discussion with QA/QC.
- Tom Xue arriving onsite, from SNC

AEM: Underground 1m³ totes to fill w/ grout and store heated. } in Permodome
: bring Calcium chloride from Underground.
Master Matrix from BASF – frozen? OK?

Report By: [signature]

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 11/12/2019

Time: 7h30

Presents:

AEM: Thomas Lepine, DE McDonald.
KCG: AP, KL, DB.
QA: SM, TX QC: JFB, HP

Health & Safety & Environment:

Ø

Daily Advance:

KCG:
- Casing drilling 533.5 → 2 redrills, casing broke.
  ↳ drilled on NS
- NS 0+488.5 6 holes.
- Finish welding of grouting plant
- admixtures check up. - Cement warmed up in heated seacan.

QA/QC:
- Lab check up w/ GHD.
- API filter press & Vicat needle arrived
  ↳ specs & standard for tests checked w/ QC

AEM: - all admixture ready
- U/G dates for reject batches

General Planning/Comments:

KCG: - Mix tests tomorrow.
- HE cement warming in heated seacan, too cold today for tests.
- Continue drilling chasing.
- Start batch plant (permadame).
- Lined reject grout pond to build on West abutment.

QA/QC:
- Exclusion Zones should be have from SNC in PM.
- Get set up in offices (trailer)
- WPT strategy to start thinking about. → SNC to provide strategy
AEM: - need to clarify location for tests → E to W ∅ matter if tests are done in low or high flow zones.
- test mix sequence.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 13th 2019

Time: 7h30

Presents:

AEM: PG-TG

KCG: SL-JG-DB-KZ-AD

QA: SM-TX QC: HP-JPB-

Health & Safety & Environment:

- Nothing to report

Daily Advance:

KCG: - drilling : lower compressor air to save bits
491.5 to 503.5 day } 6
506.5 to 459.5 night } 4

- finish prep holes plant heated secam
- " set-up for tamrock

QA/QC: - 533 : 4.5m broke twice → survey of the holes
- 488.5 bit in the hole
- casings not covered → fine particles inside.
-

General Planning/Comments:

KCG: - drilling continues
- start putting cement in buckets
- start pond at West abutment
-
- overall progress asked by Alex

QA/QC: - exclusion zones coordinates to be received
- follow-up grouting
- Low water pressure test only in primaries

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 14th 2019

Time: 7h30

Presents:

AEM: PG - JFB - JC - FB

KCG: PG - SL - AP - KL - JG - DB

QA: SM - TX QC: ~~HP~~

Health & Safety & Environment:

- Lots of new workers → all procedures reviewed lately
- Nothing to report on yesterday

Daily Advance:

KCG: - Drilling 4 hole days, 5 night
452.5 to 374.5 377.5 to 389.5
- Prepare buckets (3 tons) of cement
-

QA/QC: Nothing to report
-

General Planning/Comments:

KCG: - Continue drilling
- Mix testing (A-B-C)
- Flight availability is an issue for next week

QA/QC: - Need as much information as possible on the logs & report from drilling
- Follow up on testing
- 20 buckets will be coming from MBK today - TH & inclinometer cut the casings

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 15th 2019

Time: 7h30

Presents:

AEM: DG - SFB -

KCG: SL - KL - AP - DB - PG - JG

QA: SM - TX QC: —

Health & Safety & Environment:

- Stop operation yesterday at 4 pm to 8h30 pm,

-

Daily Advance:

KCG: - Drilling day : 389.5 to 398.5
Night : 398.5 to 407.5 } 7 holes completed

- Mix testing & head loss testing with success

-

QA/QC: - QC needs training for filter press - likely today

- testing was OK, a bit limit on Mix C b testing

- received plastic brackets

-

General Planning/Comments:

KCG: - Continue drilling
- Modify the injection
- Start plugs at the end of day
- Vicat needle broke in transportation
- Office set-up for QA/QC

QA/QC: - follow-up on grouting

-

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 16th 2019

Time: 7h30

Presents:

AEM: PG - JFB -

KCG: PG - SL - AP - DB - RL -

QA: SM QC: JPB

Health & Safety & Environment:

- Nothing to report

Daily Advance:

KCG: - Drilling day (6) : 407.5 to 347.5
Night 2 : 347.5 to 366.5

- Filled u/6 brackets → 3 out of 4 completed 5000 kG cement 3000 l water

QA/QC: - Water level in holes are measured 4.5 and 5 m → 686.5 & 689.5 on drill report

- Needs to be measured also when holes is completed

General Planning/Comments:

KCG: - Continue drilling casings

- Admixture set up (heated)

- Complete the u/6 brackets

QA/QC: - Follow-up grouting

- Offices installation AEM & QA/QC

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 17th 2019

Time: 7h30

Presents:

AEM: PG - JFB

KCG: JG - KL - DP - AD - PG

QA: SM TX QC: PH

Health & Safety & Environment:

- Nothing to report
- Do not let pick up idle at the main camp during lunch

Daily Advance:

KCG: - Drilling (9) day : 266.5 to 290.5 → last 6 were dry
(6) night : 293.5 to 308.5

- Grouting admixture shelter is now ready → only Celbex at shop
- Casing inventory : 4 x 90 casing x 12m = 4300 m at Meadow
≈ 1000 m already installed, missing qty is what is already prepared at AMQ → today

QA/QC:

- Water level measurement with probe

* GHD schedule

General Planning/Comments:

KCG: - Continue drilling
- mix testing with Glenium - and Rheomac 4W 540
- bucket for w/c
- confirm water level in casing
- start plug
- casing done on D/S on Dec 6th (forecast)

QA/QC:

- Follow-up on grouting
- SWTC pad for pump

Report By: PG

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 18th 2019

Time: 7h30

Presents:

AEM: PG - JFB

KCG: AP - KL - DB

QA: SM QC: PH

Health & Safety & Environment:

- Nothing to report
- Move the injection unit today → reactivity

Daily Advance:

KCG: - Drilling : day 6 : 0308.5 to 248.5
night 4 : 248.5 to 236.5 → 5 hrs mechanics (down)

- Injection : mix testing with admixtures A+, B+, C+, D & E
- Injection unit down last night,
- L/6 form completed

QA/QC: - Water depth in holes measured 749 to 742

- Need to double check the level in each hole on East abutment
-

General Planning/Comments:

KCG: - Continue drilling casings
- Move injection unit - Start plugs
-

QA/QC: Follow-up on grouting & injection

* Electric shut down today at KCG *

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 19th 2019

Time: 7h30

Presents:

AEM: PG - JFB

KCG: AP - KL - JG - LB - ML

QA: JM QC:

Health & Safety & Environment:

- Nothing to report
-

Daily Advance:

KCG: - Drilling: Day 7 hole 236.5 to 218.5 → 130 drilled on 192
Night: no drilling, operator sick

- Injection: finish setups and moved the unit on dike

- SWTC drilling pad ongoing with Mine

QA/QC: - QC & drilling reports shown discrepancies → need to be reviewed by KCG before sending

- Mud/cement in holes while measurement taken - Appears to be from recent pile

- Culvert SAA cut and capped (3/4)

-

General Planning/Comments:

KCG: - Casing drilling continues
- Grout plugs (for real)

- Following the SWTC capping, building the remaining cap

QA/QC: - Follow-up on grout plugs

- Continue measure holes

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 28th 2019

e: 7h30

Presents:

AEM: PG - JFB

KCG: SL - KL - DB - AP - WL - JG

QA: SMII QC: —

Health & Safety & Environment:

- Cleats mandatory on dike as of now! Whip guards needs to be installed on grout pipes
- MSDS sheet needs to be available at grout shack

Daily Advance:

KCG: - Drilling: 5 days 215.5 to 191.5
5 night 186.5 to 176.5
- SWTC almost completed
Injection: 10 plugs: 749.5 to 722.5

Casing drilled	140	/ 192
Injection	7	/ 192
Water cons.	2000	liters

*3 could not be injected because of CB presence in hole → need to drive casing lower pass the recent pile

QA/QC:

- Need to verify depth right after casing is completed
- Discrepencies to be corrected in the QC hole measurement file
hole depth needs to be measured and not estimated from casing depth as the bit is drilling 90 m ahead of casing.

General Planning/Comments:

KCG: - Drilling continued
- Grout plug "

QA/QC: - Make sure the holes are clean before attempting plug or injection
- Follow-up on drilling & grouting

Fuel farm closed from 10 to 12

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 01st 2019

Time: 7h30

Presents:

AEM: DG-JFB-MH

KCG: AP-KL-WL-ML-LB

QA: SM QC:

Health & Safety & Environment:

- MSDS sheets in unit OK - First aid yesterday - cut on a finger with shrapnel on casing small
- Stop signs will be install on both sides of grout unit
- Reduce speed around workers who work at pad Q ; whip guards for hoses to be installed

Daily Advance:

KCG: - drilling Day : 5 = 257.5 to 260.5 / 314.5 to 320.5
5 = 323.5 to 329.5 / 350.5 to 353.5

- injection : 10 plugs, all good

Casing drilled	150	/ 192
Injection	90	/ 192
Water cons.	2000	liters
cement	960	Kg

QA/QC: - reviewed the casing embedment in rock with everyone
- drilling measurement done

General Planning/Comments:

KCG: - Continue drilling & injecting
- measure holes
- move water stack on dike (generator was broken in unit)

QA/QC: - Follow-up today new QA arrival, training & cross-shifting
- QC shift change day tomorrow → cross-shifting

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 22nd 2019

Time: 7h30

Presents:

AEM: PG - JFB - MH

KCG: KL - WL - DP - JG - FC

QA: JDD QC: —

Health & Safety & Environment:

— Nothing to report

— Install stop signs

TCG to install whip guards on grout pressure pipes

Daily Advance:

KCG: Drilling : day = 3 : 356.5 to 413.5

night = 4 : 419.5 to 428

* 416 casing broken in hole

Injection : 10 grout plugs

- SWTC : pad completed

in your report it is

Casing drilled	157	/ 192
Injection	27	/ 192
Water cons.	9652	liters
cement	900 kg	

QA/QC : — gage pressure is different than on the datalogger, KCG to take a look

— 353.5 : casing stopped at bedrock, needs to be 0.3 into bedrock

635.5 : needs to be redrilled and casing driven lower

THis is different from your report, please verify prior to issue. verify with TCG logs

General Planning/Comments:

KCG : — Continue drilling casing

— Injection → crew change, no grouting for today

QA/QC : — Follow-up on grouting

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 23rd 2019

e: 7h30

Presents:

AEM: PG - JFB - MH

KCG: WL - JG

QA: training SOP QC: –

Health & Safety & Environment:

– Stop signs to install today around injection unit

Daily Advance:

KCG: – drilling : day : 3 431 to 437 (2.5h downtime on drilling)
night : 6 443 to 464

– injection : nothing done, plane arrived at 5pm, crew at MBK

Casing drilled	166	/ 192
Injection	27	/ 192
Water cons.	0	liters

QA/QC : – Follow-up on grouting & casing installation

General Planning/Comments:

KCG : – Continue drilling casings

– Training for new employees on injection at MBK
integration of new employees at AMK
– if time permits, injection
– Try to thaw sodium silicate → entering it in heated shack for slow thawing

QA/QC : – Measure hole & water level

SWTC :

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 24th 2019

me: 7h30

Presents:

AEM: PG - MH - JFB

KCG: RL - JG - WL - LB - FC

QA: JDD QC:

Health & Safety & Environment:

- Nothing to report, No night shift on drilling as of yesterday → No supervisors
- Frost bite risk
- Make sure to report incident right away

Daily Advance:

KCG: - Drilling : 3 day from 667.5 to 670.5 & 206.5 (3h delay)
- Nothing done for grouting (New crew in)

Casing drilled	169	/ 192
Injection	27	/ 192
Water cons.		liters

QA/QC: - Water level, hole measurements,
-

General Planning/Comments:

KCG: - Drilling continue on East abutment to complete missing holes
- Grout plugs
-
- Test holes on SWTC

QA/QC: - double checks on hole location is done before implementing in field

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 25th 2019

Time: 7h30

Presents:

AEM: PG - JFB - MH

KCG: KL - FC - JG - LB - WL

QA: JDD QC:

Health & Safety & Environment:

- Idle policy reviewed
- Small spill 5 liters compressor oil - report to follow - on WTD

Daily Advance:

KCG: - Drilling : 707.5 (1) 2.35 m bedrock lower than max depth

- injection : 11 grout plugs 639.5 to 599.5
- drill broken for most of day

Casing drilled	170	/ 192
Injection	38	/ 192
Water cons.	2434	liters
Cement	640	kg

QA/QC: - for hole that bedrock is not reached and casing not embedded, skip then and come back later and casing is driven lower

- hole 530.5 need to be reviewed
- hole 306.5 need to be investigated also (depth)

General Planning/Comments:

KCG: - Continue drilling & injection

-

QA/QC: - whip guards installed

- follow-up on injection

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 26/11/2019

Time: 7h30

Presents:

AEM: MH, JFB, YS

KCG: WL, RL, JG, LB

QA: JDD QC: /

Health & Safety & Environment:

Pickup backed up into another pickup in SANA parking lot.
Stop signs installed on grout shacks.

Daily Advance:

KCG:

Casings: 4 (DS only) 710.5 → 719.5. (deeper than expected)
Plugs: 9

Casing drilled	174	/ 192
Injection	47	/ 192
Water cons.	1845	liters
Cement	600 kg	

QA/QC: asked to stake out the centerline to check offset on the field.

General Planning/Comments:

KCG: grouting + drilling (plugs)

Will check the seacans for cement bags. May have to unstack seacans as they are piled up but hyster wasn't available.
Jeannot Gagnon leaving today, Audrey Bilodeau comes in tomorrow.

QA/QC: keep following up on grouting plugs
weekly report to be issued today.

Report By: Marion Haberetter

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 27/11/2019

Time: 7h30

Presents:

AEM: MH, YS

KCG: KL, WL, FC

QA: JDD QC: —

Health & Safety & Environment:

ice on the dike: sanding will be done. Watch your step when going out of the injection unit.

Daily Advance:

KCG: drilling 2 casings, broken for 4h. 674, 671 → moved to other section
grout plugs: 10 → 494,5.
drill 1 hole (740,5) into the bedrock. 5 m into BR.

Casing drilled	176	/ 192
Injection	57	/ 192
Water cons.	3150	liters
Cement	580 kg	

QA/QC: Plugs are good, crew is efficient.
Length of hole / casing corrected.

General Planning/Comments:

KCG: casings
bedrock drilling
grout plugs
no nightshift at all.

→ AEM recommended QA does spot checks on GHD depth measurements

QA/QC: Check GHD measurements.

Report By: [signature]

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 28/11/2019

Time: 7h30

Presents:

AEM: MH, YS

KCG: AB, WL, KL, FC

QA: JDD QC: /

Health & Safety & Environment:

Icy surfaces.

Daily Advance:

KCG: Drilling 4 casing 593 → 584
Plugs: 10 plugs 491 → 464
(lots of take)

Casing drilled	180	/ 192
Injection	67	/ 192
Water cons.	2800	liters
Cement	400	kg

Bedrock drilling 727.5 wasn't successful: previous depth was not suitable (not into the bedrock). Identify such casings and redrill casing.

QA/QC: /

General Planning/Comments:

KCG: Review logs with holes where casings are too shallow.
Drilling casings, bedrock. Bedrock: abandon 2nd hole, move to 3rd.
Plug grouting.

QA/QC: To attend 3-weeks meeting.
Asked to see a work plan/schedule before grouting works begin. AEM reminded that SNC, AEM and KCG agreed to start before final specs with the site instructions document as a guide.

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 29th 2019.

Time: 7h30

Presents:

AEM: KL, AB, LB, FC.

KCG: JC, PEM, MH, YS, WL.

QA: JDD. QC:

Health & Safety & Environment:

Windy conditions onsite.

Daily Advance:

KCG: - 3 casings done 581 - 575
- 4 drilling holes done in BR. Normal BR drilling ~~7~~ 728.5
- 5 plugs done & problem w/ mixes in the tub, need to clean up
- QC crew change yesterday.

Casing drilled 183 / 192
Injection 72 / 192
Water cons. 2150 liters
6 casings left to drill
480kg
2150 kg water

QA/QC:

-Need to confirm w/ designer for 0+716.5 where plug wasn't done, no take in holes adjacent & logistically hard.
0+749.5, no record for it but confirmation that it's drilled @ right depth & location.
AEM: make sure planning is sufficient for snow around the dike.

General Planning/Comments:

KCG: drilling casing.
- grout plugs morning & BR grouting in afternoon.
- need to provide section 2.5 documents from specification.
-

QA/QC: follow up 0+716.5

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Nov 30th 2019

Time: 7h30

Presents:

AEM: MH, VS, JC, PEM.

KCG: KL, WL

QA: JDD QC:

Health & Safety & Environment:

Blizzard Break during a couple of hours.

Daily Advance:

KCG: 3 grout plugs done.
3 BR drilling 0+580.5 Ø BR reached, casing in F.F.
↳ 7 holes ready for injection
casing drilling on 3 holes 0+566.5 to 0+572.5.
- Deviation survey was sent to SNC. For the 3 most concerning ones, re-measure for orientation was undertaken.

Casing drilled		/ 192
Injection		/ 192
Water cons.	4000	liters

480kg cement
↳ tank flushed for blizzard.

QA/QC:
- Target pressures were revised from plug to grouting. Calculations are now OK & considering pressure loss.
  ↳ BR elevation more accurate w/ Tamrock water drill.
- Few holes are out of specs. The instrument's error is very close to the specs. (best on the market.)
  ↳ E-W & N-S orientation is known. Centralizer are present around inclinometer.
- For hole w/ no plug, the grouting can be done w/ packer half way in casing & BR.

General Planning/Comments:

KCG: - BR inclination to be measured at first to show that there is no problem in deviation & (AEM) we can remove it from the specs.
- AEM: Info from SNC: w/ new specs, the casings in F.F. can be lowered to BR, otherwise it won't be grountable.
- Casing, BR, drilling, grouting.

QA/QC: JDD to check w/ designer if deviation is problematic & if mitigation is required.
- JDD to check if mix C + 0.2% is the mix to start with as (AEM) it's different from grout committee letter, it seems aggressive.

AEM: Tech specs section 2.5 to be sent to SNC.

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 1st 2019

Time: 7h30

Presents:

AEM: DEM, JC, YS, MH

KCG: FC, WL, KL

QA: JDD QC: Ø

Health & Safety & Environment:

Finger pinched in the door.
Evaluation for need of mask for the batcher.

Daily Advance:

BR drilled:	8 / 189
Plugs:	75 / 189
Casing drilled	188 / 189
Injection	1 / 189
Water cons.	6650 liters
	2250 kg Cement.

KCG: • 2 casings 0+563, 0+560. Returned to 680.5 to deepen into rock.
• 1st primary hole done, Mix C @ 0.5 → Ø pressure → +0.2% celbex.
↳ casing open because the hole would take it, need to wait for set time today & backfill it. Thickest mix was used.
• 8 holes drilled in BR.

QA/QC: holes 0+254.5 & 0+434.5 will be offsetted as per KCG proposal.
- Equation fixed for target pressure.
- Communication sent for 0+728 that was only put against BR, Ø anchor.
↳ put packer 1/2 & 1/2 right away was agreed.
- Designer to look at solution, first hole got refusal by wl.: mix Ø thick enough.
- Check ups done on D/S trench for grout migration.

General Planning/Comments:

KCG: Deepen a 17 holes w/ Rockmaster that didn't reach rock.
- Continue for grouting.
- hole 0+740 Ø backfill until discussion w/ designer.
KL: we can flush set a plug w/ dropping Sodium silicate from the top.
- logistic & speed is good for bringing buckets to injection unit.

QA/QC:
- Field follow up.
- Follow up w/ designer.

Report By:

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 12 / 2 /2019

Time: 7h30

Presents:

AEM: YS, MH, PEM.

KCG: KL, FC. WL

QA: JDD. QC: —

Health & Safety & Environment:

Mask provided to batcher for dust protection
Monitoring on skin irritation at the bucket mixing permodune.

Daily Advance:

Plugs	75	/ 189
Casing drilled	188	/ 192 189
Injection	4	/ 192 189
Water cons.	6250	liters

KCG: - 3 primaries holes : 2 x 2000L (max V.) & 1x 4802L
- 16 holes to redrill as of yesterday to anchor casing in BR.
↳ plug wasn't done on those.
- Some holes the plug was done but they ∅ reach BR. 5400kg of cement
↳ check w/ Tannock drill water drilling
- 596 - 533 - 404 Casings deepened in BR.

QA/QC:
- KCG & SNC agreed to create a simplified procedure including lesson learned, not to repeat the same mistakes and confusion early in the project
-
- GHD tech leaved as emergency ⇒ ∅ tech until Friday, KCG tech will do tests & over seen by GHD Saguenay office.
- keep going w/ casing drilling.

General Planning/Comments:

KCG: - P- 680.5 has no plug but natural fill (grout from secant pile) acts as a natural plug, it was deepened & redrilled. 1.6m 1.1/2-1/2 packer can be done.
↳ all the other primaries up to 596 have a good plug.
- the high take holes measurement after grouting revealed the grout was 1m above the total lenght. which means grout goes in BR. (First 2 primaries).
- Ken Lachance X shift to Stephane Breton & Patrice Fortin replace him.

QA/QC: - JDD to check for casing that needs to be backfilled (at 740.5 + 3 other primaries)
↳ the ones where Vmax was reached.
- field follow up.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 12/3/2019

Time: 7h30

Presents:

AEM: YS, PEM, JC,

KCG: LG, WL,

QA: JDD, QC: —

Health & Safety & Environment:

Skin irritation (rash) @ batch plant on 3 people.
↳ Fan system to be installed.
Look for more options such as mill full suits w/ breathing system

Daily Advance:

KCG:

Casing drilled		/ 192
Injection		/ 192
Water cons.	4800	liters

- Grouted 2 holes P-680 & P 692.5 → max V. reached.
  ↳ Same kind of pressure was able to build up.
- 3 casings deepened. 0+392.5, 0+389.5, 0+380.5, mostly within 1m deep.
- Ø BR drilling cause primaries are done in 1st Zone. → 1 worker on stand by.

QA/QC:

- Mix C + 0.2% Celbex → [Mix D → Sodium Silicate (Ø ready yet).
  ↳ not for today since not approved as per JDD.
- Need to have the Vicat needle up & running, will be done today w/ help of max Côté (WL)
- (PEM) Need to do 5-6 BR inclino values to keep for fact. to be able to move off space
- AEM: pH 9 measured in D/S trench. Will be tested daily & turbidity (TBD)

General Planning/Comments:

KCG: → 4 primaries left in 1st Zone, leave on std by and grout secondaries & tertiaries @ same time. So we don't have crews on std by & work is more efficient
- 1 hole for injection P-0+656 & then moving on plugs.
- Ø BR drilling until plugs are done
- Casing redrills, 9 left. casing drilling left.
- Checking Batch plant issue

QA/QC:

- clarify what happens w/ Max volume holes i.e. see if we have to come back.
  ↳ need to measure grout elevation

AEM: deliverable list & frequency sent to KCG.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 12/3/2019

Time: 7h30

Presents:

AEM: YS, PEM, JC,

KCG: LG, WL,

QA: JDD, QC: —

Health & Safety & Environment:

Skin irritation (rash) @ batch plant on 3 people.
↳ Fan system to be installed.
Look for more options such as mill full suits w/ breathing system

Daily Advance:

KCG:

Casing drilled		/ 192
Injection		/ 192
Water cons.	4800	liters

- Grouted 2 holes P-680 & P 692.5 → max V. reached.
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- 3 casings deepened. 0+392.5, 0+389.5, 0+380.5, mostly within 1m deep.
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- (PEM) Need to do 5-6 BR inclino values to keep for fact. to be able to move off space
- AEM: pH 9 measured in D/S trench. Will be tested daily & turbidity (TBD)

General Planning/Comments:

KCG: → 4 primaries left in 1st Zone, leave on std by and grout secondaries & tertiaries @ same time. So we don't have crews on std by & work is more efficient
- 1 hole for injection P-0+656 & then moving on plugs.
- Ø BR drilling until plugs are done
- Casing redrills, 9 left. casing drilling left.
- Checking Batch plant issue

QA/QC:

- clarify what happens w/ Max volume holes i.e. see if we have to come back.
  ↳ need to measure grout elevation

AEM: deliverable list & frequency sent to KCG.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 4th 2019

Time: 7h30

Presents:

AEM: PEM, YS

KCG: FC, WL

QA: JDD QC: —

Health & Safety & Environment:

- Full face mask to be received this morning. Yesterday Tyvek + masks tried and it's much better. More ventilation was installed.
- Rash compiled as a "reported event", the Nurse gave the OK.

Daily Advance:

Plugs 84 / 192
Casing drilled 189 / 192
Injection 7 / 192
Water cons. TBD. liters

KCG:

- 3 casings done P356.5 - T353.5 - P344.5
  ↳ 5 left + 3 need to be drilled
- Plug 7 holes 675 671 674 707 710 713 719 (tertiary & secondary)
  ↳ normal takes a 20L.
- Ø BR drilling

Cement Consumption { Dec 2nd 5280 kg, Dec 3rd 3360 kg }

QA/QC:

- Mix Directives sent to contractor.
- Sodium Silicate has to be mixed w/ special packer in the hole.
- Explanation of proposed to tremie water w/ special packer / rod arrangement

AEM: Daily pH & NTU turbidity sampled in D/S trench.

General Planning/Comments:

KCG:

- 1st Vical needle tests
- BR in diameter.
- WL to check with Stephane Breton if Sodium Silicate set up is possible to build soon to avoid moves of injection unit later on.
- Rush to deepen casings & remaining 3 holes drilling
- Regrouting w/ new drill holes 716.5 740.5

QA/QC:

- Field follow up.
- Communication w/ designer for tremie proposal, AEM challenges SNC since it is expected to add lots of time consumming manipulation.
  ↳ reasons summarized in AEM email to be sent.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 7h30.

Time: 7h30

Presents:

AEM: YS, PEM

KCG: FC, LG, WL

QA: JDD, SM. QC: —

Health & Safety & Environment:

Cement situation better (solved at 75%). other fan to be put + geotextile.
Rakal mask to be tried today (2 found), required for the worker with glasses.

Daily Advance:

KCG: - All casings deepened are done on DJS, 3 new casings to be done. Tomorrow the drill will go to IVR dike for TH.
- Re-grouting 740.5 (2 times & Vmax reached) 716.5 (Vmax but grout level in casing → OK)
- Permodame & water drill moved.
- Ø BR drilled. will start on saturday.

Casing drilled	189.	/ 192
Injection	7	/ 192
Water cons.	4000.	liters
cement	3480 kg	

QA/QC:
- SNC's instruction followed for regrouting. Modif: start right away w/ 0.2% Celbex, rather than starting w/ mix C & add 0.2% Celbex after 400L.
  L 704.5 692.5 (backfill only) 680.5.
- Ø tremie method
- Vicat done for mix C + 0.2% celbex 4h39 for initial set.

General Planning/Comments:

KCG: Regrouting: 704.5 692.5 (backfill only) 680.5. 668.
- Drilling remaining casing S-254.5 T-365.5 S-434.5.
- Saturday BR drilling restart for secondaries.
- Finish BR values for inclino.
- X shifting of KCG tech tomorrow - They will spend couple hours together.

QA/QC:
- Vicat test over weekend mix C w/out Celbex & mix D. (initial & final set time).
- Filtration test w/out Celbex (mix C) & mix D.
- Field follow up. of regrouting.
- Daily NTU & pH of seep trench will be sent daily by AEM.

Report By: [signature]

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 2019-12-07

Time: 7h30

Presents:

AEM: VS, PEM.

KCG: AP, LG

QA: SM QC: ——

Health & Safety & Environment:

Dust Investigation is closed
Meeting held w/ new crew.

Daily Advance:

KCG:

Casing drilling is finished.
Crew change
Set up of new pump.

Casing drilled —— / 192
Injection —— / 192
Water cons. Ø liters
Ø cement

QA/QC:

Site instructions sent for new pump.
holes cancelled 335.5 359.5 440.5 608.5.

AEM: Relocate at MBK since Nov 29th. To bring with other admixtures.

General Planning/Comments:

KCG:

Finish open thread installation
tests on 3 holes to regrout. → meeting in injection unit before.
Bedrock Drilling TBD.

QA/QC:

Field follow up.

Report By: [signature]

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 12-08-2019

Time: 7h30

Present:

AEM: PEM, JC, YS, JC

KCG: DB, AP, AB, LG.

QA: — QC: —

Health & Safety & Environment:

Investigation sent & closed

Daily Advance:

KCG:

Ø drilling, casing done.
Ø BR drilling
Learning curve of open thread pump. 0+740.5. → now moved to cement. 600kg.
Chart of flow rate vs % Celbex given to QA & grout specialists (KCG) as a problem solving.

BR drill	17/188	
Plug	85/188	
Casing drilled	187 / 188	
Injection	7 / 188	
Water cons.	180	liters

Same as previous.

QA/QC:

t° of water & pH testing.

General Planning/Comments:

KCG:

Ø Drilling (casing or BR).
680.5 grouting → after 0+668.5.

QA/QC:

Field follow up.

AEM: Jerome Collard to patch up YS & PEM until Patrice comes in on Tuesday PM.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 12/9/2019

Time: 7h30

Presents:

AEM: YS, PEM., JC

KCG: AP, LG

QA: SM. QC: —

Health & Safety & Environment:

Risk of blizzard - Procedure reviewed with the crew.
Make sure whip checks are in place.

Daily Advance:

bit drill	17 / 188	
Plug	95 / 188	
Casing drilled	127 / 188	
Injection	7 / 188	
Water cons.	1300	liters
Cement:	1800 kg	

KCG:

- 2 regrout: 680 & 668. holes considered closed
- Fast grighter ∅ work after those holes, grouting was discontinued for the day.
- Problem with Tamrock. Currently under investigation & being fixed. 1800

QA/QC:

- Closed the 2 holes.
- Solutions developped were effective & now it's working fine.
- Open throat only to be used w/ regrout.
- ∅ reach refusal criteria w/ open throat pump. Need to talk w/ designer.

General Planning/Comments:

KCG:

- Grouting of new holes of 5m. Pressure adjusted w/ water depth.
- Tamrock thrubble shooting.
- automatic Cellhex distributer was discussed. Might be better manual. for reserval discussed w/ Alex.

QA/QC:

- field follow up - (original specs to be applied for new holes).
  C → C+0.2% → D → open throat (0.5%). - Because of open throat limitations
- talk w/ designer for refusal criteria.

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 12th 2019

Time: 7h30

Presents:

AEM: PG - JC - JFB

KCG: AD - JG

QA: MS QC:

Health & Safety & Environment:

- Nothing to report
- Icy conditions around the injection unit;

Daily Advance:

KCG: - Grouting 3 holes, primaries 630, 632, 644 (5m stages)
* last ones on 5m stages
- Drilling 6 holes secondaries 746.5 to 674.5 except 722.5
- 722.5 casing will need to be deepened 1.5m to bedrock

Casing drilled		/ 192
Injection		/ 192
Water cons.	3400	liters
cement	4380	kg

QA/QC: - Mix D was used to close holes, no Celbex was used

General Planning/Comments:

KCG: - Continue grouting 1st stage 1.5m on secondaries
- Continue drilling with 722.5 and secondaries

QA/QC: - Follow-up on grouting
-

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 13th 2019

me: 7h30

Presents:

AEM: PG - JFB

KCG: AP - Steph - DB - JG

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Stop sign missing at injection unit
- MSDS review in unit

Daily Advance:

KCG: Drilling: drilled 722.5 to bedrock +1.5m, secondaries 622 to 626 (4 holes)

- Injection: respont 632, plug 596, grout sec. 746, 734, 722, 710 (1.5m steps)

Casing drilled		/ 192
Injection		/ 192
Water cons.	1980	liters
Cement	2040	Kg

QA/QC: - All went well, drilling is perfect in bedrock
- All injected holes closed with Mix C without Celbex

General Planning/Comments:

KCG: - Inject 3 holes secondaries
- Drill 596 5m AEM allow it for sequencing purposes only

QA/QC: - Follow-up on injection & drilling

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 15th 2019

Time: 7h30

Presents:

AEM: PG - JFB - FB

KCG: AP - LG - GT - JG - CG

QA: SM QC:

Health & Safety & Environment:

- Safety meeting on circulation rule, batch plan needs fit test; needs to be shaven (Permadome) and wear a mask
- GT is here to perform H&S inspections of all KCG installations; Recognition program will be implemented in 202
- Will perform inspections AEM & KCG in the future

Daily Advance:

KCG: - bedrock drilling 1 hole 674
- grouting 626; 1.5m ; 614.5, 1.5m ; 5m on 596.5
674.5 ; 3.5m

Casing drilled		/ 192
Injection		/ 192
Water cons.	1860	liters
Cement	600	Kg

QA/QC: - All holes filled with Mix C as Celbex, reached Max pressure

General Planning/Comments:

KCG: - injection continues 686 towards west
- drill 602.5 to 674
-

QA/QC: - Follow up on injection & drilling

- Meeting at 1h pm
- SWTC ice removal & pipe removal from lake

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 16th 2019

Time: 7h30

Presents:

AEM: PG - JFB

KCG: AP -

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Radio issue at SWTC in hauf truck
- Working on a new procedure for electrical shut down in injection unit

Daily Advance:

KCG: - injection : 5686.5 & 698.5 → open threath & Celbex
↳ still open this morning - regrout
- bedrock drilling 5662 to 5602 3.5m and 602 at 1.5 m

Casing drilled		/ 192
Injection		/ 192
Water cons.	3848	liters
Cement	3960	Kg

QA/QC: - Grouting → still high peaks when using Celbex
for 698.5 tried using 1L of theomac but washed away anyways

General Planning/Comments:

KCG: - Regrout 686 & 698 → Same procedure
- injection 746 towards East
- No drilling today

QA/QC: - Follow-up grouting
- Meeting with Designer today

AEM: installed TH at 740 results to come

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 17th 2019

Time: 7h30

Presents:

AEM: PG - JFB

KCG: AP - JG - SL - LB - SL

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Cold conditions outside

Daily Advance:

KCG: - No drilling bedrock
- regrout 686.5 Celbex 699.5 without Celbex
- grout 5746.5 5734.5 → lower level this morning
  ↳ 5M

Casing drilled		/ 192
Injection		/ 192
Water cons.	3860	liters
Cement	3600	Kg

QA/QC: - Pressure & flow adjusted in field to follow specs with different admixtures
- Usage of celbex → need to stop when peak in pressure at 10bars

General Planning/Comments:

KCG: - regrout 746.5 & 734.5
- inject 729.5 - 710.5
- backfill 686 & 699

QA/QC: - Follow-up on grouting
-

SUPC: Continue working on road, removed culvert pipe

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Dec 18th 2019

Time: 7h30

Presents:

AEM: PG

KCG: AP - LB - SG - CG

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Report on HS by KCG done → share it with AEM
- Windy & cold → wear proper clothes

Daily Advance:

KCG: SWTC = continue ice removal & road construction 0-3/4 : survey today
No drilling
Grouting: 5746.5 & 734.5 regrout → backfilled
5722.5 - 710.5 initial 3.5m with Mix C

Casing drilled		/ 192
Injection		/ 192
Water cons.	3100	liters
Cement	2160	Kg

QA/QC: - All good closure of holes, everything went well

General Planning/Comments:

KCG: - Grouting 662 to 602
-

QA/QC: - Follow up on grouting
- SWTC : continue excavation of ice in road access

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Jan 12th 2020

WTD

Time: 7h30

Presents:

AEM: PG - JFB - JG

KCG: LG - KL - WL

QA: SM QC:

Health & Safety & Environment:

- 2 new workers - reviewed procedure with them
- Nothing to report
- Slippery conditions still prevailing

Daily Advance:

KCG: - Drilled 2 test holes 686 - 746
- 5 tertiaries 749 to 725
- 5 grout plugs - 578 took max volume
- 2nd stage 678.5 drilled & grout

Casing drilled		/ 192
Injection		/ 192
Water cons.	6500	liters
Cement	720	Kg

QA/QC: - Test hole 746 was good, 686 was caved to start with, no water trapped
- SNC is of the opinion that what was done before Christmas was effective
- when plugging casing and we have high takes → Celdex should be added

General Planning/Comments:

KCG: - Continue drilling
- " grout plugs
- Start grouting tertiaries
-

QA/QC: - Vicat needle needs to be done for mix D

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

WTD

AGNICO EAGLE
MEADOWBANK

Date: Jan 13th 2020

Time: 7h30

Presents:

AEM: PG - JFB - JG

KCG: KL - WL -

QA: SM QC:

Health & Safety & Environment:

- Nothing to report

Daily Advance:

KCG: - Injection: 4 plugs, 2 tertiaries injection → low takes mix C
- Drilling bedrock: 8 tertiaries
- backfilled 746.5 with grout

Casing drilled		/ 192
Injection		/ 192
Water cons.	4000	liters
Cement	1560	Kg

QA/QC: - 539.5 measures is not right
- 548 needs to be cleaned, 1m of material inside
- 723.5 - 719.5 hole caved, casing not in bedrock → skip and return when casing is pushed down

General Planning/Comments:

KCG: - drilling continues
- injection continues

QA/QC: Follow-up injection

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

WTD

AGNICO EAGLE
MEADOWBANK

Date: Jan 14th 2020

Time: 7h30

Presents:

AEM: PG - SFB

KCG: KC - WL

QA: SM QC:

Health & Safety & Environment:

- Near miss at batch plant - door fell on the floor
- Nothing else

Daily Advance:

KCG: - Injection 3 tertiaries 737, 731, 713
- Drilled 11 holes tertiaries,
-

Casing drilled		/ 192
Injection		/ 192
Water cons.	5250	liters
Cement	2280	Kg

QA/QC: - Great communication between 737 & 731
-

- Grout committee meeting, minutes of meeting hopefully by Friday

General Planning/Comments:

KCG: - Continue grouting of tertiaries,
- Drilling plugs & secondaries

QA/QC: - Follow up on injection

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Jan 15th 2020

WTD

Time: 7h30

Presents:

AEM: PG - JFB - FLB

KCG: JD - KL - WL

QA: SM QC:

Health & Safety & Environment:

- Door fixed on the dome - Paperwork completed for near miss

Daily Advance:

KCG: - Grouting 4 tertiaries 707.5 to 689.5
- Drilling 2 primaries, clean-up some snow & ice

Casing drilled		/ 192
Injection		/ 192
Water cons.	5200	liters
Cement	5640	Kg

QA/QC: - Coarse particles in cement powder
- Temperature varies a lot (grout)
-

General Planning/Comments:

KCG: - Continue grouting
- Push casing down 725 - 719

QA/QC: - Grouting 686 (test hole with mix B)
- follow up grouting

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

WTD

AGNICO EAGLE
MEADOWBANK

Date: Jan 16th 2020

Time: 7h30

Presents:

AEM: NG - JFB

KC JD - KL - WZ

QA: SM QC:

Health & Safety & Environment:

- New stop sign on Road 7
- High winds, low visibility

Daily Advance:

KCG: - Drilling: pushed casing 723.5 → 2m; drilled 5m to bedrock
719.5 → 1m "
- Injection: 3 holes 683.5 to 671.5 tertiaries, all backfilled

Casing drilled		/ 192
Injection		/ 192
Water cons.	4900	liters
Cement	2640	Kg

QA/QC: - Need to have inclination of holes
- Tertiaries are done only spaced at 6m → ok if no communication between holes
- Still high temperature of grout - KGC to work on solution

AEM to send pH results

General Planning/Comments:

KCG: - Continue grouting
- " drilling + clean-up

QA/QC: - Follow-up on injection

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

WTD

AGNICO EAGLE
MEADOWBANK

Date: Jan 17th 2020

Time: 7h30

Presents:

AEM: PG - JFB

KCG: DP - JD - CG - WG - KL

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Permodome : fixed on hinge on door

Daily Advance:

KCG : - injection : 4 holes 665 to 647 all tertiaries
- drilling : no drilling
-

QA/QC : - 4 holes completed and backfilled,
- Turbidity in the trench is increasing

Casing drilled		/ 192
Injection		/ 192
Water cons.	5670	liters
Cement	4440	Kg

General Planning/Comments:

KCG : - Continue injection of tertiaries 725, 719, 686
- Drilling primaries, cleaning holes, → Crew change today

QA/QC : - Use proper procedure to inject the hole where casings were advanced into bedrock

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

WTD

AGNICO EAGLE
MEADOWBANK

Date: Jan 18th 2020

Time: 7h30

Presents:

AEM: PG-JFB

KCG: DP-AB-CG-JD-WL

QA: — QC: —

Health & Safety & Environment:

- Nothing to report
- Blizzard warning in effect

Daily Advance:

KCG: - injection 5 holes 0+725, 0+719, 0+686, 0+641, 0+635
0+719 lost packer in hole,
- no drilling

Casing drilled		/ 192
Injection		/ 192
Water cons.	4200	liters
Cement	5640	Kg

QA/QC: - SNC aware of 0+719 situation; they proposed the path forward → hole backfilled with packer still inside as results were satisfactory in adjacent holes

General Planning/Comments:

KCG: - Continue injection in the zone where secondary was not injected between 2 open tertiaries
- " " plugs

QA/QC: - Follow-up on grouting

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Jan 19th 2020

Time: 7h30

Presents:

AEM: PG - JFB

KCG: AB - DP - JD -

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Stop blizzard at noon
- Near miss review on SAA Cover

Daily Advance:

KCG: - Injection complete of tertiaries 624.5 & 623.5

- No drilling
- Clean-up holes to check plugs (8)

QA/QC: - Tertiaries grouted pressure refusal, no communication with secondary
- packer installed in 626.5 in casing, empty after injection of tertiaries

Casing drilled	/ 192	
Injection	/ 192	
Water cons.	liters	
Cement	Kg	

General Planning/Comments:

KCG: - Stand by blizzard
- Maybe restart this afternoon

QA/QC: Weekly report QA

Report By:

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Jan 30th 2020

Time: 7h30

Presents:

AEM: PG - JFB

KCG: WL - DP - JD

QA: SM QC:

Health & Safety & Environment:

- Nothing to report
- Near miss SAA reviewed with crew

Daily Advance:

KCG: - Stand by after blizzard, No water at injection unit
- Cleaned holes

Casing drilled		/ 192
Injection		/ 192
Water cons.		liters
Cement		Kg

QA/QC: - Weekly report done, sent for approval
20 holes last week, total 44 for the entire job

General Planning/Comments:

KCG: - Injection of 1 secondary and plugs
- No drilling today

QA/QC: - Follow-up injection

Report By: [signature]

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: Jan 21st 2020

Time: 7h30

Presents:

AEM: PG - JFB

KCG: WL - JD

QA: SM QC:

Health & Safety & Environment:

- Nothing to report

Daily Advance:

KCG: - Injection 5696.5 closed max volume

- Plugs (6) 593.5 to 533.5

- No drilling (Sequencing)

Casing drilled		/ 192
Injection		/ 192
Water cons.	4000	liters
Cement	2640	Kg

QA/QC: - Injection was stopped at max vol - measured - went up in casing → good

- Temperature of grout good

General Planning/Comments:

KCG: - Continue injection 614 - 617 - 611 - 609

- drilling primaries plugged yesterday

QA/QC: - Follow-up on grouting

- Cross shift Sébastien Vian arriving today

Report By:

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 22/01/2019

Time: 7h30

Presents:

AEM: AET, MH, JFB
KCG: DP, WL, JD
QA: ST, SV QC: —

Health & Safety & Environment:

No event. Reminder: 10 km/h around camp and mechanic shop.
Ice situation on the dike: sand and reject put every day.

Daily Advance:

KCG: injected 5 holes (2T, 2S, 1P). One S to be completed.
One casing may have to be pushed deeper (0+602).
drilled 4 P holes (P560.5, P548.5, P464.5, P462.5)

Casing drilled		/ 192
Injection		/ 192
Water cons.	4180	liters
Cement	1080	Kg

QA/QC: S hole stopped
grout tests: temperature is better than last week. Tests are good, mostly.

→ 0+602: all holes completed except 1T

General Planning/Comments:

KCG: water truck pump is frozen, batch plant's genset is down. Will be fixed ASAP.
new tower light will be brought
injection. Not much drilling over the next days.
S 0+602: casing pushed, if possible injection after P holes
(?) limits of next blanket zones (AET)

QA/QC: follow-up on the field
around cables: test on both sides how much take there is, then decide if we keep the hole.

Report By: MH

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 23/01/2020

Time: 7h30

Presents:

AEM: PETI, MH, YS

KCG: JD, SB, AP

QA: MS, SV QC: /

Health & Safety & Environment:

Blast 12:45. Yesterday 2 blasters got frostbites. Reminder to check each other.

Daily Advance:

KCG: redrill S 602.5, injected with Celbex, backfilled
grouting P 572.5 (next sequence), high take
graphs are spiky but general trend is fine.
no drilling

Casing drilled		/ 192
Injection		/ 192
Water cons.	4322	liters
Cement	4200	Kg

QA/QC: tests are good.

General Planning/Comments:

KCG: regrout P 572.5
continue primary holes

QA/QC: follow-up, new QA training
suggestion: review meeting time to optimize operations. Crews start working around 7:15 → move meeting to 7:00.

Report By: MH

DAILY CONSTRUCTION MEETING

~~**South Whale Tail Channel**~~ WTD grouting

AGNICO EAGLE
MEADOWBANK

Date: 24/01/2020

Time: 7h30

Presents:

AEM: PETT, MH, YS

KCG: WL, AP, JD

QA: SV QC: —

Health & Safety & Environment:

No event.

Daily Advance:

KCG: regrout P572.5 (no open throat needed, Mix C) water: 2960 L
grout P560.5 cement: 2400 kg
P548.5
P536.5 not much take

QA/QC: good progression

General Planning/Comments:

KCG: clean-up for crew change today. No injection today.
try to reach 452 at this point, then do S.
Either close the blanket (all holes) before moving on, or go back. Favorite option is the one with the less down time.

QA/QC: —

Report By: MH

DAILY CONSTRUCTION MEETING
WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 25/01/2020

Time: 7h30

Presents:

AEM: PET, MH, YS

KCG: JD, SB, AP

QA: — (SOP) QC: —

Health & Safety & Environment:

SSE point: safe approach of heavy equipment → never in blind spots, always with first a radio or positive visual communication. 10 m safety radius around working zone.

Daily Advance:

KCG: Crew change: no injection
(7) about injecting T 605.5 before S 590.5 (12 m distance)
→ to validate with QA, document in QA daily report

Casing drilled		/ 192
Injection		/ 192
Water cons.	—	liters
Cement	—	Kg

QA/QC: —

General Planning/Comments:

KCG: 5 P holes planned to inject
drilling 2T and S with 12 m distance of last P.

QA/QC: follow-up

AEM: will forward the signed and sealed design documents (updated) to SANA

Report By: MH

DAILY CONSTRUCTION MEETING

WHALE TAIL DIKE 2019

AGNICO EAGLE
MEADOWBANK

Date: 26/01/2020

Time: 7h30

Presents:

AEM: PET, MH, YS

KCG: AB, JT, AP, SB, JD

QA: SV QC: /

Health & Safety & Environment:

Minor first aid: eye irritation.
Windy conditions and snow, possibility of low visibility.

Daily Advance:

KCG:

- 3 holes injected. One packer stuck at the bottom of the hole, will be left in place. No safe effective mean to retrieve it.
  P524.5 : packer stuck
  P512.5 : good (Mix C+D)
  P500.5 : good (low take) loader overheated after that.
- drilling: cleaning 2 holes (plugs); T605.5, T599.5 (casing lowered) drilled through bedrock
  S590.5, S578.5, S566.5

Casing drilled		/ 192
Injection		/ 192
Water cons.	3700	liters
Cement	1440	Kg

QA/QC:

misunderstanding on injection sequence, but it worked well.

General Planning/Comments:

KCG: inj. 2P remaining, then 2 plugs
Next sequence on the other side of the instrument shack.
After 500.5, drilling through bedrock (P holes).

QA/QC: Follow operations

Report By: MH