Rio Tinto

Dust Gauge Collection Field Sheet

		No:	ENVI-178-0312
Area:	8000	Revision:	R0
Effective Date:	26-Mar-2012	By:	Dianne Dul
Task:	Dust Gauge Collection Field Sheet		
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GENERAL

LOCATION NAME: Dust 3 DATE (dd-mmm-yyyy): 2019-Dec-26 TIME (24:00): 1115

SAMPLED BY: AH NG TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 535024 E 7151872 N (Zone) 12W

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 10

Precipitation: rain / (mist) / snow / N/A Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible, (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-30 by LC, NG

- clear liquid
- dust visible, white in colour

Samples analyzed 2019-12-29

Total Volume of Water After Melting: 680 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	114.9	327.7	212.8	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	114.9	327.7	212.8	

Rio Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 4 DATE (dd-mmm-yyyy): 2019-Dec-26 TIME (24:00): 1149

SAMPLED BY: AH NG TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 531397 E 7152127 N (Zone) 12W

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 10

Precipitation: rain (mist) snow / N/A Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-28 by SS2, NG, LC, DP

- clear liquid - white in colour
- some dust visible.

Samples analyzed 2019-12-29

Total Volume of Water After Melting: 675 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	117.6.	142.2	24.6.	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	117.6	142.2	24.6.	

RIO TINTO

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 5 DATE (dd-mmm-yyyy): 2019-Dec-28 TIME (24:00): 1037

SAMPLED BY: AM GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 535696 E 7155138 N (Zone) 12W

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -20 °C Wind Direction: W Wind Speed (knots): 12

Precipitation: rain / mist / snow / (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible, (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SS2

- clear liquid
- some dust visible - white in colour

Samples analyzed 2019-12-29

Total Volume of Water After Melting: 550 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	117.8	152.5	34.7	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	117.8	152.5	34.7	

RO.Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 6 DATE (dd-mmm-yyyy): 2019-Dec-26 TIME (24:00): 1100

SAMPLED BY: AH NG TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 537502 E 7152934 N (Zone) 12W.

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 10

Precipitation: rain / (mist) / snow / N/A Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-30 by LC, NG
- clear liquid - white colour
- dust visible.

Samples analyzed 2019-12-29

Total Volume of Water After Melting: 430 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	117.0	146.0	29.0	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	117.0	146.0	29.0	

Dust Gauge Collection Field Sheet			
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GENERAL

LOCATION NAME: Dust 7 DATE (dd-mmm-yyyy): 2019-Dec-27 TIME (24:00): 1258

SAMPLED BY: AH GL TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 536819 E 7150510 N (Zone) 12W

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -14 °C Wind Direction: S Wind Speed (knots): 7

Precipitation: rain / mist / snow (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible, (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SSL
- clear liquid.
- Dust visible, white in colour

Samples Analyzed 2019-12-29

Total Volume of Water After Melting: 670 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	118.3	227.7	109.4.	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	118.3	227.7	109.4	

RIO TINTO

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 8 DATE (dd-mmm-yyyy): 2019-Dec-28 TIME (24:00): 1100

SAMPLED BY: AH GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 531401 E 7154146 N (Zone) 12W

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -20 °C Wind Direction: W Wind Speed (knots): 12

Precipitation: rain / mist / snow / (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible, (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29, by SSL

- clear liquid
- some dust visible - white/brown in colour

Samples Analyzed 2019-12-29

Total Volume of Water After Melting: 725 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	118.2	195.7	77.5	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	118.2	195.7	77.5	

Rio Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 9 DATE (dd-mmm-yyyy): 2019-Dec-27 TIME (24:00): 1319.

SAMPLED BY: AH, GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 541204 E 7152154 N (Zone) 12W.

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -14 °C Wind Direction: S Wind Speed (knots): 7

Precipitation: rain / mist / snow (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible ~~Not Visible~~

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SSL

- clear liquid.
- Some dust visible.

Samples Analyzed 2019-12-29

Total Volume of Water After Melting : ~~455~~ 400 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	119.0	124.9	5.9	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	119.0	124.9	5.9	

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 10 DATE (dd-mmm-yyyy): 2019-Dec-26 TIME (24:00): 1221

SAMPLED BY: AH NG TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 532908 E 7148924 N (Zone) 12W.

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 10.

Precipitation: rain / (mist) / snow / N/A Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-30 by LC, NG
- clear liquid - white colour
- some dust visible
- mosquito present, filtered out

Samples Analyzed 2019-12-29

Total Volume of Water After Melting: 750 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	117.4	227.6	110.2	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	117.4	227.6	110.2	

Rio Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 11 DATE (dd-mmm-yyyy): 2019-Dec-28 TIME (24:00): 12 17

SAMPLED BY: AH GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 531493 E 7150156. N (Zone) 12w.

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -20 °C Wind Direction: W Wind Speed (knots): 12

Precipitation: rain / mist / snow (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SS2

- clear liquid
- some brown/light dust visible.

Samples Analyzed 2019-12-29

Total Volume of Water After Melting : 750 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	118.3	148.4	30.1	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	118.3	148.4	30.1	

Rio Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust 12 DATE (dd-mmm-yyyy): 2019-Dec-28 TIME (24:00): ~~12~~ 1152

SAMPLED BY: AH GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 529323 E 7151191 N (Zone) 12W.

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -20 °C Wind Direction: W Wind Speed (knots): 12

Precipitation: rain / mist / snow / (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible, (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SS2

- clear liquid
- some dust visible - white-light in colour.

Samples Analyzed 2019-12-29

Total Volume of Water After Melting: 750 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	116.2	131.1	14.9.	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	116.2	131.1	14.9.	

Rio Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust C1 DATE (dd-mmm-yyyy): 2019-12-27 TIME (24:00): 1221

SAMPLED BY: AH GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 534979 E 7144290 N (Zone) 12W

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -14 °C Wind Direction: S Wind Speed (knots): 7

Precipitation: rain / mist / snow (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible, (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SS2

- clear liquid.
- Some dust visible

Samples Analyzed 2019-12-29

Total Volume of Water After Melting: 650. (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	118.3	143.3	25.0	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	118.3	143.3	25.0	

Rio Tinto

Dust Gauge Collection Field Sheet

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GENERAL

LOCATION NAME: Dust C2 DATE (dd-mmm-yyyy): 2019-Dec-28 TIME (24:00): 1125

SAMPLED BY: AH GC TYPE OF SAMPLE: (Dust) Other

GPS COORDINATES (UTM): 528714 E 7153276 N (Zone) 12W.

DESCRIPTION: Q4 Dust

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -20 °C Wind Direction: W Wind Speed (knots): 12

Precipitation: rain / mist / snow (N/A) Cloud Cover: 0%, 10%, 25%, 50%, 75%, (100)

Snow Cover: 0%, 10%, 25%, 50%, 75%, (100%) Dust in area: Visible (Not Visible)

COLLECTION COMMENTS: (i.e. damage to station, bugs - twigs in sample, hole in vestibule, etc.)

Date Sample Collected was Deployed 2019-09-29 by SS2

- clear liquid
- some dust visible

Samples Analyzed 2019-12-29.

Total Volume of Water After Melting: 680 (mL)

Filter #	Weight of Filter	Filter + Residue	Residue Weight	Comments
1	118.3	132.1	13.8	
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
Totals	118.3	132.1	13.8	

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
Area:	8000	Revision:	R8
Effective Date:	26-MAR-2012	By:	Dianne Dul
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GENERAL

LOCATION NAME: SS1-1 DATE (yyyy-mm-dd): 2019-04-06 TIME (24:00): 1602

SAMPLED BY: MN SS2 LC TYPE OF SAMPLE: Dust ☑ Water Quality ☐ QAQC: N/A

GPS COORDINATES (UTM): 0533911 E 7154290 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik 0 km & Direction _____ On: Land ☑ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -19 °C Wind Direction: SE Wind Speed (knots): 10

Precipitation: Rain / Mist / Snow / Ice / None

Dust in area: Visible ☑ Not Visible ☑

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	15.0	12.0	41.0	39.0	2.0	(Y) N	Visible dust
	2	16.0	14.0	41.0	39.0	2.0	(Y) N	
	3	19.0	15.0	42.0	39.0	3.0	(Y) N	
	4	21.0	17.0	42.0	39.0	3.0	(Y) N	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	~~1~~ 5	19.0	12.0	41.0	39.0	2.0	(Y) N	
	~~2~~ 6	21.0	14.0	41.0	39.0	2.0	(Y) N	
	~~3~~ 7	30.0	19.0	43.0	39.0	4.0	(Y) N	
	~~4~~ 8	19.0	11.0	41.0	39.0	2.0	(Y) N	Veg
	~~5~~ 9	26.0	16.0	42.0	39.0	3.0	(Y) N	
	~~6~~ 10	26.0	12.0	41.0	39.0	2.0	(Y) N	Veg
	~~7~~ 11	25	19.0	41.0	39.0	2.0	(Y) N	
	8						Y N	
	9						Y N	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Area:	8000	Revision:	R7
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Dust Sample Filters

Total Volume of Melted Snow : 1090 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	115.4	376.3	260.9	lots of settled sand present
2	115.3	448.0	332.7	
3	117.3	447.5	330.2	
4	116.0	1301.3	1185.3	
Totals	464.0	2573.1	2109.1	

Water Quality Bottles

Total Volume of Melted Snow :_____(mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type *	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☐	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☐	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☐	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☐	☐	☐	
5	Routine	1000 mL plastic	Y	N	☐	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☐	☐	☐	

***Sample Type**: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS1-2 DATE (yyyy-mm-dd): 2019-04-06 TIME (24:00): 1545

SAMPLED BY: MN SS2 LC TYPE OF SAMPLE: Dust ☑ Water Quality ☐ QAQC: N/A

GPS COORDINATES (UTM): 0533914 E 7154358 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik 0 km & Direction _____ On: Land ☑ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -17 °C Wind Direction: E Wind Speed (knots): 6

Precipitation: Rain / Mist / Snow / Ice / (None)

Cloud Cover: 0% / (10%) / 25% / 50% / 75% / 100%

Dust in area: Visible ☐ Not Visible ☑

Snow Condition: Crystallized ☑ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	33	18	45	39.0	6.0	Y (N)	Reweighed, sugary snow at bottom
	2	29	14	43	39.0	4.0	Y (N)	Sugary snow @ bottom
	3	31	29	45	39.0	6.0	Y (N)	" " veg plug"
	4	33	27	45	39.0	6.0	Y (N)	veg "plug"
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	~~1~~ 5	30	14	42	39.0	3.0	Y (N)	
	~~2~~ 6	31	22	44.0	39.0	5.0	Y (N)	
	3						Y N	
	4						Y N	
	5						Y N	
	6						Y N	
	7						Y N	
	8						Y N	
	9						Y N	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Area:	8000	Revision:	R7
Effective Date:	26-MAR-2012	By:	D. Dul
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Dust Sample Filters

Total Volume of Melted Snow : 1070. (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	114.0	309.1	195.1	
2	116.1	304.5	188.4	
3				
4				
Totals	230.1	613.6	383.5	

Water Quality Bottles

Total Volume of Melted Snow : _____ (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type *	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☐	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☐	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☐	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☐	☐	☐	
5	Routine	1000 mL plastic	Y	N	☐	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☐	☐	☐	

***Sample Type:** GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS1-3-4 DATE (yyyy-mm-dd): 2019-04-06 TIME (24:00): 15:13

SAMPLED BY: MN SS2 LC TYPE OF SAMPLE: Dust ☑ Water Quality ☐ QAQC: DUP

GPS COORDINATES (UTM): 0533966 E 7154521 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik 0 km & Direction _____ On: Land ☑ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -17 °C Wind Direction: E Wind Speed (knots): 6

Precipitation: Rain / Mist / Snow / Ice / (None)

Cloud Cover: 0% / (10%) / 25% / 50% / 75% / 100%

Dust in area: Visible ☐ Not Visible ☑

Snow Condition: Crystallized ☑ Packed ☐ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	25	17	43.0	39.0	4.0	Y (N)	Reweighed, veg in sample
	2	19	10	42.0	39.0	3.0	Y (N)	
	3	30	14	43.0	39.0	4.0	Y (N)	
	4	23	12	42.0	39.0	3.0	Y (N)	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	~~1~~ 5	25	20	45.0	39.0	6.0	Y (N)	grass in sample
	~~2~~ 6	25	16	44.0	39.0	5.0	Y (N)	
	~~3~~ 7	25	20	44.0	39.0	5.0	Y (N)	
	4						Y N	
	5						Y N	
	6						Y N	
	7						Y N	
	8						Y N	
	9						Y N	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

no wq sample.

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 1035 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	115.2	158.8	43.6.	
2				
3				
4				
Totals	115.2.	158.8	43.6.	

Water Quality Bottles

Total Volume of Melted Snow :_____(mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type *	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☐	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☐	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☐	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☐	☐	☐	
5	Routine	1000 mL plastic	Y	N	☐	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☐	☐	☐	

***Sample Type**: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
Area:	8000	Revision:	R8
Effective Date:	26-MAR-2012	By:	Dianne Dul
Task:	Snow Sampling Field Sheet		
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GENERAL

LOCATION NAME: SS1-3-5 DATE (yyyy-mm-dd): 2014-04-06 TIME (24:00): 1530

SAMPLED BY: MN SS2 LC TYPE OF SAMPLE: Dust ☑ Water Quality ☐ QAQC: DUP

GPS COORDINATES (UTM): 0533966 E 7154521 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☑ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -17 °C Wind Direction: E Wind Speed (knots): 6

Precipitation: Rain / Mist / Snow / Ice / (None)

Cloud Cover: 0% / (10%) / 25% / 50% / 75% / 100%

Dust in area: Visible ☐ Not Visible ☑

Snow Condition: Crystallized ☑ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	25	20	45	39.0	6.0	Y (N)	Reweighed
	2	22	16	43	39.0	4.0	Y (N)	Air pockets in snow, sugary at bottom
	3	26	17	45	39.0	6.0	Y (N)	Air pockets in snow, sugary @ bottom
	4	25	16	44	39.0	5.0	Y (N)	"
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	~~1~~ 5	20	12	42	39.0	3.0	Y (N)	"
	~~2~~ 6	20	13	42	39.0	3.0	Y (N)	"
	3						Y N	
	4						Y N	
	5						Y N	
	6						Y N	
	7						Y N	
	8						Y N	
	9						Y N	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 960 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	116.8	145.8	29.0	
2				
3				
4				
Totals	116.8	145.8	29.0	

Water Quality Bottles

Total Volume of Melted Snow : _____ (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type *	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☐	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☐	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☐	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☐	☐	☐	
5	Routine	1000 mL plastic	Y	N	☐	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☐	☐	☐	

***Sample Type**: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

Additional Comments

Rio Tinto

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GENERAL

LOCATION NAME: 551-4 DATE (yyyy-mm-dd): 2019-04-06 TIME (24:00): 14:45

SAMPLED BY: SS2 MN LC TYPE OF SAMPLE: Dust ☐ Water Quality ☒ QAQC: _____

GPS COORDINATES (UTM): 534482 E 7155093 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☒

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -17 °C Wind Direction: E Wind Speed (knots): 6

Precipitation: Rain / Mist / Snow / Ice / None

Dust in area: Visible ☐ Not Visible ☑

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)	
Dust Cores	1	30	28	46	39.0	7	Y N		7
	2	30	28	46		7	Y N		14
	3	29	28	46		7	Y N		21
	4	30	28	46		7	Y N		28
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)									
Water Quality Cores	1	30	28	46	39.0	7	Y N	Rewash.	7
	2	30	29	46		7	Y N		14
	3	30	30	46		7	Y N		21
	4	30	30	46		7	Y N		29
	5	30	30	46		7	Y N		38
	6	30	30	46		7	Y N		45
	7	31	30	46		7	Y N		52
	8	32	31	47	39.0	8	Y N	Rewash	60
	9	32	31	47		8	Y N		68
	10	31	30	46		7	Y N		75
	11	30	30	46		7	Y N		82
	12	30	29	47		8	Y N		90
	13	30	29	46		7		Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)	97
	14	30	21	46		7			104

*** **Water Content** $_{SWE}$ = **Wt. of Tube & Core** $_{SWE}$ – **Wt. of Empty Tube** $_{SWE}$ ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 895 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	115.4	162.7	47.3	
2				
3				
4				
Totals	115.4	162.7	47.3	

Water Quality Bottles

Total Volume of Melted Snow : ~~3314~~ 1625+1675 3300 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * GW	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☑	☐	☐	
5	Routine	1000 mL plastic	Y	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☑	☐	☐	

***Sample Type**: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate (Y) ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS1-5 DATE (yyyy-mm-dd): 2019-04-06 TIME (24:00): 14:00

SAMPLED BY: MN SS2 LC TYPE OF SAMPLE: Dust ☒ Water Quality ☒ QAQC: _____

GPS COORDINATES (UTM): 535097 E 7156275 N (Zone) _____ NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☒

CLIMATE CONDITIONS (if sampling outside)

Air Temp: ~17 °C Wind Direction: E Wind Speed (knots): 6

Precipitation: Rain / Mist / Snow / Ice / None

Dust in area: Visible ☐ Not Visible ☒

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)	
Dust Cores	1	30	30	47	39	8	Y N		
	2	30	29	47	39	8	Y N		16
	3	31	29	47	39	8	Y N		24
	4	31	30	48	39	9	Y N		33
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)									
Water Quality Cores	1	33	33	49	39	10	Y N		
	2	34	34	50	39	11	Y N		
	3	35	33	50	39	11	Y N		
	4	35	34	50	39	11	Y N		43
	5	35	34	50	39	11	Y N		54
	6	35	33	51	39	12	Y N	Newborg, Newegh	66
	7	36	36	50	39	11	Y N		77
	8	35	35	50	39	11	Y N		88
	9	35	35	50	39	11	Y N		99
	10	36	36	50	39	11	Y N		110
	11						Y N		
	12						Y N		
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)									

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 1100 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	121.2.	163.0.	41.8.	
2				
3				
4				
Totals	121.2.	163.0.	41.8.	

Water Quality Bottles

1705+1760

Total Volume of Melted Snow : 3465 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (GW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate (Y) ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS2-1 DATE (yyyy-mm-dd): 2019-04-07 TIME (24:00): 1428

SAMPLED BY: LC SS2 TYPE OF SAMPLE: Dust ☑ Water Quality ☑ QAQC: N/A

GPS COORDINATES (UTM): 05T 0537553 E 7153473 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik 0.18 km & Direction E On: Land ☐ &/or Lake ☑

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -18 °C Wind Direction: SE Wind Speed (knots): 11

Precipitation: Rain / Mist / (Snow) / Ice / None Cloud Cover: 0% / 10% / 25% / 50% / 75% / (100%)

Dust in area: Visible ☐ Not Visible ☑ Snow Condition: Crystallized ☑ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	31.0	30	47.0	39.0	8.0	Y (N)	Reweighed cores
	2	35.0	33	48.0	39.0	9.0	Y (N)	
	3	34.0	33.0	46.0	39.0	7.0	Y (N)	
	4	33.0	31.0	47.0	39.0	8.0	Y (N)	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	1	33.0	31.0	47.0	39.0	8.0	Y (N)	Reweighed cores
	2	32.0	31.0	47.0	39.0	8.0	Y (N)	
	3	32.0	30.0	47.0	39.0	8.0	Y (N)	
	4	32.0	31.0	47.0	39.0	8.0	Y (N)	
	5	32.0	30.0	47.0	39.0	8.0	Y (N)	
	6	32.0	31.0	47.0	39.0	8.0	Y (N)	
	7	30.0	29.0	47.0	39.0	8.0	Y (N)	
	8	3932.0	29.0	47.0	39.0	8.0	Y (N)	Reweighed cores
	9	33.0	32.0	48.0	39.0	9.0	Y (N)	
	10	32.0	32.0	47.0	39.0	8.0	Y (N)	
	11	30.0	29.0	46.0	39.0	7.0	Y (N)	
	12	30.0	28.0	46.0	39.0	7.0	Y (N)	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								
		29.0	27.0	46.0	39.0	7.0	(N)	

*** **Water Content** $_{SWE}$ **= Wt. of Tube & Core** $_{SWE}$ **– Wt. of Empty Tube** $_{SWE}$ ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 1025 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	116.5	127.5	11.0.	
2	115.1	121.1	6.0	
3				
4				
Totals	231.6	~~376.1~~ 248.6.	17.0.	

1755 + 1485

Water Quality Bottles

Total Volume of Melted Snow : 3240 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (GW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

***Sample Type:** GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate (Y) ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS2-1-1 DATE (yyyy-mm-dd): 2014-04-07 TIME (24:00): 1742

SAMPLED BY: LC SS2 TYPE OF SAMPLE: Dust ☐ Water Quality ☐ QAQC: EBW.

GPS COORDINATES (UTM): _____ E _____ N (Zone) _____ NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: _____ °C Wind Direction: _____ Wind Speed (knots): _____

Precipitation: Rain / Mist / Snow / Ice / None
Dust in area: Visible ☐ Not Visible ☐

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%
Snow Condition: Crystallized ☐ Packed ☐ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1						Y N	
	2						Y N	
	3						Y N	
	4						Y N	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	1						Y N	
	2						Y N	
	3						Y N	
	4						Y N	
	5						Y N	
	6						Y N	
	7						Y N	
	8						Y N	
	9						Y N	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 1000 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	117.0	(116.3) 117.0.	0	03519-0315
2				
3				
4				
Totals				

Water Quality Bottles

Total Volume of Melted Snow : 1260+2335 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * EBW	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

perchlorate ✓

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL 552-1-1B

LOCATION NAME: 55 Bay DATE (yyyy-mm-dd): _____ TIME (24:00): _____

SAMPLED BY: _____ TYPE OF SAMPLE: Dust ☐ Water Quality ☐ QAQC: EBW

GPS COORDINATES (UTM): _____ E _____ N (Zone) _____ NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: _____ °C Wind Direction: _____ Wind Speed (knots): _____

Precipitation: Rain / Mist / Snow / Ice / None
Dust in area: Visible ☐ Not Visible ☐

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%
Snow Condition: Crystallized ☐ Packed ☐ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1						Y N	03159-0315 D1
	2						Y N	
	3						Y N	
	4						Y N	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	1						Y N	
	2						Y N	
	3						Y N	
	4						Y N	
	5						Y N	
	6						Y N	
	7						Y N	
	8						Y N	
	9						Y N	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
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Dust Sample Filters

Total Volume of Melted Snow : 1095 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	116.4	(115.8) 116.4	0	031519-0315
2				
3				
4				
Totals				

2235 + 2075

Water Quality Bottles

Total Volume of Melted Snow : _____ (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (FBW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☑	☐	☐	
5	Routine	1000 mL plastic	Y	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☑	☐	☐	

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate ✓ ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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Area:	8000	Revision:	R8
Effective Date:	26-MAR-2012	By:	Dianne Dul
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GENERAL

LOCATION NAME: SS2-2-4 DATE (yyyy-mm-dd): 2019-04-07 TIME (24:00): 13:30

SAMPLED BY: SS2 LC TYPE OF SAMPLE: Dust ☒ Water Quality ☒ QAQC: -4

GPS COORDINATES (UTM): 0537829 E 7153478 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☒

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 12

Precipitation: Rain / Mist / Snow / Ice / None

Dust in area: Visible ☐ Not Visible ☒

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Snow Condition: Crystallized ☒ Packed ☐ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)	
Dust Cores	1	28	26	46	39	7	Y N		
	2	30	24	46	39	7	Y N		14
	3	29	27	46	39	7	Y N		21
	4	31	25	46	39	7	Y N		28
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)									
Water Quality Cores	1	30	30	47	39	8	Y N		7
	2	33	32	48	39	9	Y N		26
	3	30	29	46	39	9	Y N		35
	4	31	30	48	39	9	Y N		44
	5	31	31	48	39	9	Y N		53
	6	32	31	48	39	9	Y N		62
	7	31	30	48	39	9	Y N		71
	8	29	27	47	39	8	Y N		80
	9	30	28	47	39	8	Y N		88
	10	29	28	47	39	8	Y N		96
	11	32	27	48	39	9	Y N		106
	12						Y N		
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)									

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 925 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	108.4.	126.4.	18.0.	
2				
3				
4				
Totals	108.4	126.4.	18.0.	

Water Quality Bottles

Total Volume of Melted Snow : 1765+1330 3095 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (DUPW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

Perchlorate

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS2-2-5 DATE (yyyy-mm-dd): 2019-04-07 TIME (24:00): 13:54

SAMPLED BY: SS2 LC TYPE OF SAMPLE: Dust ☒ Water Quality ☐ QAQC: -5

GPS COORDINATES (UTM): 0537825 E 7153480 N (Zone) _____ NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☒

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 12

Precipitation: Rain / Mist / Snow / Ice / None

Dust in area: Visible ☐ Not Visible ☒

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Snow Condition: Crystallized ☐ Packed ☒ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)	
Dust Cores	1	30	28	47	39	8	Y N		
	2	30	29	47	39	8	Y N		16
	3	30	28	47	39	8	Y N		24
	4	30	28	47	39	8	Y N		32
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)									
Water Quality Cores	1	28	26	46	39	7	Y N		
	2	30	25	47	39	8	Y N		15
	3	32	25	48	39	9	Y N		24
	4	30	26	46	39	7	Y N		31
	5	30	27	47	39	8	Y N		39
	6	30	27	47	39	8	Y N		47
	7	28	26	46	39	7	Y N		54
	8	27	25	46	39	7	Y N		61
	9	31	30	48	39	9	Y N		70
	10	30	28	48	39	9	Y N		79
	11	30	24	46	39	7	Y N		86
	12	30	29	48	39	9	Y N		95
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)									

13 28 24 45 39 6 101

*** **Water Content** $_{SWE}$ **= Wt. of Tube & Core** $_{SWE}$ **– Wt. of Empty Tube** $_{SWE}$ ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 1025 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	121.9	135.6.	13.7.	
2	121.8	134.3	12.5	
3				
4				
Totals	243.7	269.9.	26.2.	

Water Quality Bottles

Total Volume of Melted Snow : 1515+1700 3215 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * DUPW2	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate Y ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: 552-3 DATE (yyyy-mm-dd): 2019-04-04 TIME (24:00): 1113

SAMPLED BY: MN 552 LC TYPE OF SAMPLE: Dust ☑ Water Quality ☑ QAQC: N/A

GPS COORDINATES (UTM): 05 38483 E 715 3947 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik 2.89 km & Direction NE On: Land ☐ &/or Lake ☑

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -24 °C Wind Direction: ~~270~~ W Wind Speed (knots): 30

Precipitation: Rain / Mist / Snow / Ice / None

Dust in area: Visible ☐ Not Visible ☑

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Snow Condition: Crystallized ☑ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	29.0	29.0	46.00	39.0	7.0	Y (N)	Reweigh
	2	34.0	34.0	48.0	39.0	9.0	Y (N)	
	3	34.0	34.0	49.0	39.0	10.0	Y (N)	
	4						Y N	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	1	34.0	34.0	48.0	39.0	9.0	Y (N)	Reweigh Bag 1
	2	27.0	27.0	45.0	39.0	6.0	Y (N)	
	3	30.0	30.0	46.0	39.0	7.0	Y (N)	
	4	30.0	30.0	46.0	39.0	7.0	Y (N)	
	5	31.0	31.0	46.0	39.0	7.0	Y (N)	
	6	36.0	36.0	49.0	39.0	10.0	Y (N)	
	7	36.0	36.0	48.0	39.0	9.0	Y (N)	
	8	35.0	35.0	118.0	39.0	4.0	Y (N)	Reweigh, Bag 2
	9	27.0	27.0	47.0	39.0	8.0	Y (N)	
	10	33.0	32.0	47.0	39.0	8.0	Y (N)	
	11	31.0	31.0	48.0	39.0	9.0	Y (N)	
	12	37.0	37.0	49.0	39.0	10.0	Y (N)	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

22 3 64

36.0 31.0 45.0 39.0 6.0 (N)

*** **Water Content** $_{SWE}$ **= Wt. of Tube & Core** $_{SWE}$ **– Wt. of Empty Tube** $_{SWE}$ ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 870 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	121.5	136.4	14.9	
2				
3				
4				
Totals	121.5	136.4	14.9	

Water Quality Bottles

1845.0 + 1955

Total Volume of Melted Snow : 3800 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (GW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

redistrade (Y) (N) ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS2-4 DATE (yyyy-mm-dd): 2019-04-04 TIME (24:00): 1003

SAMPLED BY: MN SSR LC TYPE OF SAMPLE: Dust ☑ Water Quality ☑ QAQC: N/A

GPS COORDINATES (UTM): 0534158 E 7154683 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik 3.74 km & Direction NE On: Land ☐ &/or Lake ☑

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -22 °C Wind Direction: W Wind Speed (knots): 30

Precipitation: Rain / Mist / Snow / Ice / None Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%

Dust in area: Visible ☐ Not Visible ☑ Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	23.0	21.0	~~45.0~~ 41.0	39.0	~~6.0~~ 2.0	Y (N)	
	2	23.0	23.0	46.0	39.0	~~7.0~~ 6.0	Y (N)	
	3	23.0	21.0	45.0	39.0	6.0	Y (N)	
	4	~~23.0~~ 24.0	22.0	44.0	39.0	5.0	Y (N)	
		22.0	22.0	44.0	39.0	5.0	(N)	Dust (Min. of 3 cores – Total Water Content SWE =/> 25)
Water Quality Cores	1	27.0	27.0	45.0	39.0	6.0	Y (N)	Reweighed, Bag1
	2	25.0	24.0	45.0	39.0	6.0	Y (N)	
	3	25.0	25.0	45.0	39.0	6.0	Y (N)	
	4	25.0	25.0	45.0	39.0	6.0	Y (N)	
	5	25.0	25.0	45.0	39.0	6.0	Y (N)	
	6	25.0	25.0	45.0	39.0	6.0	Y (N)	
	7	27.0	27.0	46.0	39.0	7.0	Y (N)	
	8	27.0	27.0	46.0	39.0	7.0	Y (N)	Reweigh.
	9	25.0	25.0	45.0	39.0	6.0	Y (N)	Bag 2
	10	40.0	39.0	51.0	39.0	12.0	Y (N)	
	11	40.0	40.0	51.0	39.0	12.0	Y (N)	
	12	37.0	37.0	49.0	39.0	10.0	Y (N)	
		40.0	34.0	49.0	39.0	10.0	(N)	Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)
		39.0	38.0	49.0	39.0	10.0	(N)	

*** **Water Content** $_{SWE}$ **= Wt. of Tube & Core** $_{SWE}$ **– Wt. of Empty Tube** $_{SWE}$ ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 975 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	113.4	138.4	25.0	
2				
3				
4				
Totals	113.4	138.4	25.0	

Water Quality Bottles

1625 + 1780

Total Volume of Melted Snow : 3405 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (GW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

*Sample Type: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate (Y) ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: 553-4 DATE (yyyy-mm-dd): 2012-04-07 TIME (24:00): 11:32

SAMPLED BY: LC 552 TYPE OF SAMPLE: Dust ☑ Water Quality ☑ QAQC: N/A

GPS COORDINATES (UTM): 0536536 E 7151023 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik ____ km & Direction ____ On: Land ☐ &/or Lake ☑

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 12

Precipitation: Rain / Mist / (Snow) / Ice / None

Dust in area: Visible ☐ Not Visible ☑

Cloud Cover: 0% / 10% / 25% / 50% / 75% / (100%)

Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	40	39	50.0	39.0	11.0	Y (N)	Reweighed cores
	2	41	39	51.0	39.0	12.0	Y (N)	
	3	43	41	50.0	39.0	11.0	Y (N)	
	4						Y N	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
Water Quality Cores	1	35.0	33.0	48.0	39.0	9.0	Y (N)	Reweighed cores, Bag 1
	2	39.0	36.0	49.0	39.0	10.0	Y (N)	
	3	38.0	35.0	49.0	39.0	10.0	Y (N)	
	4	38.0	36.0	49.0	39.0	10.0	Y (N)	
	5	38.0	37.0	49.0	39.0	10.0	Y (N)	
	6	37.0	36.0	49.0	39.0	10.0	Y (N)	
	7	39.0	35.0	49.0	39.0	10.0	Y (N)	Reweigh cores, bag 2
	8	36.0	35.0	49.0	39.0	10.0	Y (N)	
	9	36.0	36.0	48.0	39.0	9.0	Y (N)	
	10	37.0	35.0	49.0	39.0	10.0	Y (N)	
	11	36.0	35.0	49.0	39.0	10.0	Y (N)	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

*** **Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$** ***

Rio Tinto

Snow Sampling Field Sheet

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Dust Sample Filters

Total Volume of Melted Snow : 1100 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	108.4	130.3	21.9	
2	113.9	144.5	30.6	
3	121.8	162.3	40.5	
4				
Totals	344.1	437.1	93.0	

Water Quality Bottles

Total Volume of Melted Snow : 3475 (mL) ~~1595~~ 1880 + 1595

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (GW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

***Sample Type:** GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate (P) ✓

Additional Comments

Snow Sampling Field Sheet

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GENERAL

LOCATION NAME: SS3-5 DATE (yyyy-mm-dd): 2019-04-07 TIME (24:00): 1001

SAMPLED BY: LC SS2 TYPE OF SAMPLE: Dust ☑ Water Quality ☑ QAQC: N/A

GPS COORDINATES (UTM): 0537690 E 7150798 N (Zone)_____ NAD 83

DESCRIPTION: Distance to Diavik_____km & Direction_____On: Land ☐ &/or Lake ☑

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -16 °C Wind Direction: SE Wind Speed (knots): 13

Precipitation: Rain / Mist / (Snow) / Ice / None

Dust in area: Visible ☐ Not Visible ☑

Cloud Cover: 0% / 10% / 25% / 50% / 75% / (100%)

Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1	15.0	15.0	42.0	39.0	3.0	Y (N)	Reweighed cover, 55 m from point due to W. road
	2	15.0	15.0	43.0	39.0	4.0	Y (N)	
	3	15.0	15.0	44.0	39.0	5.0	Y (N)	
	4	17.0	16.0	44.0	39.0	5.0	Y (N)	
	5	17.0	15.0	43.0	39.0	4.0	(N)	
	6	17.0	16.0	43.0	39.0	4.0	(N)	
	Dust (Min. of 3 cores – Total Water Content SWE =/> 25)							
Water Quality Cores	1	15.0	15.0	43.0	39.0	4.0	Y (N)	Reweighed cover, Bag 1
	2	16.0	15.0	43.0	39.0	4.0	Y (N)	
	3	16.0	15.0	43.0	39.0	4.0	Y (N)	
	4	15.0	14.0	42.0	39.0	3.0	Y (N)	
	5	15.0	14.0	43.0	39.0	4.0	Y (N)	
	6	16.0	15.0	43.0	39.0	4.0	Y (N)	
	7	15.0	15.0	43.0	39.0	4.0	Y (N)	
	8	16.0	15.0	43.0	39.0	4.0	Y (N)	
	9	15.0	15.0	43.0	39.0	4.0	Y (N)	
	10	17.0	16.0	44.0	39.0	5.0	Y (N)	Reweighed cover
	11	17.0	16.0	43.0	39.0	4.0	Y (N)	
	12	17.0	16.0	43.0	39.0	4.0	Y (N)	
	Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)							
		18.0	17.0	43.0	39.0	4.0	(N)	
		18.0	17.0	43.0	39.0	4.0	(N)	Bag 2
		19.0	18.0	43.0	39.0	4.0	(N)	

*** **Water Content** $_{SWE}$ **= Wt. of Tube & Core** $_{SWE}$ **– Wt. of Empty Tube** $_{SWE}$ ***

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
Area:	8000	Revision:	R7
Effective Date:	26-MAR-2012	By:	D. Dul
Task:	Snow Sampling Field Sheet		
		Page:	2 of 2

Dust Sample Filters

Total Volume of Melted Snow : 995 (mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1	115.6.	124.9.	9.3.	
2	116.7.	128.0	11.3.	
3	116.2.	132.9.	16.7.	
4				
Totals	348.5	385.8.	37.3.	

Water Quality Bottles

Total Volume of Melted Snow : 1765 + 1880 = 3645 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type *	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	Y	N	☐	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	Y	N	☐	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	Y	☐	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	Y	☐	☐	☐	
5	Routine	1000 mL plastic	Y	N	☐	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	Y	N	☐	☐	☐	

***Sample Type**: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
Area:	8000	Revision:	R8
Effective Date:	26-MAR-2012	By:	Dianne Dul
Task:	Snow Sampling Field Sheet		
		Page:	1 of 2

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GENERAL

LOCATION NAME: 553-5 DATE (yyyy-mm-dd): _____ TIME (24:00): _____

SAMPLED BY: _____ TYPE OF SAMPLE: Dust ☐ Water Quality ☐ QAQC: _____

GPS COORDINATES (UTM): _____ E _____ N (Zone) _____ NAD 83

DESCRIPTION: Distance to Diavik _____ km & Direction _____ On: Land ☐ &/or Lake ☐

CLIMATE CONDITIONS (if sampling outside)

Air Temp: _____ °C Wind Direction: _____ Wind Speed (knots): _____

Precipitation: Rain / Mist / Snow / Ice / None
Dust in area: Visible ☐ Not Visible ☐

Cloud Cover: 0% / 10% / 25% / 50% / 75% / 100%
Snow Condition: Crystallized ☐ Packed ☐ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)
Dust Cores	1						Y N	
	2						Y N	
	3						Y N	
	4						Y N	
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)								
65 Water Quality Cores	16	18.0	17.0	44.0	39.0	5.0	Y (N)	
69	2 17	19.0	17.0	43.0	39.0	4.0	Y (N)	
73	3 18	19.0	18.0	43.0	39.0	4.0	Y (N)	
79	4 19	20	19.0	45.0	39.0	6.0	Y (N)	
82	5 20	15.0	15.0	42.0	39.0	3.0	Y (N)	Reweighed core
87	6 21	19.0	18.0	44.0	39.0	5.0	Y (N)	
92	7 22	20.0	19.0	44.0	39.0	5.0	Y (N)	
97	8 23	20.0	20.0	44.0	39.0	5.0	Y (N)	
102	9 24	19.0	19.0	44.0	39.0	5.0	Y (N)	
	10						Y N	
	11						Y N	
	12						Y N	
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)								

***** Water Content $_{SWE}$ = Wt. of Tube & Core $_{SWE}$ – Wt. of Empty Tube $_{SWE}$ *****

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
Area:	8000	Revision:	R7
Effective Date:	26-MAR-2012	By:	D. Dul
Task:	Snow Sampling Field Sheet		
		Page:	2 of 2

Dust Sample Filters

Total Volume of Melted Snow :_____(mL)

Filter #	Weight of Filter (mg)	Filter + Residue (mg)	Residue Weight (mg)	Comments
1				
2				
3				
4				
Totals				

Water Quality Bottles

Total Volume of Melted Snow : 3645 (mL)

Filling Order	Analysis	Bottle Type	Triple Rinse	Preserve	Sample Type * (GW)	Sample Type *	Sample Type *	Sample Comments DI Batch # for QAQC, Location preserved if not in field, label changes
1	Metals Total	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
2	Metals Dissolved	60 mL Falcon Tube	(Y)	N	☑	☐	☐	
3	Total Mercury	40 mL clear glass (pre-preserved)	N	(Y)	☑	☐	☐	
4	Nutrients	120 mL plastic (pre-preserved)	N	(Y)	☑	☐	☐	
5	Routine	1000 mL plastic	(Y)	N	☑	☐	☐	
6	TSS/Turb/pH	1000 mL plastic	(Y)	N	☑	☐	☐	

***Sample Type**: GW, DUPW1/DUPW2, FBW, TBW, EBW, REP1/ REP2, Filter Blank

perchlorate (Y) ✓

Additional Comments

Rio Tinto

Snow Sampling Field Sheet

		No:	ENVI-177-0312
Area:	8000	Revision:	R8
Effective Date:	26-MAR-2012	By:	Dianne Dul
Task:	Snow Sampling Field Sheet		
		Page:	1 of 2

GENERAL

LOCATION NAME: SS3-6 DATE (yyyy-mm-dd): 2019-04-07 TIME (24:00): 12:47

SAMPLED BY: SS2 LC TYPE OF SAMPLE: Dust ☒ Water Quality ☒ QAQC: —

GPS COORDINATES (UTM): 0536300 E 7151568 N (Zone) 12 NAD 83

DESCRIPTION: Distance to Diavik ____ km & Direction ____ On: Land ☐ &/or Lake ☑

CLIMATE CONDITIONS (if sampling outside)

Air Temp: -12 °C Wind Direction: SE Wind Speed (knots): 12

Precipitation: Rain / Mist / (Snow) / Ice / None Cloud Cover: 0% / 10% / 25% / 50% / 75% / (100%)

Dust in area: Visible ☑ Not Visible ☐ Snow Condition: Crystallized ☐ Packed ☑ Wet ☐ Dry ☐

	Core Number	Depth of Snow (cm)	Length of Snow Core (cm)	Weight of Tube & Core-SWE (cm)	Weight of Empty Tube-SWE (cm)	Water Content-SWE (cm)	Dust Present Yes/No	Comments (core weighed, bag #, changes in snow condition)	
Dust Cores	1	26	27	46	39	7	Y N		
	2	25	27	46	39	7	Y N		14
	3	23	28	45	39	6	Y N		20
	4	28	23	46	39	7	Y N		27
Dust (Min. of 3 cores – Total Water Content SWE =/> 25)									
Water Quality Cores	1	30	29	45	39	6	Y N		
	2	28	25	44	39	5	Y N		11
	3	30	29	45	39	6	Y N		17
	4	29	27	45	39	6	Y N		23
	5	30	28	45	39	6	Y N		29
	6	28	25	45	39	6	Y N		35
	7	28	24	45	39	6	Y N		41
	8	30	29	45	39	6	Y N		47
	9	30	28	45	39	6	Y N		54
	10	30	28	45	39	6	Y N		60
	11	32	30	46	38	7	Y N		67
	12	31	31	45	39	6	Y N		74
Water Quality (Min. of 3 cores – Total Water Content SWE =/> 100)									
	13	31	29	45	39	6	N		80
	14	31	31	45	39	6	N		86
	15	33	31	46	39	7	N		93
	16	31	31	46	39	?			100
	17	33	31	45	39	6			106

*** **Water Content** SWE = **Wt. of Tube & Core** SWE – **Wt. of Empty Tube** SWE ***