

Appendix F: Waste Rock Production Summary

Quarterly Waste Rock Production Report



Production Month **January 2017**

<u>Waste Type:</u>	<u>Cover Material</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Kayak				
Placed Location	North Oxide	12,430	0.00%	2.20%	0.00%
Waste Type Subtotal		12,430			
<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Ikalukrok				
Placed Location	Main pit dump 4	2,225	2.20%	5.50%	1.50%
Placed Location	Main Pit Dump 5	21,844	2.38%	5.90%	1.81%
Formation:	Siksikpuk				
Placed Location	Main Pit Dump 5	2,250	6.50%	3.40%	5.60%
Placed Location	West Spur Dump	6,084	6.50%	3.40%	5.60%
Waste Type Subtotal		32,403			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Ikalukrok				
Placed Location	West Spur Dump	25,232	2.11%	0.97%	3.81%
Placed Location	Main Pit Dump 3	2,600	0.20%	2.90%	0.10%
Placed Location	Main Pit Dump 5	52,407	1.50%	2.24%	1.49%
Formation:	Kivalina				
Placed Location	West Spur Dump	69	0.40%	2.10%	0.30%
Placed Location	Main pit dump 4	10,665	0.40%	2.10%	0.30%
Placed Location	Main Pit Dump 5	14,819	0.40%	2.10%	0.30%
Formation:	Siksikpuk				
Placed Location	Main Pit Dump 3	18,877	0.19%	2.54%	0.78%
Placed Location	Main pit dump 4	1,192	0.30%	3.20%	0.20%
Placed Location	Main Pit Dump 5	246,883	0.39%	2.67%	1.00%
Placed Location	West Spur Dump	97,624	0.52%	1.31%	3.31%
Waste Type Subtotal		470,368			
Total tonnes for month		515,201			

Production Month February 2017

<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	Main pit dump 4	24,031	0.80%	8.50%	2.60%
Placed Location					
	Main Pit Dump 5	11,086	0.80%	8.50%	2.60%
Formation: Mixed					
Placed Location					
	Main pit dump 4	1,703	0.00%	5.40%	0.00%
Placed Location					
	Main Pit Dump 5	55,072	0.00%	5.40%	0.00%
Waste Type Subtotal		91,892			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	Main pit dump 4	64,484	1.78%	1.65%	4.08%
Placed Location					
	Main Pit Dump 5	9,353	1.98%	1.06%	4.34%
Formation: Siksikpuk					
Placed Location					
	West Spur Dump	19,717	2.40%	1.60%	5.40%
Placed Location					
	Main pit dump 4	168,258	1.10%	1.26%	3.43%
Placed Location					
	Main Pit Dump 5	90,680	0.47%	0.93%	2.55%
Waste Type Subtotal		352,492			
Total tonnes for month		444,384			

Production Month March 2017

<u>Waste Type:</u>		<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Kayak					
Placed Location					
North Oxide		13,141	0.00%	2.20%	0.00%
Waste Type Subtotal		13,141			
<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
Main Pit Dump 5		17,922	6.22%	14.03%	3.54%
Formation: Mixed					
Placed Location					
Main Pit Dump 5		2,367	0.00%	5.40%	0.00%
Formation: Siksikpuk					
Placed Location					
Main Pit Dump 5		7,464	7.90%	2.60%	10.00%
Waste Type Subtotal		27,753			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
Main pit dump 4		63,255	1.40%	1.24%	1.78%
Placed Location					
Main Pit Dump 5		166,971	1.44%	1.49%	2.83%
Formation: Siksikpuk					
Placed Location					
Main pit dump 4		137,019	0.58%	1.76%	1.67%
Placed Location					
Main Pit Dump 5		187,673	0.62%	1.97%	1.87%
Waste Type Subtotal		554,918			
Total tonnes for month		595,812			

Production Month April 2017

<u>Waste Type:</u>	<u>Cover Material</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Kayak				
Placed Location	North Oxide	14,002	0.00%	2.20%	0.00%
Waste Type Subtotal		14,002			
<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Ikalukrok				
Placed Location	Main Pit Dump 5	37,974	7.43%	4.88%	3.45%
Waste Type Subtotal		37,974			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Ikalukrok				
Placed Location	Main Pit Dump 2	80	0.20%	2.80%	0.30%
Placed Location	Main Pit Dump 3	930	0.40%	1.60%	4.50%
Placed Location	Main pit dump 4	1,582	0.40%	1.60%	4.50%
Placed Location	Main Pit Dump 5	240,474	1.42%	1.83%	3.77%
Formation:	Kayak				
Placed Location	Main Pit Dump 5	29,896	0.50%	2.10%	0.40%
Formation:	Kivalina				
Placed Location	Main Pit Dump 5	10,909	0.20%	3.60%	0.30%
Formation:	Siksikpuk				
Placed Location	Main Pit Dump 5	120,757	0.55%	2.11%	3.03%
Waste Type Subtotal		404,628			
Total tonnes for month		456,604			

Production Month May 2017

<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	Cold Storage North	201	5.50%	24.40%	1.90%
Placed Location					
	Main Pit Dump 5	78,974	12.51%	10.60%	5.59%
Formation: Siksikpuk					
Placed Location					
	Main pit dump 4	2,998	2.71%	5.44%	1.11%
Placed Location					
	Main Pit Dump 5	41,816	1.03%	6.61%	0.17%
Waste Type Subtotal		123,989			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	Main Pit Dump 5	238,906	1.25%	1.74%	2.41%
Placed Location					
	Cold Storage North	17,178	2.55%	1.42%	1.62%
Placed Location					
	Landfill @MWD	5,617	1.70%	1.25%	3.24%
Placed Location					
	Main Pit Dump 3	95	3.10%	1.60%	1.90%
Placed Location					
	Main pit dump 4	17,322	0.55%	1.60%	3.46%
Formation: Kivalina					
Placed Location					
	Cold Storage North	1,725	1.30%	3.10%	0.70%
Formation: Siksikpuk					
Placed Location					
	Main pit dump 4	2,905	1.11%	1.57%	3.25%
Placed Location					
	Main Pit Dump 5	115,508	0.60%	1.08%	2.63%
Waste Type Subtotal		399,256			
Total tonnes for month		523,245			

Production Month June 2017

<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
	Placed Location				
	Main Pit Dump 3	724	1.60%	4.80%	0.20%
	Placed Location				
	Main pit dump 4	6,531	7.36%	3.31%	11.24%
	Placed Location				
	Main Pit Dump 5	5,604	7.25%	5.13%	2.36%
Formation: Siksikpuk					
	Placed Location				
	Main pit dump 4	2,748	0.00%	5.79%	0.00%
	Placed Location				
	Main Pit Dump 5	65,152	0.34%	5.96%	0.14%
	Placed Location				
	Main Pit Dump 3	14,302	0.00%	5.50%	0.00%
Waste Type Subtotal		95,061			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
	Placed Location				
	Landfill @MWD	960	0.80%	2.10%	9.40%
	Placed Location				
	Main Pit Dump 3	2,892	4.01%	1.52%	2.95%
	Placed Location				
	Main pit dump 4	68,167	0.63%	0.96%	3.93%
	Placed Location				
	Main Pit Dump 5	107,204	1.32%	1.12%	2.13%
	Placed Location				
	Cold Storage North	165	1.60%	3.90%	0.50%
Formation: Kayak					
	Placed Location				
	Main pit dump 4	3,058	0.00%	2.80%	0.10%
	Placed Location				
	Main Pit Dump 5	74,028	0.08%	2.72%	0.10%
Formation: Siksikpuk					
	Placed Location				
	Main Pit Dump 3	971	0.90%	1.60%	2.80%
	Placed Location				
	Main pit dump 4	190,312	0.66%	1.20%	3.41%
	Placed Location				
	Main Pit Dump 5	8,995	0.73%	1.78%	2.51%
	Placed Location				
	Landfill @MWD	1,985	0.30%	0.60%	4.30%
Waste Type Subtotal		458,737			
Total tonnes for month		553,798			

Production Month July 2017

<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
	Placed Location				
	Main pit dump 4	6,529	4.50%	3.06%	9.88%
	Placed Location				
	Main Pit Dump 5	7,970	7.91%	3.98%	4.45%
	Placed Location				
	Oxide Ore Dump	4,805	0.80%	2.90%	15.20%
Formation: Siksikpuk					
	Placed Location				
	Main Pit Dump 5	2,281	4.50%	4.20%	2.10%
Waste Type Subtotal		21,585			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
	Placed Location				
	Main pit dump 4	262,342	1.03%	2.00%	3.35%
	Placed Location				
	PAC Dump	1,786	2.70%	0.60%	1.60%
	Placed Location				
	Main Pit Dump 5	180,426	1.01%	3.01%	0.69%
	Placed Location				
	Main Waste Dump	1,272	0.40%	4.10%	0.10%
Formation: Kayak					
	Placed Location				
	Main Pit Dump 5	37,027	0.00%	2.80%	0.10%
Formation: Siksikpuk					
	Placed Location				
	Main pit dump 4	30,794	0.31%	1.80%	2.93%
	Placed Location				
	Main Pit Dump 5	4,977	0.20%	4.20%	0.10%
Waste Type Subtotal		518,624			
Total tonnes for month		540,209			

Production Month August 2017

<u>Waste Type:</u>	<u>Cover Material</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Kayak				
Placed Location	North Oxide	26,185	0.00%	2.18%	0.01%
Waste Type Subtotal		26,185			
<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Ikalukrok				
Placed Location	Landfill @MWD	80	7.40%	5.40%	4.20%
Placed Location	Main Pit Dump 5	22,723	6.28%	4.43%	3.80%
Placed Location	Main pit dump 4	14,562	7.23%	5.36%	4.13%
Formation:	Kayak				
Placed Location	Main pit dump 4	5,257	2.50%	4.20%	2.10%
Placed Location	Main Pit Dump 5	2,056	2.50%	4.20%	2.10%
Waste Type Subtotal		44,678			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation:	Ikalukrok				
Placed Location	PAC Dump	2,183	2.59%	0.76%	1.93%
Placed Location	Landfill @MWD	1,831	0.20%	0.50%	5.50%
Placed Location	Main pit dump 4	127,529	0.67%	1.02%	4.49%
Placed Location	Main Pit Dump 5	172,619	1.06%	2.83%	0.76%
Formation:	Kayak				
Placed Location	Main Pit Dump 5	10,759	0.08%	2.54%	0.10%
Formation:	Siksikpuk				
Placed Location	Main Pit Dump 2	4,656	0.52%	3.11%	0.46%
Placed Location	Main pit dump 4	99,394	1.17%	1.81%	3.36%
Placed Location	Main Pit Dump 5	215,797	0.50%	2.81%	0.84%
Placed Location	Crusher Pad	7,911	0.80%	2.10%	0.80%
Waste Type Subtotal		642,679			
Total tonnes for month		713,542			

Production Month September 2017

<u>Waste Type:</u>	<u>Cover Material</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Kayak					
Placed Location					
	North Oxide	19,967	0.00%	2.47%	0.14%
Waste Type Subtotal		19,967			
<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	Oxide Ore Dump	12,780	2.53%	3.06%	11.52%
Placed Location					
	Main pit dump 4	17,076	5.01%	4.29%	3.59%
Placed Location					
	Main Pit Dump 5	12,454	7.84%	4.58%	4.30%
Formation: Mixed					
Placed Location					
	Oxide Ore Dump	1,449	3.00%	3.00%	11.90%
Waste Type Subtotal		43,759			
<u>Waste Type:</u>	<u>Other Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	Main pit dump 4	133,268	1.09%	1.19%	4.12%
Placed Location					
	Main Pit Dump 5	76,115	0.71%	1.40%	0.73%
Placed Location					
	Oxide Ore Dump	37,434	0.14%	1.89%	12.85%
Placed Location					
	PAC Dump	1,833	2.02%	0.45%	1.26%
Formation: Kayak					
Placed Location					
	Main Pit Dump 2	1,472	0.10%	3.00%	0.30%
Placed Location					
	Main Pit Dump 5	10,261	0.10%	3.00%	0.30%
Formation: Mixed					
Placed Location					
	Oxide Ore Dump	5,373	0.10%	2.70%	13.90%
Formation: Siksikpuk					
Placed Location					
	Main Pit Dump 5	9,183	1.17%	1.82%	2.42%
Placed Location					
	Landfill @MWD	4,278	0.30%	1.10%	3.50%
Placed Location					
	Main pit dump 4	68,777	0.42%	1.19%	3.48%
Waste Type Subtotal		347,994			
Total tonnes for month		411,720			

Production Month October 2017

<u>Waste Type:</u> <u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok				
Placed Location				
Portable crusher Pad	28,254	1.80%	2.32%	1.81%
Placed Location				
Cold Storage North	4,774	2.60%	4.30%	3.40%
Placed Location				
Main Pit Dump 3	104	0.30%	2.10%	0.20%
Placed Location				
Main pit dump 4	171,989	0.71%	0.88%	3.99%
Placed Location				
Main Pit Dump 5	167,419	2.33%	3.04%	1.52%
Placed Location				
Oxide Ore Dump	560	0.10%	1.10%	15.50%
Formation: Siksikpuk				
Placed Location				
Main Pit Dump 5	69,896	0.00%	5.56%	0.00%
Placed Location				
Main pit dump 4	11,127	0.00%	5.60%	0.00%
Waste Type Subtotal		454,123		
Total tonnes for month		454,123		

Production Month November 2017

<u>Waste Type:</u> <u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok				
Placed Location				
CWD	7,437	15.64%	8.00%	5.42%
Placed Location				
Main pit dump 4	204,250	1.36%	1.76%	4.14%
Placed Location				
Main Pit Dump 5	75,056	1.08%	4.06%	0.72%
Placed Location				
Oxide Ore Dump	24,957	1.28%	2.07%	12.67%
Formation: Kivalina				
Placed Location				
Main pit dump 4	3,490	0.00%	2.00%	0.00%
Formation: Mixed				
Placed Location				
Landfill @MWD	4,023	1.50%	1.50%	3.80%
Placed Location				
Main pit dump 4	86,983	1.43%	1.84%	3.27%
Formation: Siksikpuk				
Placed Location				
Main pit dump 4	3,759	0.00%	5.40%	0.00%
Placed Location				
Main Pit Dump 5	49,207	0.00%	5.40%	0.00%
Placed Location				
Cold Storage North	5,082	0.00%	5.40%	0.00%
Waste Type Subtotal		464,244		
Total tonnes for month		464,244		

Production Month December 2017

<u>Waste Type:</u>	<u>Most Reactive Waste</u>	<u>Tonnes</u>	<u>Avg Zn%</u>	<u>Avg Fe%</u>	<u>Avg Pb%</u>
Formation: Ikalukrok					
Placed Location					
	CWD	7,130	6.84%	2.49%	4.50%
Placed Location					
	Main pit dump 4	340,601	1.24%	1.62%	3.41%
Placed Location					
	Main Pit Dump 5	22,775	1.67%	5.12%	1.14%
Placed Location					
	Oxide Ore Dump	83,651	1.42%	2.43%	12.51%
Formation: Mixed					
Placed Location					
	Main pit dump 4	15,767	1.50%	1.50%	3.80%
Waste Type Subtotal		469,924			
Total tonnes for month		469,924			

Total Waste Rock tonnes for period 6,142,806