

August 11, 2006

EBA File: 1240137

Yukon Water Board  
Suite 106, 419 Range Road  
Whitehorse, YT Y1A 3V1

Attention: Judi White  
Manager

Dear Ms. White:

**Subject: Water Use Application QZ04-063**  
**Ketza River Holdings Ltd.**

EBA Engineering Consultants Ltd. (EBA) has completed the attached water balance and water quality models (Appendix A), at the request of Ketza River Holdings Ltd., to provide the information requested (Items 15 and 16) in your letter of February 7, 2006. The following models are provided:

- Assumed Minimum Flow from Tailings Pond and Measured Concentration (January)
- Maximum Allowable Flow and Concentration from Tailings Pond (January)
- Assumed Minimum Flow from Tailings Pond and Measured Concentration (October)
- Maximum Allowable Flow and Concentration from Tailings Pond (October)

Two tables are enclosed that provide information regarding the input parameters used in the models.

The requirements for the water balance and water quality models are also identified in your letter of July 17, 2006 to Mr. Graham Dickson. This letter also asks if the requested licence is for authorization to discharge from the tailings impoundment. As discussed in our letter of June 15, 2006 this discharge is currently being conducted and is not considered part of the licence application (see response to Question 12).

This information has been prepared at the request of Ketza River Holdings Inc. for the purposes of providing the additional information requested. The information provided is based on reports and data provided by others. Where possible this information has been verified through the review of supporting documentation. Should you have any questions, please contact the undersigned.

Respectfully Submitted,  
EBA Engineering Consultants Ltd.



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Cc: Graham Dickson, Ketza River Holdings

Enclosures

# TABLES

The runoff information has been updated to the most recent available date (2003). The following tables provide information regarding the input parameters used in the models.

TABLE 1: PARAMETER FOR JANUARY			
LOCATION	FLOW	ARSENIC [AS]	NOTE
KR - 01	Calculated Value from Mean Runoff for October	Measured (29-Jan-06)	
KR - 13	Sum of other Creek (Assumed) and KR-01	Measured (18-Jan-06)	
KR - 09	Assumed value (Minimum Flow)	Measured (18-Jan-06)	
KR -14	Assumed value	Measured (3-Jan-06)	
North Seepage	Assumed value	Assumed value	
Groundwater	Assumed value	Assumed value	
KR – 04(N2)	Sum of North Seepage and Groundwater	Measured (29- Jan-06)	
Other Creeks	Assumed value	Assumed value	
South Seepage	Assumed value	Assumed value	
Groundwater	Assumed value	Assumed value	
KR-05(S2)	Sum of South Seepage and Groundwater	Measured (29-Jan-06)	
KR-08	Sum of upstream flow	Measured (18-Jan-06)	
Other Creeks	Assumed value	Assumed value	
KR – 15	Assumed value	Measured (18- Jan-06)	
KR – 10	Sum of upstream flow	Measured (18- Jan-06)	
KR – 11	Assumed value	Measured (29- Jan-06)	
KR – 12	Sum of upstream flow	Measured (29 – Jan -06)	

**TABLE 2: PARAMETER FOR OCTOBER**

LOCATION	FLOW	ARSENIC [AS]	NOTE
KR - 01	Calculated Value from Mean Runoff for January	Measured (3-Oct-05)	
KR - 13	Sum of other Creek (Assumed) and KR-01	Measured (3-Oct-05)	
KR - 09	Assumed value (Minimum Flow)	Measured (25-Oct-05)	
KR -14	Assumed value	Measured (25-Oct-05)	
North Seepage	Assumed value	Assumed value	
Groundwater	Assumed value	Assumed value	
KR – 04(N2)	Sum of North Seepage and Groundwater	Measured (3-Oct-05)	
Other Creeks	Assumed value	Assumed value	
South Seepage	Assumed value	Assumed value	
Groundwater	Assumed value	Assumed value	
KR-05(S2)	Sum of South Seepage and Groundwater	Measured (3-Oct-05)	
KR-08	Sum of upstream flow	Measured (3-Oct-05)	
Other Creeks	Assumed value	Assumed value	
KR – 15	Assumed value	Measured (3-Oct-05)	
KR – 10	Sum of upstream flow	Measured (25-Oct-05)	
KR – 11	Assumed value	Measured (25-Oct-05)	
KR – 12	Sum of upstream flow	Measured (25-Oct-05)	

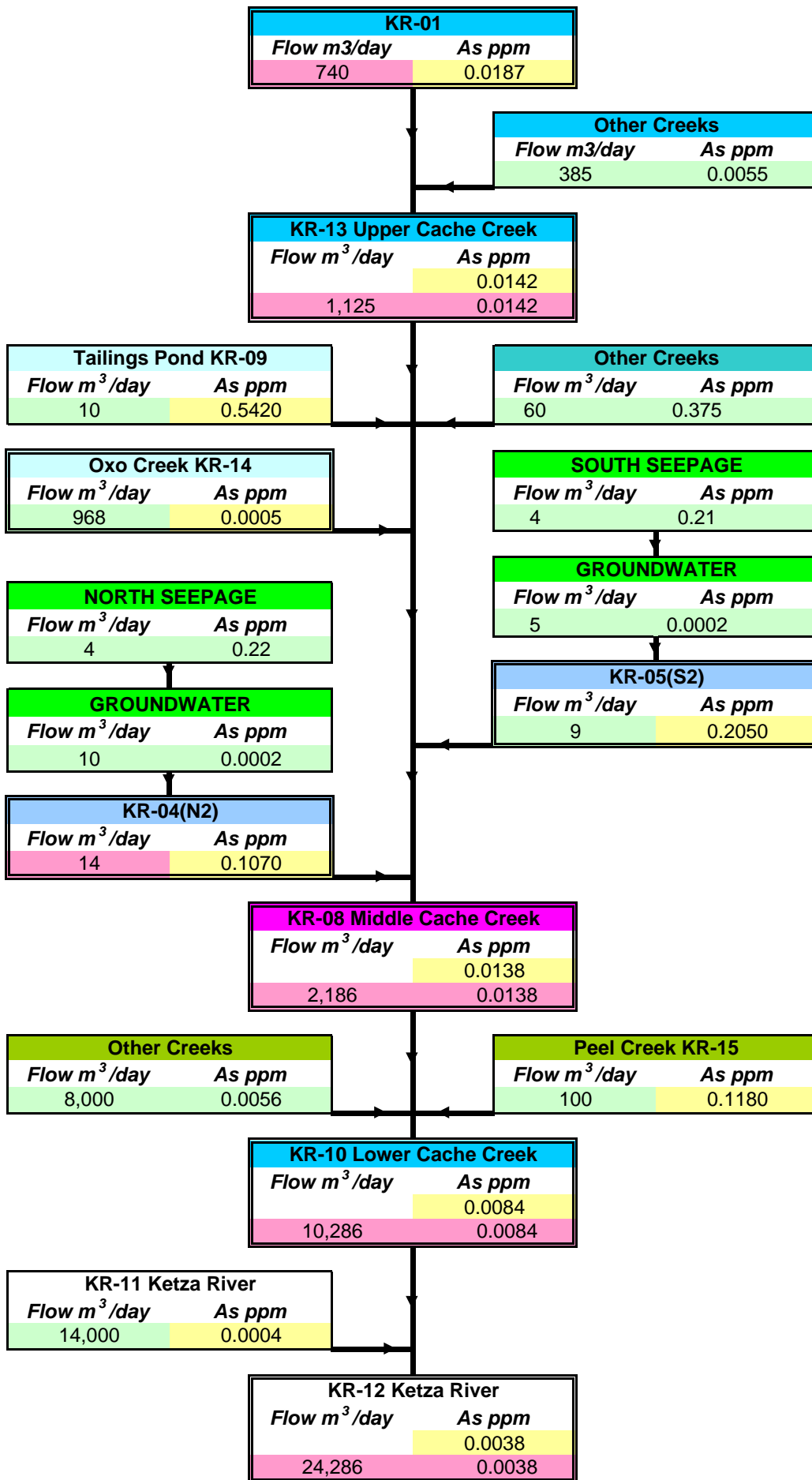
# APPENDIX

## APPENDIX A WATER BALANCE MODELS

# WATER BALANCE MODEL (January)

Assumed Minimum Flow From Tailings Pond and Measured Concentration

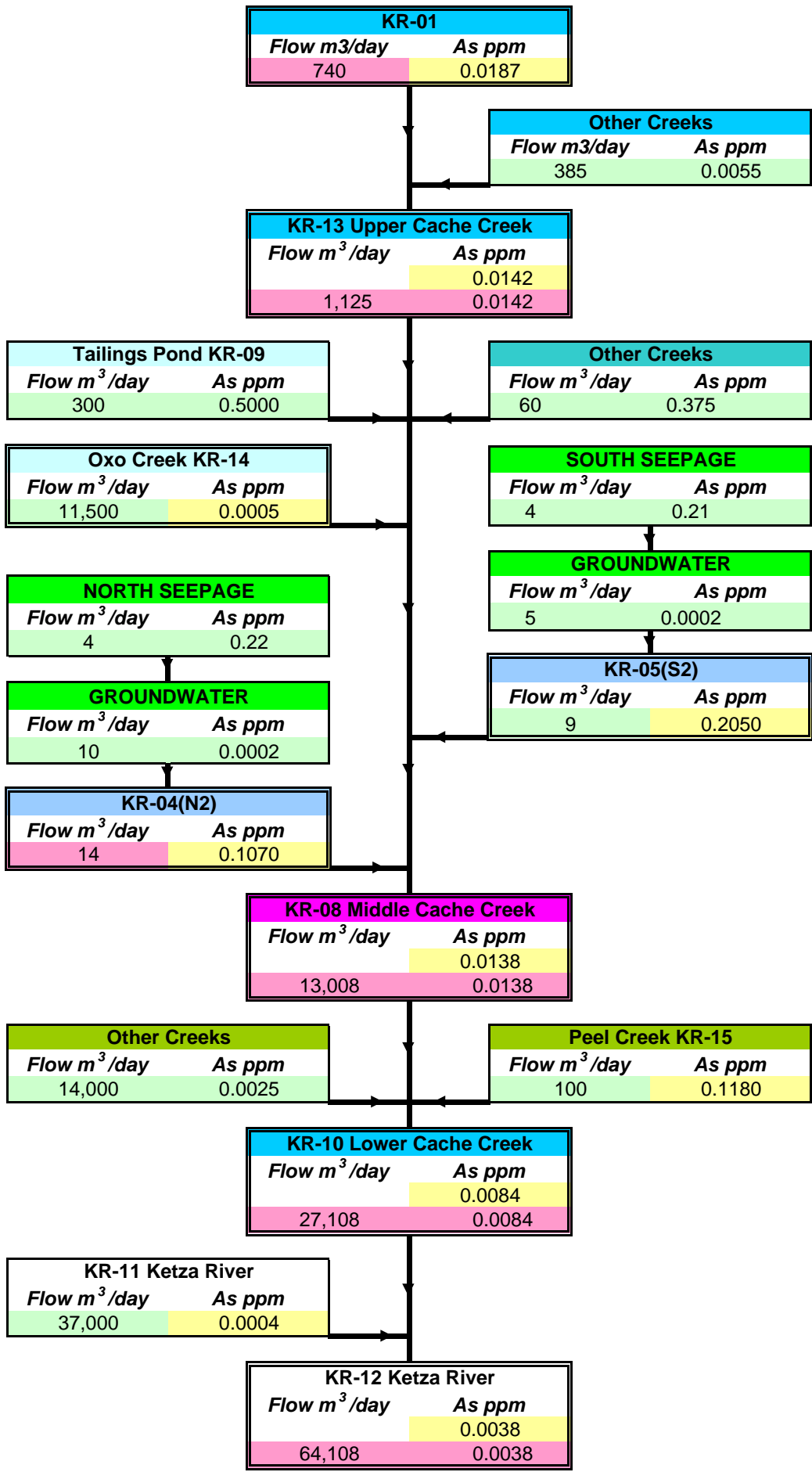
Measured value
Calculated value
Assumed Value



## WATER BALANCE MODEL (January)

### Maximum Allowable Flow & Concentration From Tailings Pond

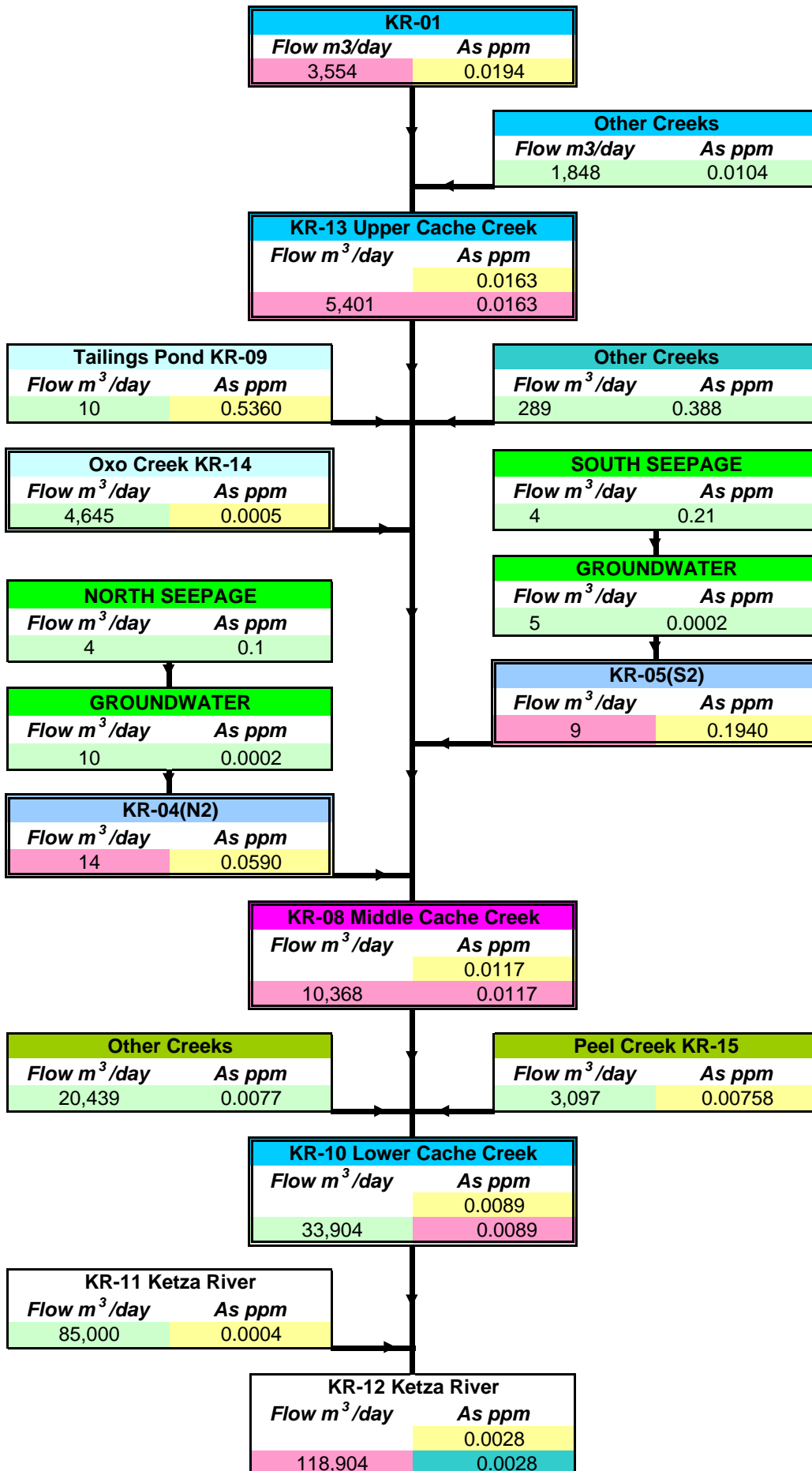
Measured value
Calculated value
Assumed Value



**WATER BALANCE MODEL (October)**

Assumed Minimum Flow From Tailings Pond and Measured Concentration

Measured value
Calculated value
Assumed Value



WATER BALANCE MODEL (October)

Maximum Allowable Flow & Concentration From Tailings Pond

Measured value
Calculated value
Assumed Value

