Appendix A

WESA 2008, James Property Hydrology and Water Balance, (Section 4.1.4) of the Environmental Impact Statement for Labrador Iron Mines Ltd. pp.19.

JAMES PROPERTY HYDROLOGY and WATER BALANCE

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1.0 HYDROLOGY

This report is an excerpt from a section on hydrology that will be included in the Environmental Impact Statement (EIS) report currently being prepared by Labrador Iron Mines (LIM) for submission to the Department of Environment and Conservation, Government of Newfoundland and Labrador. Discussions with the Department of Fisheries and Oceans (DFO) at a meeting in St. John's Newfoundland and Labrador on September 5, 2007 indicated that a fish habitat assessment report would be required to determine whether a *Section 35(2) Harmful Alteration, Disturbance and Destruction* (HADD) *Authorization* would be required for the proposed mining operation. Two components for this fish habitat assessment report include; the actual physical fish habitat present and the role of groundwater contributions to the Unnamed Tributary as well as a water balance and hydrology report (this report).

This report describes the general hydrological conditions at the James Property and presents flow monitoring data from specific stream monitoring stations installed in June 2008 and monitored until the fall of 2008. A water balance for the James Creek/Bean Lake watershed is also presented, and an assessment is provided of potential impacts to the water balance from pit and beneficiation operations at the James site.

The drainage systems in the area are strongly influenced by the underlying geology. Streams and lakes tend to be oriented northwest/southeast to match the strike of the bedrock units. Watershed boundaries are generally quite clearly defined by exposed bedrock ridges that run in a northwest/southeast direction.

James Property:

The James Property is located at the base of an eastern slope of a significant northwest/southeast trending bedrock ridge (Figure "James Creek/Bean Lake Drainage Area"). Bean Lake is located to the east of the site and is the closest lake to the James Property. This lake is fed by James Creek which enters Bean Lake at its northern-most point. James Creek begins in the area east of Ruth Pit, flows southeast past the south end of Ruth Pit into Slimy Lake, then flows out of Slimy Lake continuing southeast to Bean Lake (Figure "James Creek/Bean Lake Drainage Area"). There are two springs on the James Property that are the source of an unnamed tributary that flows into Bean Lake (Figure "James Springs and Unnamed Tributary")). These springs (and tributary) figure prominently in the hydrological assessment of the James site and to the water balance of the system. Bean Lake outlets from the southeast and flows into a stream that outlets from Lejeune Lake.

WESA installed stream gauges and groundwater monitoring wells around the site in 2008. Stream gauges were installed to collect stream flows into and out of Bean Lake, which is the main surface water feature near the James Property, and to collect flow data from the two springs located on the James Property. Data from the monitoring wells were used to estimate the groundwater component of the water balance for the site.

1.1 WATER BALANCE APPROACH

James Creek and Bean Lake are the focal points for the water balance assessment of the James Property since these are the closest surface water features and because shallow groundwater from the site flows to the east/southeast, toward the lake. The approach taken with respect to the water balance involved measuring surface water flow into and out of the lake, estimating groundwater discharge to the lake, and incorporating evaporation data from available meteorological data sources.

2.0 METHODOLOGY

Methodologies and data sources used in determining the surface water inputs to the water balance are described in this section.

2.1 SURFACE WATER

Velocity-Area Method of Discharge Calculation

The Velocity-Area Method of calculating stream discharge (Q) estimates Q as the product of flow velocity (V) and cross-sectional area (A):

$$Q=(V)(A)$$

In order to calculate the discharge of a channel, the channel cross-section must first be divided into several subsections. A tag line was set up perpendicular to the flow direction at each pre-selected gauging station to ensure accurate measurements of each subsection width. The stream depth was measured at these specific intervals across the stream, which allowed a stream profile to be constructed. From this profile, the cross-sectional area of the stream at the gauging site was determined. The average velocity of the cross-section was measured using the FP101 Global Flow Probe. The methodology outlined in the probe manual (Global Water, 2004) was utilized whereby the probe is moved in a serpentine pattern across the stream cross-section yielding a single average flow velocity. This average velocity was then multiplied by the cross-sectional area to determine stream discharge.

<u>Continuous Stream Depth Measurement</u>

Water level dataloggers were installed at five locations (SG-1, 2, 4, 5, and 8) on June 7, 2008. One additional datalogger was installed at SG-4 on July 7, 2008 to measure barometric pressure. Solinst® Levelogger® Gold Model 3001 and Barologger Gold dataloggers were used. These loggers are equipped with the datalogger, battery, pressure transducer, and temperature sensor. All loggers were programmed to record real-time data every 15 minutes which could be downloaded from the loggers using direct read cables.

Loggers at SG-1, 2, and 8 were installed in natural stream cross-sections using a length of 1.5-inch diameter ABS pipe extended horizontally from one bank to the other, perpendicular to the direction of flow. This pipe not only anchored the Levelogger, but also served as the tag line used for cross-section measurements. A second length of ABS pipe was bolted vertically to the horizontal piece such that it extended down to the streambed. This vertical ABS pipe had holes drilled through it to allow water to pass into and through the pipe in order for the water depth inside the ABS to reflect the water level of the stream. The vertical ABS acted as a sort of "stilling-well" in which the Levelogger was contained. The Levelogger was secured inside the vertical ABS by attaching the direct read cable to it with zip-ties. The direct read cable was attached to the Levelogger and run along the ABS pipe (secured using zip-ties) to the shore where the other end remained on a spool to allow for easier downloading of the Levelogger. Photographs 1 and 2 below show leveloggers set up in a stream.

Photograph 1: SG2 Stream Gauge Levelogger Looking Southeast

Photograph 2: SG1 Stream Gauge Levelogger

Sites SG-4 and 5 required Leveloggers to be mounted in culverts using threaded steel rods. A hole was drilled in the top of the culvert through which the steel rod was inserted until it came in contact with the bottom of the culvert.

Photograph 3: SG4 Levelogger Looking West

2.2 PRECIPITATION

Precipitation was estimated using the meteorological data collected at the Schefferville Airport weather station from May to November 2008. This weather station is located approximately 4 km from the site. A meteorological station was installed at the Houston Property by LIM. The data from the Schefferville station was used because that station is closer to the James Property. Although weather patterns in the area can be extremely localized, over the course of a season, the precipitation at Schefferville would be a reasonable approximation of the amount of rainfall at Bean Lake, given the proximity of the site to the weather station and the similar elevations of each. Furthermore, a comparison of the James Property stream gauge data with the Schefferville precipitation data shows a qualitative correlation between higher levels of precipitation at Schefferville, and higher water levels in the monitored streams (Charts 1-4, below).

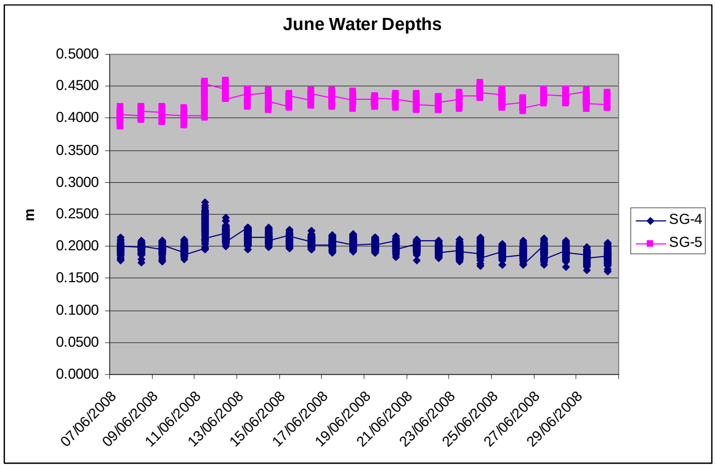

Chart 1: Stream Gauge Data, June 7 – 29

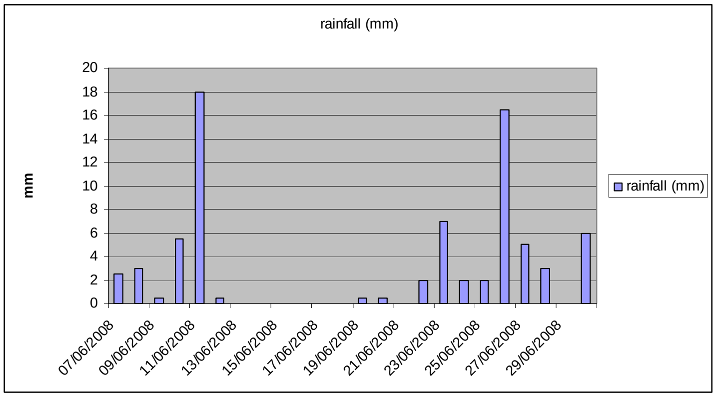

Chart 2: Rainfall Data, June 7- 29

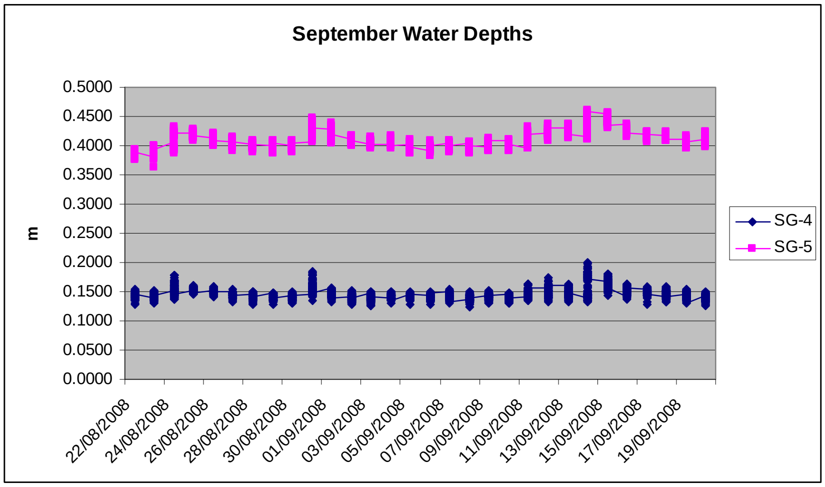

Chart 3: Stream Gauge Data, August 22 – September 19

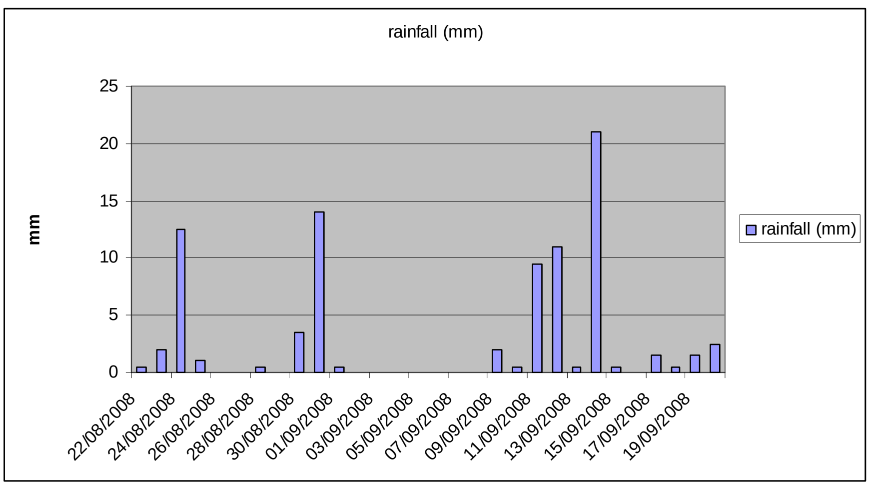

Chart 4: Rainfall Data, August 22 – September 19

3.0 WATER BALANCE

The water balance for Bean Lake can be described in terms of the contributions made by each of the following:

- Surface water inflow and outflow
- Groundwater discharge
- Evaporation

In addition to the continuous monitoring, the balance of flows into and out of the lake was examined as a kind of 'snapshot' at two points in time, one on a day in early spring (June 6) and the other on a day in late fall (Sep 25). These two sets of data were then compared to each other.

Precipitation was not included in the balance due to the fact that the week preceding each of these two days had been dry, as discussed below. Lake storage was also excluded from the balance based on the expectation that storage contribution would be minimal using the snapshot approach.

The components of the water balance are discussed in more detail below.

3.1 SURFACE WATER

Surface water inflow to Bean Lake is primarily through James Creek, which forms the main inlet at the north end, and from an inlet (unnamed tributary) along the west side of the lake that represents the combined flow of the two springs at the proposed mine site. In addition, there are some minor streams flowing into the lake near the south end. Extensive visual observation of the perimeter of the lake did not reveal any other significant inflows to the lake, and it is therefore assumed that the surface water input to the lake is captured by these inflow streams. All of the water in the area of the proposed mine site appears to drain into Bean Lake.

3.1.1 Stream Gauges

Stream gauges were placed in both of the two larger inlets (James Creek and the unnamed tributary) and the outlet, as well as the two springs near the proposed mine site. The stream gauges collected water level readings every 15 minutes. Water level readings were corrected for barometric pressure.

The locations of the stream gauges are shown on Figure "Monitoring Wells and Stream Gauges Locations" and are described as follows:

SG-1: The northern of two springs in the proposed mine area (James North Spring). The stream gauge was installed in a stream about 3.3 m wide, with a depth of approximately 30 cm at its deepest point.
SG-2: The southern spring in the proposed mine area (James South Spring). This small stream is approximately 90 cm wide, with a depth of about 20 cm.
SG-4: The combined drainage of the two springs (unnamed tributary), just before it enters Bean Lake, passes through a culvert (formerly a 24" round culvert, now deformed such that the sides in the lower portion form a V-shape).
SG-8: The main inflow to Bean Lake (at the north end of the lake) is James Creek, a stream approximately 2.9 m wide and 30 cm deep.
SG-5: The outflow from Bean Lake passes through a 12 ft corrugated steel culvert.

In addition, measurements of cross-sectional areas and stream velocities were made on July 30, 2008 at the two small streams near the south end of Bean Lake (XS-1-N and XS-2-S).

3.1.2 Stream Velocities

Stream velocities were measured during three field visits, on June 5 & 6, July 30 and September 25 & 26.

June measurements were collected during spring high levels following a period of little precipitation; July measurements followed a heavy rain; and late September measurements would be expected to represent the seasonal low. Despite these variations in conditions, measured flow velocities did not vary by more than 20% over the course of the season. The measured velocities are presented in Table 1, below.

Table 1: Measured Stream Velocities

Stream Gauge	Location	Jun-06	Jul-30	Sep-25	mean
		m/s	m/s	m/s	m/s
SG-1	James North spring	0.09	0.07	0.05	0.07
SG-2	James South spring	0.34	0.32	0.41	0.36
SG-4	Combined spring flow, unnamed tributary, at inlet to Bean Lake (culvert)	1.31	1.49	1.24	1.35
SG-8	James Creek, primary Bean Lake inlet	0.91	0.74	0.88	0.84
XS-1-N	Minor stream (culvert)		0.98		0.98
XS-2-S	Minor stream (culvert)		0.73		0.73
SG-5	Bean Lake outlet (culvert)	1.52	1.41	1.30	1.41

3.1.3 Stream Flows

Flow in the surface streams was calculated based on velocity measurements collected on June 5 & 6, July 30 and September 25 & 26. The measured flows in the streams are summarized in Table 2, below.

Table 2: Measured Flows

		June 6	July 30	Sep 25
Stream Gauge	Location	m^3/min	m^3/min	m^3/min
SG-1	James North spring	3.3	2.0	1.5
SG-2	James South spring	2.2	1.6	2.7
SG-4	combined spring flow, unnamed tributary, at inlet to Bean Lake (culvert)	2.4	2.4	1.2
SG-8	James Creek, primary Bean Lake inlet	42.1	32.1	41.8
SG-5	Bean Lake outlet (culvert)	61.0	56.1	54.4

Maximum, minimum and mean flows were calculated based on a combination of stream gauge data and measured values. The maximum flow was calculated using the highest water level (either measured or recorded by the stream gauge) and the maximum velocity. The minimum flow was similarly calculated using the lowest water level (either measured or recorded by the stream gauge) and the minimum velocity. Mean flows were calculated using the average depth recorded by the stream gauge or the average measured depth, and the average of the three measured velocities. These values are presented in Table 3, below.

Table 3: Maximum, Minimum and Mean Flows

		Max	Min	Mean
Stream Gauge	Location	m³/min	m³/min	m³/min
SG-1	James North spring	3.4	1.1	2.0
SG-2	James South spring	2.7	1.6	2.1
SG-4	combined spring flow, unnamed tributary, at inlet to Bean Lake (culvert)	3.2	0.9	1.6
SG-8	James Creek, primary Bean Lake inlet	48.6	19.7	26.3
SG-5	Bean Lake outlet (culvert)	72.8	41.5	55.9

3.1.4 Periods of Low Precipitation

Average rates of precipitation in the area, based on data collected from 1949 until 2007, falls in the range of 2.6 – 3.9 mm/day (or 19 - 27 mm/week), for the months of June through October (see Table 4).

Table 4: Meteorological Data - Daily Averages (1949 - 2007)

Month	Min Temp (C)	Max Temp (C)	Mean Temp (C)	Rain (mm)	Snow (mm)	Total Precipitation (mm)
Jun	3.4	14.0	8.73	2.41	0.24	2.65
Jul	7.8	17.5	12.65	3.20	0.01	3.21
Aug	6.8	15.7	11.25	2.97	0.07	3.04
Sep	2.1	9.6	5.83	2.98	0.56	3.53
Oct	-4.0	2.1	-0.96	2.44	1.49	3.93

In order to determine the water balance for Bean Lake, periods of very low precipitation have been examined. Without input from precipitation and runoff, the water balance consists of surface water inputs, groundwater inputs, and evaporation.

Stream measurements were collected on June 5 & 6, which was at the end of a relatively dry period (5 mm of precipitation in the week preceding June 5, and an additional 1.5 mm on June 6), as compared to the weekly average for June of approximately 19 mm/week. June 18 also marked the end of a seven-day period of very little precipitation (0.5 mm). The stream water levels at SG-4 were very similar on both June 6 and June 18, and stream velocities did not vary a great deal over the entire season; similarly for SG-5. Flows calculated for early June are therefore considered to represent a period of minimal precipitation in June.

Similarly, September 8 marked the end of a seven-day dry period (0 mm of precipitation). Stream measurements were taken on September 25 and 26, which also marked the end of a period of low precipitation (4.5 mm over the preceding seven days). The stream water levels at SG-4 were very similar on both September 8 and September 25/26 (Chart 5), and similarly at SG-5; flows calculated for late September are considered representative of a period of minimal precipitation in September.

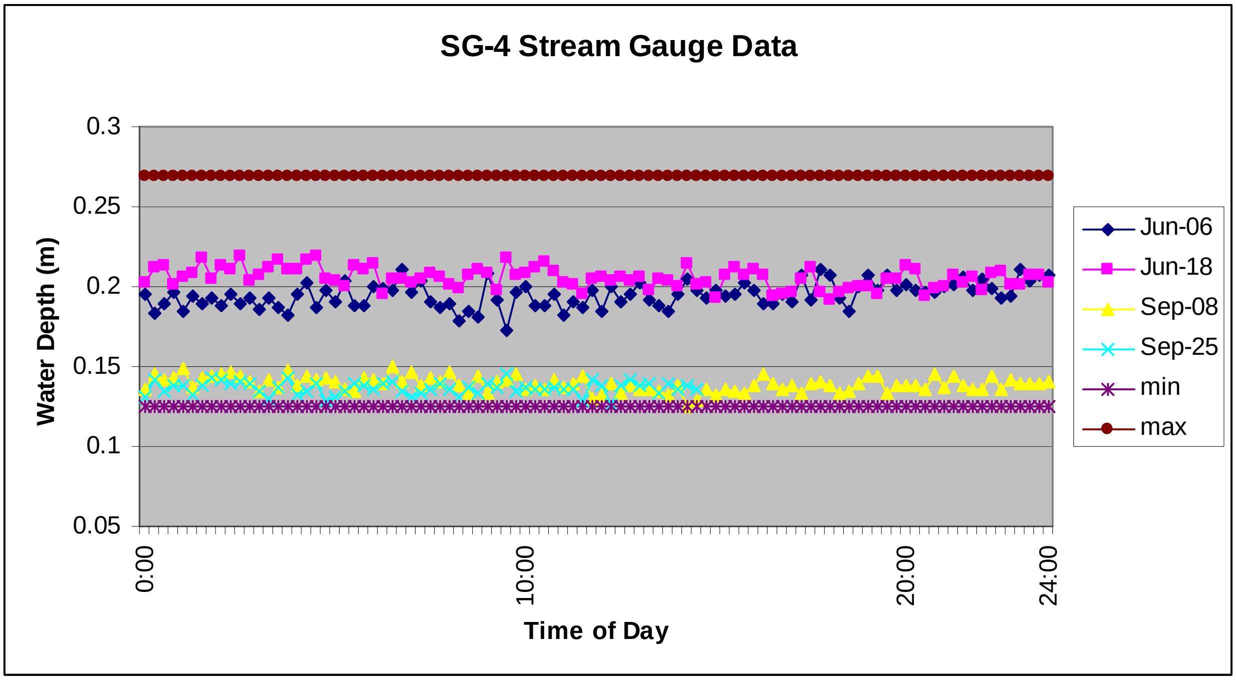

Chart 5: SG-4 Stream Gauge Data on June 6 & 18, Sep 8 & 25

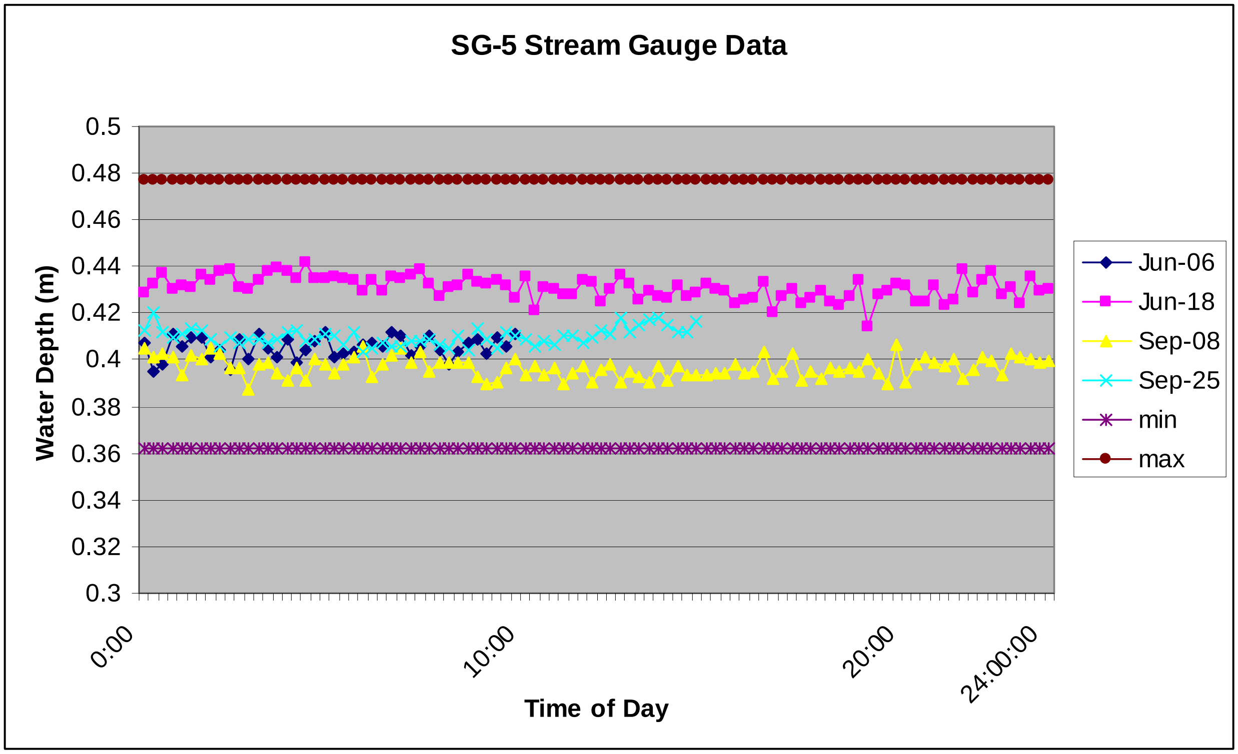

Chart 6: SG-5 Stream Gauge Data on June 6 & 18, Sep 8 & 25

3.2 Groundwater Flow

An estimate of the groundwater discharge to Bean Lake was made using information obtained during a hydrogeological assessment of the site. This assessment involved installing a total of 27 groundwater monitoring wells at 8 well nest locations across the property, conducting single well response testing to determine hydraulic conductivity, conducting a constant discharge pumping test as a further estimate of hydraulic conductivity, sampling the wells for chemical analysis, and measuring groundwater elevations to determine hydraulic gradients. The locations of the wells are shown on Figure "Monitoring Locations and Stream Gauges Locations".

Groundwater discharge to the west side of Bean Lake (from the James property side of the lake) was approximated using:

$$Q = kiA,$$

Where Q = Groundwater Flux
K = Hydraulic Conductivity
A = Cross sectional area of flowpath

The groundwater discharge estimate is an approximation and does not include any groundwater flow that may discharge to the lake from the north, south or east sides of the lake. Based on the topography, the groundwater contributions to the lake from these directions are thought to be much less than the flow from the west.

The mean hydraulic conductivity measured from single well response testing and from pumping tests conducted on pumping wells located southeast of the James North Spring was determined to be 2.69×10^{-4} m/sec. The estimated horizontal hydraulic gradient of groundwater monitoring wells installed in the shallower zone at the James site (the zone most likely to potentially discharge to Bean Lake) was determined to be 0.08. The cross sectional area of the groundwater flow path along the west side of Bean Lake was roughly estimated to be 15000 m^2. Based on these input values the groundwater discharge to the lake from the James Property side was estimated to be approximately 19 m^3/min.

3.3 EVAPORATION

Evaporation in this case includes all evaporation directly from the surface of Bean Lake.

According to the Water Resources Atlas of Newfoundland, the mean annual potential evapo-transpiration in the area falls in the range of 375 – 400 mm. Evaporation from lakes in Newfoundland and Labrador falls in the range of 300 – 600 mm. Based on this information, it was assumed that the evaporation from Bean Lake would occur at the rate of 400 mm/year.

It is also assumed that all of the evaporation takes place during the period when the lake is not frozen. There are approximately 185 ice-free days in the region.

The area of Bean Lake is 547,760 m^2. Based on this area and an evaporation rate of 400 mm in 185 days, the loss from Bean Lake due to evaporation is estimated to be 0.8 m^3/min.

4.0 JAMES CREEK/BEAN LAKE WATER BALANCE SUMMARY

The combined inflows to Bean Lake (surface and groundwater) and the combined outflows (surface water flow and evaporation) are presented in Table 5 and Charts 7 & 8, below.

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Table 5: Water Balance Summary

Stream Gauge	June m3/min	Sep m3/min
XS-1-N	0.4	0.2
XS-2-S	2.2	1.1
SG-4 (Un-named tributary)	2.4	1.2
Groundwater Discharge	18.9	18.9
SG-8 (James Creek)	42.1	41.8
TOTAL INFLOW	66.0	63.2
Evaporation	0.8	0.8
SG-5	61.0	54.4
TOTAL OUTFLOW	61.8	55.2
Difference	4.2	8.0

The difference between the total inflow and outflow amounts is assumed to represent the cumulative error in the measurements and estimations that make up the components of the water balance. The June values balance very closely while the balance for September is not as close. The total inflow values to Bean Lake were very consistent between the June and September 2008 measurement periods. The component with the greatest unknown degree of accuracy is the groundwater flux, because the cross-sectional area of flow was determined based on an estimate of the width and depth of the groundwater flowpath that discharges to Bean Lake. In reality, the area of this flowpath may differ from the estimate. Notwithstanding this estimate, the overall water budget balanced quite closely giving a measure of confidence in the groundwater estimate. Additional groundwater assessment work will be conducted in 2009 to refine the dewatering requirements.

The outflow estimate from Bean Lake was lower in September than in June; it is possible that the groundwater discharge to Bean Lake decreased over the course of the summer and/or that water from the lake was lost to groundwater later in the season.

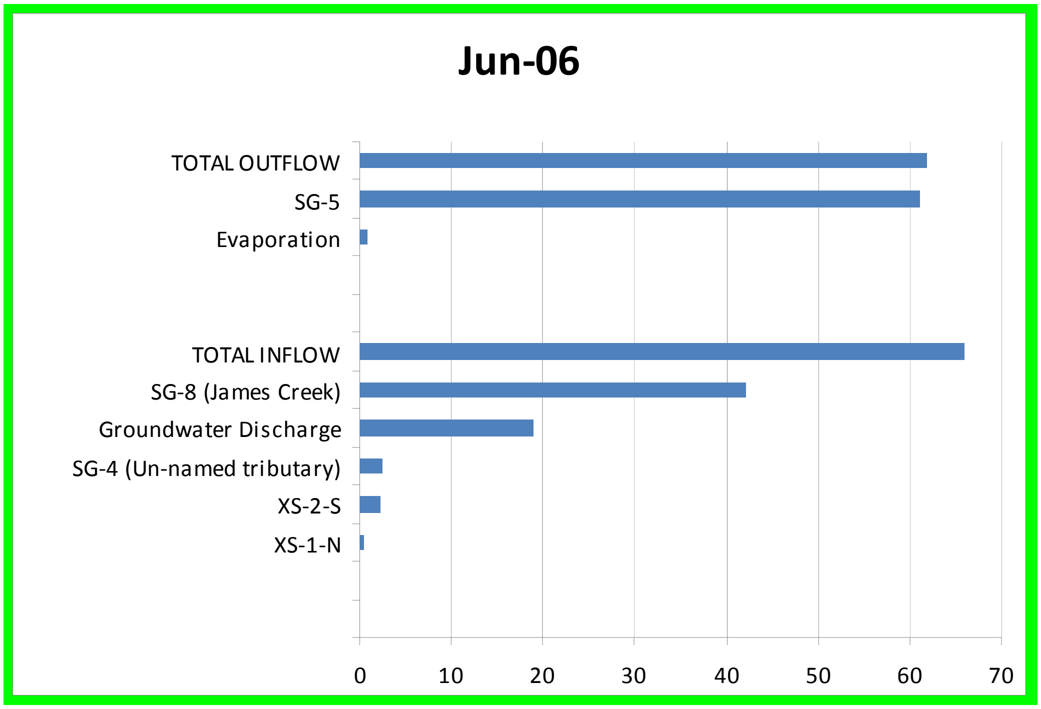

Chart 7: Components of the Water Balance for June 6

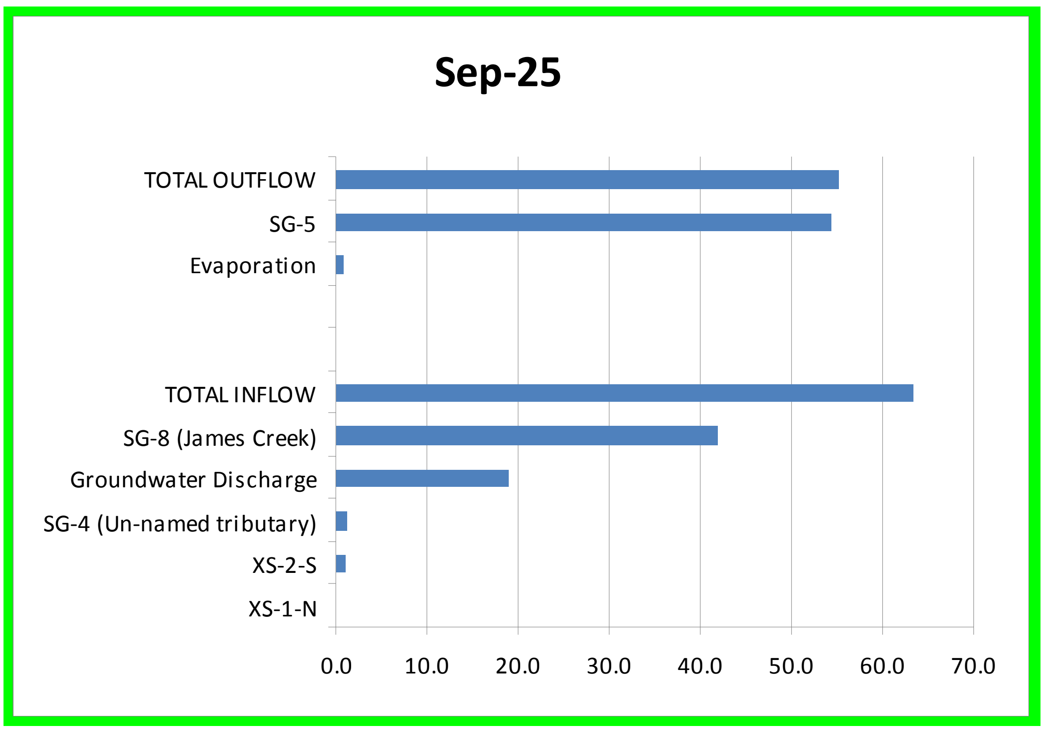

Chart 8: Components of the Water Balance for September 25

Overall, the June and September water balance 'snapshots' were quite similar: the flows were similar, and the relative contributions of the various components in the balance were similar. They are therefore considered to be representative of the entire ice-free season.

Comparison of Measured Flow Rates to Theoretical Rates – James Creek/Bean Lake Watershed:

Theoretical maximum runoff (R) estimates for the James Creek/Bean Lake watershed can be made by determining inputs to the watershed from precipitation (P) and subtracting the potential evapotranspiration (ET) based on the area of the watershed and published P and ET rates for the area. This approach assumes that any infiltration that occurs eventually discharges back to surface further along in the system.

The area of the watershed is estimated to be 1305 hectares. Precipitation data obtained from Environment Canada for the area for the period of 1949 to 2007 indicates average annual precipitation of 775 mm. A potential ET rate for the area of 375 mm was obtained from the Newfoundland and Labrador Water Atlas. Using these values yields an average annual runoff value of 5222504 m^3. This works out to 28230 m^3/day using a six month period as a basis and 14308 m^3/day over a twelve month period. These maximum theoretical values are considerably lower than the stream flow rates that were measured in James Creek from June to October 2008 if the measured flow rates are extrapolated over a full year.

Stream flow measurements over the spring/summer/fall of 2008 appear to represent seasonally above average flow conditions and the flow rates drop substantially during the winter months. Longer term full season monitoring will be undertaken in the future to confirm these conditions.

5.0 IMPACT OF JAMES PIT DEVELOPMENT ON WATER BALANCE

5.1 Pit Dewatering Impacts on James Springs and Unnamed Tributary:

The approximate locations of the proposed James Pits (North and South) are shown on Figure "Proposed James Pit and Dewatering Wells". Pit dewatering will be required to lower the water table in the immediate vicinity of the pits to allow mining to occur. Dewatering will be achieved using primarily perimeter dewatering wells and, as required, in pit sumps. Given the proximity of the springs to the pits (North Spring is between the two proposed pits and the south spring is within the proposed James South Pit), the lowering of the water table in response to pit dewatering is expected to impact the flow from the James North and James South Springs. Since the springs are the source of flow in the unnamed tributary, the interception of flow from the springs by pit dewatering will likely lead to a significant reduction and perhaps even complete cessation of flow from the unnamed tributary unless steps are taken to replace the lost flow. The most appropriate way to manage this is to divert a portion of the water pumped from the groundwater dewatering back to the unnamed tributary to replace the groundwater that, under normal circumstances, would discharge from the two springs.

Based on current pumping test data, it is expected that water from the James Pit dewatering system will need to be directed to a sediment removal system or settling pond system to remove suspended solids before discharge to the natural environment. Anecdotal information (Don Hindy, former IOC engineer, December 2008) has indicated that historical groundwater observations were that the groundwater eventually became quite clear. However, a conservative approach will be taken to reduce TSS prior to the entrance of this water back into the nearby water systems.

The maximum, minimum, and mean flows from the James North and James South Springs over the June to October recording period are summarized below.

Flow	James North Spring – SG1	James South Spring – SG2
Maximum (m^3/min)	3.4	2.7
Minimum (m^3/min)	1.1	1.6
Mean (m^3/min)	2	2.1

Flow from the James North Spring forms the upper end of an unnamed tributary that flows southeast, accepts additional flow from the James South Spring, and ultimately discharges into Bean Lake (Figure 'James Springs and Unnamed Tributary"). Flow rates for the unnamed tributary were also recorded from June to mid October 2008 at a location just before it discharges to Bean Lake (SG4). The maximum, minimum, and mean flow rates for this location are summarized below.

Flow	Unnamed Tributary at Bean Lake – SG4
Maximum (m^3/min)	3.2
Minimum (m^3/min)	0.9
Mean (m^3/min)	1.6

The flow rate from SG4 (downstream end of the tributary) was always less than the combined flow from the two springs, indicating that water in the tributary infiltrates into the ground as it flows toward Bean Lake.

Based on the locations of the James North and James South Springs, the proposed outline of the James Pit, and the observations made during pumping tests at the site, it is highly probable that dewatering from the proposed pit will affect the flow rates from the springs, and in all probability the springs will stop flowing at some point during the development of the pit without the supplementation of water back into the fish habitat sections of the tributary. The mitigation strategy will involve diverting a portion of the perimeter groundwater well water to the unnamed tributary after running the water through a settling/filter system to remove suspended solids. The targeted redirected water flow rate to the tributary during operations would be the maximum rate measured from the tributary (SG4 flow data) during the 2008 monitoring period, while the average flow rate measured would be used during winter shutdown periods.

Groundwater is the source of water that discharges from the springs, therefore replacing the spring water with water from the dewatering wells means that the same source of water will be feeding the unnamed tributary before, during and after site development.

5.2 Effects of Dewatering Water on Bean Lake:

SNC Lavalin is conducting engineering work for the proposed mine. They have estimated that the cumulative amount of groundwater pumped by the pit dewatering system will be 113 m^3/min. Approximately 8 m/min of this water will be diverted to the unnamed tributary to offset water lost from the springs by dewatering, therefore approximately 105 m^3/min of dewatering water will be sent to Bean Lake via the inlet from James Creek. The area of Bean Lake is approximately 54 ha, therefore a discharge rate of 113 m^3/min only adds about 0.02 cm/min to the hydraulic loading of Ruth Pit and Bean Lake. The hydraulic impact to Bean Lake is considered to be negligible.

5.3 Effects of Process Water Use:

An additional item in the James Creek/Bean Lake water balance includes process water used to wash the ore prior to shipment. It is estimated that 505 m^3 of water per hour will be required. The best source for this water is considered to be pit dewatering water that can be diverted from the James pit dewatering system. This process water (reject fines wash water) will contain approximately 21 % solids after washing, therefore it will be pumped to Ruth Pit, located north of the James Property for settling. This additional volume (505 m^3/hour) will have a negligible hydraulic impact on Ruth Pit, which has an area of 61 hectares and a depth of 120 m (hydraulic loading of 0.001 cm/min). Ruth Pit has more than adequate capacity to accommodate this additional flow and no hydraulic impacts to James Creek are anticipated.

6.0 REFERENCES

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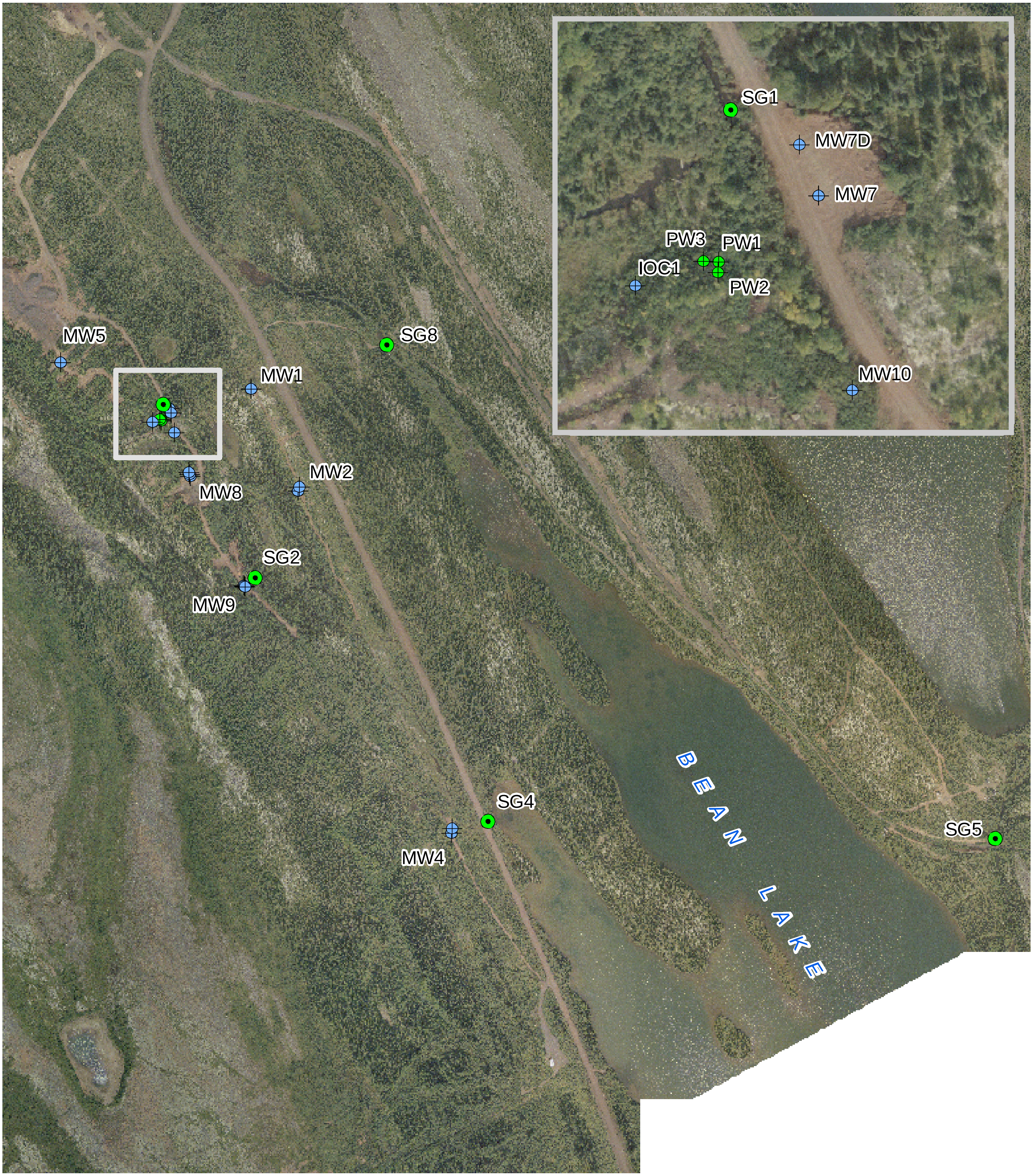

Figure xx: Monitoring Wells and Stream Gauges Locations

LEGEND:

- Bedrock Wells
- Pumping Wells
- Stream Gauges

Project Number:
K-B6836

Date: November 27, 2008

Data Source:
Eagle Mapping

0 25 50 100 150 200
Meters

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LEGEND

- Flow Direction
- James Creek / Bean Lake Watershed Boundary

REFERENCE

Note:
Data Source : Geomatics Canada 1:50 000 NTS, Google Earth
Coordinate System : UTM NAD83 Zone 19 North

0 75 150 300 450 600
Meters

1:16,000

PROJECT

LIM SCHEFFERVILLE

TITLE

James Springs and Unnamed Tributary

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A Better Environment For Business

PROJECT No. KB6832		
DESIGN	JFD	
GIS	JFD	24/11/2008
CHECK	BOC	24/11/2008
REVIEW		

FIGURE xx

FIG2_LIM_DFO