

# IZOK LAKE PROJECT MARCH 10, 2011

## 2011 WATER BOARD ANNUAL REPORT REPORTING ON 2010 ACTIVITY

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## **Contents**

Project Summary	1
Water Use	5
Reclamation	7
T*	
Figures and Tables	
Table I : 2010 Drilling Summary	1
Table II : Water Sample Locations	6
Figure I : General Location Map	
Tigure II . Detailed Dilli I lail	J
Appendices	
Appendix I : Water Sample Location Photos6	
Appendix II : Water Sample Results9	1
Appendix III : Spill Contingency Plan	)
Appendix IV : Abandonment and Restoration Plan35	5

### 1 Project Summary Izok

The Minerals and Metals Group (MMG) is a mining development company that has acquired the mineral rights for the Izok property, and portions of the Hood River property from Oz Minerals.

The Izok property is a VMS style polymetalic deposit hosted in felsic rocks, the primary interest being its copper and zinc content. The property consists of three mineral leases and three claims (currently being processed). It is located approximately 300 km north of Yellowknife (see Figure I) and is situated on both Crown and Inuit Owned Land.

The Izok Lake property has been well documented and explored by various groups over its 40 year history. Although activity in the region is documented since the 1960's, the first significant discovery was made in the mid-1970's by Texas Gulf. Since then Izok Lake has played host to a number of interested groups, including Minnova and Inmet prior to the involvement of Wolfden and the subsequent series of takeovers that led the property to MMG.

The 2010 exploration program at Izok included diamond drilling and surface geophysics, as well as mapping and sampling. Drilling is summarized in Table I below. With the exception of one drill pad (IR-10-01) all drilling was carried out on ice over lake-bottom targets. In total 5 holes were drilled (see Table I). Land sump locations were established in natural depressions, but in some cases not utilized, as circulation was lost during drilling (water utilized in drilling escaped at depth in fractures within the rock and did not return to surface). Water samples were taken at all of the drill pad locations prior to and following completion of the drill holes. Analysis of these samples was completed by ALS Chemex labs and is reported in Appendix II of this report along with their locations (see Table II). In addition, photos were taken of each water sample location and these have also been included (Appendix II).

Table I: Summary of Drilling 2010 Izok Lake

Hole_ID	Easting	Northing	Elev.	Datum	Zone	<b>Sump Easting</b>	<b>Sump Northing</b>
HEN-444	417252.2	7279973.5	417.3	NAD83	12N	417363	7279983
HEN-445	417317	7280318	417.3	NAD83	12N	417383	7280281
HEN-446	416605	7280651	417.3	NAD83	12N	416339	7280506
HEN-447	417025.3	7280579.2	417.3	NAD83	12N	417090	7280746
IR10-01	411880	7281990	412	NAD83	12N		

Figure I : Location Map Izok Lake

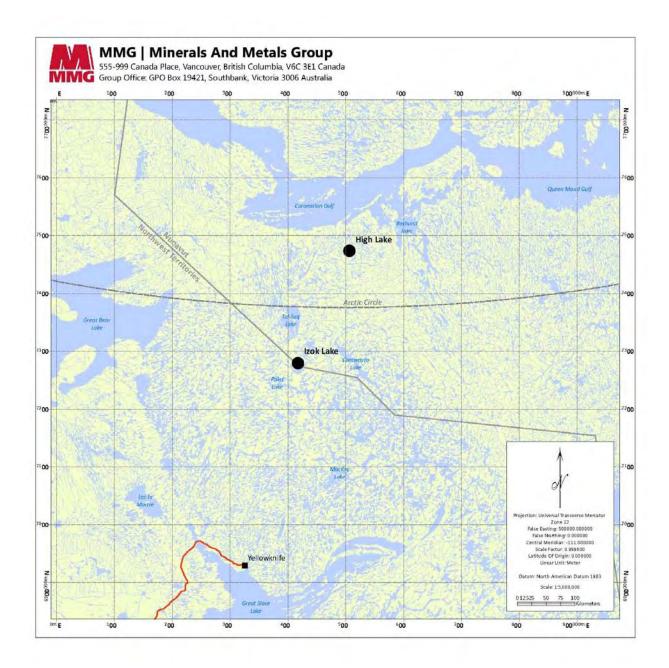
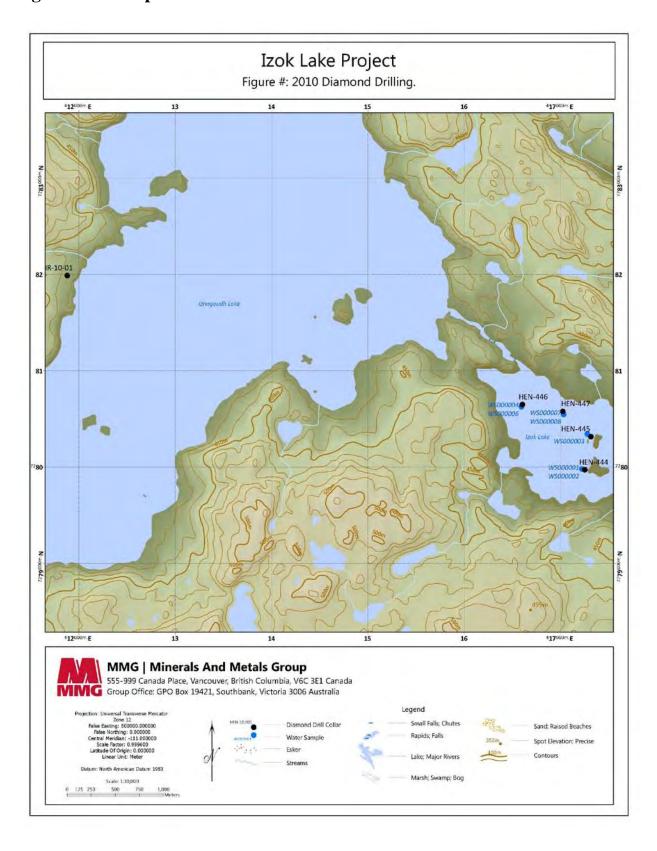


Figure II: Drill pad locations 2010 Izok Lake



This year, MMG is proposing geophysics and an exploratory drilling program in the vicinity of Izok Lake and on the Hood Property, located in Nunavut. These programs will begin in mid March 2011 and operate for about six months. Drilling at Izok is expected to be more or less continuous during this period. The scope of the drilling program will be related somewhat to success in early holes.

In addition to mineral exploration activities, we anticipate that environmental baseline work and engineering studies will be carried out concurrent with the planned diamond drilling and prospecting.

The planned activities are necessary to increase the technical understanding of the nature of the mineral deposits. The long-term objective of any mineral exploration program is to progress the project towards feasibility studies and eventual development of a producing mine. In addition to the mineral exploration work, environmental baseline studies will be undertaken to obtain the necessary background data and to improve the knowledge of the physical environment of the property. This is in preparation for a future submission of an Environmental Impact Statement in support of permit applications for mine development and operation.

#### 2 Water Use

Water use on the Izok project is resultant from two activities; diamond drilling and camp operations. Last season's diamond drilling program began March 30, 2010 and concluded May 25, 2010, and consisted of only one drill. Water pumped to the drill is calculated by average pumping rates of supply pumps and is  $25 \, \mathrm{m}^3$  per drill per day. Of this an estimated 30% is used by the drill for drilling operations, the remainder, which is clean unused water is allowed to flow back to the water table.

The Ham Lake Camp utilizes water from Ham Lake. The water consumption was calculated by keeping record of the number of times the storage tanks were filled. The known volume of the storage tanks was multiplied by number of times each was filled. The camp consumed an average of 750 gallons of water per day during operation. A water meter was purchased for the camp and the data collected is presented in Appendix II.

## 3 Unauthorized Discharges

No spills or unauthorized discharges occurred during the 2010 exploration program and reporting period.

### 4 Spill Contingency Plan / Abandonment and Restoration Plan

The Izok Spill Contingency Plan was updated at the conclusion of the reporting period, with minor changes to personnel listed and contact numbers provided. Additional materials were added to the MSDS sheets where needed. The updated Spill Contingency and Abandonment and Restoration plans have been attached to this report as Appendix IV and V.

#### 5 Reclamation Work

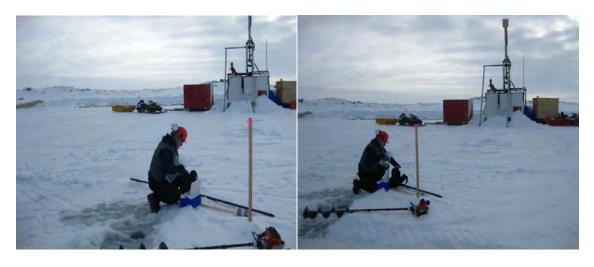
Reclamation work occurs at each diamond drilling site on an ongoing basis during the exploration program. Each site is returned to its natural state with as little disturbance as possible at the conclusion of each drill hole. Drilling sites located on frozen lake surfaces are scraped clean and any contaminated snow is deposited in a land based sump location or contained in drums. No reclamation work was carried out at the Ham Lake camp site during the reporting period.

## 6 Appendices

**Table II : Water Sampling Locations** 

Sample_ID	UTM_East	UTM_North	UTM_Datum	UTM_Zone	CollectionDate
WS000001	417222	7279982	NAD83	12	28-Mar-10
WS000002	417222	7279982	NAD83	12	16-Apr-10
WS000003	417279	7280345	NAD83	12	16-Apr-10
WS000004	416595	7280627	NAD83	12	30-Apr-10
WS000005	417269	2780337	NAD83	12	30-Apr-10
WS000006	416595	7280630	NAD83	12	10-May-10
WS000007	417035	7280549	NAD83	12	9-May-10
WS000008	417035	7280549	NAD83	12	19-May-10

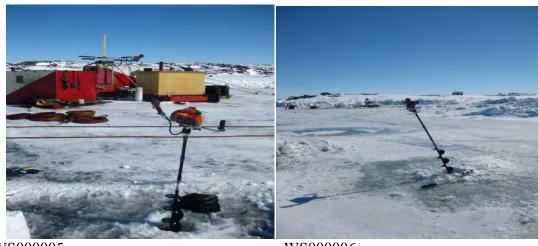
**Appendix I: Water Sample Location Photos** 



WS000001



WS000003 WS000004



WS000005 WS000006



WS000007 WS000008

## **Appendix II: Water Sampling Results**

# ALS Laboratory Group



#### **Environmental Division**

		Certificate of	f Analysis	
MMG RESOURCES	INC		Report	Date: 06-APR-10 16:36 (MT)
ATTN: RON FENLO	ON		Ve	rsion: FINAL
200 - 1159 ALLOY D	RIVE			
THUNDER BAY ON	P7B 6M8			
_ab Work Order #:	L873752		Date I	Received: 01-APR-10
Project P.O. #: Job Reference:	10-00433			
Legal Site Desc: CofC Numbers:	08-011525			
Other Information:				
Comments:				
	47.4	100		
	91	1 Que		
	Maure	een Olinek		

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY. ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

## ALS LABORATORY GROUP ANALYTICAL REPORT

<0.00010  0.029 <0.00040 <0.00040 0.0036 <0.0010 <0.0050 <0.00050 <0.0050	0.00010 0.00040 0.00040 0.0030 0.0010 0.050	mg/L mg/L mg/L mg/L mg/L		05-APR-10 05-APR-10 05-APR-10 05-APR-10	R1230707 R1230415 R1230415 R1230415
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0.029 <0.00040 <0.00040 0.0036 <0.0010 <0.050 =0.000050	0.010 0.00040 0.00040 0.0030 0.0010	mg/L mg/L mg/L mg/L		05-APR-10 05-APR-10 05-APR-10	R1230415 R1230415 R1230415
0.029 <0.00040 <0.00040 0.0036 <0.0010 <0.050 =0.000050	0.010 0.00040 0.00040 0.0030 0.0010	mg/L mg/L mg/L mg/L		05-APR-10 05-APR-10 05-APR-10	R1230415 R1230415 R1230415
0.029 <0.00040 <0.00040 0.0036 <0.0010 <0.050 =0.000050	0.010 0.00040 0.00040 0.0030 0.0010	mg/L mg/L mg/L mg/L		05-APR-10 05-APR-10 05-APR-10	R1230415 R1230415 R1230415
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<0.00040 <0.00040 0.0036 <0.0010 <0.050 <0.000050	0.00040 0.00040 0.0030 0.0010	mg/L mg/L mg/L		05-APR-10 05-APR-10	R1230415
<0.00040 0.0036 <0.0010 <0.050 =0.000050	0.00040 0.0030 0.0010	mg/L mg/L		05-APR-10	R1230415
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4.251.252.3	0.0050	mg/L		05-APR-10	R1230415
<0.0020	0.0020	mg/L		05-APR-10	R1230415
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	77777				R1230415
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717 93 1 1	150-270-6				R1230415
	4/10/04			100000000000000000000000000000000000000	R1230415
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1.74.70.74.71	100000000000000000000000000000000000000	- 11			R1230415
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1.07	0.50	mall		05-APR-10	R1228724
	1000000	100		The state of the s	R1228724
C. 10 of 71				2000 0000 0000	R1228724
	1,374,65.7			De 1 2 Bones	R1228724
	1,12,7376.5	1.100			R1228724
200	10.5546	-		Target and the second	R1228724
1.0	3.0	mgrz		0071111-10	11122012
-30	3.0	mn/l		05-APR-10	R1228124
	3,0	ingre.		25,73,17,10	111220124
6.99	0.10	pH		01-APR-10	R1225985
1000	1000000	1.0			R1225985
	0.00012 <0.010 <0.0050 <0.0020 <0.00040 <0.00010 <0.00010 <0.0011 <0.0010 0.00011 <0.0010 1.97 <0.010 1.04 <0.0020 0.54 1.0 <3.0 6.99 22.2	<0.010 <0.0050 <0.0050 <0.0020 <0.00040 <0.00040 <0.00010 <0.00010 <0.00010 <0.050 <0.0010 0.0010 0.0011 0.00011 0.00011 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 0.0010 1.07  <0.010 0.010 1.04 0.10 <0.0020 0.54 0.10 1.0 <3.0 3.0 6.99 0.10	<ul> <li>&lt;0.010</li> <li>&lt;0.0050</li> <li>&lt;0.0050</li> <li>&lt;0.0020</li> <li>&lt;0.0020</li> <li>&lt;0.00040</li> <li>&lt;0.00010</li> <li>&lt;0.0010</li> <li>&lt;0.0040</li> <li>&lt;0.007</li> <li>&lt;0.0040</li> <li>&lt;0.0010</li> <li>&lt;0.0010</li> <li>&lt;0.0010</li> <li>&lt;0.0010</li> <li>&lt;0.0010</li> <li>&lt;0.0020</li> <li>&lt;0.0020&lt;</li></ul>	<0.010 <0.010 <0.0050 <0.0050 <0.0020 <0.0020 <0.00040 <0.00010 <0.00010 <0.00010 <0.00010 <0.00010 <0.00010 <0.0001 <0.0001 <0.0001 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0040 <0.0010 <0.0040 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0010 <0.0020 <0.0020 <0.0020 <0.54 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10 <0.10	<ul> <li>&lt;0.010</li> <li>0.010</li> <li>mg/L</li> <li>0.0050</li> <li>0.0050</li> <li>mg/L</li> <li>05-APR-10</li> </ul>

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

# ALS Laboratory Group



#### **Environmental Division**

Certificate of Analysis

MMG RESOURCES INC

ATTN: RON FENLON 200 - 1159 ALLOY DRIVE

THUNDER BAY ON P7B 6M8

Report Date: 26-APR-10 14:48 (MT)

Date Received: 21-APR-10

Version: FINAL

Lab Work Order #: L879115

10-00433

Project P.O. #: Job Reference:

Legal Site Desc:

CofC Numbers: 08-011526

Other Information:

Comments:

Maureen Olinek Senior Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY. ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS, PLEASE CONTACT THE LAB IF YOU REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

## ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	DL.	Units	Extracted	Analyzed	Batch
L879115-1 WS000002							
Sampled By: CLIENT on 16-APR-10 @ 09:00							
Matrix: WATER							
Total Metals - CCME							
Mercury (Hg) - Total							
Mercury (Hg)-Total	<0.00010		0.00010	mg/L		22-APR-10	R124062
Total Metals in Water by ICPMS (Low)	~0.00010		0.00010	mg/ L		227/11/15/10	N124002
Aluminum (Al)-Total	0.035		0.010	mg/L		22-APR-10	R124070
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		22-APR-10	R124070
Arsenic (As)-Total	0.00041		0.00040	mg/L		22-APR-10	R124070
Barium (Ba)-Total	0.0040		0.0030	mg/L		22-APR-10	R124070
Beryllium (Be)-Total	<0.0010		0.0030	mg/L		22-APR-10	R124070
Boron (B)-Total	<0.050		0.050	mg/L		22-APR-10	R124070
Cadmium (Cd)-Total	F 3 F 3 F 3 F 3 F 3 F 3 F 3 F 3 F 3 F 3		0.000050	100		22-APR-10	R124070
	<0.000050		00.000000000000000000000000000000000000	mg/L		22-APR-10	40,000,000
Chromium (Cr)-Total	<0.0050		0.0050	mg/L		414	R124070
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		22-APR-10	R124070
Copper (Cu)-Total	0.0020		0.0010	mg/L		22-APR-10	R124070
Lead (Pb)-Total	0.00113		0.00010	mg/L		22-APR-10	R124070
Lithium (Li)-Total	<0.010		0.010	mg/L		22-APR-10	R124070
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		22-APR-10	R124070
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		22-APR-10	R124070
Selenium (Se)-Total	<0.00040	1500	0.00040	mg/L		22-APR-10	R124070
Silver (Ag)-Total	<0.00050	DLM	0.00050	mg/L		22-APR-10	R124070
Thallium (TI)-Total	< 0.00010		0.00010	mg/L		22-APR-10	R124070
Tin (Sn)-Total	< 0.050		0.050	mg/L		22-APR-10	R124070
Titanium (Ti)-Total	< 0.0010		0.0010	mg/L		22-APR-10	R124070
Uranium (U)-Total	0.00011		0.00010	mg/L		22-APR-10	R124070
Vanadium (V)-Total	< 0.0010		0.0010	mg/L		22-APR-10	R124070
Zinc (Zn)-Total	0.0100	RRVAP	0.0040	mg/L		22-APR-10	R124070
Total Metals in Water by ICPOES (Low)	and the second		A Alexander			3.3.7.40	7.7
Calcium (Ca)-Total	1.73		0.50	mg/L		23-APR-10	R124146
Iron (Fe)-Total	0.023		0.010	mg/L		23-APR-10	R124146
Magnesium (Mg)-Total	0.87		0.10	mg/L		23-APR-10	R124146
Manganese (Mn)-Total	0.0034		0.0020	mg/L		23-APR-10	R124146
Potassium (K)-Total	0.54		0.10	mg/L		23-APR-10	R124146
Sodium (Na)-Total	≤1.0		1.0	mg/L		23-APR-10	R124146
Miscellaneous Parameters	-1.0			mgre		207111-10	15124140
Total Suspended Solids	<3,0		3.0	mg/L		22-APR-10	R124049
1,100,000,000,000,000	73,0		3,0	mg/L		22-M-10	14124045
pH and Conductivity	6.73		0.10	pH		21-APR-10	R123949
Conductivity (EC)	21.7		0.20	uS/cm		21-APR-10	R123949
879115-2 WS000003	21.7		0,20	doroni	-	21-71-10	K123545
Sampled By: CLIENT on 16-APR-10 @ 09:20							
Matrix: WATER							
Total Metals - CCME							
Mercury (Hg) - Total			W 00010	-C-W		20 455 45	Biologi
Mercury (Hg)-Total	<0.00010		0.00010	mg/L		22-APR-10	R124062
Total Metals in Water by ICPMS (Low)	7244		24.6	- Marie William		00 455 15	43300
Aluminum (Al)-Total	0.030		0.010	mg/L		22-APR-10	R124070
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		22-APR-10	R124070
Arsenic (As)-Total	<0.00040		0.00040	mg/L		22-APR-10	R124070
Barium (Ba)-Total	0.0050		0.0030	mg/L		22-APR-10	R124070
Beryllium (Be)-Total	< 0.0010		0.0010	mg/L		22-APR-10	R124070
Boron (B)-Total	<0.050		0.050	mg/L		22-APR-10	R124070
Cadmium (Cd)-Total	< 0.000050	1	0.000050	mg/L		22-APR-10	R124070

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS LABORATORY GROUP ANALYTICAL REPORT

WS000003   CLIENT on 16-APR-10 @ 09:20   WATER   sin Water by (CPMS (Low)
CLIENT on 16-APR-10 @ 09:20   WATER   S in Water by ICPMS (Low)
WATER
Sin Water by ICPMS (Low)   C(r)-Total   <0.0050
C(Cr)-Total
Total
O-Total   O.0015   O.0010   mg/L   22-APR-10   R1240708   R12407
Total
A-Total
Total
Total
Se -Total
Total
Act   Color
Composition
V)-Total
Description
s in Water by ICPOES (Low) a)-Total 1.71 0.50 mg/L 23-APR-10 R1241464 btal 0.017 0.010 mg/L 23-APR-10 R1241464 (Mg)-Total 0.86 0.10 mg/L 23-APR-10 R1241464 ((Mn)-Total 0.0027 0.0020 mg/L 23-APR-10 R1241464 (K)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (b)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (b)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (b)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (c)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (c)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (c)-Total 0.51 0.10 mg/L 23-APR-10 R1240491 (c)-Total 0.50 0.50 0.50 0.50 0.50 0.50 0.50 0.5
1.71
Detail   D
(Mg)-Total     0.86     0.10     mg/L     23-APR-10     R1241464       (Mn)-Total     0.0027     0.0020     mg/L     23-APR-10     R1241464       (K)-Total     0.51     0.10     mg/L     23-APR-10     R1241464       (b)-Total     <1.0
(Mn)-Total 0.0027 0.0020 mg/L 23-APR-10 R1241464 (K)-Total 0.51 0.10 mg/L 23-APR-10 R1241464 (R)-Total 0.51 1.0 mg/L 23-APR-10 R1241464 (R)-Total 1.0 mg/L 23-APR-10 R1241464 (R)-Total 1.0 mg/L 23-APR-10 R1241464 (R)-Total 1.0 mg/L 22-APR-10 R1240491 (R)-Total 1.0 mg/L 22-APR-10 R1240491 (R)-Total 1.0 mg/L 22-APR-10 R1240491 (R)-Total 1.0 mg/L 21-APR-10 R1240491 (R)-Total
23-APR-10   R1241454
ous Parameters
ous Parameters
ductivity 6.64 0.10 pH 21-APR-10 R1239492
ductivity 6.64 0.10 pH 21-APR-10 R1239492
6.64 0.10 pH 21-APR-10 R1239492
y (EC) 21.2 0.20 uS/cm 21-APR-10 R1239492

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

# ALS Laboratory Group





#### **Environmental Division**

Certificate of Analysis

MMG RESOURCES INC

ATTN: RON FENLON 200 - 1159 ALLOY DRIVE

THUNDER BAY ON P7B 6M8

Report Date: 11-MAY-10 10:35 (MT)

Date Received: 05-MAY-10

Version: FINAL

Lab Work Order #: L883189

10-00433

Project P.O. #:

Job Reference:

Legal Site Desc:

CofC Numbers: 08-011527

Other Information:

Comments:

Maureen Olinek Senior Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY. ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS, PLEASE CONTACT THE LAB IF YOU REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

## ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	DL.	Units	Extracted	Analyzed	Batch
L883189-1 WS000004							
Sampled By: CLIENT on 30-APR-10 @ 11:00							
Matrix: WATER							
Total Metals - CCME							
Mercury (Hg) - Total			P 75			1.5	
Mercury (Hg)-Total	<0.00010		0.00010	mg/L		06-MAY-10	R124951
Total Metals in Water by ICPMS (Low)			3.000.0	11130-2		30 111 10	Distant.
Aluminum (Al)-Total	0.028		0.010	mg/L		08-MAY-10	R125039
Antimony (Sb)-Total	< 0.00040		0.00040	mg/L		08-MAY-10	R125039
Arsenic (As)-Total	0.00086		0.00040	mg/L		08-MAY-10	R125039
Barium (Ba)-Total	0.0037		0.0030	mg/L		08-MAY-10	R125039
Beryllium (Be)-Total	< 0.0010		0.0010	mg/L		08-MAY-10	R125039
Boron (B)-Total	< 0.050		0.050	mg/L		08-MAY-10	R125039
Cadmium (Cd)-Total	<0.000050		0.000050	mg/L		08-MAY-10	R125039
Chromium (Cr)-Total	<0.0050		0.0050	mg/L		08-MAY-10	R125039
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		08-MAY-10	R125039
Copper (Cu)-Total	0.0018		0.0010	mg/L		08-MAY-10	R125039
Lead (Pb)-Total	0.00036		0.00010	mg/L		08-MAY-10	R125039
Lithium (Li)-Total	<0.010		0.010	mg/L		08-MAY-10	R125039
Molybdenum (Mo)-Total	< 0.0050		0.0050	mg/L		08-MAY-10	R125039
Nickel (Ni)-Total	< 0.0020		0.0020	mg/L		08-MAY-10	R125039
Selenium (Se)-Total	0.00062		0.00040	mg/L		08-MAY-10	R125039
Silver (Ag)-Total	0.00018		0.00010	mg/L		08-MAY-10	R125039
Strontium (Sr)-Total	0.00615		0.00020	mg/L		08-MAY-10	R125039
Thallium (Ti)-Total	≥0.00010		0.00010	mg/L		08-MAY-10	R125039
Tin (Sn)-Total	<0.050		0.050	mg/L		08-MAY-10	R125039
Titanium (Ti)-Total	< 0.0010		0.0010	mg/L		08-MAY-10	R125039
Uranium (U)-Total	0.00010		0.00010	mg/L		08-MAY-10	R125039
Venadium (V)-Total	< 0.0010		0.00010	mg/L		08-MAY-10	R125039
Zinc (Zn)-Total	0.0198	RRVAP	0.0040	mg/L		08-MAY-10	R125039
	0.0156	isisvest	0.0040	myrt		00-WV1-10	K 123039
Total Metals in Water by ICPOES (Low) Calcium (Ca)-Total	1.48		0.50	mg/L		06-MAY-10	R124962
Iron (Fe)-Total	0.046		0.010	mg/L		06-MAY-10	R124962
Magnesium (Mg)-Total	0.77		0.10	mg/L		06-MAY-10	R124962
Manganese (Mn)-Total	0.0025		0.0020	mg/L		06-MAY-10	R124962
Potassium (K)-Total	0.0025		0.10	mg/L		06-MAY-10	R124962
Sodium (Na)-Total	<1.0		1.0	mg/L		06-MAY-10	R124962
Miscellaneous Parameters	51,0		3,0	my/L		00-IVIA1-10	K124902
Total Suspended Solids	20.0		2.0			06-MAY-10	5454646
	<3.0		3.0	mg/L		OB-MAT-10	R124948
pH and Conductivity			0.10	-11		05 MAY 10	0104050
Conductivity (EC)	6,64 18.2		0.10	pH uS/cm		05-MAY-10 05-MAY-10	R124858 R124858
And the second second	18.2		0.20	us/cm	-	U5-MAY-IU	R124858
.883189-2 WS000005							
Sampled By: CLIENT on 30-APR-10 @ 12:00							
Matrix: WATER							
Total Metals - CCME							
Mercury (Hg) - Total	0500000		W 3	and a		Telizones.	5.00-00
Mercury (Hg)-Total	<0.00010		0.00010	mg/L		06-MAY-10	R124951
Total Metals in Water by ICPMS (Low)	6300		Name	-		Lacture #	
Aluminum (Al)-Total	0.026		0.010	mg/L		08-MAY-10	R125039
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		08-MAY-10	R125039
Arsenic (As)-Total	0.00092		0.00040	mg/L		08-MAY-10	R125039
Barium (Ba)-Total	0.0037		0.0030	mg/L		08-MAY-10	R125039
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		08-MAY-10	R125039
Boron (B)-Total	< 0.050		0.050	mg/L		08-MAY-10	R125039

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS LABORATORY GROUP ANALYTICAL REPORT

0.000050 0.0050 0.0020 0.0010 0.0010 0.0050 0.0020 0.00040 0.00010 0.0050 0.0010 0.0010 0.0010 0.0040	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10	R1250396 R1250396 R1250396 R1250396 R1250396 R1250396 R1250396 R1250396
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0.0050 0.0020 0.0010 0.00010 0.0050 0.0020 0.00040 0.00010 0.00020 0.00010 0.0010 0.0010 0.00010 0.00010	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10	R1250396 R1250396 R1250396 R1250396 R1250396 R1250396
0.0020 0.0010 0.00010 0.0050 0.0050 0.00040 0.00010 0.00010 0.050 0.0010 0.00010 0.00010 0.00010	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10	R1250396 R1250396 R1250396 R1250396 R1250396 R1250396
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0,010 0.0050 0.0020 0.00040 0.00010 0.00020 0.00010 0.050 0.0010 0.0010 0.0010	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10 08-MAY-10	R1250396 R1250396 R1250396
0.0050 0.0020 0.00040 0.00010 0.00020 0.00010 0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10 08-MAY-10 08-MAY-10	R1250396
0.00040 0.00010 0.00020 0.00010 0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10 08-MAY-10	8.14.5.55.5.5.
0.00010 0.00020 0.00010 0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L mg/L mg/L mg/L mg/L	08-MAY-10	R1250396
0.00020 0.00010 0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L mg/L mg/L mg/L		
0.00010 0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L mg/L mg/L	08-MAY-10	R1250396
0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L mg/L		R1250396
0.0010 0.00010 0.0010 0.0040	mg/L mg/L	08-MAY-10	R1250396
0.00010 0.0010 0.0040	mg/L	08-MAY-10	R1250396
0.0010 0.0040		08-MAY-10	R1250396
0.0040	mg/L	08-MAY-10	R1250396
10.00		08-MAY-10	R1250396
0.50	mg/L	08-MAY-10	R1250396
0.50			-
40.00	mg/L	06-MAY-10	R1249627
0.010	mg/L	06-MAY-10	R1249627
0.10	mg/L	06-MAY-10	R1249627
0.0020	mg/L	06-MAY-10	R1249627
0.10	mg/L	06-MAY-10	R1249627
1.0	mg/L	06-MAY-10	R1249627
17/	1 44	13.7	Sec. 7.
3.0	mg/L	06-MAY-10	R1249485
7.7		F-100-00	
0.10	pH	05-MAY-10	R1248583
0.20	uS/cm	05-MAY-10	R1248583

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

# ALS Laboratory Group





#### **Environmental Division**

Certificate of Analysis

MMG RESOURCES INC

ATTN: RON FENLON 200 - 1159 ALLOY DRIVE

THUNDER BAY ON P7B 6M8

Report Date: 20-MAY-10 10:06 (MT)

Date Received: 13-MAY-10

Version: FINAL

Lab Work Order #: L885983

10-00433

Project P.O. #: Job Reference:

Legal Site Desc:

CofC Numbers: 08-011528

Other Information:

Comments:

Maureen Olinek Senior Account Manager

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY. ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS, PLEASE CONTACT THE LAB IF YOU REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

## ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L885983-1 WS000006							
Sampled By: CLIENT on 10-MAY-10 @ 11:25							
Matrix: WATER							
Total Metals - CCME							
Mercury (Hg) - Total			P 70				
Mercury (Hg)-Total	<0.00010		0.00010	mg/L		17-MAY-10	R125588
Total Metals in Water by ICPMS (Low)	3,335,512		10000				171,444,444
Aluminum (Al)-Total	0.028		0.010	mg/L		18-MAY-10	R125672
Antimony (Sb)-Total	< 0.00040		0.00040	mg/L		18-MAY-10	R125672
Arsenic (As)-Total	0.00052		0.00040	mg/L		18-MAY-10	R125672
Barium (Ba)-Total	0.0031		0.0030	mg/L		18-MAY-10	R125672
Beryllium (Be)-Total	< 0.0010		0.0010	mg/L		18-MAY-10	R125672
Boron (B)-Total	< 0.050		0.050	mg/L		18-MAY-10	R125672
Cadmium (Cd)-Total	< 0.000050		0.000050	mg/L		18-MAY-10	R125672
Chromium (Cr)-Total	< 0.0050		0.0050	mg/L		18-MAY-10	R125672
Cobalt (Co)-Total	< 0.0020		0.0020	mg/L		18-MAY-10	R125672
Copper (Cu)-Total	0.0025		0.0010	mg/L		18-MAY-10	R125672
Lead (Pb)-Total	0.00018		0.00010	mg/L		18-MAY-10	R125672
Lithium (Li)-Total	< 0.010		0.010	mg/L		18-MAY-10	R125672
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		18-MAY-10	R125672
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		18-MAY-10	R125672
Selenium (Se)-Total	<0.00040		0.00040	mg/L		18-MAY-10	R125672
Silver (Ag)-Total	<0.00050	DLM	0.00050	mg/L		18-MAY-10	R125672
Strontium (Sr)-Total	0.00705	D.C.III	0.00030	mg/L		18-MAY-10	R125672
Thallium (TI)-Total	<0.00010		0.00020	mg/L		18-MAY-10	R125672
Tin (Sn)-Total	<0.050		0.050	mg/L		18-MAY-10	R125672
11174 5 14411 1114 4 4 4	1000 0000		0.000	1000		18-MAY-10	10,077 30,000
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		18-MAY-10	R125672
Uranium (U)-Total	<0.00010		0.00010	mg/L		19119011 12	R125672
Vanadium (V)-Total	<0.0010		0.0010	mg/L		18-MAY-10	R125672
Zinc (Zn)-Total	0.0156		0.0040	mg/L		18-MAY-10	R125672
Total Metals in Water by ICPOES (Low)	3.50		0.50			45 44497 400	DARFERS
Calcium (Ca)-Total	1.53		0.50	mg/L		15-MAY-10	R125505
Iron (Fe)-Total	0.075		0.010	mg/L		15-MAY-10	R125505
Magnesium (Mg)-Total	0.80		0.10	mg/L		15-MAY-10	R125505
Manganese (Mn)-Total	<0.0020		0.0020	mg/L		15-MAY-10	R125505
Potassium (K)-Total	0.63		0.10	mg/L		15-MAY-10	R125505
Sodium (Na)-Total	<1.0		1.0	mg/L		15-MAY-10	R125505
Miscellaneous Parameters	1.54		7.6			Marine.	A. Asse
Total Suspended Solids	<3.0		3.0	mg/L		14-MAY-10	R125446
pH and Conductivity	025		400	. 40		10.7501.70	2111121
pH (50)	6.73		0.10	pH		13-MAY-10	R125372
Conductivity (EC)	18.8		0.20	uS/cm		13-MAY-10	R125372
L885983-2 WS000007							-
Sampled By: CLIENT on 09-MAY-10 @ 20:30							
Matrix: WATER							
Total Metals - CCME							
Mercury (Hg) - Total	1000000					7.31.275.37	****
Mercury (Hg)-Total	<0.00010		0.00010	mg/L		17-MAY-10	R125588
Total Metals in Water by ICPMS (Low)			1			1337.50	
Aluminum (Al)-Total	0.032		0.010	mg/L		18-MAY-10	R125672
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		18-MAY-10	R125672
Arsenic (As)-Total	0.00048		0.00040	mg/L		18-MAY-10	R125672
Barium (Ba)-Total	0.0033		0.0030	mg/L		18-MAY-10	R125672
Beryllium (Be)-Total	< 0.0010		0.0010	mg/L		18-MAY-10	R125672
Boron (B)-Total	< 0.050		0.050	mg/L		18-MAY-10	R125672

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

## ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
.885983-2 WS000007							
Sampled By: CLIENT on 09-MAY-10 @ 20:30							
Matrix: WATER							
Total Metals in Water by ICPMS (Low) Cadmium (Cd)-Total	<0.000050		0.000050	mg/L		18-MAY-10	R1256726
Chromium (Cr)-Total	<0.0050		0.0050	mg/L		18-MAY-10	R1256726
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		18-MAY-10	R1256726
Copper (Cu)-Total	0.0017		0.0010	mg/L		18-MAY-10	R1256726
Lead (Pb)-Total	0.00110		0.00010	mg/L		18-MAY-10	R1256726
Lithium (Li)-Total	< 0.010		0.010	mg/L		18-MAY-10	R1256726
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		18-MAY-10	R1256726
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		18-MAY-10	R1256726
Selenium (Se)-Total	< 0.00040	17.5	0.00040	mg/L		18-MAY-10	R1256726
Silver (Ag)-Total	<0.00050	DLM	0.00050	mg/L		18-MAY-10	R1256726
Strontium (Sr)-Total	0.00731		0.00020	mg/L		18-MAY-10	R1256726
Thallium (TI)-Total	< 0.00010		0.00010	mg/L		18-MAY-10	R1256726
Tin (Sn)-Total	< 0.050		0.050	mg/L		18-MAY-10	R1256726
Titanium (Ti)-Total	< 0.0010		0.0010	mg/L		18-MAY-10	R1256726
Uranium (U)-Total	< 0.00010		0.00010	mg/L		18-MAY-10	R1256726
Vanadium (V)-Total	<0.0010		0.0010	mg/L		18-MAY-10	R1256726
Zinc (Zn)-Total	0.0087		0.0040	mg/L		18-MAY-10	R1256726
Total Metals in Water by ICPOES (Low)	1070		1073				
Calcium (Ca)-Total	1.53		0.50	mg/L		14-MAY-10	R1254736
Iron (Fe)-Total	0.014		0.010	mg/L		14-MAY-10	R1254736
Magnesium (Mg)-Total	0.71		0.10	mg/L		14-MAY-10	R1254736
Manganese (Mn)-Total	<0.0020		0.0020	mg/L		14-MAY-10	R1254736
Potassium (K)-Total	0.45		0.10	mg/L		14-MAY-10	R1254736
Sodium (Na)-Total	<1.0		1.0	mg/L		14-MAY-10	R1254736
Miscellaneous Parameters	3.2		3.5			0.442.000	2.550
Total Suspended Solids	<3.0		3.0	mg/L		14-MAY-10	R1254469
pH and Conductivity	224		0.40	pH		13-MAY-10	
pH Conductivity (EC)	6.81 18.5		0.10	uS/cm		13-MAY-10	R1253723
Conductivity (EC)	18.5	-	0.20	uo/cm		13-MAY-10	R1253723

<sup>\*</sup> Refer to Referenced Information for Qualifiers (if any) and Methodology.

## **Appendix III : Water Usage 2010**

March - April

Date	Water Volume (L)	Date	Water Volume (L)
March 12,2010	111	April 1, 2010	27990
March 13,2010	961	April 2, 2010	30840
March 14,2010	1759	April 3, 2010	32498
March 15,2010	3052	April 4, 2010	35834
March 16,2010	3824	April 5, 2010	37820
March 17,2010	4883	April 6, 2010	40655
March 18,2010	5069	April 7, 2010	42647
March 19,2010	7540	April 8, 2010	44596
March 20,2010	9003	April 9, 2010	45959
March 21,2010	10134	April 10, 2010	47847
March 22,2010	12410	April 11, 2010	49987
March 23,2010	14239	April 12, 2010	52106
March 24,2010	15709	April 13, 2010	54076
March 25,2010	17159	April 14, 2010	55515
March 26,2010	18787	April 15, 2010	58365
March 27,2010	20619	April 16, 2010	59394
March 28,2010	22501	April 17, 2010	60661
March 29,2010	24547	April 18, 2010	62246
March 30,2010	25920	April 19, 2010	63973
		April 20, 2010	66834
		April 21, 2010	67947
		April 22, 2010	69358
		April 23, 2010	70888
		April 24, 2010	72460
		April 25, 2010	75630
		April 26, 2010	76936
		April 27, 2010	78822
		April 28, 2010	80791
		April 29, 2010	82659
		April 30, 2010	85231

## Water Usage : May - June

Date	Water Volume (L)	Date	Water Volume (L)
May 1,2010	88020	June 1, 2010	158487
May 2,2010	90265	June 2, 2010	160194
May 3,2010	92661	June 3, 2010	161904
May 4,2010	95662	June 4, 2010	164140
May 5,2010	98013	June 5, 2010	165782
May 6,2010	100140	June 6, 2010	167782
May 7,2010	102457	June 7, 2010	169414
May 8,2010	104774	June 8, 2010	173018
May 9,2010	107015	June 9, 2010	174601
May 10,2010	109750	June 10, 2010	175150
May 11,2010	112350	June 11, 2010	176101
May 12,2010	114927	June 12, 2010	177202
May 13,2010	117612	June 13, 2010	180254
May 14,2010	120171	June 14, 2010	182166
May 15,2010	122282	June 15, 2010	184396
May 16,2010	124783	June 16, 2010	185890
May 17,2010	127585	June 17, 2010	187138
May 18,2010	130675	June 18, 2010	188583
May 19,2010	133133	June 19, 2010	190086
May 20,2010	135013	June 20, 2010	191876
May 21,2010	136819	June 21, 2010	193707
May 22,2010	139404	June 22, 2010	195742
May 23,2010	140984	June 23, 2010	197285
May 24,2010	143574	June 24, 2010	198681
May 25,2010	145368	June 25, 2010	200093
May 26,2010	147537	June 26, 2010	202393
May 27,2010	149086	June 27, 2010	203853
May 28,2010	152656	June 28, 2010	206260
May 29,2010	155210	June 29, 2010	208450
May 30,2010	156100	June 30, 2010	209819
May 31,2010	157646		

Water Usage: July - August

Date	Water Volume (L)	Date	Water Volume (L)
7/1/2010	211639	8/1/2010	32498
7/2/2010	212988	8/2/2010	34455
7/3/2010	214116	8/3/2010	36200
7/4/2010	215683	8/4/2010	37686
7/5/2010	217288	8/5/2010	40245
7/6/2010	219266	8/6/2010	41360
7/7/2010	220408	8/7/2010	42816
7/8/2010	221808	8/8/2010	45795
7/9/2010	223057	8/9/2010	48072
7/10/2010	224798	8/10/2010	49881
7/11/2010	226184	8/11/2010	51136
7/12/2010	227814	8/12/2010	52969
7/13/2010	590*	8/13/2010	54161
7/14/2010	2023	8/14/2010	56353
7/15/2010	4118	8/15/2010	57464
7/16/2010	4890	8/16/2010	58698
7/17/2010	6748	8/17/2010	60591
7/18/2010	8181	8/18/2010	61613
7/19/2010	9310	8/19/2010	63502
7/20/2010	11154	8/20/2010	64991
7/21/2010	12364	8/21/2010	66104
7/22/2010	13928	8/22/2010	67483
7/23/2010	15671	8/23/2010	69217
7/24/2010	18602	8/24/2010	70658
7/25/2010	20639	8/25/2010	72146
7/26/2010	23094	8/26/2010	73824
7/27/2010	25505	8/27/2010	75469
7/28/2010	26472	8/28/2010	76769
7/29/2010	28564	8/29/2010	
7/30/2010	30088	8/30/2010	
7/31/2010	31410	8/31/2010	

<sup>\*</sup> On the 13<sup>th</sup> of July the water meter was re-set.

Average water use is between 1200 and 2500 Litres per day.

• Note: Water volumes are cumulative, each days total adding to the previous days and presented as a total usage for the season to date.



## SPILL CONTINGENCY PLAN

**EXPLORATION OPERATIONS** 

## IZOK, HOOD AND GONDOR PROJECTS NUNAVUT, CANADA

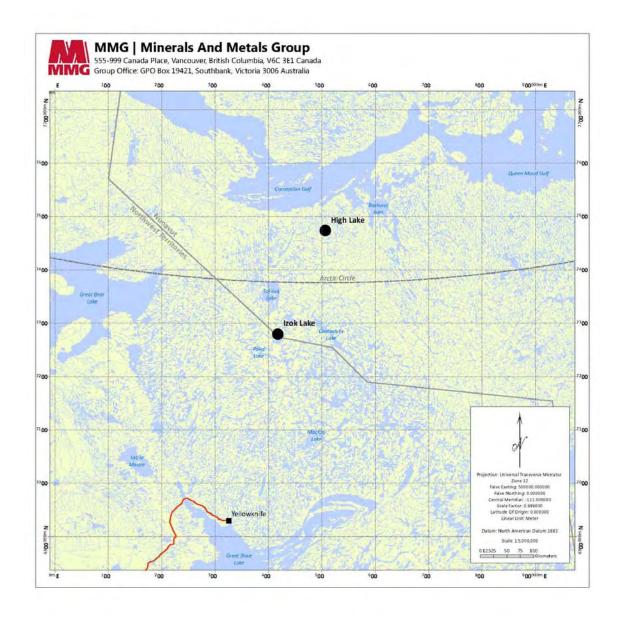
March, 2011

Prepared By:	Ted Muraro – Operations Manager	Date:	_
Reviewed By:	Greg Duso – Project Manager	Date:	
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# TABLE OF CONTENTS

1.0	PREAMBLE 3	
2.0	INTRODUCTION	4
3.0	SITE DESCRIPTION	5
4.0	CONTACTS 6	
5.0	<b>RESPONSE ORGAN</b>	IZATION 7
6.0	SPILL RESPONSE T	EAM 8
7.0	INITIAL ACTION	9
8.0	REPORTING 10	
9.0	RESOURCE INVENT	ΓORY 11
10.0	HAZARDOUS MATI	ERIAL INVENTORY 12
10.1.	Diesel Fuel, Jet-B, G	asoline 12
10.1.1.	General Precautions	12
10.1.2.	Spill on Land 12	
10.1.3.	Spill on Water 12	
10.1.4.	Spill on Rivers and St	reams 13
10.1.5.	Spill on Ice and Snow	13
10.1.6.	Spill Disposal 13	
10.2.0	Propane 13	
10.2.1.	General Precautions	13
10.2.2.	Spill on Land, Water,	Ice and Snow 13
10.2.3.	Spill Disposal 14	
10.3.4	Motor Oil, Hydrauli	c Oil, Transmission Fluid 14
10.3.1.	<b>General Precautions</b>	14
10.3.2.	Spill Action 14	
10.4.0	Antifreeze 14	
10.4.1.	<b>General Precautions</b>	14
10.4.2.	Spill on Land 14	
10.4.3.	Spill on Rivers and St	reams 14
10.4.4.	Spill on Ice and Snow	14
10.4.5.	Spill Disposal 15	
10.5.0	Battery Acid 15	
10.5.1.	<b>General Precautions</b>	15
10.5.2.	Spill Action 15	
10.6.0	Poly-Drill DR-133	15
10.6.1.	General Precautions	15
10.6.2.	Spill Action 15	
	550-X Polymer	15
10.7.1.	General Precautions	15
10.7.2.	Spill Action 15	



#### **PREAMBLE**

The Spill Contingency Plan is effective from January 1, 2008 to December 31, 2008 and applies to the Izok, Hood and Gondor Projects – Ham camp operated by Wolfden Resources in the Kitikmeot District of Nunavut, north latitude 65° 40' and west longitude 112° 50'. The project is under agreement with Nunavut Tunngavik Incorporated (NTI). Land Use permits with the Kitikmeot Inuit Association (KIA) and Nunavut Water Board (NWB) are currently in place.

The locations of the Izok drilling areas are shown on Figures 3 to 10. The Ham Camp layout is shown on Figure 2.

The following formal distribution has been made of this plan: KIA, NWB, Ian Neill (Exploration Manager, MMG), Greg Duso (Project Manager, MMG), Ted Muraro (Operations Manager, MMG) Martin McFarlane (President, MMG).

#### INTRODUCTION

This Spill Contingency Plan is to provides a plan of action for reasonably foreseeable spill events at the Izok, Hood and Gondor Projects – Ham camp considering the nature of the fuels and other hazardous materials that will be handled during the Company's operations The plan defines the responsibilities of key response personnel and outlines the procedures for responding to spill in a way that will act to minimize potential health and safety hazards, environmental damage and remediation costs. The plan has been prepared to provide ready access to all the information needed in dealing with a spill.

It is MMG policy to comply with all existing laws and regulations to help ensure the protection of the environment, to provide such protection of the environment as is technically feasible, to cooperate with other groups working on protection of the environment and to keep employees, government officials and the public informed.

Personnel will be instructed on the plan upon arrival in camp. Instruction will also be given on how to properly manipulate and store fuel and other hazardous substances and on the location of emergency equipment. A more graphical representation of this plan will be posted in common camp areas.

#### SITE DESCRIPTION

The camp is located on the South and East Shores of Ham Lake. The camp was established by the previous operator of the exploration project, Inmet Mining Corporation (Inmet). The camp includes an accommodation complex, diamond drill core logging and storage facilities, garage, fuel storage facilities. The camp is served by a 2500 foot long gravel air strip. The layout of the camp is shown on Figure 2.

From an inventory provided by Inmet, following is a list of the major components of the camp and ancillary facilities.

### Major Camp Equipment/Facilities

- 13 Travco trailer units
- 8-4' x 44' camp matting
- 1 Oil fired incinerator (serial no. 18162)
- 1 10' x 44' Generator Building
- 2 Cummins 150 kW diesel generators (serial no's. 44670421 and 4460441)
- 1 Steel garage 20' x 24'
- 2 Wood frame, steel clad core storage warehouses
- 1 Wood frame, aluminum clad 12' x 36' skidded core shack
- 1 Weatherhaven Office 24' x 32
- 1 Weatherhaven Large Sleeper 24' x 68'
- 10 Weatherhaven 4 man Sleepers 14' x 16'
- 1 Weatherhaven Kitchen 16' x 40'
- 2 Weatherhaven Camp/Drillers Dry 16' x 24'

#### Fuel Tanks

7 – 12,000 gal fuel skid mounted fuel tanks

#### Mobile Equipment

- 1 Caterpillar D-6 Bulldozer
- 1 Champion Motor Grader
- 1 Fuel Trailer
- 1- 1992 Ford Supercab F-350 trucks (diesel)

A map showing the regional setting of the project areas is provided on Figure 1. This plan can be extended to drilling operations that will be carried out at some distance from the camp.

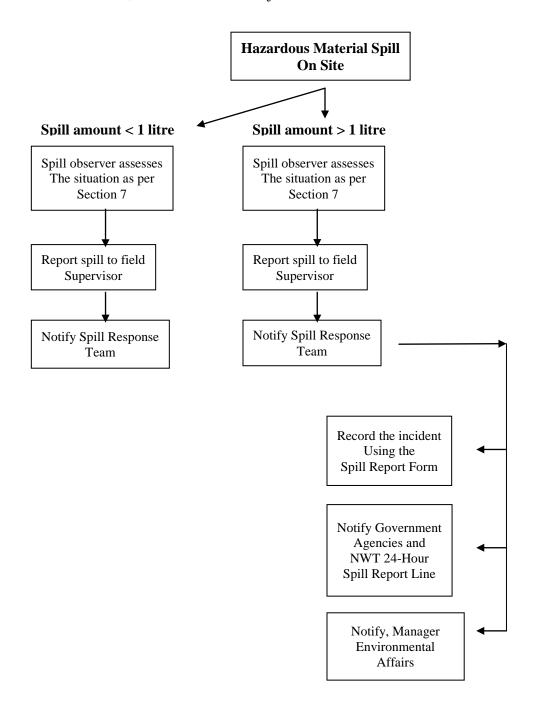
## CONTACTS

People and organizations that can be contacted in the event of a spill:

Nunavut Contacts		
Exploration Manager	Ian Neill	778-373-5603
Camp Manager	Randy Oinenon	778-372-2674
Project Manager	Greg Duso	778-372-2679
Operations Manager	Ted Muraro	778-373-5589
MMG Head Office	Martin McFarlane	778-373-5600
Kitikmeot Inuit Association	Stanley Anablak	(867)-982-3310
Nunavut Water Board	Phyllis Beaulieu	(867)-360-6338
		(867)-360-6369 (fax)
Spill Report Line (24 hr)		(867)-873-6924
Environment Canada	(867)-669-4644	
WCB 24 Hour Accidents		(867)-873-7468
WCB Chief Mines Inspector	Peter Bengts	(867)-920-3888
Kugluktuk Health Center	Janet Carstairs	(867)-982-4531
Kugluktuk RCMP	Franco Radescho	(867)-982-1111
		(867)-920-8130 (fax)
Indian and Northern Affairs	Andrew Keim	(867) 975-4289
Inspector		
NWT Contacts		
Wek'eezhii Land and Water Board	Regulatory Specialist	(867) 713-2500
Indian and Northern Affairs Inspector	Clint Ambrose	(867) 664-2794

### RESPONSE ORGANIZATION

The following is a flow chart to illustrate the sequence of events if a hazardous material spill occurs at the Izok, Hood or Gondor Projects.



#### SPILL RESPONSE TEAM

All personnel will be informed of the contents of the Spill Contingency Plan and trained in the safe use of relevant spill prevention and clean up equipment. The Field Supervisor will appoint and train two persons to be the Spill Response Team. They will also be responsible to carry out the daily inspections of the fuel storage areas and equipment. Personnel on site will be limited, so for any large spill more people will be brought in to help, from surrounding exploration operations primarily from the High Lake Camp located 175km North of Izok and secondly from Yellowknife.

#### Spill Response Team Responsibilities

Perform daily inspections at the Camp fuel and chemical storage areas and fuel hoses.

Report any spill to Exploration Manager or designate.

Containment of the spill and site remediation.

#### Field Supervisor Responsibilities

Assume complete authority over the spill scene and coordinate all personnel involved.

Evaluate spill situation and develop overall plan of action.

Activate the spill contingency plan

Immediately report the spill to the NWT 24-Hour Spill Report Line and regulatory agencies. (For spill greater than 1 litre)

Fill out the Spill Report Form (for spill greater than 1 litre)

Report the spill to the Project Manager. (For spill greater than 1 litre)

If required, obtain additional manpower, equipment, and material if not available on site for spill response.

#### Manager, Environmental Affairs Responsibilities

Provide regulatory agencies and MMG management with information regarding the status of the clean up activities.

Prepare and submit a report on the spill incident to regulatory agencies within 30 days of the event.

#### **INITIAL ACTION**

These instructions are to be followed by the first person on the spill scene.

Always be alert and consider your safety first.

Wear personal protective equipment

Do not smoke and eliminate all source of ignition

Assess the hazard to people in the vicinity of the spill.

If possible control danger to human life

Do not touch, smell, taste or get close to unknown substance.

If substance has been identified and if possible and safe to do so, try to stop the flow of material.

If filling is in progress, stop at once

If seeping through a small hole, use a patch kit if practical to do so.

If necessary and practical, pump the fuel from the leaking container into a refuge container Immediately report the spill to the Field Supervisor and Spill Response Team by radio, satellite phone or in person.

Resume any effective action to contain, mitigate, or terminate the flow of the spilled material. If in doubt about cleaning procedures or for a very large spill, regulatory agencies can help.

#### REPORTING

The person who notices the spill must immediately notify the Field Supervisor. As soon as possible the Field Supervisor will report the spill to:

The 24-Hour Spill Report Line Phone (867) 920-8130, Fax (867) 873-6924 Fill out the NWT Spill Report Form NWT1752/0202 Notify the Manager, Environmental Affairs for a spill greater than 1 litre. Notify permitting authorities (Nunavut Water Board, Kitikmeot Inuit Association)

#### RESOURCE INVENTORY

A spill kit with a capacity of 240 litres will be located at the fuel tank area and will contain:

- 1 360 litre/79 gallon polyethylene drum
- 4 oil absorbent booms (5" X 10')

100 – oil absorbent sheets (16.5" X 20" X 3/8")

- 1 drain cover (36" X 36" X 1/16")
- 1 Caution tape (3" X 500')
- 1 1 lb plugging compound
- 2 pair Nitrile gloves
- 2 pair Safety goggles
- 2 pair Tyvek coveralls
- 1 instruction booklet
- 10 printed disposable bags (24" X 48")
- 1- shovel (in remote spill kit only)
- 1- plastic tarp

Shovels, water pump, plastic pails, garbage bags, extra absorbent pad, drip pans will be placed on the side of the wall at the main office and the kitchen. Fire extinguishers are available throughout the camp facility.

Drill Spill Kits with a capacity of 25 L will contain the following:

- 10- Pads (17"x19"x2/8")
- 3 Socks (3"x4")
- 1 Pair of Gloves
- 1 Disposal Bags
- 1 Warning Sign
- 1 Literature (Inventory List, MSDS, Instructions)

#### **HAZARDOUS MATERIAL INVENTORY:**

This following section lists for each hazardous substance present on the project area, health hazards, spill procedure and disposal procedures. For more detailed information, refer to the MSDS sheets.

#### DIESEL FUEL, JET B AND GASOLINE

DIESEL, JET-B AND GASOLINE ARE HIGHLY FLAMMABLE

#### **General Precautions**

Do not smoke

Will be easily ignited by heat, sparks or flames

Gasoline and Jet-B are more volatile than diesel

Explosion hazard indoors, in confined spaces and outdoors

Vapors may form explosive mixtures with air

Vapors may travel to source of ignition and flash back

Most vapors are heavier than air. They will spread along ground and collect in low or confined areas

Keep pump or electrical equipment far away, be very careful with metallic tools that could sparks on rocks, wait for vapors to dissipate

Inhalation may cause central nervous effects

Aspiration into lungs may cause pneumonitis which can be fatal

Eye and skin irritation

Prolonged exposure has caused cancers in laboratory animals

#### Spill on Land

Build a containment berm, downslope, using, peat, moss, and soil material, bags filled with sand or rocks and place a plastic tarp at the foot of the berm to pool the spill. Spill can be pumped if in a large amount

Soak up spilled substance by using absorbent pads

Excavate the surface soil if necessary. If large excavation is needed, first contact regulatory agencies for approval.

Remove spill substance splashed on vegetation by applying a thin dusting of Spag-zorb or other ultra-dry absorbent.

Dispose hydrocarbons, absorbent pad, contaminated soil and cleaning material in an empty drum, seal it and label it.

On marshy zones, don't destroy vegetal cover, limit personnel and equipment. Remove pooled oil with absorbent pads and/or skimmer.

#### Spill on Water

Contain spill as close to release point as possible

On small spill, deploy hydrophobic absorbent pads

On larger spill and weather conditions permitting, use containment boom to limit fuel dispersion.

Use a skimmer, pump or hydrophobic absorbent pads to remove fuel inside the boom.

Dispose hydrocarbons, absorbent pad, contaminated soil and cleaning material in an empty drum, seal it and label it.

#### **Spill on Rivers and Streams**

Prevent entry into water, if possible, by building a berm or trench.

Intercept moving slicks in quiet areas using (absorbent) booms.

Do not use absorbent booms/pads in fast currents and turbulent water.

#### Spill on Ice and Snow

Build a containment berm of compacted snow around spill.

If hydrocarbons are pooling on ice, pump large amount or use hydrophobic absorbent pads. Don't delay removing the spill as hydrocarbons could seep through cracks into the water. Scrape ice, shovel all contaminated snow in plastic buckets with lids or in drums. Dispose absorbent pads and other contaminated equipment in separated containers. Label and seal the containers.

#### **Spill Disposal**

Contact Federal and Territorial regulatory agencies to identify appropriate disposal methods before disposing of contaminated material.

#### **PROPANE:**

EXTREMELY FLAMMABLE

#### **General Precautions**

Do not smoke

Cylinders may explode when heated

Cylinders may rocket if ruptured

Will be easily ignited by heat, sparks or flames

Explosion hazard indoors, in confined spaces and outdoors

Vapors may form explosive mixtures with air

Vapors may travel to source of ignition and flash back

Vapors from liquefied gas are initially heavier than air and spread along ground.

Contact with gas or liquefied gas may cause burns, severe injuries and/or frostbite

Keep pump or electrical equipment far away, be very careful with metallic tools that could sparks on rocks, wait for vapors to dissipate

Liquid may cause frostbites and blisters

Blurred vision if goes in the eyes

Narcotic asphyxiant

Dizziness, disorientation, excitation, headache, vomiting, unconsciousness if inhaled

#### Spill Procedure (on Land, Water, Ice and Snow)

Eliminate all source of ignition

Do not attempt to contain the propane release if not absolutely sure on what to do.

Do not touch or walk through spilled material

Stop leak if can be done without risk

If possible, turn container so that gas escapes rather than liquid.

Water spray can be used to knock down vapors but don't direct water at spill or source of leak Prevent spreading of vapors in confined areas If or when possible, confine spill with confinement berm. Throw absorbent pads into spill, retrieved them with gaffs or pitchforks.

Small fire can be extinguished with dry chemical or CO2.

Dispose contaminated materials in a labeled drum.

#### **Spill Disposal**

Contact Federal and Territorial regulatory agencies to identify appropriate disposal methods for detective equipment that resulted in the release.

#### MOTOR OIL, HYDRAULIC OIL, AND TRANSMISSION FLUID

#### **General Precautions**

Avoid breathing mists, may cause lung irritation On skin may cause mild irritation

#### **Spill Action**

Soak up with absorbent material
Disposed contaminated soil and material in sealed and labeled container
Small amount can be incinerated
Large amounts to be disposed as hazardous waste.

#### **ANTIFREEZE**

#### **General Precautions**

Respiratory irritation with prolonged exposure. Kidney, liver and bladder problems reported in animals

#### Spill on Land

Soak up by using absorbent pads

Dispose antifreeze, absorbent pad, contaminated soil and cleaning material in an empty drum, seal it and label it.

On marshy zones, don't destroy vegetal cover, limit personnel and equipment. If possible remove pooled antifreeze with absorbent pads.

#### **Spill on Rivers and Streams**

Prevent entry into water, if possible, by building a berm or trench.

#### Spill on Ice and Snow

Build a containment berm of compacted snow around spill.

If pooling on ice, pump large amount or use absorbent pads.

Don't delay removing the spill as it can seep through cracks into the water.

Scrape ice, shovel all contaminated snow into plastic buckets with lids or in drums.

Dispose absorbent pads and other contaminated equipment in separated containers. Label and seal the containers.

#### **Spill Disposal**

Contact Federal and Territorial regulatory agencies to identify appropriate disposal methods before disposing of contaminated material.

#### **BATTERY ACID**

#### **General Precautions**

Fire and explosion hazard

Can be extinguished with dry chemical fire extinguisher.

Ventilate area

Remove combustible materials

Mist inhalation hazard when being charged or spilled

Acid burns to skin and eyes irritation

#### **Spill Action**

Neutralize with soda or lime

Dispose battery and neutralized contaminated material in a sealed and labeled container Dispose as an hazardous waste

#### **POLY DRILL DR-133**

#### **General Precautions**

May cause skin and eye irritation

#### **Spill Action**

Soak up with absorbent pad

Dispose residue, contaminated soil and material in labeled containers. Solidify with sand. Small amount can be incinerated, otherwise dispose as hazardous waste.

#### 550-X POLYMER

#### **General Precautions**

Prolonged skin contact may cause irritation

Possible eye irritation

Ingestion may cause nausea, vomiting, cramps, diarrhea

#### **Spill Action**

Clean up spill with gloves. Scrape soil or surface and disposed in labeled containers Dispose as hazardous waste

Spill Contingency Plan IZOK and Hood Projects

Spill Contingency Plan IZOK and Hood Projects