

**IZOK / HOOD / GONDOR**  
**(IZOK CORRIDOR)**



**2015 Annual Report of Activities and Closure  
Submittal**

Presented  
**January 2016**

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## **PROJECT DESCRIPTION: IZOK / HOOD**

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

The Izok property is a VMS style poly-metallic deposit hosted in felsic rocks, the primary interest being its copper and zinc content. The property consists of three mineral leases and three claims. It is located approximately 300 km north of Yellowknife and is situated on both Crown and Inuit Owned Land (see figure 1).

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.

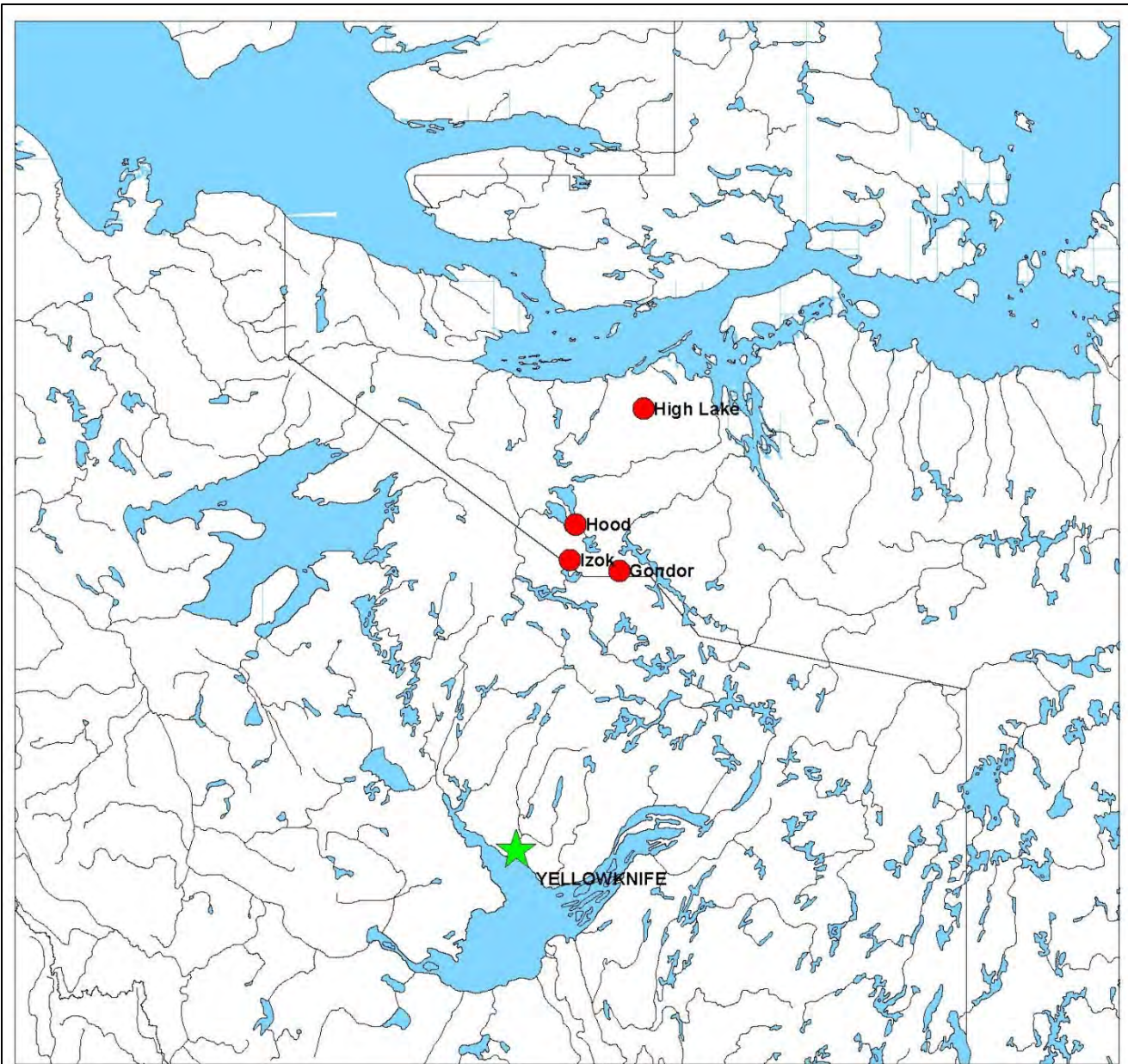
MMG continued to test for extensions of the Izok resource until 2014, and actively followed up geophysical targets with exploration drilling. Although under a series of different companies (Wolfden/Zinifex/Oz) exploration has been continually managed under more or less the same technical team since the acquisition of Wolfden by Zinifex in 2007. During this period there has been several drill campaigns aimed at expanding the resource. The intervening years saw continued surface mapping and geophysical testing of surrounding rock units in the hopes of identifying extensions. Included in this regional work were the adjacent historic showings of Gondor and Hood River, previously explored by Kennecott and Inmet in the 1970s and 80s. Both locations host VMS style mineralization in greenstone geology, and represent potential additional resources that due to their proximity to Izok, are of interest.

Izok's remote location and the logistical challenges involved have discouraged possible developers over the years and it remains one of the last undeveloped large high grade base metal deposits.

Having determined that the project continues to fall short of positive economics at this time, MMG has no immediate plans to continue exploration efforts around the Izok site. The long term plan for the project site involves care and maintenance.

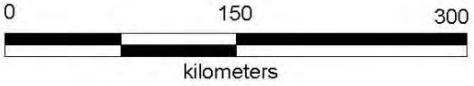
The project is supported by a 50 man camp located on Ham Lake, approximately 5km North of Izok Lake where the mineral resource is located. The camp is located on land under surface lease with the Kitikmeot Inuit Association that has been annexed from IOL CO-05.


Figure 1 : Location Map



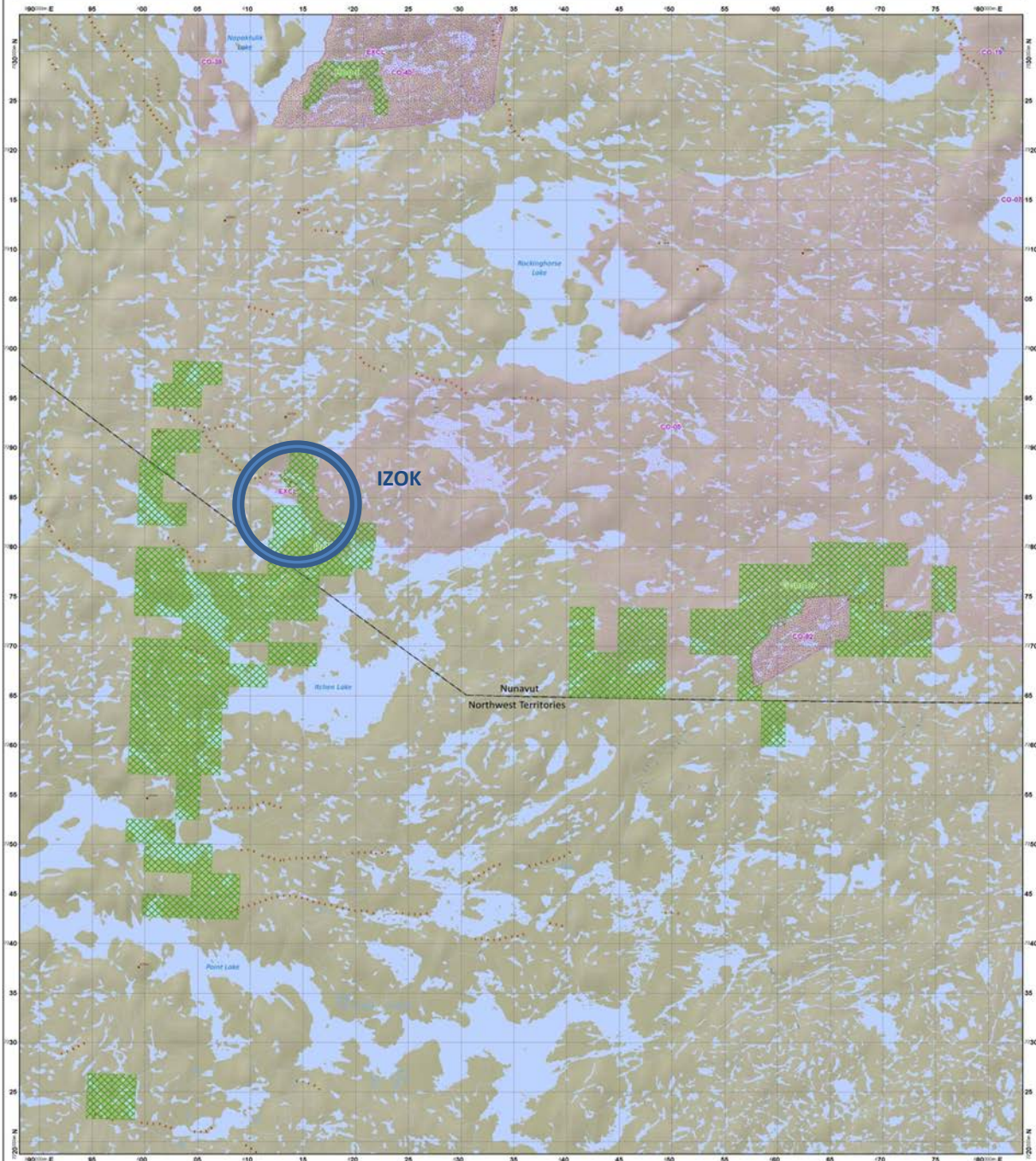
Legend

- MMG Project Sites
- ★ YellowKnife
- Rivers



 <b>MMG</b>	
Date: 02-Aug-12	<b>Project Location Map</b>
Author: YeungC	
Office: Vancouver	
Drawing: 001	
Scale: 1 : 7,000,000	Projection: WGS84

# Izok, Gondor, and Hood Area of Work



## MMG | Minerals And Metals Group

555-999 Canada Place, Vancouver, British Columbia, V6C 3E1 Canada  
 Group Office: GPO Box 19421, Southbank, Victoria 3006 Australia

Projection: Universal Transverse Mercator  
 Zone 12  
 False Easting: 500000.000  
 False Northing: 0.000  
 Central Meridian: 111° 00' 00" W  
 Scale Factor: 0.999600  
 Latitude Of Origin: 0° 00' 00"  
 Linear Unit: Meter

Datum: North American Datum 1983



Scale: 1:275,000



### Legend

- Area of work currently covered by existing permit
- Inuit Owned Lands - Mineral Rights
- Surface/Subsurface Rights
- Surface Rights Only
- Esker
- Streams
- Small Falls, Chutes
- Rapids, Falls
- Lake; Major Rivers
- Marsh; Swamp; Bog
- Sand; Raised Beaches
- Spot Elevation, Precise
- Contours

Figure 3 : IOL Package and Surface Leases (air photo)

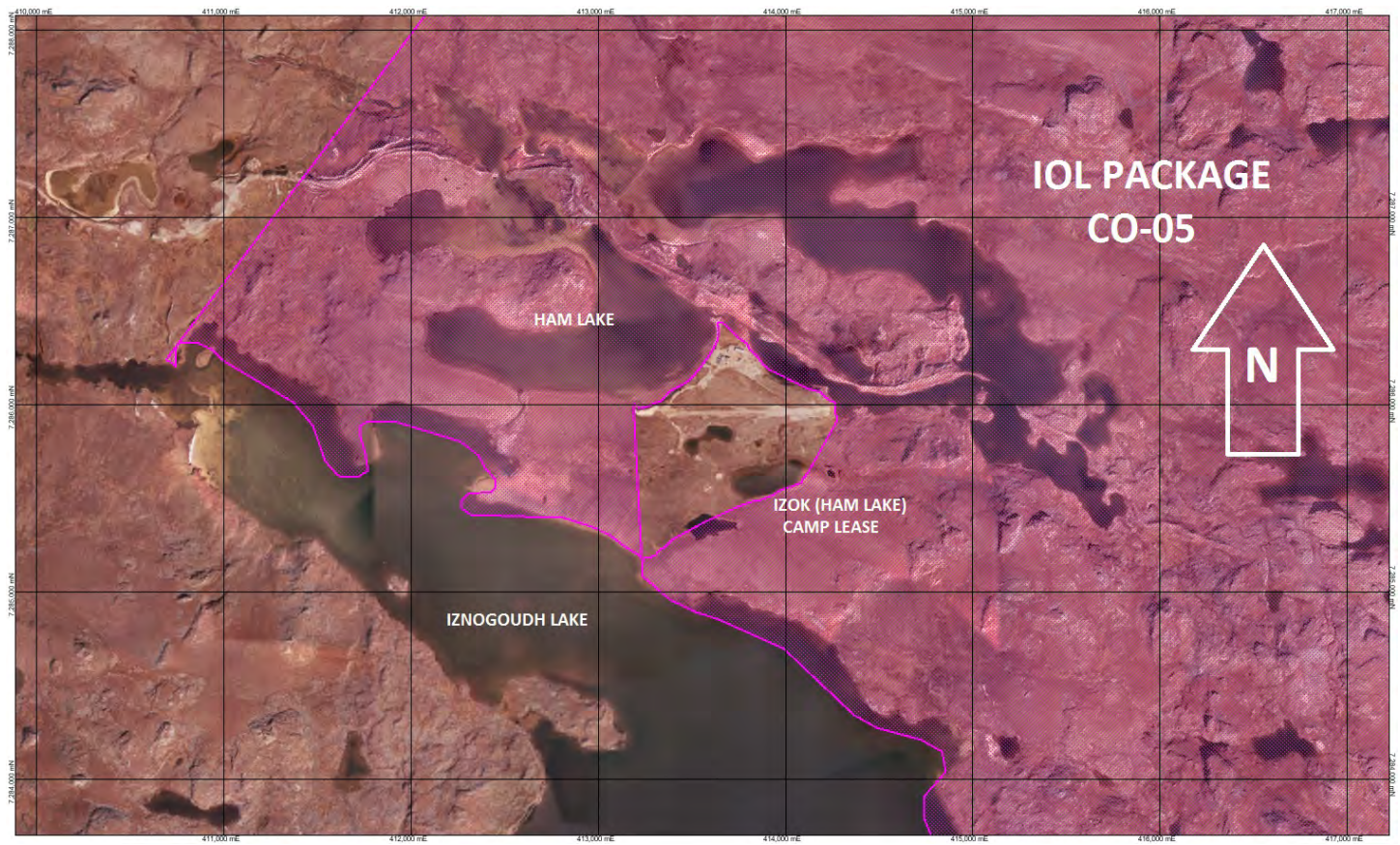
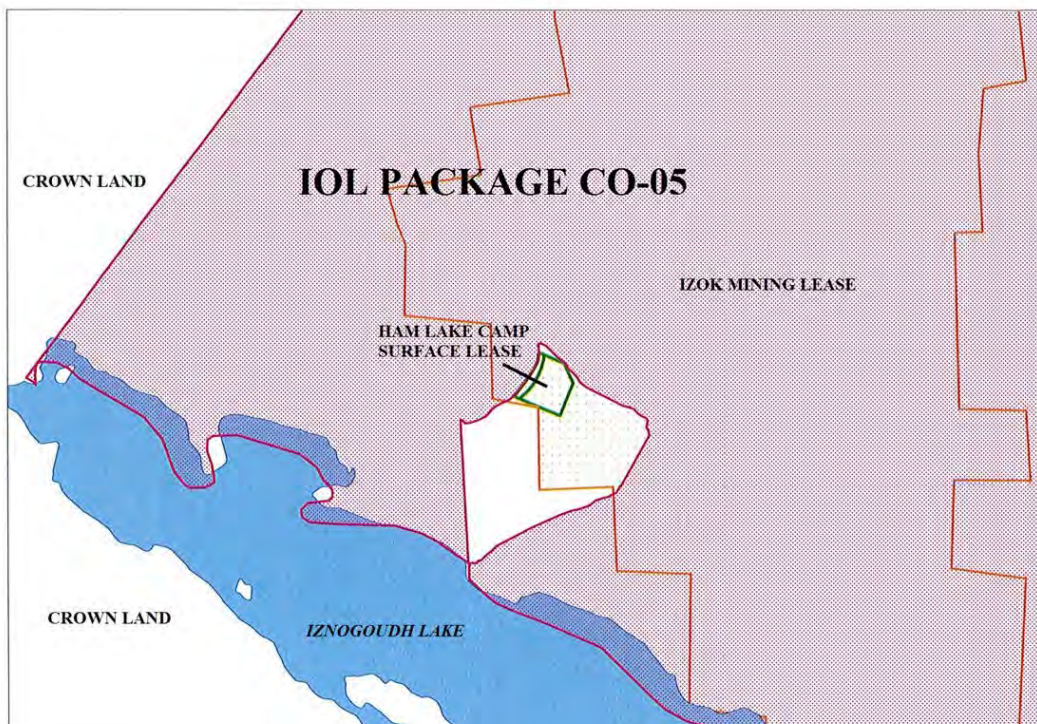


Figure 4 : IOL Package and Surface Leases



## IZOK / HOOD / GONDOR EXPLORATION ACTIVITY SUMMARY:

The below tables show the diamond drill collar locations for the exploration and development activity surrounding the Izok resource during the last 8 years of operations. In total some 180 diamond drill holes were completed. Additional information regarding these drilling programs can be found in the annual reports for each year.

Table 1 : Drilling Summary Tables 2007 -2014

2007

DDH	Easting	Northing	Water Source	Easting	Northing	Discharge	Easting	Northing
1	418385.0	7280267.0	Izok Lake	418250	7280200	Land (Natural Sump)	418385.0	7280267.0
2	418385.0	7280267.0	Izok Lake	418250	7280200	Land (Natural Sump)	418385.0	7280267.0
3	418385.0	7280267.0	Izok Lake	418250	7280200	Land (Natural Sump)	418385.0	7280267.0
4	418385.0	7280267.0	Izok Lake	418250	7280200	Land (Natural Sump)	418385.0	7280267.0
5	418385.0	7280267.0	Izok Lake	418250	7280200	Land (Natural Sump)	418385.0	7280267.0
6	417374.0	7279982.0	Izok Lake	418650	7280500	Land (Natural Sump)	417374.0	7279982.0

2007					
HOLE ID #	EASTING	NORTHING	DATUM	UTM ZONE	HOLE DEPTH
	418385.0	7280267.0	NAD83	12N	
	418385.0	7280267.0	NAD83	12N	
	418385.0	7280267.0	NAD83	12N	
	418385.0	7280267.0	NAD83	12N	
	418385.0	7280267.0	NAD83	12N	
	417374.0	7279982.0	NAD83	12N	
2008					
HOLE ID #	EASTING	NORTHING	DATUM	UTM ZONE	HOLE DEPTH
HEN-377	417574.01	7279996.884	NAD83	12N	134
HEN-378	417505.02	7280169.885	NAD83	12N	149
HEN-379	417475.02	7280160.893	NAD83	12N	149
HEN-380	416833.01	7280240.877	NAD83	12N	80
HEN-381	416915.02	7280217.889	NAD83	12N	110
HEN-382	417330.01	7280168.889	NAD83	12N	50
HEN-383	416904.02	7280179.879	NAD83	12N	131
HEN-384	417277.02	7280141.879	NAD83	12N	50
HEN-385	417258.02	7280113.886	NAD83	12N	50
HEN-386	416863.01	7280130.882	NAD83	12N	119
HEN-387	417149.02	7280005.884	NAD83	12N	116
HEN-389	417065.02	7279972.886	NAD83	12N	50
HEN-390	417038.02	7279958.872	NAD83	12N	71
HEN-391	416930.03	7279956.878	NAD83	12N	80
HEN-392	417004.02	7279954.874	NAD83	12N	59
HEN-393	416870.02	7279938.89	NAD83	12N	101
HEN-394	416966.02	7279960.898	NAD83	12N	116
HEN-395	416836.03	7279945.878	NAD83	12N	131



HEN-396	416918.01	7279925.889	NAD83	12N	95
HEN-397	417202.02	7280035.878	NAD83	12N	50
HEN-398	417300.02	7280042.89	NAD83	12N	50
HEN-399	417846.02	7280282.889	NAD83	12N	149
HEN-401	417470.02	7279935.891	NAD83	12N	128
HEN-402	418152.01	7280299.878	NAD83	12N	128
HEN-403	418135.01	7280290.883	NAD83	12N	448.7
HEN-404	417485.02	7279968.894	NAD83	12N	170
HEN-405	417440.03	7279965.886	NAD83	12N	170
HEN-406	417440.03	7279965.886	NAD83	12N	170
HEN-407	417364.52	7279951.771	NAD83	12N	173
HEN-408	418152.01	7280299.878	NAD83	12N	158
HEN-409	418152.01	7280299.878	NAD83	12N	548
HEN-410	417335.66	7279956.353	NAD83	12N	170.3
HEN-411	418100.02	7280371.89	NAD83	12N	378.95
HEN-412	417315.02	7280730.887	NAD83	12N	98
HEN-413	417315.02	7280730.887	NAD83	12N	305
HEN-414	418033.02	7280038.888	NAD83	12N	338
HEN-415	416504.03	7279923.884	NAD83	12N	242
HEN-416	416578.02	7279802.885	NAD83	12N	179
HEN-417	418033.02	7280038.888	NAD83	12N	350
HEN-418	417837.02	7279611.887	NAD83	12N	395
HEN-419	417979.02	7279956.879	NAD83	12N	536.45
HEN-420	418604.01	7280909.887	NAD83	12N	470
HEN-421	417119.03	7279393.895	NAD83	12N	284
HEN-422	417884.01	7280121.888	NAD83	12N	200
HEN-423	417884.01	7280121.888	NAD83	12N	185
HEN-424	417119.03	7279393.895	NAD83	12N	212
HEN-425	417956.02	7280117.894	NAD83	12N	252
HEN-426	417094.03	7279443.889	NAD83	12N	215
HEN-427	417891.91	7280167.087	NAD83	12N	150
HEN-428	415697.03	7279916.893	NAD83	12N	338
HEN-429	417891.91	7280167.087	NAD83	12N	162
HEN-430	417891.91	7280167.087	NAD83	12N	161
HEN-431	417891.91	7280167.087	NAD83	12N	185
HEN-432	417974.31	7280146.88	NAD83	12N	319
HEN-433	415719.03	7280407.879	NAD83	12N	287
HEN-434	417948.51	7280189.486	NAD83	12N	245.3
HEN-435	415366.06	7276708.893	NAD83	12N	276.1
HEN-436	417948.51	7280189.486	NAD83	12N	4
HEN-437	417920.22	7280177.884	NAD83	12N	85
HEN-438	415870.01	7281079.87	NAD83	12N	26
HEN-439	415870.01	7281079.87	NAD83	12N	4
HEN-440	417705.02	7280562.887	NAD83	12N	287
HEN-441	416543.51	7281946.072	NAD83	12N	35
HEN-442	416855.91	7281978.479	NAD83	12N	35
HEN-443	417411.81	7281912.369	NAD83	12N	38
<b>2010</b>					
HOLE ID #	EASTING	NORTHING	DATUM	UTM ZONE	HOLE DEPTH
HEN-444	417252.2	7279973.5	NAD83	12N	588.1

HEN-445	417317	7280318	NAD83	12N	606.1
HEN-446	416605	7280651	NAD83	12N	432.1
HEN-447	417025.27	7280579.23	NAD83	12N	345
IR10-01	411880	7281990	NAD83	12N	339.45
<b>2011</b>					
HOLE ID #	EASTING	NORTHING	DATUM	UTM ZONE	HOLE DEPTH
HEN448	417446.2	7279798	NAD83	12N	408.72
HEN449	416892.6	7279728	NAD83	12N	453
HEN450	417582.9	7279798	NAD83	12N	408
HEN451	417024.3	7279806	NAD83	12N	441
HEN452	417689.6	7279970	NAD83	12N	303
HEN453	417161.3	7279887	NAD83	12N	240
HEN454	417689.6	7279970	NAD83	12N	369
HEN455	417192.7	7280326	NAD83	12N	261
HEN456	416630.6	7280111	NAD83	12N	282
HEN457	417727.6	7280049	NAD83	12N	351
HEN458	416718.6	7280196	NAD83	12N	336
HEN459	417687.3	7280237	NAD83	12N	273
HEN460	416363.2	7280761	NAD83	12N	380
HEN461	417895.6	7280331	NAD83	12N	300
HEN462	417568.2	7280458	NAD83	12N	498
HEN463	416597.4	7280594	NAD83	12N	278
HEN464	417265.1	7280500	NAD83	12N	525
HEN465	416763.8	7280842	NAD83	12N	321
HEN466	417788.6	7279652	NAD83	12N	360
HEN467	417828.8	7279750	NAD83	12N	423
HEN468	417709.3	7279750	NAD83	12N	330
HEN469	417828.8	7279750	NAD83	12N	9
HEN470	417814.3	7279835	NAD83	12N	327
HEN471	417709.3	7279750	NAD83	12N	45
HEN472	417520	7279681	NAD83	12N	396
HEN473	417980.9	7279875	NAD83	12N	498
HEN474	417595	7279557	NAD83	12N	399
HEN475	417257.2	7281434	NAD83	12N	343.37
HEN476	417023.7	7279564	NAD83	12N	381
HEN477	417814.4	7279981	NAD83	12N	408
HEN478	416510.6	7280112	NAD83	12N	348
HEN479	418180.4	7279925	NAD83	12N	490.25
HEN480	417091.9	7279361	NAD83	12N	294
HEN481	417869	7279681	NAD83	12N	549
HEN482	417402.2	7279597	NAD83	12N	402
HEN483	415823.6	7279719	NAD83	12N	195
HEN484	417996.6	7279718	NAD83	12N	630
HEN485	417841.1	7279854	NAD83	12N	399
HEN486	417964.7	7279852	NAD83	12N	444
HEN487	418082.6	7279939	NAD83	12N	414.15
HEN488	417827	7279581	NAD83	12N	249.41
HEN489	417446.2	7279798	NAD83	12N	408.72
<b>2012</b>					
HOLE ID #	EASTING	NORTHING	DATUM	UTM ZONE	HOLE DEPTH

BH-BGC12-01	416554.9	7280468.9	NAD83	12N	35.05
BH-BGC12-02	416871.5	7280533.6	NAD83	12N	30.48
BH-BGC12-03	416798.9	7280785.0	NAD83	12N	12.5
BH-BGC12-03A	416795.0	7280785.0	NAD83	12N	10.97
BH-BGC12-04	416575.9	7281061.6	NAD83	12N	24.68
BH-BGC12-05	416557.2	7281041.7	NAD83	12N	25.6
BH-BGC12-06	416311.6	7281324.0	NAD83	12N	15.24
BH-BGC12-07	417621.0	7279636.0	NAD83	12N	14.02
BH-BGC12-08	417677.7	7279629.5	NAD83	12N	29.25
BH-BGC12-09	417717.0	7279608.0	NAD83	12N	15.54
BH-BGC12-10	418187.4	7279291.1	NAD83	12N	14.04
BH-BGC12-11	418179.5	7279352.0	NAD83	12N	15.24
BH-BGC12-12	417388.3	7280469.7	NAD83	12N	27.72
BH-BGC12-13	417176.4	7280428.0	NAD83	12N	5.49
BH-BGC12-14	418271.3	7280126.3	NAD83	12N	32
BH-BGC12-15	417778.2	7280760.6	NAD83	12N	15.31
BH-BGC12-16	417492.7	7280911.7	NAD83	12N	15.34
BH-BGC12-17	417108.8	7280907.9	NAD83	12N	21.34
BH-BGC12-18	417222.9	7281146.5	NAD83	12N	15.24
BH-BGC12-19	416889.2	7281152.2	NAD83	12N	21.34
BH-BGC12-20	416342.2	7280121.4	NAD83	12N	6.1
BH-BGC12-20A	416344.0	7280124.0	NAD83	12N	9.85
BH-BGC12-21	417563.6	7279512.5	NAD83	12N	13.71
BH-BGC12-22	417683.9	7279575.4	NAD83	12N	18.59
BH-BGC12-23	416632.2	7279567.5	NAD83	12N	15.24
BH-BGC12-24	418151.1	7278980.8	NAD83	12N	15.24
BH-BGC12-25	417207.5	7279355.0	NAD83	12N	15.24
BH-BGC12-26	417294.1	7278880.8	NAD83	12N	21.23
BH-BGC12-27	417973.0	7280288.0	NAD83	12N	30.4
BH-BGC12-28	413830.5	7285896.9	NAD83	12N	13.7
HG-01	417868.5	7280377.9	NAD83	12N	80
HG-03	417468.7	7280059.7	NAD83	12N	26
HG-04	417463.3	7280067.6	NAD83	12N	26
HG-05	417556.3	7279825.5	NAD83	12N	95
HG-06	417297.7	7280262.5	NAD83	12N	26
HG-07	417297.0	7280258.6	NAD83	12N	77
HG-10	416448.7	7280085.1	NAD83	12N	50
IZ-RES-01	417295.1	7279988.5	NAD83	12N	189
IZ-RES-02	417465.0	7280067.0	NAD83	12N	153
IZ-RES-03	417329.5	7280105.1	NAD83	12N	47
IZ-RES-04	417468.8	7279957.3	NAD83	12N	180
IZ-RES-05	417469.2	7279956.7	NAD83	12N	180
IZ-RES-06	416813.1	7280027.9	NAD83	12N	161
IZ-RES-07	416912.1	7279987.6	NAD83	12N	87
IZ-RES-08	416824.7	7280042.6	NAD83	12N	151
IZ-RES-09	417513.3	7280043.1	NAD83	12N	131.5
HEN-490	418401.5	7279499.5	NAD83	12N	702
HEN-491	416346.4	7280216.0	NAD83	12N	315
HEN-492	418160.0	7279606.8	NAD83	12N	726
HEN-493	417902.4	7279629.4	NAD83	12N	720

HEN-494	417921.7	7280026.3	NAD83	12N	339
HEN-495	418181.5	7279778.8	NAD83	12N	639
HEN-496	417856.4	7279564.8	NAD83	12N	591
HEN-497	416151.4	7278890.9	NAD83	12N	123
HEN-498	416151.4	7278890.9	NAD83	12N	207
HEN-500	415904.5	7277602.7	NAD83	12N	519
HEN-501	414490.6	7276299.6	NAD83	12N	483
HEN-502	418304.2	7279621.0	NAD83	12N	573
HEN-503	416716.6	7279401.3	NAD83	12N	525
<b>2014</b>					
HOLE ID #	EASTING	NORTHING	DATUM	UTM ZONE	HOLE DEPTH
HM-14-01	418935.1	7312108	NAD83	12N	562
A17-14-01	419314.6	7315185.6	NAD83	12N	573
G9-14-01	453664	7271470	NAD83	12N	506
G21-14-01	457232	7271975.2	NAD83	12N	506

#### **IZOK / HOOD / GONDOR FIELD PROGRAM 2015:**

The 2015 program at Izok was limited to collection of weather data, as well as ongoing reclamation efforts focussed on placing the camp facilities on long term care and maintenance. The site was opened on June 25<sup>th</sup> and occupied until mid-August. Activity was limited to clean up work immediately around the site itself and was carried out by a relatively small crew. Site occupancy reached a maximum in July with a total of 6 individuals. During this period a heavy airlift removed all fuel stored at the site in addition to remaining drill components and some heavy equipment. The bulk fuel tanks that were removed, drained and prepared for transport in previous seasons were dismantled and also flown out to Yellowknife.

#### **PLANNED EXPLORATION PROGRAM 2016:**

There is no proposed field program for the 2016 field season. Work in 2015 was centred on the continued reclamation of the Izok Corridor Project sites in preparation for long term care and maintenance.

#### **ENVIRONMENTAL:**

Environmental baseline work was discontinued at the end of the 2014 season, primarily due to MMG's decision to not proceed with feasibility work at this time. The recording of weather data, however was continued in 2015. Wind direction and speed, temperature, and precipitation data is routinely monitored during field operations. Water usage volumes for domestic and industrial purposes are recorded for the annual water board report and are provided in the appendix.

No lake ice water sampling associated with drilling activity was carried out.

Very limited hydrological and hydrogeological data gathering in maintenance of the projects baseline studies for sustainability reporting was continued in 2015 under supervision of Scott Trussler and the MMG Development Team.

An annual review of the Spill Contingency Plan is conducted, modifications are made if necessary, and the document is included in the appendices of the annual report on an annual basis.

**WATER USAGE:**

Water usage is divided into Industrial and Domestic applications, and is monitored. Water usage reporting is included in the appendices. The project is presently permitted for 100m<sup>3</sup> per day total volume for both applications. On average the Camp consumes roughly 4m<sup>3</sup> per day during capacity occupancy. The reduced activity and camp numbers this season resulted in lower usage. During the 2015 field season the camp was occupied from July XX to the XX of September. It reached a maximum population of 6 men for several days in June. The average population over the entire period of occupation in 2015 was 4. The Ham Lake camp draws its water from Ham Lake by means of a submersible electric pump. The intake on the pump is screened. Industrial usage is limited to those activities associated with drilling.

**WILDLIFE:**

Wildlife encounters and sightings during operations are documented by field personnel. A copy of the log is included in the appendices. As specified in our permit, low level flying is avoided unless absolutely necessary for operations and special care is taken during sensitive periods of animal life cycles. A copy of the current Wildlife Management Plan for MMGs operations in the Slave is included in the Appendices.

**COMMUNITY:**

MMG maintains an office in Kugluktuk, the closest Inuit community to our project sites. We have an advisor there who works part time for MMG, Mr. Donald Havioyak, who acts as our community liaison. His primary job is to keep local community members informed of our exploration activities, and address concerns and questions they may have on behalf of the company. He is also instrumental in the hiring of local staff, aiding applicants in resume preparation and conducting initial interviews on our behalf. A list of temporary employees from local communities is included below.

Table II : Local Employment

<b>Employee Name</b>	<b>Community</b>	<b>Mandays</b>
Carl Katiak	Kugluktuk	79
<b>TOTAL</b>		<b>79</b>

## **AIR OPERATIONS:**

Izok was opened on the 25th of June, 2015. Crew changes along with food re-supply from Yellowknife, NT was conducted using dornier aircraft operated by Summit Air, throughout field operations, an Aerospatial B3 helicopter provided by Great Slave Helicopters (GSH) was based onsite and made local flights daily in order to facilitate the moving of equipment and the completion of reclamation activities at satellite camp locations. A significant heavy airlift was coordinated to remove fuel as well as drill equipment and equipment from the site as part of the continuing reclamation

During operations, low level flight is avoided in order to minimize noise impacts on local wildlife. When operational areas coincide with seasonal migration paths or calving grounds, activity is diverted or suspended.

A table showing 2015 air operations conducted out of the Izok site is included below:

Table III : 2015 Air Operations

<b>MONTH</b>	<b>FIXED WING FLIGHTS</b>	<b>HELICOPTER HOURS</b>
March	-	-
April	-	-
May	-	-
June	3	-
July	15	12.4
August	3	-
September	-	-
<b>TOTAL</b>	<b>26</b>	<b>12.4</b>

## **RECLAMATION WORK:**

The intention of MMG is to put the Ham Lake Camp on long term care and maintenance. All presence on permitted Crown and IOL lands has been removed. Remaining infrastructure is contained within the surface lease.

Clean up efforts this season were focussed on preparing the site for long term care and maintenance and the associated closure of Land Use Permits for surrounding Crown and IOL ground. Removal of waste, unused material and equipment, and the entire stock of stored fuel, was accomplished over a period of several months by a skeleton crew and heavy air support. Historic equipment was in some cases partially dis-assembled and prepared for removal from site along with old drill steel and drill components. Fuel storage tanks that were

drained last season in preparation for transport were disassembled and removed from site for disposal. Exposed casing from drill collars that did not house monitoring equipment was severed at ground level and capped. Photographic documentation of the above mentioned reclamation efforts are included in the appendices, along with waste transport records and KBL disposal certificates.

All remaining fuel on site was sold to another operator in the Kitikmeot region and transported to either Kugluktuk or Yellowknife for transfer of ownership.

The following table shows the nature and weights of equipment and waste removed from the Izok site during the months of June and July.

Table IV : Equipment and Material removed from Izok site

WASTE TYPE	TOTAL WEIGHT (LBS)	DESTINATION
Drill equipment	70,000	Major Drilling, Yellowknife
Crushed Drums	10,200	Returned to FuelFlo, Yellowknife
Drilling fluids and salt	12,600	Sold to Discovery Mining Services
Camp equipment	8,900	MMG storage in Yellowknife
Waste materials	2400	KBL Environmental for disposal
<b>TOTAL</b>	<b>104,100</b>	

**WASTE REMOVAL:**

All waste is streamed to differentiate between burnable waste, recyclables, and those waste products that must be transported to Yellowknife for treatment off site. Burnable waste and sewage is incinerated on site by a diesel powered forced air furnace. Waste that is not approved for burning, or that is identified as recyclable is removed from the waste stream. Incineration ash is collected and sealed in empty 45 gallon fuel drums for transport back to Yellowknife. Waste is handled by expeditors in Yellowknife and transferred over to KBL Environmental for appropriate disposal. Transport and final disposal records from KBL have been included in the appendices. Waste that involves petroleum or other chemical products is transported by KBL to Edmonton for disposal in a certified facility. Human waste is collected daily from ‘pacto’ style toilets and incinerated on site. Empty fuel drums are crushed on site and returned to the fuel supplier (FuelFlo Logistics) in Yellowknife. The updated Waste Management Plan for the Izok Corridor Project sites is included in the appendices along with daily records of waste streaming and disposal.

**SPILL CONTINGENCY AND ABANDONMENT AND RESTORATION:**

The Spill Contingency and Abandonment and Restoration Plans for the site underwent review and modification in January 2014 and the updated versions were forwarded to AANDC and the NIRB. The Plans have historically been included in the annual report submittals to regulatory agencies. As it is MMGs intention to close out the Land Use Permits associated with both Crown and IOL ground, and no activity is contemplated in 2016, with all fuel and lubricants having been removed from site, there has been no modification to the Spill Contingency Plan. The Abandonment and Restoration plan has undergone minor modification to reflect our plans for long term care and maintenance.

## **SITE INSPECTIONS:**

Visual site inspections of the Izok Corridor Project sites were conducted by both Eva Paul and Baba Pederson of Aboriginal Affairs and Northern Development (also acting on behalf of the Nunavut Water Board). In addition a visit was made by representatives from the Kitikmeot Inuit Association. A copy of the AANDC and KIA inspection reports are included in the Appendices with dates and findings. Ongoing Reclamation efforts involving historic structures were duly noted and Camp Management teams were commended for their efforts.

## **PERMITTING:**

Both the Land Use Permit and Water Licence associated with the Izok Property underwent renewal in 2012.

A single LUP (N2012C0005) issued by Aboriginal Affairs and Northern Development Canada now serves to cover both the Izok and the Hood/Gondor project areas. An extension request for this permit was submitted and approved for the 2015 field season and a copy is included in the appendices.

The renewal of the Water License was approved in 2012 and the new license ( 2BE – IZO1217 ) now carries an expiry date of 2017. The previous permit expired December 31<sup>st</sup>, 2012. In March of 2015, the Nunavut Water Board issued an allowance for limited open burning in order to address specific reclamation issues around the Izok site and a copy of that allowance is also included in the Appendices.

The Land Use Agreement for operating on IOL ground was successfully renewed with the Kitikmeot Inuit Association in February of 2015.

It is MMG's intention to not seek renewal or extension of land use permits with the AANDC and the KIA for continued exploration on Crown and IOL ground surrounding the surface leases. No exploration is planned in the foreseeable future and the facilities that remain on surface leased land will be put on long term care and maintenance. For the time being the water license associated with the Izok project will remain in good standing although water usage is not anticipated.

# **APPENDICES**



# Appendix I : 2015 Site Inspections



Aboriginal Affairs and  
Northern Development Canada

Affaires autochtones et  
Développement du Nord Canada

## WATER LICENCE INSPECTION FORM

Original  
 Follow-Up Report

Licensee <b>MMG</b>	Licensee Representative <b>Peter Cullinane</b>
License No. / Expiry <b>2BE-IZO1217</b>	Representative's Title <b>Field Program Manager</b>
License No. / Expiry <b>2BE-HIG1217</b>	Land / Other Authorizations
Date of Inspection <b>July 14 and 15, 2015</b>	Inspector <b>Eva Paul</b>
Activities Inspected <input checked="" type="checkbox"/> Camp <input type="checkbox"/> Drilling <input type="checkbox"/> Mining <input type="checkbox"/> Construction <input checked="" type="checkbox"/> Reclamation <input checked="" type="checkbox"/> Fuel Storage <input type="checkbox"/> Roads/Hauling <input type="checkbox"/> Other: <input type="checkbox"/> Other:	

Conditions:	A - Acceptable	C - Concern	U - Unacceptable	NA - Not Applicable	NI - Not Inspected			
<b>Water Use</b>	Condition	Comment	<b>Site Conditions</b>	Condition	Comment	<b>Haz/Mat Management</b>	Condition	Comment
Intake/Screen	A		Water Management Structures	A		Storage	A	4
Flow Measure. Device	A		Culverts / Bridges	N/A		Spills	A	
Source: Ham Lake	A		Drainage	A		Spill Plan	A	
Water Use:	A		Erosion / Sediment	A				
Recirculation ( y / n )	A		Mitigation Measures	A		<b>Administrative</b>		
			Reclamation Activities	A	3	Records	A	
			Materials Storage	A		Reports	NI	
<b>Waste Disposal</b>			Signage	A		Plans	NI	
Waste Water	A					Notifications	A	
Solid Waste	A	1	<b>Monitoring</b>			<b>Other</b>		
Hazardous Waste	A	2	Sample Collection / Analysis	NA		Future closure	A	5
<i>*The number in the comments field will correspond with specific comments provided below.</i>								
Samples taken by Inspector:			Location(s):					
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No								

SECTION 1	<input checked="" type="checkbox"/> Comments (s.1 and 2)	<input type="checkbox"/> Non-Compliance with Act or Licence (N/A)	<input type="checkbox"/> Action Required (N/A)
-----------	--	---	--

MMG is preparing its two Nunavut projects for longer-term closure. An inspection was conducted on July 14 and 15 of camps and reclamation activities pertaining to MMG's 2BE-IZO1217 and 2BE-HIG1217 licences.

Izok Lake Project: Ham Lake Camp (N65°41'08, W112°52'49) and Hood Core Facility (N66°05'04", W112°43'06")

High Lake Project: High Lake Camp (N67°22'44", W110°50'40") and High Lake East/Moly Mag Camp (N67°08'36", W109°52'03")

I was accompanied by Peter Cullinane, Field Program Manager for the projects. MMG graciously hosted me for several days at Izok to conduct work in the area, allowing for a fulsome understanding of the work that has been undertaken at these sites. It is clear from the state of the camps that MMG's focus this season has been to eliminate any environmental liability from the closure of the projects. Work was completed at High Lake in the spring, and three people were on-site at Izok to carry out the camp closure.

1. An impressive amount of waste has been backhauled. Nothing but neatly stacked drill rod was in evidence at High Lake. Several more loads were anticipated from Izok following my inspection. Backhaul records were available for inspection.
2. Peter indicated that hazardous waste is all anticipated to be removed from site at Izok, and has been removed from High Lake. The few waste barrels that remain at Izok are currently in use, labelled, and contained within a berm.





<b>SECTION 2</b>	<input checked="" type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
<p>3. The footprint of the facilities has been greatly reduced, and areas no longer in use have been contoured and are restricted from access to promote re-vegetation. Several tents were removed from High Lake, as well as the core/cutting shacks. High Lake East (Moly Mag) has been completely removed with only core racks remaining. Drilling equipment that remains at Izok is ready for backhaul</p> <p>4. MMG is working with a nearby project to re-distribute consumables such as fuel, drill lubricants, and drill salt. All fuel and drill supplies were removed from High Lake. Peter indicated that all the remaining fuel at Izok would be consumed or removed from site prior to closure. Bulk fuel tanks have been emptied and swabbed out to prevent any potential for leakage. Vents and hoses are sealed. Only minimal hazardous materials will remain on-site, and those are in containment and within structures. The majority of the vehicles and equipment have been drained of fluids to eliminate leaks.</p> <p>5. I am impressed with the measures that have been taken to all-but-eliminate potential future environmental liability from this site. Occasional monitoring of the remaining facilities will be required, and if permanent closure of the sites are sought, or cancellation of the water licences, then all of the requirements of the Abandonment and Restoration Plan, as well as of the Licence (Part I) must be met.</p> <p>It has been a pleasure to inspect and work out of MMG's sites since I came to AANDC. MMG's excellent standing in compliance and environmental stewardship has made a mark in the region (as well as removing many) under Peter's leadership.</p>			
<b>SECTION 3</b>	<input type="checkbox"/> Comments	<input type="checkbox"/> Non-Compliance with Act or Licence	<input type="checkbox"/> Action Required
N/A			

Licensee or Representative <b>PETER CULLINANE</b>	Inspector's Name <b>Eva Paul</b>
Signature <i>[Signature]</i>	Signature <i>[Signature]</i>
Date <b>JULY 16 2015</b>	Date <b>16.7.15.</b>

Office Use Only: Follow-up report to be issued by Inspector  Yes  No





Indian and Northern Affairs Canada / Affaires indiennes et du Nord Canada

**LAND USE PERMIT  
NORTHERN AFFAIRS PROGRAM**

**PERMIS D'UTILISATION DES TERRES  
PROGRAMME DES AFFAIRES DU NORD**

Permit Class - Permis Catégorie <b>A</b>	Permit No - NE de permis <b>N2012C0005</b>
---	---

Subject to the Territorial Land Use Regulations and the terms and conditions in this permit, authority is hereby granted to:

Sous réserve du Règlement sur l'utilisation des terres territoriales et des conditions de ce permis:

**MMG Resources Inc.**  
Permittee - Détenteur de permis

To proceed with the land use operation described in the application of:

Est autorisé à entreprendre les travaux d'exploitation des terres décrits dans la demande de permis du:

Signature <b>Theodore Muraro</b>	Date <b>March 1<sup>st</sup>, 2012</b>
Type of Land Use Operation - Genre de travaux d'exploitation des terres <b>Mining (Exploration)</b>	
Location - Emplacement <b>Izok Lake Area, Kitikmeot, NU, NTS76E &amp; 86H</b>	

This permit may be assigned, extended, discontinued, suspended or cancelled pursuant to the Territorial Land Use Regulations.

Ce permis peut faire l'objet d'une cession, d'une prolongation d'une cessation d'une suspension ou d'une annulation, en vertu du Règlement sur l'utilisation des terres territoriales.

Dated at Iqaluit Date a Iqaluit Engineer [Signature] Ingénieur

This 1st Day of March, 2012  
Ce 1st jour de March, 2012

Commencement Date March 1st, 2012 Expiry Date February 28th, 2014  
Date du début des travaux March 1st, 2012 Date d'achèvement February 28th, 2014

**NOTE**

IT IS A CONDITION OF THIS PERMIT THAT THE PERMITTEE COMPLY WITH ANY OTHER APPLICABLE ACT, REGULATION, ORDINANCE BY - LAW OR ORDER DEFAULT HEREOF MAY RESULT IN SUSPENSION OR CANCELLATION OF THIS PERMIT.

**REMARQUE**

LE DÉTENTEUR DU PRÉSENT PERMIS DOIT SE CONFORMER À TOUT AUTRE RÈGLEMENT, LOI, DÉCRET RÈGLEMENT MUNICIPAL OU ARRÊTÉ APPLICABLE. LE MANQUEMENT À CETTE OBLIGATION POURRAIT DONNER LIEU À LA SUSPENSION OU À L'ANNULATION DU PERMIS.

**Canada**



Land Administration  
P.O. Box 100  
IQALUIT, NU X0A 0H0  
Phone: 867-975-4283  
FAX: 867-975-4286

March 16, 2015

MMG Resources Inc.  
Level 26-1117 West Hastings St.  
Vancouver, BC  
V6E 2K3

Dear Ted Muraro,

**Re: Land Use Permit #N2012C0005**  
**Type of Operation: Mining (Exploration)**  
**Location: Izok Lake Area, Kitikmeot, NU, NTS 76E & 86H**

Further to our letter dated January 22<sup>nd</sup>, 2015, this will confirm that the above land use permit is hereby extended from February 28<sup>th</sup>, 2015 to February 28<sup>th</sup>, 2016.

All conditions annexed to land use permit N2012C0005 will apply to this extension.

Sincerely,

Nicholas Kavanagh  
Land Administrator Specialist

cc: Manager, Field Operations  
RMO - Kitikmeot  
NIRB



**NUNAVUT WATER BOARD  
WATER LICENCE RENEWAL**

Licence No. 2BE-IZO1217

Pursuant to the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Agreement Between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada*, the Nunavut Water Board, hereinafter referred to as the Board, hereby grants to

MMG INC.

(Licensee)

26<sup>th</sup> FLOOR -1177 WEST HASTINGS ST., VANCOUVER, BC V6E 2K3

(Mailing Address)

hereinafter called the Licensee, the right to alter, divert or otherwise use water or dispose of waste for a period subject to restrictions and conditions contained within this Licence renewal:

Licence Number/Type: 2BE-IZO1217 TYPE "B"

Water Management Area: NUNAVUT 07

Location: IZOK LAKE PROJECT  
KITIKMEOT REGION, NUNAVUT

Classification: MINING AND MILLING UNDERTAKING

Purpose: DIRECT WATER USE AND DEPOSIT OF WASTE

Quantity of Water use not to Exceed: ONE HUNDRED (100) CUBIC METRES PER DAY

Date of Licence Issuance: DECEMBER 20, 2012

Expiry of Licence: DECEMBER 31, 2017

This Licence renewal issued and recorded at Gjoa Haven, Nunavut, includes and is subject to the annexed conditions.

**Thomas Kabloona,  
Nunavut Water Board  
Chair**

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NUNAVUT WATER BOARD  
NUNAVUT IMALIRIVIN KATIMAYINGI  
OFFICE DES EAUX DU NUNAVUT

**File No.: 2BE-HIG1217/TR/D2  
2BE-IZO1217/TR/D2**

March 25, 2015

Ted Muraro  
Operations Manager – Exploration Canada  
MMG Resources Inc.  
Level 26, 1177 West Hastings Street  
Vancouver, BC V6E 2K3  
E-mail: [Theodore.Muraro@MMG.com](mailto:Theodore.Muraro@MMG.com)

**RE: Licenses No. 2BE-HIG1217 and 2BE-IZO1217, Type “B”, MMG Resources Inc.:  
Request to Carry out Open Burning of Acceptable Materials.**

Dear Mr. Muraro:

The Nunavut Water Board (“NWB”) received on January 14, 2015 a request from MMG Resources Inc. (MMG) to complete controlled open burning, at High Lake Camp at the High Lake Project and Ham Lake Camp at the Izok Project, of acceptable materials (untreated wood materials such as paper, cardboard and wood), without the use of an incinerator. It was stated that proposed activities are related to the “*complete removal and closure of High lake East Camp on the James River at High Lake Project, as well as to the continued reduction and reclamation around the both the historic High Lake site and the Izok site (Ham Lake Camp)*”.

On February 18, 2015, the NWB acknowledged receipt and distributed the request to interested persons and parties for a thirty (30) day review period. Comments were received from Aboriginal Affairs and Northern Development Canada (AANDC) and Environment Canada (EC) on March 18, 2015, and from Kitikmeot Inuit Association (KIA) on March 4, 2015.

Upon review of the request, supporting documentation, terms and conditions in Licenses No. 2BE-HIG1217 and 2BE-IZO1217, and submissions from interested persons and/or parties, the NWB is satisfied that the activity, as proposed by the Licensee, would not directly or indirectly impact surface and groundwater, which is a requirement under Section 12.1(a), (b) of the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, and maintain its obligations to adhere to the terms and conditions in licenses. The NWB has, therefore, approved the request under motions No. 2014-B1-042 and 2014-B1-043, dated March 25, 2015, for an open burning of untreated and unpainted wood materials to be carried out in summer 2015 (or over the course of 2015).



P.O. Box 360  
Kugluktuk, NU X0B 0B0  
Telephone: (867) 982-3310  
Fax: (867) 982-3311  
www.kitia.ca

Kugluktuk  
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# INUIT OWNED LAND USE LICENSE

## KITIKMEOT INUIT ASSOCIATION

### LICENSE NO. KTL306C019 Renewed

Subject to the Terms and Conditions of this License, authority is hereby granted to:

**MMG Resources Inc.**

LICENSEE

To proceed with Land Use operation described in the accepted application dated:  
January 14, 2015

Location: Inuit Owned Lands CO-05, CO-40, CO-82

Type of Operation: Drilling (diamond/ice, etc.), Archaeology, Research  
(wildlife/fish/birds/marine), Collection of Species

Commencement Date: February 25, 2015      Expiry Date: February 24, 2016

This 25 day of February 2015

**Kitikmeot Inuit Association**

By   
LANDS & ENVIRONMENT

The Licensee acknowledges and agrees to comply with Terms and Conditions of this License.


**MMG Resources Inc.**

By   
AUTHORIZED SIGNATORY

Digitally signed by  
jan.nell@mmg.com  
DN: cn=jan.nell@mmg.com  
Date: 2016.01.21 15:15:26 -0800


Affiliates: Nunavut Tungavik Inc., Inuit Tapirisat of Canada, Kitikmeot Corporation

## Appendix III : Water Usage – Domestic and Industrial


	2015 <b>WATER USAGE TRACKING</b> <b>HIGH LAKE AND IZOK PROJECTS</b>									
		MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER		
	<i>PROJECT</i>	<i>HIGH LAKE</i>	<i>HIGH LAKE</i>		<i>IZOK</i>	<i>IZOK</i>	<i>IZOK</i>			
	CAMP USE (DOMESTIC)	27.4	4.9	0.0	53.7	50.1	54.9	0.0		
	CORE SHACK	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
	<b>TOTAL</b>	<b>191.0 M<sup>3</sup></b>								

The above table provides a monthly summary of water use measured in M<sup>3</sup>. Detailed daily figures for each month are provided below.

### June


	2015 <b>WATER USAGE TRACKING</b> <b>IZOK PROJECT</b>																															
		Monday, 1 June 2015	Tuesday, 2 June 2015	Wednesday, 3 June 2015	Thursday, 4 June 2015	Friday, 5 June 2015	Saturday, 6 June 2015	Sunday, 7 June 2015	Monday, 8 June 2015	Tuesday, 9 June 2015	Wednesday, 10 June 2015	Thursday, 11 June 2015	Friday, 12 June 2015	Saturday, 13 June 2015	Sunday, 14 June 2015	Monday, 15 June 2015	Tuesday, 16 June 2015	Wednesday, 17 June 2015	Thursday, 18 June 2015	Friday, 19 June 2015	Saturday, 20 June 2015	Sunday, 21 June 2015	Monday, 22 June 2015	Tuesday, 23 June 2015	Wednesday, 24 June 2015	Thursday, 25 June 2015	Friday, 26 June 2015	Saturday, 27 June 2015	Sunday, 28 June 2015	Monday, 29 June 2015	Tuesday, 30 June 2015	<b>TOTAL</b>
	CAMP USE (DOMESTIC)	0.0	0.0	0.0	0.0	4.0	2.5	1.0	2.1	3.3	1.8	0.6	1.1	1.6	1.8	1.8	1.9	2.4	2.2	2.1	2.1	2.3	2.6	2.5	2.3	1.7	1.7	1.5	2.2	2.9	2.0	53.7
CORE SHACK																																0.0
DAILY TOTALS	0.0	0.0	0.0	0.0	4.0	2.5	1.0	2.1	3.3	1.8	0.6	1.1	1.6	1.8	1.8	1.9	2.4	2.2	2.1	2.1	2.3	2.6	2.5	2.3	1.7	1.7	1.5	2.2	2.9	2.0		
MONTH TOTAL	53.7																															

### July

	2015 <b>WATER USAGE TRACKING</b> <b>IZOK</b>																																
		Wednesday, 1 July 2015	Thursday, 2 July 2015	Friday, 3 July 2015	Saturday, 4 July 2015	Sunday, 5 July 2015	Monday, 6 July 2015	Tuesday, 7 July 2015	Wednesday, 8 July 2015	Thursday, 9 July 2015	Friday, 10 July 2015	Saturday, 11 July 2015	Sunday, 12 July 2015	Monday, 13 July 2015	Tuesday, 14 July 2015	Wednesday, 15 July 2015	Thursday, 16 July 2015	Friday, 17 July 2015	Saturday, 18 July 2015	Sunday, 19 July 2015	Monday, 20 July 2015	Tuesday, 21 July 2015	Wednesday, 22 July 2015	Thursday, 23 July 2015	Friday, 24 July 2015	Saturday, 25 July 2015	Sunday, 26 July 2015	Monday, 27 July 2015	Tuesday, 28 July 2015	Wednesday, 29 July 2015	Thursday, 30 July 2015	Friday, 31 July 2015	<b>TOTAL</b>
	CAMP USE (DOMESTIC)	2.8	2.2	1.8	1.9	2.6	2.2	2.6	2.3	1.7	2.8	2.0	2.6	2.0	2.7	2.4	1.5	1.5	2.1	1.0	1.0	0.7	1.4	0.7	1.3	0.2	0.8	0.4	0.4	0.6	0.0	2.1	50.1
CORE SHACK																																	0.0
DAILY TOTALS	2.8	2.2	1.8	1.9	2.6	2.2	2.6	2.3	1.7	2.8	2.0	2.6	2.0	2.7	2.4	1.5	1.5	2.1	1.0	1.0	0.7	1.4	0.7	1.3	0.2	0.8	0.4	0.4	0.6	0.0	2.1		
MONTH TOTAL	50.1																																



# August

		2015																																	
		WATER USAGE TRACKING																																	
		IZOK PROJECT																																	
		Saturday, 1 August 2015	Sunday, 2 August 2015	Monday, 3 August 2015	Tuesday, 4 August 2015	Wednesday, 5 August 2015	Thursday, 6 August 2015	Friday, 7 August 2015	Saturday, 8 August 2015	Sunday, 9 August 2015	Monday, 10 August 2015	Tuesday, 11 August 2015	Wednesday, 12 August 2015	Thursday, 13 August 2015	Friday, 14 August 2015	Saturday, 15 August 2015	Sunday, 16 August 2015	Monday, 17 August 2015	Tuesday, 18 August 2015	Wednesday, 19 August 2015	Thursday, 20 August 2015	Friday, 21 August 2015	Saturday, 22 August 2015	Sunday, 23 August 2015	Monday, 24 August 2015	Tuesday, 25 August 2015	Wednesday, 26 August 2015	Thursday, 27 August 2015	Friday, 28 August 2015	Saturday, 29 August 2015	Sunday, 30 August 2015	Monday, 31 August 2015	TOTAL		
	CAMP USE (DOMESTIC)	1.4	1.8	2.3	2.5	1.8	2.3	2.3	2.2	2.0	2.4	2.0	2.5	1.6	2.2	2.3	1.4	2.0	1.5	1.8	1.7	2.0	2.1	1.5	2.3	1.6	2.0	1.9	0.8	0.7			54.9		
	CORE SHACK																																	0.0	
	DAILY TOTALS	1.4	1.8	2.3	2.5	1.8	2.3	2.3	2.2	2.0	2.4	2.0	2.5	1.6	2.2	2.3	1.4	2.0	1.5	1.8	1.7	2.0	2.1	1.5	2.3	1.6	2.0	1.9	0.8	0.7					
	MONTH TOTAL	54.9																																	

## Appendix IV : Water Testing Results

Water testing is a requirement associated with winter drilling off of lake ice. No under ice water testing was carried out in 2015

## Appendix V : Water Sampling Photos

See above, no water testing was carried out

Appendix VI : 2015 Wildlife Sightings Slave Project Sites



WILDLIFE SIGHTING SHEET - 2015  
HIGH LAKE & IZOK PROJECT SITE

Date	Name	Wildlife Observed	Location	Notes
14/05/15	P. CULLIVANE	FOX	HIGHLAKE EAST	BROWN
15/05/15	P. CULLIVANE	MUSKOX (20)	20 KM WEST HLE	COLD
15/05/15	P. CULLIVANE	CARABO (12)	" "	HUNGERY
19 MAR 15	H. NICHOLS	CARIBOU (5)	10 NM ESE OF H.L.	BOCKEN EAR NORTHBOUND AT 45 MPH
19 MAR 15	H. NICHOLS	MOOSE (1)	2 NM ESE OF H.L.	BIG ASS MOOSE
20 MAR 15	P. FARRELL	CARIBOU (12)	15 NM ESE OF H.L.	SLEEPY
21 MAR 15	P. FARRELL	CARIBOU (5)	10 NM WNW OF H.L.	
21 MAR 15	P. FARRELL	MUSKOX (4)	15 NM WNW OF H.L.	CUTE
15/04/02	BRE. D.	WOLVERINE TRACK HEADING EAST	MAJOR LAYDOWN	
Apr 5	P. FARRELL	MUSKOX (15)	40 NM East of H.L.	Furry
Apr 5	P. FARRELL	Fox	20 NM East of H.L.	Speedy
MAY 10	P. CULLIVANE	WOLVERINE	200M NORTH OF HIGHLAKE	ON RUNWAY
MAY 12	P. CULLIVANE	RABBITS (3)	HIGHLAKE HELI PAD	WHITE WITH BLACK STIP ON EARS
MAY 12	P. CULLIVANE	SIKSİK (2)	SOUTH CACHE	RUNNING TOGETHER
MAY 19/15	C. KATIAK	GRIZZLY 1	6.9 km SW HIGHLAKE	WALKING NORTH
May 21/15	J. CIRIONE	Moose (1)	20.0M N High Lake	LOST
JUNE 28	P. CULLIVANE	MUSKOX 1	RUNWAY @ 120K	LONELY
July 8	D. BAKER	Wolves (2)	IZOK Runway	BOTH WHITE, NOT OVERLY FEARED
July 22	A. DUBOIS	CARIBOOS (12)	IZOK Runway	

Please try to provide as many details as you can - If you saw a cow caribou and a calf, make a note of that. If you saw animal tracks, such as wolverine or bear, that's important information too. The more specific about the location the better (Please ask the camp manager for detailed information about the name of where you were working - ie. Drill 1232 doesn't help us because the drills are moving all the time). Thanks for taking a few moments to write down what you saw.




WILDLIFE SIGHTING SHEET - 2015  
ICP PROJECT SITE

Date	Name	Wildlife Observed	Location	Notes
04/09/15	P. CULLIVANE	2 X CARIBOO (MALE)	EAST SAND 5140 E 120K	SLEEPING


Please try to provide as many details as you can - If you saw a cow caribou and a calf, make a note of that. If you saw animal tracks, such as wolverine or bear, that's important information too. The more specific about the location the better (Please ask the camp manager for detailed information about the name of where you were working - ie. Drill 1232 doesn't help us because the drills are moving all the time). Thanks for taking a few moments to write down what you saw.

**Appendix VII : Monthly Waste Control Documentation**

June

	Monthly Incineration Tracking Sheet					Initials
	Pacto (LBS)	Kitchen Waste (LBS)	Cardboard (LBS)	Wood (LBS)	Household (LBS)	
01/06/2015						
02/06/2015						
03/06/2015						
04/06/2015						
05/06/2015						
06/06/2015						
07/06/2015						
08/06/2015						
09/06/2015						
10/06/2015						
11/06/2015						
12/06/2015						
13/06/2015						
14/06/2015						
15/06/2015						
16/06/2015						
17/06/2015						
18/06/2015						
19/06/2015						
20/06/2015						
21/06/2015						
22/06/2015						
23/06/2015						
24/06/2015		OPEN	120K			
25/06/2015						
26/06/2015	0	0	0	0	0	PC
27/06/2015	0	0	30	10	10	PC
28/06/2015	0	0	0	0	0	0
29/06/2015	9	14	6	10	6	PC
30/06/2015	0	0	0	0	0	0
01/07/2015	7	19	11	4	9	PC

July

	Monthly Incineration Tracking Sheet					
	Pacto (LBS)	Kitchen Waste (LBS)	Cardboard (LBS)	Wood (LBS)	Household (LBS)	Initials
01/07/2015	0	0	0	0	0	PC
02/07/2015	6	20	10	5	15	PC
03/07/2015	0	0	0	0	0	PC
04/07/2015	5	17	5	2	11	PC
05/07/2015	7	0	0	0	0	PC
06/07/2015	2	0	0	0	0	JC
07/07/2015	9	19	2	0	0	JC
08/07/2015	0	0	0	0	0	JC
09/07/2015	5	22	6	0	0	JC
10/07/2015	0	0	0	0	0	JC
11/07/2015	6	16	0	0	0	JC
12/07/2015	0	6	11	0	0	JC
13/07/2015	5	7	3	0	0	PC
14/07/2015	0	0	0	0	0	PC
15/07/2015	11	5	2	0	5	PC
16/07/2015	0	0	0	0	0	PC
17/07/2015	12	4	0	0	0	PC
18/07/2015	0	0	0	0	0	PC
19/07/2015	4	11	4	10	5	PC
20/07/2015	0	0	0	0	0	PC
21/07/2015	6	19	2	11	8	PC
22/07/2015	0	0	0	0	0	PC
23/07/2015	6	16	0	11	5	PC
24/07/2015	0	0	0	0	0	PC
25/07/2015	7	21	8	12	4	PC
26/07/2015	0	0	0	0	0	PC
27/07/2015	7	13	2	21	0	PC
28/07/2015	0	0	0	0	0	PC
29/07/2015	8	21	8	12	4	PC
30/07/2015	0	0	0	0	0	PC
31/07/2015	13	29	11	4	4	PC

August

MMG	Monthly Incineration Tracking Sheet					
	Pacto (LBS)	Kitchen Waste (LBS)	Cardboard (LBS)	Wood (LBS)	Household (LBS)	Initials
01/08/2015						
02/08/2015						
03/08/2015	0	0	0	0	0	PC
04/08/2015	13	21	2	11	7	PC
05/08/2015	0	0	0	0	0	PC
06/08/2015	14	22	3	12	8	PC
07/08/2015	0	0	0	0	0	PC
08/08/2015	3	7	0	20	6	PC
09/08/2015	0	0	0	0	0	PC
10/08/2015	0	0	0	0	0	PC
11/08/2015	7	19	4	11	17	PC
12/08/2015						
13/08/2015						
14/08/2015						
15/08/2015						
16/08/2015						
17/08/2015						
18/08/2015						
19/08/2015						
20/08/2015						
21/08/2015						
22/08/2015						
23/08/2015						
24/08/2015						
25/08/2015						
26/08/2015						
27/08/2015						
28/08/2015						
29/08/2015						
30/08/2015						
31/08/2015						

JUNE

		IZOK Incinerator Record																															
	Date	1/6/13	2/6/13	3/6/13	4/6/13	5/6/13	6/6/13	7/6/13	8/6/13	9/6/13	10/6/13	11/6/13	12/6/13	13/6/13	14/6/13	15/6/13	16/6/13	17/6/13	18/6/13	19/6/13	20/6/13	21/6/13	22/6/13	23/6/13	24/6/13	25/6/13	26/6/13	27/6/13	28/6/13	29/6/13	30/6/13	TOTALS	
Item																																	
Pacto	lbs					5.00	5.00	8.00	7.00	10.00	7.00	9.50	22.00	14.00	12.00	11.00	13.00	18.00	13.00	15.00	10.00	14.00	12.00	15.00	14.00	12.00	13.00	18.00	20.00	19.00	21.00	337.5	
Kitchen	lbs					10.00	15.00	12.00	15.00	14.50	16.00	14.50	35.00	30.00	33.00	40.00	40.00	42.00	28.00	35.00	31.00	38.00	40.00	37.00	40.00	45.00	34.00	40.00	37.00	38.00	32.00	792	
Cardboard	lbs				30.00	10.00			5.00	30.00	20.00			3.00		2.00	1.00	8.00	5.00	2.00							4.00	48.00	6.00	0.00	4.00	178	
Wood	lbs							25.00			60.00	45.00			350.00	200.00	30.00										20.00		0.00	0.00	0.00	740	
Household	lbs					3.00		10.00	5.00	10.00		29.50	10.00	15.00	5.00	10.00	4.00	28.00	6.00	10.00	10.00		7.00	10.00	5.00	4.00		5.00	0.00	0.00	0.00	186.5	
Total	lbs	0.00	0.00	0.00	30.00	28.00	45.00	30.00	32.00	124.50	23.00	118.50	67.00	62.00	400.00	261.00	89.00	89.00	55.00	65.00	53.00	62.00	59.00	62.00	59.00	61.00	71.00	111.00	63.00	57.00	57.00	0.00	
Mothly Total	lbs	2234.000																															
		IZOK Waste Removal Record																															
Recycling	bag									0.00	0.00									3.00								2.00				5	
Refundables	bag									0.00	0.00									2.00								6.00				8	
Ash	drum									0.00	0.00									0.00							0.00					0	
Waste Oil	drum									0.00	0.00									0.00							0.00					0	
Oil Filters	drum									0.00	0.00									0.00							0.00					0	
Oil Containers	M3									0.00	0.00									0.00							0.00					0	
Misc Garbage	M3									0.00	0.00									0.00							0.00					0	
Batteries / Aerosols	bag										0.00									0.00							0.00					0	
Empty Drums	each				70.00					50.00	70.00									30.00							10.00					230	
Mothly Total	M3	1.625																															


JULY

		IZOK Incinerator Record																															
	Date	1/7/13	2/7/13	3/7/13	4/7/13	5/7/13	6/7/13	7/7/13	8/7/13	9/7/13	10/7/13	11/7/13	12/7/13	13/7/13	14/7/13	15/7/13	16/7/13	17/7/13	18/7/13	19/7/13	20/7/13	21/7/13	22/7/13	23/7/13	24/7/13	25/7/13	26/7/13	27/7/13	28/7/13	29/7/13	30/7/13	31/7/13	TOTALS
Item																																	
Pacto	lbs	18.00	15.00	20.00	27.00	18.00	32.00	22.00	26.00	24.00	28.00	26.00	29.00	26.00	27.00	38.00	32.00	12.00	7.00	11.00	10.00	6.00		13.00	3.00	2.00					16.00	488	
Kitchen	lbs	32.00	35.00	38.00	36.00	35.00	42.00	34.00	35.00	38.00	44.00	37.00	29.00	32.00	35.00	38.00	37.00	26.00	33.00	28.00	45.00	40.00	32.00	29.00	20.00	15.00	13.00		25.00	17.00	5.00	905	
Cardboard	lbs	0.00	30.00	5.00	6.00		5.00	8.00	10.00	9.00	33.00	2.00	3.00	4.00		3.00	1.00	4.00	1.00					16.00	2.00				5.00	2.00	5.00	154	
Wood	lbs	0.00	0.00																													0	
Household	lbs	0.00	0.00	10.00		16.00						31.00	11.00	8.00	12.00	10.00	15.00	10.00	7.00	5.00		6.00		15.00	3.00	2.00			15.00	5.00	181		
Total	lbs	50.00	80.00	73.00	69.00	69.00	79.00	64.00	71.00	71.00	105.00	96.00	72.00	70.00	74.00	89.00	85.00	52.00	48.00	44.00	55.00	52.00	32.00	73.00	26.00	21.00	13.00	0.00	45.00	2.00	43.00	5.00	
Mothly Total	lbs	1728.000																															
		IZOK Waste Removal Record																															
Recycling	bag	5.00	5.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14
Refundables	bag	3.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9
Ash	drum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Waste Oil	drum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Oil Filters	Pails	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3
Oil Containers	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Misc Garbage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Batteries / Aerosols	bag	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
Empty Drums	each	31.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	30.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	161
Bad Water	Drum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mothly Total	M3	3.625																															

AUGUST

		IZOK Incinerator Record																															
	Date	1/8/13	2/8/13	3/8/13	4/8/13	5/8/13	6/8/13	7/8/13	8/8/13	9/8/13	10/8/13	11/8/13	12/8/13	13/8/13	14/8/13	15/8/13	16/8/13	17/8/13	18/8/13	19/8/13	20/8/13	21/8/13	22/8/13	23/8/13	24/8/13	25/8/13	26/8/13	27/8/13	28/8/13	29/8/13	30/8/13	31/8/13	TOTALS
Item																																	
Pacto	lbs	0.00	15.00	34.00	17.00	16.00	12.00	24.00	16.00	20.00	20.00	15.00	18.00	25.00	16.00	12.00	18.00	15.00	14.00	15.00	16.00	18.00	12.00	10.00	10.00	18.00	11.00	15.00	20.00	10.00	8.00		
Kitchen	lbs	37.00	33.00	34.00	28.00	25.00	18.00	52.00	28.00	30.00	33.00	60.00	37.00	36.00	42.00	46.00	36.00	29.00	37.00	30.00	46.00	62.00	25.00	40.00	26.00	24.00	25.00	22.00	20.00	30.00	15.00		
Cardboard	lbs	15.00	0.00	2.00	2.00	0.00	20.00	10.00	12.00	0.00	0.00	0.00	0.00	20.00	10.00	8.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	0.00	0.00	0.00	5.00	0.00			
Wood	lbs	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Household	lbs	8.00	0.00	6.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	8.00	0.00	0.00	0.00	18.00	6.00	0.00	0.00	10.00	15.00	5.00	25.00	0.00	0.00		
Total	lbs	60.00	48.00	76.00	47.00	41.00	50.00	86.00	56.00	50.00	53.00	87.00	55.00	81.00	68.00	66.00	54.00	52.00	51.00	45.00	62.00	98.00	43.00	60.00	36.00	52.00	51.00	42.00	65.00	45.00	23.00	0.00	
Mothly Total	lbs	1703.000																															
		IZOK Waste Removal Record																															
Recycling	bag	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Refundables	bag	0.00	0.00	0.00	0.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Ash	drum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Waste Oil	drum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	
Oil Filters	drum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Oil Containers	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Misc Garbage	M3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Batteries / Aerosols	bag	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Empty Drums	each	0.00	50.00	0.00	0.00	0.00	12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Bad Water	Drums	0.00	0.00	0.00	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Mothly Total	M3	4.625																															





**KBL Environmental LTD.**

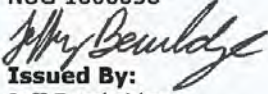
## Certificate of Disposal

Date: August 14, 2015

KBL Job #K2612  
Invoice #4542


KBL Environmental Ltd hereby certifies that the waste shipped from MMG, on KBL Bill of Lading #4501 which was received at KBL Environmental Ltd. on July 23<sup>rd</sup>, 2015 and has been processed, recycled/disposed of in accordance with all applicable Federal and Territorial /Provincial Regulations.


**Generator:**  
MMG  
NUG 1000056



**Issued By:**  
Jeff Bembridge  
Operations Manager  
KBL Environmental Ltd.  
NTR 0000123

PO Box 1108 - 17 Cameron Road - Yellowknife, NT - X1A 2N8



 **KBL Environmental LTD.**

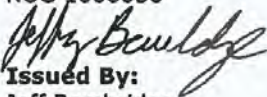
## **Certificate of Disposal**

Date: August 17, 2015

KBL Job #K2629  
Invoice #4591

KBL Environmental Ltd hereby certifies that the waste shipped from MMG, on KBL Bill of Lading #5791 and federal manifest NT09280-8 which was received at KBL Environmental Ltd. on July 27<sup>th</sup>, 2015 and has been processed, recycled/disposed of in accordance with all applicable Federal and Territorial /Provincial Regulations.

**Generator:**  
MMG  
NUG 1000056

  
**Issued By:**  
Jeff Bembridge  
Operations Manager  
KBL Environmental Ltd.  
NTR 0000123

PO Box 1108 - 17 Cameron Road - Yellowknife, NT - X1A 2N8



**KBL Environmental LTD.**

## **Certificate of Disposal**

Date: Sept 4, 2015

KBL Job #K2645  
Invoice #4613

KBL Environmental Ltd hereby certifies that the waste shipped from MMG, on KBL Bill of Lading #4513 and federal manifest NT09316-0 which was received at KBL Environmental Ltd. on August 17<sup>th</sup>, 2015 and has been processed, recycled/disposed of in accordance with all applicable Federal and Territorial /Provincial Regulations.

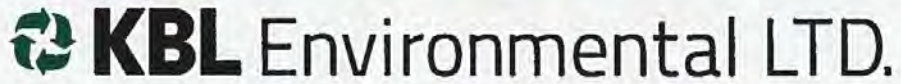
**Generator:**

MMG  
NUG 1000056

**Issued By:**

Jeff Bembridge  
Operations Manager  
KBL Environmental Ltd.  
NTR 0000123

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## Certificate of Disposal

Date: October 13, 2015

KBL Job #K2715  
Invoice #4766

KBL Environmental Ltd hereby certifies that the waste shipped from MMG-Izok, on KBL Bill of Lading #4605 which was received at KBL Environmental Ltd. on September 23<sup>rd</sup>, 2015 and has been processed, recycled/disposed of in accordance with all applicable Federal and Territorial /Provincial Regulations.

**Generator:**

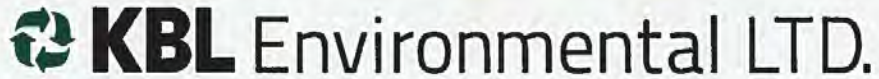
MMG  
NUG 1000056

A handwritten signature in black ink, appearing to read "Jeff Bembridge", is written over the printed name.

**Issued By:**

Jeff Bembridge  
Operations Manager  
KBL Environmental Ltd.  
NTR 0000123

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## **Certificate of Disposal**

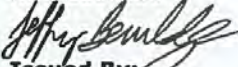
Date: October 13, 2015

KBL Job #K2716  
Invoice #4767

KBL Environmental Ltd hereby certifies that the waste shipped from MMG-High Lake, on KBL Bill of Lading #4604 which was received at KBL Environmental Ltd. on September 23<sup>rd</sup>, 2015 and has been processed, recycled/disposed of in accordance with all applicable Federal and Territorial /Provincial Regulations.

**Generator:**

MMG  
NUG 1000056



**Issued By:**

Jeff Bembridge  
Operations Manager  
KBL Environmental Ltd.  
NTR 0000123

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**WASTE DISPOSAL PLAN**  
**SLAVE PROJECTS**

**AMMENDED OCTOBER 2012**

**MMG RESOURCES**  
**26 – 1177 W. HASTINGS ST.**  
**VANCOUVER, BC**  
**V6E2K3**

## **Guidelines for Waste Incineration**

1. All waste will be categorized and any materials not in accordance with the Department of Environments Policy “Municipal Solid Wastes Suitable for Open Burning” will be removed from the waste stream. Only kitchen waste, sewage, and untreated wood and paper products are approved for incineration.
2. Kitchen and human waste is to be collected and incinerated on a daily basis. If volumes warrant then twice daily.
3. “wet” biological waste from kitchens or toilet facilities will be mixed in small volumes with more combustible paper and cardboard materials to ensure total elimination during incineration.
4. A suitable temporary storage facility for garbage awaiting incineration is required that is impervious to wildlife and decreases odours.
5. Any recyclable materials (plastic bottles, aluminium cans) will be separated, packaged appropriately for transport and removed from site for handling in Yellowknife.
6. Clearly marked separate containers for easy categorization of refuse is encouraged.
7. Any industrial refuse contaminated with petroleum based products from lubricants, fuels, or additives will be appropriately packaged for transport to Yellowknife and handling by KBL.
8. Any batteries, chemicals, or other waste categorized as dangerous or hazardous goods will be appropriately packaged and transported to Yellowknife for proper handling and disposal KBL.
9. Daily records of waste streaming and incineration will be kept and be available upon request to inspectors.
10. Records will be kept of all refuse shipped to Yellowknife for disposal, including date, volume, and category. Chain of custody and final disposal records will be requested from Expediter and KBL Environmental to fully document waste disposal. Copies of final disposal certificates will be provided to AANDC with annual reports.

Waste handling procedure and incinerators at exploration camp locations will be inspected on a monthly basis and reviewed for adequacy and performance in regards to the waste stream that they handle, with the following specifics in mind:

- Operating temperature and complete incineration of waste.

- Composition of remaining ash
- Containment of liquid waste within combustion chamber and structural integrity of the burn chamber.
- Integrity and proper function of the stack.
- Care and maintenance of incinerator and burner.
- Accuracy of records and reporting of transport and disposal

For further information, Environment Canada's guide to batch incineration should be consulted. A copy of summary information for this document is provided here.



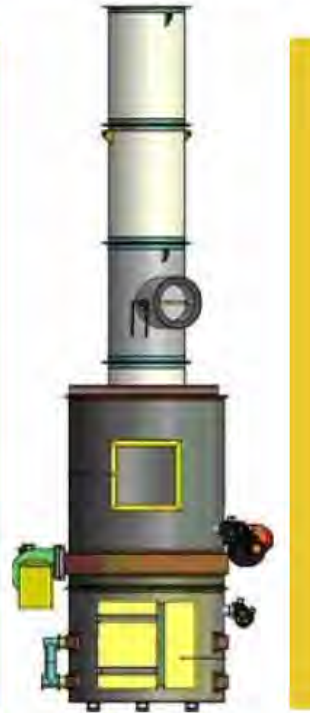


## Fact Sheet: Technical Document for Batch Waste Incineration

The *Technical Document for Batch Waste Incineration* provides guidance for owners, operators and regulators on the appropriate incineration technologies and best management practices to minimize releases of toxic substances into the environment.

### Six Steps to Better Incineration

- 1 Understand Your Waste Stream
- 2 Select the Appropriate Incinerator (or Evaluate the Existing System)
- 3 Properly Equip and Install the Incinerator
- 4 Operate the Incinerator for Optimum Combustion
- 5 Safely Handle and Dispose of Incinerator Residues
- 6 Maintain Records and Report



For more information, please see the complete document at:  
[www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1](http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1)

Contact information:  
TMB@ec.gc.ca or 819-997-3377



## More Details About the Six-Step Process for Batch Waste Incineration

**1**

### **Understand Your Waste Stream**

The first step in managing your waste is understanding what the waste is. Perform a waste audit to understand its quantity and composition. Based on the results, you can assess what appropriate disposal options should be undertaken. Remember the "3Rs": Reduce, Reuse and Recycle.

**2**

### **Select the Appropriate Incinerator (or Evaluate the Existing System)**

To ensure that a suitable incinerator is chosen, the call for proposals for incinerator manufacturers who want to provide service for you should include specific information on the characteristics of the residual waste stream you need to dispose of. For facilities with existing incinerators, owners/operators should reassess the suitability of the existing system to manage the current waste stream. The recommended configuration is a dual chamber controlled air incinerator.

**3**

### **Properly Equip and Install the Incinerator**

Make sure that building and equipment considerations are well planned during the design phase, before installing the incinerator.

**4**

### **Operate the Incinerator for Optimum Combustion**

To ensure optimum combustion conditions, the incinerator must be operating correctly. Proper operation includes separating the waste, weighing it, mixing it for a specified calorific value, and closing the incinerator door once the waste is loaded, and not re-opening it until the burn is complete. Important considerations such as appropriate operator safety training should be completed.

**5**

### **Safely Handle and Dispose of Incinerator Residues**

Ash from the primary chamber of the incinerator can contain materials that are hazardous to the operator's health and to the environment. Operators should use personal protective equipment when handling this material. The ash should be disposed of at an approved disposal site.

**6**

### **Maintain Records and Report**

To demonstrate appropriate operation and maintenance of the incinerator, the facility must maintain records and prepare an annual report.

For more information, please see the complete document at:  
[www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1](http://www.ec.gc.ca/gdd-mw/default.asp?lang=En&n=F53EDE13-1)

Contact information:  
TMB@ec.gc.ca or 819-997-3377

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Aussi disponible en français.



CY-2020-FA "D"

[Photo: Diesel fired unit]

- **Built In Safety Features**
- **Readily Transportable**
- **Economical Operation**
- **Clean Burning**

## Designed for Waste Disposal

### Primary Chamber Volume / Heat Release

- 0.5 m<sup>3</sup> / 3.00 MJ/h

### Waste Types / Approx. Capacity

- Type No. 1: 20\* kg/h
  - Type No. 2: 30\* kg/h
  - Type No. 3: 50\* kg/h
- (\* based on 6 loads/h)

### Power Requirements

- 115 volts 60 cycle single phase.

### Stack

- 14 gauge stainless steel.
- 33 cm diameter.
- 3 m high.
- c/w stainless steel spark arrester and a hinged base plate for transport.

### Casing

- 12 gauge steel.
- Lining: high heat duty castable refractory over high temperature insulation.

### Hearth

- Refractory hearth over 6.35 mm steel base.

### Doors

- 6.35 mm steel plate c/w heavy duty blade latch.
- Charging Door
  - 46 cm x 61 cm clear opening.
  - Refractory lined over steel plate.
- Ash Door
  - 46 cm x 30 cm clear opening.
  - Refractory lined over steel plate.

### Air Supply

- Forced air fan c/w duct to primary air jets and to secondary over-fire air jets.

### Timers

- Cycle timer interconnected to air supply fan and gun type burner enclosed in burner housing.

### Burners

- 490,000 Btu gun type primary burner. The gun burner is enclosed in protective plate steel housing.
- 280,000 Btu gun type burner in the secondary combustion chamber.

### Fuel Supply Options:

- Natural gas "N".
- LPG "LPG".
- Diesel "D" – requires a 450 litre fuel storage tank c/w filter and flexible hose type connection.

### Transporter

- Incinerator and fuel storage mounted on skid type frame 365 cm long x 152 cm wide.
- Height: 2.64 m, with stack folded.
- Constructed of 15 cm I Beam c/w bumper posts.

### Weight

- 2268 kg.

### Options

- LPG fired burner.
- Diesel fired burner.
- 2.3 m Electric power cord.
- Stack winch.
- 1.3 m<sup>3</sup> model CY-2050-FA.
- Cold climate assembly.

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DISTRIBUTED BY:



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20204 – 110 Avenue, Edmonton, AB Canada T5S 1X8  
Phone: (780) 447-5052 Fax: (780) 447-4912  
E-MAIL: info@westlandenvironmental.com

## **Appendix X : Spill Contingency Plan**

The complete Spill Contingency Plan is provided in digital format on the CD that accompanies this report.

## **Appendix XI : Abandonment and Restoration Plan**

The complete Abandonment and Restoration Plan is provided in digital format on the CD that accompanies this report.

## **Appendix Appendix IX : Photos Izok**

Izok Camp on Ham Lake – 2014 site photo



Looking to the West over Ham Lake. Airstrip is to left of photo. Blue trailers of the historical Inmet Camp are on the right of photo.



All of the remaining bulk tanks have now been drained.



Drum fuel storage area at end of 2014 season. All of this has now been removed from site.



Historical bulk fuel tanks and non-servicing heavy equipment ready for backhaul at end of 2014 season has now been removed from site.



Drill equipment, scrap steel, and crushed drums ready for backhaul at airstrip at end of 2014 season have now been removed from site.



Same area as the photo above, now void of drill equipment and crushed drums – August 2015



Looking back towards camp, showing removed material and equipment – August 2015



Cutting and capping historic drill casings at ground level



“Hood” Core shack and site – July 2015