APPENDIX H

ACOUSTIC ENVIRONMENT STUDY

H-1 RWDI Memorandum (May 5, 2017)
H-2 Noise Baseline Study
H-3 Acoustic Assessment Report
H-4 Environmental Noise Assessment
H-5 RWDI Memorandum (March 12, 2018)

NOTE TO READER
APPENDIX H

In April 2015, Treasury Metals submitted an Environmental Impact Statement (EIS) for the proposed Goliath Gold Project (the Project) to the Canadian Environmental Assessment Agency (the Agency) for consideration under the Canadian Environmental Assessment Act (CEAA), 2012. The Agency reviewed the submission and informed Treasury Metals that the requirements of the EIS Guidelines for the Project were met and that the Agency would begin its technical review of the submission. In June 2015, the Agency issued a series of information requests to Treasury Metals regarding the EIS and supporting appendices (referred to herein as the Round 1 information requests). The Round 1 information requests included questions from the Agency, other federal and provincial reviewers, and members of Indigenous communities, as well as interested stakeholders. As part of the Round 1 information request process, the Agency requested that Treasury Metals consolidate the responses to the information requests into a revised EIS for the Project.

Appendix H to the revised EIS (Acoustic Environment Study) includes information related to the effects of the Project on noise. The appendix includes the following four components:

- H-1: A memorandum from RWDI Air, dated May 5, 2017, which provides an opinion of the implications of refinements to the Project layout to the noise levels predictions presented as part of the original EIS. The expected changes should be relatively minor, resulting in slightly higher predicted noise levels for those receptors located along East Thunder Lake Road. The predicted noise levels at the closest receptors, located to the south of the Project near Tree Nursery Road are expected to be slightly lower as a result of the changes to the Project since the filing of the original EIS.
- H-2: Noise Baseline Study: This study presents the results of the monitoring program to measure and record background ambient sound levels at receptors in proximity to the Project, and to describe baseline noise conditions. The information contained in this report was relied on to prepare Section 5.3.1 of the revised EIS.
- H-3: Acoustic Assessment Report (AAR): This study demonstrates the Project will be able to achieve compliance with provincial permitting requirements. The information contained in this report was relied on as the primary source of information for the assessment of the effects of the Project on blasting noise and vibration levels (Section 6.4 of the revised EIS). The provincial permitting required to obtain a noise ECA is a separate process that will require Treasury Metals submit an updated AAR reflecting the final design specifications for the Project.
- H-4: Environmental Noise Assessment: This study provides an evaluation of the effects of the Project on noise levels throughout the life of the Project. The information presented in this report is the primary source of information used for describing the effects of the Project on noise levels (Section 6.4 of the revised EIS).

- H-5: A memorandum from RWDI Air, dated March 12, 2018 providing technical details in support of information requests with respect to:
    - The definition of regional and local study areas;
    - Inclusion of noise due to off-site project vehicle traffic;
    - Assessment of blasting noise; and
    - Inclusion of adjustments for sound character.

No changes have been made to the portions of this appendix presented in the original EIS issued in April 2015 (i.e., H-2, H-3 and H-4), however memorandum's H-1 and H-5 have been provided to support technical information identified as deficient during the Round 1 Information Request process. To aid the reader, bookmarks for each component are provided in the electronic copy of this appendix.

As part of the process to revise the EIS, Treasury Metals has undertaken a review of the status for the various appendices. The status of each appendix to the revised EIS has been classified as one of the following:

- **Unchanged**: The appendix remains unchanged from the original EIS, and has been re-issued as part revised EIS.
- **Minor Changes:** The appendix remains relatively unchanged from the original EIS, and has been re-issued with relevant clarification.
- **Major Revisions**: The appendix has been substantially changed from the original EIS. A re-written appendix has been issued as part of the revised EIS.
- **Superseded:** The appendix is no longer required to support the EIS. The information in the original appendix has been replaced by information provided in a new appendix prepared to support the revised EIS.
- **New**: This is a new appendix prepared to support the revised EIS.

The following table provides a listing of the appendices to the revised EIS, along with a listing of the status of each appendix and their description.

List of Appendices to the Revised EIS		
Appendix	Status	Description
Appendix A	Major Revisions	Table of Concordance
Appendix B	Unchanged	Optimization Study
Appendix C	Unchanged	Mining Study
Appendix D	Major Revisions	Tailings Storage Facility
Appendix E	Minor Changes	Traffic Study

List of Appendices to the Revised EIS		
Appendix	Status	Description
Appendix F	Major Revisions	Water Management Plan
Appendix G	Superseded	Environmental Baseline
Appendix H	Minor Changes	Acoustic Environment Study
Appendix I	Unchanged	Light Environment Study
Appendix J	Minor Changes	Air Quality Study
Appendix K	Minor Changes	Geochemistry
Appendix L	Superseded	Geochemical Modelling
Appendix M	Minor Changes	Hydrogeology
Appendix N	Unchanged	Surface Hydrology
Appendix O	Superseded	Hydrologic Modeling
Appendix P	Unchanged	Aquatics DST
Appendix Q	Major Revisions	Fisheries and Habitat
Appendix R	Major Revisions	Terrestrial
Appendix S	Major Revisions	Wetlands
Appendix T	Unchanged	Socio-Economic
Appendix U	Minor Changes	Heritage Resources
Appendix V	Major Revisions	Public Engagement
Appendix W	Unchanged	Screening Level Risk Assessment
Appendix X	Major Revisions	Alternatives Assessment Matrix
Appendix Y	Unchanged	EIS Guidelines
Appendix Z	Unchanged	TML Corporate Policies
Appendix AA	Major Revisions	List of Mineral Claims
Appendix BB	Unchanged	Preliminary Economic Assessment
Appendix CC	Unchanged	Mining, Dynamic And Dependable For Ontario's Future
Appendix DD	Major Revisions	Indigenous Engagement Report
Appendix EE	Unchanged	Country Foods Assessment
Appendix FF	Unchanged	Photo Record Of The Goliath Gold Project
Appendix GG	Minor Changes	TSF Failure Modelling
Appendix HH	Unchanged	Failure Modes And Effects Analysis
Appendix II	Major Revisions	Draft Fisheries Compensation Strategy and Plans
Appendix JJ	New	Water Report
Appendix KK	New	Conceptual Closure Plan
Appendix LL	New	Impact Footprints and Effects

APPENDIX H-1

RWDI MEMORANDUM

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Canada

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Fax: +1.519.823.1316
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MEMORANDUM

DATE:	2017-05-05	**RWDI REFERENCE #:** 1602163
TO:	Mark Wheeler	**EMAIL:** mark@treasurymetals.com
FROM:	John DeYoe	**Email:** john.deyoe@rwdi.com
RE:	**Air Quality and Noise Impact Changes Related to Proposed Mill Location Treasury Metals**	

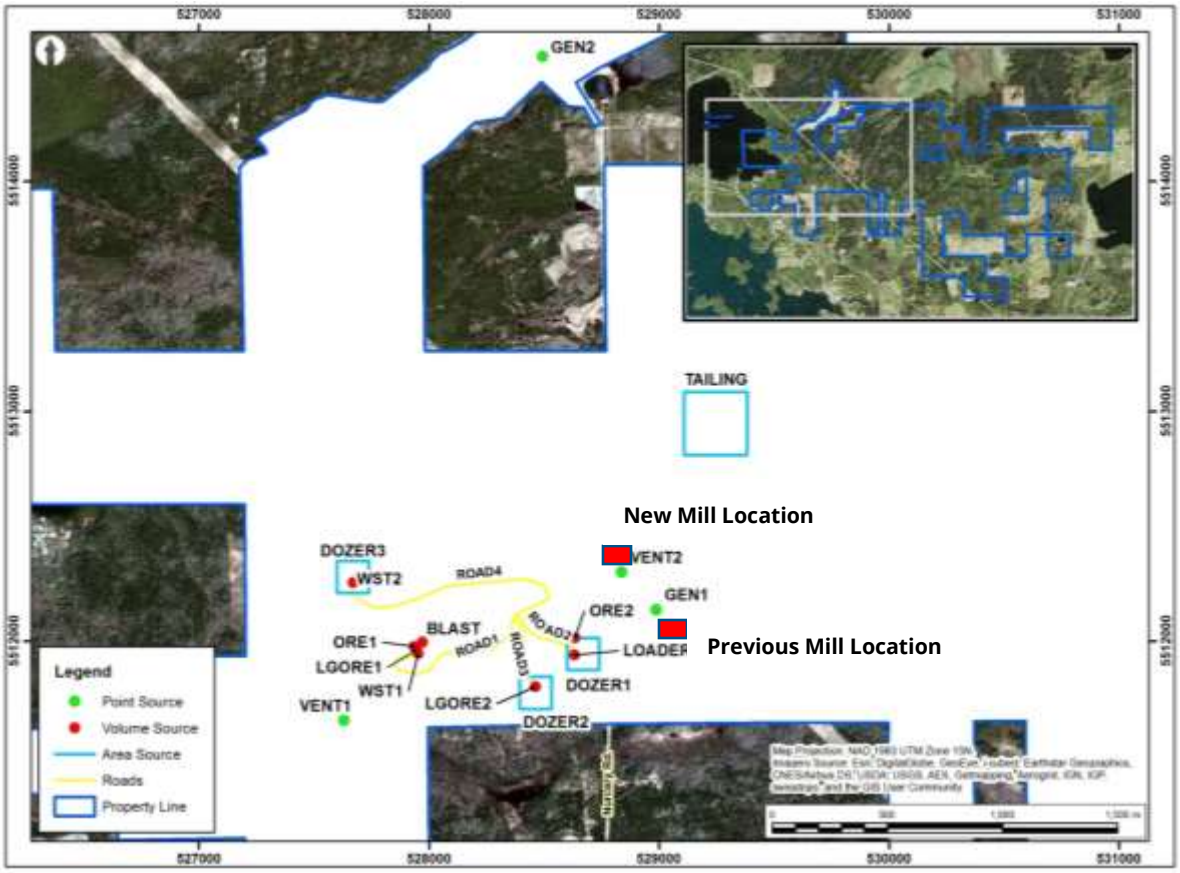
RWDI has previously completed an Air Quality[i] and Noise[ii] assessment for the Environmental Impact Statement (Federal) as well as an Air Quality[iii] and Noise[iv] assessment for the Environmental Compliance Assessment (Provincial). There were numerous air quality and noise sources examined for the project and their impact was assessed at receptors around the site.

Treasury Metals has asked RWDI to review the impact of moving the mine mill and associated activities to a location roughly 500 metres the northwest of the previously proposed location as shown in Figure 1, attached. Relatively few of the air quality and noise sources are associated with the mill. Generally speaking, this move would be an improvement or neutral in terms of air quality and noise. The mill activities are now farther from the closest receptors to the site and will improve. The receptors to the west, near Thunder Lake, are all over two kilometers away from the mill activity and will now be approximately 250 metres closer to the mill activities and will be neutrally affected. The following sections examine the air quality and noise impacts related to the proposed relocation of the mill.

AIR QUALITY

Air Quality Sources

The locations of the sources used in the air quality modelling are shown in the figure following. The red rectangles indicate the approximate positions of the previously proposed position of the mill and the newly proposed location of the mill.



The following sources associated with the mill were evaluated in the EIS and/or ECA assessments:

Source	Label	Percentage Emissions
Road to ore stock pile (shorter)	ROAD2	2% of Airborne metals
Unloading from ore trucks	ORE2	< 1% of particulate
Loader feeding ore crusher	LOADER	< 1% of particulate
Dozer on ore pile	DOZER1	3% of particulate

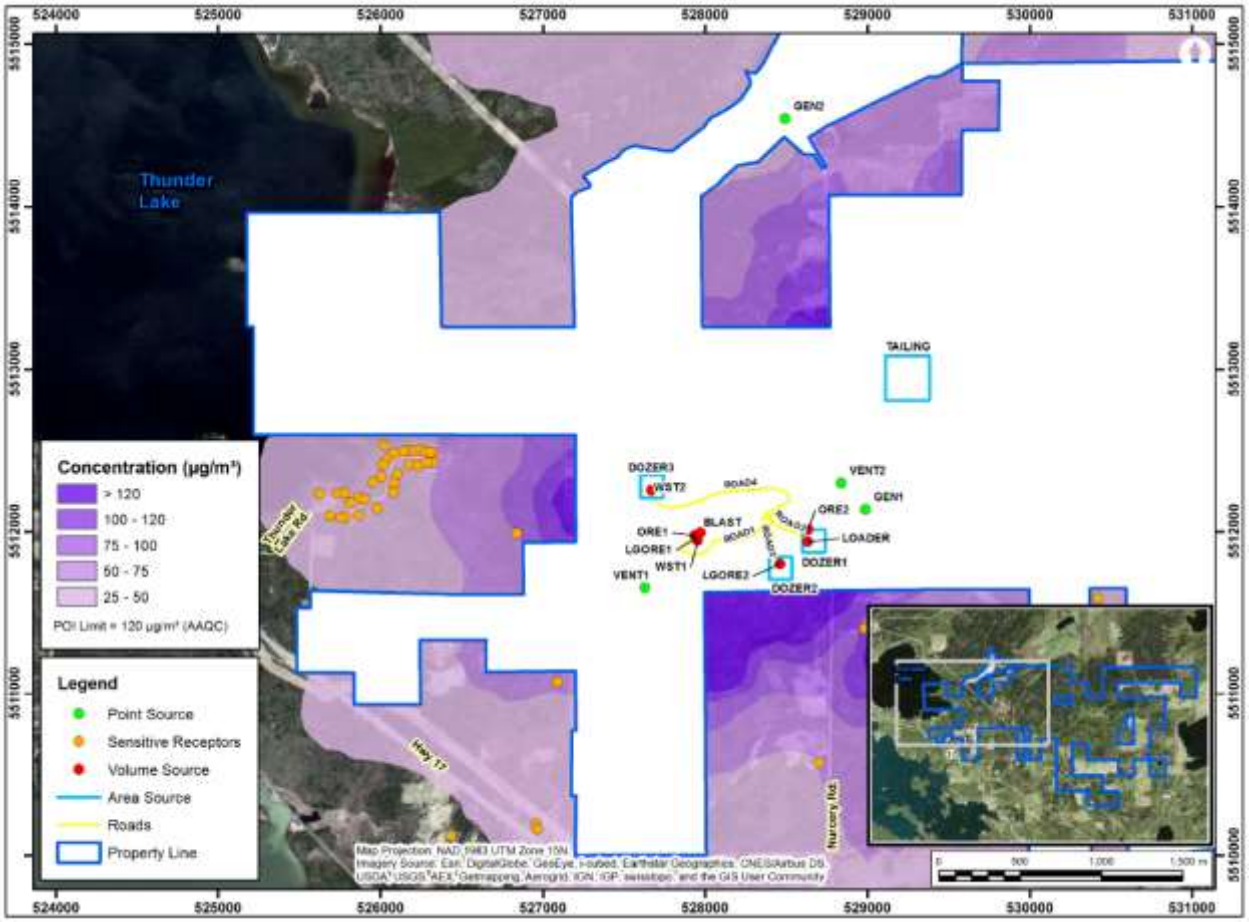
Insignificant Sources

500 KW Emergency generator	Gen1
150 kW Emergency Generator	Gen2
Baghouse emissions -ore crusher	BAGHOUSE
Kiln Burner	KILN
Elution Heater	ELUTION
Carbon Leach Tanks	MILL

The insignificant sources listed above will continue to be insignificant if the location of the mill is changed. For a further discussion of the significance of the sources we would direct the reader to the Air Quality Environment Compliance Assessment[iii]. The only significant emission from the mill area that were assessed are related to particulate emissions.

Air Quality Receptors

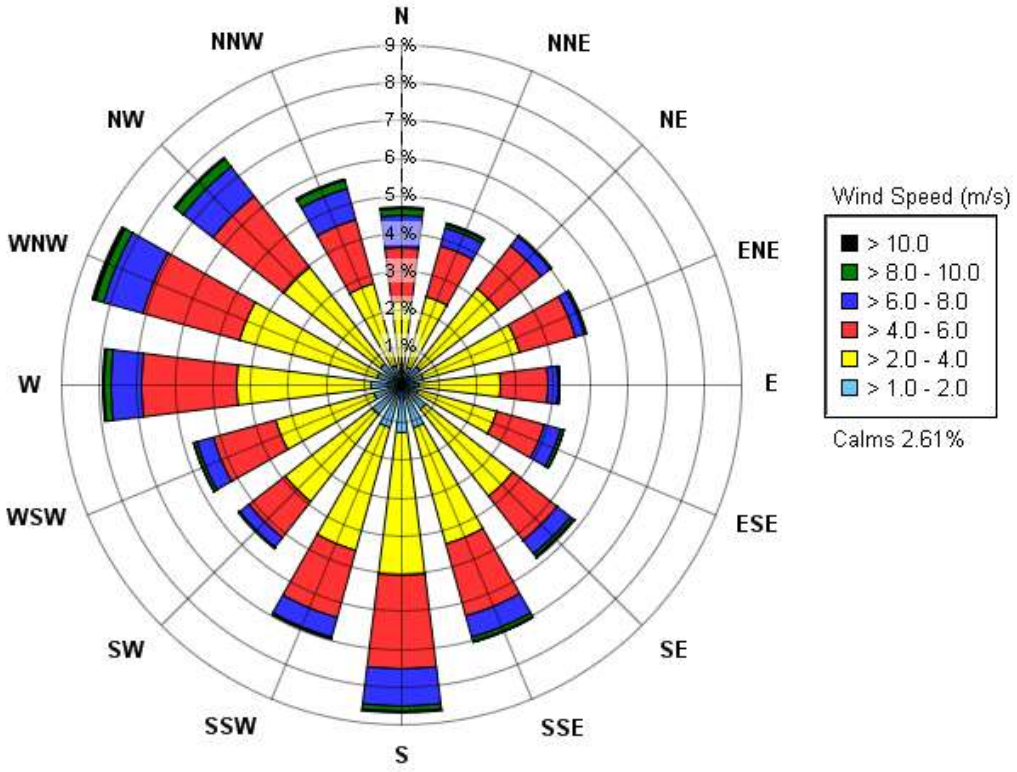
The only receptors that could possibly be negatively affected by moving the mill are the receptors to the west of the mine site, towards Thunder Lake. The receptor locations are shown in the figure below which also shows the worst case 24-hour total suspended particulate (TSP) emissions:



The closest residential receptors are roughly 2500 metres from the initially proposed location of the mill. The newly proposed mill location will be approximately 300 metres closer to the western receptors.

Air Quality Impact Frequency

The receptors located to the west of the site are also only infrequently impacted by emissions from the mill. The figure below shows the distribution of wind angles for the area:



As can be seen from the wind rose above the western receptors will be downwind of the mill area less than 10 % of the time.

Air Quality Discussion

The mill site will be roughly 12% closer to the closest residential receptors to the west of the site. The receptors are well past the point of maximum ground level concentrations for the mill emissions. Numerical modelling of the mill emission would show concentrations at these points would increase less than 12%. Since mill area emissions only represent 7% of the total emissions, even if the predicted concentrations related to the emissions from the mill area doubled, they would only represent a 7% increase in the predicted concentration of particulate. The most critical air quality impacts modelled for the western receptors are related to the 24-hour TSP concentrations. Under worst-case conditions, at the closest

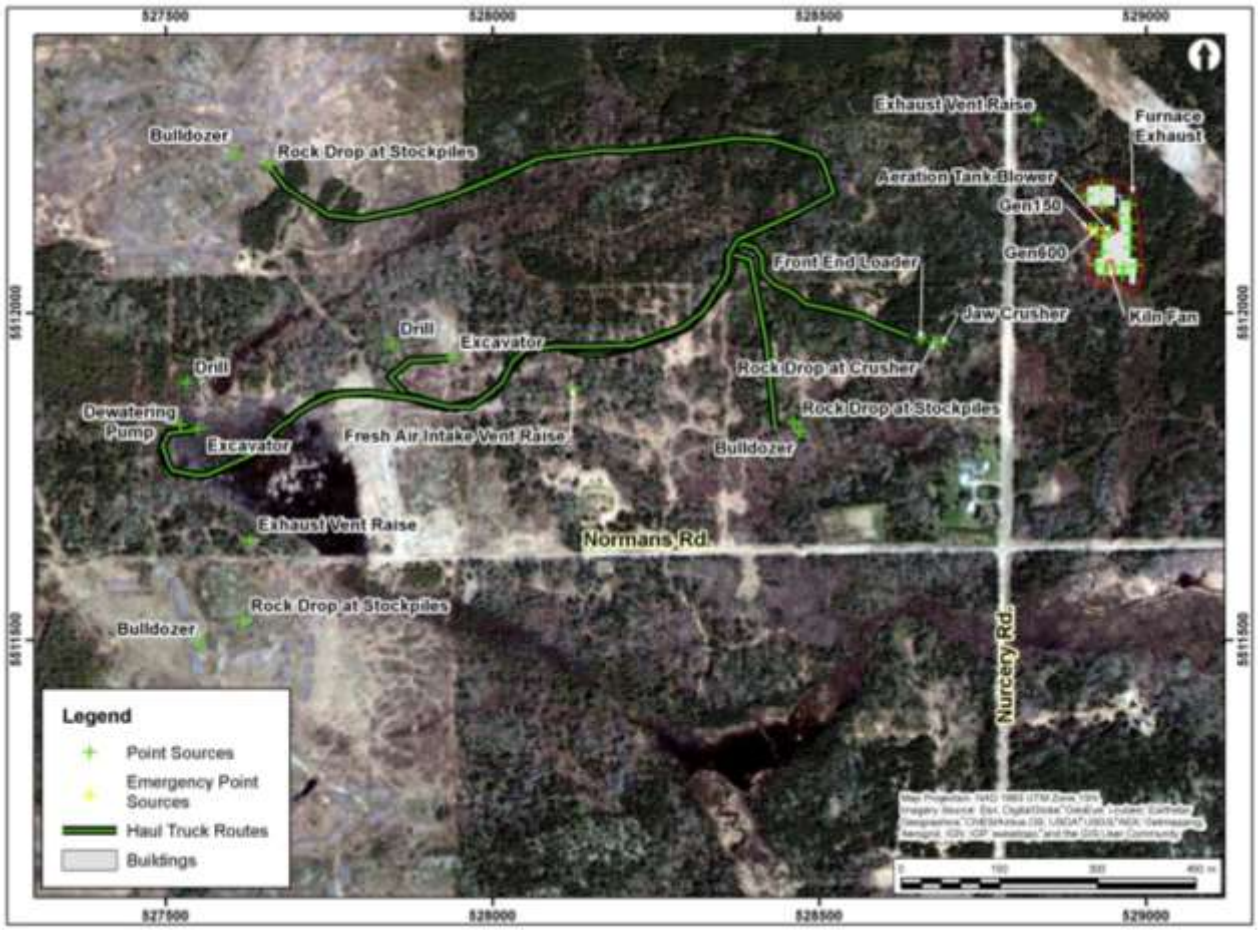
residential receptor, the changed mill location would translate to roughly 3 micrograms per cubic metre of TSP. Any increase in concentrations related to the newly proposed mill location would occur less than 10% of the time.

The worst case receptor locations were to the south of the mine property. These locations will experience lower concentrations as a result of the new proposed mill location. The same is true for any receptors to the east of the site. There are no nearby receptors to the north of the site.

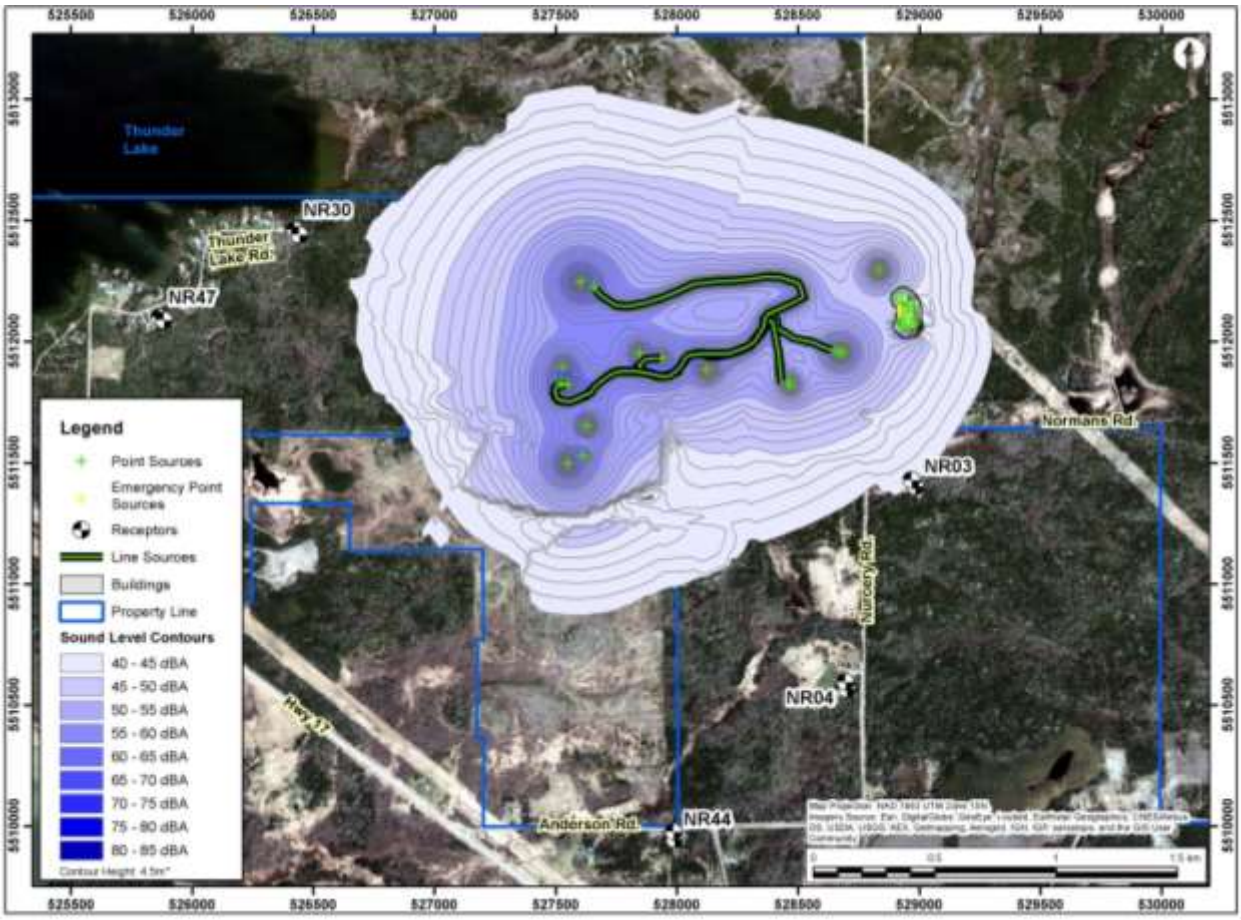
In conclusion, the receptors to the west of the mine site would experience very small increases in particulate emissions that would occur infrequently and would still be below air quality criteria. Air quality will be improved at all other receptors as a result of the new mill location.

NOISE

The locations of the noise sources are shown in the figure following.



The next figure shows the noise modelling results with mill located in the previously proposed location as well as a number of critical receptors.



The receptor that will be most negatively affected by moving the mill related noise sources 500 metres to the northwest will be NR30. The mill will be roughly 300 metres closer to NR30. The table following shows the impact of all the mill related noise sources at NR30.

The impact of all the mill related sources at NR30 is 17 and 28 decibels for regular and emergency operations respectively. The new proposed mill location is roughly 300 metres closer to NR30. The average distance of the mill related sources is 2515 metres from the previously proposed mill location. The simple noise to distance attenuation is calculated by the formula:

20 log (R2/R1)

Where: R1 is the distance to the first receptor from the source
R2 is the distance to the second receptor from the source

Thus:

20 log (2515/2215)
= 1.1 dBA

The approximate impact at NR30 from the sources related to the new mill location is 29 dBA. The modelled noise impact from all sources at NR30 was 34 dBA with the mill in the new location the impact from all sources will be below 35 dBA which is still well below the provincial nighttime guideline of 40 dBA.

Please note that the 1.1 dBA increase is only related to the mill sources. The impacts at NR30 are still dominated by other sources so the cumulative increase is much less than 1.1 dBA.

The previously modelled impact at NR3, which is the closest receptor to the site, was 40 dBA. The old mill location was within one kilometer to NR3 and the new location will be roughly 1200 metres away. The noise impact will likely be below 40 dBA at this location now.

In conclusion, the proposed new mill location will not cause any of the critical receptors to be above noise criteria values and may improve conditions at the worst-case receptor.

CLOSING

In general, the new proposed mill location will have benefits in terms of air quality and noise at the most greatly impacted receptors.

Those receptors that will now be closer to the mill will have imperceptible changes in noise impacts. All receptors will be below noise criteria.

In terms of Air Quality (particulate) impacts, the receptors to the west will infrequently experience very small increases in particulate levels over what was predicted with the old mill location. The predicted levels will still be well below Air Quality criteria.

Yours very truly,

<Original signed by>

John DeYoe, B.A., d.E.T.
Senior Consultant / Air Quality Specialist / Principal

JD/klm

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[i] Goliath Gold Project, Wabigoon, Ontario, Final Report, Environmental Air Quality Assessment, RWDI #1401701
October 16, 2014.
[ii] Treasury Metals Inc. – Goliath Gold Project, Wabigoon, Ontario, Final Report, Environmental Noise Assessment, RWDI #1401701, October 16, 2014.
[iii] Treasury Metals Incorporated, Goliath Gold Project, Wabigoon, Ontario, **Final Report** Emission Summary and Dispersion Modelling Report, RWDI #1401701, October 16, 2014.
[iv] Treasury Metals Incorporated, Goliath Gold Project, Wabigoon, Ontario, Final Report, Acoustic Assessment Report, RWDI #1401701, October 16, 2014.

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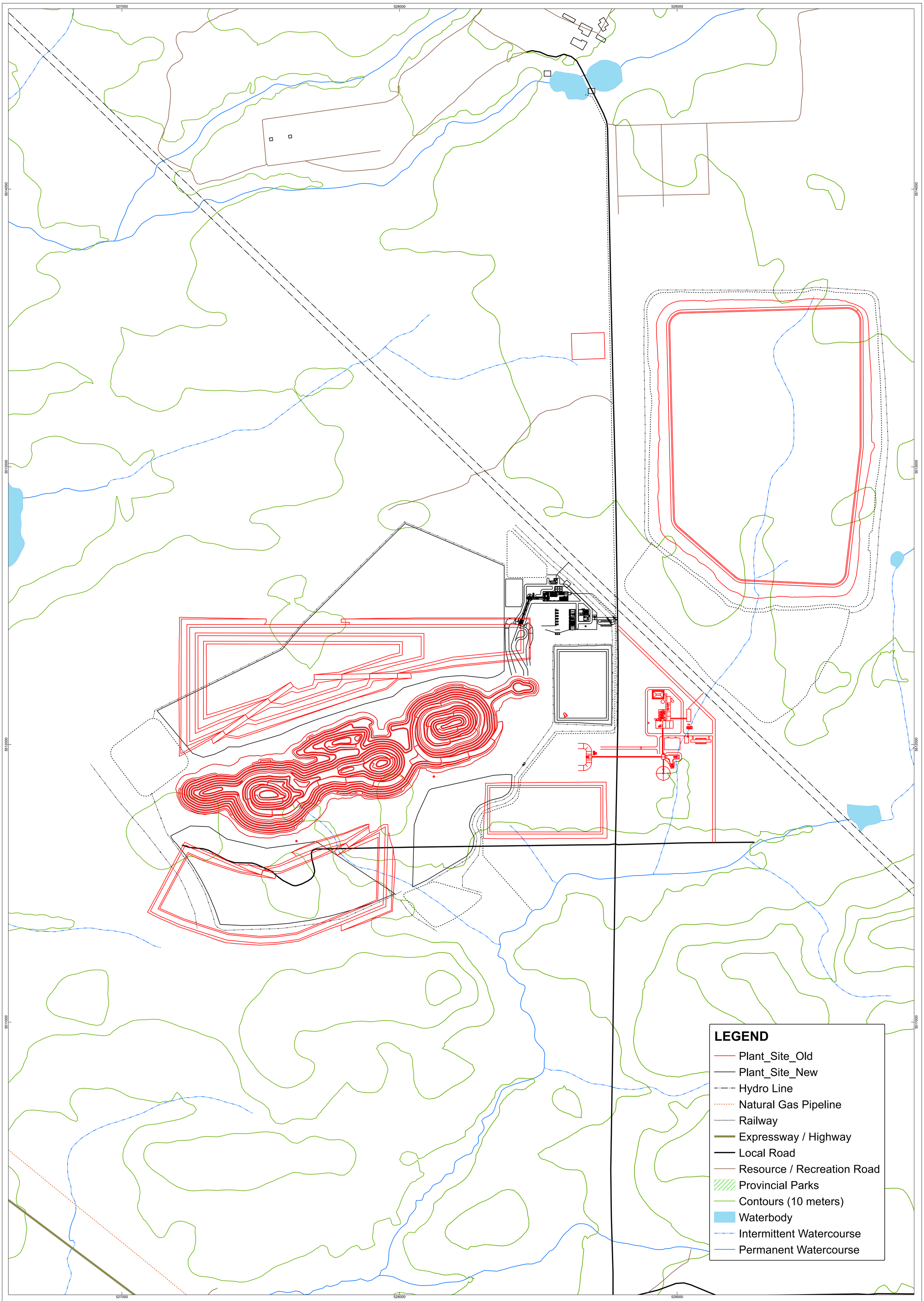

LEGEND

- Plant_Site_Old
- Plant_Site_New
- Hydro Line
- Natural Gas Pipeline
- Railway
- Expressway / Highway
- Local Road
- Resource / Recreation Road
- Provincial Parks
- Contours (10 meters)
- Waterbody
- Intermittent Watercourse
- Permanent Watercourse

0 200 400 600 800 1,000
Meters

N

REFERENCE AND NOTES

Data by Treasury Metals Inc.
Projection: NAD83 UTM Zone 15N
Note: Project details are subject to change during final engineering design

GOLIATH GOLD PROJECT
DRYDEN, ON, CANADA

RWDI GA Changes

FIGURE: TBD | REV.00

SCALE:7500

TREASURY METALS INC.

DESIGN: MP 26 JAN. 2017
GIS: MP 26 JAN. 2017
CHECK: MW 26 JAN. 2017
REVIEW: DB 26 JAN. 2017

Figure 1

APPENDIX H-2

NOISE BASELINE STUDY

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Treasury Metals Inc. - Goliath Gold Project

Dryden, Ontario

Final Report

Noise Baseline Study

RWDI #1300747
January 23, 2014

SUBMITTED TO:

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Tables

Figures

1. INTRODUCTION

Treasury Metals Incorporated (Treasury) has been exploring and developing the Thunder Lake Gold deposit known as the Goliath Gold Project (the Project), located near Dryden, Ontario in the Kenora Mining District (Figures 1 and 2). Treasury continues to develop the Project towards Feasibility Status through: Environmental Baseline Studies which were initiated in Fall of 2010 and are ongoing.

The purpose of this report is to summarize the existing baseline conditions in the study area of the Project in terms of environmental noise.

1.1 Overview of Goliath Gold Project

The Project is located in northwestern Ontario, approximately 125 kilometers (km) east of the City of Kenora, 20 km east of the City of Dryden and 325 km northwest of the City of Thunder Bay. The total area of the Project is 4,991 hectares (50 km^2) covering portions of Hartman and Zealand townships east of the city of Dryden, Ontario.

Treasury has undertaken a 30,000 meter diamond drill program and has several development stage programs underway at the Project. In 2010, A.C.A. Howe International completed an Independent Preliminary Economic Assessment on the deposit and made recommendations for the further project development.

Treasury began an exploration program in 2008 and has not previously undergone any environmental or advanced exploration/mine permitting processes. No other exploration work has been completed on the Thunder Lake Property or the Laramide Property since 1999 and 1994, respectively. Underground and diamond drill hole sampling has previously taken place at both properties (A. C. A. Howe, 2010).

The proposed mining development is focused on the Thunder Lake Deposit. Operations will start initially with surface methods and follow with underground mining production from Year 3 to Year 10. A mill with gravity separation followed by carbon-in-leach circuit (CIL) is proposed for mineral processing (A. C. A. Howe, 2012).

2. ENVIRONMENTAL NOISE

Environmental sound levels vary continuously over time. To account for both daily and short-term variations in sound levels, several single numerical descriptors have been developed based on large-scale psycho-acoustic studies of annoyance with environmental noise. These allow sound monitoring to be conducted for a constantly varying sound environment over an extended period, with the results described as a single number that accurately describes the environment.

The single number descriptor commonly used in most international standards for environmental sound measurements is the energy equivalent sound level (L_{EQ}). The L_{EQ} value, expressed in dBA, is the energy-averaged, A-weighted sound level for the complete measurement interval. It is the steady, continuous sound level over a given period that has the same acoustic energy as the actual varying

sound levels occurring over the same period in the measured environment. It is one of the most common and useful predictors of human response to noise, and is also one of the noise descriptor that is used in the majority of environmental sound level criteria. The A-weighting accounts for the frequency content of the measured sound based on a frequency response similar to that perceived by the human ear.

The descriptors specific to this study are $L_{EQ\ 1\text{-}hr}$, L_{MAX} and L_{MIN}. The $L_{EQ\ 1\text{-}hr}$ is the 1-hour A-weighted energy equivalent sound level, $L_{EQ\ 1\text{-}hr}$, referred to as the hourly sound level. The L_{MAX} is the maximum sound level experienced during the monitoring program. The L_{MIN} is the minimum sound level experienced during the monitoring program.

Ranges of typical everyday sounds are presented in Table 1.

Table 1: Typical Ranges of Commonly Encountered Sound Levels

Sound Level	dBA	Common Everyday Sources
Deafening	**120**	Threshold of pain
	115	Maximum noise level at a hard rock concert
	110	Accelerating motorcycle at 1 m
	105	Loud auto horn at 3 m
Very Loud	**100**	Dance club; Maximum human vocal output at 1 m
	95	Jackhammer at 15 m
	90	Inside a noisy factory
	85	Heavy truck pass-by at 15 m
Loud	**80**	School cafeteria; Noisy bar
	75	Near edge of major highway; Inside automobile travelling at 60 km/h
	70	Vacuum cleaner at 1.5 m
	65	Normal human speech, i.e., an un-raised voice, at 1 m
Moderate	**60**	Typical background noise levels in a large department store; Hair dryer
	55	Running tap water
	50	Clothes dryer; Air conditioner
	45	Typical background noise level in an office caused by HVAC; Flowing stream
Faint	**40**	Typical background noise level in a library; EUB guideline for noise at 1.5 km
	35	Average whisper; Typical quiet outdoors
	30	Broadcast studio
	25	
Very Faint	**20**	Deep woods on a calm day
	15	
	10	
	5	Human breathing
	0	Threshold of hearing, i.e., quietest sound that can be heard

3. ASSESSMENT CRITERIA

In Class 3 areas, described as rural or recreational, the applicable MOE "Stationary Source" guidelines are those set out in MOE Publication NPC-232 (MOE, 1995). These guidelines state that one-hour sound exposures ($L_{EQ,\ 1\text{-}hr}$ dBA values) from stationary noise shall not exceed that of the background, where the background is defined as the sound level present in the environment produced by noise sources other than those associated with the facility under assessment. The MOE Publication NPC-232 sound level limits are outlined as follows:

- The higher of 45 dBA or background noise, during the daytime hours (0700-1900h);
- The higher of 40 dBA or background noise, during the evening hours (1900-2300h); and
- The higher of 40 dBA or background noise, during the night-time hours (2300-0700h).

The applicable guideline limit is the higher of the measured background sound level and the MOE's minimum sound level limit. The above default sound level limits are the applicable for the receptors surrounding the Project. Background ambient sound level measurements were conducted and are summarized in Section 4.

4. BASELINE SOUND LEVEL ASSESSMENT

The basic procedures for the baseline assessment consists of long-term background sound level measurements of receptors near the Project, validation of measured hourly data based on weather information, and comparing the validated lowest hourly sound level data to the default guideline limits.

Long-term measurements of background ambient sound levels at one location was conducted from December 5 to December 7, 2011, near the Project Site noted in Figure 1. Additional monitoring at three representative locations was conducted from July 3 to July 9, 2013, shown in Figure 2. All measurements were conducted in accordance with the applicable requirements of MOE Publication NPC-103 (MOE, 1977b).

4.1 Equipment

Sound level readings were obtained using a Larson-Davis Model 820 precision integrating sound level meters, configured to log L_{EQ} (5 minute) levels during the 2011 monitoring and configured to log L_{EQ} (1 hour) levels during the 2013 monitoring. This unit meets IEC 61672 (IEC, 2002) Class I sound level meter requirements, and Ontario Ministry of the Environment Publication NPC-102 requirements (MOE, 1977a). The sound level meters were field-calibrated at the beginning and end of measurements to ensure accuracy for all monitoring events.

A PCB Model 377A60 microphone was used at each monitoring location to ensure adequate low-level response (with a "noise floor" of approximately 20 dBA). Each microphone was mounted on a tripod, with the microphone located approximately 1.5 m above grade. Environmental microphone kits were used to provide protection from wind and rain. Each kit includes a wind screen with bird spikes to reduce wind

noise and interference from birds. Desiccants were used to sustain dryness of the environmental kit to prevent damage from rain.

Weather data were obtained from the nearest Environment Canada meteorological station located in Dryden, Ontario. This station recorded wind speed, wind direction, temperature and relative humidity on an hourly basis.

4.1.1 Data Validation

Data collected from the sound level meters were analyzed to determine the baseline conditions. Only data with meteorological conditions complying with MOE NPC-103 criteria during the measurement period have been used in the analysis of background sound levels. Acceptable meteorological conditions are shown in Table 2.

Table 2: Acceptable Meteorological Conditions

Parameter	Lower Limit	Upper Limit
Temperature	-20°C	40°C
Wind Speed	-	20 km/h
Relative Humidity	-	95 %
Precipitation	-	0 mm/h

Periods of short duration high-level events resulting from human activity or wind gust are excluded from the analysis. Audio recording was not conducted as part of this program and, therefore validation of the activities during these short duration high-level events was not possible. The measured sound levels from these events were excluded from the analysis. This is a conservative approach to determining the lowest background sound levels. Highway traffic noise from the Trans-Canada Highway was steady resulting in a continuous background sound and was therefore not excluded for the 2011 analysis.

5. BASELINE MONITORING RESULTS AND DISCUSSION

The study area is in a rural location outside a small northern community with low levels of human activity. Background ambient sound levels in remote areas are typically low, ranging from about 25 to 40 dBA. These values are similar to those measured for the Project. Tables 3 and 4 show the measured ambient noise values for each monitoring event. Each table summarizes the measured ambient sound levels and the resultant guideline limits. The sound from these levels would be described as faint (see Table 1). The measured ambient sound levels are lower than the NCP-232 guideline minima; therefore, for the purposes of this study, the NCP-232 guideline minima will be used as the sound level criteria for the detailed impact assessment.

Table 3: 2011 Baseline Monitoring Results

	L_{EQ} (1hr)	Min	Max	NPC-232 Guideline Minima	Resultant Limit
Day	28	20	54	45	45
Evening	34	23	50	40	40
Night	30	19	66	40	40

Noise observed during the study consisted of most wind, small animals, bird noise and noise from the TransCanada Highway which runs in near proximity to the study area. The difference between daytime and nighttime sound levels were generally small, and are attributed mainly to very low level of noise from human activity which could not be screened out. Figures 3 through 5 graphically display the measured LEQ, LMIN and LMAX for the duration of the 2011 study.

Table 4: 2013 Baseline Monitoring Results

Location	Time Period	L_{EQ} (1hr)	L_{MIN} (1hr)	L_{MAX} (1hr)	MOE NPC-232 Guideline Minima	Resultant Limit
Site 1	Day	39	30	70	45	45
	Evening	38	30	66	40	40
	Night	35	29	67	40	40
Site 2	Day	38	20	68	45	45
	Evening	37	27	63	40	40
	Night	32	19	68	40	40
Site 3	Day	32	21	69	45	45
	Evening	35	24	69	40	40
	Night	28	20	62	40	40

Notes: *Daytime time period – 0700-1900 hours*
Evening time period – 1900-2300 hours
Night time period – 2300-0700 hours

Figures 6a through 8c graphically display the measured L_{EQ}, L_{MIN} and L_{MAX} with weather exclusions for the duration of the 2013 study at each of the three locations.

6. CONCLUSION

This report has presented a summary of the current noise levels in the vicinity of the Project site. The noise measurement results indicate that the existing baseline sound levels did not exceed the sound level limits as outlined in the MOE Publication NPC-232. Based on our review of the data, it appears that the existing baseline conditions are typical of Northwestern Ontario conditions.

7. REFERENCES

A. C. A. Howe International Limited. 2010. *Technical Report and Preliminary Economic Assessment on the Goliath Gold Project*.

A. C. A. Howe International Limited. 2012. *Preliminary Economic Analysis of the Goliath Gold Project*.

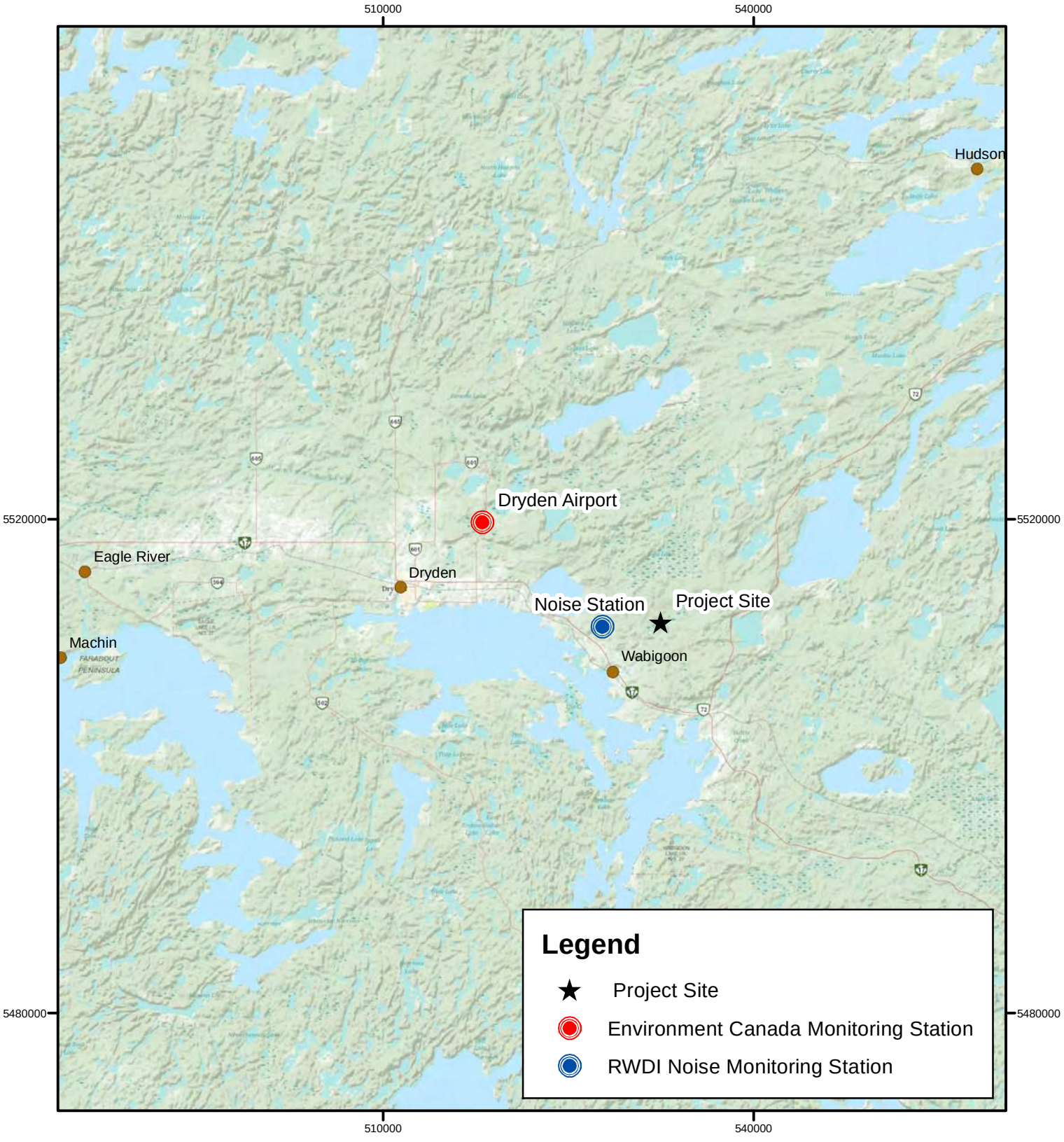
Ontario Ministry of the Environment (MOE), 1995, Publication NPC-232 “Sound Level Limit for Stationary Sources in Class 3 Areas (Rural)”.

Ontario Ministry of the Environment (MOE), 1977b, Publication NPC-103 “Procedures”.

International Electrotechnical Commission (IEC), 2002, IEC Standard 61672-1 “Electroacoustics – Sound level meters – Part 1: Specifications”.

Ontario Ministry of the Environment (MOE), 1977a, Publication NPC-102 “Instrumentation”.

FIGURES



Monitoring Station Locations Near the Project Site

Goliath Gold - Zealand Township, Ontario

Source: Basemap and Town Locations from ESRI and its Licensor(s) 2011

Project #1200542

True North

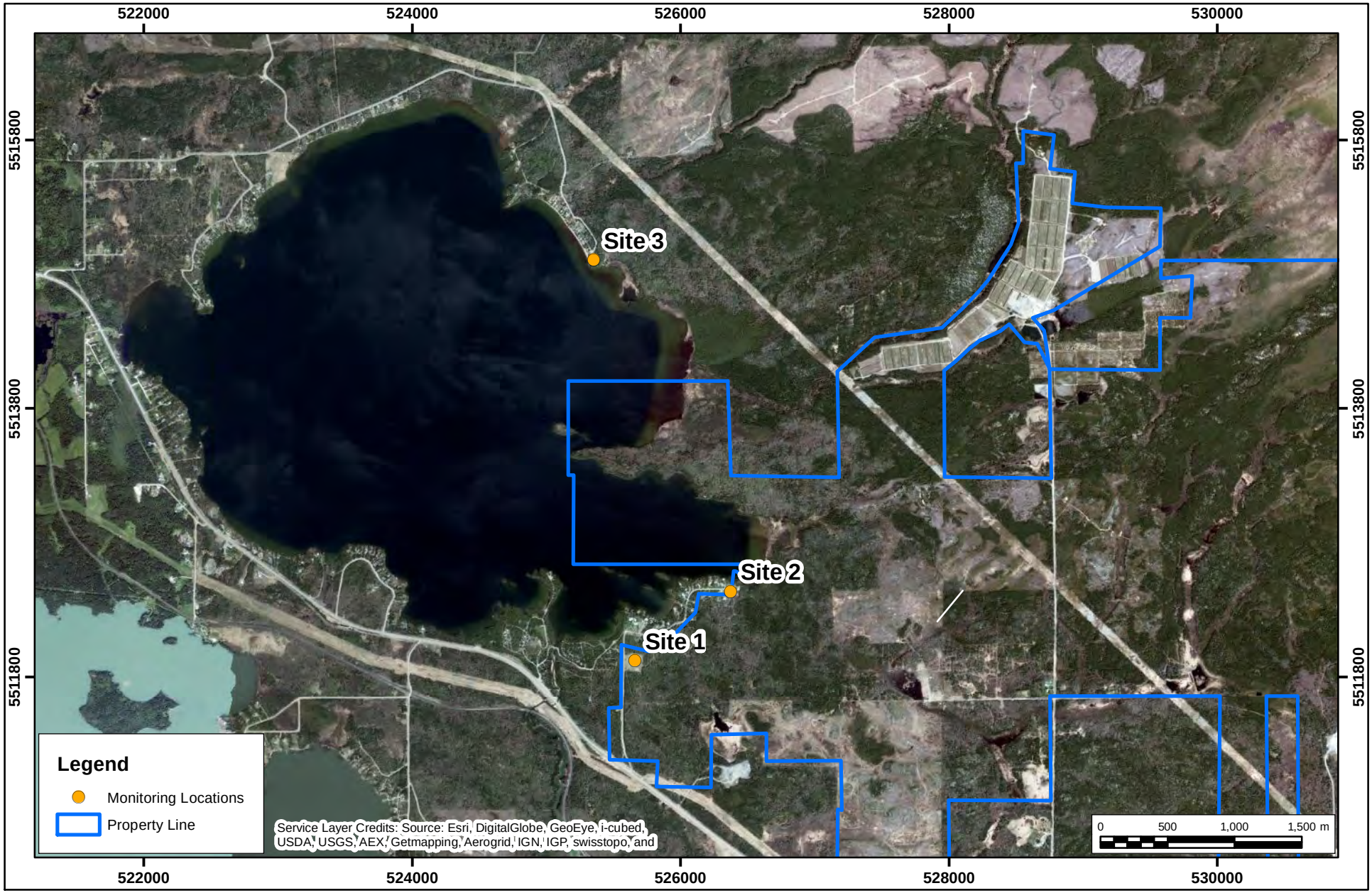
Drawn by: JFV

Fig: 1

Approx. Scale: 1:428,633

Date Revised: Jan. 30, 2012

RWDI



Noise Monitoring Locations

Map Projection: NAD 1983 UTM Zone 15N.

True North

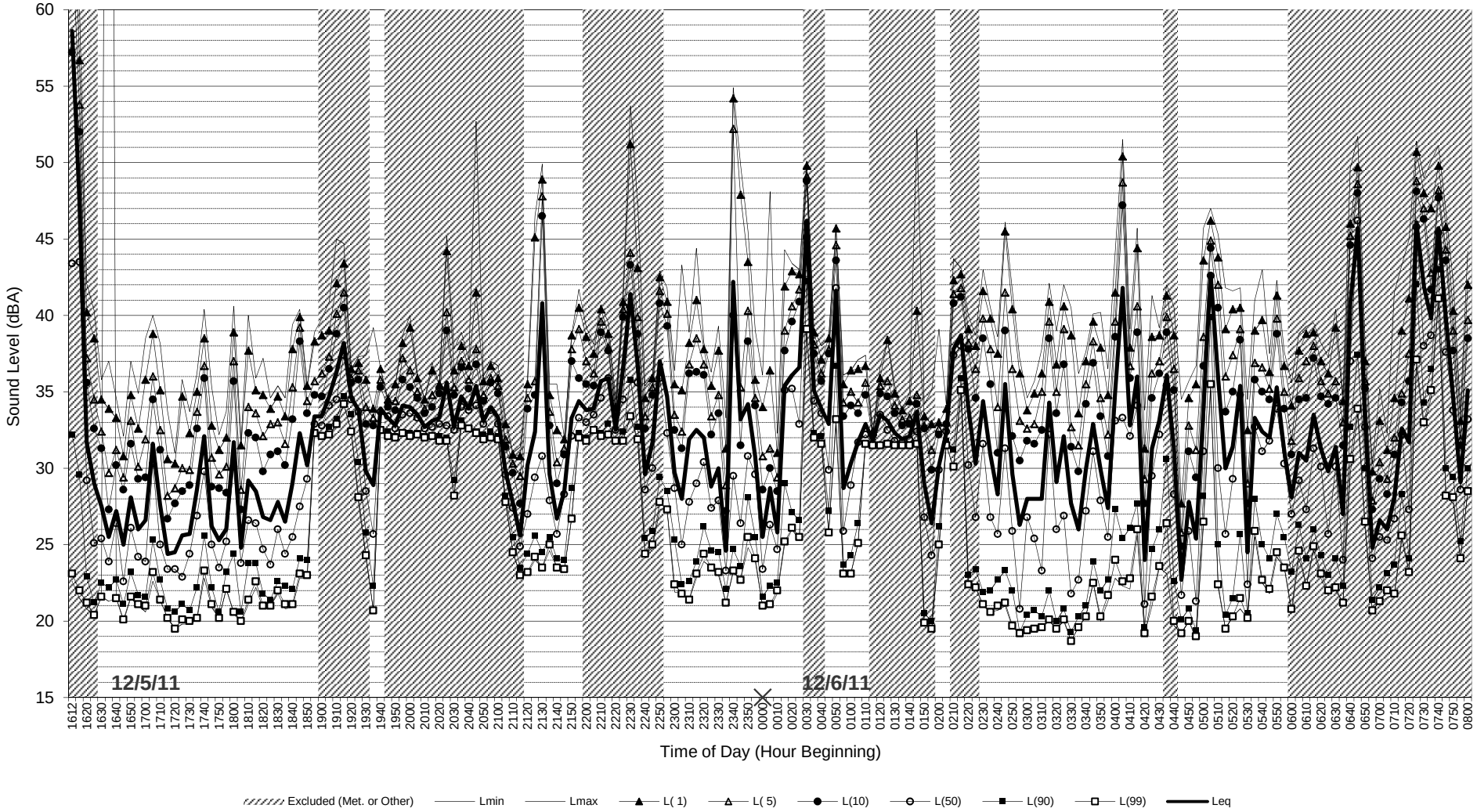
Goliath Gold Mine, Kenora Mining Division, Ontario

Project #1300747

Drawn by: CAM	Figure: 2
Approx. Scale:	1:40,000
Date Revised:	July 30, 2013

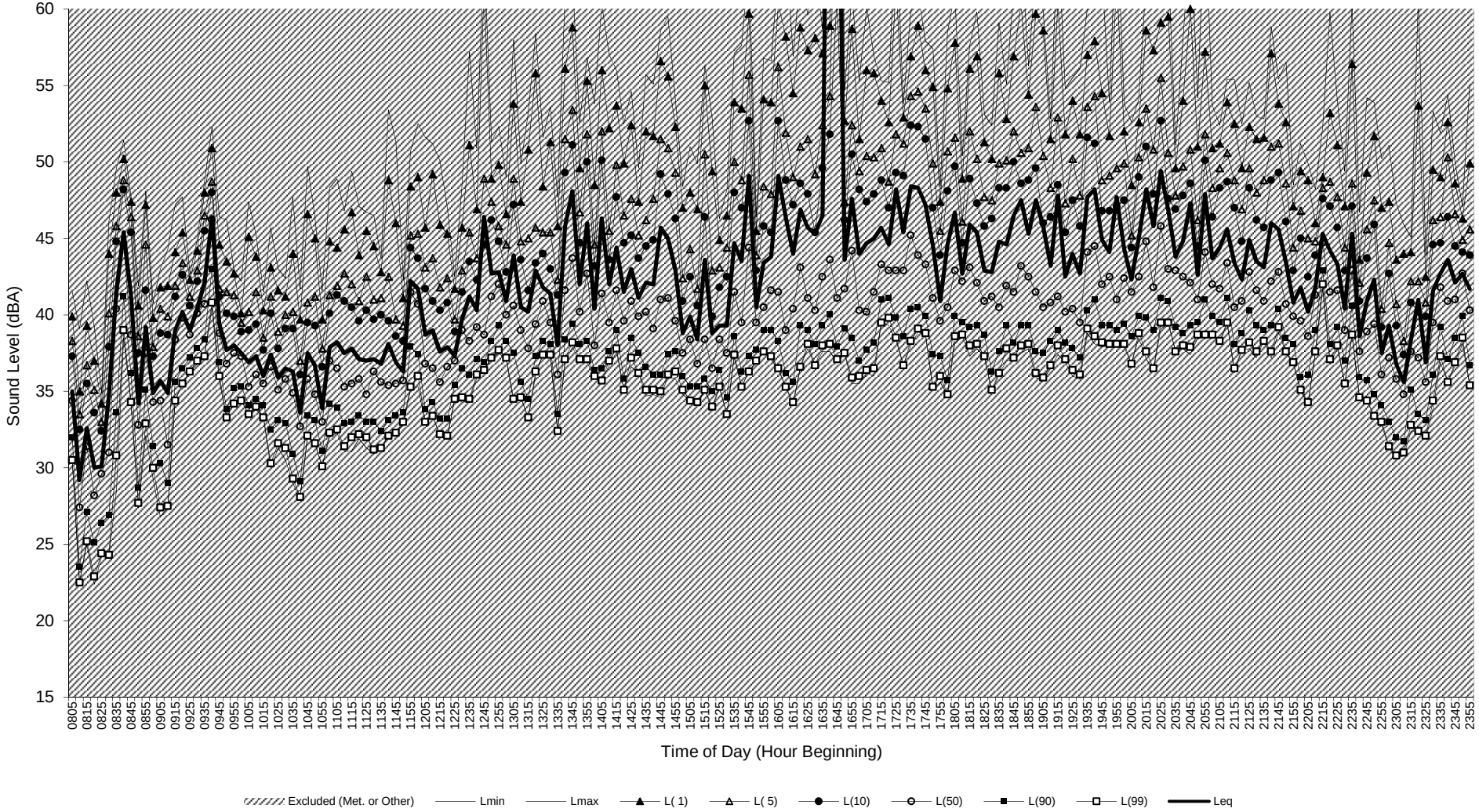
RWDI

Long-Term Measurement Results



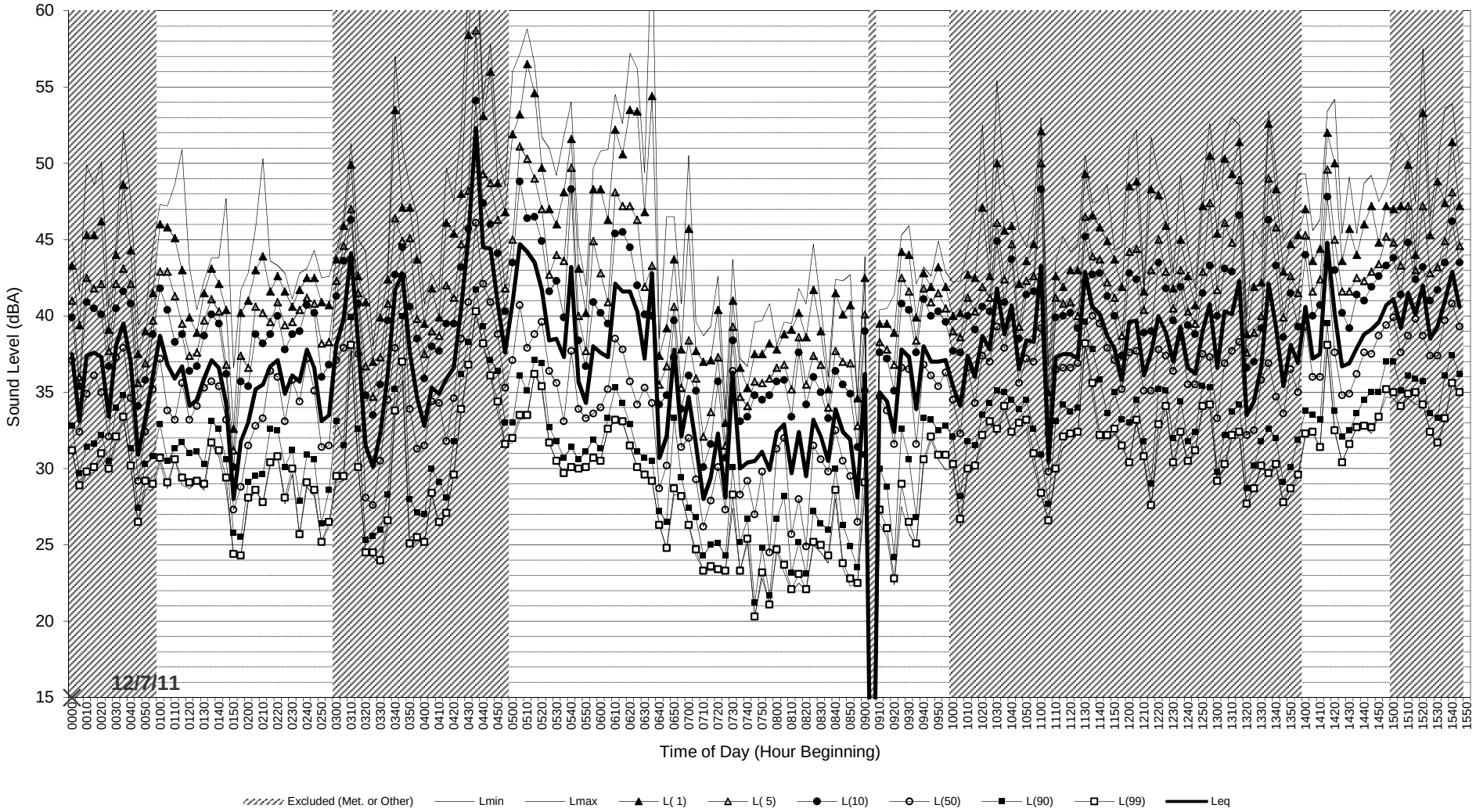
Measured Ambient Sound Levels From Dec 5,2011 to Dec 6,2011 Goliath Gold Project # 1200542	Figure No. **3** Date: Jan 18, 2012	RWDI

Long-Term Measurement Results



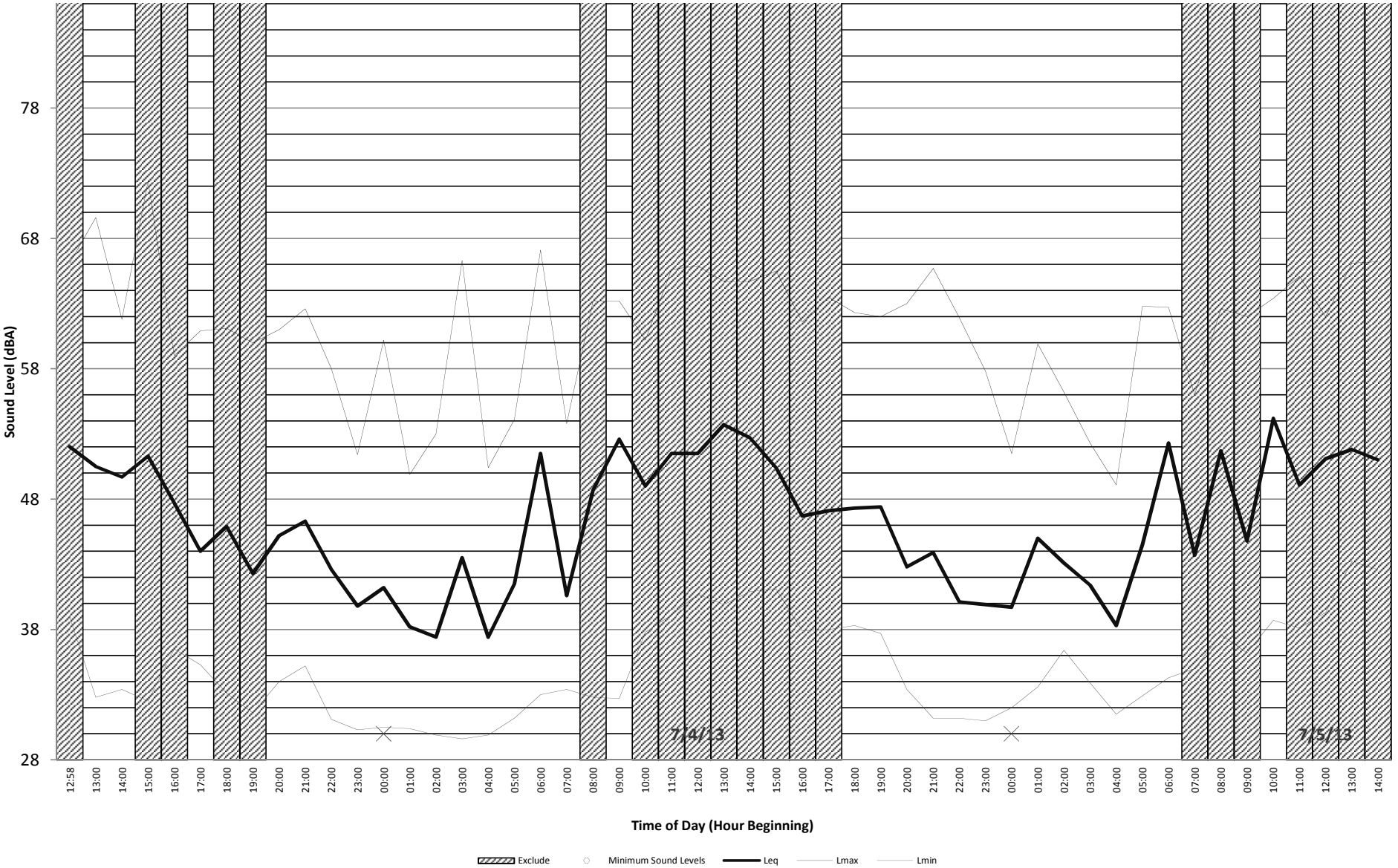
Measured Ambient Sound Levels From Dec 6,2011 to Dec 6,2011 Goliath Gold Project # 1200542	Figure No. **4** Date: Jan 18, 2012	RWDI

Long-Term Measurement Results



Measured Ambient Sound Levels From Dec 7,2011 to Dec 7,2011 Goliath Gold — Project # 1200542	Figure No. **5** Date: Jan 18, 2012	RWDI

Long-Term Measurement Results
Site 1



Measured Ambient Sound Levels
From 03/07/2013 12:58:27 PM to 05/07/2013 2:00:00 PM

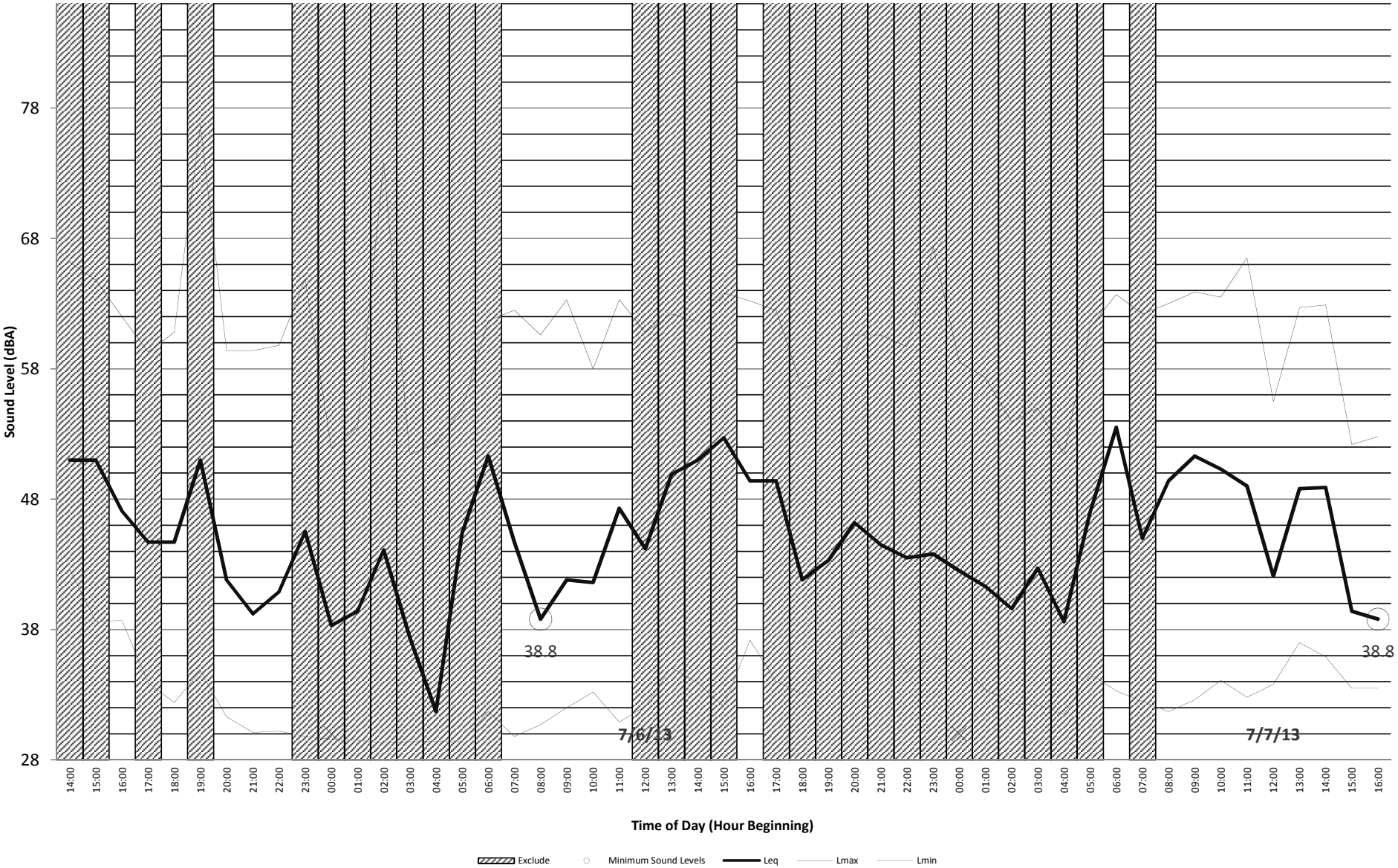
Project # 1300747

Figure No. 6a

Date: Aug. 01, 2013

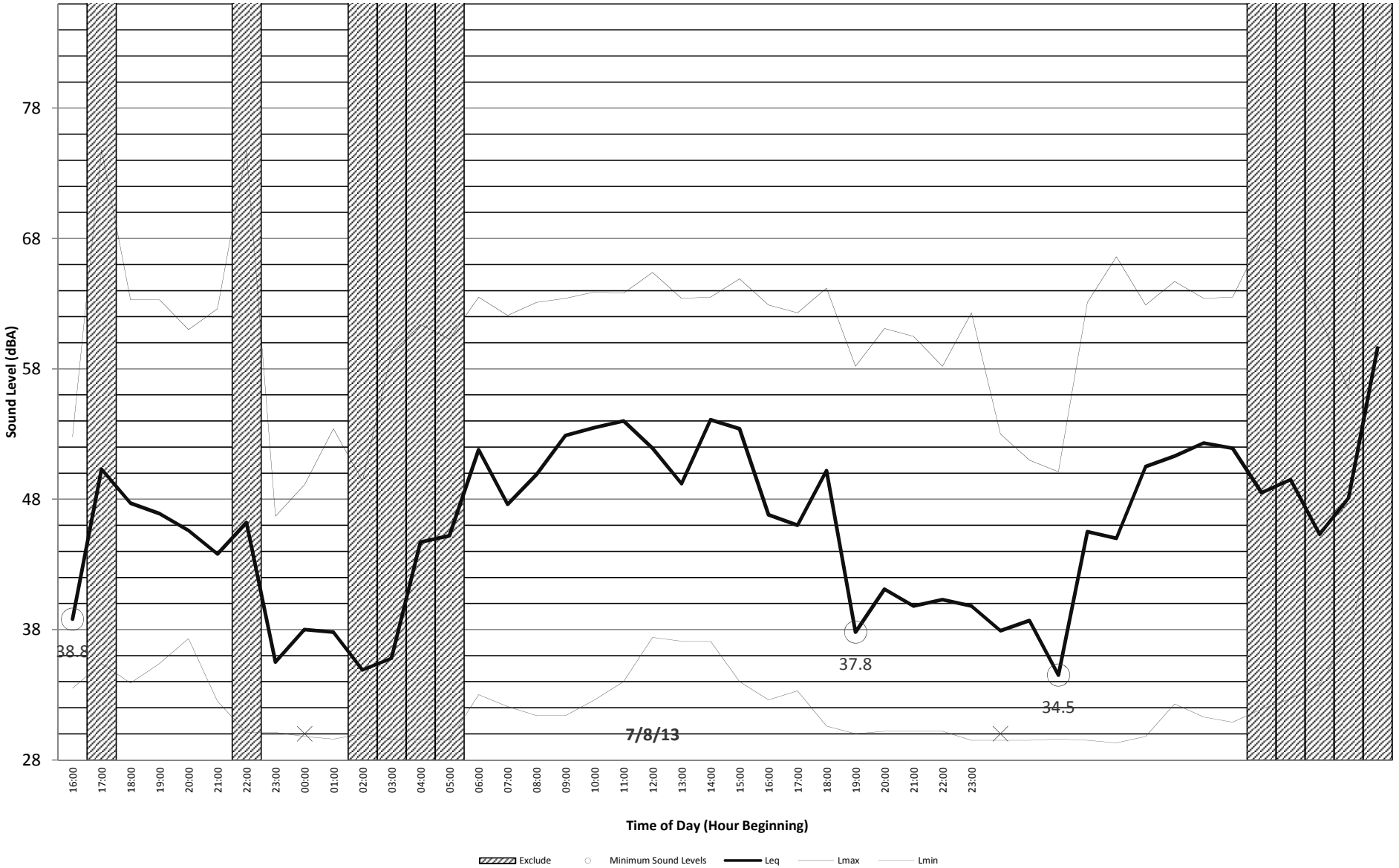
RWDI

Long-Term Measurement Results
Site 1



Measured Ambient Sound Levels From 05/07/2013 2:00:00 PM to 07/07/2013 4:00:00 PM Project # 1300747	Figure No. 6b Date: Aug. 01, 2013	RWDI

Long-Term Measurement Results
Site 1



Measured Ambient Sound Levels
From 07/07/2013 4:00:00 PM to 09/07/2013 1:00:00 PM

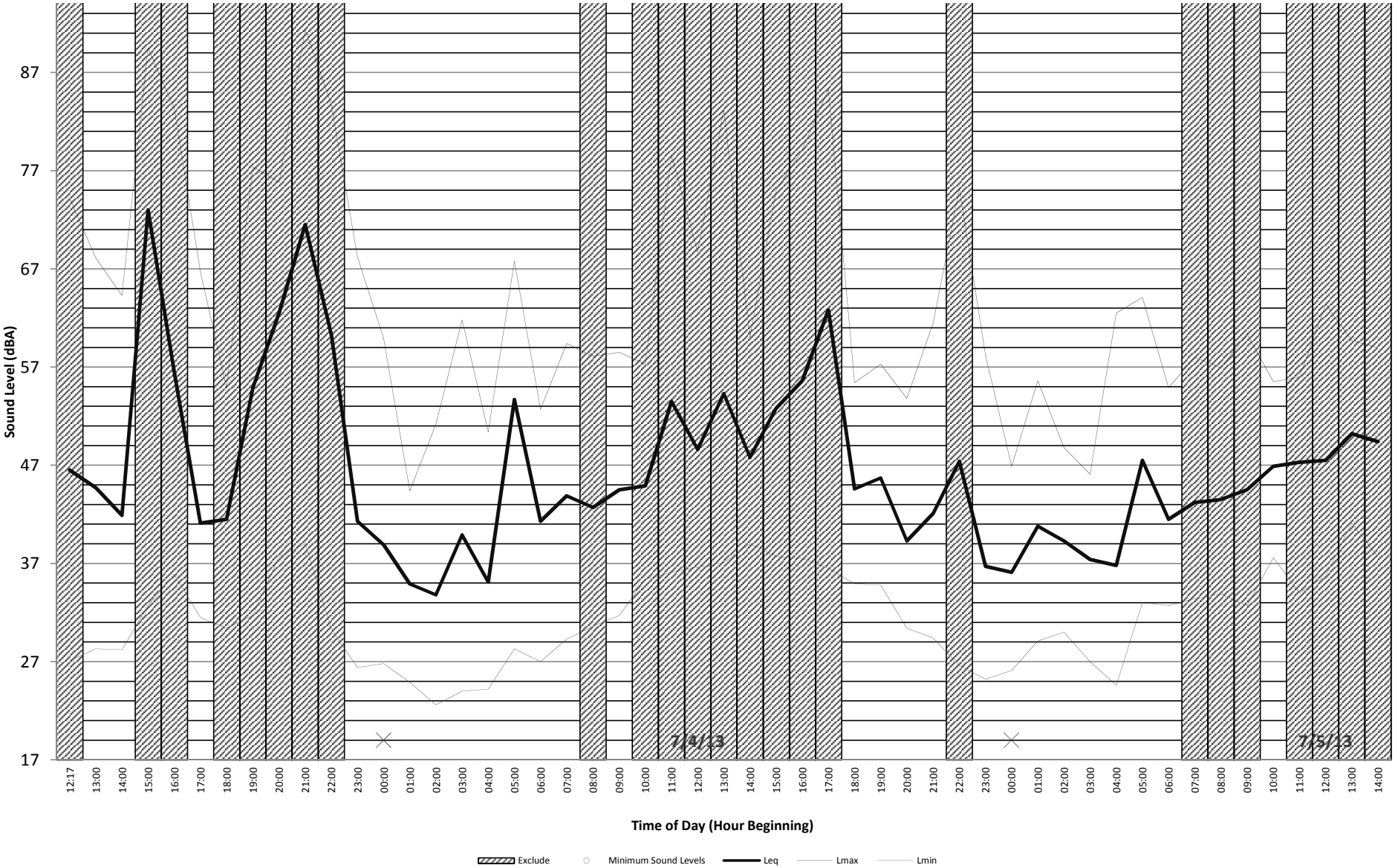
Project # 1300747

Figure No. 6c

Date: Aug. 01, 2013

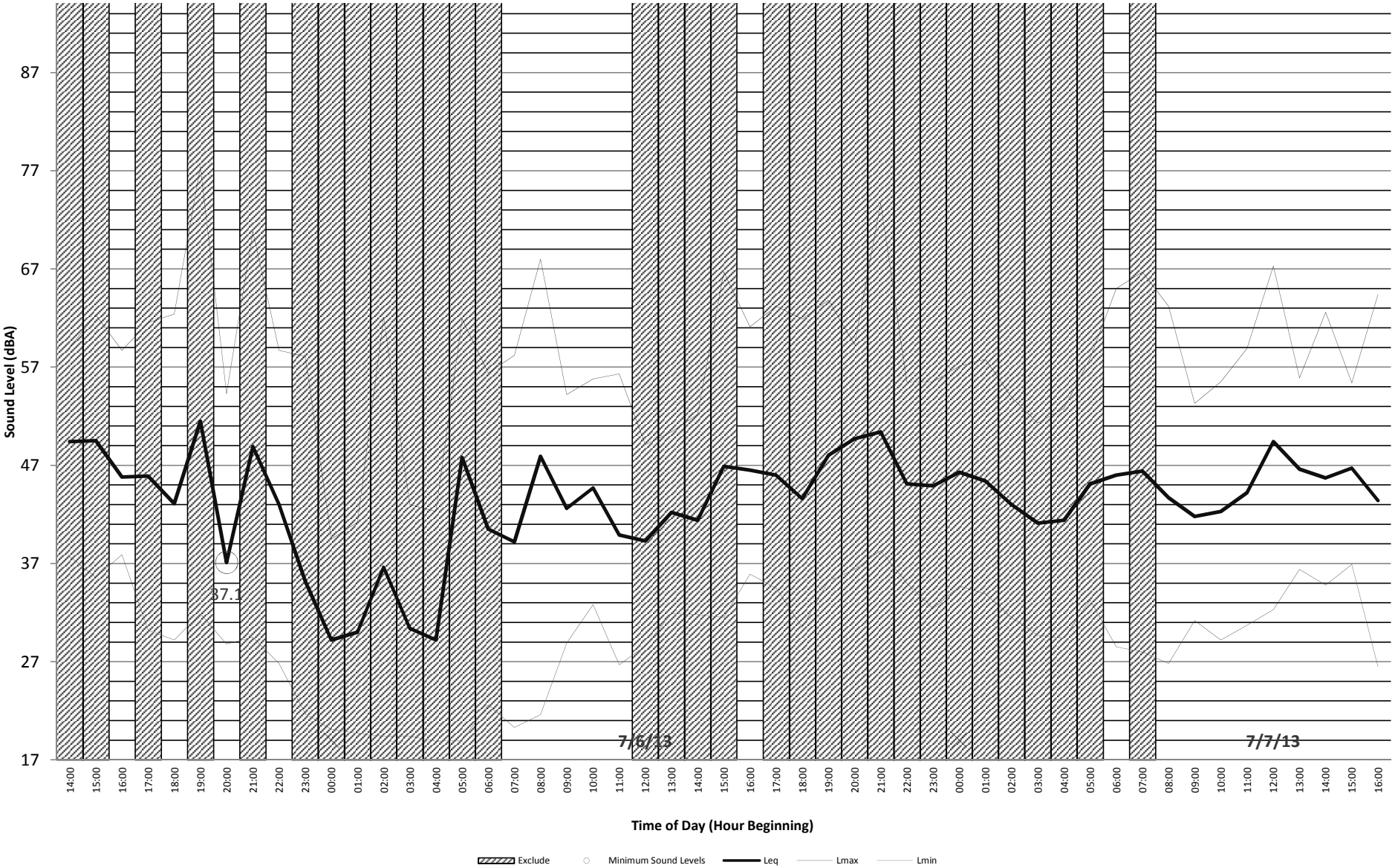
RWDI

Long-Term Measurement Results
Site 2



Measured Ambient Sound Levels From 03/07/2013 12:17:12 PM to 05/07/2013 2:00:00 PM Project # 1300747	Figure No. 7a Date: Jul. 26, 2013	RWDI

Long-Term Measurement Results
Site 2



Measured Ambient Sound Levels
From 05/07/2013 2:00:00 PM to 07/07/2013 4:00:00 PM

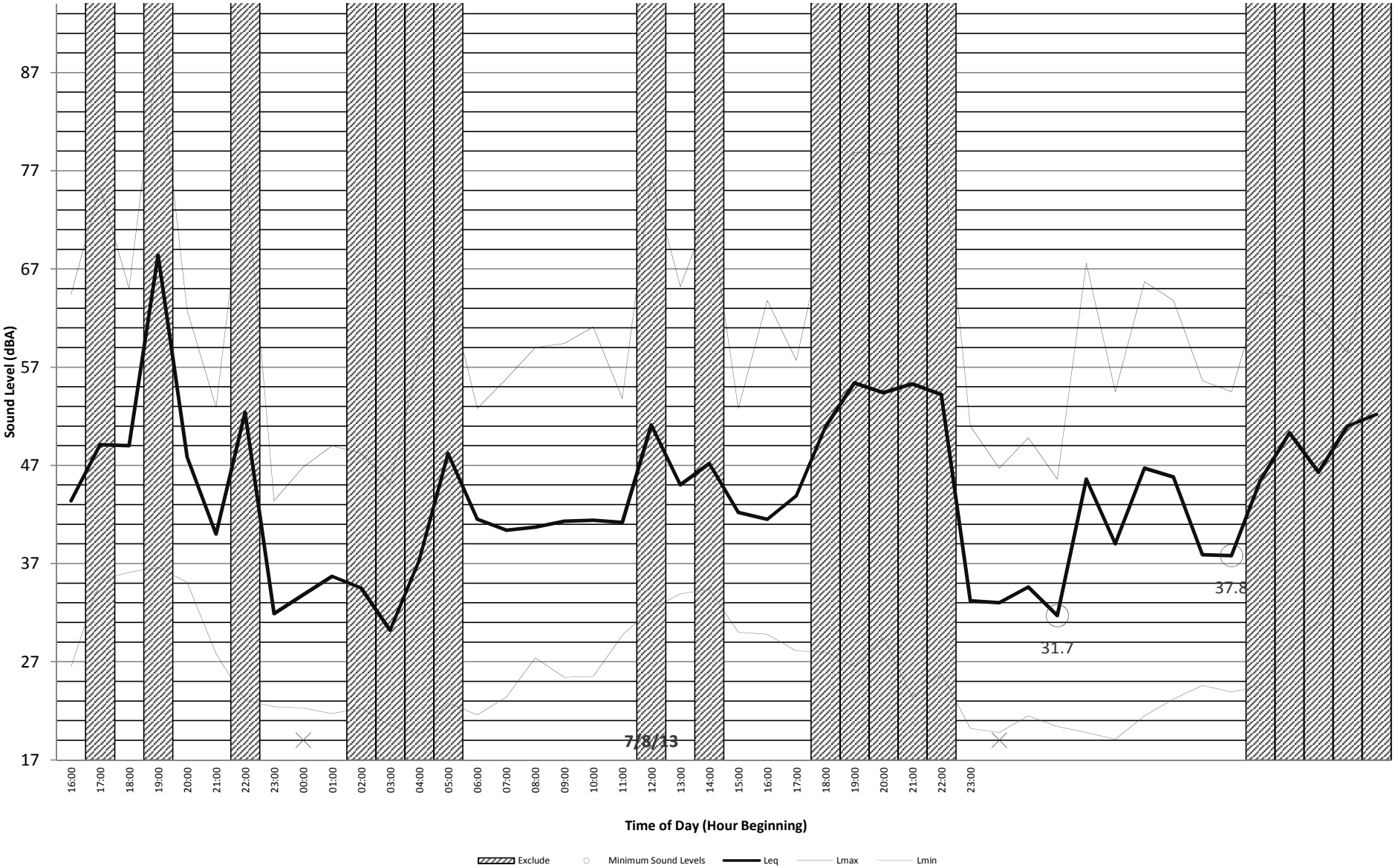
Project # 1300747

Figure No. 7b

Date: Jul. 26, 2013

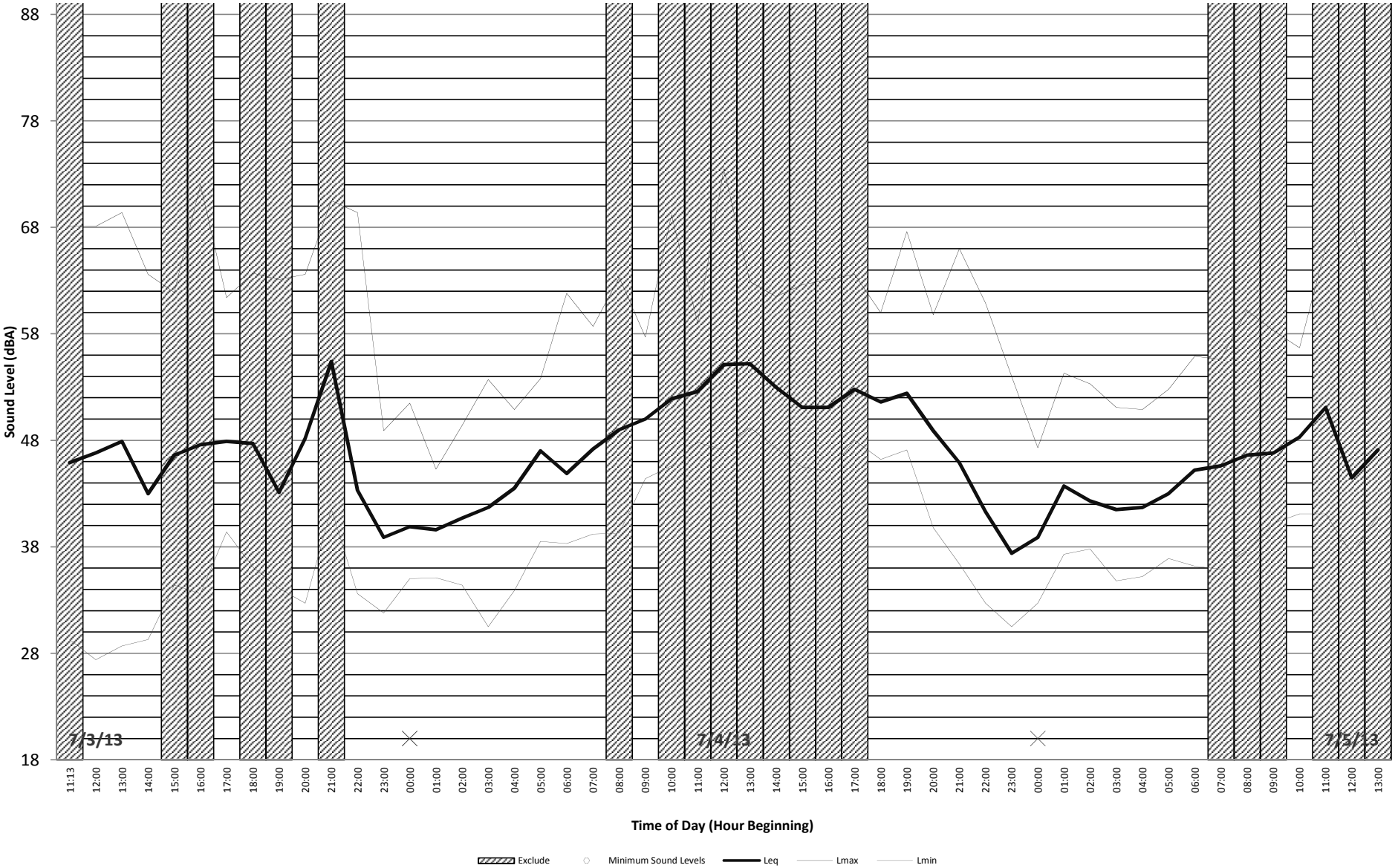
RWDI

Long-Term Measurement Results
Site 2



Measured Ambient Sound Levels From 07/07/2013 4:00:00 PM to 09/07/2013 1:00:00 PM Project # 1300747	Figure No. 7C Date: Jul. 26, 2013	RWDI

Long-Term Measurement Results
Site 3



Measured Ambient Sound Levels
From 03/07/2013 11:13:41 AM to 05/07/2013 1:00:00 PM

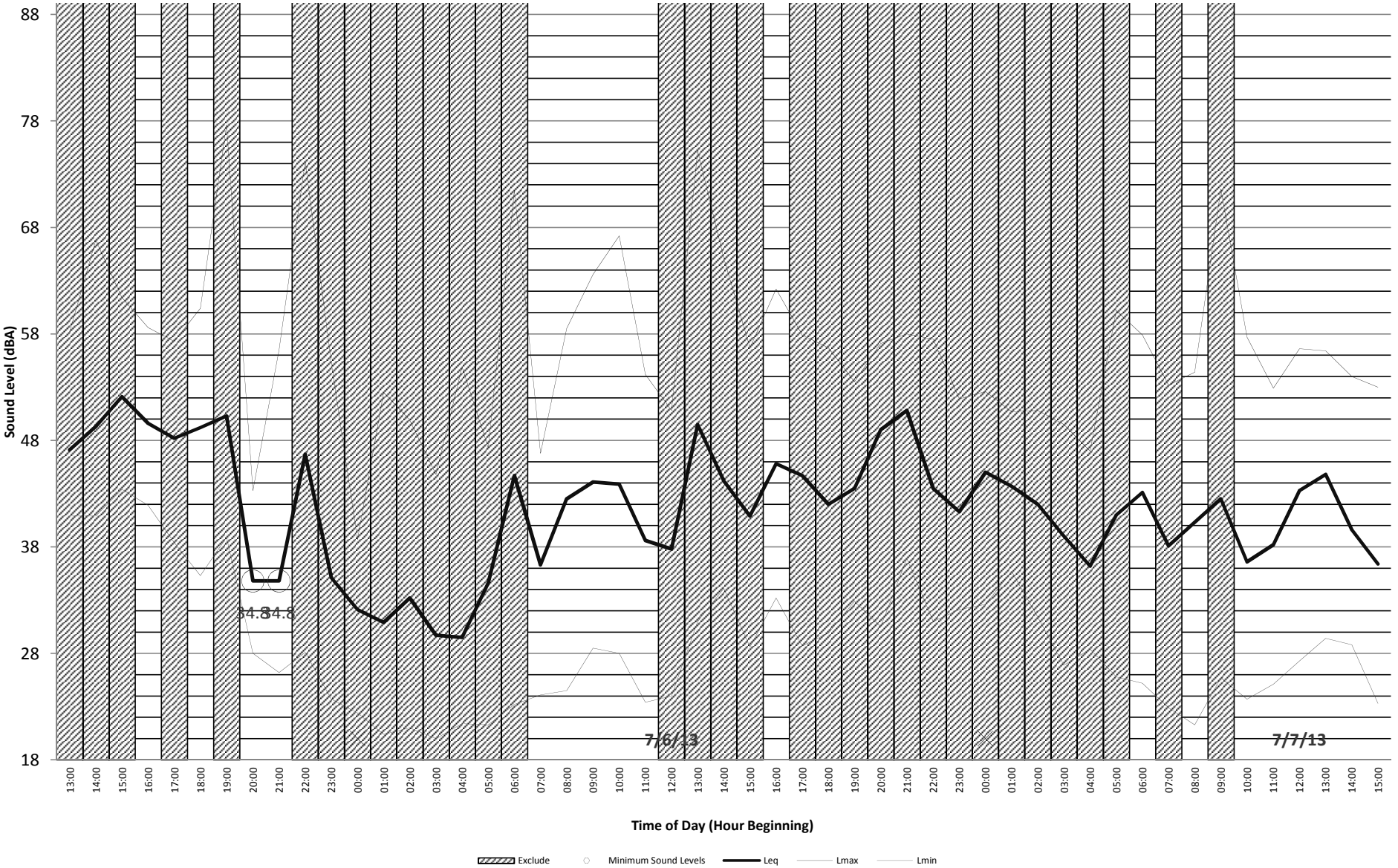
Project # 1300747

Figure No. 8a

Date: Aug. 01, 2013

RWDI

Long-Term Measurement Results
Site 3



Measured Ambient Sound Levels
From 05/07/2013 1:00:00 PM to 07/07/2013 3:00:00 PM

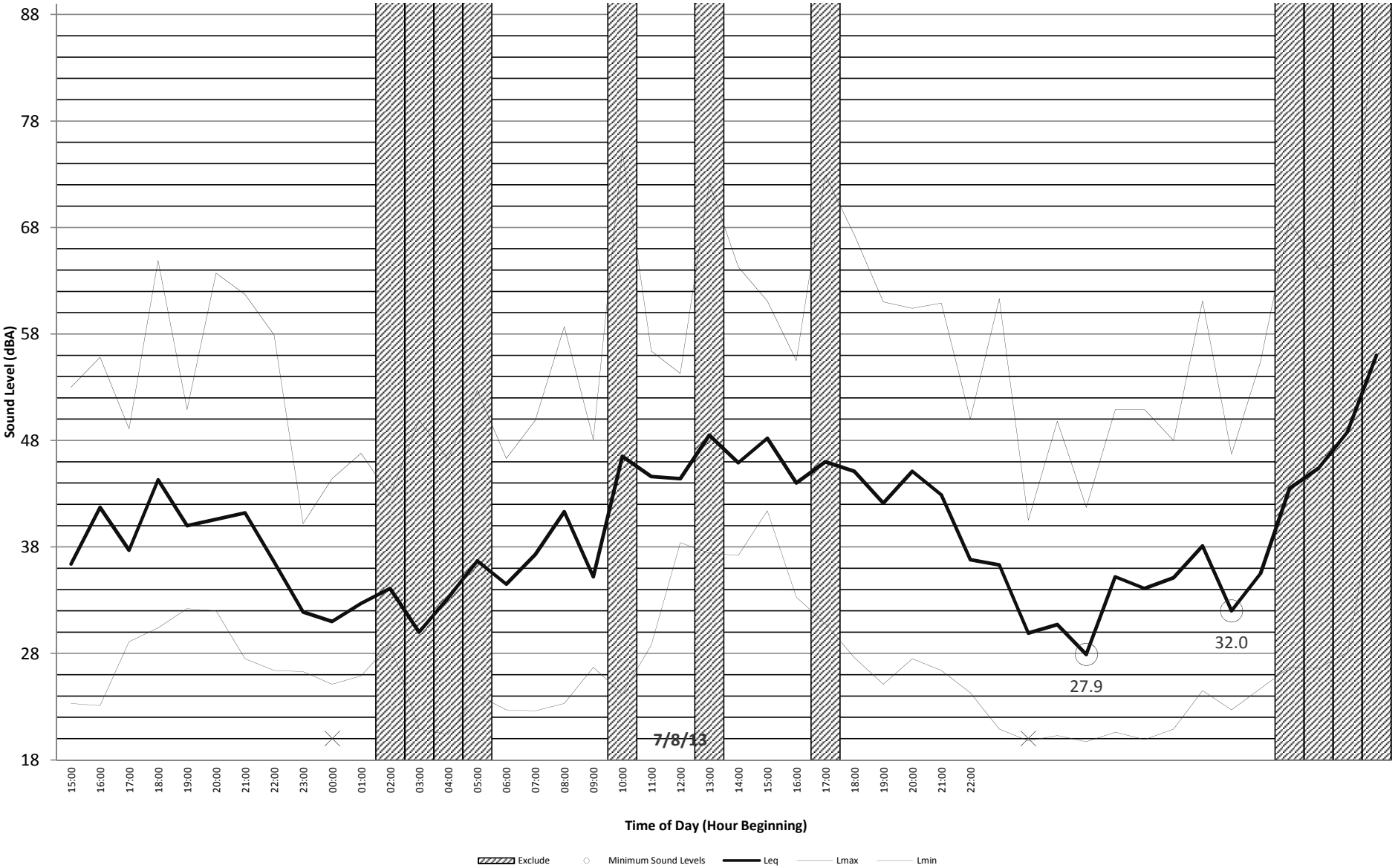
Project # 1300747

Figure No. 8b

Date: Aug. 01, 2013

RWDI

Long-Term Measurement Results
Site 3



Measured Ambient Sound Levels
From 07/07/2013 3:00:00 PM to 09/07/2013 12:00:00 PM

Project # 1300747

Figure No. 8c

Date: Aug. 01, 2013

RWDI

APPENDIX H-3

ACOUSTIC ASSESSMENT REPORT

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Treasury Metals Incorporated
Goliath Gold Project
Wabigoon, Ontario

Final Report

Acoustic Assessment Report

RWDI #1401701
October 16, 2014

SUBMITTED TO:

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CONSULTING ENGINEERS & SCIENTISTS

EXECUTIVE SUMMARY

Treasury Metals Incorporated retained RWDI AIR Inc. to complete an Acoustic Assessment Report in support of the Goliath Gold Project. The Project is a proposed gold mine near Wabigoon, Ontario. This assessment has been completed in support of an application for an Environmental Compliance Approval with Limited Operational Flexibility.

This assessment focuses on sound emissions from sources at the facility and their potential effect on worst-case sensitive receptors surrounding the facility. Sources at the facility include: ventilation equipment, process exhausts, mobile heavy equipment, and rock crushing equipment. Data for the predictable worst-case operations were described using one operating scenario representative of a predictable worst-case hour during the worst-case project year. Sound levels from the facility were assessed by detailed modelling using the Cadna/A software package. Airborne and Ground-borne vibrations due to blasting activities were assessed using guidance from NPC-119 (MOE, 1977) and Guidelines on Information Required for the Assessment of Blasting Noise and Vibration (MOE, 1985).

Modelling inputs include source type and locations, and sound levels. Source types and locations were taken from information provided in the Goliath Gold project description, and from Treasury Metals personnel. Sound levels were taken from information on file at RWDI, or were calculated based on equipment specifications. At this early stage of development, information can be limited therefore, where necessary, modelling has been conducted using sound levels for typical sources at a mine.

Noise sensitive receptors identified in the area are houses (seasonal or otherwise). Forty-four individual receptors were identified. Noise modelling software was used to predict the effects of the Project at the nearest receptors, representing the worst case impacts.

In some circumstances, sound levels of specific sources were found to cause noncompliance at noise sensitive receptors. Quieter than average equipment will be required for some pieces to achieve compliance. This equipment is commercially available. Treasury Metals has committed to ensuring that sound levels from these pieces of equipment meet these requirements.

Vibrations from blasting activities is predicted to be in compliance with NPC-119 at all sensitive receptors Based on the commitment described above to limit sound levels of certain equipment, the Goliath Gold Project is predicted to be in compliance with the Ministry of Environment and Climate Change guidelines at all receptors.

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Appendices

1. INTRODUCTION

Treasury Incorporated has retained RWDI AIR Inc. (RWDI) to complete an acoustic assessment and Acoustic Assessment Report (AAR) for the Goliath Gold Project (the Project) located near Wabigoon, Ontario. This AAR is completed using the applicable MOE guidance documents (MOE, 2012 and MOE, 1995). A copy of the Acoustic Assessment Report checklist is included in Appendix A. This assessment has been completed in support of an application for an Environmental Compliance Approval with Limited Operational Flexibility.

The MOECC Primary Noise Screening has been completed for this facility, and is included in Appendix A. The NAICS code for this facility is 21222. A detailed assessment is required because sensitive receptors are located within the setback distance provided by the Primary Noise Screening. All land within several kilometers of the Project is crown land, or is unincorporated land, and therefore has no zoning information available.

This assessment focuses on sound levels due to the Project at surrounding worst-case sensitive receptors. Sources at the facility include: ventilation equipment, building exhausts, on site vehicle traffic, and rock crushing equipment.

Operations at the Project do not include large sources of vibration, with the exception of blasting activities. An evaluation of blasting activities is included in section 6.

2. FACILITY DESCRIPTION

Treasury Metals Incorporated (Treasury) has been exploring and developing the Thunder Lake Gold deposit known as the Goliath Gold Project (the Project), located near Wabigoon, Ontario. The Project involves the construction, operation, closure, and reclamation of a 4.5 million tonne-per-annum (Mt/a) open pit and underground mine that will operate for approximately 15 years. The site includes three open pits that will be mined sequentially, a mill building for ore processing and a tailings area. With the exception of blasting and generator testing, which will occur during daytime hours only, all noise sources associated with the Project may operate 24 hours a day, seven days a week.

Construction and Site Preparation phases will include tree clearing, grubbing, stripping of overburden, crushing of aggregate for road construction, blasting, and construction of project facilities. The duration of the Site Preparation and the Construction phase is estimated to be 3 years. The majority of noise sources during this phase will be mobile equipment operating at grade.

The operations phases will include both underground and open face mining activities. The open face mining activities include drilling, blasting, dozing, excavating and the transportation of rock material around site. The underground activities include the operation of intake and exhaust vent raises and the transportation of rock material to the surface. The processing plant, or mill, will include several stationary noise sources related to ventilation and process exhausts. Emergency power generators are to be tested only during the daytime hours. The duration of the operations phase is estimated to be 10 years.

Closure, Decommissioning and Restoration phases will include backfilling and flooding of the open pits and underground mine area, disassembling of infrastructure and equipment as well as overall site maintenance. The duration of the Closure, Decommissioning and Restoration phase is estimated to be 2 years. The majority of noise sources during this phase will be mobile equipment operating at grade.

3. NOISE SOURCE SUMMARY

Details regarding types of equipment used during the operations phase were limited at the time of this assessment. Best-available data regarding noise sources for future construction, operations, and decommissioning were collected from Treasury Metals, and used to predict sound levels for the Project. The significant sources were identified from drawings and the project description provided to RWDI by Treasury. No significant impulsive sources were identified with the exception of blasting which is assessed separately.

3.1 Insignificant Sources

At the time of assessment, detailed drawings for construction had not been developed. Details of small exhausts serving areas such as break rooms, washrooms, and storage areas were therefore not available. Such sources typically have sound power levels less than 80 dBA and were considered to be insignificant. A small amount of comfort heating and cooling has also been considered to be insignificant.

Movements of light vehicles (pickup trucks, vans, cars, etc.) traveling on site are unpredictable. With the limited operating times of these vehicles, and relatively low power levels compared to other sources on site, these sources have been considered insignificant. A weekly armored vehicle trip removing gold from the site has similarly been considered insignificant.

A summary of modelled sources is included in Table 1 in the tables section; detailed source information is included in Table B.1 of Appendix B. Source locations are shown in Figure 1.

3.2 Continuous Sources

Sound power level data for continuous sources was obtained by measurements, engineering calculations, manufacturer's data, and sound levels for similar equipment on file at RWDI.

Sound pressure level (SPL) measurements were conducted for the operation of an exploration drill during a site visit on April 22, 2014. This data was used to represent the operations drills, sources OP_DRILL1_o and OP_DRILL2_o). Sources (OP_DRILL1_o and OP_DRILL2_o) were both time-weighted to operate for 30 minutes per hour in order to provide a realistic representation of drilling operations on site. All measurements were consistent with ISO 3744:1994(E) (ISO, 1994a), and ISO 3746:1995(E) (ISO, 1995) measurement standards, and the applicable portions of the MOE Publication NPC-103 (MOE, 1978). The measured SPLs were converted into PWLs based on measurement distances and the size of the equipment being measured, as appropriate.

The sound power levels for the dewatering pump, and aeration tank blower (sources OP_Dpump1_o, and ML_Blwr_o) were calculated based on typical specifications and information provided by Treasury. The dewatering pump was calculated with the pump operating at 180m water column of static pressure. This is the representative sound level of the pump when the pit is at its deepest level of excavation, and conservative for when the pump is near ground level. Calculations of source sound power level and octave band spectra for the aeration tank blower and the dewatering pump were made using equations provided by Crocker (Crocker, 2007) and Bies and Hansen (Bies, 2009) respectively. Calculations are shown in Appendix B.

The sound power level for the exhaust louvers on the mill building (sources ML_ExLvr01_o through ML_ExLvr14_o) were calculated assuming an indoor sound power level of 85 dB within the mill facility. This is a typical objective for indoor sound levels in order to comply with occupational health and safety regulations. The locations of these sources were unknown and thus the sources were distributed evenly around the building. The number of exhaust openings was calculated based on a minimum of 6 air changes per hour, and based on the approximate volume of the building. The sound power level of these sources includes the sound from a fan in each opening, sized to accommodate the required air changes. The fan sound power level was calculated using equations from Crocker (Crocker, 2007). Each modelled point source includes indoor noise radiating through an intake, indoor noise radiating through an exhaust, and the sound from a fan at the exhaust opening.

The PWLs for the generators, kiln fan and intake and exhaust vent raises (sources Gen150_e, Gen600_e, ML_KF_o, UG_ExVentRaise1_o, UG_ExVentRaise2_o and UG_VentRaise1_o respectively) were approximated based on the manufacturer's PWL data for similar equipment. The sound power level data for UG_VentRaise1_o and UG_ExVentRaise1_o was taken from a manufacturer data sheet for a fan similar to that which would typically be used for this purpose. At UG_ExVentRaise2_o these sound power levels were found to result in noncompliance. The sound level of the fan has been reduced by 5 dB for UG_ExVentRaise2_o. Treasury Metals is committed to selecting equipment which is less than or equal to the sound power level used in the modelling for this source. The manufacturer's PWL data is included in Appendix B.

The sound data used for following sources were taken from measurements of similar equipment on file at RWDI.

- Rock drop from trucks and loaders (sources ML_Rckdrp_o, OP_Rckdrp_lowgrade_o, OP_Rckdrp_overburden_o, and OP_Rckdrp_waste_o);
- Front End Loader (source ML_ldr_o);
- Bulldozers (source OP_DZR_lowgrade_o, OP_DZR_overburden_o, OP_DZR_waste_o);
- Jaw crusher (source Crshr);
- Hydraulic Excavators (sources OP_Excvtr1_o, OP_Excvtr2_o); and
- 50 Ton Haul Trucks (sources Htruck1_o, Htruck2_o, Htruck3_o).

The evaluation of noise impacts is based on the principle of worst-case hour. Where sources operate for less than an hour, the sound level of the source is weighted to account for reduced operation. Sources (OP_DZR_lowgrade_o and OP_DZR_overburden_o) were time-weighted at 30 minutes per hour to account for the dozer operating at both the low grade and overburden stockpiles in a given worst-case hour. The front end loader at the run of mine pad is limited to operating 30 minutes per hour. This is due to the periodic nature of rock material drops offs at the pad. Rock drop noise represents the noise from rocks being dumped from trucks and loaders. This activity was time weighted, as it is periodic. Details on time weighting for all sources are provided in Table B.1.

In some circumstances, sound levels of specific sources modelled from data on file were found to cause noncompliance at noise sensitive receptors. This data is representative of average equipment, and does not represent quieter equipment currently available. Quieter than average equipment will be required for some pieces of heavy equipment to achieve compliance. Treasury Metals has committed to ensuring that sound levels from these pieces of equipment meet these requirements. PWLs of all equipment are outlined in Appendix B, and every effort will be made to ensure that selected equipment has sound emissions equal to or lower than the PWLs specified there.

Haul trucks traveling on site were modelled using a moving point source calculation method. A total of 14 round trips are expected in a worst case hour between the open pit, and any combination of the waste rock stockpile, low grade stockpile, and run of mine pile. The route to the waste rock stockpile is considerably longer than all other routes, and results in the highest sound level at all receptors. These trips were conservatively weighted towards having most trips in a predicable worst-case hour routed to the waste rock stockpile. Ten trucks were modelled travelling round trip between the open pit and waste rock stockpile for a total of 20 truck movements along this route. Two trucks were modelled travelling round trip between the open pit and the low grade stockpile. Two trucks were modelled travelling round trip between the open pit and run of mine pile in any worst-case hour for a total of 4 truck movements along the route. Trucks are expected to travel on the site at a speed of 30 km/h.

Measurement data and details of the SPL to PWL conversions, octave band sound power data, and manufacturer's data are included in Appendix B. Weather conditions and measurement equipment for measurements of exploration drilling are in compliance with the requirement set out in MOE Publication NPC-103 (MOE, 1978). The measurement weather conditions are summarized in Appendix C. Measurement equipment model and serial information is provided in Appendix C.

3.3 Identifiable Source Characteristics

Sources that have characteristics considered to be particularly annoying receive additional consideration in accordance with NPC-104 guidelines (MOE, 1978). The adjustment is based on assessment at the point of reception, as described in Publication NPC-103. No sources were identified to exhibit annoying sound emissions.

3.4 Operating Scenarios

The assessment of noise focuses on the predictable worst-case hour, during a worst-case year in the life of the Project. Based on modelling conducted for the federal Environmental Assessment, it is expected that the worst-case phase is the operating phase; the construction and decommissioning phases are predicted to generate lower sound levels. The early years which occur during the operations phase are the worst-case in the operations phase, due to an increase in activity related to the construction of the underground mine and a lack of screening from pit sources.

As an absolute worst-case during the early years of the operations phase, all sources related to the open pit mine have been modelled at grade, along with the vent raises for the underground mine operating. This discounts all shielding effects from the ultimately 180 m deep pit, and conservatively assumes that the vent raises will be operational while open pit mining is still near the surface. These conservative estimates of the worst-case operations were chosen to account for unknowns such as remediation of the open pit during underground mining activities. Those sorts of activities are anticipated to generate lesser noise than the modelled scenario.

Two emergency generators located at the site will be tested on a regular basis, during daytime hours only. With the exception of blasting, all other sources as described above may operate 24 hours per day. Two scenarios have therefore been modelled: operating phase, excluding generators, and including both open pit and underground sources, and generator testing.

4. POINT OF RECEPTION SUMMARY

Sound levels from sources at the Project were determined at points of reception (PORs) located on noise-sensitive land uses. Noise-sensitive land uses are defined in the MOECC's environmental noise guideline, publication NPC-300 (MOE, 2013), as the property of a person that accommodates a dwelling, a noise-sensitive commercial building or a noise-sensitive institutional building. Vacant lots are considered noise-sensitive, provided they are zoned to allow a sensitive use and are accessible by road. A noise-sensitive land use may have one or more receptors.

PORs for an acoustic assessment are those locations where sound from the facility is received and assessed against the applicable limits. Sound levels may be assessed at the façade of the building and/or outdoor areas, depending on the type of sensitive land use assessed. Outdoor PORs are only assessed for dwellings and are not assessed for commercial and institutional noise-sensitive land uses.

Residential receptors include houses, cottages, and the like, whether continuously occupied or seasonal. For existing residential properties, sound levels are assessed at the façade of the building at a height of 4.5 m above local grade and an outdoor POR at a height of 1.5 m. The point of assessment for the outdoor receptors is a point 30 m from the building façade, or the property line in cases where the 30 m setback would exceed the size of the property.

Commercial and institutional receptors include hotels, churches, daycares, schools, clinics, and the like. The point of assessment for these types of receptors is at the façade of the building only; Outdoor receptors are not assessed for commercial and institutional noise-sensitive land uses.

Properties that are zoned to permit a noise-sensitive land use, but are currently vacant need to be assessed as if a noise-sensitive land use exists at that location. For these noise sensitive areas, the receptors are typically considered in a location consistent with typical local building patterns, at a height of 4.5 m above local grade. In the case of unincorporated land without a minister's zoning order, the land is generally understood to allow noise-sensitive uses, and would be assessed in the same way as land that is zoned for a noise sensitive use. All land within the vicinity of the Project is either crown land, or unincorporated land. No zoning information is available for these areas.

There is currently a house located to the West of the low grade stockpile which is owned by Treasury Metals, and will not be occupied during the life of the Project. A house located on the north west corner of Normans Rd and Nursery Rd is also owned by Treasury Metals and will not be occupied during the life of the Project. The house located approximately 400 m east of the intersection of Normans Rd and Nursery Rd, on the North side of Normans Rd is currently occupied, and will be vacated prior to the commencement of the Project.

Vacant land on the south side of Normans Rd, immediately to the south of the low grade stockpile is apparently accessible by road as judged from aerial photographs. This section of Normans Road, west of Nursery Rd, is controlled by Treasury Metals, and will result in this land being inaccessible for the life of the Project.

Forty-four individual noise-sensitive receptors were identified within the local study area. Where the surface mining rights have been secured by Treasury Metals, land use was assumed to be non-noise-sensitive and no receptors were identified. All other vacant lands in the vicinity of the Project that were found to be inaccessible (except by a rough cut-in through the forest) were not considered as receptors. Forty-two of the receptors were identified as houses. One was identified as the campground at Aaron Provincial Park. One receptor is a trailer located on otherwise vacant land. There are no receptors identified roughly within 2 km to the north or 8 km to the east, because Treasury Metals has surface rights to all land in those directions.

Since noise impacts decrease with distance from the source, the nearest receptors to the Project are considered the worst-case, and are evaluated explicitly. Other receptors are not evaluated explicitly, but effects can be seen noise contour maps. Figure 2 presents receptors that are explicitly evaluated.

5. ASSESSMENT CRITERIA

5.1 Exclusion Limits

The applicable guideline limits for the receptors in the vicinity of the Project are the "Stationary Source" guidelines for Class 3 area, set out in MOE Publication NPC-300. These guidelines state that one-hour sound exposures (A-Weighted hourly L_{EQ} values) from stationary sources in Class 3 area shall not

exceed that of the background, where the background is defined as the sound level present in the environment produced by sources other than those associated with the project under assessment. The MOE Publication NPC-300 minimum sound level limits at the façade (or plane of window) are summarized as follows:

- The higher of 45 dBA or background sound, during the daytime hours (0700-1900h);
- The higher of 40 dBA or background sound, during the evening hours (1900-2300h); and
- The higher of 40 dBA or background sound, during the nighttime hours (2300-0700h).

The MOE Publication NPC-300 sound level limits at an outdoor POR are applicable during the daytime and evening hours only. These limits are summarized as follows:

- The higher of 45 dBA or background sound, during the daytime hours (0700-1900h); and
- The higher of 40 dBA or background sound, during the evening hours (1900-2300h).

The applicable criterion is the higher of the background sound level and the default minimum sound level limit. Background sound level measurements showed levels below the exclusionary limits. The minimum sound level limits are therefore applicable.

Sound from the operation of emergency equipment, such as generators, is not considered except during planned testing. Sound levels of planned testing of emergency equipment are evaluated separately from all other noise from the Project. In the case where multiple pieces of emergency equipment are tested together, their combined impact is evaluated against the limit. The sound level limits for emergency equipment operating in a testing scenario are 5 dB greater than the sound level limits presented above.

5.2 Blasting

Blasting is evaluated separately under MOECC guidelines. Guidance for noise from blasting is taken mainly from two publications, NPC-119 (MOE, 1978) and Guidelines on Information Required for the Assessment of Blasting Noise and Vibration (MOE, 1985).

Blasting activities are identified as a source for sound due to airborne vibration (concussion). The level of sound experienced at a receptor is assessed using the peak pressure level measured in linear (un-weighted) decibels (dB). MOE publication NPC-119 introduces two limits, the cautionary limit, and the peek pressure level limit. The cautionary limit is 120 dB and can be applied in cases where there is no monitoring of sound levels from blasting. The peek pressure limit is 128 dB, and can only be used when sound level monitoring is conducted during blasting. The cautionary limit is used as the criteria for airborne blast noise for the Project.

Blasting activities are also identified as a source of groundborne vibration. Groundborne vibration is evaluated as a peak particle velocity measured in cm/s. NPC-119 limits vibration from blasting to 1.00 cm/s at a sensitive receptor location. For this assessment, sensitive receptors for vibration impacts are considered to be the same as those described in section 4 for noise.

6. IMPACT ASSESSMENT

6.1 Assessment of Sound Levels

The facility sound emissions were modelled based on the normal facility operations and emergency equipment testing operating scenarios as described in Section 3. The Sound Pressure Level (SPL) at surrounding PORs were calculated by modelling the sound propagation from the significant sources at the facility. The modelled SPLs at the PORs were assessed against the applicable sound level limits.

6.1.1 Continuous Sources

Modelling of sound level propagation for continuous sources to the receptors was conducted using Cadna/A, a commercially available implementation of the ISO 9613 (ISO, 1994b and ISO, 1996) algorithms. Cadna/A is produced by Datakustik GmbH. The modelling took into account the following factors:

- Source sound power level and directivity;
- Distance attenuation;
- Source-receptor geometry including heights, elevations and topography;
- Barrier effects of the site and surrounding buildings;
- Duration of events;
- Ground and air (atmospheric) attenuation; and
- Meteorological effects on sound propagation.

A sample calculation showing step-by-step calculation parameters is provided for receptor NR03, and is included in Appendix D. Key modelling parameters are summarized in Appendix D.

The individual contributions of each source at the modelled PORs are presented in Table 2. Sound level contours (isopleths of equal sound level) were generated for normal facility operations and for generator testing and are presented in Figures 3 and 4 respectively.

The SPLs at PORs under regular facility operations and emergency equipment testing scenarios were assessed using the applicable sound level limits, as shown in Table 3a and 3b, respectively. The predicted facility-attributable levels at each POR are in compliance with the applicable limits.

6.1.2 Blasting Noise

Modelling of blasting sound levels was conducted using numerical modelling techniques presented in the International Society of Explosives Engineers Blaster's Handbook (ISEE, 2011). Airborne vibration due to blasting activities attenuates from a site at a slower rate than ground vibrations. The distribution of this air vibration energy from a blast is also strongly influenced by the prevailing weather conditions during the blast. Other factors influencing airborne vibration propagation include:

- charge-weight per delay;
- depth of burial;
- volume of displaced rock;
- delay time intervals;
- type of explosive;
- atmospheric conditions; and,
- topography.

Further definition of these terms is provided in Appendix B.

The rate at which blast noise decays or attenuates from a blast site is dependent upon the scaled distance as follows:

- scaled distance (SD_3) = $R/\sqrt[3]{W}$
  - where R = distance (metres) from the blast to a point of interest; and,
  - W = charge-weight (kilograms) detonated within any 8-millisecond delay period.

Prediction of maximum blast noise was based on the following equation which assumes average burial of the explosive:

- $P = 37.1 \times SD_3^{-0.97}$
  - where P = peak air pressure (Pascals); and,
  - SD_3 = scaled distance (metres per kilogram [$m/kg^{1/3}$]).

This equation produces a pressure in pascals, which is then converted to decibels (dB) as shown in the following equation:

- $dB=20 \log(P/P_o)$
  - where P_o is the reference pressure (2×10^{-5} Pa).

Sound levels from blasting were evaluated separately from sounds due to continuous noise sources as per the guidance. Levels were assessed at the five worst-case receptors as discussed in section 5.2. A radius of influence was also determined, which is the distance from a blast where the sound levels will fall off to the precautionary limit. The radius of influence is 95 m in all directions from the blasting. Any receptor further than 95 m from a blast will therefore experience effects lower than the NPC-119 precautionary limit.

All levels at receptors are predicted to be in compliance with the NPC-300 minimum sound level limits for a class 3 area. The predicted sound levels and applicable limits are presented in Table 3C.

6.2 Assessment of Vibration Levels

Ground vibration was calculated to determine the peak particle velocity in mm/s due to the blast. The rate at which ground vibrations decay or attenuate from a blast site can be expressed by the scaled distance, which is defined as:

- scaled distance (SD_2) = $R/\sqrt{W}$
    - where R = distance (m) from the blast to a point of interest; and,
    - W = charge-weight (kilogram) detonated within any 8-millisecond delay period.

The prediction of maximum ground vibrations can be calculated based on the following equation (ISEE 2011) for upper bound construction industries:

- $PPV = 1730 (SD_2)^{-1.6}$
    - where PPV = peak particle velocity (mm/s); and,
    - SD2 = scaled distance (meter per kilogram [m/kg1/2]).

Vibration levels for blasting are presented in NPC-119 and are limited to 1.00 cm/s. Using this limit, the area of vibration influence for blasting was determined to be 457 m. The nearest receptors are located more than this distance away from areas where blasting is likely to occur, so blasting vibration is predicted to be in compliance with NPC-119 at all sensitive receptors. Details of the blasting vibration calculation are included in Appendix B.

7. CONCLUSIONS

A detailed assessment of the Project sound levels was completed by modelling the individual contributions of the significant sources at the representative receptors. Predicted facility sound levels and vibration levels from blasting are in compliance with the applicable guideline limits at each of the receptors for daytime, evening and nighttime operations with the inclusion of reduced sound level equipment for some sources. This assessment predicts that the Project is in compliance with the requirements of the NPC-300 and NPC-119 guidelines.

8. REFERENCES

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Ontario Ministry of the Environment (MOE), August 2013, Publication NPC-300, *Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning*

TABLES

Table 1: Noise Source Summary

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

- "Table A1" in Appendix A of Basic CCofA Guide.

1. Wherever possible, the Source ID matches the identifiers used in the ESDM report.

2. Sound Power Level of Source, in dBA, not including sound characteristic adjustments per NPC-104.

3. Source Location: O = Outside of building, including the roof, I = Inside of building

4. Sound Characteristic, per NPC-104:
   - S = Steady
   - I = Impulsive
   - T = Tonal
   - Q = Quasi-Steady Impulsive
   - B = Buzzing
   - C = Cyclic

   Where annoying characteristics are audible at the source, but not at receptors, no penalty is applied and the characteristic in this table is shown as "S". See section 3 of the report text for further details.

5. Noise control measures currently in place or specified in construction drawings:
   - S = Silencer/Muffler
   - L = Lagging
   - O = Other
   - A = Acoustic lining, plenum
   - E = Acoustic enclosure
   - U = Uncontrolled
   - B = Barrier

   Where noise control measures are specified in construction drawings or were found on existing equipment, octave band sound power levels include the effects of the noise control measures. Noise control measures recommended in the mitigation section of this report are not included in this table.

Source ID [1]	Source Description	Sound Power Level [2] (dBA)	Source Location [3] (I or O)	Sound Characteristics [4] (S,Q,I,B,T,C)	Noise Control Measures [5] (S,A,B,L,E,O,U)
Gen150_e	150 kW Emergency Generator	113	O	S	E,S
Gen600_e	600 kW Emergency Generator	114	O	S	E,S
ML_Blwr_o	Blower	91	O	S	U
ML_Crshr_o	Jaw Crusher	99	O	S	U
ML_FEx_o	Furnance Exhaust	74	O	S	U
ML_KF_o	Kiln Fan	94	O	S	U
ML_ldr_o	Front End Loader	100	O	S	U
ML_Rckdrp_o	Rock Drop	119	O	S	U
OP_Dpump1_o	Dewatering Pump at 180m Head	101	O	S	U
OP_DRILL1_o	Drill	107	O	S	U
OP_DRILL2_o	Drill	107	O	S	U
OP_DZR_lowgrade_o	CAT D8N dozer	100	O	S	U
OP_DZR_overburden_o	CAT D8N dozer	110	O	S	U
OP_DZR_waste_o	CAT D8N dozer	110	O	S	U
OP_Excvtr1_o	Hydraulic Excavator	101	O	S	U
OP_Excvtr2_o	Hydraulic Excavator	106	O	S	U
OP_Rckdrp_lowgrade_o	Rock Drop	112	O	S	U
OP_Rckdrp_overburden_o	Rock Drop	112	O	S	U
OP_Rckdrp_waste_o	Rock Drop	112	O	S	U
UG_ExVentRaise1_o	Exhaust Vent Raise 1	116	O	S	U
UG_ExVentRaise2_o	Exhaust Vent Raise 2	111	O	S	U
UG_VentRaise1_o	Fresh Air Intake Vent Raise	116	O	S	U
ML_ExLvr01_o	Building Vent 1	90	O	S	U
ML_ExLvr02_o	Building Vent 2	90	O	S	U
ML_ExLvr03_o	Building Vent 3	90	O	S	U
ML_ExLvr04_o	Building Vent 4	90	O	S	U
ML_ExLvr05_o	Building Vent 5	90	O	S	U
ML_ExLvr06_o	Building Vent 6	90	O	S	U
ML_ExLvr07_o	Building Vent 7	90	O	S	U
ML_ExLvr08_o	Building Vent 8	90	O	S	U
ML_ExLvr09_o	Building Vent 9	90	O	S	U
ML_ExLvr10_o	Building Vent 10	90	O	S	U
ML_ExLvr11_o	Building Vent 11	90	O	S	U
ML_ExLvr12_o	Building Vent 12	90	O	S	U
ML_ExLvr13_o	Building Vent 13	90	O	S	U
ML_ExLvr14_o	Building Vent 14	90	O	S	U
Htruck1_o	Haul Truck #1	107	O	S	U
Htruck2_o	Haul Truck #2	107	O	S	U
Htruck3_o	Haul Truck #3	107	O	S	U

Table 2: Point of Reception Noise Impact

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

- "Table A2" in Appendix A of Basic CCofA Guide.

1. "Continuous" noise sources includes operating time corrections and sum of steady, quasi-steady impulsive, tonal, cyclical and buzzing noise sources, with appropriate penalties applied, in accordance with documents NPC-104 and NPC-300.

2. Wherever possible, the Source ID matches the identifiers used in the ESDM report.

3. Sound Level units:
 - dBA = 1-hour energy equivalent sound level (L_{eq} (1-hr)), in terms of A-Weighted decibels.
 - dBAI = Logarithmic mean impulsive noise level (L_{LM}), in terms of A-Weighted decibels incorporating an impulsive time weighting.

-- Noise and vibration receptors representative of worst-case potential impacts have been selected. For the purposes of noise and vibration impact assessment, the following land uses (existing or zoned for future use) have been considered:
 - permanent , seasonal, or rental residences
 - hotels, motels and campgrounds
 - nursing / retirement homes
 - hospitals and clinics
 - schools, universities, libraries and daycare centres
 - churches and places of worship

Point of Reception ID	NR03	NR03_O	NR04	NR04_O	NR30	NR30_O	NR44	NR44_O	NR47	NR47_O
Point of Reception Description	House - owned by Mcleish	Outdoor receptor- Mcleish	House - owned by Nystroms	Outdoor receptor- Nystroms	House - East Thunder Lake Road	Outdoor receptor - East Thunder Lake Road	House - Near Trans-Canada Highway	Outdoor receptor - Near Trans-Canada Highway	House - East Thunder Lake Road	Outdoor receptor - East Thunder Lake Road
Point of Reception Coordinates X	528986	528971	528702	528697	526424	526443	527992	527987	525866	525884
Point of Reception Coordinates Y	5511403	5511427	5510566	5510595	5512462	5512441	5509946	5509977	5512101	5512089
Point of Reception Coordinates Z	398	393	395	392	385	383	385	382	385	382

Source ID [2]	Source Description	Point of Reception 1			Point of Reception 2			Point of Reception 3			Point of Reception 4			Point of Reception 5			Point of Reception 6			Point of Reception 7			Point of Reception 8			Point of Reception 9			Point of Reception 10		
		Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)	Distance (m)	Sound Level at PoR	Units [3] (dBA)
Gen150_e	150 kW Emergency Generator	730	42	dBA	704	42	dBA	1577	31	dBA	1550	30	dBA	2514	26	dBA	2492	25	dBA	2371	26	dBA	2344	26	dBA	3050	23	dBA	3032	23	dBA
Gen600_e	600 kW Emergency Generator	729	35	dBA	703	34	dBA	1578	30	dBA	1551	29	dBA	2523	24	dBA	2501	22	dBA	2374	24	dBA	2348	23	dBA	3059	21	dBA	3041	20	dBA
ML_Blwr_o	Blower	724	-2	dBA	699	-2	dBA	1578	-9	dBA	1551	-11	dBA	2543	-2	dBA	2522	-2	dBA	2379	-11	dBA	2353	-15	dBA	3080	-14	dBA	3061	-15	dBA
ML_Crshr_o	Jaw Crusher	627	29	dBA	598	29	dBA	1388	15	dBA	1360	14	dBA	2320	7	dBA	2297	7	dBA	2126	9	dBA	2099	8	dBA	2826	4	dBA	2807	4	dBA
ML_FEx_o	Furnance Exhaust	668	5	dBA	643	4	dBA	1526	-3	dBA	1499	-5	dBA	2572	-13	dBA	2550	-13	dBA	2337	-8	dBA	2311	-12	dBA	3100	-15	dBA	3082	-15	dBA
ML_KF_o	Kiln Fan	667	25	dBA	642	24	dBA	1522	16	dBA	1494	14	dBA	2551	5	dBA	2529	4	dBA	2327	11	dBA	2301	6	dBA	3079	2	dBA	3060	2	dBA
ML_ldr_o	Front End Loader	650	27	dBA	621	23	dBA	1396	15	dBA	1367	14	dBA	2286	9	dBA	2263	8	dBA	2122	10	dBA	2094	9	dBA	2792	7	dBA	2774	5	dBA
ML_Rckdrp_o	Rock Drop	634	33	dBA	605	32	dBA	1389	24	dBA	1360	19	dBA	2308	14	dBA	2284	13	dBA	2122	15	dBA	2095	14	dBA	2813	12	dBA	2795	10	dBA
OP_Dpump1_o	Dewatering Pump at 180m Head	1524	14	dBA	1502	14	dBA	1727	12	dBA	1703	12	dBA	1268	17	dBA	1241	15	dBA	1940	11	dBA	1909	10	dBA	1679	13	dBA	1659	12	dBA
OP_DRILL1_o	Drill	1265	25	dBA	1240	24	dBA	1628	17	dBA	1602	17	dBA	1511	18	dBA	1486	18	dBA	2011	14	dBA	1980	14	dBA	1986	15	dBA	1967	14	dBA
OP_DRILL2_o	Drill	1535	18	dBA	1512	18	dBA	1769	16	dBA	1745	16	dBA	1245	21	dBA	1218	21	dBA	2001	15	dBA	1970	14	dBA	1678	17	dBA	1659	16	dBA
OP_DZR_lowgrade_o	CAT D8N dozer	662	27	dBA	635	26	dBA	1273	19	dBA	1244	18	dBA	2145	7	dBA	2121	7	dBA	1933	9	dBA	1904	8	dBA	2620	5	dBA	2601	4	dBA
OP_DZR_overburden_o	CAT D8N dozer	1438	27	dBA	1421	22	dBA	1480	22	dBA	1459	22	dBA	1483	22	dBA	1456	22	dBA	1612	21	dBA	1582	21	dBA	1790	20	dBA	1769	19	dBA
OP_DZR_waste_o	CAT D8N dozer	1618	24	dBA	1592	24	dBA	2005	21	dBA	1978	21	dBA	1200	28	dBA	1177	28	dBA	2331	19	dBA	2300	19	dBA	1744	23	dBA	1727	23	dBA
OP_Excvtr1_o	Hydraulic Excavator	1174	27	dBA	1149	26	dBA	1564	24	dBA	1537	23	dBA	1604	20	dBA	1580	19	dBA	1986	18	dBA	1956	17	dBA	2079	17	dBA	2060	17	dBA
OP_Excvtr2_o	Hydraulic Excavator	1498	25	dBA	1476	25	dBA	1705	24	dBA	1681	24	dBA	1293	27	dBA	1267	27	dBA	1928	23	dBA	1897	23	dBA	1705	24	dBA	1685	24	dBA
OP_Rckdrp_lowgrade_o	Rock Drop	679	23	dBA	651	20	dBA	1289	15	dBA	1260	14	dBA	2132	7	dBA	2107	5	dBA	1945	9	dBA	1916	6	dBA	2609	5	dBA	2590	3	dBA
OP_Rckdrp_overburden_o	Rock Drop	1375	13	dBA	1357	11	dBA	1450	12	dBA	1428	10	dBA	1515	12	dBA	1487	10	dBA	1626	11	dBA	1596	9	dBA	1842	9	dBA	1822	7	dBA
OP_Rckdrp_waste_o	Rock Drop	1563	11	dBA	1537	9	dBA	1961	8	dBA	1934	6	dBA	1256	14	dBA	1234	12	dBA	2305	6	dBA	2274	4	dBA	1797	10	dBA	1779	7	dBA
UG_ExVentRaise1_o	Exhaust Vent Raise 1	1380	25	dBA	1361	24	dBA	1527	24	dBA	1503	22	dBA	1451	24	dBA	1424	22	dBA	1745	23	dBA	1713	21	dBA	1819	22	dBA	1798	21	dBA
UG_ExVentRaise2_o	Exhaust Vent Raise 2	906	27	dBA	879	26	dBA	1734	20	dBA	1706	19	dBA	2416	14	dBA	2396	13	dBA	2496	14	dBA	2469	13	dBA	2975	12	dBA	2958	11	dBA
UG_VentRaise1_o	Fresh Air Intake Vent Raise	988	29	dBA	963	27	dBA	1440	25	dBA	1411	23	dBA	1795	23	dBA	1770	21	dBA	1943	21	dBA	1913	20	dBA	2268	20	dBA	2249	19	dBA
ML_ExLvr01_o	Building Vent 1	737	17	dBA	712	15	dBA	1596	-4	dBA	1569	-6	dBA	2572	-13	dBA	2551	-14	dBA	2404	-9	dBA	2378	-12	dBA	3111	-15	dBA	3093	-15	dBA
ML_ExLvr02_o	Building Vent 2	763	16	dBA	738	16	dBA	1622	-1	dBA	1595	-2	dBA	2569	-10	dBA	2548	-11	dBA	2428	-6	dBA	2402	-9	dBA	3111	-12	dBA	3093	-12	dBA
ML_ExLvr03_o	Building Vent 3	670	22	dBA	645	16	dBA	1532	-8	dBA	1505	-10	dBA	2591	-16	dBA	2569	-17	dBA	2348	-15	dBA	2322	-15	dBA	3120	-18	dBA	3102	-19	dBA
ML_ExLvr04_o	Building Vent 4	697	15	dBA	672	11	dBA	1557	-7	dBA	1530	-9	dBA	2578	-15	dBA	2556	-16	dBA	2368	-11	dBA	2342	-14	dBA	3110	-17	dBA	3092	-17	dBA
ML_ExLvr05_o	Building Vent 5	718	17	dBA	693	13	dBA	1578	-6	dBA	1551	-7	dBA	2575	-14	dBA	2553	-15	dBA	2387	-10	dBA	2361	-13	dBA	3110	-16	dBA	3092	-16	dBA
ML_ExLvr06_o	Building Vent 6	656	22	dBA	631	21	dBA	1515	12	dBA	1488	7	dBA	2572	-16	dBA	2550	-17	dBA	2326	2	dBA	2300	1	dBA	3099	-9	dBA	3080	-8	dBA
ML_ExLvr07_o	Building Vent 7	658	22	dBA	632	21	dBA	1510	12	dBA	1483	7	dBA	2545	-16	dBA	2523	-17	dBA	2314	7	dBA	2288	1	dBA	3071	-13	dBA	3053	-13	dBA
ML_ExLvr08_o	Building Vent 8	795	15	dBA	769	15	dBA	1645	6	dBA	1618	6	dBA	2522	1	dBA	2501	0	dBA	2439	1	dBA	2412	1	dBA	3068	-2	dBA	3050	-3	dBA
ML_ExLvr09_o	Building Vent 9	782	15	dBA	756	15	dBA	1627	11	dBA	1600	10	dBA	2501	1	dBA	2480	0	dBA	2416	6	dBA	2389	1	dBA	3045	-2	dBA	3027	-3	dBA
ML_ExLvr10_o	Building Vent 0	763	16	dBA	737	16	dBA	1614	11	dBA	1586	6	dBA	2526	-7	dBA	2505	-8	dBA	2409	6	dBA	2383	1	dBA	3068	-2	dBA	3050	-3	dBA
ML_ExLvr11_o	Building Vent 1	693	2	dBA	667	2	dBA	1544	6	dBA	1517	5	dBA	2536	1	dBA	2514	0	dBA	2345	1	dBA	2318	-2	dBA	3067	-2	dBA	3049	-3	dBA
ML_ExLvr12_o	Building Vent 2	673	14	dBA	648	13	dBA	1523	12	dBA	1495	7	dBA	2529	1	dBA	2507	0	dBA	2322	7	dBA	2296	1	dBA	3057	-2	dBA	3039	-3	dBA
ML_ExLvr13_o	Building Vent 3	714	2	dBA	689	4	dBA	1565	7	dBA	1538	7	dBA	2533	1	dBA	2511	0	dBA	2364	6	dBA	2338	1	dBA	3067	-2	dBA	3049	-3	dBA
ML_ExLvr14_o	Building Vent 4	748	9	dBA	723	12	dBA	1604	7	dBA	1577	6	dBA	2554	0	dBA	2532	0	dBA	2407	1	dBA	2380	1	dBA	3093	-2	dBA	3075	-3	dBA
Htruck1_o	Haul Truck #1	Varies	24	dBA	Varies	21	dBA	Varies	18	dBA	Varies	17	dBA	Varies	12	dBA	Varies	11	dBA	Varies	10	dBA	Varies	9	dBA	Varies	8	dBA	Varies	8	dBA
Htruck2_o	Haul Truck #2	Varies	24	dBA	Varies	21	dBA	Varies	18	dBA	Varies	17	dBA	Varies	14	dBA	Varies	14	dBA	Varies	12	dBA	Varies	11	dBA	Varies	11	dBA	Varies	10	dBA
Htruck3_o	Haul Truck #3	Varies	32	dBA	Varies	29	dBA	Varies	27	dBA	Varies	25	dBA	Varies	24	dBA	Varies	23	dBA	Varies	20	dBA	Varies	19	dBA	Varies	20	dBA	Varies	19	dBA

Table 3A: Acoustic Assessment Summary

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

- "Table A3" in Appendix A of Basic CCofA Guide.

1. "Continuous" noise sources includes sum of steady, quasi-steady impulsive, tonal, cyclical and buzzing noise sources, with appropriate penalties applied, in accordance with documents NPC-104 and NPC-300. Impulsive and emergency noise sources are assessed seperately from continuous noise sources.

2. Daytime occurs from 0700-1900h. Evening occurs from 1900h-2300h. Nighttime occurs from 2300-0700h.

3. Worst-case cumulative sound level from all applicable sources operating.

4. Has an acoustic audit (as defined in Publication NPC-233) been conducted with source in place and operating?

5. Applicable worst-case NPC-300 sound level limit.

6. Performance limit (aka guideline limit) based on following:
   - C = Calculated based on road traffic volumes in compliance with NPC-206 requirements.
   - M = Measured based on monitoring for a minimum 48 hour period, in accordance with NPC-233 requirements.
   - D = Default guideline minima per NPC-300.

Assessment of Impacts for "Continuous" Noise Sources [1]

Point of Reception ID	Point of Reception Description	Time Period [2]	Total Sound Level at PoR [3] (dBA)	Verified by Acoustic Audit [4] (Yes/No)	Performance Limit [5] (dBA)	Peformance Limit Source [6] (C / M/ D)	Compliance with Performance Limit (Yes/No)
NR03	House - owned by Mcleish	Daytime	40	No	45	D	Yes
		Evening	40	No	40		Yes
		Nighttime	40	No	40		Yes
NR03_O	Outdoor receptor- Mcleish	Daytime	39	No	45	D	Yes
		Evening	39	No	40		Yes
		Nighttime	39	No	40		Yes
NR04	House - owned by Nystroms	Daytime	34	No	45	D	Yes
		Evening	34	No	40		Yes
		Nighttime	34	No	40		Yes
NR04_O	Outdoor receptor- Nystroms	Daytime	33	No	45	D	Yes
		Evening	33	No	40		Yes
		Nighttime	33	No	40		Yes
NR30	House - East Thunder Lake Road	Daytime	34	No	45	D	Yes
		Evening	34	No	40		Yes
		Nighttime	34	No	40		Yes
NR30_O	Outdoor receptor - East Thunder Lake Road	Daytime	33	No	45	D	Yes
		Evening	33	No	40		Yes
		Nighttime	33	No	40		Yes
NR44	House - Near Trans-Canada Highway	Daytime	31	No	45	D	Yes
		Evening	31	No	40		Yes
		Nighttime	31	No	40		Yes
NR44_O	Outdoor receptor - Near Trans-Canada Highway	Daytime	30	No	45	D	Yes
		Evening	30	No	40		Yes
		Nighttime	30	No	40		Yes
NR47	House - East Thunder Lake Road	Daytime	31	No	45	D	Yes
		Evening	31	No	40		Yes
		Nighttime	31	No	40		Yes
NR47_O	Outdoor receptor - East Thunder Lake Road	Daytime	30	No	45	D	Yes
		Evening	30	No	40		Yes
		Nighttime	30	No	40		Yes

Table 3B: Acoustic Assessment Summary

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

- "Table A3" in Appendix A of Basic CCofA Guide.

1. "Continuous" noise sources includes sum of steady, quasi-steady impulsive, tonal, cyclical and buzzing noise sources, with appropriate penalties applied, in accordance with documents NPC-104 and NPC-300. Impulsive and emergency noise sources are assessed seperately from continuous noise sources.

2. Daytime occurs from 0700-1900h. Evening occurs from 1900h-2300h. Nighttime occurs from 2300-0700h.

3. Worst-case cumulative sound level from all applicable sources operating.

4. Has an acoustic audit (as defined in Publication NPC-233) been conducted with source in place and operating?

5. Applicable worst-case NPC-300 sound level limit.

6. Performance limit (aka guideline limit) based on following:
   - C = Calculated based on road traffic volumes in compliance with NPC-206 requirements.
   - M = Measured based on monitoring for a minimum 48 hour period, in accordance with NPC-233 requirements.
   - D = Default guideline minima per NPC-300.

Assessment of Noise Impacts from Emergency Source Testing [1]

Point of Reception ID	Point of Reception Description	Time Period [2]	Total Sound Level at PoR [3] (dBA)	Verified by Acoustic Audit [4] (Yes/No)	Performance Limit [5] (dBA)	Peformance Limit Source [6] (C / M/ D)	Compliance with Performance Limit (Yes/No)
NR03	House - owned by Mcleish	Daytime	43	No	50	D	Yes
NR03_O	Outdoor receptor- Mcleish	Daytime	43	No	50	D	Yes
NR04	House - owned by Nystroms	Daytime	36	No	50	D	Yes
NR04_O	Outdoor receptor- Nystroms	Daytime	33	No	50	D	Yes
NR30	House - East Thunder Lake Road	Daytime	28	No	50	D	Yes
NR30_O	Outdoor receptor - East Thunder Lake Road	Daytime	27	No	50	D	Yes
NR44	House - Near Trans-Canada Highway	Daytime	31	No	50	D	Yes
NR44_O	Outdoor receptor - Near Trans-Canada Highway	Daytime	28	No	50	D	Yes
NR47	House - East Thunder Lake Road	Daytime	25	No	50	D	Yes
NR47_O	Outdoor receptor - East Thunder Lake Road	Daytime	25	No	50	D	Yes

Table 3C: Acoustic Assessment Summary

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

- "Table A3" in Appendix A of Basic CCofA Guide.

1. "Blasting" noise sources includes sum of steady noise sources, with appropriate penalties applied,
2. Daytime occurs from 0700-1900h
3. Worst-case cumulative sound level from all applicable sources operating.
4. Has an acoustic audit (as defined in Publication NPC-233) been conducted with source in place and operating?
5. Applicable worst-case NPC-119 sound level limit.
6. Performance limit (aka guideline limit) based on NPC-119

Assessment of Impacts for Blasting Noise Sources [1]

Point of Reception ID	Point of Reception Description	Time Period [2]	Total Sound Level at PoR [3] (dBA)	Verified by Acoustic Audit [4] (Yes/No)	Performance Limit [5] (dBA)	Peformance Limit Source [6]	Compliance with Performance Limit (Yes/No)
NR03	House - owned by Mcleish	Daytime	78	No	120	NPC-119 Cautionary Limt	Yes
NR04	House - owned by Nystroms	Daytime	71	No	120	NPC-119 Cautionary Limt	Yes
NR30	House - East Thunder Lake Road	Daytime	75	No	120	NPC-119 Cautionary Limt	Yes
NR44	House - Near Trans-Canada Highway	Daytime	68	No	120	NPC-119 Cautionary Limt	Yes
NR47	House - East Thunder Lake Road	Daytime	70	No	120	NPC-119 Cautionary Limt	Yes

Table 3D: Vibration Assessment Summary

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

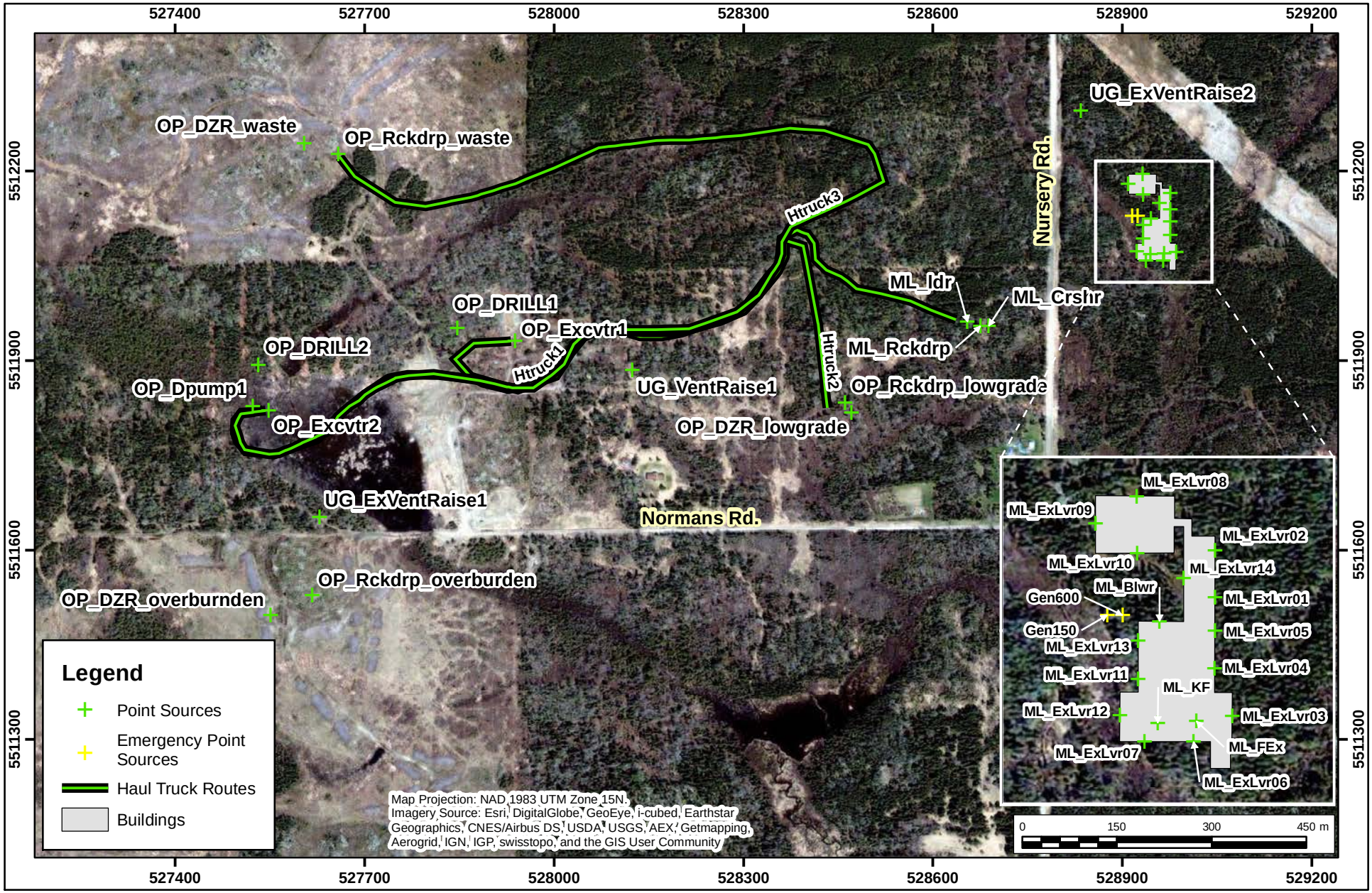
- "Table A3" in Appendix A of Basic CCofA Guide.

1. Daytime occurs from 0700-1900h
2. Worst-case cumulative vibration level from all applicable sources operating.
3. Applicable worst-case NPC-119 vibration level limit.
4. Performance limit (aka guideline limit) based on NPC-119

Assessment of Impacts for Blasting Vibration Sources [1]

Point of Reception ID	Point of Reception Description	Time Period [2]	Total PPV Level at PoR [3] (mm/sec)	Performance Limit [5] (mm/sec)	Peformance Limit Source [6]	Compliance with Performance Limit (Yes/No)
NR03	House - owned by Mcleish	Daytime	1.23	10	NPC-119 Cautionary Limt	Yes
NR04	House - owned by Nystroms	Daytime	0.57	10	NPC-119 Cautionary Limt	Yes
NR30	House - East Thunder Lake Road	Daytime	0.82	10	NPC-119 Cautionary Limt	Yes
NR44	House - Near Trans-Canada Highway	Daytime	0.41	10	NPC-119 Cautionary Limt	Yes
NR47	House - East Thunder Lake Road	Daytime	0.52	10	NPC-119 Cautionary Limt	Yes

FIGURES



Source locations

True North

Drawn by: NBN | Figure: 1

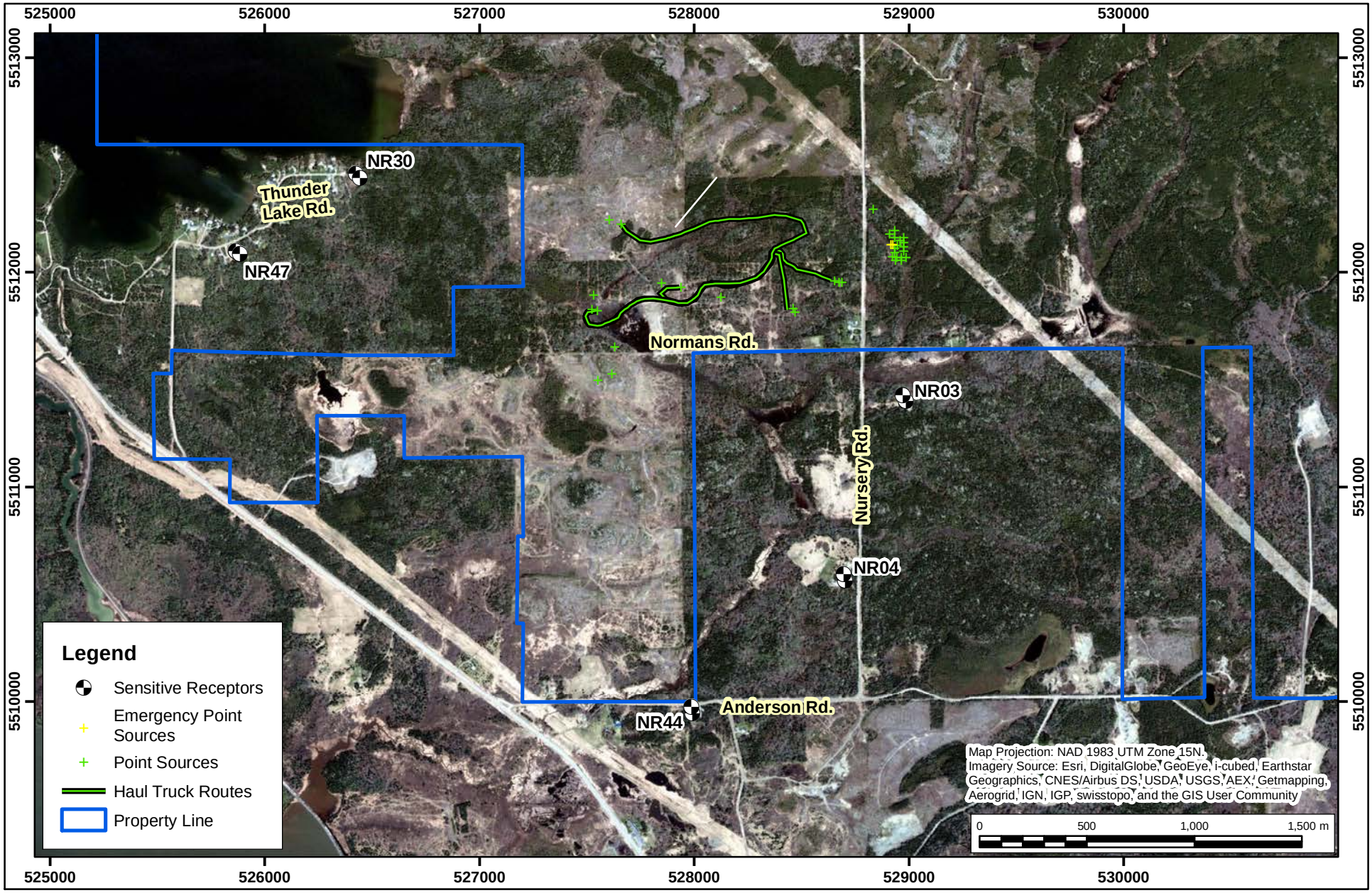
Approx. Scale: 1:8,500

Date Revised: Aug. 20, 2014

Treasury Metals Inc. - Goliath Gold Project - Wabigoon, Ontario

Project #1401701

RWDI



Sensitive Receptor Locations

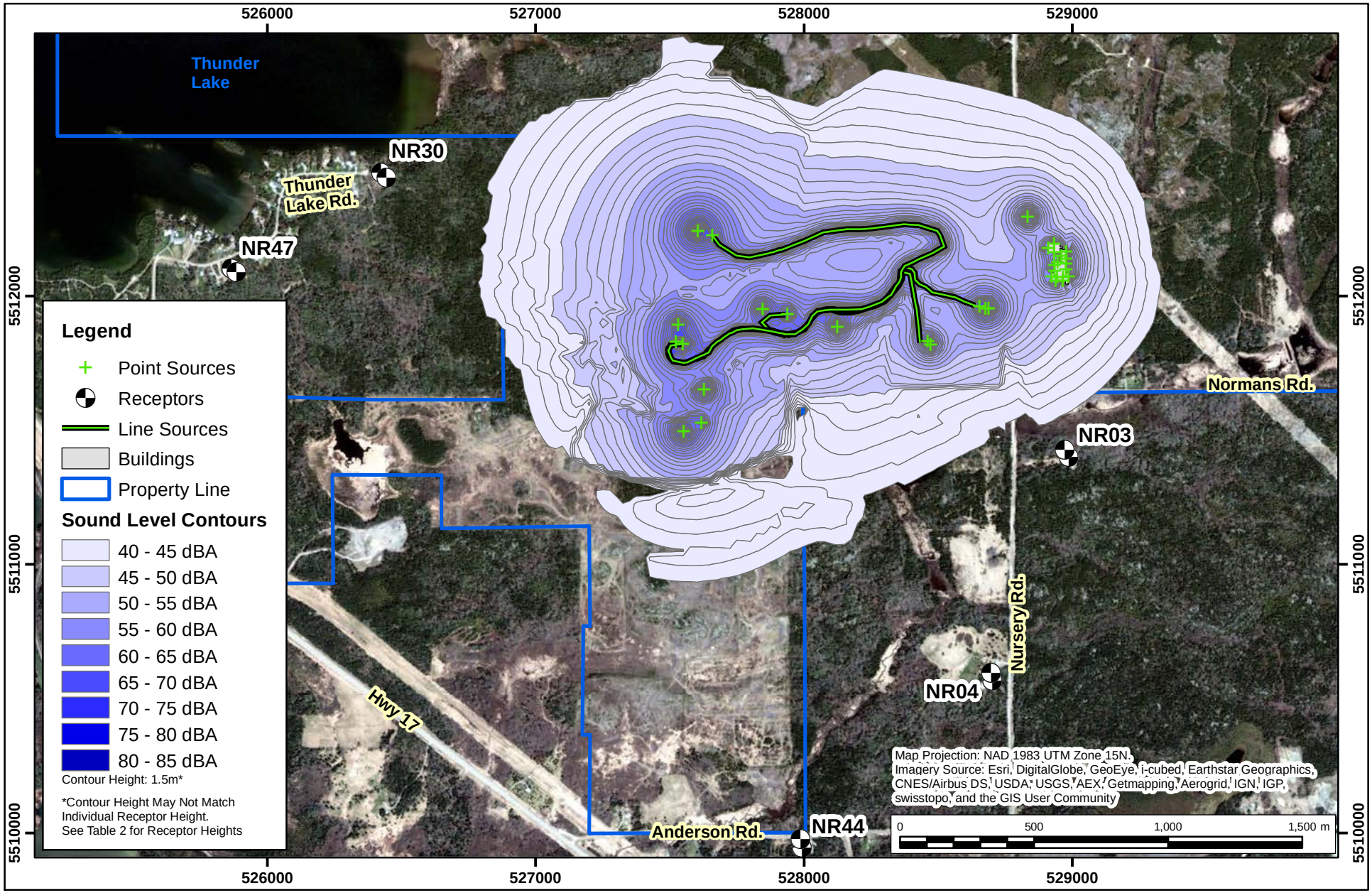
True North

Drawn by:	NBN	Figure:	2
Approx. Scale:	1:25,000		
Date Revised:	Aug. 20, 2014		

Treasury Metals Inc. - Goliath Gold Project - Wabigoon, Ontario

Project #1401701

RWDI



Predicted Sound Level Contours for Normal Operations

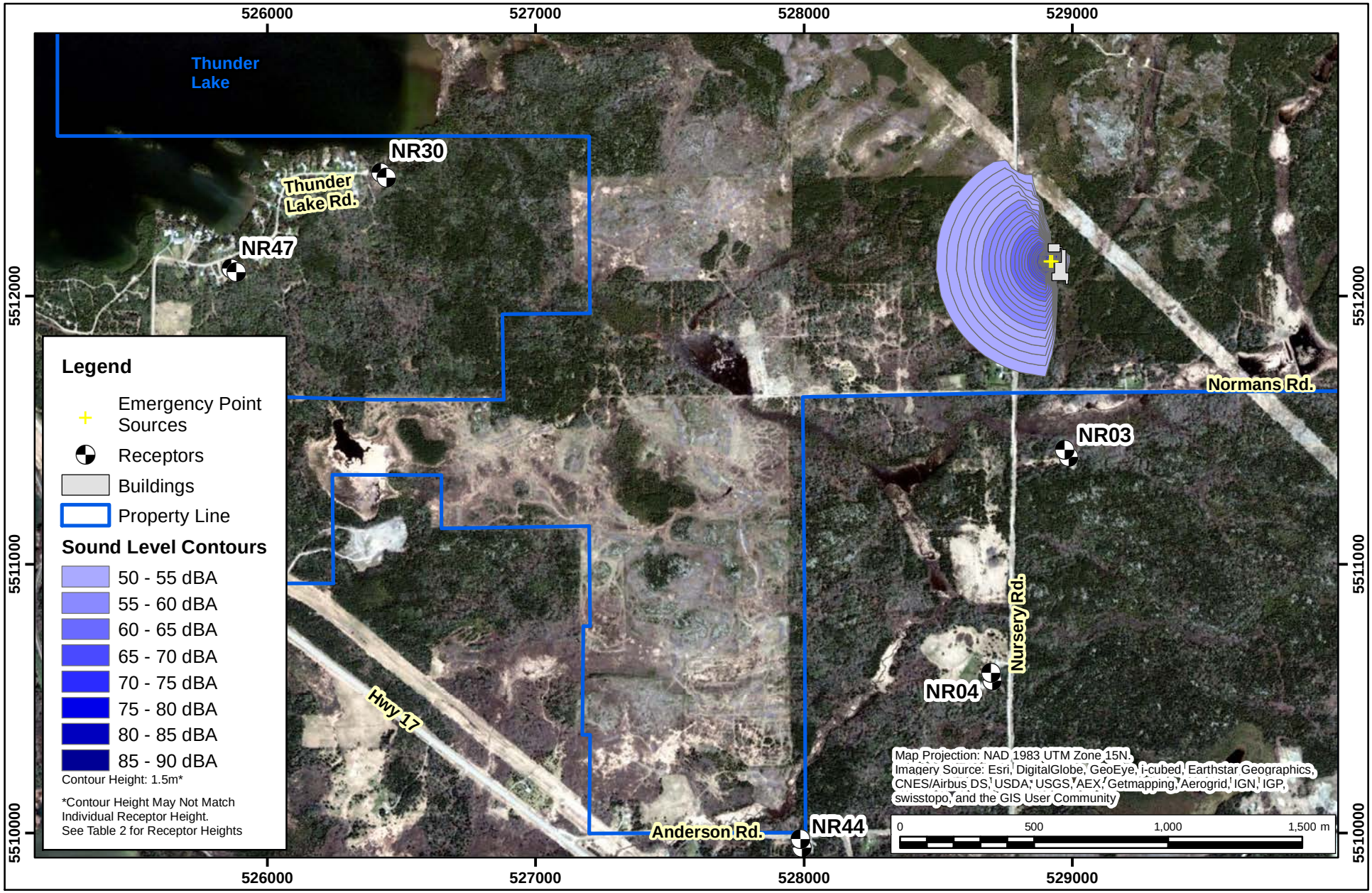
True North

Drawn by:	NBN	Figure:	3
Approx. Scale:	1:20,000		
Date Revised:	Aug. 21, 2014		

Treasury Metals Inc. - Goliath Gold Project - Wabigoon, Ontario

Project #1401701

RWDI



Predicted Sound Level Contours for Emergency Source Testing

Daytime

True North

Drawn by:	NBN	Figure:	4
Approx. Scale:	1:20,000		
Date Revised:	Aug. 20, 2014		

Treasury Metals Inc. - Goliath Gold Project - Wabigoon, Ontario

Project #1401701

RWDI

APPENDIX A

Acoustic Assessment Report Check-List

Ontario

Prepared by:

Ontario Ministry of the Environment
Environmental Approval Access and Service Integration Branch

Last Revision Date: February 2013

Ce formulaire est disponible en français

For more information:
Ministry of the Environment
Public Information Centre
Telephone: 416-325-4000
Toll free: 1-800-565-4923
Email: picemail.moe@ontario.ca
www.ontario.ca/environment

PIBS 5356e01

Company Name: Treasury Metals Incorporated

Company Address: 130 King Street West

Location of Facility: Toronto, Ontario

The attached Acoustic Assessment Report was prepared in accordance with the guidance in the ministry document "Information to be Submitted for Approval of Stationary Sources of Sound" (NPC 233) dated October 1995 and the minimum required information identified in the check-list on the reverse of this sheet has been submitted.

Company Contact:

Name: Mark Wheeler, P.Eng.

Title: Senior Mining Engineer

Phone Number: (416) 214-4654

Signature:

Date:

Technical Contact:

Name: Melissa Annett

Representing: RWDI AIR Inc.

Phone Number: (519) 823-1311 ext 2372

Signature:

Date:

ACOUSTIC ASSESSMENT REPORT CHECKLIST

	Required Information		
		Submitted	Explanation/Reference
1.0	**Introduction** (Project Background and Overview)	☑ Yes	Section 1
2.0	**Facility Description**		
	2.1 Operating hours of facility and significant Noise Sources	☑ Yes	Section 2
	2.2 Site Plan identifying all significant Noise Sources	☑ Yes	Figure 1
3.0	**Noise Source Summary**		
	3.1 ***Noise Source Summary Table***	☑ Yes	Table 1
	3.2 Source noise emissions specifications	☑ Yes	Appendix B
	3.3 Source power/capacity ratings	☑ Yes	Appendix B
	3.4 Noise control equipment description and acoustical specifications	☐ Yes	N/A
4.0	**Point of Reception Noise Impact Calculations**		
	4.1 ***Point of Reception Noise Impact Table***	☑ Yes	Table 2
	4.2 Point(s) of Reception (POR) list and description	☑ Yes	Section 4
	4.3 Land-use Zoning Plan	☑ Yes	See details in section 4
	4.4 Scaled Area Location Plan	☑ Yes	Figure 2
	4.5 Procedure used to assess noise impacts at each POR	☑ Yes	Section 6
	4.6 List of parameters/assumptions used in calculations	☑ Yes	Appendix D
5.0	**Acoustic Assessment Summary**		
	5.1 ***Acoustic Assessment Summary Table***	☑ Yes	Table 3
	5.2 Rationale for selecting applicable noise guideline limits	☑ Yes	Section 5
	5.3 Predictable Worst Case Impacts Operating Scenario	☑ Yes	Section 3
6.0	**Conclusions**		
	6.1 Statement of compliance with the selected noise performance limits	☑ Yes	Section 7
7.0	**Appendices** (Provide details such as)	☑ Yes	
	Listing of Insignificant Noise Sources	☑ Yes	Section 3.1
	Manufacture's Noise Specifications	☑ Yes	Appendix B
	Calculations	☑ Yes	Appendix B and D
	Instrumentation	☑ Yes	Appendix C
	Meteorology during Sound Level Measurements	☑ Yes	Appendix C
	Raw Data from Measurements	☑ Yes	Appendix C
	Drawings (Facility / Equipment)	☑ Yes	Figures Section

NOISE SCREENING PROCESS FOR S.9 APPLICATIONS SUPPLEMENT TO APPLICATION FOR APPROVAL

In order to obtain an approval under Section 9 of the EPA, applicants are, as a minimum, required to assess and document the impacts of all noise emissions from their facility on any noise sensitive locations defined as a Point of Reception. In order to facilitate this assessment, the ministry has developed a Noise Screening Process.

The Noise Screening Process has been developed for mining, utilities and manufacturing operations that are being reviewed by the Air and Noise Unit of the Environmental Assessment and Approvals Branch. *Other facilities that require Section 9 approval can not use this Noise Screening Process. Applications for equipment identified as candidates for the Streamline Review Unit (SRU) should not complete this process, rather they should follow specific directions from the SRU. For more information about the types of applications that may be reviewed by the SRU, please refer to the Guide to Applying for Approval (Air & Noise) dated February, 2005.*

The Noise Screening Process consists of the following Steps:

Step 1:	Identify the closest Point of Reception to the facility. (Zoning Plan)
Step 2:	Determine the actual separation distance from the Point of Reception to the facility. (Scaled Area Location Plan)
Step 3:	Calculate the minimum required separation distance by completing the questionnaire on using the facility's North American Industrial Classification System Code and generic assumptions regarding the actual noise sources present at the facility.
Step 4:	Compare the actual separation distance determined in Step 2 with the minimum required separation distance calculated in Step 3 and sign the form.

The Noise Screening Process is based on the fact that the noise emissions from any noise sources at a facility will not exceed ministry noise guidelines at the closest Point of Reception provided there is a sufficient separation distance between the facility's noise sources and the Point of Reception. Using conservative assumptions regarding the likely noise sources present at a facility, a procedure was developed for calculating the minimum required separation distance to achieve compliance with the ministry noise guidelines. If the actual separation distance from the facility to the closest Point of Reception is greater than the calculated minimum required separation distance, then no further action is required. The signed Noise Screening Process form would provide sufficient supporting information for the noise assessment required by the application process.

If the closest Point of Reception is closer than the minimum required separation distance calculated in Step 3 then further assessment is required. The application may still be approved as proposed and noise control measures may not be necessary; however, a more detailed noise impact assessment using site specific information on the noise sources present at the facility must be completed. The Zoning Plan and Scaled Area Location Plan required by the Noise Screening Process will form part of the required assessment outlined in the ministry publication NPC 233 "Information to be Submitted for Approval of Stationary Sources of Sound." See the Guide to Applying for Approval (Air and Noise) dated February, 2005 for more information on the minimum required supporting information to be included with an application that is unable to pass the Noise Screening Process.

1. Applicant Information

Company Name	Site Name	North American Industry Classification System (NAICS) Code
Treasury Metals Incorporated	Goliath Gold Project	21222

Site Address - Street information *(applies to an address that has civic numbering and street information - includes street number, name, type and direction)*	Unit Identifier *(identifies type of unit, such as suite & number)*

Survey Address *(used for a rural location specified for a subdivided township, an unsubdivided township or unsurveyed territory)*

Non Address Information *(includes any additional information to clarify clients' physical location)*

49°45'29.39"N , 92°36'19.65"W

Municipality/Unorganized Township	County/District	Postal Code
Wabigoon	Kenora	

2. Noise Screening Process *(please refer to the attached Noise Screening Process – Information & Instructions)*

Step 1

Identify Closest Point of Reception (POR) (attach Land Use Zoning Designation Plan)

POR Description House - owned by Mcleish POR Acoustical Class (as per NPC-205 & NPC-232) ☐ 1 ☐ 2 ☒ 3

Step 2

Determine Actual Separation Distance (attach Scaled Area Location Plan) 350 m

Step 3

Calculate Minimum Separation Distance (complete attached Noise Screening Process Questionnaire) 1000 m

Step 4

By signing this statement you are verifying that:

- I am the applicant or have been retained by the applicant, for the purposes of completing this Noise Screening Process;
- The closest Point of Reception has been identified and the Land Use Zoning Designation Plan provided by the Local Municipality is attached (Step 1);
- A Scaled Area Location Plan, prepared by myself, that identifies the facility, the closest Point of Reception and the actual minimum separation distance is attached (Step 2);
- I have accurately completed the Noise Screening Process questionnaire and identified all noise sources as required (Step 3);
- The actual separation distance from the facility to the closest Point of Reception, as determined in Steps 1 and 2, is greater than the minimum required separation distance determined in Step 3; and
- The facility belongs to one of the sectors for which the ministry has indicated the Noise Screening Process is applicable.

Name of Signing Authority (p*lease print)*	Title:	Company: *(if different from the Applicant)*

Civic Address - Street information *(includes street number, name, type and direction)* ☐ Same as Site Address	Unit Identifier *(identifies type of unit, such as suite & number)*

Municipality	Postal Station	Province/State	Country	Postal Code

Telephone Number *(including area code & extension)*	Fax Number *(including area code)*	E-mail Address

Signature	Date *(y/m/d)*

Noise Screening Process Questionnaire

Question 1

1 (a) - Is your facility NAICS Code Listed on Table 1.1 below?

Table 1.1 Industry with significant noise sources

NAICS Code	Industry	Check all That Apply
21	Mining and Oil and Gas Extraction	☒
22111	Electrical Power Generation	☐
324	Petroleum and Coal Products Manufacturing	☐
3251	Basic Chemical Manufacturing	☐
32731	Cement Manufacturing	☐
32741	Lime Manufacturing	☐
3311	Iron and Steel Mills and Ferro-Alloy Manufacturing	☐
3313	Alumina and Aluminium Production and Processing	☐

1 (b) - Is any of the following equipment Listed on Table 1.2 below present at the facility?

Table 1.2 Equipment with significant noise emissions

Equipment	Check all That Apply
Flares	☐
Gas Turbines, Cogeneration Facilities or any other continuous or peak shaving electrical power generation equipment	☐
Arc Furnaces	☐
Asphalt Plants	☐
High velocity or pressure atmospheric vents such as Gas Process Blow Down Devices	☐
Rock, Concrete or Aggregate Crushing Operations	☒
Individual Fans with flow rates in excess of 47 m^3/s	☒
Individual Pressure Blowers or Positive Displacement Blowers with static pressures in excess of 1.25 kilopascal	☒

Did you answer "Yes" to Question 1(a) or 1 (b)? ☒ Yes ☐ No

If Yes, the minimum required separation distance is 1,000 m.
You have completed Step 3 of the Noise Screening Process, proceed to Step 4.

If No, proceed to Question 2

Proceed to Question 2

Question 2

2 - Is your facility NAICS Code Listed on Table 2 below?

Table 2 Industries with a 500 m Radius		
NAICS Code	**Industry**	**Check all That Apply**
22112	Electrical Power Transmission, Control and Distribution	☐
2213	Water Sewage and Other Systems	☐
321	Wood Product Manufacturing	☐
322	Paper Manufacturing	☐
325	Chemical Manufacturing (except 3251 as noted in Table 1.1 above)	☐
326	Plastics and Rubber Products Manufacturing	☐
327	Non-Metallic Mineral Product Manufacturing (except 32731 and 32741 as noted in Table 1.1 above)	☐
331	Primary Metal Manufacturing (except 3311 as noted in Table 1.1 above)	☐
332	Fabricated Metal Product Manufacturing (except 33271 and 3328)	☐
333	Machinery Manufacturing	☐
335	Electrical Equipment, Appliance and Component Manufacturing	☐
336	Transportation Equipment Manufacturing	☐

Did you answer "Yes" to Question 2? ☐ Yes ☒ No

If Yes, the minimum required separation distance is as follows:

	Minimum Separation	Check the One That Applies
For Class 1:		
Daytime Operation Only (between 7:00 am and 7:00 pm)	300 m	N/A
Daytime and Afternoon shift only (between 7:00 am and 11:00 pm)	400 m	☒
Other times (outside the hours of 7:00 am to 11:00 pm)	500 m	☐
For Class 2:		
Daytime Operation Only (between 7:00 am and 7:00 pm)	300 m	N/A
Multi shifts (outside the hours of 7:00 am to 7:00 pm)	500 m	N/A
For Class 3:		
Any Operation	500 m	☐

You have completed Step 3 of the Noise Screening Process, proceed to Step 4

If No, proceed to Question 3

Proceed to Question 3

Question 3

3 - Provide information on the facility and any noise sources that may be present by answering the following questions to determine a Score for noise sources located at the facility:

			Check one for each question	Value	Score
(a)	What is the area of the enclosed buildings of the facility?				
	< 650 m^2	< 7,000 ft^2	☐	20	
	650 m^2 to < 2,300 m^2	7,000 ft^2 to < 25,000 ft^2	☐	25	
	2,300 m^2 to 9,300 m^2	25,000 ft^2 to 100,000 ft^2	☐	30	
	> 9,300 m^2	> 100,000 ft^2	☐	40	
	multi building		☐	40	
(b)	Are any cooling towers located at the facility?				
	Yes				
	- Total of all cooling towers less than 20 horsepower	< 15 kW	☐	10	
	- Total of all cooling towers from 20 to 100 horsepower	15 to 75 kW	☐	20	
	- Total of all cooling towers greater than 100 horsepower	> 75 kW	☐	40	
	No		☐	0	
(c)	Are any outdoor air cooled chillers located at the facility?				
	Yes				
	- Total of all chillers less than 150 ton	< 530 kW	☐	10	
	- Total of all chillers from 150 to 1,000 ton	530 to 3,500 kW	☐	20	
	- Total of all chillers greater than 1,000 ton	> 3,500 kW	☐	40	
	No		☐	0	
(d)	Are any air compressors used to provide process air or for pneumatic conveying systems located at the facility?				
	Yes				
	- Total of all compressors less than 10 horsepower	< 7.5 kW	☐	10	
	- Total of all compressors from 10 to 75 horsepower	7.5 to 56 kW	☐	20	
	- Total of all compressors greater than 75 horsepower	> 56 kW	☐	40	
	No		☐	0	
(e)	Is a boiler located at the facility?				
	Yes				
	- Total heat input of all boilers less than 10 million BTU/hr	< 2,930 kW	☐	10	
	- Total heat input of all boilers from 10 to 67 million BTU/hr	2,930 to 19,600 kW	☐	20	
	- Total heat input of all boilers greater than 67 million BTU/hr	> 19,600 kW	☐	40	
	No		☐	0	
(f)	What is the total volumetric flow rate of all process exhaust and general ventilation fans?				
	< 5 m^3/s		☐	0	
	5 m^3/s to < 10 m^3/s		☐	10	
	10 m^3/s to < 15m^3/s		☐	20	
	15 m^3/s to < 20 m^3/s		☐	30	
	> 20 m^3/s		☐	40	
(g)	Are any of the above air compressors, fan or blower motors located outside the building envelope?				
	Yes		☐	10	
	No		☐	0	
			SUBTOTAL - *Add Score from (a) to (g)*		

Question 3 (continued)

Adjustments for Hours of Operation		Check one	Value	Score
Class 1	Daytime Operation Only (between 7:00 am and 7:00 pm) *	☒	-20	
	Daytime and Afternoon shift only (between 7:00 am and 11:00 pm) **	N/A	-15	
	Other times (outside the hours of 7:00 am to 11:00 pm)	N/A	-10	
Class2	Daytime Operation Only (between 7:00 am and 7:00 pm)*	N/A	-20	
	Multi shifts (outside the hours of 7:00 am to 7:00 pm)	N/A	-10	
Class 3	Daytime Operation Only (between 7:00 am and 7:00 pm)	☐	-10	
	Multi shifts (outside the hours of 7:00 am to 7:00 pm)	☐	0	
			TOTAL ADJUSTMENT (A)	
Adjustments for Elevated Background Noise at Point of Reception (POR)***		Check one	Value	Score
Class 1	POR within 100 m of a 400 Series Freeway (e.g. 401)	☒	-10	
	POR within 30 m of a Provincial Highway or Arterial Road (eg HWY 27, Keele St)	N/A	-10	
	POR at other locations	N/A	0	
Class2	POR within 100 m of a 400 Series Freeway (e.g. 401)	N/A	-10	
	POR within 30 m of a Provincial Highway or Arterial Road (eg HWY 27, Keele St)	N/A	-10	
	POR at other locations	N/A	0	
Class 3	All locations	☐	0	
			TOTAL ADJUSTMENT (B)	
			TOTAL SCORE - *SUBTOTAL + TOTAL ADJUSTMENT (A) + TOTAL ADJUSTMENT (B)*	

* Note: the largest minimum separation distance for Daytime Operation only in Class 1 or 2 is 300 m.

** Note: the largest minimum separation distance for Evening and Daytime Operation only in Class 1 is 400 m

*** Note: if Adjustments for Elevated Background Noise are used then the applicant must identify the next closest receptor outside the area of influence of the roadway and show that the actual separation distance to the next closest receptor is greater than the minimum required separation distance without adjustments.

Minimum Separation Distances – Based on Total Score (above)

Total Score	Minimum Separation Distance	Check the distance that applies
< 0 points	50 m	☐
< 5 points	75 m	☐
< 10 points	100 m	☐
< 20 points	200 m	☐
< 30 points	300 m	☐
< 40 points	400 m	☐
40 or more points	500 m	☐
	Distance:	m

NOISE SCREENING PROCESS – INFORMATION & INSTRUCTIONS

STEP 1: IDENTIFY CLOSEST POINT OF RECEPTION

The applicant must identify and locate the closest Point of Reception (POR) affected by any noise emissions that may arise from the operations at the facility. A Point of Reception is defined as "any point on the premises of a person where sound or vibration originating from other than those premises is received".

The Point of Reception may be located on any of the following existing or zoned for future use premises:

- permanent or seasonal residences;
- hotels/motels;
- nursing/retirement homes;
- rental residences;
- hospitals;
- campgrounds; and
- noise sensitive buildings such as schools and places of worship.

For the Screening Process it is only required to identify the closest Point of Reception to the facility or any outdoor noise sources. For a more detailed assessment additional Point(s) or Reception may be required to be identified in other directions based on site specific conditions.

The closest Point of Reception must be selected using a **Land Use Zoning Designation Plan.** This plan indicates the approved local land use and nature of the neighbourhood for the area surrounding the facility. The plan must be based on up-to-date Zoning information provided by the Local Municipality. Zoning Designation Plans may be obtained from the planning department of the Local Municipality. This information may be in the form of hard copy zoning plans prepared by the municipality or electronic base maps showing local land use and features that may be available from the municipality to be printed by the applicant.

The Zoning information obtained from the Local Municipality must be detailed enough to clearly indicate the approved local land use for the individual properties surrounding the facility in a radius including the closest Point of Reception. The plan must include a scale and legend indicating the land use. The Zoning Information used to identify the closest Point of Reception must be attached to the Screening Process.

The Point of Reception Identification section should also describe the environmental noise climate at the Point of Reception in terms of the acoustical class, according to the following definitions:

- "Class 1 Area" means an area with an acoustical environment typical of a major population centre, where the background noise is dominated by the urban hum.

- "Class 2 Area" means an area with an acoustical environment that has qualities representative of both Class 1 and Class 3 Areas, and in which a low ambient sound level, normally occurring only between 23:00 and 07:00 hours in Class 1 Areas, will typically be realized as early as 19:00 hours.
  Other characteristics which may indicate the presence of a Class 2 Area include:
  - absence of urban hum between 19:00 and 23:00 hours;
  - evening background sound level defined by natural environment and infrequent human activity; and
  - no clearly audible sound from stationary sources other than from those under impact assessment.

- "Class 3 Area" means a rural area with an acoustical environment that is dominated by natural sounds having little or no road traffic, such as the following:
  - a small community with less than 1,000 population;
  - an agricultural area;
  - a rural recreational area such as a cottage or a resort area; or
  - a wilderness area.

STEP 2: DETERMINE ACTUAL SEPARATION DISTANCE

The location of the closest Point of Reception must be shown on a figure, prepared by the applicant, to determine the actual separation distance from the facility to the Point of Reception. The figure is referred to as a **Scaled Area Location Plan.**

For the Purposes of the Screening Process it may be possible to use the Zoning information provided by the Local Municipality as the Scaled Area Location Plan. However, the information is usually better presented in two separate figures because the scale of zoning plans available from the Local municipality is usually too small to sufficiently show the level of detail required by the Scaled Area Location Plan.

This figure, prepared by the applicant, must clearly indicate the location of the facility, the facility property line, all buildings on the facility and any noise sources at the facility that are located outside of the building envelope, such as dust collectors located beside a building. For the purposes of the Screening Process, it is not required to identify all noise sources, such as roof-mounted exhaust fans, on the Scaled Area Location Plan. The Scaled Area Location Plan must also show and name all local roads and features of the neighbourhood for the area surrounding the facility within a radius that includes the closest Point of Reception identified in Step 1. The figure must include a legend and scale.

The actual separation distance is calculated from the closest facility wall or outside noise source, such as a dust collector located outside the facility, to the Property Line of the selected Point of Reception. For rural receptors in Class 3 Areas, where properties may be larger and may include areas that would not be considered noise-sensitive, Points of Reception are limited to locations within 30 metres of a dwelling or a camping area, where sound or vibration originating from other than those premises is received. The location of the closest Point of Reception must be shown on the figure and the actual separation distance from the facility to the Property line of the closest Point of Reception must also be shown as a line on the figure, measured in metres.

Base maps showing the features of the surrounding neighbourhood may be obtained from the Local Municipality, Ministry of Natural Resources or other mapping companies.

The plan may include the location and features of all buildings surrounding the facility and include the topography of the surrounding area should it have an effect on the transmission of noise to a Point of Reception. However for the Screening Process this is usually not necessary. This information is required for a more detailed noise assessment.

Note: For larger facilities with outdoor noise sources, this process may have to be repeated for each outdoor noise source and different Points of Reception in order to identify the shortest actual separation distance to the closest Point of Reception.

STEP 3 – CALCULATE MINIMUM REQUIRED SEPARATION DISTANCE

Applicants are required to complete the Noise Screening Process questionnaire to calculate the minimum required separation distance that will result in compliance with the noise guidelines for the facility. Generic separation distances have been supplied that should provide a sufficient separation distance for a facility based on the type of operations conducted at the facility and the size and quantity of common noise sources associated with the type of facility under review. The minimum required distances have been provided from 1,000 m to 50 m. If a facility is closer to a Point of Reception than 50 m, you can not use this process. Conversely, if a facility is well sited, located more than 1,000m from a Point of Reception, then a detailed noise assessment is not required.

Applicants must use the North American Industry Classification System (NAICS) Code required by the application form to describe the facility. The NAICS code is determined in accordance with the Statistics Canada publication "North American Industry Classification System (NAICS) 2002 - Canada". For more information on determining the NAICS Code for a business please see www.statcan.ca. This screening process only applies to facilities with NAICS Codes starting with 21, 22, 31, 32 or 33. **If the NAICS code for the facility does not fall into one of these sectors then this step of the Screening Process can not be used.**

The following explanations are intended to assist with completing the Questionnaire:

Table 1.2 The presence of any one piece of equipment identified on this table should be indicated in the appropriate check box. The reference to fans and blowers is for individual large fans or blowers only. It is not required to sum the total volumetric flow rate or pressure drops across all fans or blowers at the facility. The applicant

must include any fans or blowers located on delivery trucks that supply or transport raw materials or products from the facility.

Table 1.2 The applicant must identify large atmospheric vents that are associated with process pressure vessels, or piping such as natural gas blow down valves at pipeline compressor stations. This category of equipment is not intended to capture mandatory steam release valves from commercial boilers.

Question 3 For each type of equipment identified on this table the total rating for all similar pieces of equipment should be summed and indicated in the appropriate question.

Question 3(f) The applicant is required to sum the total maximum volumetric flow rate for all process or general ventilation fans or blowers at the facility that are not directly referenced elsewhere in the table. If fans are capable of operating at two speeds the higher volumetric flow rate should be used. It is not necessary to include fans associated with cooling towers or part of packaged HVAC equipment. Fans serving condensers or other cooling units should be included. The applicant must include any fans or blowers located on delivery trucks that supply or transport raw materials or products from the facility.

Question 3(g) The applicant is required to identify if any motors powering any of the fans, blowers or air compressors are located outside the building envelope. For example if a fan serving a dust collector is located outside then the answer is yes. If the fan and dust collector are inside the building envelope the answer is no.

STEP 4: STATEMENT FACILITY MEETS SCREENING REQUIRMENTS

If an applicant can demonstrate through this screening process that the actual separation distance from the facility to the closest Point of Reception shown on the Scaled Area Location Plan is greater than the minimum required separation distance calculated in Step 3, then the person who conducted the Noise Screening Process must complete and sign off in Step 4.

APPENDIX B

Table B.1: Noise Source Data

Treasury Metals Inc. – Goliath Gold Project, 1401701

Notes to Table:

1. Wherever possible, the Source ID matches the identifiers used in the ESDM report.

2. Sound Power Level of Source, in dBA, not including sound characteristic adjustments per NPC-104.

3. Source Location: O = Outside of building, including the roof, I = Inside of building.

4. Sound Characteristic, per NPC-104:
   - S = Steady
   - I = Impulsive
   - T = Tonal
   - Q = Quasi-Steady Impulsive
   - B = Buzzing
   - C = Cyclic

5. Noise control measures currently in place or specified in construction drawings:
   - S = Silencer/Muffler
   - L = Lagging
   - O = Other
   - A = Acoustic lining, plenum
   - E = Acoustic enclosure
   - U = Uncontrolled
   - B = Barrier

   Where noise control measures are specified in construction drawings or were found on existing equipment, octave band sound power levels include the effects of the noise control measures. Noise control measures recommended in the mitigation section of this report are not included in this table.

6. Source type indicates Cadna/A modelling methodology. For Point, Line, and Area sources, PWLs represent the overall level for the entire source. Where source type is Truck Route, the source is modelled as a moving point source, and PWL is calculated from a single-vehicle passby.

7. Sound Power Level Data Source:
   - Man = Manufacturer's Data
   - EC = Engineering Calc based on specifications
   - Mea = Measured Directly
   - Same ### = same type as source no. ###
   - Pre = Pre-tender Package
   - File = Measurement on File at RWDI

Source ID [1]	Source Description	Sound Power Level [2]	Source Location [3]	Sound Characteristics [4]	Noise Control Measures [5]	1/1 Octave Band Sound Power Level Data if available (dB)									Source Type [6]	PWL Data Source [7]	Height Above Roof	Local Roof Height Ab. Grade	Height Above Grade	Source Co-ordinates for point sources (m)			Operating Times	Quieter than average equipment
		(dBA)	(I or O)	(S,Q,I,B,T,C)	(S,A,B,L,E,O,U)	31.5	63	125	250	500	1000	2000	4000	8000			(m)	(m)	(m)	X	Y	Z	Mintues per Hour	
Gen150_e	150 kW Emergency Generator	113	O	S	E,S		127.9	111.4	106.3	111.3	107.3	104.3	101.2	100.8	Point	Man	-	-	394.9	528916	5512129	394.9	60.0	
Gen600_e	600 kW Emergency Generator	114	O	S	E,S		109.6	111.0	111.9	111.5	108.5	105.7	102.3	99.9	Point	Man	-	-	396.4	528925	5512129	396.4	60.0	
ML_Blwr_o	Blower	91	O	S	U	109.0	104.0	99.0	94.0	89.0	84.0	79.0	74.0	69.0	Point	EC	-	-	394.3	528946	5512126	394.3	60.0	
ML_Crshr_o	Jaw Crusher	99	O	S	U	88.5	86.5	87.5	90.5	93.5	94.5	93.5	89.5	82.5	Point	File	-	-	396.3	528689	5511955	396.3	60.0	✓
ML_FEx_o	Furnance Exhaust	74	O	S	U		84.8	84.8	74.8	69.8	67.8	62.8	57.8	52.8	Point	File	2.5	8.0	405.0	528966	5512070	405.0	60.0	
ML_KF_o	Kiln Fan	94	O	S	U		95.0	93.0	93.0	93.0	90.0	85.0	79.0	72.0	Point	Man	2.5	8.0	405.0	528945	5512069	405.0	60.0	
ML_ldr_o	Front End Loader	100	O	S	U	97.8	97.3	104.6	101.9	97.2	93.9	91.0	87.7	82.0	Point	File	-	-	396.4	528655	5511962	396.4	30.0	✓
ML_Rckdrp_o	Rock Drop	119	O	S	U	114.1	115.7	120.7	122.4	112.7	113.9	111.2	106.1	100.4	Point	File	-	-	396.8	528676	5511955	396.8	1.3	
OP_Dpump1_o	Dewatering Pump at 180m Head	101	O	S	U	89.6	90.0	92.2	94.2	96.2	97.2	95.5	90.8	83.6	Point	EC	-	-	392.2	527523	5511828	392.2	60.0	
OP_DRILL1_o	Drill	107	O	S	U	101.3	95.9	103.2	102.6	99.6	102.1	101.4	96.6	89.3	Point	Mea	-	-	399.6	527847	5511952	399.6	30.0	
OP_DRILL2_o	Drill	107	O	S	U	101.3	95.9	103.2	102.6	99.6	102.1	101.4	96.6	89.3	Point	Mea	-	-	395.7	527532	5511893	395.7	30.0	
OP_DZR_lowgrade_o	CAT D8N dozer	100	O	S	U	95.5	96.3	101.1	94.2	95.1	95.3	94.2	88.1	79.3	Point	File	-	-	398.6	528471	5511818	398.6	30.0	✓
OP_DZR_overburden_o	CAT D8N dozer	110	O	S	U	105.5	106.3	111.1	104.2	105.1	105.3	104.2	98.1	89.3	Point	File	-	-	407.5	527551	5511497	407.5	30.0	
OP_DZR_waste_o	CAT D8N dozer	110	O	S	U	105.5	106.3	111.1	104.2	105.1	105.3	104.2	98.1	89.3	Point	File	-	-	397.2	527604	5512244	397.2	60.0	
OP_Excvtr1_o	Hydraulic Excavator	101	O	S	U	94.5	117.5	109.5	99.5	96.5	92.5	93.5	89.5	84.5	Point	File	-	-	400.6	527939	5511932	400.6	60.0	✓
OP_Excvtr2_o	Hydraulic Excavator	106	O	S	U	99.5	122.5	114.5	104.5	101.5	97.5	98.5	94.5	89.5	Point	File	-	-	394.1	527548	5511822	394.1	60.0	
OP_Rckdrp_lowgrade_o	Rock Drop	112	O	S	U	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	Point	File	-	-	397.1	528461	5511833	397.1	2.3	
OP_Rckdrp_overburden_o	Rock Drop	112	O	S	U	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	Point	File	-	-	406.0	527617	5511529	406.0	2.3	
OP_Rckdrp_waste_o	Rock Drop	112	O	S	U	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	Point	File	-	-	397.1	527658	5512227	397.1	2.3	
UG_ExVentRaise1_o	Exhaust Vent Raise 1	116	O	S	U		122.0	122.0	119.0	113.0	110.0	105.0	99.0	92.0	Point	Man	-	-	392.6	527629	5511652	392.6	60.0	
UG_ExVentRaise2_o	Exhaust Vent Raise 2	111	O	S	U		117.0	117.0	114.0	108.0	105.0	100.0	94.0	87.0	Point	Man	-	-	397.9	528835	5512296	397.9	60.0	✓
UG_VentRaise1_o	Fresh Air Intake Vent Raise	116	O	S	U		122.0	122.0	119.0	113.0	110.0	105.0	99.0	92.0	Point	Man	-	-	397.4	528124	5511885	397.4	60.0	
ML_ExLvr01_o	Building Vent 1	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	401.5	528976	5512139	401.5	60.0	
ML_ExLvr02_o	Building Vent 2	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	402.0	528977	5512165	402.0	60.0	
ML_ExLvr03_o	Building Vent 3	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	400.2	528986	5512072	400.2	60.0	
ML_ExLvr04_o	Building Vent 4	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	400.7	528976	5512100	400.7	60.0	
ML_ExLvr05_o	Building Vent 5	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	401.1	528976	5512120	401.1	60.0	
ML_ExLvr06_o	Building Vent 6	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	399.9	528965	5512058	399.9	60.0	
ML_ExLvr07_o	Building Vent 7	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	400.0	528937	5512058	400.0	60.0	
ML_ExLvr08_o	Building Vent 8	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	402.7	528933	5512196	402.7	60.0	
ML_ExLvr09_o	Building Vent 9	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	402.4	528910	5512180	402.4	60.0	
ML_ExLvr10_o	Building Vent 10	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	402.1	528933	5512164	402.1	60.0	
ML_ExLvr11_o	Building Vent 11	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	400.7	528933	5512093	400.7	60.0	
ML_ExLvr12_o	Building Vent 12	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	400.3	528923	5512073	400.3	60.0	
ML_ExLvr13_o	Building Vent 13	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	401.1	528934	5512115	401.1	60.0	
ML_ExLvr14_o	Building Vent 14	90	O	S	U	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	Point	EC	-	-	401.7	528959	5512150	401.7	60.0	
Htruck1_o	Haul Truck #1	107	O	S	U	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	Truck Route	File	-	-	-	-	-	-	60.0	✓
Htruck2_o	Haul Truck #2	107	O	S	U	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	Truck Route	File	-	-	-	-	-	-	60.0	✓
Htruck3_o	Haul Truck #3	107	O	S	U	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	Truck Route	File	-	-	-	-	-	-	60.0	✓

Table B.2 : SOURCE LEVEL DATA AND SPL TO PWL CONVERSIONS - Version 3.4
Treasury Metals Inc. – Goliath Gold Project - 1401701

Notes to Table:
1. All measurements conducted on April 22, 2014,, using Larson Davis LD-824 SLM's / RTA's.
2. All measurements were consistent with ISO 3744:1994(E) and ISO 3746:1995 measurement standards, and the applicable portions of the MOE Publication NPC-103.
3. Calc Type of C, A, or S refer to the source geometry, and represent Cylindrical, Area, or Spherical sources, respectively.
4. SPL Ref Distance refers to the radial distance from the microphone to the acoustic centre of a spherical source or the symmetrical axis of a cylindrical source.
5. Length refers to the length of a cylindrical source or line source. A length of 1.0 m may be used to define a PWL per metre.
6. Net surface area refers to surface area corrected for partition coefficient. Partition coefficient applies only to spherical and cylindrical geometries. Sound power level is estimated using an area correction 10 log A.
7. Refer to "Spectral Weighting" column for dB or dBA application information.

Measurement Reference	Source ID	Source Description	Calc Type [3] (A, C, or S)	SPL Ref Distance [4] (S or C) (m)	Length [5] (C only) (m)	Area (A only) (m^2)	Partition Coefficient (S or C) (%)	Net Surface Area [6] (m^2)	Spectral Weighting (A or Flat)	Octave Band Sound Pressure Level Data (dB or dBA) [7] 31.5	63	125	250	500	1000	2000	4000	8000	Total (dBA)	Sound Power Level Adjustment (dB)	Purpose	Octave Band Sound Power Level Data (dB or dBA) [7] 31.5	63	125	250	500	1000	2000	4000	8000	Total (dBA)
140422 824 1401873 File_001.slmdl	OP_DRILL1_o	Wire-line core diamond drill w/ enclosed diesel	S	14.50			50%	1320.4	Flat	69.5	65.4	72.7	72.1	66.0	63.9	62.4	56.3	50.0	70.0			100.7	96.6	104.0	103.3	97.3	95.1	93.6	87.5	81.2	101.2
140422 824 1401873 File_001.slmdl	OP_DRILL2_o	Wire-line core diamond drill w/ enclosed diesel	S	14.50			50%	1320.4	Flat	69.5	65.4	72.7	72.1	66.0	63.9	62.4	56.3	50.0	70.0			100.7	96.6	104.0	103.3	97.3	95.1	93.6	87.5	81.2	101.2

Table B.3 : Power Level Data
Treasury Metals Inc. – Goliath Gold Project - 1401701

Notes to Table:
1. Refer to "Spectral Weighting" column for spectral weighting information.

Power Level Data Source	Source ID	Source Description	Sound Power Level Adjustment		Spectral Weighting (A or Flat)	Octave Band Sound Power Level Data (dB or dBA) [1]									Total dBA	Octave Band Sound Power Level Data (dB or dBA) [1]									Total dBA
			(dB)	Purpose		31.5	63	125	250	500	1000	2000	4000	8000		31.5	63	125	250	500	1000	2000	4000	8000	
Measurement on file	OP_Rckdrp_lowgrade_o	Rock Drop at low grade stockpile			Flat	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	111.6	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	111.6
Measurement on file	OP_Rckdrp_overburden_o	Rock Drop at overburden stockpile			Flat	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	111.6	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	111.6
Measurement on file	OP_Rckdrp_waste_o	Rock Drop at waste stockpile			Flat	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	111.6	100.2	106.4	116.2	106.7	109.1	103.0	103.5	102.9	102.7	111.6
Measurement on file	ML_Rckdrp_o	Rock Drop at the crusher			Flat	114.1	115.7	120.7	122.4	112.7	113.9	111.2	106.1	100.4	119.3	114.1	115.7	120.7	122.4	112.7	113.9	111.2	106.1	100.4	119.3
Engineering calculation	UG_ExVentRaise2_o	Exhaust Vent Raise 2			Flat		117.0	117.0	114.0	108.0	105.0	100.0	94.0	87.0	111.0		117.0	117.0	114.0	108.0	105.0	100.0	94.0	87.0	111.0
Measurement on file	ML_Crshr_o	Crusher			Flat	88.5	86.5	87.5	90.5	93.5	94.5	93.5	89.5	82.5	99.2	88.5	86.5	87.5	90.5	93.5	94.5	93.5	89.5	82.5	99.2
Measurement on file	ML_ldr_o	Loader			Flat	97.8	97.3	104.6	101.9	97.2	93.9	91.0	87.7	82.0	100.2	97.8	97.3	104.6	101.9	97.2	93.9	91.0	87.7	82.0	100.2
Measurement on file	OP_Excvtr1_o	Hydraulic Excavator			Flat	94.5	117.5	109.5	99.5	96.5	92.5	93.5	89.5	84.5	101.1	94.5	117.5	109.5	99.5	96.5	92.5	93.5	89.5	84.5	101.1
Measurement on file	OP_Excvtr2_o	Hydraulic Excavator			Flat	99.5	122.5	114.5	104.5	101.5	97.5	98.5	94.5	89.5	106.1	99.5	122.5	114.5	104.5	101.5	97.5	98.5	94.5	89.5	106.1
Measurement on file	Htruck1_o	Haul Truck #1			Flat	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	107.2	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	107.2
Measurement on file	Htruck2_o	Haul Truck #2			Flat	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	107.2	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	107.2
Measurement on file	Htruck3_o	Haul Truck #3			Flat	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	107.2	99.5	95.5	101.5	103.5	102.5	102.5	101.5	94.5	89.5	107.2
Measurement on file	OP_DZR_lowgrade_o	Dozer at low grade stockpile			Flat	95.5	96.3	101.1	94.2	95.1	95.3	94.2	88.1	79.3	100.0	95.5	96.3	101.1	94.2	95.1	95.3	94.2	88.1	79.3	100.0
Measurement on file	OP_DZR_overburden_o	Dozer at overburden stockpile			Flat	105.5	106.3	111.1	104.2	105.1	105.3	104.2	98.1	89.3	110.0	105.5	106.3	111.1	104.2	105.1	105.3	104.2	98.1	89.3	110.0
Measurement on file	OP_DZR_waste_o	Dozer at waste stockpile			Flat	105.5	106.3	111.1	104.2	105.1	105.3	104.2	98.1	89.3	110.0	105.5	106.3	111.1	104.2	105.1	105.3	104.2	98.1	89.3	110.0

Twin City Fan & Blower
A Twin City Fan Company
5959 Trenton Lane · Minneapolis, MN 55442-3238
Phone (763) 551-7600 · Fax (763) 551-7601 · www.tcf.com
ISO 9001 CERTIFIED

Sources:
UG_ExVentRaise1_o
UG_VentRaise1_o

Customer: W/A
Job Name:
Job ID: Goliath

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Fan Description

Tag	ExVentRaise
Type	BC-SW
Size	982
Width	SWSI
Class	V
Wheel diameter (in.)	98.25
Drive method	60 Hz belt drive
Percentage width	100%
Percentage diameter	100%

Fan Performance

CFM	370,000
Operating SP (in.wg)	10
Standard SP (in.wg)	10
RPM	762
Tip Speed (fpm)	19,600
Oper. BHP	1172.10
Standard BHP	1172.10
Outlet area (sq. ft)	55.5
Outlet Velocity (fpm)	6,667
Temperature (°F)	70
Altitude (ft)	0
Density (lb/ft³)	0.075
Max RPM for Class	775
Static Efficiency	49.62
Mechanical Efficiency	63.37

Motor Data

Motor not defined.

Sound

Sound Power Levels in dB re. 10^{-12} Watts:

Octave Bands	1	2	3	4	5	6	7	8	LwA
Level at Inlet	122	122	119	113	110	105	99	92	116

Estimated sound pressure level in dBA (re: 0.0002 microbar) based on a single* ducted installation:

Distance in ft	10
dBA at Inlet	99

*To estimate dBA level for ducted inlet and ducted outlet (into and out of the room) type installation, deduct 20 from the LWA value shown.

Using a directivity factor of 2.

Estimated Sound Pressure based on free field, hemispherical (Q = 2) radiation at the stated distance.

Definitions:

LwA — The overall (single value) fan sound power level, 'A' weighted.

dBA — The environment for each fan installation influences its measured sound value, therefore dBA levels cannot be guaranteed. Consult AMCA Publication 303 for further details.
A fan's dBA is influenced by nearby reflective surfaces.

Twin City Fan & Blower
A Twin City Fan Company
5959 Trenton Lane · Minneapolis, MN 55442-3238
Phone (763) 551-7600 · Fax (763) 551-7601 · www.tcf.com
ISO 9001 CERTIFIED

Customer: W/A
Job Name:
Job ID: Goliath

July 16, 2014

1. Twin City Fan and Blower certifies that the model BC-SW is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.
2. Performance shown is for Installation Type B & D: Free or ducted inlet, Ducted outlet.
3. Power rating (BHP) does not include belt drive losses.
4. Performance ratings do not include the effects of appurtenances in the airstream.
5. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
6. Values shown are for inlet Lwi and LwiA sound power levels for Installation Type B: Free inlet, Ducted outlet.
7. Ratings do not include the effects of duct end correction.
8. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

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Source:
ML_KF_o

Customer: W/A
Job Name:
Job ID: Goliath

July 17, 2014

Fan Description

Tag	Kiln Fan
Type	BC-SW
Size	245
Width	SWSI
Class	II
Wheel diameter (in.)	24.5
Drive method	60 Hz belt drive
Percentage width	100%
Percentage diameter	100%

Fan Performance

CFM	10,000
Operating SP (in.wg)	4
Standard SP (in.wg)	4
RPM	1611
Tip Speed (fpm)	10,333
Oper. BHP	9.93
Standard BHP	9.93
Outlet area (sq. ft)	3.45
Outlet Velocity (fpm)	2,899
Temperature (°F)	70
Altitude (ft)	0
Density (lb/ft³)	0.075
Max RPM for Class	2033
Static Efficiency	63.30
Mechanical Efficiency	71.59

Motor Data

Motor not defined.

Sound

Sound Power Levels in dB re. 10^{-12} Watts:

Octave Bands	1	2	3	4	5	6	7	8	LwA
Level at Inlet	95	93	93	93	90	85	79	72	95

Estimated sound pressure level in dBA (re: 0.0002 microbar) based on a single* ducted installation:

Distance in ft	1	3	5
dBA at Inlet	95	85	81

*To estimate dBA level for ducted inlet and ducted outlet (into and out of the room) type installation, deduct 20 from the LWA value shown.

Using a directivity factor of 1.

Estimated Sound Pressure based on free field, spherical (Q = 1) radiation at the stated distance.

Definitions:

LwA — The overall (single value) fan sound power level, 'A' weighted.

dBA — The environment for each fan installation influences its measured sound value, therefore dBA levels cannot be guaranteed. Consult AMCA Publication 303 for further details.
A fan's dBA is influenced by nearby reflective surfaces.

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Customer: W/A
Job Name:
Job ID: Goliath

July 17, 2014

1. Twin City Fan and Blower certifies that the model BC-SW is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.
2. Performance shown is for Installation Type B & D: Free or ducted inlet, Ducted outlet.
3. Power rating (BHP) does not include belt drive losses.
4. Performance ratings do not include the effects of appurtenances in the airstream.
5. The sound power level ratings shown are in decibels, referred to 10 E-12 watts calculated per AMCA Standard 301.
6. Values shown are for inlet Lwi and LwiA sound power levels for Installation Type B: Free inlet, Ducted outlet.
7. Ratings do not include the effects of duct end correction.
8. The A-weighted sound ratings shown have been calculated per AMCA Standard 301.

Source:
Gen150_e

Sound Data

150DGFB 50 Hz

Sound Pressure Levels @ 7 meters dB(A)

Configuration		Position (Note 1)								8 Position Average
		1	2	3	4	5	6	7	8	
Standard - Unhoused (Note 3)	Infinite Exhaust	79.9	85.3	84.3	86.3	80.3	85.1	83.4	85.0	83.7
F182 and F216-Weather (Note 3)	Infinite Exhaust	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
F182 and F216-Weather	Mounted Muffler	87.5	87.7	87.8	86.2	84.7	87.8	88.0	89.4	87.4
F172 - Quiet Site II First Stage	Mounted Muffler	81.8	82.8	76.9	76.1	72.1	70.8	73.6	82.6	77.1
F173 and F217 - Quiet Site II Second Stage	Mounted Muffler	73.1	73.4	74.6	74.2	70.1	68.2	69.3	71.8	71.8

Note:

1. Position 1 faces the engine front at 23 feet (7 m) from the center of the generator set. The positions proceed around the generator set in a counter-clockwise direction in 45° increments.
2. Data based on full rated load with standard radiator-fan package.
3. Sound data for generator set with infinite exhaust do not include exhaust noise.
4. Sound pressure levels per ANSI S1.13-1971 as applicable.
5. Reference sound pressure is 20 µPa.
6. Sound pressure levels are subject to instrumentation, measurement, installation and generator set variability.
7. Sound pressure levels for aluminum enclosures are approximately 2dB(A) higher than listed sound pressure levels for steel enclosures.

Sound Power Levels dB(A)

Configuration		Octave Band Center Frequency (Hz)								Sound Power Level
		63	125	250	500	1000	2000	4000	8000	
Standard - Unhoused (Note 3)	Infinite Exhaust	75.6	91.5	97.3	102.2	106.7	106.1	99.6	95.5	110.9
F182 and F216-Weather	Mounted Muffler	101.7	95.3	97.7	108.1	107.3	105.5	102.2	99.7	113.1
F172 - Quiet SIte II First Stage	Mounted Muffler	94.2	90.7	91.1	97.6	101.1	101.0	95.6	90.7	106.1
F173 and F217- Quiet Site II Second Stage	Mounted Muffler	92.4	88.9	87.4	87.7	90.9	89.7	87.9	87.9	98.3

Note:

1. Data based on full rated load with standard radiator-fan package.
2. Sound power per ANSI S12.34-1988 and ISO 3744 as applicable.
3. Sound data for generator set with infinite exhaust do not include exhaust noise.
4. Reference sound power is 1pW=1 x 10^{-12} W.
5. Sound power levels are subject to instrumentation, measurement, installation and generator set variability.
6. Sound power levels for aluminum enclosures are approximately 2dB(A) higher than listed sound power levels for steel enclosures.

Sound Data

Source: Gen600_e

600DFGB **60Hz**

Sound Pressure Levels @ 7 meters dB(A)

Configuration		Position (Note 1)								8 Position Average
		1	2	3	4	5	6	7	8	
Standard-Unhoused (Note 3)	Infinite Exhaust	90.6	91.9	88.5	89.8	86.1	90.3	90.9	91	90.2
F200 - Weather	Mounted Muffler	88.1	88.7	78.2	82.9	85.3	80.9	76.8	87.8	85.2
F201 - Quiet Site II First Stage	Mounted Muffler	75	74.1	74	79	83.7	77.6	72.1	72.7	78.1
F202 - Quiet Site II Second Stage	Mounted Muffler	73.9	74.8	74.5	73.3	72.6	72.4	73.1	74.1	73.7
Unhoused - Remote Cooled (Note 3 &7)	Infinite Exhaust	87.2	90.1	87.5	89.2	85.2	89.6	90.1	89.2	88.8

Note:

1. Position 1 faces the engine front at 23 feet (7 m) from the surface of the generator set. The positions proceed around the generator set in a counter-clockwise direction in 45° increments.
2. Data based on full rated load with standard radiator-fan package.
3. Sound data for generator set with infinite exhaust do not include exhaust noise.
4. Sound pressure levels per ANSI S1.13-1971 as applicable.
5. Reference sound pressure is 10 μPa.
6. Sound pressure levels are subject to instrumentation, measurement, installation and generator set variability.
7. Sound data with remote-cooled sets are based on rated loads without fan noise.

Sound Power Levels dB(A)

Configuration		Octave Band Center Frequency (Hz)								Sound Power Level
		63	125	250	500	1000	2000	4000	8000	
Standard-Unhoused (Note 3)	Infinite Exhaust	81.8	98	105.5	111.7	111.8	111.1	108.3	103	117.5
F200 - Weather	Mounted Muffler	83.4	94.9	103.3	108.3	108.5	106.9	103.3	98.8	107.1
F201 - Quiet Site II First Stage	Mounted Muffler	83.4	92.7	99.4	100.8	99.5	99.7	97.1	92.6	107.1
F202 - Quiet Site II Second Stage	Mounted Muffler	83.4	91.4	93.5	92.9	96.1	98.4	97.1	89.9	104.2
Unhoused - Remote Cooled (Note 3 & 6)	Infinite Exhaust	81.2	93.7	103.2	109	109.5	109.9	107.6	102.2	115.7

Note:

1. Sound pressure levels per ANSI S12.34-1988 and SIO 3744 as applicable.
2. Data based on full rated load with standard radiator-fan package.
3. Sound data for generator set with infinite exhaust do not include exhaust noise.
4. Reference sound pressure is 1pW-1x10^{-12} W.
5. Sound pressure levels are subject to instrumentation, measurement, installation and generator set variability.
6. Sound data with remote-cooled sets are based on rated loads without fan noise.

Exhaust Sound Pressure Levels @ 1 meter dB(A)

Open Exhaust (No Muffler) @ Rated Load	Octave Band Center Frequency (Hz)								Sound Pressure Level
	63	125	250	500	1000	2000	4000	8000	
	78.9	93.6	105.2	100.8	104.7	107.9	106.9	102.4	112.7

Note: Sound pressure level per ISO 6798 Annex A as applicable.

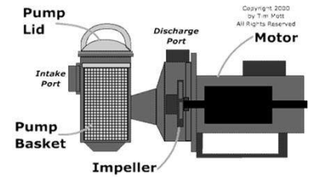
MOTOR-DRIVEN PUMPS v1.2

Source:
OP_Dpump1_o

B&H Pumps

B&H Electric Motors

Bies and Hansen Text



Sound Level Estimation

Based on Bies and Hansen, Engineering Noise Control 4th edition
Reference: D. A. Bies and C. H. Hansen, 2009. Engineering Noise Control: Theory and Practice, New York, USA.

Project #: 1401701
Project Name: Treasury Metals Inc. – Goliath Gold Project

CALCULATION 1: PUMP UNITS

				PROPERTIES						PUMP UNITS													
				Power			Speed		Load					Octave Band Sound Level Data (dB)									Overall Level		
	Tag ID	Description	Qty	kW	hp	Class	rpm	Class	%	Formula	SPL@1m dB	Q-factor	PWL dB	31.5	63	125	250	500	1000	2000	4000	8000	dB	dBA	dBC
1	Dpump	Dewatering Pump at 180m Hea	1	40	54	A	1800	P3	100	SPL = 75 + 10logkW	91	2	99	86.0	87.0	88.0	90.0	90.0	93.0	90.0	86.0	80.0	**98.5**	**96.6**	**98.2**

CALCULATION 2a: ELECTRIC MOTORS <300 kW (TYPE M1)

				PROPERTIES							PUMP DRIVERS (ELECTRIC MOTORS) <300 kW													
				Power			Speed	Load	Motor	Fan					Octave Band Sound Level Data (dB)									Overall Level		
	Tag ID	Description	Qty	kW	hp	Class	rpm	%	Type	Type	Adj.	Formula	SPL@1m dB	Q-factor	PWL dB	31.5	63	125	250	500	1000	2000	4000	8000	dB	dBA	dBC
1	Dpump	Dewatering Pump at 180m Hea	1	40	54	A	1800	100	TEFC	normal	0	SPL = 17 + 17logkW + 15logRPM	93	2	101	87.0	87.0	90.0	92.0	95.0	95.0	94.0	89.0	81.0	**101.3**	**99.7**	**101.1**

CALCULATION 3: COMBINED PUMPS AND ELECTRIC MOTORS

				PROPERTIES						COMBINED PUMP AND MOTOR SOUND POWER LEVEL											
				Power		Speed	Load	Pump Driver						Octave Band Sound Level Data (dB)								Overall Level		
	Tag ID	Description	Qty	kW	hp	rpm	%	Class	Type	Fan Type	31.5	63	125	250	500	1000	2000	4000	8000	dB	dBA	dBC
1	Dpump	Dewatering Pump at 180m Hea	1	40	54	1800	100	M1	TEFC	normal	89.6	90.0	92.2	94.2	96.2	97.2	95.5	90.8	83.6	**103**	**101**	**103**

Fan Sound Power Levels

PWL generation and/or PWL/SPL shaping

Source:
ML_FEx_o

Source Information

From 1991 ASHRAE Handbook of Fundamentals Chapter 42

Type	Fan Type	Description
1	Centrifugal	Airfoil (AF), Backward Curved (BC), Backward Inclined (BI) > 36" dia. (900 mm)
2		AF, BC, BI fans < 36" (900mm)
3		Forward Curved (FC) (All fan sizes) USE FOR CENTRIFUGAL IF EXACT TYPE IS UNKNOWN
4		Radial Bladed Low Pressure, 4 to 10" H2O (1 to 2.5 kPa)
5		Radial Bladed Medium Pressure, 6 to 15" H2O (1.5 to 3.7 kPa)
6		Radial Bladed High Pressure, 15 to 60" H2O (3.7 to 15 kPa)
7	Vaneaxial	Hub Ratio 0.3 to 0.4
8		Hub Ratio 0.4 to 0.6
9		Hub Ratio 0.6 to 0.8 USE FOR VANEAXIAL IF EXACT TYPE IS UNKNOWN
10	Tubeaxial	Wheel dia. > 40" (1000 mm)
11		Wheel dia. < 40" (1000 mm)
12	Propeller	General Ventilation / Cooling Tower

Notes:

Unit Conversions

Calculation

Tag number / Description	Type	Flowrate	Static	Fan	Motor	Number	rpm	Peak	given levels (for shaping)			Total Fan Level								
									Value	A-Weighted	PWL or	Output	Octave Band Frequencies							Overall
		(cfm)	Pressure (in. w.c.)	Power (HP)	Power (HP)	of Blades		Efficiency (%)		(y/n)	SPL	Type	63	125	250	500	1000	2000	4000	8000	Level
Furnace Exhaust	3	1177.16	0.803	0.15				85				PWL	84.8	84.8	74.8	69.8	67.8	62.8	57.8	52.8	88.1 dB

Calculation of building ventilation

Sources:
ML_ExLvr01_o
through to
ML_ExLvr14_o

Number of vents	14
Air Changes/hr	6
Radiating Surface Area	
A= Area (m^3)	9200
Required Louvre Area (m^2)	31
Louvre Area (m^2)	1.5
Fan Area (m^2)	0.8
Reverberant Power Level in the Room (dBA)	85
Sound Power Level per m^2 (dBA)	85

Exhaust

	31.5	63	125	250	500	1000	2000	4000	8000	PWL(A)
Fan	73.0	74.0	77.0	84.0	82.0	81.0	78.0	72.0	68.0	85.3
Opening (PWL")	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	85.0
Area correction	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	
Area corrected PWL	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	77.0	84.0
Total Exhaust	78.5	78.8	80.0	84.8	83.2	82.4	80.5	78.2	77.5	87.7

Inlet

	31.5	63	125	250	500	1000	2000	4000	8000	PWL(A)
Opening (PWL")	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	78.0	85.0
Area correction	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	
Area corrected PWL	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	79.8	86.7

Combined	82.2	82.3	82.9	86.0	84.8	84.3	83.2	82.1	81.8	90.3

Source:
ML_Blwr_o

Blower Calculation (Crocker, 2007)

6.1 Centrifugal Blower Sound Power–Shaft Power Correlation

Realizing that acoustic efficiency (η) is sound power divided by the mechanical power that drives the source, Beranek et al.[10] developed empirical noise formulations based on shaft horsepower of the fan. The sound power radiation from a wide class of blowers (where $\eta = 10^{-6}$) operating in the ducts of building ventilation systems formed the foundation of this investigation. The authors measured the sound power spectrum from 14 different blowers operating in several different systems. The overall sound power measured in these experiments correlated to

$$L_W = 90 + 10\log_{10} \text{SHP re } 10^{-12} \text{ W} \qquad (10)$$

where SHP is the shaft power of the blower in horsepower. The measured data for the group of fans used in this study yield a spread of about ± 4 dB about the line computed from Eq. (10). The octave band sound power spectrum was found to slope off with increasing frequency at a rate of 5 dB per octave. The level of the first band, centered at 20 Hz, is 1 dB below the overall level predicted by Eq. (10).

Shaft Horse Power 100.6

	31.5	63	125	250	500	1000	2000	4000	8000	Total dBA
Calculated Sound Power Level	*110*	*110*	*110*	*110*	*110*	*110*	*110*	*110*	*110*	
Spectrum Reduction	*1*	*6*	*11*	*16*	*21*	*26*	*31*	*36*	*41*	
Corrected Sound Power Level	109	104	99	94	89	84	79	74	69	**91.4**

Blasting Vibration Calculation

References: ISEE Blaster Handbook

Ground Vibration

Equations:

$PPV = 3330(SD)^{-1.52}$

$SD = R/W^{1/2}$

Where:

PPV	Peak particle velocity (millimeters per second)
SD	Square root scaled distance
R	Distance (meters) between the blast and point of interest
W	Maximum weight of explosive (kilograms) detonated per delay period

Project-specific parameters:

Maximum PPV	PPV	10	mm/sec (as specified in NPC-110)
Maximum charge	W	100	kg per delay
Distance	R	(unknown)	meters

Calculation:

Receptor	D (m)	W (kg)	SD	PPV (mm/sec)
Location of Maximum PPV	457	100	45.7	9.99
NR03	1813	100	181.253	1.23
NR04	3000	100	300.047	0.57
NR30	2373	100	237.341	0.82
NR44	3734	100	373.418	0.41
NR47	3187	100	318.707	0.52

Blasting Noise Calculation

Reference: ISEE Blaster Handbook

Receptor	Distance (m)	Charge - Weight (Kg)	Scaled Distance	Peak Air Pressure (Pa)	Peak Sound Pressure Level (dB)
Cautionary Limit	95	100	20	19.52	120
NR03	1813	100	390	0.16	78
NR04	3000	100	646	0.07	71
NR30	2373	100	511	0.11	75
NR44	3734	100	805	0.05	68
NR47	3187	100	687	0.07	70

Scaled Distance

Scaled distance (SD_3) = $R/\sqrt[3]{W}$

where R = distance (metres) from the blast to a point of interest; and,

W = charge-weight (kilograms) detonated within any 8-millisecond delay period.

Peak Air Pressure

$P = 37.1 \times SD_3^{-0.97}$

where P = peak air pressure (Pascals); and,

SD_3 = scaled distance (metres per kilogram [$m/kg^{1/3}$]).

Peak Sound Pressure Level

$dB=20 \log(P/P_o)$

where P_o is the reference pressure (2×10^{-5} Pa).

APPENDIX C

MEASUREMENT EQUIPMENT

Sound Level Meter 824 Kit 3

Sound Level Meter	
Make and Model	Larson-Davis Model 824 SLM and RTA
Serial No.	824A0988
Pre-amplifier	
Make and Model	Larson-Davis Model PRM902
Serial No.	1462
Microphone	
Make and Model	Larson-Davis Model 2559 precision air-condenser microphone
Serial No.	2800
Calibrator	
Make and Model	Larson-Davis CAL200 precision acoustic calibrator (1000 Hz)
Serial No.	2570

Government of Canada / Gouvernement du Canada

Canada

Weather

Dryden Airport, Ontario

Past 24 Hour Conditions

°C | °F Table | Graph

This table is a summary of hourly weather conditions for the past 24 hours. This summary includes the following parameters: temperature, humidity, dew point, wind speed and direction, air pressure, visibility and/or wind chill and humidex.

Date / Time (CDT)	Conditions	Temp (°C)	Humidity (%)	Dew Point (°C)	Wind (km/h)	Pressure (kPa)	Vis (km)	Wind Chill
23 April 2014								
5:00	N/A	0	64	-6	SSE 11	102.1	16	*
4:00	Clear	1	63	-6	SSE 9	102.1	16	*
3:00	Clear	1	61	-6	S 4	102.1	16	*
2:00	Clear	2	52	-7	SW 9	102.1	16	*
1:00	Clear	3	50	-7	SW 8	102.1	16	*
00:00	Clear	5	43	-7	SSW 9	102.1	16	*
22 April 2014								
23:00	Clear	5	42	-7	S 11	102.0	16	*
22:00	Clear	4	44	-7	S 11	102.0	16	*
21:00	N/A	N/A	N/A	N/A	N/A	N/A	N/A	*
20:00	Sunny	8	31	-8	N 8	101.9	16	*
19:00	Sunny	9	29	-8	NNW 8	102.0	16	*
18:00	Sunny	10 ↑	30	-7	WNW 5	102.0	16	*
17:00	Sunny	9	32	-7	WNW 5	102.0	16	*
16:00	Sunny	9	31	-8	NNW 11	102.0	16	*
15:00	Sunny	9	33	-7	N 11	102.0	16	*
14:00	Sunny	8	33	-8	N 15	102.0	16	*
13:00	Sunny	7	36	-7	NNW 17 gust 34	102.1	16	*
12:00	Sunny	6	44	-5	NW 15 gust 28	102.1	16	*
11:00	Sunny	5	51	-4	NW 11 gust 30	102.1	16	*

10:00	Partly Cloudy	4	57	-4	NW 15	102.1	16	*
9:00	Sunny	2	73	-3	N 9	102.1	16	*
8:00	Sunny	0	83	-3	WNW 8	102.1	16	-3
7:00	Sunny	-2 ↓	89	-3	WNW 9	102.1	16	-5
6:00	Clear	-2 ↓	87	-4	NW 8	102.1	16	-5
5:00	Clear	-1	82	-4	WNW 8	102.1	16	-4

N/A Not available ↑ Highest temperature ↓ Lowest temperature

* Value not significant.

If you require additional historical weather information, please visit Climate Data Online.

Date modified: 2014-03-25

APPENDIX D

Table D.1: Key Parameters Included in the Cadna/A Noise Modelling

Treasury Metals Inc. – Goliath Gold Project, 1401701

Parameter	Value	Rationale
Ground Absorption	0.8	Accounts for mostly soft (e.g., loose dirt, grass) surfaces between facility and receptors of interest
Temperature	10 ^{o}C	Ontario standard conditions
Relative Humidity	70%	Ontario standard conditions
Max. Order of Reflection	0	No significant reflections from buildings on site

Cadna/A ISO-9613 Calculation Protocol - Definitions

Parameter	Unit	Definition
X	**(m)**	X-axis Cartesian coordinate
Y	**(m)**	Y-axis Cartesian coordinate
Z	**(m)**	Z-axis Cartesian coordinate
Refl.	**order**	Order of reflection
Freq.	**(Hz)**	1/1-Octave Frequency Band Centre Frequency
LxT	**(dBA)**	Daytime Sound Power Level
LxN	**(dBA)**	Night-time Sound Power Level
K0	**(dB)**	D_omega in ISO-9613 (correction for radiation into solid angles less than 4 Pi)
Dc	**(dB)**	Attenuation due to Directivity Effects
Adiv	**(dB)**	Attenuation Due to Divergence
Aatm	**(dB)**	Atmospheric Attenuation
Agr	**(dB)**	Ground Attenuation
Afol	**(dB)**	Attenuation due to foliage
Ahous	**(dB)**	Attenuation from houses
Abar	**(dB)**	Barrier Attenuation
Cmet	**(dB)**	Meteorological Correction
RL	**(dB)**	Reflection Loss
LrT	**(dBA)**	Resulting Daytime Noise Impacts at the receptor - Leq(1hr)
LrN	**(dBA)**	Resulting Night-time Noise Impacts at the receptor - Leq(1hr)

Configuration	
Parameter	Value
General	
Country	(user defined)
Max. Error (dB)	0.00
Max. Search Radius (m)	5000.00
Min. Dist Src to Rcvr	0.00
Partition	
Raster Factor	0.50
Max. Length of Section (m)	1000.00
Min. Length of Section (m)	1.00
Min. Length of Section (%)	0.00
Proj. Line Sources	On
Proj. Area Sources	On
Ref. Time	
Reference Time Day (min)	60.00
Reference Time Night (min)	60.00
Daytime Penalty (dB)	0.00
Recr. Time Penalty (dB)	0.00
Night-time Penalty (dB)	0.00
DTM	
Standard Height (m)	395.00
Model of Terrain	Triangulation
Reflection	
max. Order of Reflection	0
Search Radius Src	100.00
Search Radius Rcvr	100.00
Max. Distance Source - Rcvr	1000.00 1000.00
Min. Distance Rvcr - Reflector	1.00 1.00
Min. Distance Source - Reflector	0.10
Industrial (ISO 9613)	
Lateral Diffraction	some Obj
Obst. within Area Src do not shield	On
Screening	Excl. Ground Att. over Barrier
	Dz with limit (20/25)
Barrier Coefficients C1,2,3	3.0 20.0 0.0
Temperature (°C)	10
rel. Humidity (%)	70
Ground Absorption G	0.80
Wind Speed for Dir. (m/s)	3.0
Roads (RLS-90)	
Strictly acc. to RLS-90	
Railways (Schall 03)	
Strictly acc. to Schall 03 / Schall-Transrapid	
Aircraft (???)	
Strictly acc. to AzB	

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Receiver
Name: House - owned by Mcleish
ID: NR03
X: 528986.29
Y: 5511402.53
Z: 398.35

Point Source, ISO 9613, Name: "Blower", ID: "ML_Blwr_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528945.48	5512125.56	394.29	0	32	69.6	69.6	0.0	-1.8	68.2	0.0	-5.3	0.0	0.0	11.9	0.0	-0.0	-7.0	-7.0
2	528945.48	5512125.56	394.29	0	63	77.8	77.8	0.0	-3.7	68.2	0.1	-5.3	0.0	0.0	16.1	0.0	-0.0	-4.9	-4.9
3	528945.48	5512125.56	394.29	0	125	82.9	82.9	0.0	-7.4	68.2	0.3	5.4	0.0	0.0	15.4	0.0	-0.0	-13.7	-13.7
4	528945.48	5512125.56	394.29	0	250	85.4	85.4	0.0	-8.7	68.2	0.8	6.3	0.0	0.0	17.7	0.0	-0.0	-16.3	-16.3
5	528945.48	5512125.56	394.29	0	500	85.8	85.8	0.0	-9.9	68.2	1.4	6.0	0.0	0.0	18.7	0.0	-0.0	-18.4	-18.4
6	528945.48	5512125.56	394.29	0	1000	84.0	84.0	0.0	11.0	68.2	2.6	0.6	0.0	0.0	24.0	0.0	-0.0	-22.4	-22.4
7	528945.48	5512125.56	394.29	0	2000	80.2	80.2	0.0	11.0	68.2	7.0	-1.1	0.0	0.0	24.7	0.0	-0.0	-29.7	-29.7
8	528945.48	5512125.56	394.29	0	4000	75.0	75.0	0.0	11.0	68.2	23.7	-1.1	0.0	0.0	24.9	0.0	-0.0	-51.7	-51.7
9	528945.48	5512125.56	394.29	0	8000	67.9	67.9	0.0	11.0	68.2	84.6	-1.1	0.0	0.0	24.9	0.0	-0.0	-119.8	-119.8

Point Source, ISO 9613, Name: "Jaw Crusher", ID: "ML_Crshr_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528688.49	5511954.76	396.30	0	32	49.1	49.1	0.0	0.0	67.0	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-12.9	-12.9
2	528688.49	5511954.76	396.30	0	63	60.3	60.3	0.0	0.0	67.0	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	-1.7	-1.7
3	528688.49	5511954.76	396.30	0	125	71.4	71.4	0.0	0.0	67.0	0.3	4.7	0.0	0.0	0.0	0.0	-0.0	-0.5	-0.5
4	528688.49	5511954.76	396.30	0	250	81.9	81.9	0.0	0.0	67.0	0.7	4.0	0.0	0.0	0.0	0.0	-0.0	10.3	10.3
5	528688.49	5511954.76	396.30	0	500	90.3	90.3	0.0	0.0	67.0	1.2	-0.4	0.0	0.0	0.0	0.0	-0.0	22.5	22.5
6	528688.49	5511954.76	396.30	0	1000	94.5	94.5	0.0	0.0	67.0	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	26.2	26.2
7	528688.49	5511954.76	396.30	0	2000	94.7	94.7	0.0	0.0	67.0	6.1	-1.0	0.0	0.0	0.0	0.0	-0.0	22.7	22.7
8	528688.49	5511954.76	396.30	0	4000	90.5	90.5	0.0	0.0	67.0	20.6	-1.0	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
9	528688.49	5511954.76	396.30	0	8000	81.4	81.4	0.0	0.0	67.0	73.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-57.9	-57.9

Point Source, ISO 9613, Name: "Furnance Exhaust", ID: "ML_FEx_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528965.95	5512069.71	405.04	0	32	-39.4	-39.4	0.0	0.0	67.5	0.0	-3.6	0.0	0.0	0.0	0.0	-0.0	-103.3	-103.3
2	528965.95	5512069.71	405.04	0	63	58.6	58.6	0.0	0.0	67.5	0.1	-3.6	0.0	0.0	0.0	0.0	-0.0	-5.3	-5.3
3	528965.95	5512069.71	405.04	0	125	68.7	68.7	0.0	0.0	67.5	0.3	2.1	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
4	528965.95	5512069.71	405.04	0	250	66.2	66.2	0.0	0.0	67.5	0.7	0.4	0.0	0.0	0.0	0.0	-0.0	-2.4	-2.4
5	528965.95	5512069.71	405.04	0	500	66.6	66.6	0.0	0.0	67.5	1.3	-0.7	0.0	0.0	0.0	0.0	-0.0	-1.5	-1.5
6	528965.95	5512069.71	405.04	0	1000	67.8	67.8	0.0	0.0	67.5	2.4	-0.7	0.0	0.0	0.0	0.0	-0.0	-1.4	-1.4
7	528965.95	5512069.71	405.04	0	2000	64.0	64.0	0.0	0.0	67.5	6.5	-0.7	0.0	0.0	0.0	0.0	-0.0	-9.2	-9.2
8	528965.95	5512069.71	405.04	0	4000	58.8	58.8	0.0	0.0	67.5	21.9	-0.7	0.0	0.0	0.0	0.0	-0.0	-29.8	-29.8
9	528965.95	5512069.71	405.04	0	8000	51.7	51.7	0.0	0.0	67.5	78.0	-0.7	0.0	0.0	0.0	0.0	-0.0	-93.1	-93.1

Point Source, ISO 9613, Name: "Kiln Fan", ID: "ML_KF_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528944.46	5512068.63	405.04	0	63	68.8	68.8	0.0	0.0	67.5	0.1	-3.7	0.0	0.0	0.0	0.0	-0.0	4.9	4.9
2	528944.46	5512068.63	405.04	0	125	76.9	76.9	0.0	0.0	67.5	0.3	2.1	0.0	0.0	0.0	0.0	-0.0	7.0	7.0
3	528944.46	5512068.63	405.04	0	250	84.4	84.4	0.0	0.0	67.5	0.7	0.4	0.0	0.0	0.0	0.0	-0.0	15.8	15.8
4	528944.46	5512068.63	405.04	0	500	89.8	89.8	0.0	0.0	67.5	1.3	-0.7	0.0	0.0	0.0	0.0	-0.0	21.8	21.8
5	528944.46	5512068.63	405.04	0	1000	90.0	90.0	0.0	0.0	67.5	2.4	-0.7	0.0	0.0	0.0	0.0	-0.0	20.8	20.8
6	528944.46	5512068.63	405.04	0	2000	86.2	86.2	0.0	0.0	67.5	6.5	-0.7	0.0	0.0	0.0	0.0	-0.0	13.0	13.0
7	528944.46	5512068.63	405.04	0	4000	80.0	80.0	0.0	0.0	67.5	21.9	-0.7	0.0	0.0	0.0	0.0	-0.0	-8.6	-8.6
8	528944.46	5512068.63	405.04	0	8000	70.9	70.9	0.0	0.0	67.5	78.0	-0.7	0.0	0.0	0.0	0.0	-0.0	-73.9	-73.9

Point Source, ISO 9613, Name: "Front End Loader", ID: "ML_ldr_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528654.89	5511961.82	396.35	0	32	55.4	55.4	0.0	0.0	67.3	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-6.9	-6.9
2	528654.89	5511961.82	396.35	0	63	68.1	68.1	0.0	0.0	67.3	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	5.8	5.8

Sample Calculation at facade of NR03

Point Source, ISO 9613, Name: "Front End Loader", ID: "ML_ldr_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
3	528654.89	5511961.82	396.35	0	125	85.5	85.5	0.0	0.0	67.3	0.3	4.8	0.0	0.0	0.0	0.0	-0.0	13.2	13.2
4	528654.89	5511961.82	396.35	0	250	90.3	90.3	0.0	0.0	67.3	0.7	4.0	0.0	0.0	0.0	0.0	-0.0	18.3	18.3
5	528654.89	5511961.82	396.35	0	500	91.0	91.0	0.0	0.0	67.3	1.3	-0.4	0.0	0.0	0.0	0.0	-0.0	22.9	22.9
6	528654.89	5511961.82	396.35	0	1000	90.9	90.9	0.0	0.0	67.3	2.4	-1.0	0.0	0.0	0.0	0.0	-0.0	22.2	22.2
7	528654.89	5511961.82	396.35	0	2000	89.2	89.2	0.0	0.0	67.3	6.3	-1.0	0.0	0.0	0.0	0.0	-0.0	16.7	16.7
8	528654.89	5511961.82	396.35	0	4000	85.7	85.7	0.0	0.0	67.3	21.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.9	-1.9
9	528654.89	5511961.82	396.35	0	8000	77.9	77.9	0.0	0.0	67.3	76.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-64.3	-64.3

Point Source, ISO 9613, Name: "Rock Drop", ID: "ML_Rckdrp_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528675.61	5511954.89	396.80	0	32	58.2	58.2	0.0	0.0	67.0	0.0	-4.9	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
2	528675.61	5511954.89	396.80	0	63	73.0	73.0	0.0	0.0	67.0	0.1	-4.9	0.0	0.0	0.0	0.0	-0.0	10.8	10.8
3	528675.61	5511954.89	396.80	0	125	88.1	88.1	0.0	0.0	67.0	0.3	4.7	0.0	0.0	0.0	0.0	-0.0	16.1	16.1
4	528675.61	5511954.89	396.80	0	250	97.3	97.3	0.0	0.0	67.0	0.7	3.2	0.0	0.0	0.0	0.0	-0.0	26.4	26.4
5	528675.61	5511954.89	396.80	0	500	93.0	93.0	0.0	0.0	67.0	1.2	-0.8	0.0	0.0	0.0	0.0	-0.0	25.5	25.5
6	528675.61	5511954.89	396.80	0	1000	97.4	97.4	0.0	0.0	67.0	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	29.0	29.0
7	528675.61	5511954.89	396.80	0	2000	95.9	95.9	0.0	0.0	67.0	6.1	-1.0	0.0	0.0	0.0	0.0	-0.0	23.7	23.7
8	528675.61	5511954.89	396.80	0	4000	90.6	90.6	0.0	0.0	67.0	20.8	-1.0	0.0	0.0	0.0	0.0	-0.0	3.7	3.7
9	528675.61	5511954.89	396.80	0	8000	82.8	82.8	0.0	0.0	67.0	74.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-57.4	-57.4

Point Source, ISO 9613, Name: "Dewatering Pump at 180m Head", ID: "OP_Dpump1_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527522.56	5511828.35	392.15	0	32	50.2	50.2	0.0	0.0	74.7	0.1	-5.7	0.0	0.0	4.8	0.0	-0.0	-23.6	-23.6
2	527522.56	5511828.35	392.15	0	63	63.8	63.8	0.0	0.0	74.7	0.2	-5.7	0.0	0.0	4.8	0.0	-0.0	-10.1	-10.1
3	527522.56	5511828.35	392.15	0	125	76.1	76.1	0.0	0.0	74.7	0.6	6.6	0.0	0.0	0.0	0.0	-0.0	-5.8	-5.8
4	527522.56	5511828.35	392.15	0	250	85.6	85.6	0.0	0.0	74.7	1.6	6.7	0.0	0.0	0.0	0.0	-0.0	2.6	2.6
5	527522.56	5511828.35	392.15	0	500	93.0	93.0	0.0	0.0	74.7	2.9	8.8	0.0	0.0	0.0	0.0	-0.0	6.6	6.6
6	527522.56	5511828.35	392.15	0	1000	97.2	97.2	0.0	0.0	74.7	5.6	2.0	0.0	0.0	2.7	0.0	-0.0	12.2	12.2
7	527522.56	5511828.35	392.15	0	2000	96.7	96.7	0.0	0.0	74.7	14.7	-1.1	0.0	0.0	4.8	0.0	-0.0	3.7	3.7
8	527522.56	5511828.35	392.15	0	4000	91.8	91.8	0.0	0.0	74.7	50.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-36.4	-36.4
9	527522.56	5511828.35	392.15	0	8000	82.5	82.5	0.0	0.0	74.7	178.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-174.0	-174.0

Point Source, ISO 9613, Name: "Drill", ID: "OP_DRILL1_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527846.54	5511951.90	399.62	0	32	58.9	58.9	0.0	0.0	73.0	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-8.8	-8.8
2	527846.54	5511951.90	399.62	0	63	66.7	66.7	0.0	0.0	73.0	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
3	527846.54	5511951.90	399.62	0	125	84.1	84.1	0.0	0.0	73.0	0.5	5.0	0.0	0.0	0.0	0.0	-0.0	5.5	5.5
4	527846.54	5511951.90	399.62	0	250	91.0	91.0	0.0	0.0	73.0	1.3	1.2	0.0	0.0	0.0	0.0	-0.0	15.5	15.5
5	527846.54	5511951.90	399.62	0	500	93.4	93.4	0.0	0.0	73.0	2.4	-1.1	0.0	0.0	0.0	0.0	-0.0	19.0	19.0
6	527846.54	5511951.90	399.62	0	1000	99.1	99.1	0.0	0.0	73.0	4.6	-1.1	0.0	0.0	0.0	0.0	-0.0	22.5	22.5
7	527846.54	5511951.90	399.62	0	2000	99.6	99.6	0.0	0.0	73.0	12.2	-1.1	0.0	0.0	0.0	0.0	-0.0	15.4	15.4
8	527846.54	5511951.90	399.62	0	4000	94.6	94.6	0.0	0.0	73.0	41.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-18.8	-18.8
9	527846.54	5511951.90	399.62	0	8000	85.2	85.2	0.0	0.0	73.0	147.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-134.7	-134.7

Point Source, ISO 9613, Name: "Drill", ID: "OP_DRILL2_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527531.61	5511893.10	395.72	0	32	58.9	58.9	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-15.2	-15.2
2	527531.61	5511893.10	395.72	0	63	66.7	66.7	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-7.5	-7.5
3	527531.61	5511893.10	395.72	0	125	84.1	84.1	0.0	0.0	74.7	0.6	5.0	0.0	0.0	0.0	0.0	-0.0	3.7	3.7
4	527531.61	5511893.10	395.72	0	250	91.0	91.0	0.0	0.0	74.7	1.6	1.1	0.0	0.0	3.6	0.0	-0.0	9.9	9.9
5	527531.61	5511893.10	395.72	0	500	93.4	93.4	0.0	0.0	74.7	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	12.0	12.0
6	527531.61	5511893.10	395.72	0	1000	99.1	99.1	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	15.1	15.1
7	527531.61	5511893.10	395.72	0	2000	99.6	99.6	0.0	0.0	74.7	14.8	-1.1	0.0	0.0	4.8	0.0	-0.0	6.3	6.3
8	527531.61	5511893.10	395.72	0	4000	94.6	94.6	0.0	0.0	74.7	50.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-34.1	-34.1
9	527531.61	5511893.10	395.72	0	8000	85.2	85.2	0.0	0.0	74.7	179.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-172.6	-172.6

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Point Source, ISO 9613, Name: "CAT D8N dozer", ID: "OP_DZR_lowgrade_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528470.78	5511818.38	398.60	0	32	53.1	53.1	0.0	0.0	67.4	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-9.3	-9.3
2	528470.78	5511818.38	398.60	0	63	67.1	67.1	0.0	0.0	67.4	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	4.6	4.6
3	528470.78	5511818.38	398.60	0	125	82.0	82.0	0.0	0.0	67.4	0.3	4.8	0.0	0.0	0.0	0.0	-0.0	9.5	9.5
4	528470.78	5511818.38	398.60	0	250	82.6	82.6	0.0	0.0	67.4	0.7	4.0	0.0	0.0	0.0	0.0	-0.0	10.5	10.5
5	528470.78	5511818.38	398.60	0	500	88.9	88.9	0.0	0.0	67.4	1.3	-0.4	0.0	0.0	0.0	0.0	-0.0	20.6	20.6
6	528470.78	5511818.38	398.60	0	1000	92.3	92.3	0.0	0.0	67.4	2.4	-1.0	0.0	0.0	0.0	0.0	-0.0	23.4	23.4
7	528470.78	5511818.38	398.60	0	2000	92.4	92.4	0.0	0.0	67.4	6.4	-1.0	0.0	0.0	0.0	0.0	-0.0	19.6	19.6
8	528470.78	5511818.38	398.60	0	4000	86.1	86.1	0.0	0.0	67.4	21.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.0	-2.0
9	528470.78	5511818.38	398.60	0	8000	75.2	75.2	0.0	0.0	67.4	77.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-68.6	-68.6

Point Source, ISO 9613, Name: "CAT D8N dozer", ID: "OP_DZR_overburden_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527550.98	5511496.84	407.50	0	32	63.1	63.1	0.0	0.0	74.2	0.1	-5.6	0.0	0.0	0.0	0.0	-0.0	-5.5	-5.5
2	527550.98	5511496.84	407.50	0	63	77.1	77.1	0.0	0.0	74.2	0.2	-5.6	0.0	0.0	0.0	0.0	-0.0	8.3	8.3
3	527550.98	5511496.84	407.50	0	125	92.0	92.0	0.0	0.0	74.2	0.6	5.7	0.0	0.0	0.0	0.0	-0.0	11.6	11.6
4	527550.98	5511496.84	407.50	0	250	92.6	92.6	0.0	0.0	74.2	1.5	3.9	0.0	0.0	0.0	0.0	-0.0	13.0	13.0
5	527550.98	5511496.84	407.50	0	500	98.9	98.9	0.0	0.0	74.2	2.8	-0.5	0.0	0.0	0.0	0.0	-0.0	22.4	22.4
6	527550.98	5511496.84	407.50	0	1000	102.3	102.3	0.0	0.0	74.2	5.3	-1.1	0.0	0.0	0.0	0.0	-0.0	24.0	24.0
7	527550.98	5511496.84	407.50	0	2000	102.4	102.4	0.0	0.0	74.2	13.9	-1.1	0.0	0.0	0.0	0.0	-0.0	15.4	15.4
8	527550.98	5511496.84	407.50	0	4000	96.1	96.1	0.0	0.0	74.2	47.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-24.1	-24.1
9	527550.98	5511496.84	407.50	0	8000	85.2	85.2	0.0	0.0	74.2	168.1	-1.1	0.0	0.0	0.0	0.0	-0.0	156.0	156.0

Point Source, ISO 9613, Name: "CAT D8N dozer", ID: "OP_DZR_waste_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527604.11	5512244.14	397.21	0	32	66.1	66.1	0.0	0.0	75.2	0.1	-5.6	0.0	0.0	4.8	0.0	-0.0	-8.3	-8.3
2	527604.11	5512244.14	397.21	0	63	80.1	80.1	0.0	0.0	75.2	0.2	-5.6	0.0	0.0	4.8	0.0	-0.0	5.6	5.6
3	527604.11	5512244.14	397.21	0	125	95.0	95.0	0.0	0.0	75.2	0.7	5.7	0.0	0.0	0.0	0.0	-0.0	13.5	13.5
4	527604.11	5512244.14	397.21	0	250	95.6	95.6	0.0	0.0	75.2	1.7	3.9	0.0	0.0	0.9	0.0	-0.0	14.0	14.0
5	527604.11	5512244.14	397.21	0	500	101.9	101.9	0.0	0.0	75.2	3.1	-0.5	0.0	0.0	4.8	0.0	-0.0	19.3	19.3
6	527604.11	5512244.14	397.21	0	1000	105.3	105.3	0.0	0.0	75.2	5.9	-1.1	0.0	0.0	4.8	0.0	-0.0	20.5	20.5
7	527604.11	5512244.14	397.21	0	2000	105.4	105.4	0.0	0.0	75.2	15.6	-1.1	0.0	0.0	4.8	0.0	-0.0	10.9	10.9
8	527604.11	5512244.14	397.21	0	4000	99.1	99.1	0.0	0.0	75.2	53.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-32.8	-32.8
9	527604.11	5512244.14	397.21	0	8000	88.2	88.2	0.0	0.0	75.2	189.1	-1.1	0.0	0.0	4.8	0.0	-0.0	179.8	179.8

Point Source, ISO 9613, Name: "Hydraulic Excavator", ID: "OP_Excvtr1_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527938.55	5511931.55	400.63	0	32	55.1	55.1	0.0	0.0	72.4	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-11.9	-11.9
2	527938.55	5511931.55	400.63	0	63	91.3	91.3	0.0	0.0	72.4	0.1	-5.5	0.0	0.0	0.0	0.0	-0.0	24.2	24.2
3	527938.55	5511931.55	400.63	0	125	93.4	93.4	0.0	0.0	72.4	0.5	5.6	0.0	0.0	0.0	0.0	-0.0	14.9	14.9
4	527938.55	5511931.55	400.63	0	250	90.9	90.9	0.0	0.0	72.4	1.2	3.9	0.0	0.0	0.0	0.0	-0.0	13.3	13.3
5	527938.55	5511931.55	400.63	0	500	93.3	93.3	0.0	0.0	72.4	2.3	-0.5	0.0	0.0	0.0	0.0	-0.0	19.1	19.1
6	527938.55	5511931.55	400.63	0	1000	92.5	92.5	0.0	0.0	72.4	4.3	-1.1	0.0	0.0	0.0	0.0	-0.0	16.9	16.9
7	527938.55	5511931.55	400.63	0	2000	94.7	94.7	0.0	0.0	72.4	11.3	-1.1	0.0	0.0	0.0	0.0	-0.0	12.1	12.1
8	527938.55	5511931.55	400.63	0	4000	90.5	90.5	0.0	0.0	72.4	38.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-19.3	-19.3
9	527938.55	5511931.55	400.63	0	8000	83.4	83.4	0.0	0.0	72.4	137.2	-1.1	0.0	0.0	0.0	0.0	-0.0	125.1	125.1

Point Source, ISO 9613, Name: "Hydraulic Excavator", ID: "OP_Excvtr2_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527548.32	5511821.65	394.12	0	32	60.1	60.1	0.0	0.0	74.5	0.1	-5.6	0.0	0.0	4.8	0.0	-0.0	-13.7	-13.7
2	527548.32	5511821.65	394.12	0	63	96.3	96.3	0.0	0.0	74.5	0.2	-5.6	0.0	0.0	4.8	0.0	-0.0	22.4	22.4
3	527548.32	5511821.65	394.12	0	125	98.4	98.4	0.0	0.0	74.5	0.6	5.7	0.0	0.0	0.0	0.0	-0.0	17.6	17.6
4	527548.32	5511821.65	394.12	0	250	95.9	95.9	0.0	0.0	74.5	1.6	3.9	0.0	0.0	0.9	0.0	-0.0	15.1	15.1
5	527548.32	5511821.65	394.12	0	500	98.3	98.3	0.0	0.0	74.5	2.9	-0.5	0.0	0.0	4.8	0.0	-0.0	16.6	16.6
6	527548.32	5511821.65	394.12	0	1000	97.5	97.5	0.0	0.0	74.5	5.5	-1.1	0.0	0.0	4.8	0.0	-0.0	13.8	13.8
7	527548.32	5511821.65	394.12	0	2000	99.7	99.7	0.0	0.0	74.5	14.5	-1.1	0.0	0.0	4.8	0.0	-0.0	7.1	7.1
8	527548.32	5511821.65	394.12	0	4000	95.5	95.5	0.0	0.0	74.5	49.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-31.8	-31.8
9	527548.32	5511821.65	394.12	0	8000	88.4	88.4	0.0	0.0	74.5	175.1	-1.1	0.0	0.0	4.8	0.0	-0.0	164.8	164.8

Sample Calculation at facade of NR03

Point Source, ISO 9613, Name: "Rock Drop", ID: "OP_Rckdrp_lowgrade_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528461.24	5511832.86	397.10	0	32	46.7	46.7	0.0	0.0	67.6	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-15.7	-15.7
2	528461.24	5511832.86	397.10	0	63	66.1	66.1	0.0	0.0	67.6	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	3.6	3.6
3	528461.24	5511832.86	397.10	0	125	86.0	86.0	0.0	0.0	67.6	0.3	5.2	0.0	0.0	0.0	0.0	-0.0	12.9	12.9
4	528461.24	5511832.86	397.10	0	250	84.0	84.0	0.0	0.0	67.6	0.7	6.3	0.0	0.0	0.0	0.0	-0.0	9.3	9.3
5	528461.24	5511832.86	397.10	0	500	91.8	91.8	0.0	0.0	67.6	1.3	6.0	0.0	0.0	0.0	0.0	-0.0	16.8	16.8
6	528461.24	5511832.86	397.10	0	1000	88.9	88.9	0.0	0.0	67.6	2.5	0.6	0.0	0.0	0.0	0.0	-0.0	18.2	18.2
7	528461.24	5511832.86	397.10	0	2000	90.6	90.6	0.0	0.0	67.6	6.6	-1.1	0.0	0.0	0.0	0.0	-0.0	17.4	17.4
8	528461.24	5511832.86	397.10	0	4000	89.8	89.8	0.0	0.0	67.6	22.3	-1.1	0.0	0.0	0.0	0.0	-0.0	1.0	1.0
9	528461.24	5511832.86	397.10	0	8000	87.5	87.5	0.0	0.0	67.6	79.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-58.4	-58.4

Point Source, ISO 9613, Name: "Rock Drop", ID: "OP_Rckdrp_overburden_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527617.17	5511528.50	406.00	0	32	46.7	46.7	0.0	0.0	73.8	0.0	-5.6	0.0	0.0	4.8	0.0	-0.0	-26.3	-26.3
2	527617.17	5511528.50	406.00	0	63	66.1	66.1	0.0	0.0	73.8	0.2	-5.6	0.0	0.0	4.8	0.0	-0.0	-7.0	-7.0
3	527617.17	5511528.50	406.00	0	125	86.0	86.0	0.0	0.0	73.8	0.6	6.4	0.0	0.0	0.0	0.0	-0.0	5.2	5.2
4	527617.17	5511528.50	406.00	0	250	84.0	84.0	0.0	0.0	73.8	1.4	6.3	0.0	0.0	0.0	0.0	-0.0	2.5	2.5
5	527617.17	5511528.50	406.00	0	500	91.8	91.8	0.0	0.0	73.8	2.6	5.9	0.0	0.0	0.0	0.0	-0.0	9.4	9.4
6	527617.17	5511528.50	406.00	0	1000	88.9	88.9	0.0	0.0	73.8	5.0	0.5	0.0	0.0	4.3	0.0	-0.0	5.3	5.3
7	527617.17	5511528.50	406.00	0	2000	90.6	90.6	0.0	0.0	73.8	13.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.1	-0.1
8	527617.17	5511528.50	406.00	0	4000	89.8	89.8	0.0	0.0	73.8	45.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-32.7	-32.7
9	527617.17	5511528.50	406.00	0	8000	87.5	87.5	0.0	0.0	73.8	160.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-150.6	-150.6

Point Source, ISO 9613, Name: "Rock Drop", ID: "OP_Rckdrp_waste_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527658.43	5512226.93	397.05	0	32	46.7	46.7	0.0	0.0	74.9	0.1	-5.7	0.0	0.0	4.8	0.0	-0.0	-27.3	-27.3
2	527658.43	5512226.93	397.05	0	63	66.1	66.1	0.0	0.0	74.9	0.2	-5.7	0.0	0.0	4.8	0.0	-0.0	-8.1	-8.1
3	527658.43	5512226.93	397.05	0	125	86.0	86.0	0.0	0.0	74.9	0.6	6.4	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
4	527658.43	5512226.93	397.05	0	250	84.0	84.0	0.0	0.0	74.9	1.6	6.3	0.0	0.0	0.0	0.0	-0.0	1.2	1.2
5	527658.43	5512226.93	397.05	0	500	91.8	91.8	0.0	0.0	74.9	3.0	5.9	0.0	0.0	0.0	0.0	-0.0	8.0	8.0
6	527658.43	5512226.93	397.05	0	1000	88.9	88.9	0.0	0.0	74.9	5.7	0.5	0.0	0.0	4.3	0.0	-0.0	3.5	3.5
7	527658.43	5512226.93	397.05	0	2000	90.6	90.6	0.0	0.0	74.9	15.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.0	-3.0
8	527658.43	5512226.93	397.05	0	4000	89.8	89.8	0.0	0.0	74.9	51.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-39.9	-39.9
9	527658.43	5512226.93	397.05	0	8000	87.5	87.5	0.0	0.0	74.9	182.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-173.7	-173.7

Point Source, ISO 9613, Name: "Exhaust Vent Raise 1", ID: "UG_ExVentRaise1_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	527628.71	5511652.18	392.61	0	63	95.8	95.8	0.0	-3.7	73.8	0.2	-5.6	0.0	0.0	4.8	0.0	-0.0	19.0	19.0
2	527628.71	5511652.18	392.61	0	125	105.9	105.9	0.0	-7.4	73.8	0.6	6.4	0.0	0.0	0.0	0.0	-0.0	17.7	17.7
3	527628.71	5511652.18	392.61	0	250	110.4	110.4	0.0	-8.7	73.8	1.4	6.3	0.0	0.0	0.0	0.0	-0.0	20.2	20.2
4	527628.71	5511652.18	392.61	0	500	109.8	109.8	0.0	-9.9	73.8	2.7	5.9	0.0	0.0	0.0	0.0	-0.0	17.5	17.5
5	527628.71	5511652.18	392.61	0	1000	110.0	110.0	0.0	11.0	73.8	5.0	0.5	0.0	0.0	4.3	0.0	-0.0	15.3	15.3
6	527628.71	5511652.18	392.61	0	2000	106.2	106.2	0.0	11.0	73.8	13.3	-1.1	0.0	0.0	4.9	0.0	-0.0	4.3	4.3
7	527628.71	5511652.18	392.61	0	4000	100.0	100.0	0.0	11.0	73.8	45.2	-1.1	0.0	0.0	4.9	0.0	-0.0	-33.8	-33.8
8	527628.71	5511652.18	392.61	0	8000	90.9	90.9	0.0	11.0	73.8	161.3	-1.1	0.0	0.0	5.1	0.0	-0.0	-159.2	-159.2

Point Source, ISO 9613, Name: "Exhaust Vent Raise 2", ID: "UG_ExVentRaise2_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528834.74	5512295.63	397.88	0	63	90.8	90.8	0.0	-3.7	70.1	0.1	-5.5	0.0	0.0	0.0	0.0	-0.0	22.3	22.3
2	528834.74	5512295.63	397.88	0	125	100.9	100.9	0.0	-7.4	70.1	0.4	6.0	0.0	0.0	0.0	0.0	-0.0	17.0	17.0
3	528834.74	5512295.63	397.88	0	250	105.4	105.4	0.0	-8.7	70.1	1.0	6.3	0.0	0.0	0.0	0.0	-0.0	19.3	19.3
4	528834.74	5512295.63	397.88	0	500	104.8	104.8	0.0	-9.9	70.1	1.8	6.0	0.0	0.0	0.0	0.0	-0.0	17.0	17.0
5	528834.74	5512295.63	397.88	0	1000	105.0	105.0	0.0	11.0	70.1	3.3	0.5	0.0	0.0	0.0	0.0	-0.0	20.0	20.0
6	528834.74	5512295.63	397.88	0	2000	101.2	101.2	0.0	11.0	70.1	8.8	-1.1	0.0	0.0	0.0	0.0	-0.0	12.4	12.4
7	528834.74	5512295.63	397.88	0	4000	95.0	95.0	0.0	11.0	70.1	29.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-14.7	-14.7
8	528834.74	5512295.63	397.88	0	8000	85.9	85.9	0.0	11.0	70.1	105.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-100.0	-100.0

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Point Source, ISO 9613, Name: "Fresh Air Intake Vent Raise", ID: "UG_VentRaise1_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528123.67	5511884.74	397.40	0	63	95.8	95.8	0.0	-3.7	70.9	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	21.8	21.8
2	528123.67	5511884.74	397.40	0	125	105.9	105.9	0.0	-7.4	70.9	0.4	6.2	0.0	0.0	0.0	0.0	-0.0	21.0	21.0
3	528123.67	5511884.74	397.40	0	250	110.4	110.4	0.0	-8.7	70.9	1.0	6.3	0.0	0.0	0.0	0.0	-0.0	23.5	23.5
4	528123.67	5511884.74	397.40	0	500	109.8	109.8	0.0	-9.9	70.9	1.9	6.0	0.0	0.0	0.0	0.0	-0.0	21.1	21.1
5	528123.67	5511884.74	397.40	0	1000	110.0	110.0	0.0	11.0	70.9	3.6	0.5	0.0	0.0	4.3	0.0	-0.0	19.7	19.7
6	528123.67	5511884.74	397.40	0	2000	106.2	106.2	0.0	11.0	70.9	9.6	-1.1	0.0	0.0	4.8	0.0	-0.0	11.1	11.1
7	528123.67	5511884.74	397.40	0	4000	100.0	100.0	0.0	11.0	70.9	32.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-18.0	-18.0
8	528123.67	5511884.74	397.40	0	8000	90.9	90.9	0.0	11.0	70.9	115.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-110.3	-110.3

Point Source, ISO 9613, Name: "Building Vent 1", ID: "ML_ExLvr01_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528976.42	5512139.06	401.49	0	32	42.8	42.8	3.0	0.0	68.3	0.0	-4.5	0.0	0.0	2.5	0.0	-0.0	-20.7	-20.7
2	528976.42	5512139.06	401.49	0	63	56.1	56.1	3.0	0.0	68.3	0.1	-4.5	0.0	0.0	3.0	0.0	-0.0	-7.8	-7.8
3	528976.42	5512139.06	401.49	0	125	66.8	66.8	3.0	0.0	68.3	0.3	2.8	0.0	0.0	1.2	0.0	-0.0	-2.9	-2.9
4	528976.42	5512139.06	401.49	0	250	77.4	77.4	3.0	0.0	68.3	0.8	0.2	0.0	0.0	3.8	0.0	-0.0	7.2	7.2
5	528976.42	5512139.06	401.49	0	500	81.6	81.6	3.0	0.0	68.3	1.4	-0.9	0.0	0.0	4.3	0.0	-0.0	11.4	11.4
6	528976.42	5512139.06	401.49	0	1000	84.3	84.3	3.0	0.0	68.3	2.7	-0.9	0.0	0.0	4.5	0.0	-0.0	12.7	12.7
7	528976.42	5512139.06	401.49	0	2000	84.4	84.4	3.0	0.0	68.3	7.1	-0.9	0.0	0.0	4.6	0.0	-0.0	8.2	8.2
8	528976.42	5512139.06	401.49	0	4000	83.1	83.1	3.0	0.0	68.3	24.1	-0.9	0.0	0.0	4.7	0.0	-0.0	-10.2	-10.2
9	528976.42	5512139.06	401.49	0	8000	80.7	80.7	3.0	0.0	68.3	86.1	-0.9	0.0	0.0	4.7	0.0	-0.0	-74.6	-74.6

Point Source, ISO 9613, Name: "Building Vent 2", ID: "ML_ExLvr02_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528976.49	5512165.19	402.01	0	32	42.8	42.8	3.0	0.0	68.6	0.0	-4.5	0.0	0.0	4.8	0.0	-0.0	-23.2	-23.2
2	528976.49	5512165.19	402.01	0	63	56.1	56.1	3.0	0.0	68.6	0.1	-4.5	0.0	0.0	4.8	0.0	-0.0	-9.9	-9.9
3	528976.49	5512165.19	402.01	0	125	66.8	66.8	3.0	0.0	68.6	0.3	2.8	0.0	0.0	1.9	0.0	-0.0	-3.9	-3.9
4	528976.49	5512165.19	402.01	0	250	77.4	77.4	3.0	0.0	68.6	0.8	0.2	0.0	0.0	4.5	0.0	-0.0	6.1	6.1
5	528976.49	5512165.19	402.01	0	500	81.6	81.6	3.0	0.0	68.6	1.5	-0.9	0.0	0.0	4.8	0.0	-0.0	10.6	10.6
6	528976.49	5512165.19	402.01	0	1000	84.3	84.3	3.0	0.0	68.6	2.8	-0.9	0.0	0.0	4.8	0.0	-0.0	12.0	12.0
7	528976.49	5512165.19	402.01	0	2000	84.4	84.4	3.0	0.0	68.6	7.4	-0.9	0.0	0.0	4.8	0.0	-0.0	7.5	7.5
8	528976.49	5512165.19	402.01	0	4000	83.1	83.1	3.0	0.0	68.6	25.0	-0.9	0.0	0.0	4.8	0.0	-0.0	-11.5	-11.5
9	528976.49	5512165.19	402.01	0	8000	80.7	80.7	3.0	0.0	68.6	89.1	-0.9	0.0	0.0	4.8	0.0	-0.0	-78.0	-78.0

Point Source, ISO 9613, Name: "Building Vent 3", ID: "ML_ExLvr03_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528986.05	5512072.44	400.15	0	32	42.8	42.8	3.0	0.0	67.5	0.0	-4.3	0.0	0.0	0.0	0.0	-0.0	-17.4	-17.4
2	528986.05	5512072.44	400.15	0	63	56.1	56.1	3.0	0.0	67.5	0.1	-4.3	0.0	0.0	0.0	0.0	-0.0	-4.2	-4.2
3	528986.05	5512072.44	400.15	0	125	66.8	66.8	3.0	0.0	67.5	0.3	2.8	0.0	0.0	0.0	0.0	-0.0	-0.8	-0.8
4	528986.05	5512072.44	400.15	0	250	77.4	77.4	3.0	0.0	67.5	0.7	0.3	0.0	0.0	0.0	0.0	-0.0	11.9	11.9
5	528986.05	5512072.44	400.15	0	500	81.6	81.6	3.0	0.0	67.5	1.3	-0.9	0.0	0.0	0.0	0.0	-0.0	16.7	16.7
6	528986.05	5512072.44	400.15	0	1000	84.3	84.3	3.0	0.0	67.5	2.4	-0.9	0.0	0.0	0.0	0.0	-0.0	18.2	18.2
7	528986.05	5512072.44	400.15	0	2000	84.4	84.4	3.0	0.0	67.5	6.5	-0.9	0.0	0.0	0.0	0.0	-0.0	14.2	14.2
8	528986.05	5512072.44	400.15	0	4000	83.1	83.1	3.0	0.0	67.5	21.9	-0.9	0.0	0.0	0.0	0.0	-0.0	-2.5	-2.5
9	528986.05	5512072.44	400.15	0	8000	80.7	80.7	3.0	0.0	67.5	78.3	-0.9	0.0	0.0	0.0	0.0	-0.0	-61.3	-61.3

Point Source, ISO 9613, Name: "Building Vent 4", ID: "ML_ExLvr04_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528976.33	5512099.54	400.71	0	32	42.8	42.8	3.0	0.0	67.9	0.0	-4.4	0.0	0.0	3.5	0.0	-0.0	-21.2	-21.2
2	528976.33	5512099.54	400.71	0	63	56.1	56.1	3.0	0.0	67.9	0.1	-4.4	0.0	0.0	4.0	0.0	-0.0	-8.5	-8.5
3	528976.33	5512099.54	400.71	0	125	66.8	66.8	3.0	0.0	67.9	0.3	2.8	0.0	0.0	2.0	0.0	-0.0	-3.1	-3.1
4	528976.33	5512099.54	400.71	0	250	77.4	77.4	3.0	0.0	67.9	0.7	0.3	0.0	0.0	4.8	0.0	-0.0	6.6	6.6
5	528976.33	5512099.54	400.71	0	500	81.6	81.6	3.0	0.0	67.9	1.3	-0.9	0.0	0.0	5.8	0.0	-0.0	10.5	10.5
6	528976.33	5512099.54	400.71	0	1000	84.3	84.3	3.0	0.0	67.9	2.5	-0.9	0.0	0.0	6.8	0.0	-0.0	10.9	10.9
7	528976.33	5512099.54	400.71	0	2000	84.4	84.4	3.0	0.0	67.9	6.7	-0.9	0.0	0.0	8.3	0.0	-0.0	5.3	5.3
8	528976.33	5512099.54	400.71	0	4000	83.1	83.1	3.0	0.0	67.9	22.8	-0.9	0.0	0.0	10.3	0.0	-0.0	-14.1	-14.1
9	528976.33	5512099.54	400.71	0	8000	80.7	80.7	3.0	0.0	67.9	81.5	-0.9	0.0	0.0	12.7	0.0	-0.0	-77.4	-77.4

Sample Calculation at facade of NR03

Point Source, ISO 9613, Name: "Building Vent 5", ID: "ML_ExLvr05_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528976.38	5512120.21	401.12	0	32	42.8	42.8	3.0	0.0	68.1	0.0	-4.4	0.0	0.0	2.8	0.0	-0.0	-20.8	-20.8
2	528976.38	5512120.21	401.12	0	63	56.1	56.1	3.0	0.0	68.1	0.1	-4.4	0.0	0.0	3.3	0.0	-0.0	-8.0	-8.0
3	528976.38	5512120.21	401.12	0	125	66.8	66.8	3.0	0.0	68.1	0.3	2.8	0.0	0.0	1.4	0.0	-0.0	-2.9	-2.9
4	528976.38	5512120.21	401.12	0	250	77.4	77.4	3.0	0.0	68.1	0.8	0.3	0.0	0.0	4.0	0.0	-0.0	7.3	7.3
5	528976.38	5512120.21	401.12	0	500	81.6	81.6	3.0	0.0	68.1	1.4	-0.9	0.0	0.0	4.5	0.0	-0.0	11.5	11.5
6	528976.38	5512120.21	401.12	0	1000	84.3	84.3	3.0	0.0	68.1	2.6	-0.9	0.0	0.0	4.6	0.0	-0.0	12.8	12.8
7	528976.38	5512120.21	401.12	0	2000	84.4	84.4	3.0	0.0	68.1	6.9	-0.9	0.0	0.0	4.7	0.0	-0.0	8.5	8.5
8	528976.38	5512120.21	401.12	0	4000	83.1	83.1	3.0	0.0	68.1	23.5	-0.9	0.0	0.0	4.8	0.0	-0.0	-9.4	-9.4
9	528976.38	5512120.21	401.12	0	8000	80.7	80.7	3.0	0.0	68.1	83.9	-0.9	0.0	0.0	4.8	0.0	-0.0	-72.2	-72.2

Point Source, ISO 9613, Name: "Building Vent 6", ID: "ML_ExLvr06_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528964.52	5512058.28	399.91	0	32	42.8	42.8	3.0	0.0	67.3	0.0	-4.3	0.0	0.0	0.0	0.0	-0.0	-17.3	-17.3
2	528964.52	5512058.28	399.91	0	63	56.1	56.1	3.0	0.0	67.3	0.1	-4.3	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
3	528964.52	5512058.28	399.91	0	125	66.8	66.8	3.0	0.0	67.3	0.3	2.8	0.0	0.0	0.0	0.0	-0.0	-0.6	-0.6
4	528964.52	5512058.28	399.91	0	250	77.4	77.4	3.0	0.0	67.3	0.7	0.3	0.0	0.0	0.0	0.0	-0.0	12.1	12.1
5	528964.52	5512058.28	399.91	0	500	81.6	81.6	3.0	0.0	67.3	1.3	-0.9	0.0	0.0	0.0	0.0	-0.0	16.9	16.9
6	528964.52	5512058.28	399.91	0	1000	84.3	84.3	3.0	0.0	67.3	2.4	-0.9	0.0	0.0	0.0	0.0	-0.0	18.4	18.4
7	528964.52	5512058.28	399.91	0	2000	84.4	84.4	3.0	0.0	67.3	6.3	-0.9	0.0	0.0	0.0	0.0	-0.0	14.6	14.6
8	528964.52	5512058.28	399.91	0	4000	83.1	83.1	3.0	0.0	67.3	21.5	-0.9	0.0	0.0	0.0	0.0	-0.0	-1.9	-1.9
9	528964.52	5512058.28	399.91	0	8000	80.7	80.7	3.0	0.0	67.3	76.7	-0.9	0.0	0.0	0.0	0.0	-0.0	-59.5	-59.5

Point Source, ISO 9613, Name: "Building Vent 7", ID: "ML_ExLvr07_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528937.18	5512058.27	399.96	0	32	42.8	42.8	3.0	0.0	67.4	0.0	-4.3	0.0	0.0	0.0	0.0	-0.0	-17.3	-17.3
2	528937.18	5512058.27	399.96	0	63	56.1	56.1	3.0	0.0	67.4	0.1	-4.3	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
3	528937.18	5512058.27	399.96	0	125	66.8	66.8	3.0	0.0	67.4	0.3	2.8	0.0	0.0	0.0	0.0	-0.0	-0.7	-0.7
4	528937.18	5512058.27	399.96	0	250	77.4	77.4	3.0	0.0	67.4	0.7	0.3	0.0	0.0	0.0	0.0	-0.0	12.0	12.0
5	528937.18	5512058.27	399.96	0	500	81.6	81.6	3.0	0.0	67.4	1.3	-0.9	0.0	0.0	0.0	0.0	-0.0	16.8	16.8
6	528937.18	5512058.27	399.96	0	1000	84.3	84.3	3.0	0.0	67.4	2.4	-0.9	0.0	0.0	0.0	0.0	-0.0	18.4	18.4
7	528937.18	5512058.27	399.96	0	2000	84.4	84.4	3.0	0.0	67.4	6.3	-0.9	0.0	0.0	0.0	0.0	-0.0	14.5	14.5
8	528937.18	5512058.27	399.96	0	4000	83.1	83.1	3.0	0.0	67.4	21.6	-0.9	0.0	0.0	0.0	0.0	-0.0	-2.0	-2.0
9	528937.18	5512058.27	399.96	0	8000	80.7	80.7	3.0	0.0	67.4	76.9	-0.9	0.0	0.0	0.0	0.0	-0.0	-59.7	-59.7

Point Source, ISO 9613, Name: "Building Vent 8", ID: "ML_ExLvr08_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528932.72	5512195.55	402.70	0	32	42.8	42.8	3.0	0.0	69.0	0.0	-4.6	0.0	0.0	4.8	0.0	-0.0	-23.4	-23.4
2	528932.72	5512195.55	402.70	0	63	56.1	56.1	3.0	0.0	69.0	0.1	-4.6	0.0	0.0	4.8	0.0	-0.0	-10.2	-10.2
3	528932.72	5512195.55	402.70	0	125	66.8	66.8	3.0	0.0	69.0	0.3	2.8	0.0	0.0	1.9	0.0	-0.0	-4.3	-4.3
4	528932.72	5512195.55	402.70	0	250	77.4	77.4	3.0	0.0	69.0	0.8	0.2	0.0	0.0	4.5	0.0	-0.0	5.8	5.8
5	528932.72	5512195.55	402.70	0	500	81.6	81.6	3.0	0.0	69.0	1.5	-0.9	0.0	0.0	4.8	0.0	-0.0	10.2	10.2
6	528932.72	5512195.55	402.70	0	1000	84.3	84.3	3.0	0.0	69.0	2.9	-0.9	0.0	0.0	4.8	0.0	-0.0	11.5	11.5
7	528932.72	5512195.55	402.70	0	2000	84.4	84.4	3.0	0.0	69.0	7.7	-0.9	0.0	0.0	4.8	0.0	-0.0	6.8	6.8
8	528932.72	5512195.55	402.70	0	4000	83.1	83.1	3.0	0.0	69.0	26.1	-0.9	0.0	0.0	4.8	0.0	-0.0	-12.8	-12.8
9	528932.72	5512195.55	402.70	0	8000	80.7	80.7	3.0	0.0	69.0	92.9	-0.9	0.0	0.0	4.8	0.0	-0.0	-82.1	-82.1

Point Source, ISO 9613, Name: "Building Vent 9", ID: "ML_ExLvr09_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528909.69	5512180.32	402.44	0	32	42.8	42.8	3.0	0.0	68.9	0.0	-4.6	0.0	0.0	4.8	0.0	-0.0	-23.3	-23.3
2	528909.69	5512180.32	402.44	0	63	56.1	56.1	3.0	0.0	68.9	0.1	-4.6	0.0	0.0	4.8	0.0	-0.0	-10.1	-10.1
3	528909.69	5512180.32	402.44	0	125	66.8	66.8	3.0	0.0	68.9	0.3	2.8	0.0	0.0	2.0	0.0	-0.0	-4.2	-4.2
4	528909.69	5512180.32	402.44	0	250	77.4	77.4	3.0	0.0	68.9	0.8	0.2	0.0	0.0	4.6	0.0	-0.0	5.8	5.8
5	528909.69	5512180.32	402.44	0	500	81.6	81.6	3.0	0.0	68.9	1.5	-0.9	0.0	0.0	4.9	0.0	-0.0	10.2	10.2
6	528909.69	5512180.32	402.44	0	1000	84.3	84.3	3.0	0.0	68.9	2.9	-0.9	0.0	0.0	5.1	0.0	-0.0	11.4	11.4
7	528909.69	5512180.32	402.44	0	2000	84.4	84.4	3.0	0.0	68.9	7.5	-0.9	0.0	0.0	5.4	0.0	-0.0	6.5	6.5
8	528909.69	5512180.32	402.44	0	4000	83.1	83.1	3.0	0.0	68.9	25.6	-0.9	0.0	0.0	5.9	0.0	-0.0	-13.4	-13.4
9	528909.69	5512180.32	402.44	0	8000	80.7	80.7	3.0	0.0	68.9	91.3	-0.9	0.0	0.0	6.8	0.0	-0.0	-82.4	-82.4

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Point Source, ISO 9613, Name: "Building Vent 10", ID: "ML_ExLvr10_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528932.95	5512163.56	402.06	0	32	42.8	42.8	3.0	0.0	68.6	0.0	-4.5	0.0	0.0	4.8	0.0	-0.0	-23.2	-23.2
2	528932.95	5512163.56	402.06	0	63	56.1	56.1	3.0	0.0	68.6	0.1	-4.5	0.0	0.0	4.8	0.0	-0.0	-9.9	-9.9
3	528932.95	5512163.56	402.06	0	125	66.8	66.8	3.0	0.0	68.6	0.3	2.8	0.0	0.0	1.9	0.0	-0.0	-3.9	-3.9
4	528932.95	5512163.56	402.06	0	250	77.4	77.4	3.0	0.0	68.6	0.8	0.2	0.0	0.0	4.5	0.0	-0.0	6.1	6.1
5	528932.95	5512163.56	402.06	0	500	81.6	81.6	3.0	0.0	68.6	1.5	-0.9	0.0	0.0	4.8	0.0	-0.0	10.6	10.6
6	528932.95	5512163.56	402.06	0	1000	84.3	84.3	3.0	0.0	68.6	2.8	-0.9	0.0	0.0	4.8	0.0	-0.0	12.0	12.0
7	528932.95	5512163.56	402.06	0	2000	84.4	84.4	3.0	0.0	68.6	7.4	-0.9	0.0	0.0	4.8	0.0	-0.0	7.5	7.5
8	528932.95	5512163.56	402.06	0	4000	83.1	83.1	3.0	0.0	68.6	25.0	-0.9	0.0	0.0	4.8	0.0	-0.0	-11.5	-11.5
9	528932.95	5512163.56	402.06	0	8000	80.7	80.7	3.0	0.0	68.6	89.2	-0.9	0.0	0.0	4.8	0.0	-0.0	-78.0	-78.0

Point Source, ISO 9613, Name: "Building Vent 11", ID: "ML_ExLvr11_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528933.44	5512093.28	400.67	0	32	42.8	42.8	3.0	0.0	67.8	0.0	-4.4	0.0	0.0	6.0	0.0	-0.0	-23.7	-23.7
2	528933.44	5512093.28	400.67	0	63	56.1	56.1	3.0	0.0	67.8	0.1	-4.4	0.0	0.0	8.7	0.0	-0.0	-13.2	-13.2
3	528933.44	5512093.28	400.67	0	125	66.8	66.8	3.0	0.0	67.8	0.3	2.8	0.0	0.0	9.9	0.0	-0.0	-11.0	-11.0
4	528933.44	5512093.28	400.67	0	250	77.4	77.4	3.0	0.0	67.8	0.7	0.3	0.0	0.0	15.5	0.0	-0.0	-4.0	-4.0
5	528933.44	5512093.28	400.67	0	500	81.6	81.6	3.0	0.0	67.8	1.3	-0.9	0.0	0.0	18.9	0.0	-0.0	-2.5	-2.5
6	528933.44	5512093.28	400.67	0	1000	84.3	84.3	3.0	0.0	67.8	2.5	-0.9	0.0	0.0	21.9	0.0	-0.0	-4.0	-4.0
7	528933.44	5512093.28	400.67	0	2000	84.4	84.4	3.0	0.0	67.8	6.7	-0.9	0.0	0.0	24.4	0.0	-0.0	-10.7	-10.7
8	528933.44	5512093.28	400.67	0	4000	83.1	83.1	3.0	0.0	67.8	22.7	-0.9	0.0	0.0	24.7	0.0	-0.0	-28.3	-28.3
9	528933.44	5512093.28	400.67	0	8000	80.7	80.7	3.0	0.0	67.8	81.0	-0.9	0.0	0.0	24.8	0.0	-0.0	-89.0	-89.0

Point Source, ISO 9613, Name: "Building Vent 12", ID: "ML_ExLvr12_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528923.28	5512073.04	400.29	0	32	42.8	42.8	3.0	0.0	67.6	0.0	-4.3	0.0	0.0	3.1	0.0	-0.0	-20.6	-20.6
2	528923.28	5512073.04	400.29	0	63	56.1	56.1	3.0	0.0	67.6	0.1	-4.3	0.0	0.0	3.8	0.0	-0.0	-8.1	-8.1
3	528923.28	5512073.04	400.29	0	125	66.8	66.8	3.0	0.0	67.6	0.3	2.8	0.0	0.0	4.2	0.0	-0.0	-5.1	-5.1
4	528923.28	5512073.04	400.29	0	250	77.4	77.4	3.0	0.0	67.6	0.7	0.3	0.0	0.0	5.8	0.0	-0.0	6.0	6.0
5	528923.28	5512073.04	400.29	0	500	81.6	81.6	3.0	0.0	67.6	1.3	-0.9	0.0	0.0	7.1	0.0	-0.0	9.5	9.5
6	528923.28	5512073.04	400.29	0	1000	84.3	84.3	3.0	0.0	67.6	2.5	-0.9	0.0	0.0	8.8	0.0	-0.0	9.4	9.4
7	528923.28	5512073.04	400.29	0	2000	84.4	84.4	3.0	0.0	67.6	6.5	-0.9	0.0	0.0	10.8	0.0	-0.0	3.4	3.4
8	528923.28	5512073.04	400.29	0	4000	83.1	83.1	3.0	0.0	67.6	22.1	-0.9	0.0	0.0	13.1	0.0	-0.0	-15.8	-15.8
9	528923.28	5512073.04	400.29	0	8000	80.7	80.7	3.0	0.0	67.6	78.7	-0.9	0.0	0.0	15.6	0.0	-0.0	-77.3	-77.3

Point Source, ISO 9613, Name: "Building Vent 13", ID: "ML_ExLvr13_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528933.49	5512114.65	401.09	0	32	42.8	42.8	3.0	0.0	68.1	0.0	-4.4	0.0	0.0	6.9	0.0	-0.0	-24.8	-24.8
2	528933.49	5512114.65	401.09	0	63	56.1	56.1	3.0	0.0	68.1	0.1	-4.4	0.0	0.0	9.3	0.0	-0.0	-14.0	-14.0
3	528933.49	5512114.65	401.09	0	125	66.8	66.8	3.0	0.0	68.1	0.3	2.8	0.0	0.0	9.4	0.0	-0.0	-10.8	-10.8
4	528933.49	5512114.65	401.09	0	250	77.4	77.4	3.0	0.0	68.1	0.8	0.3	0.0	0.0	14.9	0.0	-0.0	-3.6	-3.6
5	528933.49	5512114.65	401.09	0	500	81.6	81.6	3.0	0.0	68.1	1.4	-0.9	0.0	0.0	18.0	0.0	-0.0	-2.0	-2.0
6	528933.49	5512114.65	401.09	0	1000	84.3	84.3	3.0	0.0	68.1	2.6	-0.9	0.0	0.0	20.9	0.0	-0.0	-3.4	-3.4
7	528933.49	5512114.65	401.09	0	2000	84.4	84.4	3.0	0.0	68.1	6.9	-0.9	0.0	0.0	23.9	0.0	-0.0	-10.6	-10.6
8	528933.49	5512114.65	401.09	0	4000	83.1	83.1	3.0	0.0	68.1	23.4	-0.9	0.0	0.0	25.0	0.0	-0.0	-29.5	-29.5
9	528933.49	5512114.65	401.09	0	8000	80.7	80.7	3.0	0.0	68.1	83.5	-0.9	0.0	0.0	25.0	0.0	-0.0	-92.0	-92.0

Point Source, ISO 9613, Name: "Building Vent 14", ID: "ML_ExLvr14_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528958.96	5512149.73	401.74	0	32	42.8	42.8	3.0	0.0	68.5	0.0	-4.5	0.0	0.0	5.3	0.0	-0.0	-23.5	-23.5
2	528958.96	5512149.73	401.74	0	63	56.1	56.1	3.0	0.0	68.5	0.1	-4.5	0.0	0.0	6.0	0.0	-0.0	-11.0	-11.0
3	528958.96	5512149.73	401.74	0	125	66.8	66.8	3.0	0.0	68.5	0.3	2.8	0.0	0.0	4.4	0.0	-0.0	-6.2	-6.2
4	528958.96	5512149.73	401.74	0	250	77.4	77.4	3.0	0.0	68.5	0.8	0.2	0.0	0.0	8.6	0.0	-0.0	2.2	2.2
5	528958.96	5512149.73	401.74	0	500	81.6	81.6	3.0	0.0	68.5	1.4	-0.9	0.0	0.0	11.0	0.0	-0.0	4.6	4.6
6	528958.96	5512149.73	401.74	0	1000	84.3	84.3	3.0	0.0	68.5	2.7	-0.9	0.0	0.0	13.4	0.0	-0.0	3.6	3.6
7	528958.96	5512149.73	401.74	0	2000	84.4	84.4	3.0	0.0	68.5	7.2	-0.9	0.0	0.0	16.1	0.0	-0.0	-3.5	-3.5
8	528958.96	5512149.73	401.74	0	4000	83.1	83.1	3.0	0.0	68.5	24.5	-0.9	0.0	0.0	19.0	0.0	-0.0	-25.0	-25.0
9	528958.96	5512149.73	401.74	0	8000	80.7	80.7	3.0	0.0	68.5	87.4	-0.9	0.0	0.0	21.9	0.0	-0.0	-93.2	-93.2

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528616.76	5511972.53	397.40	0	32	37.6	37.6	0.0	0.0	67.6	0.0	-4.9	0.0	0.0	0.0	0.0	-0.0	-25.1	-25.1
2	528616.76	5511972.53	397.40	0	63	46.8	46.8	0.0	0.0	67.6	0.1	-4.9	0.0	0.0	0.0	0.0	-0.0	-16.0	-16.0
3	528616.76	5511972.53	397.40	0	125	62.9	62.9	0.0	0.0	67.6	0.3	4.8	0.0	0.0	0.0	0.0	-0.0	-9.8	-9.8
4	528616.76	5511972.53	397.40	0	250	72.4	72.4	0.0	0.0	67.6	0.7	2.4	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
5	528616.76	5511972.53	397.40	0	500	76.8	76.8	0.0	0.0	67.6	1.3	-1.0	0.0	0.0	0.0	0.0	-0.0	8.8	8.8
6	528616.76	5511972.53	397.40	0	1000	80.0	80.0	0.0	0.0	67.6	2.5	-1.0	0.0	0.0	0.0	0.0	-0.0	10.9	10.9
7	528616.76	5511972.53	397.40	0	2000	80.2	80.2	0.0	0.0	67.6	6.6	-1.0	0.0	0.0	0.0	0.0	-0.0	7.0	7.0
8	528616.76	5511972.53	397.40	0	4000	73.0	73.0	0.0	0.0	67.6	22.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
9	528616.76	5511972.53	397.40	0	8000	65.9	65.9	0.0	0.0	67.6	79.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-80.1	-80.1
10	528541.47	5512000.24	397.51	0	32	38.1	38.1	0.0	0.0	68.4	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-25.3	-25.3
11	528541.47	5512000.24	397.51	0	63	47.3	47.3	0.0	0.0	68.4	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	-16.2	-16.2
12	528541.47	5512000.24	397.51	0	125	63.4	63.4	0.0	0.0	68.4	0.3	4.9	0.0	0.0	0.0	0.0	-0.0	-10.3	-10.3
13	528541.47	5512000.24	397.51	0	250	72.9	72.9	0.0	0.0	68.4	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	1.3	1.3
14	528541.47	5512000.24	397.51	0	500	77.3	77.3	0.0	0.0	68.4	1.4	-1.0	0.0	0.0	0.0	0.0	-0.0	8.4	8.4
15	528541.47	5512000.24	397.51	0	1000	80.5	80.5	0.0	0.0	68.4	2.7	-1.0	0.0	0.0	0.0	0.0	-0.0	10.4	10.4
16	528541.47	5512000.24	397.51	0	2000	80.7	80.7	0.0	0.0	68.4	7.2	-1.0	0.0	0.0	0.0	0.0	-0.0	6.1	6.1
17	528541.47	5512000.24	397.51	0	4000	73.5	73.5	0.0	0.0	68.4	24.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-18.3	-18.3
18	528541.47	5512000.24	397.51	0	8000	66.4	66.4	0.0	0.0	68.4	87.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-88.1	-88.1
19	528580.73	5511987.31	397.47	0	32	36.9	36.9	0.0	0.0	68.0	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-26.2	-26.2
20	528580.73	5511987.31	397.47	0	63	46.1	46.1	0.0	0.0	68.0	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	-17.1	-17.1
21	528580.73	5511987.31	397.47	0	125	62.2	62.2	0.0	0.0	68.0	0.3	4.9	0.0	0.0	0.0	0.0	-0.0	-11.1	-11.1
22	528580.73	5511987.31	397.47	0	250	71.7	71.7	0.0	0.0	68.0	0.7	2.4	0.0	0.0	0.0	0.0	-0.0	0.5	0.5
23	528580.73	5511987.31	397.47	0	500	76.1	76.1	0.0	0.0	68.0	1.4	-1.0	0.0	0.0	0.0	0.0	-0.0	7.6	7.6
24	528580.73	5511987.31	397.47	0	1000	79.3	79.3	0.0	0.0	68.0	2.6	-1.0	0.0	0.0	0.0	0.0	-0.0	9.6	9.6
25	528580.73	5511987.31	397.47	0	2000	79.5	79.5	0.0	0.0	68.0	6.9	-1.0	0.0	0.0	0.0	0.0	-0.0	5.5	5.5
26	528580.73	5511987.31	397.47	0	4000	72.3	72.3	0.0	0.0	68.0	23.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-18.1	-18.1
27	528580.73	5511987.31	397.47	0	8000	65.2	65.2	0.0	0.0	68.0	83.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-85.1	-85.1
28	528498.52	5512009.94	397.72	0	32	37.4	37.4	0.0	0.0	68.8	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-26.4	-26.4
29	528498.52	5512009.94	397.72	0	63	46.6	46.6	0.0	0.0	68.8	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-17.2	-17.2
30	528498.52	5512009.94	397.72	0	125	62.7	62.7	0.0	0.0	68.8	0.3	5.0	0.0	0.0	0.0	0.0	-0.0	-11.4	-11.4
31	528498.52	5512009.94	397.72	0	250	72.2	72.2	0.0	0.0	68.8	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	0.2	0.2
32	528498.52	5512009.94	397.72	0	500	76.6	76.6	0.0	0.0	68.8	1.5	-1.0	0.0	0.0	0.0	0.0	-0.0	7.3	7.3
33	528498.52	5512009.94	397.72	0	1000	79.8	79.8	0.0	0.0	68.8	2.8	-1.0	0.0	0.0	0.0	0.0	-0.0	9.2	9.2
34	528498.52	5512009.94	397.72	0	2000	80.0	80.0	0.0	0.0	68.8	7.5	-1.0	0.0	0.0	0.0	0.0	-0.0	4.7	4.7
35	528498.52	5512009.94	397.72	0	4000	72.8	72.8	0.0	0.0	68.8	25.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-20.5	-20.5
36	528498.52	5512009.94	397.72	0	8000	65.7	65.7	0.0	0.0	68.8	91.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-93.1	-93.1
37	528328.22	5512018.73	399.38	0	32	37.6	37.6	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.4	-27.4
38	528328.22	5512018.73	399.38	0	63	46.8	46.8	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-18.2	-18.2
39	528328.22	5512018.73	399.38	0	125	62.9	62.9	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-12.7	-12.7
40	528328.22	5512018.73	399.38	0	250	72.4	72.4	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-1.0	-1.0
41	528328.22	5512018.73	399.38	0	500	76.8	76.8	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	5.9	5.9
42	528328.22	5512018.73	399.38	0	1000	80.0	80.0	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	7.6	7.6
43	528328.22	5512018.73	399.38	0	2000	80.2	80.2	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	2.4	2.4
44	528328.22	5512018.73	399.38	0	4000	73.0	73.0	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-25.6	-25.6
45	528328.22	5512018.73	399.38	0	8000	65.9	65.9	0.0	0.0	70.1	105.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-108.6	-108.6
46	528357.86	5512072.50	399.40	0	32	37.5	37.5	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.5	-27.5
47	528357.86	5512072.50	399.40	0	63	46.7	46.7	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-18.4	-18.4
48	528357.86	5512072.50	399.40	0	125	62.8	62.8	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-13.0	-13.0
49	528357.86	5512072.50	399.40	0	250	72.3	72.3	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
50	528357.86	5512072.50	399.40	0	500	76.7	76.7	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	5.7	5.7
51	528357.86	5512072.50	399.40	0	1000	79.9	79.9	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	7.4	7.4
52	528357.86	5512072.50	399.40	0	2000	80.1	80.1	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	2.0	2.0
53	528357.86	5512072.50	399.40	0	4000	72.9	72.9	0.0	0.0	70.3	30.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-26.4	-26.4
54	528357.86	5512072.50	399.40	0	8000	65.8	65.8	0.0	0.0	70.3	107.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-110.7	-110.7
55	528221.97	5511950.91	399.45	0	32	37.7	37.7	0.0	0.0	70.5	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.6	-27.6
56	528221.97	5511950.91	399.45	0	63	46.9	46.9	0.0	0.0	70.5	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-18.4	-18.4
57	528221.97	5511950.91	399.45	0	125	63.0	63.0	0.0	0.0	70.5	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-13.0	-13.0
58	528221.97	5511950.91	399.45	0	250	72.5	72.5	0.0	0.0	70.5	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-1.3	-1.3
59	528221.97	5511950.91	399.45	0	500	76.9	76.9	0.0	0.0	70.5	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	5.6	5.6
60	528221.97	5511950.91	399.45	0	1000	80.1	80.1	0.0	0.0	70.5	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	7.2	7.2
61	528221.97	5511950.91	399.45	0	2000	80.3	80.3	0.0	0.0	70.5	9.1	-1.1	0.0	0.0	0.0	0.0	-0.0	1.8	1.8
62	528221.97	5511950.91	399.45	0	4000	73.1	73.1	0.0	0.0	70.5	30.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-27.1	-27.1
63	528221.97	5511950.91	399.45	0	8000	66.0	66.0	0.0	0.0	70.5	110.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-113.4	-113.4

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
64	527966.92	5511862.79	402.55	0	32	38.4	38.4	0.0	0.0	72.0	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-28.2	-28.2
65	527966.92	5511862.79	402.55	0	63	47.6	47.6	0.0	0.0	72.0	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-19.1	-19.1
66	527966.92	5511862.79	402.55	0	125	63.7	63.7	0.0	0.0	72.0	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.0	-14.0
67	527966.92	5511862.79	402.55	0	250	73.2	73.2	0.0	0.0	72.0	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-2.2	-2.2
68	527966.92	5511862.79	402.55	0	500	77.6	77.6	0.0	0.0	72.0	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	4.5	4.5
69	527966.92	5511862.79	402.55	0	1000	80.8	80.8	0.0	0.0	72.0	4.1	-1.1	0.0	0.0	0.0	0.0	-0.0	5.8	5.8
70	527966.92	5511862.79	402.55	0	2000	81.0	81.0	0.0	0.0	72.0	10.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.7	-0.7
71	527966.92	5511862.79	402.55	0	4000	73.8	73.8	0.0	0.0	72.0	36.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-33.7	-33.7
72	527966.92	5511862.79	402.55	0	8000	66.7	66.7	0.0	0.0	72.0	130.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-134.9	-134.9
73	527899.10	5511928.92	399.60	0	32	38.6	38.6	0.0	0.0	72.6	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-28.7	-28.7
74	527899.10	5511928.92	399.60	0	63	47.8	47.8	0.0	0.0	72.6	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
75	527899.10	5511928.92	399.60	0	125	63.9	63.9	0.0	0.0	72.6	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.5	-14.5
76	527899.10	5511928.92	399.60	0	250	73.4	73.4	0.0	0.0	72.6	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	-2.8	-2.8
77	527899.10	5511928.92	399.60	0	500	77.8	77.8	0.0	0.0	72.6	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	3.9	3.9
78	527899.10	5511928.92	399.60	0	1000	81.0	81.0	0.0	0.0	72.6	4.4	-1.1	0.0	0.0	0.0	0.0	-0.0	5.0	5.0
79	527899.10	5511928.92	399.60	0	2000	81.2	81.2	0.0	0.0	72.6	11.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-2.0	-2.0
80	527899.10	5511928.92	399.60	0	4000	74.0	74.0	0.0	0.0	72.6	39.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-37.1	-37.1
81	527899.10	5511928.92	399.60	0	8000	66.9	66.9	0.0	0.0	72.6	141.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-145.9	-145.9
82	527892.54	5511867.68	399.48	0	32	38.4	38.4	0.0	0.0	72.5	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-33.5	-33.5
83	527892.54	5511867.68	399.48	0	63	47.6	47.6	0.0	0.0	72.5	0.1	-5.4	0.0	0.0	4.8	0.0	-0.0	-24.4	-24.4
84	527892.54	5511867.68	399.48	0	125	63.7	63.7	0.0	0.0	72.5	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
85	527892.54	5511867.68	399.48	0	250	73.2	73.2	0.0	0.0	72.5	1.2	2.3	0.0	0.0	2.4	0.0	-0.0	-5.3	-5.3
86	527892.54	5511867.68	399.48	0	500	77.6	77.6	0.0	0.0	72.5	2.3	-1.0	0.0	0.0	4.8	0.0	-0.0	-0.9	-0.9
87	527892.54	5511867.68	399.48	0	1000	80.8	80.8	0.0	0.0	72.5	4.3	-1.1	0.0	0.0	4.8	0.0	-0.0	0.3	0.3
88	527892.54	5511867.68	399.48	0	2000	81.0	81.0	0.0	0.0	72.5	11.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.6	-6.6
89	527892.54	5511867.68	399.48	0	4000	73.8	73.8	0.0	0.0	72.5	38.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-41.3	-41.3
90	527892.54	5511867.68	399.48	0	8000	66.7	66.7	0.0	0.0	72.5	138.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-148.4	-148.4
91	528443.09	5512038.57	398.44	0	32	35.4	35.4	0.0	0.0	69.5	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-29.0	-29.0
92	528443.09	5512038.57	398.44	0	63	44.6	44.6	0.0	0.0	69.5	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-19.8	-19.8
93	528443.09	5512038.57	398.44	0	125	60.7	60.7	0.0	0.0	69.5	0.3	5.1	0.0	0.0	0.0	0.0	-0.0	-14.2	-14.2
94	528443.09	5512038.57	398.44	0	250	70.2	70.2	0.0	0.0	69.5	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-2.5	-2.5
95	528443.09	5512038.57	398.44	0	500	74.6	74.6	0.0	0.0	69.5	1.6	-1.0	0.0	0.0	0.0	0.0	-0.0	4.5	4.5
96	528443.09	5512038.57	398.44	0	1000	77.8	77.8	0.0	0.0	69.5	3.1	-1.0	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
97	528443.09	5512038.57	398.44	0	2000	78.0	78.0	0.0	0.0	69.5	8.1	-1.0	0.0	0.0	0.0	0.0	-0.0	1.5	1.5
98	528443.09	5512038.57	398.44	0	4000	70.8	70.8	0.0	0.0	69.5	27.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-25.1	-25.1
99	528443.09	5512038.57	398.44	0	8000	63.7	63.7	0.0	0.0	69.5	97.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-102.5	-102.5
100	528014.48	5511893.55	400.11	0	32	37.7	37.7	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-28.8	-28.8
101	528014.48	5511893.55	400.11	0	63	46.9	46.9	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-19.7	-19.7
102	528014.48	5511893.55	400.11	0	125	63.0	63.0	0.0	0.0	71.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.5	-14.5
103	528014.48	5511893.55	400.11	0	250	72.5	72.5	0.0	0.0	71.7	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-2.7	-2.7
104	528014.48	5511893.55	400.11	0	500	76.9	76.9	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	4.1	4.1
105	528014.48	5511893.55	400.11	0	1000	80.1	80.1	0.0	0.0	71.7	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	5.4	5.4
106	528014.48	5511893.55	400.11	0	2000	80.3	80.3	0.0	0.0	71.7	10.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.9	-0.9
107	528014.48	5511893.55	400.11	0	4000	73.1	73.1	0.0	0.0	71.7	35.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-33.3	-33.3
108	528014.48	5511893.55	400.11	0	8000	66.0	66.0	0.0	0.0	71.7	127.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-132.0	-132.0
109	528153.04	5511938.35	399.24	0	32	36.7	36.7	0.0	0.0	70.9	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-29.0	-29.0
110	528153.04	5511938.35	399.24	0	63	45.9	45.9	0.0	0.0	70.9	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-19.9	-19.9
111	528153.04	5511938.35	399.24	0	125	62.0	62.0	0.0	0.0	70.9	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
112	528153.04	5511938.35	399.24	0	250	71.5	71.5	0.0	0.0	70.9	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-2.8	-2.8
113	528153.04	5511938.35	399.24	0	500	75.9	75.9	0.0	0.0	70.9	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	4.1	4.1
114	528153.04	5511938.35	399.24	0	1000	79.1	79.1	0.0	0.0	70.9	3.6	-1.1	0.0	0.0	0.0	0.0	-0.0	5.6	5.6
115	528153.04	5511938.35	399.24	0	2000	79.3	79.3	0.0	0.0	70.9	9.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.2	-0.2
116	528153.04	5511938.35	399.24	0	4000	72.1	72.1	0.0	0.0	70.9	32.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-30.2	-30.2
117	528153.04	5511938.35	399.24	0	8000	65.0	65.0	0.0	0.0	70.9	115.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-120.7	-120.7
118	528185.83	5511941.12	399.48	0	32	36.4	36.4	0.0	0.0	70.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-29.1	-29.1
119	528185.83	5511941.12	399.48	0	63	45.6	45.6	0.0	0.0	70.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-20.0	-20.0
120	528185.83	5511941.12	399.48	0	125	61.7	61.7	0.0	0.0	70.7	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
121	528185.83	5511941.12	399.48	0	250	71.2	71.2	0.0	0.0	70.7	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-2.8	-2.8
122	528185.83	5511941.12	399.48	0	500	75.6	75.6	0.0	0.0	70.7	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
123	528185.83	5511941.12	399.48	0	1000	78.8	78.8	0.0	0.0	70.7	3.5	-1.1	0.0	0.0	0.0	0.0	-0.0	5.6	5.6
124	528185.83	5511941.12	399.48	0	2000	79.0	79.0	0.0	0.0	70.7	9.3	-1.1	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
125	528185.83	5511941.12	399.48	0	4000	71.8	71.8	0.0	0.0	70.7	31.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-29.5	-29.5
126	528185.83	5511941.12	399.48	0	8000	64.7	64.7	0.0	0.0	70.7	112.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-117.7	-117.7

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
127	528276.36	5511970.68	399.34	0	32	35.8	35.8	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.2	-29.2
128	528276.36	5511970.68	399.34	0	63	45.0	45.0	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.0	-20.0
129	528276.36	5511970.68	399.34	0	125	61.1	61.1	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
130	528276.36	5511970.68	399.34	0	250	70.6	70.6	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-2.8	-2.8
131	528276.36	5511970.68	399.34	0	500	75.0	75.0	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	4.1	4.1
132	528276.36	5511970.68	399.34	0	1000	78.2	78.2	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	5.8	5.8
133	528276.36	5511970.68	399.34	0	2000	78.4	78.4	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	0.5	0.5
134	528276.36	5511970.68	399.34	0	4000	71.2	71.2	0.0	0.0	70.2	29.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-27.7	-27.7
135	528276.36	5511970.68	399.34	0	8000	64.1	64.1	0.0	0.0	70.2	106.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-111.3	-111.3
136	528413.07	5512073.21	398.89	0	32	35.5	35.5	0.0	0.0	69.9	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.3	-29.3
137	528413.07	5512073.21	398.89	0	63	44.7	44.7	0.0	0.0	69.9	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.2	-20.2
138	528413.07	5512073.21	398.89	0	125	60.8	60.8	0.0	0.0	69.9	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
139	528413.07	5512073.21	398.89	0	250	70.3	70.3	0.0	0.0	69.9	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-2.9	-2.9
140	528413.07	5512073.21	398.89	0	500	74.7	74.7	0.0	0.0	69.9	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	4.1	4.1
141	528413.07	5512073.21	398.89	0	1000	77.9	77.9	0.0	0.0	69.9	3.2	-1.0	0.0	0.0	0.0	0.0	-0.0	5.8	5.8
142	528413.07	5512073.21	398.89	0	2000	78.1	78.1	0.0	0.0	69.9	8.5	-1.0	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
143	528413.07	5512073.21	398.89	0	4000	70.9	70.9	0.0	0.0	69.9	28.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-26.9	-26.9
144	528413.07	5512073.21	398.89	0	8000	63.8	63.8	0.0	0.0	69.9	103.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-108.2	-108.2
145	528422.77	5512051.97	398.72	0	32	35.2	35.2	0.0	0.0	69.7	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.4	-29.4
146	528422.77	5512051.97	398.72	0	63	44.4	44.4	0.0	0.0	69.7	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.3	-20.3
147	528422.77	5512051.97	398.72	0	125	60.5	60.5	0.0	0.0	69.7	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-14.7	-14.7
148	528422.77	5512051.97	398.72	0	250	70.0	70.0	0.0	0.0	69.7	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-3.0	-3.0
149	528422.77	5512051.97	398.72	0	500	74.4	74.4	0.0	0.0	69.7	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
150	528422.77	5512051.97	398.72	0	1000	77.6	77.6	0.0	0.0	69.7	3.1	-1.0	0.0	0.0	0.0	0.0	-0.0	5.8	5.8
151	528422.77	5512051.97	398.72	0	2000	77.8	77.8	0.0	0.0	69.7	8.3	-1.0	0.0	0.0	0.0	0.0	-0.0	0.8	0.8
152	528422.77	5512051.97	398.72	0	4000	70.6	70.6	0.0	0.0	69.7	28.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-26.3	-26.3
153	528422.77	5512051.97	398.72	0	8000	63.5	63.5	0.0	0.0	69.7	100.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-105.7	-105.7
154	528471.73	5512020.10	398.03	0	32	34.0	34.0	0.0	0.0	69.1	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-30.0	-30.0
155	528471.73	5512020.10	398.03	0	63	43.2	43.2	0.0	0.0	69.1	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-20.9	-20.9
156	528471.73	5512020.10	398.03	0	125	59.3	59.3	0.0	0.0	69.1	0.3	5.0	0.0	0.0	0.0	0.0	-0.0	-15.2	-15.2
157	528471.73	5512020.10	398.03	0	250	68.8	68.8	0.0	0.0	69.1	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	-3.5	-3.5
158	528471.73	5512020.10	398.03	0	500	73.2	73.2	0.0	0.0	69.1	1.6	-1.0	0.0	0.0	0.0	0.0	-0.0	3.5	3.5
159	528471.73	5512020.10	398.03	0	1000	76.4	76.4	0.0	0.0	69.1	2.9	-1.0	0.0	0.0	0.0	0.0	-0.0	5.4	5.4
160	528471.73	5512020.10	398.03	0	2000	76.6	76.6	0.0	0.0	69.1	7.8	-1.0	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
161	528471.73	5512020.10	398.03	0	4000	69.4	69.4	0.0	0.0	69.1	26.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-25.0	-25.0
162	528471.73	5512020.10	398.03	0	8000	62.3	62.3	0.0	0.0	69.1	94.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-99.8	-99.8
163	528036.65	5511924.49	398.38	0	32	36.6	36.6	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-34.6	-34.6
164	528036.65	5511924.49	398.38	0	63	45.8	45.8	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-25.5	-25.5
165	528036.65	5511924.49	398.38	0	125	61.9	61.9	0.0	0.0	71.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-15.5	-15.5
166	528036.65	5511924.49	398.38	0	250	71.4	71.4	0.0	0.0	71.7	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-6.2	-6.2
167	528036.65	5511924.49	398.38	0	500	75.8	75.8	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	4.8	0.0	-0.0	-1.7	-1.7
168	528036.65	5511924.49	398.38	0	1000	79.0	79.0	0.0	0.0	71.7	4.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.4	-0.4
169	528036.65	5511924.49	398.38	0	2000	79.2	79.2	0.0	0.0	71.7	10.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.7	-6.7
170	528036.65	5511924.49	398.38	0	4000	72.0	72.0	0.0	0.0	71.7	35.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-38.9	-38.9
171	528036.65	5511924.49	398.38	0	8000	64.9	64.9	0.0	0.0	71.7	126.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-137.2	-137.2
172	528298.07	5511983.61	399.37	0	32	35.0	35.0	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-30.0	-30.0
173	528298.07	5511983.61	399.37	0	63	44.2	44.2	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.8	-20.8
174	528298.07	5511983.61	399.37	0	125	60.3	60.3	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-15.4	-15.4
175	528298.07	5511983.61	399.37	0	250	69.8	69.8	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-3.6	-3.6
176	528298.07	5511983.61	399.37	0	500	74.2	74.2	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	3.3	3.3
177	528298.07	5511983.61	399.37	0	1000	77.4	77.4	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	5.0	5.0
178	528298.07	5511983.61	399.37	0	2000	77.6	77.6	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.2	-0.2
179	528298.07	5511983.61	399.37	0	4000	70.4	70.4	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-28.2	-28.2
180	528298.07	5511983.61	399.37	0	8000	63.3	63.3	0.0	0.0	70.1	105.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-111.1	-111.1
181	528061.13	5511943.43	397.96	0	32	36.2	36.2	0.0	0.0	71.6	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-34.9	-34.9
182	528061.13	5511943.43	397.96	0	63	45.4	45.4	0.0	0.0	71.6	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-25.8	-25.8
183	528061.13	5511943.43	397.96	0	125	61.5	61.5	0.0	0.0	71.6	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
184	528061.13	5511943.43	397.96	0	250	71.0	71.0	0.0	0.0	71.6	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-6.5	-6.5
185	528061.13	5511943.43	397.96	0	500	75.4	75.4	0.0	0.0	71.6	2.1	-1.0	0.0	0.0	4.8	0.0	-0.0	-2.1	-2.1
186	528061.13	5511943.43	397.96	0	1000	78.6	78.6	0.0	0.0	71.6	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.7	-0.7
187	528061.13	5511943.43	397.96	0	2000	78.8	78.8	0.0	0.0	71.6	10.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.9	-6.9
188	528061.13	5511943.43	397.96	0	4000	71.6	71.6	0.0	0.0	71.6	35.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-38.9	-38.9
189	528061.13	5511943.43	397.96	0	8000	64.5	64.5	0.0	0.0	71.6	125.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-136.1	-136.1

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
190	528252.92	5511961.53	399.33	0	32	34.8	34.8	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-30.3	-30.3
191	528252.92	5511961.53	399.33	0	63	44.0	44.0	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-21.2	-21.2
192	528252.92	5511961.53	399.33	0	125	60.1	60.1	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-15.7	-15.7
193	528252.92	5511961.53	399.33	0	250	69.6	69.6	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
194	528252.92	5511961.53	399.33	0	500	74.0	74.0	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	2.9	2.9
195	528252.92	5511961.53	399.33	0	1000	77.2	77.2	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	4.6	4.6
196	528252.92	5511961.53	399.33	0	2000	77.4	77.4	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.8	-0.8
197	528252.92	5511961.53	399.33	0	4000	70.2	70.2	0.0	0.0	70.3	30.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-29.3	-29.3
198	528252.92	5511961.53	399.33	0	8000	63.1	63.1	0.0	0.0	70.3	107.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-113.9	-113.9
199	527857.90	5511914.79	397.95	0	32	37.2	37.2	0.0	0.0	72.9	0.0	-5.4	0.0	0.0	0.0	4.8	0.0	-35.0	-35.0
200	527857.90	5511914.79	397.95	0	63	46.4	46.4	0.0	0.0	72.9	0.2	-5.4	0.0	0.0	0.0	4.8	0.0	-25.9	-25.9
201	527857.90	5511914.79	397.95	0	125	62.5	62.5	0.0	0.0	72.9	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-16.2	-16.2
202	527857.90	5511914.79	397.95	0	250	72.0	72.0	0.0	0.0	72.9	1.3	2.3	0.0	0.0	0.0	2.5	0.0	-6.9	-6.9
203	527857.90	5511914.79	397.95	0	500	76.4	76.4	0.0	0.0	72.9	2.4	-1.0	0.0	0.0	0.0	4.8	0.0	-2.6	-2.6
204	527857.90	5511914.79	397.95	0	1000	79.6	79.6	0.0	0.0	72.9	4.5	-1.1	0.0	0.0	0.0	4.8	0.0	-1.5	-1.5
205	527857.90	5511914.79	397.95	0	2000	79.8	79.8	0.0	0.0	72.9	12.0	-1.1	0.0	0.0	0.0	4.8	0.0	-8.7	-8.7
206	527857.90	5511914.79	397.95	0	4000	72.6	72.6	0.0	0.0	72.9	40.6	-1.1	0.0	0.0	0.0	4.8	0.0	-44.5	-44.5
207	527857.90	5511914.79	397.95	0	8000	65.5	65.5	0.0	0.0	72.9	144.8	-1.1	0.0	0.0	0.0	4.8	0.0	-155.9	-155.9
208	527855.59	5511888.47	397.58	0	32	37.1	37.1	0.0	0.0	72.8	0.0	-5.4	0.0	0.0	0.0	4.8	0.0	-35.1	-35.1
209	527855.59	5511888.47	397.58	0	63	46.3	46.3	0.0	0.0	72.8	0.2	-5.4	0.0	0.0	0.0	4.8	0.0	-26.0	-26.0
210	527855.59	5511888.47	397.58	0	125	62.4	62.4	0.0	0.0	72.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-16.2	-16.2
211	527855.59	5511888.47	397.58	0	250	71.9	71.9	0.0	0.0	72.8	1.3	2.3	0.0	0.0	0.0	2.5	0.0	-7.0	-7.0
212	527855.59	5511888.47	397.58	0	500	76.3	76.3	0.0	0.0	72.8	2.4	-1.0	0.0	0.0	0.0	4.8	0.0	-2.6	-2.6
213	527855.59	5511888.47	397.58	0	1000	79.5	79.5	0.0	0.0	72.8	4.5	-1.1	0.0	0.0	0.0	4.8	0.0	-1.5	-1.5
214	527855.59	5511888.47	397.58	0	2000	79.7	79.7	0.0	0.0	72.8	11.9	-1.1	0.0	0.0	0.0	4.8	0.0	-8.7	-8.7
215	527855.59	5511888.47	397.58	0	4000	72.5	72.5	0.0	0.0	72.8	40.3	-1.1	0.0	0.0	0.0	4.8	0.0	-44.4	-44.4
216	527855.59	5511888.47	397.58	0	8000	65.4	65.4	0.0	0.0	72.8	143.9	-1.1	0.0	0.0	0.0	4.8	0.0	-155.0	-155.0
217	528375.53	5512101.65	400.17	0	32	34.4	34.4	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-30.7	-30.7
218	528375.53	5512101.65	400.17	0	63	43.6	43.6	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-21.6	-21.6
219	528375.53	5512101.65	400.17	0	125	59.7	59.7	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-16.2	-16.2
220	528375.53	5512101.65	400.17	0	250	69.2	69.2	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-4.4	-4.4
221	528375.53	5512101.65	400.17	0	500	73.6	73.6	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	2.5	2.5
222	528375.53	5512101.65	400.17	0	1000	76.8	76.8	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	4.1	4.1
223	528375.53	5512101.65	400.17	0	2000	77.0	77.0	0.0	0.0	70.3	9.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
224	528375.53	5512101.65	400.17	0	4000	69.8	69.8	0.0	0.0	70.3	30.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-29.9	-29.9
225	528375.53	5512101.65	400.17	0	8000	62.7	62.7	0.0	0.0	70.3	108.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-115.1	-115.1
226	528407.08	5512093.03	399.13	0	32	33.7	33.7	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-31.2	-31.2
227	528407.08	5512093.03	399.13	0	63	42.9	42.9	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-22.1	-22.1
228	528407.08	5512093.03	399.13	0	125	59.0	59.0	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-16.6	-16.6
229	528407.08	5512093.03	399.13	0	250	68.5	68.5	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-4.9	-4.9
230	528407.08	5512093.03	399.13	0	500	72.9	72.9	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	2.0	2.0
231	528407.08	5512093.03	399.13	0	1000	76.1	76.1	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	3.7	3.7
232	528407.08	5512093.03	399.13	0	2000	76.3	76.3	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.5	-1.5
233	528407.08	5512093.03	399.13	0	4000	69.1	69.1	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-29.5	-29.5
234	528407.08	5512093.03	399.13	0	8000	62.0	62.0	0.0	0.0	70.1	105.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-112.4	-112.4
235	528459.72	5512029.80	398.21	0	32	32.3	32.3	0.0	0.0	69.3	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-31.8	-31.8
236	528459.72	5512029.80	398.21	0	63	41.5	41.5	0.0	0.0	69.3	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-22.7	-22.7
237	528459.72	5512029.80	398.21	0	125	57.6	57.6	0.0	0.0	69.3	0.3	5.0	0.0	0.0	0.0	0.0	-0.0	-17.0	-17.0
238	528459.72	5512029.80	398.21	0	250	67.1	67.1	0.0	0.0	69.3	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-5.3	-5.3
239	528459.72	5512029.80	398.21	0	500	71.5	71.5	0.0	0.0	69.3	1.6	-1.0	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
240	528459.72	5512029.80	398.21	0	1000	74.7	74.7	0.0	0.0	69.3	3.0	-1.0	0.0	0.0	0.0	0.0	-0.0	3.5	3.5
241	528459.72	5512029.80	398.21	0	2000	74.9	74.9	0.0	0.0	69.3	7.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
242	528459.72	5512029.80	398.21	0	4000	67.7	67.7	0.0	0.0	69.3	26.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-27.3	-27.3
243	528459.72	5512029.80	398.21	0	8000	60.6	60.6	0.0	0.0	69.3	95.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-103.3	-103.3
244	528311.13	5511996.56	399.36	0	32	32.8	32.8	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-32.1	-32.1
245	528311.13	5511996.56	399.36	0	63	42.0	42.0	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-23.0	-23.0
246	528311.13	5511996.56	399.36	0	125	58.1	58.1	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-17.5	-17.5
247	528311.13	5511996.56	399.36	0	250	67.6	67.6	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-5.8	-5.8
248	528311.13	5511996.56	399.36	0	500	72.0	72.0	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	1.2	1.2
249	528311.13	5511996.56	399.36	0	1000	75.2	75.2	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	2.9	2.9
250	528311.13	5511996.56	399.36	0	2000	75.4	75.4	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.3	-2.3
251	528311.13	5511996.56	399.36	0	4000	68.2	68.2	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-30.3	-30.3
252	528311.13	5511996.56	399.36	0	8000	61.1	61.1	0.0	0.0	70.1	105.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-113.0	-113.0

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
253	528092.66	5511948.86	398.66	0	32	33.8	33.8	0.0	0.0	71.4	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-32.3	-32.3
254	528092.66	5511948.86	398.66	0	63	43.0	43.0	0.0	0.0	71.4	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-23.2	-23.2
255	528092.66	5511948.86	398.66	0	125	59.1	59.1	0.0	0.0	71.4	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-17.9	-17.9
256	528092.66	5511948.86	398.66	0	250	68.6	68.6	0.0	0.0	71.4	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-6.2	-6.2
257	528092.66	5511948.86	398.66	0	500	73.0	73.0	0.0	0.0	71.4	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
258	528092.66	5511948.86	398.66	0	1000	76.2	76.2	0.0	0.0	71.4	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	2.1	2.1
259	528092.66	5511948.86	398.66	0	2000	76.4	76.4	0.0	0.0	71.4	10.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
260	528092.66	5511948.86	398.66	0	4000	69.2	69.2	0.0	0.0	71.4	34.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-35.4	-35.4
261	528092.66	5511948.86	398.66	0	8000	62.1	62.1	0.0	0.0	71.4	122.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-130.6	-130.6
262	528344.98	5512039.84	399.39	0	32	32.1	32.1	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-32.8	-32.8
263	528344.98	5512039.84	399.39	0	63	41.3	41.3	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-23.7	-23.7
264	528344.98	5512039.84	399.39	0	125	57.4	57.4	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-18.2	-18.2
265	528344.98	5512039.84	399.39	0	250	66.9	66.9	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-6.5	-6.5
266	528344.98	5512039.84	399.39	0	500	71.3	71.3	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	0.5	0.5
267	528344.98	5512039.84	399.39	0	1000	74.5	74.5	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	2.1	2.1
268	528344.98	5512039.84	399.39	0	2000	74.7	74.7	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.1	-3.1
269	528344.98	5512039.84	399.39	0	4000	67.5	67.5	0.0	0.0	70.1	29.6	-1.0	0.0	0.0	0.0	0.0	-0.0	-31.2	-31.2
270	528344.98	5512039.84	399.39	0	8000	60.4	60.4	0.0	0.0	70.1	105.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-114.3	-114.3
271	528129.22	5511940.46	399.01	0	32	32.8	32.8	0.0	0.0	71.1	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-33.0	-33.0
272	528129.22	5511940.46	399.01	0	63	42.0	42.0	0.0	0.0	71.1	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-23.9	-23.9
273	528129.22	5511940.46	399.01	0	125	58.1	58.1	0.0	0.0	71.1	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-18.6	-18.6
274	528129.22	5511940.46	399.01	0	250	67.6	67.6	0.0	0.0	71.1	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-6.8	-6.8
275	528129.22	5511940.46	399.01	0	500	72.0	72.0	0.0	0.0	71.1	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
276	528129.22	5511940.46	399.01	0	1000	75.2	75.2	0.0	0.0	71.1	3.7	-1.1	0.0	0.0	0.0	0.0	-0.0	1.5	1.5
277	528129.22	5511940.46	399.01	0	2000	75.4	75.4	0.0	0.0	71.1	9.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.4	-4.4
278	528129.22	5511940.46	399.01	0	4000	68.2	68.2	0.0	0.0	71.1	33.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-35.0	-35.0
279	528129.22	5511940.46	399.01	0	8000	61.1	61.1	0.0	0.0	71.1	118.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-127.2	-127.2
280	528116.36	5511944.50	398.89	0	32	32.4	32.4	0.0	0.0	71.2	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-33.5	-33.5
281	528116.36	5511944.50	398.89	0	63	41.6	41.6	0.0	0.0	71.2	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-24.4	-24.4
282	528116.36	5511944.50	398.89	0	125	57.7	57.7	0.0	0.0	71.2	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-19.1	-19.1
283	528116.36	5511944.50	398.89	0	250	67.2	67.2	0.0	0.0	71.2	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-7.4	-7.4
284	528116.36	5511944.50	398.89	0	500	71.6	71.6	0.0	0.0	71.2	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.5	-0.5
285	528116.36	5511944.50	398.89	0	1000	74.8	74.8	0.0	0.0	71.2	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	0.9	0.9
286	528116.36	5511944.50	398.89	0	2000	75.0	75.0	0.0	0.0	71.2	9.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-5.0	-5.0
287	528116.36	5511944.50	398.89	0	4000	67.8	67.8	0.0	0.0	71.2	33.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-35.9	-35.9
288	528116.36	5511944.50	398.89	0	8000	60.7	60.7	0.0	0.0	71.2	119.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-129.2	-129.2
289	528352.25	5512048.07	399.35	0	32	31.3	31.3	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-33.6	-33.6
290	528352.25	5512048.07	399.35	0	63	40.5	40.5	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-24.5	-24.5
291	528352.25	5512048.07	399.35	0	125	56.6	56.6	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-19.0	-19.0
292	528352.25	5512048.07	399.35	0	250	66.1	66.1	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-7.3	-7.3
293	528352.25	5512048.07	399.35	0	500	70.5	70.5	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.3	-0.3
294	528352.25	5512048.07	399.35	0	1000	73.7	73.7	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	1.3	1.3
295	528352.25	5512048.07	399.35	0	2000	73.9	73.9	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.9	-3.9
296	528352.25	5512048.07	399.35	0	4000	66.7	66.7	0.0	0.0	70.1	29.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-32.0	-32.0
297	528352.25	5512048.07	399.35	0	8000	59.6	59.6	0.0	0.0	70.1	105.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-115.2	-115.2
298	527937.06	5511855.74	403.18	0	32	32.1	32.1	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-34.7	-34.7
299	527937.06	5511855.74	403.18	0	63	41.3	41.3	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-25.6	-25.6
300	527937.06	5511855.74	403.18	0	125	57.4	57.4	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-20.5	-20.5
301	527937.06	5511855.74	403.18	0	250	66.9	66.9	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-8.7	-8.7
302	527937.06	5511855.74	403.18	0	500	71.3	71.3	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.0	-2.0
303	527937.06	5511855.74	403.18	0	1000	74.5	74.5	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.7	-0.7
304	527937.06	5511855.74	403.18	0	2000	74.7	74.7	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.4	-7.4
305	527937.06	5511855.74	403.18	0	4000	67.5	67.5	0.0	0.0	72.2	37.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-41.0	-41.0
306	527937.06	5511855.74	403.18	0	8000	60.4	60.4	0.0	0.0	72.2	133.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-144.2	-144.2
307	528363.40	5512094.97	399.49	0	32	30.0	30.0	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-35.2	-35.2
308	528363.40	5512094.97	399.49	0	63	39.2	39.2	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-26.0	-26.0
309	528363.40	5512094.97	399.49	0	125	55.3	55.3	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-20.6	-20.6
310	528363.40	5512094.97	399.49	0	250	64.8	64.8	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-8.9	-8.9
311	528363.40	5512094.97	399.49	0	500	69.2	69.2	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.0	-2.0
312	528363.40	5512094.97	399.49	0	1000	72.4	72.4	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.3	-0.3
313	528363.40	5512094.97	399.49	0	2000	72.6	72.6	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-5.7	-5.7
314	528363.40	5512094.97	399.49	0	4000	65.4	65.4	0.0	0.0	70.4	30.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-34.4	-34.4
315	528363.40	5512094.97	399.49	0	8000	58.3	58.3	0.0	0.0	70.4	108.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-119.9	-119.9

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
316	528393.96	5512102.96	399.77	0	32	29.6	29.6	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-35.5	-35.5
317	528393.96	5512102.96	399.77	0	63	38.8	38.8	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-26.4	-26.4
318	528393.96	5512102.96	399.77	0	125	54.9	54.9	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-20.9	-20.9
319	528393.96	5512102.96	399.77	0	250	64.4	64.4	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-9.2	-9.2
320	528393.96	5512102.96	399.77	0	500	68.8	68.8	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.2	-2.2
321	528393.96	5512102.96	399.77	0	1000	72.0	72.0	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.6	-0.6
322	528393.96	5512102.96	399.77	0	2000	72.2	72.2	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-5.9	-5.9
323	528393.96	5512102.96	399.77	0	4000	65.0	65.0	0.0	0.0	70.3	30.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-34.3	-34.3
324	528393.96	5512102.96	399.77	0	8000	57.9	57.9	0.0	0.0	70.3	107.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-118.5	-118.5
325	527999.01	5511874.15	401.20	0	32	30.6	30.6	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-35.9	-35.9
326	527999.01	5511874.15	401.20	0	63	39.8	39.8	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-26.8	-26.8
327	527999.01	5511874.15	401.20	0	125	55.9	55.9	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-21.6	-21.6
328	527999.01	5511874.15	401.20	0	250	65.4	65.4	0.0	0.0	71.8	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-9.9	-9.9
329	527999.01	5511874.15	401.20	0	500	69.8	69.8	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.1	-3.1
330	527999.01	5511874.15	401.20	0	1000	73.0	73.0	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.8	-1.8
331	527999.01	5511874.15	401.20	0	2000	73.2	73.2	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-8.1	-8.1
332	527999.01	5511874.15	401.20	0	4000	66.0	66.0	0.0	0.0	71.8	35.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-40.6	-40.6
333	527999.01	5511874.15	401.20	0	8000	58.9	58.9	0.0	0.0	71.8	127.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-139.8	-139.8
334	527921.27	5511859.69	402.24	0	32	30.8	30.8	0.0	0.0	72.3	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-36.1	-36.1
335	527921.27	5511859.69	402.24	0	63	40.0	40.0	0.0	0.0	72.3	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-27.1	-27.1
336	527921.27	5511859.69	402.24	0	125	56.1	56.1	0.0	0.0	72.3	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-21.9	-21.9
337	527921.27	5511859.69	402.24	0	250	65.6	65.6	0.0	0.0	72.3	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-10.2	-10.2
338	527921.27	5511859.69	402.24	0	500	70.0	70.0	0.0	0.0	72.3	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.5	-3.5
339	527921.27	5511859.69	402.24	0	1000	73.2	73.2	0.0	0.0	72.3	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-2.3	-2.3
340	527921.27	5511859.69	402.24	0	2000	73.4	73.4	0.0	0.0	72.3	11.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-9.0	-9.0
341	527921.27	5511859.69	402.24	0	4000	66.2	66.2	0.0	0.0	72.3	38.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-43.0	-43.0
342	527921.27	5511859.69	402.24	0	8000	59.1	59.1	0.0	0.0	72.3	135.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-147.6	-147.6
343	528106.92	5511947.47	398.80	0	32	29.8	29.8	0.0	0.0	71.3	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-36.3	-36.3
344	528106.92	5511947.47	398.80	0	63	39.0	39.0	0.0	0.0	71.3	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-27.2	-27.2
345	528106.92	5511947.47	398.80	0	125	55.1	55.1	0.0	0.0	71.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-21.9	-21.9
346	528106.92	5511947.47	398.80	0	250	64.6	64.6	0.0	0.0	71.3	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-10.2	-10.2
347	528106.92	5511947.47	398.80	0	500	69.0	69.0	0.0	0.0	71.3	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.3	-3.3
348	528106.92	5511947.47	398.80	0	1000	72.2	72.2	0.0	0.0	71.3	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.9	-1.9
349	528106.92	5511947.47	398.80	0	2000	72.4	72.4	0.0	0.0	71.3	10.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.9	-7.9
350	528106.92	5511947.47	398.80	0	4000	65.2	65.2	0.0	0.0	71.3	33.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-39.0	-39.0
351	528106.92	5511947.47	398.80	0	8000	58.1	58.1	0.0	0.0	71.3	120.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-133.1	-133.1
352	528399.54	5512100.85	399.48	0	32	28.6	28.6	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-36.4	-36.4
353	528399.54	5512100.85	399.48	0	63	37.8	37.8	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.3	-27.3
354	528399.54	5512100.85	399.48	0	125	53.9	53.9	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-21.9	-21.9
355	528399.54	5512100.85	399.48	0	250	63.4	63.4	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-10.1	-10.1
356	528399.54	5512100.85	399.48	0	500	67.8	67.8	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.2	-3.2
357	528399.54	5512100.85	399.48	0	1000	71.0	71.0	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.5	-1.5
358	528399.54	5512100.85	399.48	0	2000	71.2	71.2	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-6.8	-6.8
359	528399.54	5512100.85	399.48	0	4000	64.0	64.0	0.0	0.0	70.2	29.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-35.1	-35.1
360	528399.54	5512100.85	399.48	0	8000	56.9	56.9	0.0	0.0	70.2	106.6	-1.0	0.0	0.0	0.0	0.0	-0.0	-118.9	-118.9
361	528386.28	5512105.86	400.88	0	32	27.3	27.3	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-37.8	-37.8
362	528386.28	5512105.86	400.88	0	63	36.5	36.5	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-28.7	-28.7
363	528386.28	5512105.86	400.88	0	125	52.6	52.6	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-23.2	-23.2
364	528386.28	5512105.86	400.88	0	250	62.1	62.1	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-11.5	-11.5
365	528386.28	5512105.86	400.88	0	500	66.5	66.5	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-4.6	-4.6
366	528386.28	5512105.86	400.88	0	1000	69.7	69.7	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.9	-2.9
367	528386.28	5512105.86	400.88	0	2000	69.9	69.9	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-8.3	-8.3
368	528386.28	5512105.86	400.88	0	4000	62.7	62.7	0.0	0.0	70.3	30.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-36.8	-36.8
369	528386.28	5512105.86	400.88	0	8000	55.6	55.6	0.0	0.0	70.3	108.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-121.7	-121.7
370	527928.66	5511930.76	401.30	0	32	29.3	29.3	0.0	0.0	72.5	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-37.8	-37.8
371	527928.66	5511930.76	401.30	0	63	38.5	38.5	0.0	0.0	72.5	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-28.7	-28.7
372	527928.66	5511930.76	401.30	0	125	54.6	54.6	0.0	0.0	72.5	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-23.6	-23.6
373	527928.66	5511930.76	401.30	0	250	64.1	64.1	0.0	0.0	72.5	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-11.9	-11.9
374	527928.66	5511930.76	401.30	0	500	68.5	68.5	0.0	0.0	72.5	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-5.1	-5.1
375	527928.66	5511930.76	401.30	0	1000	71.7	71.7	0.0	0.0	72.5	4.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
376	527928.66	5511930.76	401.30	0	2000	71.9	71.9	0.0	0.0	72.5	11.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-10.9	-10.9
377	527928.66	5511930.76	401.30	0	4000	64.7	64.7	0.0	0.0	72.5	38.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-45.4	-45.4
378	527928.66	5511930.76	401.30	0	8000	57.6	57.6	0.0	0.0	72.5	138.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-151.9	-151.9

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #1", ID: "Htruck1_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
379	528081.50	5511949.22	398.55	0	32	27.9	27.9	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-43.0	-43.0
380	528081.50	5511949.22	398.55	0	63	37.1	37.1	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-33.9	-33.9
381	528081.50	5511949.22	398.55	0	125	53.2	53.2	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-23.9	-23.9
382	528081.50	5511949.22	398.55	0	250	62.7	62.7	0.0	0.0	71.5	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-14.6	-14.6
383	528081.50	5511949.22	398.55	0	500	67.1	67.1	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	4.8	0.0	-0.0	-10.1	-10.1
384	528081.50	5511949.22	398.55	0	1000	70.3	70.3	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.7	-8.7
385	528081.50	5511949.22	398.55	0	2000	70.5	70.5	0.0	0.0	71.5	10.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-14.9	-14.9
386	528081.50	5511949.22	398.55	0	4000	63.3	63.3	0.0	0.0	71.5	34.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-46.5	-46.5
387	528081.50	5511949.22	398.55	0	8000	56.2	56.2	0.0	0.0	71.5	123.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-142.5	-142.5
388	528077.11	5511949.37	398.44	0	32	27.6	27.6	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-43.4	-43.4
389	528077.11	5511949.37	398.44	0	63	36.8	36.8	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-34.3	-34.3
390	528077.11	5511949.37	398.44	0	125	52.9	52.9	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-24.3	-24.3
391	528077.11	5511949.37	398.44	0	250	62.4	62.4	0.0	0.0	71.5	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-15.0	-15.0
392	528077.11	5511949.37	398.44	0	500	66.8	66.8	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	4.8	0.0	-0.0	-10.5	-10.5
393	528077.11	5511949.37	398.44	0	1000	70.0	70.0	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.1	-9.1
394	528077.11	5511949.37	398.44	0	2000	70.2	70.2	0.0	0.0	71.5	10.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.2	-15.2
395	528077.11	5511949.37	398.44	0	4000	63.0	63.0	0.0	0.0	71.5	34.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-46.9	-46.9
396	528077.11	5511949.37	398.44	0	8000	55.9	55.9	0.0	0.0	71.5	124.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-143.3	-143.3
397	527993.02	5511872.03	401.47	0	32	27.8	27.8	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-38.7	-38.7
398	527993.02	5511872.03	401.47	0	63	37.0	37.0	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-29.6	-29.6
399	527993.02	5511872.03	401.47	0	125	53.1	53.1	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-24.4	-24.4
400	527993.02	5511872.03	401.47	0	250	62.6	62.6	0.0	0.0	71.8	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-12.7	-12.7
401	527993.02	5511872.03	401.47	0	500	67.0	67.0	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-5.9	-5.9
402	527993.02	5511872.03	401.47	0	1000	70.2	70.2	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.6	-4.6
403	527993.02	5511872.03	401.47	0	2000	70.4	70.4	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-11.0	-11.0
404	527993.02	5511872.03	401.47	0	4000	63.2	63.2	0.0	0.0	71.8	36.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-43.6	-43.6
405	527993.02	5511872.03	401.47	0	8000	56.1	56.1	0.0	0.0	71.8	128.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-143.1	-143.1
406	528389.49	5512104.65	400.41	0	32	26.2	26.2	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-38.9	-38.9
407	528389.49	5512104.65	400.41	0	63	35.4	35.4	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.8	-29.8
408	528389.49	5512104.65	400.41	0	125	51.5	51.5	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-24.3	-24.3
409	528389.49	5512104.65	400.41	0	250	61.0	61.0	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-12.6	-12.6
410	528389.49	5512104.65	400.41	0	500	65.4	65.4	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-5.6	-5.6
411	528389.49	5512104.65	400.41	0	1000	68.6	68.6	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
412	528389.49	5512104.65	400.41	0	2000	68.8	68.8	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-9.3	-9.3
413	528389.49	5512104.65	400.41	0	4000	61.6	61.6	0.0	0.0	70.3	30.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-37.8	-37.8
414	528389.49	5512104.65	400.41	0	8000	54.5	54.5	0.0	0.0	70.3	107.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-122.4	-122.4
415	527926.98	5511858.27	402.67	0	32	26.1	26.1	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-40.8	-40.8
416	527926.98	5511858.27	402.67	0	63	35.3	35.3	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-31.7	-31.7
417	527926.98	5511858.27	402.67	0	125	51.4	51.4	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-26.6	-26.6
418	527926.98	5511858.27	402.67	0	250	60.9	60.9	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-14.8	-14.8
419	527926.98	5511858.27	402.67	0	500	65.3	65.3	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-8.1	-8.1
420	527926.98	5511858.27	402.67	0	1000	68.5	68.5	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-6.8	-6.8
421	527926.98	5511858.27	402.67	0	2000	68.7	68.7	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-13.6	-13.6
422	527926.98	5511858.27	402.67	0	4000	61.5	61.5	0.0	0.0	72.2	37.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-47.4	-47.4
423	527926.98	5511858.27	402.67	0	8000	54.4	54.4	0.0	0.0	72.2	134.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-151.5	-151.5
424	527929.84	5511857.55	402.75	0	32	26.0	26.0	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-40.9	-40.9
425	527929.84	5511857.55	402.75	0	63	35.2	35.2	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-31.8	-31.8
426	527929.84	5511857.55	402.75	0	125	51.3	51.3	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-26.7	-26.7
427	527929.84	5511857.55	402.75	0	250	60.8	60.8	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-15.0	-15.0
428	527929.84	5511857.55	402.75	0	500	65.2	65.2	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-8.2	-8.2
429	527929.84	5511857.55	402.75	0	1000	68.4	68.4	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.0	-7.0
430	527929.84	5511857.55	402.75	0	2000	68.6	68.6	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-13.7	-13.7
431	527929.84	5511857.55	402.75	0	4000	61.4	61.4	0.0	0.0	72.2	37.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-47.5	-47.5
432	527929.84	5511857.55	402.75	0	8000	54.3	54.3	0.0	0.0	72.2	134.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-151.3	-151.3
433	528102.58	5511948.54	398.76	0	32	24.5	24.5	0.0	0.0	71.3	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-41.5	-41.5
434	528102.58	5511948.54	398.76	0	63	33.7	33.7	0.0	0.0	71.3	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-32.4	-32.4
435	528102.58	5511948.54	398.76	0	125	49.8	49.8	0.0	0.0	71.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-27.2	-27.2
436	528102.58	5511948.54	398.76	0	250	59.3	59.3	0.0	0.0	71.3	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-15.4	-15.4
437	528102.58	5511948.54	398.76	0	500	63.7	63.7	0.0	0.0	71.3	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-8.6	-8.6
438	528102.58	5511948.54	398.76	0	1000	66.9	66.9	0.0	0.0	71.3	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.1	-7.1
439	528102.58	5511948.54	398.76	0	2000	67.1	67.1	0.0	0.0	71.3	10.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-13.2	-13.2
440	528102.58	5511948.54	398.76	0	4000	59.9	59.9	0.0	0.0	71.3	34.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-44.4	-44.4
441	528102.58	5511948.54	398.76	0	8000	52.8	52.8	0.0	0.0	71.3	121.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-138.9	-138.9

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528408.92	5512008.66	398.58	0	32	41.2	41.2	0.0	0.0	69.5	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-23.1	-23.1
2	528408.92	5512008.66	398.58	0	63	50.4	50.4	0.0	0.0	69.5	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-14.0	-14.0
3	528408.92	5512008.66	398.58	0	125	66.5	66.5	0.0	0.0	69.5	0.3	5.1	0.0	0.0	0.0	0.0	-0.0	-8.3	-8.3
4	528408.92	5512008.66	398.58	0	250	76.0	76.0	0.0	0.0	69.5	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	3.3	3.3
5	528408.92	5512008.66	398.58	0	500	80.4	80.4	0.0	0.0	69.5	1.6	-1.0	0.0	0.0	0.0	0.0	-0.0	10.4	10.4
6	528408.92	5512008.66	398.58	0	1000	83.6	83.6	0.0	0.0	69.5	3.1	-1.0	0.0	0.0	0.0	0.0	-0.0	12.2	12.2
7	528408.92	5512008.66	398.58	0	2000	83.8	83.8	0.0	0.0	69.5	8.1	-1.0	0.0	0.0	0.0	0.0	-0.0	7.3	7.3
8	528408.92	5512008.66	398.58	0	4000	76.6	76.6	0.0	0.0	69.5	27.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-19.2	-19.2
9	528408.92	5512008.66	398.58	0	8000	69.5	69.5	0.0	0.0	69.5	97.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-96.7	-96.7
10	528421.67	5511927.67	397.70	0	32	39.1	39.1	0.0	0.0	68.7	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-24.6	-24.6
11	528421.67	5511927.67	397.70	0	63	48.3	48.3	0.0	0.0	68.7	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-15.4	-15.4
12	528421.67	5511927.67	397.70	0	125	64.4	64.4	0.0	0.0	68.7	0.3	5.0	0.0	0.0	0.0	0.0	-0.0	-9.6	-9.6
13	528421.67	5511927.67	397.70	0	250	73.9	73.9	0.0	0.0	68.7	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	2.0	2.0
14	528421.67	5511927.67	397.70	0	500	78.3	78.3	0.0	0.0	68.7	1.5	-1.0	0.0	0.0	0.0	0.0	-0.0	9.1	9.1
15	528421.67	5511927.67	397.70	0	1000	81.5	81.5	0.0	0.0	68.7	2.8	-1.0	0.0	0.0	0.0	0.0	-0.0	11.0	11.0
16	528421.67	5511927.67	397.70	0	2000	81.7	81.7	0.0	0.0	68.7	7.5	-1.0	0.0	0.0	0.0	0.0	-0.0	6.5	6.5
17	528421.67	5511927.67	397.70	0	4000	74.5	74.5	0.0	0.0	68.7	25.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-18.5	-18.5
18	528421.67	5511927.67	397.70	0	8000	67.4	67.4	0.0	0.0	68.7	90.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-90.4	-90.4
19	528426.74	5511881.21	396.94	0	32	36.6	36.6	0.0	0.0	68.3	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-26.8	-26.8
20	528426.74	5511881.21	396.94	0	63	45.8	45.8	0.0	0.0	68.3	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	-17.6	-17.6
21	528426.74	5511881.21	396.94	0	125	61.9	61.9	0.0	0.0	68.3	0.3	4.9	0.0	0.0	0.0	0.0	-0.0	-11.7	-11.7
22	528426.74	5511881.21	396.94	0	250	71.4	71.4	0.0	0.0	68.3	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1
23	528426.74	5511881.21	396.94	0	500	75.8	75.8	0.0	0.0	68.3	1.4	-1.0	0.0	0.0	0.0	0.0	-0.0	7.0	7.0
24	528426.74	5511881.21	396.94	0	1000	79.0	79.0	0.0	0.0	68.3	2.7	-1.0	0.0	0.0	0.0	0.0	-0.0	9.0	9.0
25	528426.74	5511881.21	396.94	0	2000	79.2	79.2	0.0	0.0	68.3	7.1	-1.0	0.0	0.0	0.0	0.0	-0.0	4.7	4.7
26	528426.74	5511881.21	396.94	0	4000	72.0	72.0	0.0	0.0	68.3	24.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-19.5	-19.5
27	528426.74	5511881.21	396.94	0	8000	64.9	64.9	0.0	0.0	68.3	86.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-88.5	-88.5
28	528281.82	5511970.89	399.33	0	32	37.4	37.4	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.6	-27.6
29	528281.82	5511970.89	399.33	0	63	46.6	46.6	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-18.4	-18.4
30	528281.82	5511970.89	399.33	0	125	62.7	62.7	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-13.0	-13.0
31	528281.82	5511970.89	399.33	0	250	72.2	72.2	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
32	528281.82	5511970.89	399.33	0	500	76.6	76.6	0.0	0.0	70.1	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	5.7	5.7
33	528281.82	5511970.89	399.33	0	1000	79.8	79.8	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	7.4	7.4
34	528281.82	5511970.89	399.33	0	2000	80.0	80.0	0.0	0.0	70.1	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	2.1	2.1
35	528281.82	5511970.89	399.33	0	4000	72.8	72.8	0.0	0.0	70.1	29.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-26.0	-26.0
36	528281.82	5511970.89	399.33	0	8000	65.7	65.7	0.0	0.0	70.1	105.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-109.2	-109.2
37	528429.74	5511853.80	398.10	0	32	34.8	34.8	0.0	0.0	68.1	0.0	-5.0	0.0	0.0	0.0	0.0	-0.0	-28.4	-28.4
38	528429.74	5511853.80	398.10	0	63	44.0	44.0	0.0	0.0	68.1	0.1	-5.0	0.0	0.0	0.0	0.0	-0.0	-19.2	-19.2
39	528429.74	5511853.80	398.10	0	125	60.1	60.1	0.0	0.0	68.1	0.3	4.9	0.0	0.0	0.0	0.0	-0.0	-13.2	-13.2
40	528429.74	5511853.80	398.10	0	250	69.6	69.6	0.0	0.0	68.1	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	-1.7	-1.7
41	528429.74	5511853.80	398.10	0	500	74.0	74.0	0.0	0.0	68.1	1.4	-1.0	0.0	0.0	0.0	0.0	-0.0	5.4	5.4
42	528429.74	5511853.80	398.10	0	1000	77.2	77.2	0.0	0.0	68.1	2.6	-1.0	0.0	0.0	0.0	0.0	-0.0	7.4	7.4
43	528429.74	5511853.80	398.10	0	2000	77.4	77.4	0.0	0.0	68.1	6.9	-1.0	0.0	0.0	0.0	0.0	-0.0	3.3	3.3
44	528429.74	5511853.80	398.10	0	4000	70.2	70.2	0.0	0.0	68.1	23.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-20.4	-20.4
45	528429.74	5511853.80	398.10	0	8000	63.1	63.1	0.0	0.0	68.1	83.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-87.8	-87.8
46	527846.73	5511873.83	397.19	0	32	39.1	39.1	0.0	0.0	72.8	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-33.1	-33.1
47	527846.73	5511873.83	397.19	0	63	48.3	48.3	0.0	0.0	72.8	0.2	-5.4	0.0	0.0	4.8	0.0	-0.0	-24.0	-24.0
48	527846.73	5511873.83	397.19	0	125	64.4	64.4	0.0	0.0	72.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.2	-14.2
49	527846.73	5511873.83	397.19	0	250	73.9	73.9	0.0	0.0	72.8	1.3	2.3	0.0	0.0	2.5	0.0	-0.0	-5.0	-5.0
50	527846.73	5511873.83	397.19	0	500	78.3	78.3	0.0	0.0	72.8	2.4	-1.0	0.0	0.0	4.8	0.0	-0.0	-0.6	-0.6
51	527846.73	5511873.83	397.19	0	1000	81.5	81.5	0.0	0.0	72.8	4.5	-1.1	0.0	0.0	4.8	0.0	-0.0	0.5	0.5
52	527846.73	5511873.83	397.19	0	2000	81.7	81.7	0.0	0.0	72.8	11.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.7	-6.7
53	527846.73	5511873.83	397.19	0	4000	74.5	74.5	0.0	0.0	72.8	40.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-42.4	-42.4
54	527846.73	5511873.83	397.19	0	8000	67.4	67.4	0.0	0.0	72.8	144.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-153.3	-153.3
55	528159.42	5511944.50	399.31	0	32	36.9	36.9	0.0	0.0	70.9	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-28.8	-28.8
56	528159.42	5511944.50	399.31	0	63	46.1	46.1	0.0	0.0	70.9	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
57	528159.42	5511944.50	399.31	0	125	62.2	62.2	0.0	0.0	70.9	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-14.3	-14.3
58	528159.42	5511944.50	399.31	0	250	71.7	71.7	0.0	0.0	70.9	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-2.6	-2.6
59	528159.42	5511944.50	399.31	0	500	76.1	76.1	0.0	0.0	70.9	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	4.3	4.3
60	528159.42	5511944.50	399.31	0	1000	79.3	79.3	0.0	0.0	70.9	3.6	-1.1	0.0	0.0	0.0	0.0	-0.0	5.8	5.8
61	528159.42	5511944.50	399.31	0	2000	79.5	79.5	0.0	0.0	70.9	9.6	-1.1	0.0	0.0	0.0	0.0	-0.0	0.1	0.1
62	528159.42	5511944.50	399.31	0	4000	72.3	72.3	0.0	0.0	70.9	32.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-29.9	-29.9
63	528159.42	5511944.50	399.31	0	8000	65.2	65.2	0.0	0.0	70.9	115.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-120.2	-120.2

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
64	528431.88	5511834.17	399.60	0	32	33.8	33.8	0.0	0.0	67.9	0.0	-5.0	0.0	0.0	0.0	-0.0	-29.1	-29.1	-29.1
65	528431.88	5511834.17	399.60	0	63	43.0	43.0	0.0	0.0	67.9	0.1	-5.0	0.0	0.0	0.0	-0.0	-20.0	-20.0	-20.0
66	528431.88	5511834.17	399.60	0	125	59.1	59.1	0.0	0.0	67.9	0.3	4.8	0.0	0.0	0.0	-0.0	-13.9	-13.9	-13.9
67	528431.88	5511834.17	399.60	0	250	68.6	68.6	0.0	0.0	67.9	0.7	2.4	0.0	0.0	0.0	-0.0	-2.4	-2.4	-2.4
68	528431.88	5511834.17	399.60	0	500	73.0	73.0	0.0	0.0	67.9	1.4	-1.0	0.0	0.0	0.0	-0.0	4.7	4.7	4.7
69	528431.88	5511834.17	399.60	0	1000	76.2	76.2	0.0	0.0	67.9	2.6	-1.0	0.0	0.0	0.0	-0.0	6.7	6.7	6.7
70	528431.88	5511834.17	399.60	0	2000	76.4	76.4	0.0	0.0	67.9	6.8	-1.0	0.0	0.0	0.0	-0.0	2.7	2.7	2.7
71	528431.88	5511834.17	399.60	0	4000	69.2	69.2	0.0	0.0	67.9	23.0	-1.0	0.0	0.0	0.0	-0.0	-20.7	-20.7	-20.7
72	528431.88	5511834.17	399.60	0	8000	62.1	62.1	0.0	0.0	67.9	82.1	-1.0	0.0	0.0	0.0	-0.0	-86.9	-86.9	-86.9
73	527952.82	5511860.26	402.60	0	32	37.8	37.8	0.0	0.0	72.1	0.0	-5.4	0.0	0.0	0.0	-0.0	-28.9	-28.9	-28.9
74	527952.82	5511860.26	402.60	0	63	47.0	47.0	0.0	0.0	72.1	0.1	-5.4	0.0	0.0	0.0	-0.0	-19.8	-19.8	-19.8
75	527952.82	5511860.26	402.60	0	125	63.1	63.1	0.0	0.0	72.1	0.5	5.3	0.0	0.0	0.0	-0.0	-14.7	-14.7	-14.7
76	527952.82	5511860.26	402.60	0	250	72.6	72.6	0.0	0.0	72.1	1.2	2.3	0.0	0.0	0.0	-0.0	-2.9	-2.9	-2.9
77	527952.82	5511860.26	402.60	0	500	77.0	77.0	0.0	0.0	72.1	2.2	-1.0	0.0	0.0	0.0	-0.0	3.8	3.8	3.8
78	527952.82	5511860.26	402.60	0	1000	80.2	80.2	0.0	0.0	72.1	4.1	-1.1	0.0	0.0	0.0	-0.0	5.1	5.1	5.1
79	527952.82	5511860.26	402.60	0	2000	80.4	80.4	0.0	0.0	72.1	10.9	-1.1	0.0	0.0	0.0	-0.0	-1.5	-1.5	-1.5
80	527952.82	5511860.26	402.60	0	4000	73.2	73.2	0.0	0.0	72.1	37.0	-1.1	0.0	0.0	0.0	-0.0	-34.8	-34.8	-34.8
81	527952.82	5511860.26	402.60	0	8000	66.1	66.1	0.0	0.0	72.1	132.1	-1.1	0.0	0.0	0.0	-0.0	-137.0	-137.0	-137.0
82	528328.50	5512009.55	399.35	0	32	35.9	35.9	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	-0.0	-28.9	-28.9	-28.9
83	528328.50	5512009.55	399.35	0	63	45.1	45.1	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	-0.0	-19.8	-19.8	-19.8
84	528328.50	5512009.55	399.35	0	125	61.2	61.2	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	-0.0	-14.3	-14.3	-14.3
85	528328.50	5512009.55	399.35	0	250	70.7	70.7	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	-0.0	-2.6	-2.6	-2.6
86	528328.50	5512009.55	399.35	0	500	75.1	75.1	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	-0.0	4.4	4.4	4.4
87	528328.50	5512009.55	399.35	0	1000	78.3	78.3	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	-0.0	6.1	6.1	6.1
88	528328.50	5512009.55	399.35	0	2000	78.5	78.5	0.0	0.0	70.0	8.7	-1.0	0.0	0.0	0.0	-0.0	0.9	0.9	0.9
89	528328.50	5512009.55	399.35	0	4000	71.3	71.3	0.0	0.0	70.0	29.3	-1.0	0.0	0.0	0.0	-0.0	-27.0	-27.0	-27.0
90	528328.50	5512009.55	399.35	0	8000	64.2	64.2	0.0	0.0	70.0	104.6	-1.0	0.0	0.0	0.0	-0.0	-109.4	-109.4	-109.4
91	528214.84	5511950.50	399.48	0	32	36.3	36.3	0.0	0.0	70.5	0.0	-5.2	0.0	0.0	0.0	-0.0	-29.0	-29.0	-29.0
92	528214.84	5511950.50	399.48	0	63	45.5	45.5	0.0	0.0	70.5	0.1	-5.2	0.0	0.0	0.0	-0.0	-19.9	-19.9	-19.9
93	528214.84	5511950.50	399.48	0	125	61.6	61.6	0.0	0.0	70.5	0.4	5.2	0.0	0.0	0.0	-0.0	-14.5	-14.5	-14.5
94	528214.84	5511950.50	399.48	0	250	71.1	71.1	0.0	0.0	70.5	1.0	2.3	0.0	0.0	0.0	-0.0	-2.8	-2.8	-2.8
95	528214.84	5511950.50	399.48	0	500	75.5	75.5	0.0	0.0	70.5	1.8	-1.0	0.0	0.0	0.0	-0.0	4.1	4.1	4.1
96	528214.84	5511950.50	399.48	0	1000	78.7	78.7	0.0	0.0	70.5	3.5	-1.1	0.0	0.0	0.0	-0.0	5.8	5.8	5.8
97	528214.84	5511950.50	399.48	0	2000	78.9	78.9	0.0	0.0	70.5	9.1	-1.1	0.0	0.0	0.0	-0.0	0.3	0.3	0.3
98	528214.84	5511950.50	399.48	0	4000	71.7	71.7	0.0	0.0	70.5	31.0	-1.1	0.0	0.0	0.0	-0.0	-28.8	-28.8	-28.8
99	528214.84	5511950.50	399.48	0	8000	64.6	64.6	0.0	0.0	70.5	110.6	-1.1	0.0	0.0	0.0	-0.0	-115.5	-115.5	-115.5
100	528379.77	5512086.35	399.50	0	32	35.7	35.7	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	-0.0	-29.4	-29.4	-29.4
101	528379.77	5512086.35	399.50	0	63	44.9	44.9	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	-0.0	-20.3	-20.3	-20.3
102	528379.77	5512086.35	399.50	0	125	61.0	61.0	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	-0.0	-14.8	-14.8	-14.8
103	528379.77	5512086.35	399.50	0	250	70.5	70.5	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	-0.0	-3.1	-3.1	-3.1
104	528379.77	5512086.35	399.50	0	500	74.9	74.9	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	-0.0	3.9	3.9	3.9
105	528379.77	5512086.35	399.50	0	1000	78.1	78.1	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	-0.0	5.5	5.5	5.5
106	528379.77	5512086.35	399.50	0	2000	78.3	78.3	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	-0.0	0.3	0.3	0.3
107	528379.77	5512086.35	399.50	0	4000	71.1	71.1	0.0	0.0	70.2	29.9	-1.0	0.0	0.0	0.0	-0.0	-28.1	-28.1	-28.1
108	528379.77	5512086.35	399.50	0	8000	64.0	64.0	0.0	0.0	70.2	106.8	-1.0	0.0	0.0	0.0	-0.0	-112.1	-112.1	-112.1
109	528397.40	5512069.15	399.22	0	32	35.4	35.4	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	-0.0	-29.4	-29.4	-29.4
110	528397.40	5512069.15	399.22	0	63	44.6	44.6	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	-0.0	-20.3	-20.3	-20.3
111	528397.40	5512069.15	399.22	0	125	60.7	60.7	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	-0.0	-14.8	-14.8	-14.8
112	528397.40	5512069.15	399.22	0	250	70.2	70.2	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	-0.0	-3.1	-3.1	-3.1
113	528397.40	5512069.15	399.22	0	500	74.6	74.6	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	-0.0	3.9	3.9	3.9
114	528397.40	5512069.15	399.22	0	1000	77.8	77.8	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	-0.0	5.6	5.6	5.6
115	528397.40	5512069.15	399.22	0	2000	78.0	78.0	0.0	0.0	70.0	8.6	-1.0	0.0	0.0	0.0	-0.0	0.5	0.5	0.5
116	528397.40	5512069.15	399.22	0	4000	70.8	70.8	0.0	0.0	70.0	29.2	-1.0	0.0	0.0	0.0	-0.0	-27.3	-27.3	-27.3
117	528397.40	5512069.15	399.22	0	8000	63.7	63.7	0.0	0.0	70.0	104.0	-1.0	0.0	0.0	0.0	-0.0	-109.2	-109.2	-109.2
118	528360.42	5512053.46	399.28	0	32	35.5	35.5	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	-0.0	-29.5	-29.5	-29.5
119	528360.42	5512053.46	399.28	0	63	44.7	44.7	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	-0.0	-20.4	-20.4	-20.4
120	528360.42	5512053.46	399.28	0	125	60.8	60.8	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	-0.0	-14.9	-14.9	-14.9
121	528360.42	5512053.46	399.28	0	250	70.3	70.3	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	-0.0	-3.1	-3.1	-3.1
122	528360.42	5512053.46	399.28	0	500	74.7	74.7	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	-0.0	3.8	3.8	3.8
123	528360.42	5512053.46	399.28	0	1000	77.9	77.9	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	-0.0	5.5	5.5	5.5
124	528360.42	5512053.46	399.28	0	2000	78.1	78.1	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	-0.0	0.3	0.3	0.3
125	528360.42	5512053.46	399.28	0	4000	70.9	70.9	0.0	0.0	70.1	29.6	-1.0	0.0	0.0	0.0	-0.0	-27.8	-27.8	-27.8
126	528360.42	5512053.46	399.28	0	8000	63.8	63.8	0.0	0.0	70.1	105.6	-1.0	0.0	0.0	0.0	-0.0	-110.9	-110.9	-110.9

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
127	527792.69	5511877.52	398.09	0	32	38.2	38.2	0.0	0.0	73.2	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-34.3	-34.3
128	527792.69	5511877.52	398.09	0	63	47.4	47.4	0.0	0.0	73.2	0.2	-5.4	0.0	0.0	4.8	0.0	-0.0	-25.2	-25.2
129	527792.69	5511877.52	398.09	0	125	63.5	63.5	0.0	0.0	73.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-15.5	-15.5
130	527792.69	5511877.52	398.09	0	250	73.0	73.0	0.0	0.0	73.2	1.3	2.3	0.0	0.0	2.5	0.0	-0.0	-6.2	-6.2
131	527792.69	5511877.52	398.09	0	500	77.4	77.4	0.0	0.0	73.2	2.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.9	-1.9
132	527792.69	5511877.52	398.09	0	1000	80.6	80.6	0.0	0.0	73.2	4.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.9	-0.9
133	527792.69	5511877.52	398.09	0	2000	80.8	80.8	0.0	0.0	73.2	12.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.4	-8.4
134	527792.69	5511877.52	398.09	0	4000	73.6	73.6	0.0	0.0	73.2	42.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-45.3	-45.3
135	527792.69	5511877.52	398.09	0	8000	66.5	66.5	0.0	0.0	73.2	150.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-160.5	-160.5
136	528366.31	5512077.76	399.40	0	32	35.4	35.4	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.7	-29.7
137	528366.31	5512077.76	399.40	0	63	44.6	44.6	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.6	-20.6
138	528366.31	5512077.76	399.40	0	125	60.7	60.7	0.0	0.0	70.2	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-15.1	-15.1
139	528366.31	5512077.76	399.40	0	250	70.2	70.2	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-3.4	-3.4
140	528366.31	5512077.76	399.40	0	500	74.6	74.6	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	3.5	3.5
141	528366.31	5512077.76	399.40	0	1000	77.8	77.8	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	5.2	5.2
142	528366.31	5512077.76	399.40	0	2000	78.0	78.0	0.0	0.0	70.2	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1
143	528366.31	5512077.76	399.40	0	4000	70.8	70.8	0.0	0.0	70.2	30.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-28.5	-28.5
144	528366.31	5512077.76	399.40	0	8000	63.7	63.7	0.0	0.0	70.2	107.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-112.7	-112.7
145	528345.62	5512029.71	399.30	0	32	35.2	35.2	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.7	-29.7
146	528345.62	5512029.71	399.30	0	63	44.4	44.4	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.6	-20.6
147	528345.62	5512029.71	399.30	0	125	60.5	60.5	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-15.1	-15.1
148	528345.62	5512029.71	399.30	0	250	70.0	70.0	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-3.4	-3.4
149	528345.62	5512029.71	399.30	0	500	74.4	74.4	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	3.6	3.6
150	528345.62	5512029.71	399.30	0	1000	77.6	77.6	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	5.3	5.3
151	528345.62	5512029.71	399.30	0	2000	77.8	77.8	0.0	0.0	70.0	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	0.1	0.1
152	528345.62	5512029.71	399.30	0	4000	70.6	70.6	0.0	0.0	70.0	29.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-27.8	-27.8
153	528345.62	5512029.71	399.30	0	8000	63.5	63.5	0.0	0.0	70.0	104.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-110.3	-110.3
154	527906.44	5511860.18	400.31	0	32	37.3	37.3	0.0	0.0	72.4	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-34.5	-34.5
155	527906.44	5511860.18	400.31	0	63	46.5	46.5	0.0	0.0	72.4	0.1	-5.4	0.0	0.0	4.8	0.0	-0.0	-25.4	-25.4
156	527906.44	5511860.18	400.31	0	125	62.6	62.6	0.0	0.0	72.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-15.5	-15.5
157	527906.44	5511860.18	400.31	0	250	72.1	72.1	0.0	0.0	72.4	1.2	2.3	0.0	0.0	2.4	0.0	-0.0	-6.3	-6.3
158	527906.44	5511860.18	400.31	0	500	76.5	76.5	0.0	0.0	72.4	2.3	-1.0	0.0	0.0	4.8	0.0	-0.0	-1.9	-1.9
159	527906.44	5511860.18	400.31	0	1000	79.7	79.7	0.0	0.0	72.4	4.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.6	-0.6
160	527906.44	5511860.18	400.31	0	2000	79.9	79.9	0.0	0.0	72.4	11.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.5	-7.5
161	527906.44	5511860.18	400.31	0	4000	72.7	72.7	0.0	0.0	72.4	38.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-41.8	-41.8
162	527906.44	5511860.18	400.31	0	8000	65.6	65.6	0.0	0.0	72.4	137.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-147.5	-147.5
163	528020.50	5511905.96	399.52	0	32	36.8	36.8	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-29.7	-29.7
164	528020.50	5511905.96	399.52	0	63	46.0	46.0	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-20.6	-20.6
165	528020.50	5511905.96	399.52	0	125	62.1	62.1	0.0	0.0	71.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-15.4	-15.4
166	528020.50	5511905.96	399.52	0	250	71.6	71.6	0.0	0.0	71.7	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-3.6	-3.6
167	528020.50	5511905.96	399.52	0	500	76.0	76.0	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	3.2	3.2
168	528020.50	5511905.96	399.52	0	1000	79.2	79.2	0.0	0.0	71.7	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	4.5	4.5
169	528020.50	5511905.96	399.52	0	2000	79.4	79.4	0.0	0.0	71.7	10.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.8	-1.8
170	528020.50	5511905.96	399.52	0	4000	72.2	72.2	0.0	0.0	71.7	35.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-34.2	-34.2
171	528020.50	5511905.96	399.52	0	8000	65.1	65.1	0.0	0.0	71.7	127.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-132.9	-132.9
172	528040.82	5511931.82	398.11	0	32	36.3	36.3	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-34.9	-34.9
173	528040.82	5511931.82	398.11	0	63	45.5	45.5	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-25.8	-25.8
174	528040.82	5511931.82	398.11	0	125	61.6	61.6	0.0	0.0	71.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
175	528040.82	5511931.82	398.11	0	250	71.1	71.1	0.0	0.0	71.7	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-6.5	-6.5
176	528040.82	5511931.82	398.11	0	500	75.5	75.5	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	4.8	0.0	-0.0	-2.1	-2.1
177	528040.82	5511931.82	398.11	0	1000	78.7	78.7	0.0	0.0	71.7	4.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.7	-0.7
178	528040.82	5511931.82	398.11	0	2000	78.9	78.9	0.0	0.0	71.7	10.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.0	-7.0
179	528040.82	5511931.82	398.11	0	4000	71.7	71.7	0.0	0.0	71.7	35.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-39.3	-39.3
180	528040.82	5511931.82	398.11	0	8000	64.6	64.6	0.0	0.0	71.7	126.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-137.5	-137.5
181	528253.06	5511960.12	399.32	0	32	34.6	34.6	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-30.5	-30.5
182	528253.06	5511960.12	399.32	0	63	43.8	43.8	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-21.3	-21.3
183	528253.06	5511960.12	399.32	0	125	59.9	59.9	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
184	528253.06	5511960.12	399.32	0	250	69.4	69.4	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-4.2	-4.2
185	528253.06	5511960.12	399.32	0	500	73.8	73.8	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	2.8	2.8
186	528253.06	5511960.12	399.32	0	1000	77.0	77.0	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	4.4	4.4
187	528253.06	5511960.12	399.32	0	2000	77.2	77.2	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.9	-0.9
188	528253.06	5511960.12	399.32	0	4000	70.0	70.0	0.0	0.0	70.3	30.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-29.4	-29.4
189	528253.06	5511960.12	399.32	0	8000	62.9	62.9	0.0	0.0	70.3	107.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-114.0	-114.0

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
190	528188.51	5511945.88	399.52	0	32	34.8	34.8	0.0	0.0	70.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-30.6	-30.6
191	528188.51	5511945.88	399.52	0	63	44.0	44.0	0.0	0.0	70.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-21.5	-21.5
192	528188.51	5511945.88	399.52	0	125	60.1	60.1	0.0	0.0	70.7	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-16.1	-16.1
193	528188.51	5511945.88	399.52	0	250	69.6	69.6	0.0	0.0	70.7	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-4.4	-4.4
194	528188.51	5511945.88	399.52	0	500	74.0	74.0	0.0	0.0	70.7	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	2.5	2.5
195	528188.51	5511945.88	399.52	0	1000	77.2	77.2	0.0	0.0	70.7	3.5	-1.1	0.0	0.0	0.0	0.0	-0.0	4.1	4.1
196	528188.51	5511945.88	399.52	0	2000	77.4	77.4	0.0	0.0	70.7	9.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.5	-1.5
197	528188.51	5511945.88	399.52	0	4000	70.2	70.2	0.0	0.0	70.7	31.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-31.0	-31.0
198	528188.51	5511945.88	399.52	0	8000	63.1	63.1	0.0	0.0	70.7	112.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-119.3	-119.3
199	527682.76	5511832.72	394.27	0	32	37.8	37.8	0.0	0.0	73.8	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-35.3	-35.3
200	527682.76	5511832.72	394.27	0	63	47.0	47.0	0.0	0.0	73.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-26.2	-26.2
201	527682.76	5511832.72	394.27	0	125	63.1	63.1	0.0	0.0	73.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.5	-16.5
202	527682.76	5511832.72	394.27	0	250	72.6	72.6	0.0	0.0	73.8	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-7.4	-7.4
203	527682.76	5511832.72	394.27	0	500	77.0	77.0	0.0	0.0	73.8	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.1	-3.1
204	527682.76	5511832.72	394.27	0	1000	80.2	80.2	0.0	0.0	73.8	5.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.3	-2.3
205	527682.76	5511832.72	394.27	0	2000	80.4	80.4	0.0	0.0	73.8	13.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.3	-10.3
206	527682.76	5511832.72	394.27	0	4000	73.2	73.2	0.0	0.0	73.8	45.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-49.2	-49.2
207	527682.76	5511832.72	394.27	0	8000	66.1	66.1	0.0	0.0	73.8	160.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-171.8	-171.8
208	528306.29	5511985.21	399.35	0	32	33.8	33.8	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-31.1	-31.1
209	528306.29	5511985.21	399.35	0	63	43.0	43.0	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-22.0	-22.0
210	528306.29	5511985.21	399.35	0	125	59.1	59.1	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-16.4	-16.4
211	528306.29	5511985.21	399.35	0	250	68.6	68.6	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-4.7	-4.7
212	528306.29	5511985.21	399.35	0	500	73.0	73.0	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	2.2	2.2
213	528306.29	5511985.21	399.35	0	1000	76.2	76.2	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	3.9	3.9
214	528306.29	5511985.21	399.35	0	2000	76.4	76.4	0.0	0.0	70.0	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.3	-1.3
215	528306.29	5511985.21	399.35	0	4000	69.2	69.2	0.0	0.0	70.0	29.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-29.2	-29.2
216	528306.29	5511985.21	399.35	0	8000	62.1	62.1	0.0	0.0	70.0	104.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-111.6	-111.6
217	527534.04	5511753.63	395.79	0	32	37.8	37.8	0.0	0.0	74.5	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-36.0	-36.0
218	527534.04	5511753.63	395.79	0	63	47.0	47.0	0.0	0.0	74.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-27.0	-27.0
219	527534.04	5511753.63	395.79	0	125	63.1	63.1	0.0	0.0	74.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-17.4	-17.4
220	527534.04	5511753.63	395.79	0	250	72.6	72.6	0.0	0.0	74.5	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-8.3	-8.3
221	527534.04	5511753.63	395.79	0	500	77.0	77.0	0.0	0.0	74.5	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.1	-4.1
222	527534.04	5511753.63	395.79	0	1000	80.2	80.2	0.0	0.0	74.5	5.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.5	-3.5
223	527534.04	5511753.63	395.79	0	2000	80.4	80.4	0.0	0.0	74.5	14.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.2	-12.2
224	527534.04	5511753.63	395.79	0	4000	73.2	73.2	0.0	0.0	74.5	49.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-54.0	-54.0
225	527534.04	5511753.63	395.79	0	8000	66.1	66.1	0.0	0.0	74.5	174.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-186.7	-186.7
226	528131.87	5511945.36	399.04	0	32	34.2	34.2	0.0	0.0	71.1	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-31.7	-31.7
227	528131.87	5511945.36	399.04	0	63	43.4	43.4	0.0	0.0	71.1	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-22.6	-22.6
228	528131.87	5511945.36	399.04	0	125	59.5	59.5	0.0	0.0	71.1	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-17.3	-17.3
229	528131.87	5511945.36	399.04	0	250	69.0	69.0	0.0	0.0	71.1	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-5.5	-5.5
230	528131.87	5511945.36	399.04	0	500	73.4	73.4	0.0	0.0	71.1	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	1.3	1.3
231	528131.87	5511945.36	399.04	0	1000	76.6	76.6	0.0	0.0	71.1	3.7	-1.1	0.0	0.0	0.0	0.0	-0.0	2.8	2.8
232	528131.87	5511945.36	399.04	0	2000	76.8	76.8	0.0	0.0	71.1	9.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.1	-3.1
233	528131.87	5511945.36	399.04	0	4000	69.6	69.6	0.0	0.0	71.1	33.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-33.6	-33.6
234	528131.87	5511945.36	399.04	0	8000	62.5	62.5	0.0	0.0	71.1	118.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-125.9	-125.9
235	528002.84	5511884.45	400.78	0	32	34.6	34.6	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-31.9	-31.9
236	528002.84	5511884.45	400.78	0	63	43.8	43.8	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-22.8	-22.8
237	528002.84	5511884.45	400.78	0	125	59.9	59.9	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-17.7	-17.7
238	528002.84	5511884.45	400.78	0	250	69.4	69.4	0.0	0.0	71.8	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-5.9	-5.9
239	528002.84	5511884.45	400.78	0	500	73.8	73.8	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	0.9	0.9
240	528002.84	5511884.45	400.78	0	1000	77.0	77.0	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	2.2	2.2
241	528002.84	5511884.45	400.78	0	2000	77.2	77.2	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.1	-4.1
242	528002.84	5511884.45	400.78	0	4000	70.0	70.0	0.0	0.0	71.8	35.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-36.6	-36.6
243	528002.84	5511884.45	400.78	0	8000	62.9	62.9	0.0	0.0	71.8	128.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-135.9	-135.9
244	527982.67	5511869.54	401.92	0	32	34.0	34.0	0.0	0.0	71.9	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-32.5	-32.5
245	527982.67	5511869.54	401.92	0	63	43.2	43.2	0.0	0.0	71.9	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-23.4	-23.4
246	527982.67	5511869.54	401.92	0	125	59.3	59.3	0.0	0.0	71.9	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-18.3	-18.3
247	527982.67	5511869.54	401.92	0	250	68.8	68.8	0.0	0.0	71.9	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-6.5	-6.5
248	527982.67	5511869.54	401.92	0	500	73.2	73.2	0.0	0.0	71.9	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	0.3	0.3
249	527982.67	5511869.54	401.92	0	1000	76.4	76.4	0.0	0.0	71.9	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	1.6	1.6
250	527982.67	5511869.54	401.92	0	2000	76.6	76.6	0.0	0.0	71.9	10.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.9	-4.9
251	527982.67	5511869.54	401.92	0	4000	69.4	69.4	0.0	0.0	71.9	36.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-37.6	-37.6
252	527982.67	5511869.54	401.92	0	8000	62.3	62.3	0.0	0.0	71.9	129.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-137.9	-137.9

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
253	528236.43	5511955.50	399.37	0	32	32.5	32.5	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-32.6	-32.6
254	528236.43	5511955.50	399.37	0	63	41.7	41.7	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-23.5	-23.5
255	528236.43	5511955.50	399.37	0	125	57.8	57.8	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-18.1	-18.1
256	528236.43	5511955.50	399.37	0	250	67.3	67.3	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-6.4	-6.4
257	528236.43	5511955.50	399.37	0	500	71.7	71.7	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	0.6	0.6
258	528236.43	5511955.50	399.37	0	1000	74.9	74.9	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	2.2	2.2
259	528236.43	5511955.50	399.37	0	2000	75.1	75.1	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.2	-3.2
260	528236.43	5511955.50	399.37	0	4000	67.9	67.9	0.0	0.0	70.4	30.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-31.9	-31.9
261	528236.43	5511955.50	399.37	0	8000	60.8	60.8	0.0	0.0	70.4	108.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-117.4	-117.4
262	528071.53	5511947.35	397.99	0	32	33.4	33.4	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-37.6	-37.6
263	528071.53	5511947.35	397.99	0	63	42.6	42.6	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-28.6	-28.6
264	528071.53	5511947.35	397.99	0	125	58.7	58.7	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-18.6	-18.6
265	528071.53	5511947.35	397.99	0	250	68.2	68.2	0.0	0.0	71.5	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-9.3	-9.3
266	528071.53	5511947.35	397.99	0	500	72.6	72.6	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	4.8	0.0	-0.0	-4.8	-4.8
267	528071.53	5511947.35	397.99	0	1000	75.8	75.8	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.4	-3.4
268	528071.53	5511947.35	397.99	0	2000	76.0	76.0	0.0	0.0	71.5	10.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.6	-9.6
269	528071.53	5511947.35	397.99	0	4000	68.8	68.8	0.0	0.0	71.5	34.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-41.4	-41.4
270	528071.53	5511947.35	397.99	0	8000	61.7	61.7	0.0	0.0	71.5	124.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-138.0	-138.0
271	527726.56	5511864.61	395.56	0	32	35.3	35.3	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-37.6	-37.6
272	527726.56	5511864.61	395.56	0	63	44.5	44.5	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-28.5	-28.5
273	527726.56	5511864.61	395.56	0	125	60.6	60.6	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-18.8	-18.8
274	527726.56	5511864.61	395.56	0	250	70.1	70.1	0.0	0.0	73.5	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-9.6	-9.6
275	527726.56	5511864.61	395.56	0	500	74.5	74.5	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.4	-5.4
276	527726.56	5511864.61	395.56	0	1000	77.7	77.7	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.4	-4.4
277	527726.56	5511864.61	395.56	0	2000	77.9	77.9	0.0	0.0	73.5	13.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.3	-12.3
278	527726.56	5511864.61	395.56	0	4000	70.7	70.7	0.0	0.0	73.5	44.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-50.5	-50.5
279	527726.56	5511864.61	395.56	0	8000	63.6	63.6	0.0	0.0	73.5	156.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-170.5	-170.5
280	528093.30	5511950.96	398.67	0	32	33.0	33.0	0.0	0.0	71.4	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-33.1	-33.1
281	528093.30	5511950.96	398.67	0	63	42.2	42.2	0.0	0.0	71.4	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-24.0	-24.0
282	528093.30	5511950.96	398.67	0	125	58.3	58.3	0.0	0.0	71.4	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-18.8	-18.8
283	528093.30	5511950.96	398.67	0	250	67.8	67.8	0.0	0.0	71.4	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-7.0	-7.0
284	528093.30	5511950.96	398.67	0	500	72.2	72.2	0.0	0.0	71.4	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.2	-0.2
285	528093.30	5511950.96	398.67	0	1000	75.4	75.4	0.0	0.0	71.4	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	1.2	1.2
286	528093.30	5511950.96	398.67	0	2000	75.6	75.6	0.0	0.0	71.4	10.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.9	-4.9
287	528093.30	5511950.96	398.67	0	4000	68.4	68.4	0.0	0.0	71.4	34.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-36.3	-36.3
288	528093.30	5511950.96	398.67	0	8000	61.3	61.3	0.0	0.0	71.4	122.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-131.5	-131.5
289	527657.11	5511810.69	394.41	0	32	35.1	35.1	0.0	0.0	73.9	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.1	-38.1
290	527657.11	5511810.69	394.41	0	63	44.3	44.3	0.0	0.0	73.9	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-29.0	-29.0
291	527657.11	5511810.69	394.41	0	125	60.4	60.4	0.0	0.0	73.9	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-19.4	-19.4
292	527657.11	5511810.69	394.41	0	250	69.9	69.9	0.0	0.0	73.9	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-10.2	-10.2
293	527657.11	5511810.69	394.41	0	500	74.3	74.3	0.0	0.0	73.9	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.0	-6.0
294	527657.11	5511810.69	394.41	0	1000	77.5	77.5	0.0	0.0	73.9	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.1	-5.1
295	527657.11	5511810.69	394.41	0	2000	77.7	77.7	0.0	0.0	73.9	13.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-13.3	-13.3
296	527657.11	5511810.69	394.41	0	4000	70.5	70.5	0.0	0.0	73.9	45.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-52.6	-52.6
297	527657.11	5511810.69	394.41	0	8000	63.4	63.4	0.0	0.0	73.9	162.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-176.7	-176.7
298	528315.57	5511995.23	399.35	0	32	31.2	31.2	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-33.6	-33.6
299	528315.57	5511995.23	399.35	0	63	40.4	40.4	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-24.5	-24.5
300	528315.57	5511995.23	399.35	0	125	56.5	56.5	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-19.0	-19.0
301	528315.57	5511995.23	399.35	0	250	66.0	66.0	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-7.3	-7.3
302	528315.57	5511995.23	399.35	0	500	70.4	70.4	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-0.3	-0.3
303	528315.57	5511995.23	399.35	0	1000	73.6	73.6	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	1.4	1.4
304	528315.57	5511995.23	399.35	0	2000	73.8	73.8	0.0	0.0	70.0	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.8	-3.8
305	528315.57	5511995.23	399.35	0	4000	66.6	66.6	0.0	0.0	70.0	29.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-31.7	-31.7
306	528315.57	5511995.23	399.35	0	8000	59.5	59.5	0.0	0.0	70.0	104.6	-1.0	0.0	0.0	0.0	0.0	-0.0	-114.1	-114.1
307	527758.38	5511875.96	397.70	0	32	34.4	34.4	0.0	0.0	73.4	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.4	-38.4
308	527758.38	5511875.96	397.70	0	63	43.6	43.6	0.0	0.0	73.4	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-29.3	-29.3
309	527758.38	5511875.96	397.70	0	125	59.7	59.7	0.0	0.0	73.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
310	527758.38	5511875.96	397.70	0	250	69.2	69.2	0.0	0.0	73.4	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-10.4	-10.4
311	527758.38	5511875.96	397.70	0	500	73.6	73.6	0.0	0.0	73.4	2.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.1	-6.1
312	527758.38	5511875.96	397.70	0	1000	76.8	76.8	0.0	0.0	73.4	4.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.1	-5.1
313	527758.38	5511875.96	397.70	0	2000	77.0	77.0	0.0	0.0	73.4	12.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.8	-12.8
314	527758.38	5511875.96	397.70	0	4000	69.8	69.8	0.0	0.0	73.4	43.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-50.4	-50.4
315	527758.38	5511875.96	397.70	0	8000	62.7	62.7	0.0	0.0	73.4	153.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-168.2	-168.2

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
316	528057.34	5511944.50	397.47	0	32	32.5	32.5	0.0	0.0	71.6	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-38.6	-38.6
317	528057.34	5511944.50	397.47	0	63	41.7	41.7	0.0	0.0	71.6	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-29.5	-29.5
318	528057.34	5511944.50	397.47	0	125	57.8	57.8	0.0	0.0	71.6	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-19.5	-19.5
319	528057.34	5511944.50	397.47	0	250	67.3	67.3	0.0	0.0	71.6	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-10.2	-10.2
320	528057.34	5511944.50	397.47	0	500	71.7	71.7	0.0	0.0	71.6	2.1	-1.0	0.0	0.0	4.8	0.0	-0.0	-5.7	-5.7
321	528057.34	5511944.50	397.47	0	1000	74.9	74.9	0.0	0.0	71.6	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.4	-4.4
322	528057.34	5511944.50	397.47	0	2000	75.1	75.1	0.0	0.0	71.6	10.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.6	-10.6
323	528057.34	5511944.50	397.47	0	4000	67.9	67.9	0.0	0.0	71.6	35.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-42.7	-42.7
324	528057.34	5511944.50	397.47	0	8000	60.8	60.8	0.0	0.0	71.6	125.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-140.2	-140.2
325	527636.81	5511789.59	394.26	0	32	34.7	34.7	0.0	0.0	74.0	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.6	-38.6
326	527636.81	5511789.59	394.26	0	63	43.9	43.9	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-29.5	-29.5
327	527636.81	5511789.59	394.26	0	125	60.0	60.0	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-19.8	-19.8
328	527636.81	5511789.59	394.26	0	250	69.5	69.5	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-10.7	-10.7
329	527636.81	5511789.59	394.26	0	500	73.9	73.9	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.5	-6.5
330	527636.81	5511789.59	394.26	0	1000	77.1	77.1	0.0	0.0	74.0	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.6	-5.6
331	527636.81	5511789.59	394.26	0	2000	77.3	77.3	0.0	0.0	74.0	13.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-13.9	-13.9
332	527636.81	5511789.59	394.26	0	4000	70.1	70.1	0.0	0.0	74.0	46.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-53.5	-53.5
333	527636.81	5511789.59	394.26	0	8000	63.0	63.0	0.0	0.0	74.0	164.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-178.7	-178.7
334	527708.09	5511852.14	394.19	0	32	34.3	34.3	0.0	0.0	73.6	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.6	-38.6
335	527708.09	5511852.14	394.19	0	63	43.5	43.5	0.0	0.0	73.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-29.6	-29.6
336	527708.09	5511852.14	394.19	0	125	59.6	59.6	0.0	0.0	73.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-19.9	-19.9
337	527708.09	5511852.14	394.19	0	250	69.1	69.1	0.0	0.0	73.6	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-10.7	-10.7
338	527708.09	5511852.14	394.19	0	500	73.5	73.5	0.0	0.0	73.6	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.4	-6.4
339	527708.09	5511852.14	394.19	0	1000	76.7	76.7	0.0	0.0	73.6	5.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.5	-5.5
340	527708.09	5511852.14	394.19	0	2000	76.9	76.9	0.0	0.0	73.6	13.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-13.5	-13.5
341	527708.09	5511852.14	394.19	0	4000	69.7	69.7	0.0	0.0	73.6	44.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-52.0	-52.0
342	527708.09	5511852.14	394.19	0	8000	62.6	62.6	0.0	0.0	73.6	158.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-173.1	-173.1
343	528116.46	5511948.65	398.89	0	32	31.5	31.5	0.0	0.0	71.2	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-34.5	-34.5
344	528116.46	5511948.65	398.89	0	63	40.7	40.7	0.0	0.0	71.2	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-25.4	-25.4
345	528116.46	5511948.65	398.89	0	125	56.8	56.8	0.0	0.0	71.2	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-20.1	-20.1
346	528116.46	5511948.65	398.89	0	250	66.3	66.3	0.0	0.0	71.2	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-8.4	-8.4
347	528116.46	5511948.65	398.89	0	500	70.7	70.7	0.0	0.0	71.2	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.5	-1.5
348	528116.46	5511948.65	398.89	0	1000	73.9	73.9	0.0	0.0	71.2	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0
349	528116.46	5511948.65	398.89	0	2000	74.1	74.1	0.0	0.0	71.2	9.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-6.0	-6.0
350	528116.46	5511948.65	398.89	0	4000	66.9	66.9	0.0	0.0	71.2	33.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-36.9	-36.9
351	528116.46	5511948.65	398.89	0	8000	59.8	59.8	0.0	0.0	71.2	120.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-130.4	-130.4
352	527591.34	5511763.66	395.15	0	32	34.4	34.4	0.0	0.0	74.2	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.1	-39.1
353	527591.34	5511763.66	395.15	0	63	43.6	43.6	0.0	0.0	74.2	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.0	-30.0
354	527591.34	5511763.66	395.15	0	125	59.7	59.7	0.0	0.0	74.2	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-20.4	-20.4
355	527591.34	5511763.66	395.15	0	250	69.2	69.2	0.0	0.0	74.2	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-11.3	-11.3
356	527591.34	5511763.66	395.15	0	500	73.6	73.6	0.0	0.0	74.2	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.1	-7.1
357	527591.34	5511763.66	395.15	0	1000	76.8	76.8	0.0	0.0	74.2	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.3	-6.3
358	527591.34	5511763.66	395.15	0	2000	77.0	77.0	0.0	0.0	74.2	13.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-14.8	-14.8
359	527591.34	5511763.66	395.15	0	4000	69.8	69.8	0.0	0.0	74.2	47.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-55.3	-55.3
360	527591.34	5511763.66	395.15	0	8000	62.7	62.7	0.0	0.0	74.2	168.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-183.6	-183.6
361	527565.49	5511754.61	395.44	0	32	34.5	34.5	0.0	0.0	74.3	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.1	-39.1
362	527565.49	5511754.61	395.44	0	63	43.7	43.7	0.0	0.0	74.3	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.1	-30.1
363	527565.49	5511754.61	395.44	0	125	59.8	59.8	0.0	0.0	74.3	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-20.4	-20.4
364	527565.49	5511754.61	395.44	0	250	69.3	69.3	0.0	0.0	74.3	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-11.3	-11.3
365	527565.49	5511754.61	395.44	0	500	73.7	73.7	0.0	0.0	74.3	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.1	-7.1
366	527565.49	5511754.61	395.44	0	1000	76.9	76.9	0.0	0.0	74.3	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.4	-6.4
367	527565.49	5511754.61	395.44	0	2000	77.1	77.1	0.0	0.0	74.3	14.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.0	-15.0
368	527565.49	5511754.61	395.44	0	4000	69.9	69.9	0.0	0.0	74.3	48.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-56.0	-56.0
369	527565.49	5511754.61	395.44	0	8000	62.8	62.8	0.0	0.0	74.3	171.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-186.3	-186.3
370	527505.86	5511763.90	396.28	0	32	34.4	34.4	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.5	-39.5
371	527505.86	5511763.90	396.28	0	63	43.6	43.6	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.4	-30.4
372	527505.86	5511763.90	396.28	0	125	59.7	59.7	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-20.9	-20.9
373	527505.86	5511763.90	396.28	0	250	69.2	69.2	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-11.8	-11.8
374	527505.86	5511763.90	396.28	0	500	73.6	73.6	0.0	0.0	74.7	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.7	-7.7
375	527505.86	5511763.90	396.28	0	1000	76.8	76.8	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.1	-7.1
376	527505.86	5511763.90	396.28	0	2000	77.0	77.0	0.0	0.0	74.7	14.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-16.0	-16.0
377	527505.86	5511763.90	396.28	0	4000	69.8	69.8	0.0	0.0	74.7	49.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-58.4	-58.4
378	527505.86	5511763.90	396.28	0	8000	62.7	62.7	0.0	0.0	74.7	178.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-193.7	-193.7

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
379	527609.18	5511769.91	394.67	0	32	33.8	33.8	0.0	0.0	74.1	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.6	-39.6
380	527609.18	5511769.91	394.67	0	63	43.0	43.0	0.0	0.0	74.1	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.5	-30.5
381	527609.18	5511769.91	394.67	0	125	59.1	59.1	0.0	0.0	74.1	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-20.8	-20.8
382	527609.18	5511769.91	394.67	0	250	68.6	68.6	0.0	0.0	74.1	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-11.7	-11.7
383	527609.18	5511769.91	394.67	0	500	73.0	73.0	0.0	0.0	74.1	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.5	-7.5
384	527609.18	5511769.91	394.67	0	1000	76.2	76.2	0.0	0.0	74.1	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.7	-6.7
385	527609.18	5511769.91	394.67	0	2000	76.4	76.4	0.0	0.0	74.1	13.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.1	-15.1
386	527609.18	5511769.91	394.67	0	4000	69.2	69.2	0.0	0.0	74.1	46.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-55.2	-55.2
387	527609.18	5511769.91	394.67	0	8000	62.1	62.1	0.0	0.0	74.1	166.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-182.2	-182.2
388	527881.83	5511867.83	397.11	0	32	32.3	32.3	0.0	0.0	72.6	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-39.7	-39.7
389	527881.83	5511867.83	397.11	0	63	41.5	41.5	0.0	0.0	72.6	0.2	-5.4	0.0	0.0	4.8	0.0	-0.0	-30.6	-30.6
390	527881.83	5511867.83	397.11	0	125	57.6	57.6	0.0	0.0	72.6	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-20.7	-20.7
391	527881.83	5511867.83	397.11	0	250	67.1	67.1	0.0	0.0	72.6	1.3	2.3	0.0	0.0	2.4	0.0	-0.0	-11.5	-11.5
392	527881.83	5511867.83	397.11	0	500	71.5	71.5	0.0	0.0	72.6	2.3	-1.0	0.0	0.0	4.8	0.0	-0.0	-7.1	-7.1
393	527881.83	5511867.83	397.11	0	1000	74.7	74.7	0.0	0.0	72.6	4.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.9	-5.9
394	527881.83	5511867.83	397.11	0	2000	74.9	74.9	0.0	0.0	72.6	11.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.9	-12.9
395	527881.83	5511867.83	397.11	0	4000	67.7	67.7	0.0	0.0	72.6	39.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-47.8	-47.8
396	527881.83	5511867.83	397.11	0	8000	60.6	60.6	0.0	0.0	72.6	140.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-155.7	-155.7
397	527494.32	5511795.31	396.07	0	32	34.2	34.2	0.0	0.0	74.8	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.8	-39.8
398	527494.32	5511795.31	396.07	0	63	43.4	43.4	0.0	0.0	74.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.8	-30.8
399	527494.32	5511795.31	396.07	0	125	59.5	59.5	0.0	0.0	74.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-21.2	-21.2
400	527494.32	5511795.31	396.07	0	250	69.0	69.0	0.0	0.0	74.8	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-12.1	-12.1
401	527494.32	5511795.31	396.07	0	500	73.4	73.4	0.0	0.0	74.8	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.0	-8.0
402	527494.32	5511795.31	396.07	0	1000	76.6	76.6	0.0	0.0	74.8	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.4	-7.4
403	527494.32	5511795.31	396.07	0	2000	76.8	76.8	0.0	0.0	74.8	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-16.5	-16.5
404	527494.32	5511795.31	396.07	0	4000	69.6	69.6	0.0	0.0	74.8	50.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-59.4	-59.4
405	527494.32	5511795.31	396.07	0	8000	62.5	62.5	0.0	0.0	74.8	180.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-196.2	-196.2
406	528104.86	5511950.96	398.78	0	32	30.6	30.6	0.0	0.0	71.3	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-35.4	-35.4
407	528104.86	5511950.96	398.78	0	63	39.8	39.8	0.0	0.0	71.3	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-26.3	-26.3
408	528104.86	5511950.96	398.78	0	125	55.9	55.9	0.0	0.0	71.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-21.1	-21.1
409	528104.86	5511950.96	398.78	0	250	65.4	65.4	0.0	0.0	71.3	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-9.3	-9.3
410	528104.86	5511950.96	398.78	0	500	69.8	69.8	0.0	0.0	71.3	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.5	-2.5
411	528104.86	5511950.96	398.78	0	1000	73.0	73.0	0.0	0.0	71.3	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.0	-1.0
412	528104.86	5511950.96	398.78	0	2000	73.2	73.2	0.0	0.0	71.3	10.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.1	-7.1
413	528104.86	5511950.96	398.78	0	4000	66.0	66.0	0.0	0.0	71.3	34.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-38.3	-38.3
414	528104.86	5511950.96	398.78	0	8000	58.9	58.9	0.0	0.0	71.3	121.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-132.7	-132.7
415	527513.21	5511818.86	395.47	0	32	33.6	33.6	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-40.4	-40.4
416	527513.21	5511818.86	395.47	0	63	42.8	42.8	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-31.4	-31.4
417	527513.21	5511818.86	395.47	0	125	58.9	58.9	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
418	527513.21	5511818.86	395.47	0	250	68.4	68.4	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-12.7	-12.7
419	527513.21	5511818.86	395.47	0	500	72.8	72.8	0.0	0.0	74.7	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.6	-8.6
420	527513.21	5511818.86	395.47	0	1000	76.0	76.0	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.0	-8.0
421	527513.21	5511818.86	395.47	0	2000	76.2	76.2	0.0	0.0	74.7	14.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-17.0	-17.0
422	527513.21	5511818.86	395.47	0	4000	69.0	69.0	0.0	0.0	74.7	50.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-59.6	-59.6
423	527513.21	5511818.86	395.47	0	8000	61.9	61.9	0.0	0.0	74.7	178.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-195.4	-195.4
424	527530.64	5511820.80	395.06	0	32	33.2	33.2	0.0	0.0	74.6	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-40.7	-40.7
425	527530.64	5511820.80	395.06	0	63	42.4	42.4	0.0	0.0	74.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-31.7	-31.7
426	527530.64	5511820.80	395.06	0	125	58.5	58.5	0.0	0.0	74.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-22.1	-22.1
427	527530.64	5511820.80	395.06	0	250	68.0	68.0	0.0	0.0	74.6	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-13.0	-13.0
428	527530.64	5511820.80	395.06	0	500	72.4	72.4	0.0	0.0	74.6	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.9	-8.9
429	527530.64	5511820.80	395.06	0	1000	75.6	75.6	0.0	0.0	74.6	5.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.2	-8.2
430	527530.64	5511820.80	395.06	0	2000	75.8	75.8	0.0	0.0	74.6	14.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-17.1	-17.1
431	527530.64	5511820.80	395.06	0	4000	68.6	68.6	0.0	0.0	74.6	49.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-59.3	-59.3
432	527530.64	5511820.80	395.06	0	8000	61.5	61.5	0.0	0.0	74.6	177.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-193.8	-193.8
433	527496.63	5511778.68	396.23	0	32	33.1	33.1	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-40.9	-40.9
434	527496.63	5511778.68	396.23	0	63	42.3	42.3	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-31.9	-31.9
435	527496.63	5511778.68	396.23	0	125	58.4	58.4	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-22.3	-22.3
436	527496.63	5511778.68	396.23	0	250	67.9	67.9	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-13.2	-13.2
437	527496.63	5511778.68	396.23	0	500	72.3	72.3	0.0	0.0	74.7	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.1	-9.1
438	527496.63	5511778.68	396.23	0	1000	75.5	75.5	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.5	-8.5
439	527496.63	5511778.68	396.23	0	2000	75.7	75.7	0.0	0.0	74.7	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-17.6	-17.6
440	527496.63	5511778.68	396.23	0	4000	68.5	68.5	0.0	0.0	74.7	50.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-60.3	-60.3
441	527496.63	5511778.68	396.23	0	8000	61.4	61.4	0.0	0.0	74.7	179.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-196.6	-196.6

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
442	527743.34	5511872.87	397.06	0	32	31.6	31.6	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-41.2	-41.2
443	527743.34	5511872.87	397.06	0	63	40.8	40.8	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.1	-32.1
444	527743.34	5511872.87	397.06	0	125	56.9	56.9	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-22.4	-22.4
445	527743.34	5511872.87	397.06	0	250	66.4	66.4	0.0	0.0	73.5	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-13.2	-13.2
446	527743.34	5511872.87	397.06	0	500	70.8	70.8	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.9	-8.9
447	527743.34	5511872.87	397.06	0	1000	74.0	74.0	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.0	-8.0
448	527743.34	5511872.87	397.06	0	2000	74.2	74.2	0.0	0.0	73.5	12.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.8	-15.8
449	527743.34	5511872.87	397.06	0	4000	67.0	67.0	0.0	0.0	73.5	43.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-53.7	-53.7
450	527743.34	5511872.87	397.06	0	8000	59.9	59.9	0.0	0.0	73.5	155.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-172.6	-172.6
451	527498.79	5511810.11	395.82	0	32	32.5	32.5	0.0	0.0	74.8	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-41.6	-41.6
452	527498.79	5511810.11	395.82	0	63	41.7	41.7	0.0	0.0	74.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.5	-32.5
453	527498.79	5511810.11	395.82	0	125	57.8	57.8	0.0	0.0	74.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-22.9	-22.9
454	527498.79	5511810.11	395.82	0	250	67.3	67.3	0.0	0.0	74.8	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-13.9	-13.9
455	527498.79	5511810.11	395.82	0	500	71.7	71.7	0.0	0.0	74.8	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.8	-9.8
456	527498.79	5511810.11	395.82	0	1000	74.9	74.9	0.0	0.0	74.8	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.2	-9.2
457	527498.79	5511810.11	395.82	0	2000	75.1	75.1	0.0	0.0	74.8	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-18.3	-18.3
458	527498.79	5511810.11	395.82	0	4000	67.9	67.9	0.0	0.0	74.8	50.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-61.1	-61.1
459	527498.79	5511810.11	395.82	0	8000	60.8	60.8	0.0	0.0	74.8	180.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-197.9	-197.9
460	528418.24	5511959.09	398.14	0	32	26.4	26.4	0.0	0.0	69.0	0.0	-5.1	0.0	0.0	0.0	0.0	-0.0	-37.6	-37.6
461	528418.24	5511959.09	398.14	0	63	35.6	35.6	0.0	0.0	69.0	0.1	-5.1	0.0	0.0	0.0	0.0	-0.0	-28.4	-28.4
462	528418.24	5511959.09	398.14	0	125	51.7	51.7	0.0	0.0	69.0	0.3	5.0	0.0	0.0	0.0	0.0	-0.0	-22.7	-22.7
463	528418.24	5511959.09	398.14	0	250	61.2	61.2	0.0	0.0	69.0	0.8	2.4	0.0	0.0	0.0	0.0	-0.0	-11.1	-11.1
464	528418.24	5511959.09	398.14	0	500	65.6	65.6	0.0	0.0	69.0	1.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-4.0	-4.0
465	528418.24	5511959.09	398.14	0	1000	68.8	68.8	0.0	0.0	69.0	2.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.1	-2.1
466	528418.24	5511959.09	398.14	0	2000	69.0	69.0	0.0	0.0	69.0	7.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-6.7	-6.7
467	528418.24	5511959.09	398.14	0	4000	61.8	61.8	0.0	0.0	69.0	26.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-32.3	-32.3
468	528418.24	5511959.09	398.14	0	8000	54.7	54.7	0.0	0.0	69.0	93.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-106.3	-106.3
469	527993.06	5511875.66	401.38	0	32	28.8	28.8	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-37.7	-37.7
470	527993.06	5511875.66	401.38	0	63	38.0	38.0	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-28.6	-28.6
471	527993.06	5511875.66	401.38	0	125	54.1	54.1	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-23.5	-23.5
472	527993.06	5511875.66	401.38	0	250	63.6	63.6	0.0	0.0	71.8	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-11.7	-11.7
473	527993.06	5511875.66	401.38	0	500	68.0	68.0	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-4.9	-4.9
474	527993.06	5511875.66	401.38	0	1000	71.2	71.2	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.6	-3.6
475	527993.06	5511875.66	401.38	0	2000	71.4	71.4	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-10.0	-10.0
476	527993.06	5511875.66	401.38	0	4000	64.2	64.2	0.0	0.0	71.8	36.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-42.6	-42.6
477	527993.06	5511875.66	401.38	0	8000	57.1	57.1	0.0	0.0	71.8	128.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-142.3	-142.3
478	528354.08	5512040.44	399.23	0	32	26.5	26.5	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-38.4	-38.4
479	528354.08	5512040.44	399.23	0	63	35.7	35.7	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-29.3	-29.3
480	528354.08	5512040.44	399.23	0	125	51.8	51.8	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-23.8	-23.8
481	528354.08	5512040.44	399.23	0	250	61.3	61.3	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-12.1	-12.1
482	528354.08	5512040.44	399.23	0	500	65.7	65.7	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-5.1	-5.1
483	528354.08	5512040.44	399.23	0	1000	68.9	68.9	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-3.4	-3.4
484	528354.08	5512040.44	399.23	0	2000	69.1	69.1	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-8.7	-8.7
485	528354.08	5512040.44	399.23	0	4000	61.9	61.9	0.0	0.0	70.1	29.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-36.6	-36.6
486	528354.08	5512040.44	399.23	0	8000	54.8	54.8	0.0	0.0	70.1	105.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-119.2	-119.2
487	528081.15	5511949.75	398.55	0	32	27.3	27.3	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-43.7	-43.7
488	528081.15	5511949.75	398.55	0	63	36.5	36.5	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-34.6	-34.6
489	528081.15	5511949.75	398.55	0	125	52.6	52.6	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-24.6	-24.6
490	528081.15	5511949.75	398.55	0	250	62.1	62.1	0.0	0.0	71.5	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-15.3	-15.3
491	528081.15	5511949.75	398.55	0	500	66.5	66.5	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	4.8	0.0	-0.0	-10.8	-10.8
492	528081.15	5511949.75	398.55	0	1000	69.7	69.7	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.4	-9.4
493	528081.15	5511949.75	398.55	0	2000	69.9	69.9	0.0	0.0	71.5	10.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.5	-15.5
494	528081.15	5511949.75	398.55	0	4000	62.7	62.7	0.0	0.0	71.5	34.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-47.2	-47.2
495	528081.15	5511949.75	398.55	0	8000	55.6	55.6	0.0	0.0	71.5	123.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-143.2	-143.2
496	527646.15	5511800.21	394.32	0	32	29.6	29.6	0.0	0.0	73.9	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-43.7	-43.7
497	527646.15	5511800.21	394.32	0	63	38.8	38.8	0.0	0.0	73.9	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-34.6	-34.6
498	527646.15	5511800.21	394.32	0	125	54.9	54.9	0.0	0.0	73.9	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-24.9	-24.9
499	527646.15	5511800.21	394.32	0	250	64.4	64.4	0.0	0.0	73.9	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-15.8	-15.8
500	527646.15	5511800.21	394.32	0	500	68.8	68.8	0.0	0.0	73.9	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.5	-11.5
501	527646.15	5511800.21	394.32	0	1000	72.0	72.0	0.0	0.0	73.9	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.7	-10.7
502	527646.15	5511800.21	394.32	0	2000	72.2	72.2	0.0	0.0	73.9	13.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-18.9	-18.9
503	527646.15	5511800.21	394.32	0	4000	65.0	65.0	0.0	0.0	73.9	45.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-58.4	-58.4
504	527646.15	5511800.21	394.32	0	8000	57.9	57.9	0.0	0.0	73.9	163.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-183.1	-183.1

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
505	528393.84	5512082.02	399.49	0	32	25.3	25.3	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-39.6	-39.6
506	528393.84	5512082.02	399.49	0	63	34.5	34.5	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-30.5	-30.5
507	528393.84	5512082.02	399.49	0	125	50.6	50.6	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-25.0	-25.0
508	528393.84	5512082.02	399.49	0	250	60.1	60.1	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-13.3	-13.3
509	528393.84	5512082.02	399.49	0	500	64.5	64.5	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-6.4	-6.4
510	528393.84	5512082.02	399.49	0	1000	67.7	67.7	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-4.7	-4.7
511	528393.84	5512082.02	399.49	0	2000	67.9	67.9	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-9.9	-9.9
512	528393.84	5512082.02	399.49	0	4000	60.7	60.7	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-37.9	-37.9
513	528393.84	5512082.02	399.49	0	8000	53.6	53.6	0.0	0.0	70.1	105.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-120.8	-120.8
514	527578.85	5511759.29	395.48	0	32	29.4	29.4	0.0	0.0	74.2	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-44.2	-44.2
515	527578.85	5511759.29	395.48	0	63	38.6	38.6	0.0	0.0	74.2	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-35.1	-35.1
516	527578.85	5511759.29	395.48	0	125	54.7	54.7	0.0	0.0	74.2	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-25.4	-25.4
517	527578.85	5511759.29	395.48	0	250	64.2	64.2	0.0	0.0	74.2	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-16.3	-16.3
518	527578.85	5511759.29	395.48	0	500	68.6	68.6	0.0	0.0	74.2	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.2	-12.2
519	527578.85	5511759.29	395.48	0	1000	71.8	71.8	0.0	0.0	74.2	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.4	-11.4
520	527578.85	5511759.29	395.48	0	2000	72.0	72.0	0.0	0.0	74.2	14.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-19.9	-19.9
521	527578.85	5511759.29	395.48	0	4000	64.8	64.8	0.0	0.0	74.2	47.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-60.7	-60.7
522	527578.85	5511759.29	395.48	0	8000	57.7	57.7	0.0	0.0	74.2	169.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-189.9	-189.9
523	528084.51	5511950.60	398.58	0	32	26.2	26.2	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-44.8	-44.8
524	528084.51	5511950.60	398.58	0	63	35.4	35.4	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-35.7	-35.7
525	528084.51	5511950.60	398.58	0	125	51.5	51.5	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-25.7	-25.7
526	528084.51	5511950.60	398.58	0	250	61.0	61.0	0.0	0.0	71.5	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-16.4	-16.4
527	528084.51	5511950.60	398.58	0	500	65.4	65.4	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	4.8	0.0	-0.0	-11.9	-11.9
528	528084.51	5511950.60	398.58	0	1000	68.6	68.6	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.5	-10.5
529	528084.51	5511950.60	398.58	0	2000	68.8	68.8	0.0	0.0	71.5	10.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-16.6	-16.6
530	528084.51	5511950.60	398.58	0	4000	61.6	61.6	0.0	0.0	71.5	34.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-48.2	-48.2
531	528084.51	5511950.60	398.58	0	8000	54.5	54.5	0.0	0.0	71.5	123.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-144.1	-144.1
532	528110.46	5511950.96	398.84	0	32	25.8	25.8	0.0	0.0	71.3	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-40.3	-40.3
533	528110.46	5511950.96	398.84	0	63	35.0	35.0	0.0	0.0	71.3	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-31.2	-31.2
534	528110.46	5511950.96	398.84	0	125	51.1	51.1	0.0	0.0	71.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-25.9	-25.9
535	528110.46	5511950.96	398.84	0	250	60.6	60.6	0.0	0.0	71.3	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-14.2	-14.2
536	528110.46	5511950.96	398.84	0	500	65.0	65.0	0.0	0.0	71.3	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-7.3	-7.3
537	528110.46	5511950.96	398.84	0	1000	68.2	68.2	0.0	0.0	71.3	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-5.8	-5.8
538	528110.46	5511950.96	398.84	0	2000	68.4	68.4	0.0	0.0	71.3	10.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-11.9	-11.9
539	528110.46	5511950.96	398.84	0	4000	61.2	61.2	0.0	0.0	71.3	33.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-42.9	-42.9
540	528110.46	5511950.96	398.84	0	8000	54.1	54.1	0.0	0.0	71.3	120.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-137.0	-137.0
541	527929.58	5511855.41	402.78	0	32	25.9	25.9	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-41.0	-41.0
542	527929.58	5511855.41	402.78	0	63	35.1	35.1	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-31.9	-31.9
543	527929.58	5511855.41	402.78	0	125	51.2	51.2	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-26.8	-26.8
544	527929.58	5511855.41	402.78	0	250	60.7	60.7	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-15.0	-15.0
545	527929.58	5511855.41	402.78	0	500	65.1	65.1	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-8.3	-8.3
546	527929.58	5511855.41	402.78	0	1000	68.3	68.3	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.0	-7.0
547	527929.58	5511855.41	402.78	0	2000	68.5	68.5	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-13.8	-13.8
548	527929.58	5511855.41	402.78	0	4000	61.3	61.3	0.0	0.0	72.2	37.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-47.5	-47.5
549	527929.58	5511855.41	402.78	0	8000	54.2	54.2	0.0	0.0	72.2	134.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-151.3	-151.3
550	527619.50	5511773.52	394.40	0	32	27.5	27.5	0.0	0.0	74.0	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-45.8	-45.8
551	527619.50	5511773.52	394.40	0	63	36.7	36.7	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-36.7	-36.7
552	527619.50	5511773.52	394.40	0	125	52.8	52.8	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-27.1	-27.1
553	527619.50	5511773.52	394.40	0	250	62.3	62.3	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-17.9	-17.9
554	527619.50	5511773.52	394.40	0	500	66.7	66.7	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-13.7	-13.7
555	527619.50	5511773.52	394.40	0	1000	69.9	69.9	0.0	0.0	74.0	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.9	-12.9
556	527619.50	5511773.52	394.40	0	2000	70.1	70.1	0.0	0.0	74.0	13.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-21.2	-21.2
557	527619.50	5511773.52	394.40	0	4000	62.9	62.9	0.0	0.0	74.0	46.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-61.2	-61.2
558	527619.50	5511773.52	394.40	0	8000	55.8	55.8	0.0	0.0	74.0	165.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-187.4	-187.4
559	527623.25	5511774.83	394.30	0	32	27.1	27.1	0.0	0.0	74.0	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-46.2	-46.2
560	527623.25	5511774.83	394.30	0	63	36.3	36.3	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-37.1	-37.1
561	527623.25	5511774.83	394.30	0	125	52.4	52.4	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-27.5	-27.5
562	527623.25	5511774.83	394.30	0	250	61.9	61.9	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-18.3	-18.3
563	527623.25	5511774.83	394.30	0	500	66.3	66.3	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-14.1	-14.1
564	527623.25	5511774.83	394.30	0	1000	69.5	69.5	0.0	0.0	74.0	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-13.3	-13.3
565	527623.25	5511774.83	394.30	0	2000	69.7	69.7	0.0	0.0	74.0	13.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-21.6	-21.6
566	527623.25	5511774.83	394.30	0	4000	62.5	62.5	0.0	0.0	74.0	46.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-61.5	-61.5
567	527623.25	5511774.83	394.30	0	8000	55.4	55.4	0.0	0.0	74.0	165.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-187.4	-187.4

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
568	527627.29	5511778.16	394.21	0	32	26.1	26.1	0.0	0.0	74.0	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-47.2	-47.2
569	527627.29	5511778.16	394.21	0	63	35.3	35.3	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.1	-38.1
570	527627.29	5511778.16	394.21	0	125	51.4	51.4	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-28.4	-28.4
571	527627.29	5511778.16	394.21	0	250	60.9	60.9	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-19.3	-19.3
572	527627.29	5511778.16	394.21	0	500	65.3	65.3	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.1	-15.1
573	527627.29	5511778.16	394.21	0	1000	68.5	68.5	0.0	0.0	74.0	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-14.3	-14.3
574	527627.29	5511778.16	394.21	0	2000	68.7	68.7	0.0	0.0	74.0	13.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-22.6	-22.6
575	527627.29	5511778.16	394.21	0	4000	61.5	61.5	0.0	0.0	74.0	46.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-62.3	-62.3
576	527627.29	5511778.16	394.21	0	8000	54.4	54.4	0.0	0.0	74.0	164.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-188.0	-188.0
577	527503.87	5511816.58	395.67	0	32	26.8	26.8	0.0	0.0	74.8	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-47.3	-47.3
578	527503.87	5511816.58	395.67	0	63	36.0	36.0	0.0	0.0	74.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.2	-38.2
579	527503.87	5511816.58	395.67	0	125	52.1	52.1	0.0	0.0	74.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-28.6	-28.6
580	527503.87	5511816.58	395.67	0	250	61.6	61.6	0.0	0.0	74.8	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-19.6	-19.6
581	527503.87	5511816.58	395.67	0	500	66.0	66.0	0.0	0.0	74.8	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.5	-15.5
582	527503.87	5511816.58	395.67	0	1000	69.2	69.2	0.0	0.0	74.8	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-14.9	-14.9
583	527503.87	5511816.58	395.67	0	2000	69.4	69.4	0.0	0.0	74.8	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-23.9	-23.9
584	527503.87	5511816.58	395.67	0	4000	62.2	62.2	0.0	0.0	74.8	50.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-66.7	-66.7
585	527503.87	5511816.58	395.67	0	8000	55.1	55.1	0.0	0.0	74.8	179.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-203.3	-203.3
586	527629.06	5511780.29	394.22	0	32	25.4	25.4	0.0	0.0	74.0	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-47.9	-47.9
587	527629.06	5511780.29	394.22	0	63	34.6	34.6	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.8	-38.8
588	527629.06	5511780.29	394.22	0	125	50.7	50.7	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-29.2	-29.2
589	527629.06	5511780.29	394.22	0	250	60.2	60.2	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-20.0	-20.0
590	527629.06	5511780.29	394.22	0	500	64.6	64.6	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.8	-15.8
591	527629.06	5511780.29	394.22	0	1000	67.8	67.8	0.0	0.0	74.0	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.0	-15.0
592	527629.06	5511780.29	394.22	0	2000	68.0	68.0	0.0	0.0	74.0	13.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-23.3	-23.3
593	527629.06	5511780.29	394.22	0	4000	60.8	60.8	0.0	0.0	74.0	46.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-63.0	-63.0
594	527629.06	5511780.29	394.22	0	8000	53.7	53.7	0.0	0.0	74.0	164.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-188.6	-188.6
595	527926.30	5511855.09	402.72	0	32	23.5	23.5	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-43.4	-43.4
596	527926.30	5511855.09	402.72	0	63	32.7	32.7	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-34.3	-34.3
597	527926.30	5511855.09	402.72	0	125	48.8	48.8	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-29.2	-29.2
598	527926.30	5511855.09	402.72	0	250	58.3	58.3	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-17.5	-17.5
599	527926.30	5511855.09	402.72	0	500	62.7	62.7	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-10.8	-10.8
600	527926.30	5511855.09	402.72	0	1000	65.9	65.9	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-9.5	-9.5
601	527926.30	5511855.09	402.72	0	2000	66.1	66.1	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-16.2	-16.2
602	527926.30	5511855.09	402.72	0	4000	58.9	58.9	0.0	0.0	72.2	37.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-50.1	-50.1
603	527926.30	5511855.09	402.72	0	8000	51.8	51.8	0.0	0.0	72.2	134.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-154.1	-154.1
604	528121.71	5511946.29	398.94	0	32	22.3	22.3	0.0	0.0	71.2	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-43.6	-43.6
605	528121.71	5511946.29	398.94	0	63	31.5	31.5	0.0	0.0	71.2	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-34.5	-34.5
606	528121.71	5511946.29	398.94	0	125	47.6	47.6	0.0	0.0	71.2	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-29.2	-29.2
607	528121.71	5511946.29	398.94	0	250	57.1	57.1	0.0	0.0	71.2	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-17.4	-17.4
608	528121.71	5511946.29	398.94	0	500	61.5	61.5	0.0	0.0	71.2	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-10.6	-10.6
609	528121.71	5511946.29	398.94	0	1000	64.7	64.7	0.0	0.0	71.2	3.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-9.1	-9.1
610	528121.71	5511946.29	398.94	0	2000	64.9	64.9	0.0	0.0	71.2	9.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-15.1	-15.1
611	528121.71	5511946.29	398.94	0	4000	57.7	57.7	0.0	0.0	71.2	33.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-45.8	-45.8
612	528121.71	5511946.29	398.94	0	8000	50.6	50.6	0.0	0.0	71.2	119.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-138.9	-138.9
613	527625.68	5511776.23	394.23	0	32	24.4	24.4	0.0	0.0	74.0	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-48.9	-48.9
614	527625.68	5511776.23	394.23	0	63	33.6	33.6	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.8	-39.8
615	527625.68	5511776.23	394.23	0	125	49.7	49.7	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-30.2	-30.2
616	527625.68	5511776.23	394.23	0	250	59.2	59.2	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-21.0	-21.0
617	527625.68	5511776.23	394.23	0	500	63.6	63.6	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-16.8	-16.8
618	527625.68	5511776.23	394.23	0	1000	66.8	66.8	0.0	0.0	74.0	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-16.0	-16.0
619	527625.68	5511776.23	394.23	0	2000	67.0	67.0	0.0	0.0	74.0	13.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-24.3	-24.3
620	527625.68	5511776.23	394.23	0	4000	59.8	59.8	0.0	0.0	74.0	46.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-64.1	-64.1
621	527625.68	5511776.23	394.23	0	8000	52.7	52.7	0.0	0.0	74.0	164.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-189.9	-189.9
622	527927.64	5511855.01	402.71	0	32	21.8	21.8	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-45.0	-45.0
623	527927.64	5511855.01	402.71	0	63	31.0	31.0	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-35.9	-35.9
624	527927.64	5511855.01	402.71	0	125	47.1	47.1	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-30.8	-30.8
625	527927.64	5511855.01	402.71	0	250	56.6	56.6	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-19.1	-19.1
626	527927.64	5511855.01	402.71	0	500	61.0	61.0	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-12.4	-12.4
627	527927.64	5511855.01	402.71	0	1000	64.2	64.2	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-11.1	-11.1
628	527927.64	5511855.01	402.71	0	2000	64.4	64.4	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-17.8	-17.8
629	527927.64	5511855.01	402.71	0	4000	57.2	57.2	0.0	0.0	72.2	37.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-51.6	-51.6
630	527927.64	5511855.01	402.71	0	8000	50.1	50.1	0.0	0.0	72.2	134.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-155.6	-155.6

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #2", ID: "Htruck2_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
631	527737.47	5511871.66	396.82	0	32	22.7	22.7	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-50.1	-50.1
632	527737.47	5511871.66	396.82	0	63	31.9	31.9	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-41.1	-41.1
633	527737.47	5511871.66	396.82	0	125	48.0	48.0	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-31.3	-31.3
634	527737.47	5511871.66	396.82	0	250	57.5	57.5	0.0	0.0	73.5	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-22.2	-22.2
635	527737.47	5511871.66	396.82	0	500	61.9	61.9	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-17.9	-17.9
636	527737.47	5511871.66	396.82	0	1000	65.1	65.1	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-16.9	-16.9
637	527737.47	5511871.66	396.82	0	2000	65.3	65.3	0.0	0.0	73.5	12.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-24.8	-24.8
638	527737.47	5511871.66	396.82	0	4000	58.1	58.1	0.0	0.0	73.5	43.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-62.8	-62.8
639	527737.47	5511871.66	396.82	0	8000	51.0	51.0	0.0	0.0	73.5	155.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-182.1	-182.1
640	527522.28	5511819.87	395.28	0	32	23.4	23.4	0.0	0.0	74.6	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-50.5	-50.5
641	527522.28	5511819.87	395.28	0	63	32.6	32.6	0.0	0.0	74.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-41.4	-41.4
642	527522.28	5511819.87	395.28	0	125	48.7	48.7	0.0	0.0	74.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-31.8	-31.8
643	527522.28	5511819.87	395.28	0	250	58.2	58.2	0.0	0.0	74.6	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-22.8	-22.8
644	527522.28	5511819.87	395.28	0	500	62.6	62.6	0.0	0.0	74.6	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-18.6	-18.6
645	527522.28	5511819.87	395.28	0	1000	65.8	65.8	0.0	0.0	74.6	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-18.0	-18.0
646	527522.28	5511819.87	395.28	0	2000	66.0	66.0	0.0	0.0	74.6	14.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-27.0	-27.0
647	527522.28	5511819.87	395.28	0	4000	58.8	58.8	0.0	0.0	74.6	49.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-69.4	-69.4
648	527522.28	5511819.87	395.28	0	8000	51.7	51.7	0.0	0.0	74.6	177.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-204.5	-204.5
649	527575.51	5511758.12	395.57	0	32	19.1	19.1	0.0	0.0	74.3	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-54.5	-54.5
650	527575.51	5511758.12	395.57	0	63	28.3	28.3	0.0	0.0	74.3	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-45.4	-45.4
651	527575.51	5511758.12	395.57	0	125	44.4	44.4	0.0	0.0	74.3	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-35.8	-35.8
652	527575.51	5511758.12	395.57	0	250	53.9	53.9	0.0	0.0	74.3	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-26.7	-26.7
653	527575.51	5511758.12	395.57	0	500	58.3	58.3	0.0	0.0	74.3	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-22.5	-22.5
654	527575.51	5511758.12	395.57	0	1000	61.5	61.5	0.0	0.0	74.3	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-21.8	-21.8
655	527575.51	5511758.12	395.57	0	2000	61.7	61.7	0.0	0.0	74.3	14.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-30.3	-30.3
656	527575.51	5511758.12	395.57	0	4000	54.5	54.5	0.0	0.0	74.3	47.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-71.1	-71.1
657	527575.51	5511758.12	395.57	0	8000	47.4	47.4	0.0	0.0	74.3	170.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-200.6	-200.6
658	527575.82	5511758.23	395.56	0	32	8.1	8.1	0.0	0.0	74.3	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-65.5	-65.5
659	527575.82	5511758.23	395.56	0	63	17.3	17.3	0.0	0.0	74.3	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-56.4	-56.4
660	527575.82	5511758.23	395.56	0	125	33.4	33.4	0.0	0.0	74.3	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-46.8	-46.8
661	527575.82	5511758.23	395.56	0	250	42.9	42.9	0.0	0.0	74.3	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-37.6	-37.6
662	527575.82	5511758.23	395.56	0	500	47.3	47.3	0.0	0.0	74.3	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-33.5	-33.5
663	527575.82	5511758.23	395.56	0	1000	50.5	50.5	0.0	0.0	74.3	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-32.8	-32.8
664	527575.82	5511758.23	395.56	0	2000	50.7	50.7	0.0	0.0	74.3	14.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-41.3	-41.3
665	527575.82	5511758.23	395.56	0	4000	43.5	43.5	0.0	0.0	74.3	47.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-82.1	-82.1
666	527575.82	5511758.23	395.56	0	8000	36.4	36.4	0.0	0.0	74.3	170.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-211.6	-211.6

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
1	528462.61	5512253.37	400.21	0	32	47.0	47.0	0.0	0.0	71.0	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-18.8	-18.8
2	528462.61	5512253.37	400.21	0	63	56.2	56.2	0.0	0.0	71.0	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-9.7	-9.7
3	528462.61	5512253.37	400.21	0	125	72.3	72.3	0.0	0.0	71.0	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-4.3	-4.3
4	528462.61	5512253.37	400.21	0	250	81.8	81.8	0.0	0.0	71.0	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	7.4	7.4
5	528462.61	5512253.37	400.21	0	500	86.2	86.2	0.0	0.0	71.0	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	14.3	14.3
6	528462.61	5512253.37	400.21	0	1000	89.4	89.4	0.0	0.0	71.0	3.6	-1.1	0.0	0.0	0.0	0.0	-0.0	15.8	15.8
7	528462.61	5512253.37	400.21	0	2000	89.6	89.6	0.0	0.0	71.0	9.7	-1.1	0.0	0.0	0.0	0.0	-0.0	10.0	10.0
8	528462.61	5512253.37	400.21	0	4000	82.4	82.4	0.0	0.0	71.0	32.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-20.3	-20.3
9	528462.61	5512253.37	400.21	0	8000	75.3	75.3	0.0	0.0	71.0	116.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-111.4	-111.4
10	528334.72	5512262.17	399.46	0	32	47.3	47.3	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-19.1	-19.1
11	528334.72	5512262.17	399.46	0	63	56.5	56.5	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-10.0	-10.0
12	528334.72	5512262.17	399.46	0	125	72.6	72.6	0.0	0.0	71.7	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-4.8	-4.8
13	528334.72	5512262.17	399.46	0	250	82.1	82.1	0.0	0.0	71.7	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	7.0	7.0
14	528334.72	5512262.17	399.46	0	500	86.5	86.5	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	13.8	13.8
15	528334.72	5512262.17	399.46	0	1000	89.7	89.7	0.0	0.0	71.7	3.9	-1.1	0.0	0.0	0.0	0.0	-0.0	15.2	15.2
16	528334.72	5512262.17	399.46	0	2000	89.9	89.9	0.0	0.0	71.7	10.4	-1.1	0.0	0.0	0.0	0.0	-0.0	8.9	8.9
17	528334.72	5512262.17	399.46	0	4000	82.7	82.7	0.0	0.0	71.7	35.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-23.3	-23.3
18	528334.72	5512262.17	399.46	0	8000	75.6	75.6	0.0	0.0	71.7	126.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-121.1	-121.1
19	528265.42	5511968.71	399.35	0	32	45.4	45.4	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
20	528265.42	5511968.71	399.35	0	63	54.6	54.6	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-10.5	-10.5
21	528265.42	5511968.71	399.35	0	125	70.7	70.7	0.0	0.0	70.2	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-5.0	-5.0
22	528265.42	5511968.71	399.35	0	250	80.2	80.2	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	6.7	6.7
23	528265.42	5511968.71	399.35	0	500	84.6	84.6	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	13.6	13.6

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
24	528265.42	5511968.71	399.35	0	1000	87.8	87.8	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	15.3	15.3
25	528265.42	5511968.71	399.35	0	2000	88.0	88.0	0.0	0.0	70.2	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	10.0	10.0
26	528265.42	5511968.71	399.35	0	4000	80.8	80.8	0.0	0.0	70.2	30.0	-1.0	0.0	0.0	0.0	0.0	-0.0	-18.4	-18.4
27	528265.42	5511968.71	399.35	0	8000	73.7	73.7	0.0	0.0	70.2	107.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-102.6	-102.6
28	528500.14	5512172.04	399.39	0	32	45.4	45.4	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
29	528500.14	5512172.04	399.39	0	63	54.6	54.6	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-10.5	-10.5
30	528500.14	5512172.04	399.39	0	125	70.7	70.7	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-5.0	-5.0
31	528500.14	5512172.04	399.39	0	250	80.2	80.2	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	6.7	6.7
32	528500.14	5512172.04	399.39	0	500	84.6	84.6	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	13.6	13.6
33	528500.14	5512172.04	399.39	0	1000	87.8	87.8	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	15.3	15.3
34	528500.14	5512172.04	399.39	0	2000	88.0	88.0	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	10.0	10.0
35	528500.14	5512172.04	399.39	0	4000	80.8	80.8	0.0	0.0	70.2	29.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-18.2	-18.2
36	528500.14	5512172.04	399.39	0	8000	73.7	73.7	0.0	0.0	70.2	106.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-101.8	-101.8
37	528187.56	5511949.94	399.40	0	32	45.6	45.6	0.0	0.0	70.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-19.9	-19.9
38	528187.56	5511949.94	399.40	0	63	54.8	54.8	0.0	0.0	70.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-10.8	-10.8
39	528187.56	5511949.94	399.40	0	125	70.9	70.9	0.0	0.0	70.7	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-5.4	-5.4
40	528187.56	5511949.94	399.40	0	250	80.4	80.4	0.0	0.0	70.7	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
41	528187.56	5511949.94	399.40	0	500	84.8	84.8	0.0	0.0	70.7	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	13.2	13.2
42	528187.56	5511949.94	399.40	0	1000	88.0	88.0	0.0	0.0	70.7	3.5	-1.1	0.0	0.0	0.0	0.0	-0.0	14.8	14.8
43	528187.56	5511949.94	399.40	0	2000	88.2	88.2	0.0	0.0	70.7	9.4	-1.1	0.0	0.0	0.0	0.0	-0.0	9.2	9.2
44	528187.56	5511949.94	399.40	0	4000	81.0	81.0	0.0	0.0	70.7	31.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-20.4	-20.4
45	528187.56	5511949.94	399.40	0	8000	73.9	73.9	0.0	0.0	70.7	113.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-109.0	-109.0
46	528515.01	5512205.74	399.73	0	32	44.9	44.9	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.3	-20.3
47	528515.01	5512205.74	399.73	0	63	54.1	54.1	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-11.1	-11.1
48	528515.01	5512205.74	399.73	0	125	70.2	70.2	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-5.7	-5.7
49	528515.01	5512205.74	399.73	0	250	79.7	79.7	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	6.0	6.0
50	528515.01	5512205.74	399.73	0	500	84.1	84.1	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	13.0	13.0
51	528515.01	5512205.74	399.73	0	1000	87.3	87.3	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	14.6	14.6
52	528515.01	5512205.74	399.73	0	2000	87.5	87.5	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	9.2	9.2
53	528515.01	5512205.74	399.73	0	4000	80.3	80.3	0.0	0.0	70.4	30.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-19.5	-19.5
54	528515.01	5512205.74	399.73	0	8000	73.2	73.2	0.0	0.0	70.4	108.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-105.0	-105.0
55	528036.06	5512221.13	400.35	0	32	47.2	47.2	0.0	0.0	73.0	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-20.4	-20.4
56	528036.06	5512221.13	400.35	0	63	56.4	56.4	0.0	0.0	73.0	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-11.3	-11.3
57	528036.06	5512221.13	400.35	0	125	72.5	72.5	0.0	0.0	73.0	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-6.3	-6.3
58	528036.06	5512221.13	400.35	0	250	82.0	82.0	0.0	0.0	73.0	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	5.4	5.4
59	528036.06	5512221.13	400.35	0	500	86.4	86.4	0.0	0.0	73.0	2.4	-1.0	0.0	0.0	0.0	0.0	-0.0	12.0	12.0
60	528036.06	5512221.13	400.35	0	1000	89.6	89.6	0.0	0.0	73.0	4.6	-1.1	0.0	0.0	0.0	0.0	-0.0	13.1	13.1
61	528036.06	5512221.13	400.35	0	2000	89.8	89.8	0.0	0.0	73.0	12.1	-1.1	0.0	0.0	0.0	0.0	-0.0	5.8	5.8
62	528036.06	5512221.13	400.35	0	4000	82.6	82.6	0.0	0.0	73.0	41.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-30.4	-30.4
63	528036.06	5512221.13	400.35	0	8000	75.5	75.5	0.0	0.0	73.0	146.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-143.0	-143.0
64	528445.85	5512144.59	398.43	0	32	44.3	44.3	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-20.8	-20.8
65	528445.85	5512144.59	398.43	0	63	53.5	53.5	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-11.7	-11.7
66	528445.85	5512144.59	398.43	0	125	69.6	69.6	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-6.2	-6.2
67	528445.85	5512144.59	398.43	0	250	79.1	79.1	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	5.5	5.5
68	528445.85	5512144.59	398.43	0	500	83.5	83.5	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	12.4	12.4
69	528445.85	5512144.59	398.43	0	1000	86.7	86.7	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	14.1	14.1
70	528445.85	5512144.59	398.43	0	2000	86.9	86.9	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	8.8	8.8
71	528445.85	5512144.59	398.43	0	4000	79.7	79.7	0.0	0.0	70.3	30.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
72	528445.85	5512144.59	398.43	0	8000	72.6	72.6	0.0	0.0	70.3	107.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-104.0	-104.0
73	528303.87	5511988.43	399.36	0	32	43.9	43.9	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-21.0	-21.0
74	528303.87	5511988.43	399.36	0	63	53.1	53.1	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-11.9	-11.9
75	528303.87	5511988.43	399.36	0	125	69.2	69.2	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-6.4	-6.4
76	528303.87	5511988.43	399.36	0	250	78.7	78.7	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	5.3	5.3
77	528303.87	5511988.43	399.36	0	500	83.1	83.1	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	12.3	12.3
78	528303.87	5511988.43	399.36	0	1000	86.3	86.3	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	14.0	14.0
79	528303.87	5511988.43	399.36	0	2000	86.5	86.5	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	8.8	8.8
80	528303.87	5511988.43	399.36	0	4000	79.3	79.3	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-19.2	-19.2
81	528303.87	5511988.43	399.36	0	8000	72.2	72.2	0.0	0.0	70.1	105.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-102.0	-102.0
82	528141.64	5511949.36	399.14	0	32	44.2	44.2	0.0	0.0	71.0	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-21.6	-21.6
83	528141.64	5511949.36	399.14	0	63	53.4	53.4	0.0	0.0	71.0	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-12.5	-12.5
84	528141.64	5511949.36	399.14	0	125	69.5	69.5	0.0	0.0	71.0	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-7.1	-7.1
85	528141.64	5511949.36	399.14	0	250	79.0	79.0	0.0	0.0	71.0	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	4.6	4.6
86	528141.64	5511949.36	399.14	0	500	83.4	83.4	0.0	0.0	71.0	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	11.5	11.5

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
87	528141.64	5511949.36	399.14	0	1000	86.6	86.6	0.0	0.0	71.0	3.7	-1.1	0.0	0.0	0.0	0.0	-0.0	13.0	13.0
88	528141.64	5511949.36	399.14	0	2000	86.8	86.8	0.0	0.0	71.0	9.7	-1.1	0.0	0.0	0.0	0.0	-0.0	7.1	7.1
89	528141.64	5511949.36	399.14	0	4000	79.6	79.6	0.0	0.0	71.0	33.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-23.3	-23.3
90	528141.64	5511949.36	399.14	0	8000	72.5	72.5	0.0	0.0	71.0	117.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-115.1	-115.1
91	527716.15	5512170.92	401.14	0	32	47.2	47.2	0.0	0.0	74.4	0.1	-5.5	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
92	527716.15	5512170.92	401.14	0	63	56.4	56.4	0.0	0.0	74.4	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-12.7	-12.7
93	527716.15	5512170.92	401.14	0	125	72.5	72.5	0.0	0.0	74.4	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-7.9	-7.9
94	527716.15	5512170.92	401.14	0	250	82.0	82.0	0.0	0.0	74.4	1.6	2.3	0.0	0.0	0.0	0.0	-0.0	3.7	3.7
95	527716.15	5512170.92	401.14	0	500	86.4	86.4	0.0	0.0	74.4	2.9	-1.1	0.0	0.0	0.0	0.0	-0.0	10.1	10.1
96	527716.15	5512170.92	401.14	0	1000	89.6	89.6	0.0	0.0	74.4	5.4	-1.1	0.0	0.0	0.0	0.0	-0.0	10.8	10.8
97	527716.15	5512170.92	401.14	0	2000	89.8	89.8	0.0	0.0	74.4	14.4	-1.1	0.0	0.0	0.0	0.0	-0.0	2.1	2.1
98	527716.15	5512170.92	401.14	0	4000	82.6	82.6	0.0	0.0	74.4	48.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-39.4	-39.4
99	527716.15	5512170.92	401.14	0	8000	75.5	75.5	0.0	0.0	74.4	173.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-171.4	-171.4
100	528409.93	5512265.70	399.11	0	32	43.9	43.9	0.0	0.0	71.3	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-22.2	-22.2
101	528409.93	5512265.70	399.11	0	63	53.1	53.1	0.0	0.0	71.3	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-13.1	-13.1
102	528409.93	5512265.70	399.11	0	125	69.2	69.2	0.0	0.0	71.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-7.8	-7.8
103	528409.93	5512265.70	399.11	0	250	78.7	78.7	0.0	0.0	71.3	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	3.9	3.9
104	528409.93	5512265.70	399.11	0	500	83.1	83.1	0.0	0.0	71.3	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	10.8	10.8
105	528409.93	5512265.70	399.11	0	1000	86.3	86.3	0.0	0.0	71.3	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	12.2	12.2
106	528409.93	5512265.70	399.11	0	2000	86.5	86.5	0.0	0.0	71.3	10.0	-1.1	0.0	0.0	0.0	0.0	-0.0	6.2	6.2
107	528409.93	5512265.70	399.11	0	4000	79.3	79.3	0.0	0.0	71.3	34.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-25.0	-25.0
108	528409.93	5512265.70	399.11	0	8000	72.2	72.2	0.0	0.0	71.3	121.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-119.4	-119.4
109	528227.61	5511955.33	399.41	0	32	42.9	42.9	0.0	0.0	70.5	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-22.3	-22.3
110	528227.61	5511955.33	399.41	0	63	52.1	52.1	0.0	0.0	70.5	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-13.2	-13.2
111	528227.61	5511955.33	399.41	0	125	68.2	68.2	0.0	0.0	70.5	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-7.8	-7.8
112	528227.61	5511955.33	399.41	0	250	77.7	77.7	0.0	0.0	70.5	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
113	528227.61	5511955.33	399.41	0	500	82.1	82.1	0.0	0.0	70.5	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	10.9	10.9
114	528227.61	5511955.33	399.41	0	1000	85.3	85.3	0.0	0.0	70.5	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	12.5	12.5
115	528227.61	5511955.33	399.41	0	2000	85.5	85.5	0.0	0.0	70.5	9.1	-1.1	0.0	0.0	0.0	0.0	-0.0	7.1	7.1
116	528227.61	5511955.33	399.41	0	4000	78.3	78.3	0.0	0.0	70.5	30.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
117	528227.61	5511955.33	399.41	0	8000	71.2	71.2	0.0	0.0	70.5	109.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-107.9	-107.9
118	527978.51	5512196.28	400.85	0	32	45.2	45.2	0.0	0.0	73.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-22.5	-22.5
119	527978.51	5512196.28	400.85	0	63	54.4	54.4	0.0	0.0	73.2	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-13.4	-13.4
120	527978.51	5512196.28	400.85	0	125	70.5	70.5	0.0	0.0	73.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-8.5	-8.5
121	527978.51	5512196.28	400.85	0	250	80.0	80.0	0.0	0.0	73.2	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	3.2	3.2
122	527978.51	5512196.28	400.85	0	500	84.4	84.4	0.0	0.0	73.2	2.5	-1.1	0.0	0.0	0.0	0.0	-0.0	9.9	9.9
123	527978.51	5512196.28	400.85	0	1000	87.6	87.6	0.0	0.0	73.2	4.7	-1.1	0.0	0.0	0.0	0.0	-0.0	10.9	10.9
124	527978.51	5512196.28	400.85	0	2000	87.8	87.8	0.0	0.0	73.2	12.4	-1.1	0.0	0.0	0.0	0.0	-0.0	3.4	3.4
125	527978.51	5512196.28	400.85	0	4000	80.6	80.6	0.0	0.0	73.2	42.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-33.5	-33.5
126	527978.51	5512196.28	400.85	0	8000	73.5	73.5	0.0	0.0	73.2	149.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-148.5	-148.5
127	528141.27	5512245.82	400.40	0	32	44.6	44.6	0.0	0.0	72.5	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-22.6	-22.6
128	528141.27	5512245.82	400.40	0	63	53.8	53.8	0.0	0.0	72.5	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-13.5	-13.5
129	528141.27	5512245.82	400.40	0	125	69.9	69.9	0.0	0.0	72.5	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-8.4	-8.4
130	528141.27	5512245.82	400.40	0	250	79.4	79.4	0.0	0.0	72.5	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	3.3	3.3
131	528141.27	5512245.82	400.40	0	500	83.8	83.8	0.0	0.0	72.5	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	10.0	10.0
132	528141.27	5512245.82	400.40	0	1000	87.0	87.0	0.0	0.0	72.5	4.4	-1.1	0.0	0.0	0.0	0.0	-0.0	11.2	11.2
133	528141.27	5512245.82	400.40	0	2000	87.2	87.2	0.0	0.0	72.5	11.5	-1.1	0.0	0.0	0.0	0.0	-0.0	4.2	4.2
134	528141.27	5512245.82	400.40	0	4000	80.0	80.0	0.0	0.0	72.5	39.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-30.6	-30.6
135	528141.27	5512245.82	400.40	0	8000	72.9	72.9	0.0	0.0	72.5	139.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-138.1	-138.1
136	528416.56	5512131.20	399.00	0	32	42.4	42.4	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-22.8	-22.8
137	528416.56	5512131.20	399.00	0	63	51.6	51.6	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-13.7	-13.7
138	528416.56	5512131.20	399.00	0	125	67.7	67.7	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-8.2	-8.2
139	528416.56	5512131.20	399.00	0	250	77.2	77.2	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	3.5	3.5
140	528416.56	5512131.20	399.00	0	500	81.6	81.6	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	10.5	10.5
141	528416.56	5512131.20	399.00	0	1000	84.8	84.8	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	12.1	12.1
142	528416.56	5512131.20	399.00	0	2000	85.0	85.0	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	6.8	6.8
143	528416.56	5512131.20	399.00	0	4000	77.8	77.8	0.0	0.0	70.3	30.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
144	528416.56	5512131.20	399.00	0	8000	70.7	70.7	0.0	0.0	70.3	108.1	-1.0	0.0	0.0	0.0	0.0	-0.0	-106.7	-106.7
145	528023.23	5511910.38	399.29	0	32	43.8	43.8	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-22.7	-22.7
146	528023.23	5511910.38	399.29	0	63	53.0	53.0	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-13.6	-13.6
147	528023.23	5511910.38	399.29	0	125	69.1	69.1	0.0	0.0	71.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-8.4	-8.4
148	528023.23	5511910.38	399.29	0	250	78.6	78.6	0.0	0.0	71.7	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	3.4	3.4
149	528023.23	5511910.38	399.29	0	500	83.0	83.0	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	10.2	10.2

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
150	528023.23	5511910.38	399.29	0	1000	86.2	86.2	0.0	0.0	71.7	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	11.5	11.5
151	528023.23	5511910.38	399.29	0	2000	86.4	86.4	0.0	0.0	71.7	10.5	-1.1	0.0	0.0	0.0	0.0	-0.0	5.2	5.2
152	528023.23	5511910.38	399.29	0	4000	79.2	79.2	0.0	0.0	71.7	35.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-27.2	-27.2
153	528023.23	5511910.38	399.29	0	8000	72.1	72.1	0.0	0.0	71.7	127.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-125.9	-125.9
154	528065.02	5511945.03	398.02	0	32	43.3	43.3	0.0	0.0	71.6	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-27.7	-27.7
155	528065.02	5511945.03	398.02	0	63	52.5	52.5	0.0	0.0	71.6	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-18.6	-18.6
156	528065.02	5511945.03	398.02	0	125	68.6	68.6	0.0	0.0	71.6	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-8.7	-8.7
157	528065.02	5511945.03	398.02	0	250	78.1	78.1	0.0	0.0	71.6	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	0.7	0.7
158	528065.02	5511945.03	398.02	0	500	82.5	82.5	0.0	0.0	71.6	2.1	-1.0	0.0	0.0	4.8	0.0	-0.0	5.1	5.1
159	528065.02	5511945.03	398.02	0	1000	85.7	85.7	0.0	0.0	71.6	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	6.5	6.5
160	528065.02	5511945.03	398.02	0	2000	85.9	85.9	0.0	0.0	71.6	10.3	-1.1	0.0	0.0	4.8	0.0	-0.0	0.3	0.3
161	528065.02	5511945.03	398.02	0	4000	78.7	78.7	0.0	0.0	71.6	35.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-31.6	-31.6
162	528065.02	5511945.03	398.02	0	8000	71.6	71.6	0.0	0.0	71.6	125.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-128.6	-128.6
163	527862.39	5511871.41	397.38	0	32	44.3	44.3	0.0	0.0	72.7	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-27.8	-27.8
164	527862.39	5511871.41	397.38	0	63	53.5	53.5	0.0	0.0	72.7	0.2	-5.4	0.0	0.0	4.8	0.0	-0.0	-18.7	-18.7
165	527862.39	5511871.41	397.38	0	125	69.6	69.6	0.0	0.0	72.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-8.9	-8.9
166	527862.39	5511871.41	397.38	0	250	79.1	79.1	0.0	0.0	72.7	1.3	2.3	0.0	0.0	2.5	0.0	-0.0	0.3	0.3
167	527862.39	5511871.41	397.38	0	500	83.5	83.5	0.0	0.0	72.7	2.3	-1.0	0.0	0.0	4.8	0.0	-0.0	4.7	4.7
168	527862.39	5511871.41	397.38	0	1000	86.7	86.7	0.0	0.0	72.7	4.5	-1.1	0.0	0.0	4.8	0.0	-0.0	5.8	5.8
169	527862.39	5511871.41	397.38	0	2000	86.9	86.9	0.0	0.0	72.7	11.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.3	-1.3
170	527862.39	5511871.41	397.38	0	4000	79.7	79.7	0.0	0.0	72.7	39.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-36.6	-36.6
171	527862.39	5511871.41	397.38	0	8000	72.6	72.6	0.0	0.0	72.7	142.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-146.1	-146.1
172	527950.52	5511856.87	402.90	0	32	43.6	43.6	0.0	0.0	72.1	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-23.1	-23.1
173	527950.52	5511856.87	402.90	0	63	52.8	52.8	0.0	0.0	72.1	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-14.0	-14.0
174	527950.52	5511856.87	402.90	0	125	68.9	68.9	0.0	0.0	72.1	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-8.9	-8.9
175	527950.52	5511856.87	402.90	0	250	78.4	78.4	0.0	0.0	72.1	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	2.8	2.8
176	527950.52	5511856.87	402.90	0	500	82.8	82.8	0.0	0.0	72.1	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	9.6	9.6
177	527950.52	5511856.87	402.90	0	1000	86.0	86.0	0.0	0.0	72.1	4.1	-1.1	0.0	0.0	0.0	0.0	-0.0	10.9	10.9
178	527950.52	5511856.87	402.90	0	2000	86.2	86.2	0.0	0.0	72.1	10.9	-1.1	0.0	0.0	0.0	0.0	-0.0	4.3	4.3
179	527950.52	5511856.87	402.90	0	4000	79.0	79.0	0.0	0.0	72.1	37.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-29.0	-29.0
180	527950.52	5511856.87	402.90	0	8000	71.9	71.9	0.0	0.0	72.1	132.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-131.3	-131.3
181	528339.51	5512029.45	399.37	0	32	41.5	41.5	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-23.4	-23.4
182	528339.51	5512029.45	399.37	0	63	50.7	50.7	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-14.3	-14.3
183	528339.51	5512029.45	399.37	0	125	66.8	66.8	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-8.8	-8.8
184	528339.51	5512029.45	399.37	0	250	76.3	76.3	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	2.9	2.9
185	528339.51	5512029.45	399.37	0	500	80.7	80.7	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	9.9	9.9
186	528339.51	5512029.45	399.37	0	1000	83.9	83.9	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	11.6	11.6
187	528339.51	5512029.45	399.37	0	2000	84.1	84.1	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
188	528339.51	5512029.45	399.37	0	4000	76.9	76.9	0.0	0.0	70.1	29.5	-1.0	0.0	0.0	0.0	0.0	-0.0	-21.7	-21.7
189	528339.51	5512029.45	399.37	0	8000	69.8	69.8	0.0	0.0	70.1	105.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-104.5	-104.5
190	527772.58	5512147.47	402.29	0	32	45.2	45.2	0.0	0.0	74.1	0.1	-5.5	0.0	0.0	0.0	0.0	-0.0	-23.4	-23.4
191	527772.58	5512147.47	402.29	0	63	54.4	54.4	0.0	0.0	74.1	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-14.3	-14.3
192	527772.58	5512147.47	402.29	0	125	70.5	70.5	0.0	0.0	74.1	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-9.4	-9.4
193	527772.58	5512147.47	402.29	0	250	80.0	80.0	0.0	0.0	74.1	1.5	2.3	0.0	0.0	0.0	0.0	-0.0	2.2	2.2
194	527772.58	5512147.47	402.29	0	500	84.4	84.4	0.0	0.0	74.1	2.8	-1.1	0.0	0.0	0.0	0.0	-0.0	8.7	8.7
195	527772.58	5512147.47	402.29	0	1000	87.6	87.6	0.0	0.0	74.1	5.2	-1.1	0.0	0.0	0.0	0.0	-0.0	9.4	9.4
196	527772.58	5512147.47	402.29	0	2000	87.8	87.8	0.0	0.0	74.1	13.8	-1.1	0.0	0.0	0.0	0.0	-0.0	1.1	1.1
197	527772.58	5512147.47	402.29	0	4000	80.6	80.6	0.0	0.0	74.1	46.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-39.0	-39.0
198	527772.58	5512147.47	402.29	0	8000	73.5	73.5	0.0	0.0	74.1	166.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-165.9	-165.9
199	528281.08	5512255.35	399.99	0	32	43.1	43.1	0.0	0.0	71.9	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-23.5	-23.5
200	528281.08	5512255.35	399.99	0	63	52.3	52.3	0.0	0.0	71.9	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-14.4	-14.4
201	528281.08	5512255.35	399.99	0	125	68.4	68.4	0.0	0.0	71.9	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-9.2	-9.2
202	528281.08	5512255.35	399.99	0	250	77.9	77.9	0.0	0.0	71.9	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	2.5	2.5
203	528281.08	5512255.35	399.99	0	500	82.3	82.3	0.0	0.0	71.9	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	9.3	9.3
204	528281.08	5512255.35	399.99	0	1000	85.5	85.5	0.0	0.0	71.9	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	10.6	10.6
205	528281.08	5512255.35	399.99	0	2000	85.7	85.7	0.0	0.0	71.9	10.7	-1.1	0.0	0.0	0.0	0.0	-0.0	4.2	4.2
206	528281.08	5512255.35	399.99	0	4000	78.5	78.5	0.0	0.0	71.9	36.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-28.6	-28.6
207	528281.08	5512255.35	399.99	0	8000	71.4	71.4	0.0	0.0	71.9	129.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-128.8	-128.8
208	527789.39	5511877.81	398.12	0	32	44.3	44.3	0.0	0.0	73.2	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-28.3	-28.3
209	527789.39	5511877.81	398.12	0	63	53.5	53.5	0.0	0.0	73.2	0.2	-5.4	0.0	0.0	4.8	0.0	-0.0	-19.2	-19.2
210	527789.39	5511877.81	398.12	0	125	69.6	69.6	0.0	0.0	73.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-9.4	-9.4
211	527789.39	5511877.81	398.12	0	250	79.1	79.1	0.0	0.0	73.2	1.3	2.3	0.0	0.0	2.5	0.0	-0.0	-0.2	-0.2
212	527789.39	5511877.81	398.12	0	500	83.5	83.5	0.0	0.0	73.2	2.5	-1.1	0.0	0.0	4.8	0.0	-0.0	4.1	4.1

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
213	527789.39	5511877.81	398.12	0	1000	86.7	86.7	0.0	0.0	73.2	4.7	-1.1	0.0	0.0	4.8	0.0	-0.0	5.1	5.1
214	527789.39	5511877.81	398.12	0	2000	86.9	86.9	0.0	0.0	73.2	12.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.4	-2.4
215	527789.39	5511877.81	398.12	0	4000	79.7	79.7	0.0	0.0	73.2	42.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-39.4	-39.4
216	527789.39	5511877.81	398.12	0	8000	72.6	72.6	0.0	0.0	73.2	150.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-154.8	-154.8
217	528328.89	5512012.37	399.36	0	32	41.2	41.2	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-23.7	-23.7
218	528328.89	5512012.37	399.36	0	63	50.4	50.4	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-14.5	-14.5
219	528328.89	5512012.37	399.36	0	125	66.5	66.5	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-9.0	-9.0
220	528328.89	5512012.37	399.36	0	250	76.0	76.0	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	2.7	2.7
221	528328.89	5512012.37	399.36	0	500	80.4	80.4	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	9.7	9.7
222	528328.89	5512012.37	399.36	0	1000	83.6	83.6	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	11.3	11.3
223	528328.89	5512012.37	399.36	0	2000	83.8	83.8	0.0	0.0	70.0	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	6.2	6.2
224	528328.89	5512012.37	399.36	0	4000	76.6	76.6	0.0	0.0	70.0	29.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
225	528328.89	5512012.37	399.36	0	8000	69.5	69.5	0.0	0.0	70.0	104.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-104.3	-104.3
226	527979.07	5511865.09	402.18	0	32	42.9	42.9	0.0	0.0	71.9	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-23.7	-23.7
227	527979.07	5511865.09	402.18	0	63	52.1	52.1	0.0	0.0	71.9	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
228	527979.07	5511865.09	402.18	0	125	68.2	68.2	0.0	0.0	71.9	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-9.4	-9.4
229	527979.07	5511865.09	402.18	0	250	77.7	77.7	0.0	0.0	71.9	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	2.3	2.3
230	527979.07	5511865.09	402.18	0	500	82.1	82.1	0.0	0.0	71.9	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	9.1	9.1
231	527979.07	5511865.09	402.18	0	1000	85.3	85.3	0.0	0.0	71.9	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	10.4	10.4
232	527979.07	5511865.09	402.18	0	2000	85.5	85.5	0.0	0.0	71.9	10.7	-1.1	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
233	527979.07	5511865.09	402.18	0	4000	78.3	78.3	0.0	0.0	71.9	36.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-28.8	-28.8
234	527979.07	5511865.09	402.18	0	8000	71.2	71.2	0.0	0.0	71.9	129.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-129.2	-129.2
235	527826.04	5511876.65	397.89	0	32	43.7	43.7	0.0	0.0	73.0	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-28.7	-28.7
236	527826.04	5511876.65	397.89	0	63	52.9	52.9	0.0	0.0	73.0	0.2	-5.4	0.0	0.0	4.8	0.0	-0.0	-19.6	-19.6
237	527826.04	5511876.65	397.89	0	125	69.0	69.0	0.0	0.0	73.0	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-9.8	-9.8
238	527826.04	5511876.65	397.89	0	250	78.5	78.5	0.0	0.0	73.0	1.3	2.3	0.0	0.0	2.5	0.0	-0.0	-0.6	-0.6
239	527826.04	5511876.65	397.89	0	500	82.9	82.9	0.0	0.0	73.0	2.4	-1.0	0.0	0.0	4.8	0.0	-0.0	3.8	3.8
240	527826.04	5511876.65	397.89	0	1000	86.1	86.1	0.0	0.0	73.0	4.6	-1.1	0.0	0.0	4.8	0.0	-0.0	4.8	4.8
241	527826.04	5511876.65	397.89	0	2000	86.3	86.3	0.0	0.0	73.0	12.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.5	-2.5
242	527826.04	5511876.65	397.89	0	4000	79.1	79.1	0.0	0.0	73.0	41.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-38.7	-38.7
243	527826.04	5511876.65	397.89	0	8000	72.0	72.0	0.0	0.0	73.0	146.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-151.2	-151.2
244	528360.74	5512078.85	399.41	0	32	41.0	41.0	0.0	0.0	70.3	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-24.1	-24.1
245	528360.74	5512078.85	399.41	0	63	50.2	50.2	0.0	0.0	70.3	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-15.0	-15.0
246	528360.74	5512078.85	399.41	0	125	66.3	66.3	0.0	0.0	70.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-9.5	-9.5
247	528360.74	5512078.85	399.41	0	250	75.8	75.8	0.0	0.0	70.3	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	2.2	2.2
248	528360.74	5512078.85	399.41	0	500	80.2	80.2	0.0	0.0	70.3	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	9.1	9.1
249	528360.74	5512078.85	399.41	0	1000	83.4	83.4	0.0	0.0	70.3	3.4	-1.0	0.0	0.0	0.0	0.0	-0.0	10.8	10.8
250	528360.74	5512078.85	399.41	0	2000	83.6	83.6	0.0	0.0	70.3	8.9	-1.0	0.0	0.0	0.0	0.0	-0.0	5.5	5.5
251	528360.74	5512078.85	399.41	0	4000	76.4	76.4	0.0	0.0	70.3	30.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-23.0	-23.0
252	528360.74	5512078.85	399.41	0	8000	69.3	69.3	0.0	0.0	70.3	107.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-107.6	-107.6
253	528199.53	5512249.14	400.03	0	32	42.9	42.9	0.0	0.0	72.3	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-24.0	-24.0
254	528199.53	5512249.14	400.03	0	63	52.1	52.1	0.0	0.0	72.3	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-14.9	-14.9
255	528199.53	5512249.14	400.03	0	125	68.2	68.2	0.0	0.0	72.3	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-9.8	-9.8
256	528199.53	5512249.14	400.03	0	250	77.7	77.7	0.0	0.0	72.3	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	1.9	1.9
257	528199.53	5512249.14	400.03	0	500	82.1	82.1	0.0	0.0	72.3	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	8.6	8.6
258	528199.53	5512249.14	400.03	0	1000	85.3	85.3	0.0	0.0	72.3	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	9.9	9.9
259	528199.53	5512249.14	400.03	0	2000	85.5	85.5	0.0	0.0	72.3	11.2	-1.1	0.0	0.0	0.0	0.0	-0.0	3.1	3.1
260	528199.53	5512249.14	400.03	0	4000	78.3	78.3	0.0	0.0	72.3	37.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-30.8	-30.8
261	528199.53	5512249.14	400.03	0	8000	71.2	71.2	0.0	0.0	72.3	135.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-135.1	-135.1
262	528040.10	5511934.52	398.02	0	32	42.3	42.3	0.0	0.0	71.7	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-28.8	-28.8
263	528040.10	5511934.52	398.02	0	63	51.5	51.5	0.0	0.0	71.7	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-19.7	-19.7
264	528040.10	5511934.52	398.02	0	125	67.6	67.6	0.0	0.0	71.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-9.8	-9.8
265	528040.10	5511934.52	398.02	0	250	77.1	77.1	0.0	0.0	71.7	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-0.5	-0.5
266	528040.10	5511934.52	398.02	0	500	81.5	81.5	0.0	0.0	71.7	2.1	-1.0	0.0	0.0	4.8	0.0	-0.0	4.0	4.0
267	528040.10	5511934.52	398.02	0	1000	84.7	84.7	0.0	0.0	71.7	4.0	-1.1	0.0	0.0	4.8	0.0	-0.0	5.4	5.4
268	528040.10	5511934.52	398.02	0	2000	84.9	84.9	0.0	0.0	71.7	10.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.0	-1.0
269	528040.10	5511934.52	398.02	0	4000	77.7	77.7	0.0	0.0	71.7	35.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-33.2	-33.2
270	528040.10	5511934.52	398.02	0	8000	70.6	70.6	0.0	0.0	71.7	126.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-131.7	-131.7
271	528358.44	5512061.77	399.33	0	32	40.5	40.5	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-24.5	-24.5
272	528358.44	5512061.77	399.33	0	63	49.7	49.7	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-15.4	-15.4
273	528358.44	5512061.77	399.33	0	125	65.8	65.8	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-9.9	-9.9
274	528358.44	5512061.77	399.33	0	250	75.3	75.3	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	1.8	1.8
275	528358.44	5512061.77	399.33	0	500	79.7	79.7	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	8.7	8.7

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
276	528358.44	5512061.77	399.33	0	1000	82.9	82.9	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	10.4	10.4
277	528358.44	5512061.77	399.33	0	2000	83.1	83.1	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	5.1	5.1
278	528358.44	5512061.77	399.33	0	4000	75.9	75.9	0.0	0.0	70.2	29.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-23.1	-23.1
279	528358.44	5512061.77	399.33	0	8000	68.8	68.8	0.0	0.0	70.2	106.4	-1.0	0.0	0.0	0.0	0.0	-0.0	-106.8	-106.8
280	528502.55	5512234.69	400.68	0	32	40.9	40.9	0.0	0.0	70.7	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-24.6	-24.6
281	528502.55	5512234.69	400.68	0	63	50.1	50.1	0.0	0.0	70.7	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-15.5	-15.5
282	528502.55	5512234.69	400.68	0	125	66.2	66.2	0.0	0.0	70.7	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-10.1	-10.1
283	528502.55	5512234.69	400.68	0	250	75.7	75.7	0.0	0.0	70.7	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
284	528502.55	5512234.69	400.68	0	500	80.1	80.1	0.0	0.0	70.7	1.9	-1.0	0.0	0.0	0.0	0.0	-0.0	8.6	8.6
285	528502.55	5512234.69	400.68	0	1000	83.3	83.3	0.0	0.0	70.7	3.5	-1.1	0.0	0.0	0.0	0.0	-0.0	10.1	10.1
286	528502.55	5512234.69	400.68	0	2000	83.5	83.5	0.0	0.0	70.7	9.3	-1.1	0.0	0.0	0.0	0.0	-0.0	4.5	4.5
287	528502.55	5512234.69	400.68	0	4000	76.3	76.3	0.0	0.0	70.7	31.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-24.9	-24.9
288	528502.55	5512234.69	400.68	0	8000	69.2	69.2	0.0	0.0	70.7	112.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-113.0	-113.0
289	528007.23	5511886.83	400.55	0	32	42.0	42.0	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-24.5	-24.5
290	528007.23	5511886.83	400.55	0	63	51.2	51.2	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-15.4	-15.4
291	528007.23	5511886.83	400.55	0	125	67.3	67.3	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-10.2	-10.2
292	528007.23	5511886.83	400.55	0	250	76.8	76.8	0.0	0.0	71.8	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	1.5	1.5
293	528007.23	5511886.83	400.55	0	500	81.2	81.2	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	8.3	8.3
294	528007.23	5511886.83	400.55	0	1000	84.4	84.4	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	9.7	9.7
295	528007.23	5511886.83	400.55	0	2000	84.6	84.6	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	3.3	3.3
296	528007.23	5511886.83	400.55	0	4000	77.4	77.4	0.0	0.0	71.8	35.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-29.1	-29.1
297	528007.23	5511886.83	400.55	0	8000	70.3	70.3	0.0	0.0	71.8	127.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-128.1	-128.1
298	528397.44	5512122.47	399.61	0	32	40.6	40.6	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-24.6	-24.6
299	528397.44	5512122.47	399.61	0	63	49.8	49.8	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-15.5	-15.5
300	528397.44	5512122.47	399.61	0	125	65.9	65.9	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-10.0	-10.0
301	528397.44	5512122.47	399.61	0	250	75.4	75.4	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
302	528397.44	5512122.47	399.61	0	500	79.8	79.8	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	8.6	8.6
303	528397.44	5512122.47	399.61	0	1000	83.0	83.0	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	10.3	10.3
304	528397.44	5512122.47	399.61	0	2000	83.2	83.2	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	4.9	4.9
305	528397.44	5512122.47	399.61	0	4000	76.0	76.0	0.0	0.0	70.4	30.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-23.8	-23.8
306	528397.44	5512122.47	399.61	0	8000	68.9	68.9	0.0	0.0	70.4	108.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-109.1	-109.1
307	528370.53	5512105.04	400.37	0	32	40.5	40.5	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-24.7	-24.7
308	528370.53	5512105.04	400.37	0	63	49.7	49.7	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-15.6	-15.6
309	528370.53	5512105.04	400.37	0	125	65.8	65.8	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-10.2	-10.2
310	528370.53	5512105.04	400.37	0	250	75.3	75.3	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	1.6	1.6
311	528370.53	5512105.04	400.37	0	500	79.7	79.7	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	8.5	8.5
312	528370.53	5512105.04	400.37	0	1000	82.9	82.9	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	10.1	10.1
313	528370.53	5512105.04	400.37	0	2000	83.1	83.1	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	4.7	4.7
314	528370.53	5512105.04	400.37	0	4000	75.9	75.9	0.0	0.0	70.4	30.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-24.1	-24.1
315	528370.53	5512105.04	400.37	0	8000	68.8	68.8	0.0	0.0	70.4	109.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-109.8	-109.8
316	527529.67	5511755.36	395.83	0	32	44.3	44.3	0.0	0.0	74.5	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-29.5	-29.5
317	527529.67	5511755.36	395.83	0	63	53.5	53.5	0.0	0.0	74.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-20.4	-20.4
318	527529.67	5511755.36	395.83	0	125	69.6	69.6	0.0	0.0	74.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-10.8	-10.8
319	527529.67	5511755.36	395.83	0	250	79.1	79.1	0.0	0.0	74.5	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-1.7	-1.7
320	527529.67	5511755.36	395.83	0	500	83.5	83.5	0.0	0.0	74.5	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	2.4	2.4
321	527529.67	5511755.36	395.83	0	1000	86.7	86.7	0.0	0.0	74.5	5.5	-1.1	0.0	0.0	4.8	0.0	-0.0	3.1	3.1
322	527529.67	5511755.36	395.83	0	2000	86.9	86.9	0.0	0.0	74.5	14.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.7	-5.7
323	527529.67	5511755.36	395.83	0	4000	79.7	79.7	0.0	0.0	74.5	49.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-47.6	-47.6
324	527529.67	5511755.36	395.83	0	8000	72.6	72.6	0.0	0.0	74.5	175.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-180.7	-180.7
325	527893.81	5511865.88	398.70	0	32	42.3	42.3	0.0	0.0	72.5	0.0	-5.4	0.0	0.0	4.8	0.0	-0.0	-29.7	-29.7
326	527893.81	5511865.88	398.70	0	63	51.5	51.5	0.0	0.0	72.5	0.1	-5.4	0.0	0.0	4.8	0.0	-0.0	-20.6	-20.6
327	527893.81	5511865.88	398.70	0	125	67.6	67.6	0.0	0.0	72.5	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-10.7	-10.7
328	527893.81	5511865.88	398.70	0	250	77.1	77.1	0.0	0.0	72.5	1.2	2.3	0.0	0.0	2.4	0.0	-0.0	-1.4	-1.4
329	527893.81	5511865.88	398.70	0	500	81.5	81.5	0.0	0.0	72.5	2.3	-1.0	0.0	0.0	4.8	0.0	-0.0	2.9	2.9
330	527893.81	5511865.88	398.70	0	1000	84.7	84.7	0.0	0.0	72.5	4.3	-1.1	0.0	0.0	4.8	0.0	-0.0	4.1	4.1
331	527893.81	5511865.88	398.70	0	2000	84.9	84.9	0.0	0.0	72.5	11.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.8	-2.8
332	527893.81	5511865.88	398.70	0	4000	77.7	77.7	0.0	0.0	72.5	38.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-37.4	-37.4
333	527893.81	5511865.88	398.70	0	8000	70.6	70.6	0.0	0.0	72.5	138.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-144.3	-144.3
334	527853.15	5512155.47	403.00	0	32	43.3	43.3	0.0	0.0	73.7	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-24.9	-24.9
335	527853.15	5512155.47	403.00	0	63	52.5	52.5	0.0	0.0	73.7	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
336	527853.15	5512155.47	403.00	0	125	68.6	68.6	0.0	0.0	73.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-10.9	-10.9
337	527853.15	5512155.47	403.00	0	250	78.1	78.1	0.0	0.0	73.7	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
338	527853.15	5512155.47	403.00	0	500	82.5	82.5	0.0	0.0	73.7	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	7.3	7.3

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
339	527853.15	5512155.47	403.00	0	1000	85.7	85.7	0.0	0.0	73.7	5.0	-1.1	0.0	0.0	0.0	0.0	-0.0	8.2	8.2
340	527853.15	5512155.47	403.00	0	2000	85.9	85.9	0.0	0.0	73.7	13.2	-1.1	0.0	0.0	0.0	0.0	-0.0	0.2	0.2
341	527853.15	5512155.47	403.00	0	4000	78.7	78.7	0.0	0.0	73.7	44.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-38.4	-38.4
342	527853.15	5512155.47	403.00	0	8000	71.6	71.6	0.0	0.0	73.7	159.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-160.0	-160.0
343	527812.83	5512147.65	402.74	0	32	43.5	43.5	0.0	0.0	73.9	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-24.9	-24.9
344	527812.83	5512147.65	402.74	0	63	52.7	52.7	0.0	0.0	73.9	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
345	527812.83	5512147.65	402.74	0	125	68.8	68.8	0.0	0.0	73.9	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-11.0	-11.0
346	527812.83	5512147.65	402.74	0	250	78.3	78.3	0.0	0.0	73.9	1.5	2.3	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
347	527812.83	5512147.65	402.74	0	500	82.7	82.7	0.0	0.0	73.9	2.7	-1.1	0.0	0.0	0.0	0.0	-0.0	7.2	7.2
348	527812.83	5512147.65	402.74	0	1000	85.9	85.9	0.0	0.0	73.9	5.1	-1.1	0.0	0.0	0.0	0.0	-0.0	8.0	8.0
349	527812.83	5512147.65	402.74	0	2000	86.1	86.1	0.0	0.0	73.9	13.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.1	-0.1
350	527812.83	5512147.65	402.74	0	4000	78.9	78.9	0.0	0.0	73.9	45.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-39.4	-39.4
351	527812.83	5512147.65	402.74	0	8000	71.8	71.8	0.0	0.0	73.9	162.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-163.5	-163.5
352	528246.07	5512252.23	400.23	0	32	41.7	41.7	0.0	0.0	72.0	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-25.0	-25.0
353	528246.07	5512252.23	400.23	0	63	50.9	50.9	0.0	0.0	72.0	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-15.9	-15.9
354	528246.07	5512252.23	400.23	0	125	67.0	67.0	0.0	0.0	72.0	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-10.8	-10.8
355	528246.07	5512252.23	400.23	0	250	76.5	76.5	0.0	0.0	72.0	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	0.9	0.9
356	528246.07	5512252.23	400.23	0	500	80.9	80.9	0.0	0.0	72.0	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	7.7	7.7
357	528246.07	5512252.23	400.23	0	1000	84.1	84.1	0.0	0.0	72.0	4.1	-1.1	0.0	0.0	0.0	0.0	-0.0	9.0	9.0
358	528246.07	5512252.23	400.23	0	2000	84.3	84.3	0.0	0.0	72.0	10.9	-1.1	0.0	0.0	0.0	0.0	-0.0	2.4	2.4
359	528246.07	5512252.23	400.23	0	4000	77.1	77.1	0.0	0.0	72.0	36.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-30.8	-30.8
360	528246.07	5512252.23	400.23	0	8000	70.0	70.0	0.0	0.0	72.0	131.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-132.7	-132.7
361	527672.18	5512207.20	399.96	0	32	44.3	44.3	0.0	0.0	74.8	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-29.8	-29.8
362	527672.18	5512207.20	399.96	0	63	53.5	53.5	0.0	0.0	74.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-20.7	-20.7
363	527672.18	5512207.20	399.96	0	125	69.6	69.6	0.0	0.0	74.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-11.1	-11.1
364	527672.18	5512207.20	399.96	0	250	79.1	79.1	0.0	0.0	74.8	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-2.0	-2.0
365	527672.18	5512207.20	399.96	0	500	83.5	83.5	0.0	0.0	74.8	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	2.0	2.0
366	527672.18	5512207.20	399.96	0	1000	86.7	86.7	0.0	0.0	74.8	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	2.6	2.6
367	527672.18	5512207.20	399.96	0	2000	86.9	86.9	0.0	0.0	74.8	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.4	-6.4
368	527672.18	5512207.20	399.96	0	4000	79.7	79.7	0.0	0.0	74.8	50.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-49.2	-49.2
369	527672.18	5512207.20	399.96	0	8000	72.6	72.6	0.0	0.0	74.8	180.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-185.9	-185.9
370	528382.81	5512267.17	398.97	0	32	41.0	41.0	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-25.2	-25.2
371	528382.81	5512267.17	398.97	0	63	50.2	50.2	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-16.1	-16.1
372	528382.81	5512267.17	398.97	0	125	66.3	66.3	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-10.8	-10.8
373	528382.81	5512267.17	398.97	0	250	75.8	75.8	0.0	0.0	71.5	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	0.9	0.9
374	528382.81	5512267.17	398.97	0	500	80.2	80.2	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	7.8	7.8
375	528382.81	5512267.17	398.97	0	1000	83.4	83.4	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	0.0	0.0	-0.0	9.2	9.2
376	528382.81	5512267.17	398.97	0	2000	83.6	83.6	0.0	0.0	71.5	10.2	-1.1	0.0	0.0	0.0	0.0	-0.0	3.0	3.0
377	528382.81	5512267.17	398.97	0	4000	76.4	76.4	0.0	0.0	71.5	34.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-28.5	-28.5
378	528382.81	5512267.17	398.97	0	8000	69.3	69.3	0.0	0.0	71.5	123.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-124.3	-124.3
379	528224.55	5512250.30	400.12	0	32	41.7	41.7	0.0	0.0	72.1	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-25.1	-25.1
380	528224.55	5512250.30	400.12	0	63	50.9	50.9	0.0	0.0	72.1	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-16.0	-16.0
381	528224.55	5512250.30	400.12	0	125	67.0	67.0	0.0	0.0	72.1	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-10.9	-10.9
382	528224.55	5512250.30	400.12	0	250	76.5	76.5	0.0	0.0	72.1	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	0.8	0.8
383	528224.55	5512250.30	400.12	0	500	80.9	80.9	0.0	0.0	72.1	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	7.6	7.6
384	528224.55	5512250.30	400.12	0	1000	84.1	84.1	0.0	0.0	72.1	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	8.9	8.9
385	528224.55	5512250.30	400.12	0	2000	84.3	84.3	0.0	0.0	72.1	11.0	-1.1	0.0	0.0	0.0	0.0	-0.0	2.2	2.2
386	528224.55	5512250.30	400.12	0	4000	77.1	77.1	0.0	0.0	72.1	37.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-31.3	-31.3
387	528224.55	5512250.30	400.12	0	8000	70.0	70.0	0.0	0.0	72.1	133.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-134.3	-134.3
388	528174.24	5512248.77	400.26	0	32	41.8	41.8	0.0	0.0	72.4	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-25.3	-25.3
389	528174.24	5512248.77	400.26	0	63	51.0	51.0	0.0	0.0	72.4	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-16.2	-16.2
390	528174.24	5512248.77	400.26	0	125	67.1	67.1	0.0	0.0	72.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-11.1	-11.1
391	528174.24	5512248.77	400.26	0	250	76.6	76.6	0.0	0.0	72.4	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
392	528174.24	5512248.77	400.26	0	500	81.0	81.0	0.0	0.0	72.4	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	7.4	7.4
393	528174.24	5512248.77	400.26	0	1000	84.2	84.2	0.0	0.0	72.4	4.3	-1.1	0.0	0.0	0.0	0.0	-0.0	8.6	8.6
394	528174.24	5512248.77	400.26	0	2000	84.4	84.4	0.0	0.0	72.4	11.3	-1.1	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
395	528174.24	5512248.77	400.26	0	4000	77.2	77.2	0.0	0.0	72.4	38.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-32.6	-32.6
396	528174.24	5512248.77	400.26	0	8000	70.1	70.1	0.0	0.0	72.4	137.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-138.3	-138.3
397	527915.62	5511861.00	401.49	0	32	41.4	41.4	0.0	0.0	72.3	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-25.5	-25.5
398	527915.62	5511861.00	401.49	0	63	50.6	50.6	0.0	0.0	72.3	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-16.4	-16.4
399	527915.62	5511861.00	401.49	0	125	66.7	66.7	0.0	0.0	72.3	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-11.4	-11.4
400	527915.62	5511861.00	401.49	0	250	76.2	76.2	0.0	0.0	72.3	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	0.4	0.4
401	527915.62	5511861.00	401.49	0	500	80.6	80.6	0.0	0.0	72.3	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	7.1	7.1

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
402	527915.62	5511861.00	401.49	0	1000	83.8	83.8	0.0	0.0	72.3	4.3	-1.1	0.0	0.0	0.0	0.0	-0.0	8.3	8.3
403	527915.62	5511861.00	401.49	0	2000	84.0	84.0	0.0	0.0	72.3	11.3	-1.1	0.0	0.0	0.0	0.0	-0.0	1.5	1.5
404	527915.62	5511861.00	401.49	0	4000	76.8	76.8	0.0	0.0	72.3	38.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-32.6	-32.6
405	527915.62	5511861.00	401.49	0	8000	69.7	69.7	0.0	0.0	72.3	136.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-137.6	-137.6
406	528352.65	5512048.99	399.35	0	32	39.2	39.2	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-25.8	-25.8
407	528352.65	5512048.99	399.35	0	63	48.4	48.4	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-16.7	-16.7
408	528352.65	5512048.99	399.35	0	125	64.5	64.5	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-11.2	-11.2
409	528352.65	5512048.99	399.35	0	250	74.0	74.0	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	0.5	0.5
410	528352.65	5512048.99	399.35	0	500	78.4	78.4	0.0	0.0	70.1	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	7.5	7.5
411	528352.65	5512048.99	399.35	0	1000	81.6	81.6	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	9.2	9.2
412	528352.65	5512048.99	399.35	0	2000	81.8	81.8	0.0	0.0	70.1	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	3.9	3.9
413	528352.65	5512048.99	399.35	0	4000	74.6	74.6	0.0	0.0	70.1	29.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-24.2	-24.2
414	528352.65	5512048.99	399.35	0	8000	67.5	67.5	0.0	0.0	70.1	105.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-107.4	-107.4
415	528384.03	5512116.38	400.40	0	32	39.4	39.4	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-25.8	-25.8
416	528384.03	5512116.38	400.40	0	63	48.6	48.6	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-16.7	-16.7
417	528384.03	5512116.38	400.40	0	125	64.7	64.7	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-11.3	-11.3
418	528384.03	5512116.38	400.40	0	250	74.2	74.2	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	0.5	0.5
419	528384.03	5512116.38	400.40	0	500	78.6	78.6	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	7.4	7.4
420	528384.03	5512116.38	400.40	0	1000	81.8	81.8	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	9.0	9.0
421	528384.03	5512116.38	400.40	0	2000	82.0	82.0	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	3.6	3.6
422	528384.03	5512116.38	400.40	0	4000	74.8	74.8	0.0	0.0	70.4	30.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-25.2	-25.2
423	528384.03	5512116.38	400.40	0	8000	67.7	67.7	0.0	0.0	70.4	109.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-110.8	-110.8
424	527927.95	5512177.01	402.45	0	32	42.0	42.0	0.0	0.0	73.4	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-26.0	-26.0
425	527927.95	5512177.01	402.45	0	63	51.2	51.2	0.0	0.0	73.4	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-16.9	-16.9
426	527927.95	5512177.01	402.45	0	125	67.3	67.3	0.0	0.0	73.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-11.9	-11.9
427	527927.95	5512177.01	402.45	0	250	76.8	76.8	0.0	0.0	73.4	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-0.3	-0.3
428	527927.95	5512177.01	402.45	0	500	81.2	81.2	0.0	0.0	73.4	2.5	-1.1	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
429	527927.95	5512177.01	402.45	0	1000	84.4	84.4	0.0	0.0	73.4	4.8	-1.1	0.0	0.0	0.0	0.0	-0.0	7.3	7.3
430	527927.95	5512177.01	402.45	0	2000	84.6	84.6	0.0	0.0	73.4	12.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.4	-0.4
431	527927.95	5512177.01	402.45	0	4000	77.4	77.4	0.0	0.0	73.4	43.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-37.9	-37.9
432	527927.95	5512177.01	402.45	0	8000	70.3	70.3	0.0	0.0	73.4	153.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-155.3	-155.3
433	528363.60	5512093.03	399.48	0	32	38.9	38.9	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-26.3	-26.3
434	528363.60	5512093.03	399.48	0	63	48.1	48.1	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-17.1	-17.1
435	528363.60	5512093.03	399.48	0	125	64.2	64.2	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-11.7	-11.7
436	528363.60	5512093.03	399.48	0	250	73.7	73.7	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
437	528363.60	5512093.03	399.48	0	500	78.1	78.1	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	7.0	7.0
438	528363.60	5512093.03	399.48	0	1000	81.3	81.3	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	8.6	8.6
439	528363.60	5512093.03	399.48	0	2000	81.5	81.5	0.0	0.0	70.4	9.0	-1.1	0.0	0.0	0.0	0.0	-0.0	3.2	3.2
440	528363.60	5512093.03	399.48	0	4000	74.3	74.3	0.0	0.0	70.4	30.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-25.5	-25.5
441	528363.60	5512093.03	399.48	0	8000	67.2	67.2	0.0	0.0	70.4	108.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-110.8	-110.8
442	527666.66	5511819.93	394.51	0	32	42.3	42.3	0.0	0.0	73.8	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.8	-30.8
443	527666.66	5511819.93	394.51	0	63	51.5	51.5	0.0	0.0	73.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-21.7	-21.7
444	527666.66	5511819.93	394.51	0	125	67.6	67.6	0.0	0.0	73.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-12.1	-12.1
445	527666.66	5511819.93	394.51	0	250	77.1	77.1	0.0	0.0	73.8	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-2.9	-2.9
446	527666.66	5511819.93	394.51	0	500	81.5	81.5	0.0	0.0	73.8	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	1.3	1.3
447	527666.66	5511819.93	394.51	0	1000	84.7	84.7	0.0	0.0	73.8	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	2.2	2.2
448	527666.66	5511819.93	394.51	0	2000	84.9	84.9	0.0	0.0	73.8	13.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.9	-5.9
449	527666.66	5511819.93	394.51	0	4000	77.7	77.7	0.0	0.0	73.8	45.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-45.1	-45.1
450	527666.66	5511819.93	394.51	0	8000	70.6	70.6	0.0	0.0	73.8	161.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-168.6	-168.6
451	527759.43	5511874.61	397.68	0	32	41.5	41.5	0.0	0.0	73.4	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-31.2	-31.2
452	527759.43	5511874.61	397.68	0	63	50.7	50.7	0.0	0.0	73.4	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-22.1	-22.1
453	527759.43	5511874.61	397.68	0	125	66.8	66.8	0.0	0.0	73.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-12.4	-12.4
454	527759.43	5511874.61	397.68	0	250	76.3	76.3	0.0	0.0	73.4	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-3.2	-3.2
455	527759.43	5511874.61	397.68	0	500	80.7	80.7	0.0	0.0	73.4	2.5	-1.1	0.0	0.0	4.8	0.0	-0.0	1.1	1.1
456	527759.43	5511874.61	397.68	0	1000	83.9	83.9	0.0	0.0	73.4	4.8	-1.1	0.0	0.0	4.8	0.0	-0.0	2.0	2.0
457	527759.43	5511874.61	397.68	0	2000	84.1	84.1	0.0	0.0	73.4	12.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-5.6	-5.6
458	527759.43	5511874.61	397.68	0	4000	76.9	76.9	0.0	0.0	73.4	43.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-43.2	-43.2
459	527759.43	5511874.61	397.68	0	8000	69.8	69.8	0.0	0.0	73.4	153.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-160.9	-160.9
460	528115.84	5511949.36	398.89	0	32	39.4	39.4	0.0	0.0	71.2	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-26.6	-26.6
461	528115.84	5511949.36	398.89	0	63	48.6	48.6	0.0	0.0	71.2	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-17.5	-17.5
462	528115.84	5511949.36	398.89	0	125	64.7	64.7	0.0	0.0	71.2	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-12.2	-12.2
463	528115.84	5511949.36	398.89	0	250	74.2	74.2	0.0	0.0	71.2	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-0.5	-0.5
464	528115.84	5511949.36	398.89	0	500	78.6	78.6	0.0	0.0	71.2	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	6.4	6.4

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"

Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
465	528115.84	5511949.36	398.89	0	1000	81.8	81.8	0.0	0.0	71.2	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	7.8	7.8
466	528115.84	5511949.36	398.89	0	2000	82.0	82.0	0.0	0.0	71.2	9.9	-1.1	0.0	0.0	0.0	0.0	-0.0	1.9	1.9
467	528115.84	5511949.36	398.89	0	4000	74.8	74.8	0.0	0.0	71.2	33.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-29.1	-29.1
468	528115.84	5511949.36	398.89	0	8000	67.7	67.7	0.0	0.0	71.2	120.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-122.6	-122.6
469	527611.76	5511774.42	394.60	0	32	42.1	42.1	0.0	0.0	74.1	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-31.3	-31.3
470	527611.76	5511774.42	394.60	0	63	51.3	51.3	0.0	0.0	74.1	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-22.2	-22.2
471	527611.76	5511774.42	394.60	0	125	67.4	67.4	0.0	0.0	74.1	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-12.5	-12.5
472	527611.76	5511774.42	394.60	0	250	76.9	76.9	0.0	0.0	74.1	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-3.4	-3.4
473	527611.76	5511774.42	394.60	0	500	81.3	81.3	0.0	0.0	74.1	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	0.8	0.8
474	527611.76	5511774.42	394.60	0	1000	84.5	84.5	0.0	0.0	74.1	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	1.6	1.6
475	527611.76	5511774.42	394.60	0	2000	84.7	84.7	0.0	0.0	74.1	13.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.8	-6.8
476	527611.76	5511774.42	394.60	0	4000	77.5	77.5	0.0	0.0	74.1	46.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-46.9	-46.9
477	527611.76	5511774.42	394.60	0	8000	70.4	70.4	0.0	0.0	74.1	166.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-173.8	-173.8
478	528091.24	5511948.50	398.65	0	32	39.5	39.5	0.0	0.0	71.4	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-26.7	-26.7
479	528091.24	5511948.50	398.65	0	63	48.7	48.7	0.0	0.0	71.4	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-17.5	-17.5
480	528091.24	5511948.50	398.65	0	125	64.8	64.8	0.0	0.0	71.4	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-12.3	-12.3
481	528091.24	5511948.50	398.65	0	250	74.3	74.3	0.0	0.0	71.4	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-0.6	-0.6
482	528091.24	5511948.50	398.65	0	500	78.7	78.7	0.0	0.0	71.4	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
483	528091.24	5511948.50	398.65	0	1000	81.9	81.9	0.0	0.0	71.4	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	7.7	7.7
484	528091.24	5511948.50	398.65	0	2000	82.1	82.1	0.0	0.0	71.4	10.1	-1.1	0.0	0.0	0.0	0.0	-0.0	1.6	1.6
485	528091.24	5511948.50	398.65	0	4000	74.9	74.9	0.0	0.0	71.4	34.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-29.8	-29.8
486	528091.24	5511948.50	398.65	0	8000	67.8	67.8	0.0	0.0	71.4	122.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-125.1	-125.1
487	527634.58	5511784.66	394.27	0	32	42.0	42.0	0.0	0.0	74.0	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-31.3	-31.3
488	527634.58	5511784.66	394.27	0	63	51.2	51.2	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-22.2	-22.2
489	527634.58	5511784.66	394.27	0	125	67.3	67.3	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-12.6	-12.6
490	527634.58	5511784.66	394.27	0	250	76.8	76.8	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-3.4	-3.4
491	527634.58	5511784.66	394.27	0	500	81.2	81.2	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	0.8	0.8
492	527634.58	5511784.66	394.27	0	1000	84.4	84.4	0.0	0.0	74.0	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	1.6	1.6
493	527634.58	5511784.66	394.27	0	2000	84.6	84.6	0.0	0.0	74.0	13.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.6	-6.6
494	527634.58	5511784.66	394.27	0	4000	77.4	77.4	0.0	0.0	74.0	46.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-46.3	-46.3
495	527634.58	5511784.66	394.27	0	8000	70.3	70.3	0.0	0.0	74.0	164.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-171.5	-171.5
496	528473.82	5512157.73	399.35	0	32	38.1	38.1	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.0	-27.0
497	528473.82	5512157.73	399.35	0	63	47.3	47.3	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-17.8	-17.8
498	528473.82	5512157.73	399.35	0	125	63.4	63.4	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-12.4	-12.4
499	528473.82	5512157.73	399.35	0	250	72.9	72.9	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-0.7	-0.7
500	528473.82	5512157.73	399.35	0	500	77.3	77.3	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
501	528473.82	5512157.73	399.35	0	1000	80.5	80.5	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	8.0	8.0
502	528473.82	5512157.73	399.35	0	2000	80.7	80.7	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	2.7	2.7
503	528473.82	5512157.73	399.35	0	4000	73.5	73.5	0.0	0.0	70.2	29.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-25.6	-25.6
504	528473.82	5512157.73	399.35	0	8000	66.4	66.4	0.0	0.0	70.2	106.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-109.5	-109.5
505	527947.37	5512183.82	401.65	0	32	40.9	40.9	0.0	0.0	73.3	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-26.9	-26.9
506	527947.37	5512183.82	401.65	0	63	50.1	50.1	0.0	0.0	73.3	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-17.9	-17.9
507	527947.37	5512183.82	401.65	0	125	66.2	66.2	0.0	0.0	73.3	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-12.9	-12.9
508	527947.37	5512183.82	401.65	0	250	75.7	75.7	0.0	0.0	73.3	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
509	527947.37	5512183.82	401.65	0	500	80.1	80.1	0.0	0.0	73.3	2.5	-1.1	0.0	0.0	0.0	0.0	-0.0	5.4	5.4
510	527947.37	5512183.82	401.65	0	1000	83.3	83.3	0.0	0.0	73.3	4.8	-1.1	0.0	0.0	0.0	0.0	-0.0	6.4	6.4
511	527947.37	5512183.82	401.65	0	2000	83.5	83.5	0.0	0.0	73.3	12.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
512	527947.37	5512183.82	401.65	0	4000	76.3	76.3	0.0	0.0	73.3	42.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-38.5	-38.5
513	527947.37	5512183.82	401.65	0	8000	69.2	69.2	0.0	0.0	73.3	151.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-154.9	-154.9
514	527893.28	5512166.18	403.15	0	32	41.1	41.1	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-27.0	-27.0
515	527893.28	5512166.18	403.15	0	63	50.3	50.3	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-17.9	-17.9
516	527893.28	5512166.18	403.15	0	125	66.4	66.4	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-12.9	-12.9
517	527893.28	5512166.18	403.15	0	250	75.9	75.9	0.0	0.0	73.5	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-1.3	-1.3
518	527893.28	5512166.18	403.15	0	500	80.3	80.3	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	5.3	5.3
519	527893.28	5512166.18	403.15	0	1000	83.5	83.5	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	0.0	0.0	-0.0	6.2	6.2
520	527893.28	5512166.18	403.15	0	2000	83.7	83.7	0.0	0.0	73.5	12.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.6	-1.6
521	527893.28	5512166.18	403.15	0	4000	76.5	76.5	0.0	0.0	73.5	43.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-39.6	-39.6
522	527893.28	5512166.18	403.15	0	8000	69.4	69.4	0.0	0.0	73.5	155.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-158.8	-158.8
523	528078.65	5512237.87	400.46	0	32	40.3	40.3	0.0	0.0	72.8	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-27.2	-27.2
524	528078.65	5512237.87	400.46	0	63	49.5	49.5	0.0	0.0	72.8	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-18.1	-18.1
525	528078.65	5512237.87	400.46	0	125	65.6	65.6	0.0	0.0	72.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-13.0	-13.0
526	528078.65	5512237.87	400.46	0	250	75.1	75.1	0.0	0.0	72.8	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	-1.3	-1.3
527	528078.65	5512237.87	400.46	0	500	79.5	79.5	0.0	0.0	72.8	2.4	-1.0	0.0	0.0	0.0	0.0	-0.0	5.3	5.3

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
528	528078.65	5512237.87	400.46	0	1000	82.7	82.7	0.0	0.0	72.8	4.5	-1.1	0.0	0.0	0.0	0.0	-0.0	6.4	6.4
529	528078.65	5512237.87	400.46	0	2000	82.9	82.9	0.0	0.0	72.8	11.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.8	-0.8
530	528078.65	5512237.87	400.46	0	4000	75.7	75.7	0.0	0.0	72.8	40.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-36.5	-36.5
531	528078.65	5512237.87	400.46	0	8000	68.6	68.6	0.0	0.0	72.8	144.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-147.3	-147.3
532	528103.79	5512241.06	402.66	0	32	40.0	40.0	0.0	0.0	72.7	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-27.3	-27.3
533	528103.79	5512241.06	402.66	0	63	49.2	49.2	0.0	0.0	72.7	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-18.2	-18.2
534	528103.79	5512241.06	402.66	0	125	65.3	65.3	0.0	0.0	72.7	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-13.2	-13.2
535	528103.79	5512241.06	402.66	0	250	74.8	74.8	0.0	0.0	72.7	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	-1.5	-1.5
536	528103.79	5512241.06	402.66	0	500	79.2	79.2	0.0	0.0	72.7	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	5.2	5.2
537	528103.79	5512241.06	402.66	0	1000	82.4	82.4	0.0	0.0	72.7	4.5	-1.1	0.0	0.0	0.0	0.0	-0.0	6.3	6.3
538	528103.79	5512241.06	402.66	0	2000	82.6	82.6	0.0	0.0	72.7	11.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.8	-0.8
539	528103.79	5512241.06	402.66	0	4000	75.4	75.4	0.0	0.0	72.7	39.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-36.1	-36.1
540	528103.79	5512241.06	402.66	0	8000	68.3	68.3	0.0	0.0	72.7	142.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-145.6	-145.6
541	527708.22	5511851.01	394.10	0	32	40.7	40.7	0.0	0.0	73.6	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.3	-32.3
542	527708.22	5511851.01	394.10	0	63	49.9	49.9	0.0	0.0	73.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-23.2	-23.2
543	527708.22	5511851.01	394.10	0	125	66.0	66.0	0.0	0.0	73.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-13.5	-13.5
544	527708.22	5511851.01	394.10	0	250	75.5	75.5	0.0	0.0	73.6	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-4.3	-4.3
545	527708.22	5511851.01	394.10	0	500	79.9	79.9	0.0	0.0	73.6	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.1	-0.1
546	527708.22	5511851.01	394.10	0	1000	83.1	83.1	0.0	0.0	73.6	5.0	-1.1	0.0	0.0	4.8	0.0	-0.0	0.8	0.8
547	527708.22	5511851.01	394.10	0	2000	83.3	83.3	0.0	0.0	73.6	13.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.1	-7.1
548	527708.22	5511851.01	394.10	0	4000	76.1	76.1	0.0	0.0	73.6	44.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-45.6	-45.6
549	527708.22	5511851.01	394.10	0	8000	69.0	69.0	0.0	0.0	73.6	158.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-166.6	-166.6
550	527683.52	5511832.73	394.67	0	32	40.8	40.8	0.0	0.0	73.8	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.3	-32.3
551	527683.52	5511832.73	394.67	0	63	50.0	50.0	0.0	0.0	73.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-23.3	-23.3
552	527683.52	5511832.73	394.67	0	125	66.1	66.1	0.0	0.0	73.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-13.6	-13.6
553	527683.52	5511832.73	394.67	0	250	75.6	75.6	0.0	0.0	73.8	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-4.4	-4.4
554	527683.52	5511832.73	394.67	0	500	80.0	80.0	0.0	0.0	73.8	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.2	-0.2
555	527683.52	5511832.73	394.67	0	1000	83.2	83.2	0.0	0.0	73.8	5.0	-1.1	0.0	0.0	4.8	0.0	-0.0	0.7	0.7
556	527683.52	5511832.73	394.67	0	2000	83.4	83.4	0.0	0.0	73.8	13.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.3	-7.3
557	527683.52	5511832.73	394.67	0	4000	76.2	76.2	0.0	0.0	73.8	45.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-46.2	-46.2
558	527683.52	5511832.73	394.67	0	8000	69.1	69.1	0.0	0.0	73.8	160.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-168.7	-168.7
559	528320.95	5512001.82	399.35	0	32	36.9	36.9	0.0	0.0	70.0	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-27.9	-27.9
560	528320.95	5512001.82	399.35	0	63	46.1	46.1	0.0	0.0	70.0	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-18.8	-18.8
561	528320.95	5512001.82	399.35	0	125	62.2	62.2	0.0	0.0	70.0	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-13.3	-13.3
562	528320.95	5512001.82	399.35	0	250	71.7	71.7	0.0	0.0	70.0	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-1.6	-1.6
563	528320.95	5512001.82	399.35	0	500	76.1	76.1	0.0	0.0	70.0	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	5.4	5.4
564	528320.95	5512001.82	399.35	0	1000	79.3	79.3	0.0	0.0	70.0	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	7.1	7.1
565	528320.95	5512001.82	399.35	0	2000	79.5	79.5	0.0	0.0	70.0	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	1.9	1.9
566	528320.95	5512001.82	399.35	0	4000	72.3	72.3	0.0	0.0	70.0	29.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-26.0	-26.0
567	528320.95	5512001.82	399.35	0	8000	65.2	65.2	0.0	0.0	70.0	104.7	-1.0	0.0	0.0	0.0	0.0	-0.0	-108.4	-108.4
568	527591.39	5511765.26	395.15	0	32	41.0	41.0	0.0	0.0	74.2	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.5	-32.5
569	527591.39	5511765.26	395.15	0	63	50.2	50.2	0.0	0.0	74.2	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-23.4	-23.4
570	527591.39	5511765.26	395.15	0	125	66.3	66.3	0.0	0.0	74.2	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-13.8	-13.8
571	527591.39	5511765.26	395.15	0	250	75.8	75.8	0.0	0.0	74.2	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-4.7	-4.7
572	527591.39	5511765.26	395.15	0	500	80.2	80.2	0.0	0.0	74.2	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.5	-0.5
573	527591.39	5511765.26	395.15	0	1000	83.4	83.4	0.0	0.0	74.2	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	0.3	0.3
574	527591.39	5511765.26	395.15	0	2000	83.6	83.6	0.0	0.0	74.2	13.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.2	-8.2
575	527591.39	5511765.26	395.15	0	4000	76.4	76.4	0.0	0.0	74.2	47.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-48.7	-48.7
576	527591.39	5511765.26	395.15	0	8000	69.3	69.3	0.0	0.0	74.2	168.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-177.0	-177.0
577	528347.11	5512041.14	399.38	0	32	36.9	36.9	0.0	0.0	70.1	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-28.1	-28.1
578	528347.11	5512041.14	399.38	0	63	46.1	46.1	0.0	0.0	70.1	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-18.9	-18.9
579	528347.11	5512041.14	399.38	0	125	62.2	62.2	0.0	0.0	70.1	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-13.5	-13.5
580	528347.11	5512041.14	399.38	0	250	71.7	71.7	0.0	0.0	70.1	0.9	2.4	0.0	0.0	0.0	0.0	-0.0	-1.7	-1.7
581	528347.11	5512041.14	399.38	0	500	76.1	76.1	0.0	0.0	70.1	1.7	-1.0	0.0	0.0	0.0	0.0	-0.0	5.2	5.2
582	528347.11	5512041.14	399.38	0	1000	79.3	79.3	0.0	0.0	70.1	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	6.9	6.9
583	528347.11	5512041.14	399.38	0	2000	79.5	79.5	0.0	0.0	70.1	8.7	-1.0	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
584	528347.11	5512041.14	399.38	0	4000	72.3	72.3	0.0	0.0	70.1	29.6	-1.0	0.0	0.0	0.0	0.0	-0.0	-26.4	-26.4
585	528347.11	5512041.14	399.38	0	8000	65.2	65.2	0.0	0.0	70.1	105.6	-1.0	0.0	0.0	0.0	0.0	-0.0	-109.5	-109.5
586	527727.04	5511861.91	395.21	0	32	40.2	40.2	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.7	-32.7
587	527727.04	5511861.91	395.21	0	63	49.4	49.4	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-23.6	-23.6
588	527727.04	5511861.91	395.21	0	125	65.5	65.5	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-13.9	-13.9
589	527727.04	5511861.91	395.21	0	250	75.0	75.0	0.0	0.0	73.5	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-4.7	-4.7
590	527727.04	5511861.91	395.21	0	500	79.4	79.4	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.4	-0.4

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
591	527727.04	5511861.91	395.21	0	1000	82.6	82.6	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	4.8	0.0	-0.0	0.5	0.5
592	527727.04	5511861.91	395.21	0	2000	82.8	82.8	0.0	0.0	73.5	13.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.3	-7.3
593	527727.04	5511861.91	395.21	0	4000	75.6	75.6	0.0	0.0	73.5	43.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-45.5	-45.5
594	527727.04	5511861.91	395.21	0	8000	68.5	68.5	0.0	0.0	73.5	156.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-165.4	-165.4
595	527533.83	5511819.65	395.11	0	32	41.2	41.2	0.0	0.0	74.6	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-32.7	-32.7
596	527533.83	5511819.65	395.11	0	63	50.4	50.4	0.0	0.0	74.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-23.7	-23.7
597	527533.83	5511819.65	395.11	0	125	66.5	66.5	0.0	0.0	74.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.1	-14.1
598	527533.83	5511819.65	395.11	0	250	76.0	76.0	0.0	0.0	74.6	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-5.0	-5.0
599	527533.83	5511819.65	395.11	0	500	80.4	80.4	0.0	0.0	74.6	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.9	-0.9
600	527533.83	5511819.65	395.11	0	1000	83.6	83.6	0.0	0.0	74.6	5.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.2	-0.2
601	527533.83	5511819.65	395.11	0	2000	83.8	83.8	0.0	0.0	74.6	14.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.1	-9.1
602	527533.83	5511819.65	395.11	0	4000	76.6	76.6	0.0	0.0	74.6	49.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-51.2	-51.2
603	527533.83	5511819.65	395.11	0	8000	69.5	69.5	0.0	0.0	74.6	176.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-185.4	-185.4
604	528466.68	5512154.11	398.66	0	32	36.6	36.6	0.0	0.0	70.2	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-28.4	-28.4
605	528466.68	5512154.11	398.66	0	63	45.8	45.8	0.0	0.0	70.2	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-19.3	-19.3
606	528466.68	5512154.11	398.66	0	125	61.9	61.9	0.0	0.0	70.2	0.4	5.1	0.0	0.0	0.0	0.0	-0.0	-13.8	-13.8
607	528466.68	5512154.11	398.66	0	250	71.4	71.4	0.0	0.0	70.2	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-2.1	-2.1
608	528466.68	5512154.11	398.66	0	500	75.8	75.8	0.0	0.0	70.2	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	4.8	4.8
609	528466.68	5512154.11	398.66	0	1000	79.0	79.0	0.0	0.0	70.2	3.3	-1.0	0.0	0.0	0.0	0.0	-0.0	6.5	6.5
610	528466.68	5512154.11	398.66	0	2000	79.2	79.2	0.0	0.0	70.2	8.8	-1.0	0.0	0.0	0.0	0.0	-0.0	1.2	1.2
611	528466.68	5512154.11	398.66	0	4000	72.0	72.0	0.0	0.0	70.2	29.9	-1.0	0.0	0.0	0.0	0.0	-0.0	-27.1	-27.1
612	528466.68	5512154.11	398.66	0	8000	64.9	64.9	0.0	0.0	70.2	106.8	-1.0	0.0	0.0	0.0	0.0	-0.0	-111.1	-111.1
613	527740.18	5511868.22	396.81	0	32	39.8	39.8	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.0	-33.0
614	527740.18	5511868.22	396.81	0	63	49.0	49.0	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-24.0	-24.0
615	527740.18	5511868.22	396.81	0	125	65.1	65.1	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.3	-14.3
616	527740.18	5511868.22	396.81	0	250	74.6	74.6	0.0	0.0	73.5	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-5.0	-5.0
617	527740.18	5511868.22	396.81	0	500	79.0	79.0	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.8	-0.8
618	527740.18	5511868.22	396.81	0	1000	82.2	82.2	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	4.8	0.0	-0.0	0.2	0.2
619	527740.18	5511868.22	396.81	0	2000	82.4	82.4	0.0	0.0	73.5	12.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.6	-7.6
620	527740.18	5511868.22	396.81	0	4000	75.2	75.2	0.0	0.0	73.5	43.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-45.6	-45.6
621	527740.18	5511868.22	396.81	0	8000	68.1	68.1	0.0	0.0	73.5	155.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-164.6	-164.6
622	527513.86	5511817.23	395.47	0	32	40.9	40.9	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.1	-33.1
623	527513.86	5511817.23	395.47	0	63	50.1	50.1	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-24.0	-24.0
624	527513.86	5511817.23	395.47	0	125	66.2	66.2	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.4	-14.4
625	527513.86	5511817.23	395.47	0	250	75.7	75.7	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-5.4	-5.4
626	527513.86	5511817.23	395.47	0	500	80.1	80.1	0.0	0.0	74.7	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.3	-1.3
627	527513.86	5511817.23	395.47	0	1000	83.3	83.3	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.7	-0.7
628	527513.86	5511817.23	395.47	0	2000	83.5	83.5	0.0	0.0	74.7	14.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.7	-9.7
629	527513.86	5511817.23	395.47	0	4000	76.3	76.3	0.0	0.0	74.7	50.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-52.2	-52.2
630	527513.86	5511817.23	395.47	0	8000	69.2	69.2	0.0	0.0	74.7	178.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-188.0	-188.0
631	527648.76	5511795.95	394.30	0	32	40.1	40.1	0.0	0.0	73.9	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.1	-33.1
632	527648.76	5511795.95	394.30	0	63	49.3	49.3	0.0	0.0	73.9	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-24.1	-24.1
633	527648.76	5511795.95	394.30	0	125	65.4	65.4	0.0	0.0	73.9	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.4	-14.4
634	527648.76	5511795.95	394.30	0	250	74.9	74.9	0.0	0.0	73.9	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-5.2	-5.2
635	527648.76	5511795.95	394.30	0	500	79.3	79.3	0.0	0.0	73.9	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.0	-1.0
636	527648.76	5511795.95	394.30	0	1000	82.5	82.5	0.0	0.0	73.9	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.2	-0.2
637	527648.76	5511795.95	394.30	0	2000	82.7	82.7	0.0	0.0	73.9	13.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.3	-8.3
638	527648.76	5511795.95	394.30	0	4000	75.5	75.5	0.0	0.0	73.9	45.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-47.8	-47.8
639	527648.76	5511795.95	394.30	0	8000	68.4	68.4	0.0	0.0	73.9	163.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-172.1	-172.1
640	528105.37	5511949.36	398.79	0	32	37.5	37.5	0.0	0.0	71.3	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-28.5	-28.5
641	528105.37	5511949.36	398.79	0	63	46.7	46.7	0.0	0.0	71.3	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-19.4	-19.4
642	528105.37	5511949.36	398.79	0	125	62.8	62.8	0.0	0.0	71.3	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-14.2	-14.2
643	528105.37	5511949.36	398.79	0	250	72.3	72.3	0.0	0.0	71.3	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-2.4	-2.4
644	528105.37	5511949.36	398.79	0	500	76.7	76.7	0.0	0.0	71.3	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	4.4	4.4
645	528105.37	5511949.36	398.79	0	1000	79.9	79.9	0.0	0.0	71.3	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	5.9	5.9
646	528105.37	5511949.36	398.79	0	2000	80.1	80.1	0.0	0.0	71.3	10.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.2	-0.2
647	528105.37	5511949.36	398.79	0	4000	72.9	72.9	0.0	0.0	71.3	34.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-31.3	-31.3
648	528105.37	5511949.36	398.79	0	8000	65.8	65.8	0.0	0.0	71.3	121.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-125.6	-125.6
649	527497.67	5511788.52	396.10	0	32	40.9	40.9	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.1	-33.1
650	527497.67	5511788.52	396.10	0	63	50.1	50.1	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-24.1	-24.1
651	527497.67	5511788.52	396.10	0	125	66.2	66.2	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.5	-14.5
652	527497.67	5511788.52	396.10	0	250	75.7	75.7	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-5.4	-5.4
653	527497.67	5511788.52	396.10	0	500	80.1	80.1	0.0	0.0	74.7	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.3	-1.3

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
654	527497.67	5511788.52	396.10	0	1000	83.3	83.3	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.7	-0.7
655	527497.67	5511788.52	396.10	0	2000	83.5	83.5	0.0	0.0	74.7	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.8	-9.8
656	527497.67	5511788.52	396.10	0	4000	76.3	76.3	0.0	0.0	74.7	50.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-52.5	-52.5
657	527497.67	5511788.52	396.10	0	8000	69.2	69.2	0.0	0.0	74.7	179.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-189.0	-189.0
658	528261.55	5512253.61	400.19	0	32	38.1	38.1	0.0	0.0	72.0	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-28.5	-28.5
659	528261.55	5512253.61	400.19	0	63	47.3	47.3	0.0	0.0	72.0	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-19.4	-19.4
660	528261.55	5512253.61	400.19	0	125	63.4	63.4	0.0	0.0	72.0	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.3	-14.3
661	528261.55	5512253.61	400.19	0	250	72.9	72.9	0.0	0.0	72.0	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-2.5	-2.5
662	528261.55	5512253.61	400.19	0	500	77.3	77.3	0.0	0.0	72.0	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	4.2	4.2
663	528261.55	5512253.61	400.19	0	1000	80.5	80.5	0.0	0.0	72.0	4.1	-1.1	0.0	0.0	0.0	0.0	-0.0	5.5	5.5
664	528261.55	5512253.61	400.19	0	2000	80.7	80.7	0.0	0.0	72.0	10.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.0	-1.0
665	528261.55	5512253.61	400.19	0	4000	73.5	73.5	0.0	0.0	72.0	36.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-34.0	-34.0
666	528261.55	5512253.61	400.19	0	8000	66.4	66.4	0.0	0.0	72.0	130.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-135.1	-135.1
667	527557.01	5511752.46	395.45	0	32	40.3	40.3	0.0	0.0	74.4	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.3	-33.3
668	527557.01	5511752.46	395.45	0	63	49.5	49.5	0.0	0.0	74.4	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-24.3	-24.3
669	527557.01	5511752.46	395.45	0	125	65.6	65.6	0.0	0.0	74.4	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
670	527557.01	5511752.46	395.45	0	250	75.1	75.1	0.0	0.0	74.4	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-5.5	-5.5
671	527557.01	5511752.46	395.45	0	500	79.5	79.5	0.0	0.0	74.4	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.4	-1.4
672	527557.01	5511752.46	395.45	0	1000	82.7	82.7	0.0	0.0	74.4	5.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.7	-0.7
673	527557.01	5511752.46	395.45	0	2000	82.9	82.9	0.0	0.0	74.4	14.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.3	-9.3
674	527557.01	5511752.46	395.45	0	4000	75.7	75.7	0.0	0.0	74.4	48.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-50.5	-50.5
675	527557.01	5511752.46	395.45	0	8000	68.6	68.6	0.0	0.0	74.4	172.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-181.4	-181.4
676	527696.03	5511841.74	394.34	0	32	39.7	39.7	0.0	0.0	73.7	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.4	-33.4
677	527696.03	5511841.74	394.34	0	63	48.9	48.9	0.0	0.0	73.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-24.3	-24.3
678	527696.03	5511841.74	394.34	0	125	65.0	65.0	0.0	0.0	73.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-14.6	-14.6
679	527696.03	5511841.74	394.34	0	250	74.5	74.5	0.0	0.0	73.7	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-5.4	-5.4
680	527696.03	5511841.74	394.34	0	500	78.9	78.9	0.0	0.0	73.7	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.2	-1.2
681	527696.03	5511841.74	394.34	0	1000	82.1	82.1	0.0	0.0	73.7	5.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-0.3	-0.3
682	527696.03	5511841.74	394.34	0	2000	82.3	82.3	0.0	0.0	73.7	13.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.3	-8.3
683	527696.03	5511841.74	394.34	0	4000	75.1	75.1	0.0	0.0	73.7	44.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-47.0	-47.0
684	527696.03	5511841.74	394.34	0	8000	68.0	68.0	0.0	0.0	73.7	159.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-168.7	-168.7
685	528091.48	5512239.50	401.24	0	32	38.4	38.4	0.0	0.0	72.8	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-28.9	-28.9
686	528091.48	5512239.50	401.24	0	63	47.6	47.6	0.0	0.0	72.8	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-19.9	-19.9
687	528091.48	5512239.50	401.24	0	125	63.7	63.7	0.0	0.0	72.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.8	-14.8
688	528091.48	5512239.50	401.24	0	250	73.2	73.2	0.0	0.0	72.8	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	-3.1	-3.1
689	528091.48	5512239.50	401.24	0	500	77.6	77.6	0.0	0.0	72.8	2.4	-1.0	0.0	0.0	0.0	0.0	-0.0	3.6	3.6
690	528091.48	5512239.50	401.24	0	1000	80.8	80.8	0.0	0.0	72.8	4.5	-1.1	0.0	0.0	0.0	0.0	-0.0	4.7	4.7
691	528091.48	5512239.50	401.24	0	2000	81.0	81.0	0.0	0.0	72.8	11.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-2.5	-2.5
692	528091.48	5512239.50	401.24	0	4000	73.8	73.8	0.0	0.0	72.8	40.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-38.0	-38.0
693	528091.48	5512239.50	401.24	0	8000	66.7	66.7	0.0	0.0	72.8	143.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-148.1	-148.1
694	528115.69	5512242.58	401.91	0	32	38.3	38.3	0.0	0.0	72.6	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-29.0	-29.0
695	528115.69	5512242.58	401.91	0	63	47.5	47.5	0.0	0.0	72.6	0.2	-5.4	0.0	0.0	0.0	0.0	-0.0	-19.9	-19.9
696	528115.69	5512242.58	401.91	0	125	63.6	63.6	0.0	0.0	72.6	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-14.9	-14.9
697	528115.69	5512242.58	401.91	0	250	73.1	73.1	0.0	0.0	72.6	1.3	2.3	0.0	0.0	0.0	0.0	-0.0	-3.1	-3.1
698	528115.69	5512242.58	401.91	0	500	77.5	77.5	0.0	0.0	72.6	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	3.5	3.5
699	528115.69	5512242.58	401.91	0	1000	80.7	80.7	0.0	0.0	72.6	4.4	-1.1	0.0	0.0	0.0	0.0	-0.0	4.7	4.7
700	528115.69	5512242.58	401.91	0	2000	80.9	80.9	0.0	0.0	72.6	11.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-2.4	-2.4
701	528115.69	5512242.58	401.91	0	4000	73.7	73.7	0.0	0.0	72.6	39.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-37.5	-37.5
702	528115.69	5512242.58	401.91	0	8000	66.6	66.6	0.0	0.0	72.6	141.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-146.4	-146.4
703	527911.78	5512171.96	403.00	0	32	38.7	38.7	0.0	0.0	73.4	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-29.3	-29.3
704	527911.78	5512171.96	403.00	0	63	47.9	47.9	0.0	0.0	73.4	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-20.3	-20.3
705	527911.78	5512171.96	403.00	0	125	64.0	64.0	0.0	0.0	73.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-15.3	-15.3
706	527911.78	5512171.96	403.00	0	250	73.5	73.5	0.0	0.0	73.4	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-3.6	-3.6
707	527911.78	5512171.96	403.00	0	500	77.9	77.9	0.0	0.0	73.4	2.5	-1.1	0.0	0.0	0.0	0.0	-0.0	3.0	3.0
708	527911.78	5512171.96	403.00	0	1000	81.1	81.1	0.0	0.0	73.4	4.8	-1.1	0.0	0.0	0.0	0.0	-0.0	3.9	3.9
709	527911.78	5512171.96	403.00	0	2000	81.3	81.3	0.0	0.0	73.4	12.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.8	-3.8
710	527911.78	5512171.96	403.00	0	4000	74.1	74.1	0.0	0.0	73.4	43.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-41.6	-41.6
711	527911.78	5512171.96	403.00	0	8000	67.0	67.0	0.0	0.0	73.4	154.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-159.8	-159.8
712	527873.92	5512160.13	402.92	0	32	38.8	38.8	0.0	0.0	73.6	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-29.3	-29.3
713	527873.92	5512160.13	402.92	0	63	48.0	48.0	0.0	0.0	73.6	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-20.3	-20.3
714	527873.92	5512160.13	402.92	0	125	64.1	64.1	0.0	0.0	73.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-15.3	-15.3
715	527873.92	5512160.13	402.92	0	250	73.6	73.6	0.0	0.0	73.6	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-3.7	-3.7
716	527873.92	5512160.13	402.92	0	500	78.0	78.0	0.0	0.0	73.6	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	2.9	2.9

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
717	527873.92	5512160.13	402.92	0	1000	81.2	81.2	0.0	0.0	73.6	4.9	-1.1	0.0	0.0	0.0	0.0	-0.0	3.8	3.8
718	527873.92	5512160.13	402.92	0	2000	81.4	81.4	0.0	0.0	73.6	13.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.1	-4.1
719	527873.92	5512160.13	402.92	0	4000	74.2	74.2	0.0	0.0	73.6	44.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-42.4	-42.4
720	527873.92	5512160.13	402.92	0	8000	67.1	67.1	0.0	0.0	73.6	157.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-162.7	-162.7
721	527570.06	5511755.67	395.55	0	32	38.9	38.9	0.0	0.0	74.3	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-34.7	-34.7
722	527570.06	5511755.67	395.55	0	63	48.1	48.1	0.0	0.0	74.3	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-25.6	-25.6
723	527570.06	5511755.67	395.55	0	125	64.2	64.2	0.0	0.0	74.3	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.0	-16.0
724	527570.06	5511755.67	395.55	0	250	73.7	73.7	0.0	0.0	74.3	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-6.9	-6.9
725	527570.06	5511755.67	395.55	0	500	78.1	78.1	0.0	0.0	74.3	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.7	-2.7
726	527570.06	5511755.67	395.55	0	1000	81.3	81.3	0.0	0.0	74.3	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.0	-2.0
727	527570.06	5511755.67	395.55	0	2000	81.5	81.5	0.0	0.0	74.3	14.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.6	-10.6
728	527570.06	5511755.67	395.55	0	4000	74.3	74.3	0.0	0.0	74.3	47.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-51.5	-51.5
729	527570.06	5511755.67	395.55	0	8000	67.2	67.2	0.0	0.0	74.3	170.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-181.4	-181.4
730	527506.98	5511764.38	396.26	0	32	39.2	39.2	0.0	0.0	74.6	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-34.7	-34.7
731	527506.98	5511764.38	396.26	0	63	48.4	48.4	0.0	0.0	74.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-25.7	-25.7
732	527506.98	5511764.38	396.26	0	125	64.5	64.5	0.0	0.0	74.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.1	-16.1
733	527506.98	5511764.38	396.26	0	250	74.0	74.0	0.0	0.0	74.6	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-7.0	-7.0
734	527506.98	5511764.38	396.26	0	500	78.4	78.4	0.0	0.0	74.6	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.9	-2.9
735	527506.98	5511764.38	396.26	0	1000	81.6	81.6	0.0	0.0	74.6	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.3	-2.3
736	527506.98	5511764.38	396.26	0	2000	81.8	81.8	0.0	0.0	74.6	14.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.2	-11.2
737	527506.98	5511764.38	396.26	0	4000	74.6	74.6	0.0	0.0	74.6	49.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-53.6	-53.6
738	527506.98	5511764.38	396.26	0	8000	67.5	67.5	0.0	0.0	74.6	178.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-188.8	-188.8
739	527654.86	5511807.00	394.37	0	32	38.5	38.5	0.0	0.0	73.9	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-34.8	-34.8
740	527654.86	5511807.00	394.37	0	63	47.7	47.7	0.0	0.0	73.9	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-25.7	-25.7
741	527654.86	5511807.00	394.37	0	125	63.8	63.8	0.0	0.0	73.9	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.0	-16.0
742	527654.86	5511807.00	394.37	0	250	73.3	73.3	0.0	0.0	73.9	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-6.8	-6.8
743	527654.86	5511807.00	394.37	0	500	77.7	77.7	0.0	0.0	73.9	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.6	-2.6
744	527654.86	5511807.00	394.37	0	1000	80.9	80.9	0.0	0.0	73.9	5.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-1.8	-1.8
745	527654.86	5511807.00	394.37	0	2000	81.1	81.1	0.0	0.0	73.9	13.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-9.9	-9.9
746	527654.86	5511807.00	394.37	0	4000	73.9	73.9	0.0	0.0	73.9	45.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-49.3	-49.3
747	527654.86	5511807.00	394.37	0	8000	66.8	66.8	0.0	0.0	73.9	162.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-173.4	-173.4
748	527833.29	5512151.62	402.91	0	32	37.9	37.9	0.0	0.0	73.8	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-30.5	-30.5
749	527833.29	5512151.62	402.91	0	63	47.1	47.1	0.0	0.0	73.8	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-21.4	-21.4
750	527833.29	5512151.62	402.91	0	125	63.2	63.2	0.0	0.0	73.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.5	-16.5
751	527833.29	5512151.62	402.91	0	250	72.7	72.7	0.0	0.0	73.8	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-4.8	-4.8
752	527833.29	5512151.62	402.91	0	500	77.1	77.1	0.0	0.0	73.8	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	1.7	1.7
753	527833.29	5512151.62	402.91	0	1000	80.3	80.3	0.0	0.0	73.8	5.0	-1.1	0.0	0.0	0.0	0.0	-0.0	2.6	2.6
754	527833.29	5512151.62	402.91	0	2000	80.5	80.5	0.0	0.0	73.8	13.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-5.5	-5.5
755	527833.29	5512151.62	402.91	0	4000	73.3	73.3	0.0	0.0	73.8	45.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-44.4	-44.4
756	527833.29	5512151.62	402.91	0	8000	66.2	66.2	0.0	0.0	73.8	160.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-167.2	-167.2
757	527502.33	5511774.85	396.20	0	32	38.7	38.7	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-35.3	-35.3
758	527502.33	5511774.85	396.20	0	63	47.9	47.9	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-26.2	-26.2
759	527502.33	5511774.85	396.20	0	125	64.0	64.0	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.6	-16.6
760	527502.33	5511774.85	396.20	0	250	73.5	73.5	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-7.6	-7.6
761	527502.33	5511774.85	396.20	0	500	77.9	77.9	0.0	0.0	74.7	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.4	-3.4
762	527502.33	5511774.85	396.20	0	1000	81.1	81.1	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.8	-2.8
763	527502.33	5511774.85	396.20	0	2000	81.3	81.3	0.0	0.0	74.7	14.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.8	-11.8
764	527502.33	5511774.85	396.20	0	4000	74.1	74.1	0.0	0.0	74.7	50.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-54.4	-54.4
765	527502.33	5511774.85	396.20	0	8000	67.0	67.0	0.0	0.0	74.7	178.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-190.2	-190.2
766	528376.43	5512112.92	401.11	0	32	34.4	34.4	0.0	0.0	70.4	0.0	-5.2	0.0	0.0	0.0	0.0	-0.0	-30.8	-30.8
767	528376.43	5512112.92	401.11	0	63	43.6	43.6	0.0	0.0	70.4	0.1	-5.2	0.0	0.0	0.0	0.0	-0.0	-21.7	-21.7
768	528376.43	5512112.92	401.11	0	125	59.7	59.7	0.0	0.0	70.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-16.3	-16.3
769	528376.43	5512112.92	401.11	0	250	69.2	69.2	0.0	0.0	70.4	1.0	2.3	0.0	0.0	0.0	0.0	-0.0	-4.6	-4.6
770	528376.43	5512112.92	401.11	0	500	73.6	73.6	0.0	0.0	70.4	1.8	-1.0	0.0	0.0	0.0	0.0	-0.0	2.4	2.4
771	528376.43	5512112.92	401.11	0	1000	76.8	76.8	0.0	0.0	70.4	3.4	-1.1	0.0	0.0	0.0	0.0	-0.0	4.0	4.0
772	528376.43	5512112.92	401.11	0	2000	77.0	77.0	0.0	0.0	70.4	9.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-1.4	-1.4
773	528376.43	5512112.92	401.11	0	4000	69.8	69.8	0.0	0.0	70.4	30.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-30.3	-30.3
774	528376.43	5512112.92	401.11	0	8000	62.7	62.7	0.0	0.0	70.4	109.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-116.1	-116.1
775	527500.87	5511810.33	395.79	0	32	38.5	38.5	0.0	0.0	74.8	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-35.5	-35.5
776	527500.87	5511810.33	395.79	0	63	47.7	47.7	0.0	0.0	74.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-26.5	-26.5
777	527500.87	5511810.33	395.79	0	125	63.8	63.8	0.0	0.0	74.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-16.9	-16.9
778	527500.87	5511810.33	395.79	0	250	73.3	73.3	0.0	0.0	74.8	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-7.8	-7.8
779	527500.87	5511810.33	395.79	0	500	77.7	77.7	0.0	0.0	74.8	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.7	-3.7

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
780	527500.87	5511810.33	395.79	0	1000	80.9	80.9	0.0	0.0	74.8	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.1	-3.1
781	527500.87	5511810.33	395.79	0	2000	81.1	81.1	0.0	0.0	74.8	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.2	-12.2
782	527500.87	5511810.33	395.79	0	4000	73.9	73.9	0.0	0.0	74.8	50.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-55.0	-55.0
783	527500.87	5511810.33	395.79	0	8000	66.8	66.8	0.0	0.0	74.8	180.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-191.7	-191.7
784	527992.92	5511874.84	401.40	0	32	35.6	35.6	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-30.9	-30.9
785	527992.92	5511874.84	401.40	0	63	44.8	44.8	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
786	527992.92	5511874.84	401.40	0	125	60.9	60.9	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-16.7	-16.7
787	527992.92	5511874.84	401.40	0	250	70.4	70.4	0.0	0.0	71.8	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-4.9	-4.9
788	527992.92	5511874.84	401.40	0	500	74.8	74.8	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	1.9	1.9
789	527992.92	5511874.84	401.40	0	1000	78.0	78.0	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	3.2	3.2
790	527992.92	5511874.84	401.40	0	2000	78.2	78.2	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.2	-3.2
791	527992.92	5511874.84	401.40	0	4000	71.0	71.0	0.0	0.0	71.8	36.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-35.8	-35.8
792	527992.92	5511874.84	401.40	0	8000	63.9	63.9	0.0	0.0	71.8	128.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-135.4	-135.4
793	527496.51	5511801.32	395.96	0	32	38.2	38.2	0.0	0.0	74.8	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-35.9	-35.9
794	527496.51	5511801.32	395.96	0	63	47.4	47.4	0.0	0.0	74.8	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-26.8	-26.8
795	527496.51	5511801.32	395.96	0	125	63.5	63.5	0.0	0.0	74.8	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-17.2	-17.2
796	527496.51	5511801.32	395.96	0	250	73.0	73.0	0.0	0.0	74.8	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-8.2	-8.2
797	527496.51	5511801.32	395.96	0	500	77.4	77.4	0.0	0.0	74.8	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.1	-4.1
798	527496.51	5511801.32	395.96	0	1000	80.6	80.6	0.0	0.0	74.8	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.5	-3.5
799	527496.51	5511801.32	395.96	0	2000	80.8	80.8	0.0	0.0	74.8	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.6	-12.6
800	527496.51	5511801.32	395.96	0	4000	73.6	73.6	0.0	0.0	74.8	50.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-55.4	-55.4
801	527496.51	5511801.32	395.96	0	8000	66.5	66.5	0.0	0.0	74.8	180.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-192.2	-192.2
802	527996.94	5511877.67	401.18	0	32	34.9	34.9	0.0	0.0	71.8	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-31.6	-31.6
803	527996.94	5511877.67	401.18	0	63	44.1	44.1	0.0	0.0	71.8	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-22.5	-22.5
804	527996.94	5511877.67	401.18	0	125	60.2	60.2	0.0	0.0	71.8	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-17.3	-17.3
805	527996.94	5511877.67	401.18	0	250	69.7	69.7	0.0	0.0	71.8	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-5.6	-5.6
806	527996.94	5511877.67	401.18	0	500	74.1	74.1	0.0	0.0	71.8	2.1	-1.0	0.0	0.0	0.0	0.0	-0.0	1.2	1.2
807	527996.94	5511877.67	401.18	0	1000	77.3	77.3	0.0	0.0	71.8	4.0	-1.1	0.0	0.0	0.0	0.0	-0.0	2.6	2.6
808	527996.94	5511877.67	401.18	0	2000	77.5	77.5	0.0	0.0	71.8	10.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.8	-3.8
809	527996.94	5511877.67	401.18	0	4000	70.3	70.3	0.0	0.0	71.8	36.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-36.4	-36.4
810	527996.94	5511877.67	401.18	0	8000	63.2	63.2	0.0	0.0	71.8	128.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-135.8	-135.8
811	528082.71	5511947.37	398.56	0	32	34.6	34.6	0.0	0.0	71.5	0.0	-5.3	0.0	0.0	4.8	0.0	-0.0	-36.4	-36.4
812	528082.71	5511947.37	398.56	0	63	43.8	43.8	0.0	0.0	71.5	0.1	-5.3	0.0	0.0	4.8	0.0	-0.0	-27.3	-27.3
813	528082.71	5511947.37	398.56	0	125	59.9	59.9	0.0	0.0	71.5	0.4	5.3	0.0	0.0	0.0	0.0	-0.0	-17.3	-17.3
814	528082.71	5511947.37	398.56	0	250	69.4	69.4	0.0	0.0	71.5	1.1	2.3	0.0	0.0	2.4	0.0	-0.0	-8.0	-8.0
815	528082.71	5511947.37	398.56	0	500	73.8	73.8	0.0	0.0	71.5	2.0	-1.0	0.0	0.0	4.8	0.0	-0.0	-3.5	-3.5
816	528082.71	5511947.37	398.56	0	1000	77.0	77.0	0.0	0.0	71.5	3.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-2.1	-2.1
817	528082.71	5511947.37	398.56	0	2000	77.2	77.2	0.0	0.0	71.5	10.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-8.2	-8.2
818	528082.71	5511947.37	398.56	0	4000	70.0	70.0	0.0	0.0	71.5	34.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-39.8	-39.8
819	528082.71	5511947.37	398.56	0	8000	62.9	62.9	0.0	0.0	71.5	123.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-135.6	-135.6
820	527579.41	5511759.88	395.47	0	32	37.3	37.3	0.0	0.0	74.2	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-36.2	-36.2
821	527579.41	5511759.88	395.47	0	63	46.5	46.5	0.0	0.0	74.2	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-27.2	-27.2
822	527579.41	5511759.88	395.47	0	125	62.6	62.6	0.0	0.0	74.2	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-17.5	-17.5
823	527579.41	5511759.88	395.47	0	250	72.1	72.1	0.0	0.0	74.2	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-8.4	-8.4
824	527579.41	5511759.88	395.47	0	500	76.5	76.5	0.0	0.0	74.2	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.2	-4.2
825	527579.41	5511759.88	395.47	0	1000	79.7	79.7	0.0	0.0	74.2	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-3.5	-3.5
826	527579.41	5511759.88	395.47	0	2000	79.9	79.9	0.0	0.0	74.2	14.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.0	-12.0
827	527579.41	5511759.88	395.47	0	4000	72.7	72.7	0.0	0.0	74.2	47.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-52.8	-52.8
828	527579.41	5511759.88	395.47	0	8000	65.6	65.6	0.0	0.0	74.2	169.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-182.0	-182.0
829	528099.47	5511949.36	398.73	0	32	33.9	33.9	0.0	0.0	71.4	0.0	-5.3	0.0	0.0	0.0	0.0	-0.0	-32.2	-32.2
830	528099.47	5511949.36	398.73	0	63	43.1	43.1	0.0	0.0	71.4	0.1	-5.3	0.0	0.0	0.0	0.0	-0.0	-23.1	-23.1
831	528099.47	5511949.36	398.73	0	125	59.2	59.2	0.0	0.0	71.4	0.4	5.2	0.0	0.0	0.0	0.0	-0.0	-17.9	-17.9
832	528099.47	5511949.36	398.73	0	250	68.7	68.7	0.0	0.0	71.4	1.1	2.3	0.0	0.0	0.0	0.0	-0.0	-6.1	-6.1
833	528099.47	5511949.36	398.73	0	500	73.1	73.1	0.0	0.0	71.4	2.0	-1.0	0.0	0.0	0.0	0.0	-0.0	0.7	0.7
834	528099.47	5511949.36	398.73	0	1000	76.3	76.3	0.0	0.0	71.4	3.8	-1.1	0.0	0.0	0.0	0.0	-0.0	2.1	2.1
835	528099.47	5511949.36	398.73	0	2000	76.5	76.5	0.0	0.0	71.4	10.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.9	-3.9
836	528099.47	5511949.36	398.73	0	4000	69.3	69.3	0.0	0.0	71.4	34.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-35.2	-35.2
837	528099.47	5511949.36	398.73	0	8000	62.2	62.2	0.0	0.0	71.4	121.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-129.9	-129.9
838	527717.82	5511857.12	394.08	0	32	35.8	35.8	0.0	0.0	73.6	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-37.1	-37.1
839	527717.82	5511857.12	394.08	0	63	45.0	45.0	0.0	0.0	73.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-28.1	-28.1
840	527717.82	5511857.12	394.08	0	125	61.1	61.1	0.0	0.0	73.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-18.3	-18.3
841	527717.82	5511857.12	394.08	0	250	70.6	70.6	0.0	0.0	73.6	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-9.2	-9.2
842	527717.82	5511857.12	394.08	0	500	75.0	75.0	0.0	0.0	73.6	2.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.9	-4.9

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																				
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
843	527717.82	5511857.12	394.08	0	1000	78.2	78.2	0.0	0.0	73.6	4.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-4.0	-4.0
844	527717.82	5511857.12	394.08	0	2000	78.4	78.4	0.0	0.0	73.6	13.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.9	-11.9
845	527717.82	5511857.12	394.08	0	4000	71.2	71.2	0.0	0.0	73.6	44.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-50.2	-50.2
846	527717.82	5511857.12	394.08	0	8000	64.1	64.1	0.0	0.0	73.6	157.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-170.7	-170.7
847	527881.75	5512162.57	402.79	0	32	35.5	35.5	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-32.6	-32.6
848	527881.75	5512162.57	402.79	0	63	44.7	44.7	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-23.5	-23.5
849	527881.75	5512162.57	402.79	0	125	60.8	60.8	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-18.6	-18.6
850	527881.75	5512162.57	402.79	0	250	70.3	70.3	0.0	0.0	73.5	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-6.9	-6.9
851	527881.75	5512162.57	402.79	0	500	74.7	74.7	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.4	-0.4
852	527881.75	5512162.57	402.79	0	1000	77.9	77.9	0.0	0.0	73.5	4.9	-1.1	0.0	0.0	0.0	0.0	-0.0	0.6	0.6
853	527881.75	5512162.57	402.79	0	2000	78.1	78.1	0.0	0.0	73.5	13.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.3	-7.3
854	527881.75	5512162.57	402.79	0	4000	70.9	70.9	0.0	0.0	73.5	43.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-45.5	-45.5
855	527881.75	5512162.57	402.79	0	8000	63.8	63.8	0.0	0.0	73.5	156.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-165.4	-165.4
856	527926.99	5511858.40	402.67	0	32	33.1	33.1	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-33.8	-33.8
857	527926.99	5511858.40	402.67	0	63	42.3	42.3	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-24.7	-24.7
858	527926.99	5511858.40	402.67	0	125	58.4	58.4	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-19.6	-19.6
859	527926.99	5511858.40	402.67	0	250	67.9	67.9	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-7.8	-7.8
860	527926.99	5511858.40	402.67	0	500	72.3	72.3	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.1	-1.1
861	527926.99	5511858.40	402.67	0	1000	75.5	75.5	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	0.2	0.2
862	527926.99	5511858.40	402.67	0	2000	75.7	75.7	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-6.6	-6.6
863	527926.99	5511858.40	402.67	0	4000	68.5	68.5	0.0	0.0	72.2	37.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-40.4	-40.4
864	527926.99	5511858.40	402.67	0	8000	61.4	61.4	0.0	0.0	72.2	134.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-144.5	-144.5
865	527929.87	5511857.74	402.75	0	32	33.0	33.0	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-33.9	-33.9
866	527929.87	5511857.74	402.75	0	63	42.2	42.2	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-24.8	-24.8
867	527929.87	5511857.74	402.75	0	125	58.3	58.3	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-19.7	-19.7
868	527929.87	5511857.74	402.75	0	250	67.8	67.8	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-8.0	-8.0
869	527929.87	5511857.74	402.75	0	500	72.2	72.2	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-1.2	-1.2
870	527929.87	5511857.74	402.75	0	1000	75.4	75.4	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	0.0	0.0
871	527929.87	5511857.74	402.75	0	2000	75.6	75.6	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-6.7	-6.7
872	527929.87	5511857.74	402.75	0	4000	68.4	68.4	0.0	0.0	72.2	37.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-40.5	-40.5
873	527929.87	5511857.74	402.75	0	8000	61.3	61.3	0.0	0.0	72.2	134.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-144.3	-144.3
874	527932.47	5511857.14	402.90	0	32	32.2	32.2	0.0	0.0	72.2	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-34.6	-34.6
875	527932.47	5511857.14	402.90	0	63	41.4	41.4	0.0	0.0	72.2	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-25.6	-25.6
876	527932.47	5511857.14	402.90	0	125	57.5	57.5	0.0	0.0	72.2	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-20.4	-20.4
877	527932.47	5511857.14	402.90	0	250	67.0	67.0	0.0	0.0	72.2	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-8.7	-8.7
878	527932.47	5511857.14	402.90	0	500	71.4	71.4	0.0	0.0	72.2	2.2	-1.0	0.0	0.0	0.0	0.0	-0.0	-2.0	-2.0
879	527932.47	5511857.14	402.90	0	1000	74.6	74.6	0.0	0.0	72.2	4.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-0.7	-0.7
880	527932.47	5511857.14	402.90	0	2000	74.8	74.8	0.0	0.0	72.2	11.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-7.4	-7.4
881	527932.47	5511857.14	402.90	0	4000	67.6	67.6	0.0	0.0	72.2	37.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-41.1	-41.1
882	527932.47	5511857.14	402.90	0	8000	60.5	60.5	0.0	0.0	72.2	134.2	-1.1	0.0	0.0	0.0	0.0	-0.0	-144.8	-144.8
883	527747.86	5511871.90	397.17	0	32	33.3	33.3	0.0	0.0	73.4	0.0	-5.5	0.0	0.0	4.8	0.0	-0.0	-39.5	-39.5
884	527747.86	5511871.90	397.17	0	63	42.5	42.5	0.0	0.0	73.4	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-30.5	-30.5
885	527747.86	5511871.90	397.17	0	125	58.6	58.6	0.0	0.0	73.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-20.7	-20.7
886	527747.86	5511871.90	397.17	0	250	68.1	68.1	0.0	0.0	73.4	1.4	2.3	0.0	0.0	2.5	0.0	-0.0	-11.5	-11.5
887	527747.86	5511871.90	397.17	0	500	72.5	72.5	0.0	0.0	73.4	2.5	-1.1	0.0	0.0	4.8	0.0	-0.0	-7.3	-7.3
888	527747.86	5511871.90	397.17	0	1000	75.7	75.7	0.0	0.0	73.4	4.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-6.3	-6.3
889	527747.86	5511871.90	397.17	0	2000	75.9	75.9	0.0	0.0	73.4	12.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-14.1	-14.1
890	527747.86	5511871.90	397.17	0	4000	68.7	68.7	0.0	0.0	73.4	43.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-51.9	-51.9
891	527747.86	5511871.90	397.17	0	8000	61.6	61.6	0.0	0.0	73.4	154.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-170.4	-170.4
892	527905.46	5512169.99	403.16	0	32	32.2	32.2	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-35.8	-35.8
893	527905.46	5512169.99	403.16	0	63	41.4	41.4	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-26.8	-26.8
894	527905.46	5512169.99	403.16	0	125	57.5	57.5	0.0	0.0	73.5	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-21.8	-21.8
895	527905.46	5512169.99	403.16	0	250	67.0	67.0	0.0	0.0	73.5	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-10.1	-10.1
896	527905.46	5512169.99	403.16	0	500	71.4	71.4	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.5	-3.5
897	527905.46	5512169.99	403.16	0	1000	74.6	74.6	0.0	0.0	73.5	4.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-2.6	-2.6
898	527905.46	5512169.99	403.16	0	2000	74.8	74.8	0.0	0.0	73.5	12.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-10.4	-10.4
899	527905.46	5512169.99	403.16	0	4000	67.6	67.6	0.0	0.0	73.5	43.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-48.2	-48.2
900	527905.46	5512169.99	403.16	0	8000	60.5	60.5	0.0	0.0	73.5	154.9	-1.1	0.0	0.0	0.0	0.0	-0.0	-166.8	-166.8
901	527903.31	5512169.31	403.34	0	32	31.5	31.5	0.0	0.0	73.5	0.0	-5.5	0.0	0.0	0.0	0.0	-0.0	-36.5	-36.5
902	527903.31	5512169.31	403.34	0	63	40.7	40.7	0.0	0.0	73.5	0.2	-5.5	0.0	0.0	0.0	0.0	-0.0	-27.4	-27.4
903	527903.31	5512169.31	403.34	0	125	56.8	56.8	0.0	0.0	73.5	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-22.5	-22.5
904	527903.31	5512169.31	403.34	0	250	66.3	66.3	0.0	0.0	73.5	1.4	2.3	0.0	0.0	0.0	0.0	-0.0	-10.8	-10.8
905	527903.31	5512169.31	403.34	0	500	70.7	70.7	0.0	0.0	73.5	2.6	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.2	-4.2

Sample Calculation at facade of NR03

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
906	527903.31	5512169.31	403.34	0	1000	73.9	73.9	0.0	0.0	73.5	4.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-3.3	-3.3
907	527903.31	5512169.31	403.34	0	2000	74.1	74.1	0.0	0.0	73.5	12.8	-1.1	0.0	0.0	0.0	0.0	-0.0	-11.0	-11.0
908	527903.31	5512169.31	403.34	0	4000	66.9	66.9	0.0	0.0	73.5	43.5	-1.1	0.0	0.0	0.0	0.0	-0.0	-48.9	-48.9
909	527903.31	5512169.31	403.34	0	8000	59.8	59.8	0.0	0.0	73.5	155.1	-1.1	0.0	0.0	0.0	0.0	-0.0	-167.6	-167.6
910	527504.07	5511815.57	395.68	0	32	31.6	31.6	0.0	0.0	74.7	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-42.5	-42.5
911	527504.07	5511815.57	395.68	0	63	40.8	40.8	0.0	0.0	74.7	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-33.4	-33.4
912	527504.07	5511815.57	395.68	0	125	56.9	56.9	0.0	0.0	74.7	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-23.8	-23.8
913	527504.07	5511815.57	395.68	0	250	66.4	66.4	0.0	0.0	74.7	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-14.8	-14.8
914	527504.07	5511815.57	395.68	0	500	70.8	70.8	0.0	0.0	74.7	3.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.7	-10.7
915	527504.07	5511815.57	395.68	0	1000	74.0	74.0	0.0	0.0	74.7	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.1	-10.1
916	527504.07	5511815.57	395.68	0	2000	74.2	74.2	0.0	0.0	74.7	14.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-19.1	-19.1
917	527504.07	5511815.57	395.68	0	4000	67.0	67.0	0.0	0.0	74.7	50.4	-1.1	0.0	0.0	4.8	0.0	-0.0	-61.9	-61.9
918	527504.07	5511815.57	395.68	0	8000	59.9	59.9	0.0	0.0	74.7	179.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-198.4	-198.4
919	527623.35	5511779.62	394.29	0	32	30.0	30.0	0.0	0.0	74.0	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-43.3	-43.3
920	527623.35	5511779.62	394.29	0	63	39.2	39.2	0.0	0.0	74.0	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-34.2	-34.2
921	527623.35	5511779.62	394.29	0	125	55.3	55.3	0.0	0.0	74.0	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-24.6	-24.6
922	527623.35	5511779.62	394.29	0	250	64.8	64.8	0.0	0.0	74.0	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-15.4	-15.4
923	527623.35	5511779.62	394.29	0	500	69.2	69.2	0.0	0.0	74.0	2.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.2	-11.2
924	527623.35	5511779.62	394.29	0	1000	72.4	72.4	0.0	0.0	74.0	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-10.4	-10.4
925	527623.35	5511779.62	394.29	0	2000	72.6	72.6	0.0	0.0	74.0	13.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-18.7	-18.7
926	527623.35	5511779.62	394.29	0	4000	65.4	65.4	0.0	0.0	74.0	46.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-58.6	-58.6
927	527623.35	5511779.62	394.29	0	8000	58.3	58.3	0.0	0.0	74.0	165.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-184.6	-184.6
928	528162.71	5512248.55	400.49	0	32	28.4	28.4	0.0	0.0	72.4	0.0	-5.4	0.0	0.0	0.0	0.0	-0.0	-38.7	-38.7
929	528162.71	5512248.55	400.49	0	63	37.6	37.6	0.0	0.0	72.4	0.1	-5.4	0.0	0.0	0.0	0.0	-0.0	-29.6	-29.6
930	528162.71	5512248.55	400.49	0	125	53.7	53.7	0.0	0.0	72.4	0.5	5.3	0.0	0.0	0.0	0.0	-0.0	-24.5	-24.5
931	528162.71	5512248.55	400.49	0	250	63.2	63.2	0.0	0.0	72.4	1.2	2.3	0.0	0.0	0.0	0.0	-0.0	-12.8	-12.8
932	528162.71	5512248.55	400.49	0	500	67.6	67.6	0.0	0.0	72.4	2.3	-1.0	0.0	0.0	0.0	0.0	-0.0	-6.0	-6.0
933	528162.71	5512248.55	400.49	0	1000	70.8	70.8	0.0	0.0	72.4	4.3	-1.1	0.0	0.0	0.0	0.0	-0.0	-4.8	-4.8
934	528162.71	5512248.55	400.49	0	2000	71.0	71.0	0.0	0.0	72.4	11.4	-1.1	0.0	0.0	0.0	0.0	-0.0	-11.7	-11.7
935	528162.71	5512248.55	400.49	0	4000	63.8	63.8	0.0	0.0	72.4	38.7	-1.1	0.0	0.0	0.0	0.0	-0.0	-46.2	-46.2
936	528162.71	5512248.55	400.49	0	8000	56.7	56.7	0.0	0.0	72.4	138.0	-1.1	0.0	0.0	0.0	0.0	-0.0	-152.6	-152.6
937	527523.55	5511818.41	395.26	0	32	30.3	30.3	0.0	0.0	74.6	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-43.6	-43.6
938	527523.55	5511818.41	395.26	0	63	39.5	39.5	0.0	0.0	74.6	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-34.6	-34.6
939	527523.55	5511818.41	395.26	0	125	55.6	55.6	0.0	0.0	74.6	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-25.0	-25.0
940	527523.55	5511818.41	395.26	0	250	65.1	65.1	0.0	0.0	74.6	1.6	2.3	0.0	0.0	2.5	0.0	-0.0	-15.9	-15.9
941	527523.55	5511818.41	395.26	0	500	69.5	69.5	0.0	0.0	74.6	2.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.8	-11.8
942	527523.55	5511818.41	395.26	0	1000	72.7	72.7	0.0	0.0	74.6	5.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.2	-11.2
943	527523.55	5511818.41	395.26	0	2000	72.9	72.9	0.0	0.0	74.6	14.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-20.1	-20.1
944	527523.55	5511818.41	395.26	0	4000	65.7	65.7	0.0	0.0	74.6	49.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-62.4	-62.4
945	527523.55	5511818.41	395.26	0	8000	58.6	58.6	0.0	0.0	74.6	177.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-197.4	-197.4
946	527600.30	5511769.27	394.91	0	32	29.0	29.0	0.0	0.0	74.1	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-44.4	-44.4
947	527600.30	5511769.27	394.91	0	63	38.2	38.2	0.0	0.0	74.1	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-35.3	-35.3
948	527600.30	5511769.27	394.91	0	125	54.3	54.3	0.0	0.0	74.1	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-25.7	-25.7
949	527600.30	5511769.27	394.91	0	250	63.8	63.8	0.0	0.0	74.1	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-16.6	-16.6
950	527600.30	5511769.27	394.91	0	500	68.2	68.2	0.0	0.0	74.1	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-12.4	-12.4
951	527600.30	5511769.27	394.91	0	1000	71.4	71.4	0.0	0.0	74.1	5.2	-1.1	0.0	0.0	4.8	0.0	-0.0	-11.6	-11.6
952	527600.30	5511769.27	394.91	0	2000	71.6	71.6	0.0	0.0	74.1	13.9	-1.1	0.0	0.0	4.8	0.0	-0.0	-20.0	-20.0
953	527600.30	5511769.27	394.91	0	4000	64.4	64.4	0.0	0.0	74.1	47.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-60.3	-60.3
954	527600.30	5511769.27	394.91	0	8000	57.3	57.3	0.0	0.0	74.1	167.6	-1.1	0.0	0.0	4.8	0.0	-0.0	-188.0	-188.0
955	527575.52	5511758.12	395.57	0	32	25.9	25.9	0.0	0.0	74.3	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-47.7	-47.7
956	527575.52	5511758.12	395.57	0	63	35.1	35.1	0.0	0.0	74.3	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-38.6	-38.6
957	527575.52	5511758.12	395.57	0	125	51.2	51.2	0.0	0.0	74.3	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-29.0	-29.0
958	527575.52	5511758.12	395.57	0	250	60.7	60.7	0.0	0.0	74.3	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-19.9	-19.9
959	527575.52	5511758.12	395.57	0	500	65.1	65.1	0.0	0.0	74.3	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.7	-15.7
960	527575.52	5511758.12	395.57	0	1000	68.3	68.3	0.0	0.0	74.3	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-15.0	-15.0
961	527575.52	5511758.12	395.57	0	2000	68.5	68.5	0.0	0.0	74.3	14.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-23.5	-23.5
962	527575.52	5511758.12	395.57	0	4000	61.3	61.3	0.0	0.0	74.3	47.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-64.3	-64.3
963	527575.52	5511758.12	395.57	0	8000	54.2	54.2	0.0	0.0	74.3	170.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-193.8	-193.8
964	527575.80	5511758.25	395.56	0	32	15.0	15.0	0.0	0.0	74.3	0.1	-5.5	0.0	0.0	4.8	0.0	-0.0	-58.6	-58.6
965	527575.80	5511758.25	395.56	0	63	24.2	24.2	0.0	0.0	74.3	0.2	-5.5	0.0	0.0	4.8	0.0	-0.0	-49.5	-49.5
966	527575.80	5511758.25	395.56	0	125	40.3	40.3	0.0	0.0	74.3	0.6	5.3	0.0	0.0	0.0	0.0	-0.0	-39.8	-39.8
967	527575.80	5511758.25	395.56	0	250	49.8	49.8	0.0	0.0	74.3	1.5	2.3	0.0	0.0	2.5	0.0	-0.0	-30.7	-30.7
968	527575.80	5511758.25	395.56	0	500	54.2	54.2	0.0	0.0	74.3	2.8	-1.1	0.0	0.0	4.8	0.0	-0.0	-26.6	-26.6

140821 Treasury Metals Inc. - Goliath Gold Project 1401701

Line Source, ISO 9613, Name: "Haul Truck #3", ID: "Htruck3_o"																			
Nr.	X	Y	Z	Refl.	Freq.	LxT	LxN	K0	Dc	Adiv	Aatm	Agr	Afol	Ahous	Abar	Cmet	RL	LrT	LrN
	(m)	(m)	(m)		(Hz)	dB(A)	dB(A)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	(dB)	dB(A)	dB(A)
969	527575.80	5511758.25	395.56	0	1000	57.4	57.4	0.0	0.0	74.3	5.3	-1.1	0.0	0.0	4.8	0.0	-0.0	-25.8	-25.8
970	527575.80	5511758.25	395.56	0	2000	57.6	57.6	0.0	0.0	74.3	14.1	-1.1	0.0	0.0	4.8	0.0	-0.0	-34.4	-34.4
971	527575.80	5511758.25	395.56	0	4000	50.4	50.4	0.0	0.0	74.3	47.7	-1.1	0.0	0.0	4.8	0.0	-0.0	-75.2	-75.2
972	527575.80	5511758.25	395.56	0	8000	43.3	43.3	0.0	0.0	74.3	170.0	-1.1	0.0	0.0	4.8	0.0	-0.0	-204.6	-204.6

Sample Calculation at facade of NR03

APPENDIX H-4

ENVIRONMENTAL NOISE ASSESSMENT

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Treasury Metals Inc. – Goliath Gold Project

Wabigoon, Ontario

Final Report

Environmental Noise Assessment

RWDI #1401701
October 16, 2014

SUBMITTED TO:

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EXECUTIVE SUMMARY

Treasury Metals Inc. retained RWDI AIR Inc. (RWDI) to complete an environmental noise assessment in support of the Goliath Gold Project (the Project). The Project is a proposed gold mine near Wabigoon, Ontario. This report assesses anticipated noise emissions from the mine against the applicable criteria.

As a federal Environmental Assessment, noise guidelines developed by Health Canada for Environmental Assessments are applicable. As a development in the province of Ontario, the Ministry of Environment and Climate Change noise criteria are also applicable.

Modelling inputs include source type and locations, and sound levels. Source types and locations were taken from information provided in the Goliath Gold project description, and from Treasury Metals personnel. Sound levels were taken from information on file at RWDI, or were calculated based on equipment specifications. At this early stage of development, information can be limited therefore, where necessary, modelling has been conducted using sound levels for typical sources at a mine.

Noise sensitive receptors identified in the area are houses (seasonal or otherwise). Fourty-four individual receptors were identified. Noise modelling software was used to predict the effects of the Project at the nearest receptors, representing the worst case (loudest) impacts.

In some circumstances, sound levels of specific sources were found to cause noncompliance at noise sensitive receptors. Quieter than average equipment will be required for some pieces to achieve compliance. This equipment is commercially available. Treasury Metals has committed to ensuring that sound levels from these pieces of equipment meet these requirements.

Based on the commitment described above to limit sound levels of certain equipment, the Goliath Gold Project is predicted to be in compliance with both the Health Canada and Ministry of Environment and Climate Change guidelines at all receptors.

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1. INTRODUCTION

1.1 Overview

Treasury Metals Incorporated (Treasury) has been exploring and developing the Thunder Lake Gold deposit known as the Goliath Gold Project (the Project), located near Dryden, Ontario. The Project involves the construction, operation, closure, and reclamation of a 4.5 million tonne-per-annum (Mt/a) open pit and underground mine that will operate for 12 years. This report focuses on the environmental noise emissions over the life of the project, and is intended to support the federal Environmental Assessment process.

1.1.1 Noise Considerations

The Project is located in a rural area of Northern Ontario and is not near any existing sources of industrial noise. The Goliath Gold Project will add new sources of noise to the area. Noise has the potential to affect wildlife species and human receptors in the nearby environment. This assessment addresses human impacts, and provides a quantitative evaluation of noise effects which can be used to understand the magnitude of effects on wildlife species in the vicinity of the project.

This report identifies the existing noise environment in the project area and describes the potential impacts of the Project. The potential effects associated with the development of the mine were evaluated and compared to both the Health Canada and Ministry of the Environment and Climate Change guidelines (HC, 2011 and MOE, 2013).

This assessment concentrates on comparisons with guideline limits and impacts on human receptors. The effects of potential noise and vibration impacts on other biophysical components, including wildlife, vegetation and human health are addressed separately by the appropriate disciplines.

1.1.2 Regional Setting

The Project is located in northwestern Ontario, approximately 125 kilometers (km) east of the City of Kenora, 20 km east of the City of Dryden and 325 km northwest of the City of Thunder Bay. The total area of the Project is 4,991 hectares (50 km2) covering portions of Hartman and Zealand townships east of the city of Dryden, Ontario. The Project is located approximately 3 km north of the Trans-Canada Highway, and is accessible by road.

1.1.2.1 Local Study Area

The Local Study Area was selected to represent areas where noise impacts associated with the project are likely to occur. In practice, noise impacts from a project of this magnitude are anticipated to be negligible at distances 1.5 km and greater from the nearest active project area. The study therefore focuses on areas within 1.5 km of the main features of the mine; namely the open pit mine, mill, vent raises, stockpiles, and haul truck routes.

2. VALUED COMPONENTS

2.1 Selected Valued Components and Indicators

High levels of environmental noise can affect people by impairing their enjoyment of using the land. High noise levels can also affect wildlife, causing changes in behaviour or avoidance of affected areas, for at least temporary periods of time. Environmental sound levels are therefore a Valued Component (VC) selected for study.

Table 1: Valued Components

VC	Reason for Selection of VC	Indicator
Environmental sound levels	Minimize effects on human dwellings within the region Minimize disturbance of natural terrestrial wildlife use patterns in the region	A-Weighted Sound Levels (L_{EQ} dBA) Increase in Percent Highly Annoyed as a result of changing sound levels

2.1.1 Noise Metrics & Magnitude of Effects

Environmental sound levels vary continuously over time. To account for both daily and short-term variations in sound levels, several single numerical descriptors have been developed based on large-scale psycho-acoustic studies of annoyance with environmental noise. These allow sound monitoring to be conducted for a constantly varying sound environment over an extended period, with the results described as a single number that accurately describes the environment. Terms relating to environmental noise are defined in Appendix A.

The single number descriptor commonly used in most international standards for environmental sound measurements is the energy equivalent sound level (L_{EQ}). The L_{EQ} value, expressed in dBA, is the energy-averaged, A-weighted sound level for the complete measurement interval. It is the steady, continuous sound level over a given period that has the same acoustic energy as the actual varying sound levels occurring over the same period in the measured environment. The L_{EQ} is one of the most common and useful predictors of human response to noise, and is the noise descriptor that is used in the majority of environmental noise criteria. The A-weighting accounts for the frequency content of the measured sound based on a frequency response similar to that heard by the human ear.

Another single metric descriptor which inherently accounts for additional noise sensitivity during nighttime hours is the DNL or L_{DN}. The L_{DN} is a 24-hour L_{EQ}, where 10 dB is added (arithmetically) to the nighttime sound levels during the hours of 2200h to 0700h.

The L_{EQ} can be used to calculate another metric known as Percent Highly Annoyed. High annoyance is a widely accepted indicator of human health effects resulting from exposure to environmental noise. Of particular interest is the change in Percent Highly Annoyed resulting from increases in environmental noise from The Project. There is a non-linear relationship between Percent Highly Annoyed and L_{EQ}. As a result, a project in a relatively quiet environment will not increase the Percent Highly Annoyed as much as the same project in a relatively noisy environment.

The descriptors specific to this study are:

- the 15-hour A-weighted energy equivalent sound level, L_D or L_{EQ} (day, 15), referred to as the daytime sound level;
- the 9-hour A-weighted energy equivalent sound level, L_N or L_{EQ} (night, 9), referred to as the nighttime sound level;
- the 1-hour A-weighted energy equivalent sound level, L_{EQ} (1), referred to as the hourly sound level
- the 24-hour time-weighted energy equivalent sound level, DNL or $L_{DN;}$ and
- the change in Percent Highly Annoyed.

For reference, ranges of typical sound levels are presented in Table 2.

Table 2: Typical Sound Levels of Common Noise Sources

Sound Level	dBA	Common Noise Sources
Deafening	**120**	Threshold of pain
	115	Maximum noise level at a hard rock concert
	110	Accelerating motorcycle at 1 m
	105	Loud auto horn at 3 m
Very Loud	**100**	Dance club; Maximum human vocal output at 1 m
	95	Jackhammer at 15 m
	90	Inside a noisy factory
	85	Heavy truck pass-by at 15 m
Loud	**80**	School cafeteria; Noisy bar
	75	Near edge of major highway; Inside automobile travelling at 60 km/h
	70	Vacuum cleaner at 1.5 m
	65	Normal human speech, i.e., an un-raised voice, at 1 m
Moderate	**60**	Typical background noise levels in a large department store; Hair dryer
	55	Running tap water
	50	Clothes dryer; Air conditioner
	45	Typical background noise level in an office caused by HVAC; Flowing stream; MOECC guideline for daytime & evening noise in a rural setting
Faint	**40**	Typical background noise level in a library; MOECC guideline for nighttime noise in a rural setting
	35	Average whisper; Typical quiet outdoors
	30	Broadcast studio
	25	
Very Faint	**20**	Deep woods on a calm day
	15	
	10	
	5	Human breathing
	0	Threshold of hearing, i.e., quietest sound that can be heard

2.1.2 Duration & Reversibility

Noise is temporary in nature, and stops when the source ceases to exist. Noise itself has no long-term presence and the acoustic environment will revert to a natural state with no intervention required.

2.1.3 Direction

Noise sources are directional in nature, and the directivity of a source is accounted for where appropriate in modelling. Overall, there is minimal directivity effect from the entire site due to the large number of noise sources which will collectively emit noise in all directions.

2.1.4 Frequency and Timing

Noise will be emitted throughout the life of the project, when any activities take place. Noise is therefore considered to be frequent, and continuous.

3. STUDY METHODOLOGY

3.1 Baseline Study

A baseline study was conducted in the winter of 2011 and the summer of 2013. Three sites were monitored in 2013 and one site in 2011. Further details are provided in section 5. Data from the baseline study is used to determine the appropriate sound level limits resulting from the existing natural environment sound levels.

3.2 Data Collection

Best-available data regarding future construction, operations, and decommissioning were collected from Treasury Metals, and used to predict sound levels for the Project. The basis for model inputs was primarily obtained from the project description (Treasury, 2012). Further information was gathered from Treasury through from May, June, and July 2014. Equipment sizes for sources such as the excavators and bulldozers have not yet been defined. Therefore, sizes were estimated from production levels and sound levels were predicted using numerical modelling techniques, or taken from manufacturer data for typical equipment. Where limited data was available on equipment, typical levels were selected from the RWDI library.

3.3 Modelling

3.3.1 Continuous Sources (ISO-9316)

Modelling of sound level propagation for continuous sources to the receptors was conducted using Cadna/A, a commercially available implementation of the ISO 9613 (ISO, 1994b and ISO, 1996) algorithms. Cadna/A is produced by Datakustik GmbH. The modelling took into account the following factors:

- Source sound power level and directivity;

- Distance attenuation;
- Source-receptor geometry including heights, elevations and topography;
- Barrier effects of the site and surrounding buildings;
- Duration of events;
- Ground and air (atmospheric) attenuation; and
- Meteorological effects on sound propagation.

The ISO-9613 algorithms are the current international standard for airborne sound propagation, and are widely used in noise impact assessments in Ontario and Canadian jurisdictions. Modelling parameters have been selected to conform to the preferred parameters of the Ministry of Environment and Climate Change (MOECC). These parameters introduce some additional conservatism to the modelling beyond that which would be achieved with strict conformance to the ISO standard, meaning that sound levels are predicted to be slightly higher than they otherwise would be. Parameters used in the modelling are presented in Table 3.

Table 3: Parameters Used in ISO-9613 Modelling

Parameter	Model Settings	Description/Notes
Calculation Standard	ISO-9613	All sources and attenuators are treated as required by the cited standard
Source Directivity	Directivities applied	Applied to stationary sources with significant directivity.
Ground Absorption	0.8 (index value 0 to 1)	Area outside project infrastructure is primarily soft ground and occasional hard ground.
Temperature/Humidity	10°C/70% Relative Humidity	Average conditions for area
Wind Conditions	Default ISO-9613	The propagation conditions in the ISO (1996) standard are valid for wind speeds between 4 and 18 km/h; all points are considered downwind
	ISO 1996 – moderate inversion condition	
Terrain	Terrain applied	Terrain in the area is modelled at 10 m resolution to account for any natural barriers within the noise study area
Reflections	0	No significant reflections from buildings on site

3.3.2 Blasting

Modelling of blasting sound levels was conducted using numerical modelling techniques presented in the International Society of Explosives Engineers Blaster's Handbook (ISEE, 2011). Airborne vibration due to blasting activities attenuates from a site at a slower rate than ground vibrations. The distribution of this air vibration energy from a blast is also strongly influenced by the prevailing weather conditions during the blast. Other factors influencing airborne vibration propagation include:

- charge-weight per delay;
- depth of burial;
- volume of displaced rock;
- delay time intervals;
- type of explosive;
- atmospheric conditions; and,
- topography.

Further definition of these terms is provided in Appendix A.

The rate at which blast noise decays or attenuates from a blast site is dependent upon the scaled distance as follows:

- scaled distance (SD_3) = $R/\sqrt[3]{W}$
  - where R = distance (metres) from the blast to a point of interest; and,
  - W = charge-weight (kilograms) detonated within any 8-millisecond delay period.

Prediction of maximum blast noise was based on the following equation which assumes average burial of the explosive:

- $P = 37.1 \times SD_3^{-0.97}$
  - where P = peak air pressure (Pascals); and,
  - SD_3 = scaled distance (metres per kilogram [$m/kg^{1/3}$]).

This equation produces a pressure in pascals, which is then converted to decibels (dB) as shown in the following equation:

- $dB=20 \log(P/P_o)$
  - where P_o is the reference pressure (2×10^{-5} Pa).

3.4 Evaluation of Impacts

The effects of the Project are ultimately evaluated by comparing modelled results to the applicable guidelines. In this study, the following comparisons will be made:

- Hourly L_{EQ} vales to MOECC criteria;
- Blasting sound levels to MOECC criteria; and
- Change in Percent Highly Annoyed to Health Canada criteria.

4. ASSESSMENT CRITERIA

The federal assessment criteria for the Project are outlined by Health Canada (HC, 2011). As the Project falls within Ontario provincial jurisdiction, and thus the MOECC guideline NPC-300 (MOE, 2013) will also be used. The HC and MOECC guidelines both focus on reducing environmental impacts as result of new developments. The HC guidelines further address the potential human health impacts associated with elevated noise levels. The specific criteria are discussed in the following sections.

4.1 Ministry of Environment and Climate Change Guidelines

Note that the Ministry of Environment changed its name in the summer of 2014 to the Ministry of Environment and Climate Change. There may be apparent inconsistency between the use of acronyms "MOE" and "MOECC" in this report, however, the use of the acronym MOECC refers to the current ministry, while the acronym MOE is used only when referring to publications by the former Ministry of Environment.

4.1.1 Continuous Sources

The MOECC guidance for continuous noise sources comes from several documents in the Noise Pollution Control or NPC series of publications. NPC-300 is referenced frequently in this section, as it presents receptor criteria and limits, and references many of the other documents in the NPC series.

4.1.1.1 Points of Reception

Sound levels from sources at the Project are required to be assessed at receptors located on noise-sensitive land uses. Noise-sensitive land uses are defined in the MOECC's environmental noise guideline, Publication NPC-300, as the property of a person that accommodates a dwelling, a noise-sensitive commercial building or a noise-sensitive institutional building. Vacant lots are considered noise-sensitive, provided they are zoned to allow a sensitive use and are accessible by road. A noise-sensitive land use may have one or more receptors.

Residential receptors include houses, cottages, and the like, whether continuously occupied or seasonal. For existing residential properties, sound levels are assessed at the façade of the building at a height of 4.5 m above local grade and an outdoor POR at a height of 1.5 m. The point of assessment for the outdoor receptors is a point 30 m from the building façade, or the property line in cases where the 30 m setback would exceed the size of the property.

Commercial and institutional receptors include hotels, churches, daycares, schools, clinics, and the like. The point of assessment for these types of receptors is at the façade of the building only; Outdoor receptors are not assessed for commercial and institutional noise-sensitive land uses.

Properties that are zoned to permit a noise-sensitive land use but are currently vacant need to be assessed as if a noise-sensitive land use exists at that location. For these noise sensitive areas, the receptors are typically considered in a location consistent with typical local building patterns, at a height of 4.5 m above local grade. In the case of unincorporated land without a minister's zoning order, the land is

generally understood to allow noise-sensitive uses, and would be assessed in the same way as land that is zoned for a noise sensitive use.

Forty-four individual noise-sensitive receptors were identified within the local study area. Where the surface mining rights have been secured by Treasury Metals, land use was assumed to be non-noise-sensitive and no receptors were identified. All other vacant lands in the vicinity of the Project that were found to be inaccessible (except by a rough cut-in through the forest) were not considered as receptors. Forty-two of the receptors were identified as houses. One was identified as the campground at Aaron Provincial Park. One receptor is a trailer located on otherwise vacant land. There are no receptors identified within the local study area to the north east, because Treasury Metals has surface rights to all land in that direction.

Since noise impacts decrease with distance from the source, the nearest receptors to the Project are considered the worst-case, and are evaluated explicitly. Other receptors are not evaluated explicitly, but effects can be seen noise contour maps. Locations of all identified receptors are presented in Figure 1. Only receptors that are explicitly evaluated are presented with labels in Figure 1.

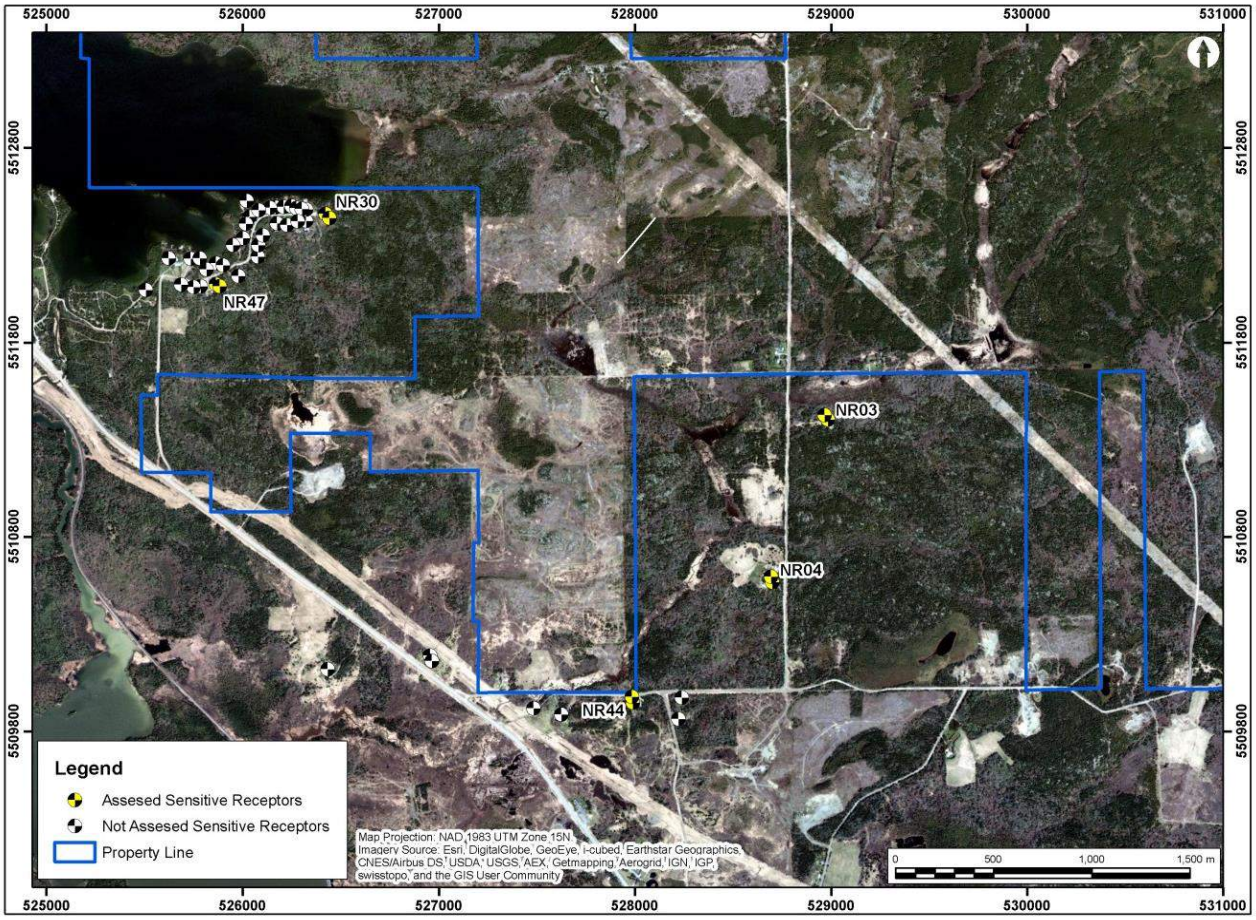

Figure 1: Noise Sensitive Receptor Locations

4.1.1.2 Evaluation Criteria

The applicable guideline limits for the receptors in the vicinity of the Project are the "Stationary Source" guidelines for Class 3 area, set out in MOE Publication NPC-300. These guidelines state that one-hour sound exposures (A-Weighted hourly L_{EQ} values) from stationary sources in Class 3 area shall not exceed that of the background, where the background is defined as the sound level present in the environment produced by sources other than those associated with the project under assessment. The MOE Publication NPC-300 minimum sound level limits at the façade (or plane of window) are summarized as follows:

- The higher of 45 dBA or background sound, during the daytime hours (0700-1900h);
- The higher of 40 dBA or background sound, during the evening hours (1900-2300h); and
- The higher of 40 dBA or background sound, during the night-time hours (2300-0700h).

The MOE Publication NPC-300 sound level limits at an outdoor POR are applicable during the daytime and evening hours only. These limits are summarized as follows:

- The higher of 45 dBA or background sound, during the daytime hours (0700-1900h); and
- The higher of 40 dBA or background sound, during the evening hours (1900-2300h).

The applicable criterion is the higher of the background sound level and the default minimum sound level limit. Measured background sound levels, as shown in section 5, are below the minimum sound level limits. The minimum sound level limits are therefore applicable.

Operation of emergency equipment, such as generators, is not considered except during planned testing. Sound levels of planned testing of emergency equipment are evaluated separately from all other noise from the Project. In the case where multiple pieces of emergency equipment are tested together, their combined impact is evaluated against the limit. The limits for emergency equipment testing are 5 dB above the limits for other stationary sources discussed above.

4.1.1.3 Sound Quality Adjustments

Sources that have characteristics considered to be particularly annoying receive additional consideration in accordance with MOE publication NPC-104 (MOE, 1978). These guidelines specify that a penalty is applicable for tonal, cyclically varying, or quasi-steady impulsive sound characteristics. The adjustment is based on assessment at the receptor, as described in MOE Publication NPC-103 (MOE, 1978). No sources were identified to exhibit annoying sound emissions.

4.1.2 Blasting

Blasting is evaluated separately under MOECC guidelines. Guidance for noise from blasting is taken mainly from two publications, NPC-119 (MOE, 1977) and Guidelines on Information Required for the Assessment of Blasting Noise and Vibration (MOE, 1985).

4.1.2.1 Points of Reception

The receptors for assessment of blasting noise are the same as for continuous noise, as described in section 4.1.1.1.

4.1.2.2 Evaluation Criteria

Blasting activities are identified as a source for sound due to airborne vibration (concussion). The level of sound experienced at a receptor is assessed using the Peak Pressure Level measured in linear (un-weighted) decibels (dB). MOE publication NPC-119 introduces two limits, the cautionary limit, and the peek pressure level limit. The cautionary limit is 120 dB and can be applied in cases where there is no monitoring of sound levels from blasting. The peek pressure limit is 128 dB, and can only be used when sound level monitoring is conducted during blasting. The cautionary limit is used as the criteria for airborne blast noise for the Project.

4.2 Health Canada Noise Guidelines

4.2.1 Continuous Sources

The applicable federal criteria for this assessment were developed by Health Canada, and presented in Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise (HC, 2011). These guidelines are specifically intended for use in federal Environmental Assessments.

4.2.1.1 Points of Reception

The Health Canada guidelines do not provide specific guidance with respect to choosing noise sensitive receptor locations. It is clear throughout the document that it is intended for the assessment of noise as it relates to human health, therefore receptor locations should be those occupied by humans. In the absence of further guidance, the MOECC definition of a noise sensitive receptor is used in this assessment, meaning that the receptor locations for both MOECC assessment and HC assessment are the same.

4.2.1.2 Evaluation Criteria

Sound levels at receptors are evaluated against the baseline noise level in the area. The assessment method utilizes the change in Percent Highly Annoyed metric, which aims to predict change in the proportion of people that would be highly annoyed due to the elevated noise levels. The change in Percent Highly Annoyed is influenced by the absolute level of the sound experienced at the receptor. There is a non-linear relationship between Percent Highly Annoyed and L_{EQ}. In practice this means that in a quiet area, an increase in sound level will result in a lower change in percent highly annoyed than the same change in sound level in a louder area. Since The Project is in a relatively quiet area, the change in Percent Highly Annoyed would typically be expected to be low. The practical result of this is that the MOECC assessment criteria discussed in section 4.1 are the more stringent of the two guidelines.

The Health Canada noise assessment criteria are as follows:

- Maximum L_{DN} of 75 dBA

- Maximum Allowed Increase in Percent Highly Annoyed of 6.5%

The Health Canada guidelines require that all baseline noise assessments and project-related noise emissions be evaluated in terms of the L_{DN} which accounts for full day exposures.

The guidelines apply to the construction, operational, and closure phases of the project. The inclusion of the construction and closure phases is required as those phases of the project will be longer than one year in duration.

4.2.2 Blasting

Blasting is considered a "High Energy Impulse" under the Health Canada noise guidelines. The guidelines dictate that the assessment of impulsive noise is to be combined with the assessment of steady state noise. A 12 dB penalty is added to the high energy impulsive component of the combined total.

5. BASELINE STUDIES

A baseline study was conducted in the winter of 2011 and the summer of 2013. Three sites were monitored in 2013 and one site in 2011. Further details are provided in section 5. Data from the baseline study is used to determine the appropriate sound level limits resulting from the sound levels in the existing natural environment.

The more detailed baseline assessment completed in 2013, was used as the basis for this project, and is documented in detail the Baseline Noise Assessment Report (RWDI, 2013). The baseline study did not present the L_D, L_N, or L_{DN} levels. These have been calculated from the raw data and are presented in this section along with the original baseline data. Key items from that report are summarized in this section.

5.1 Baseline Monitoring Locations

Long-term measurements of background ambient sound levels at one location were conducted from December 5 to December 7, 2011, near the project site as shown in Figure 2.

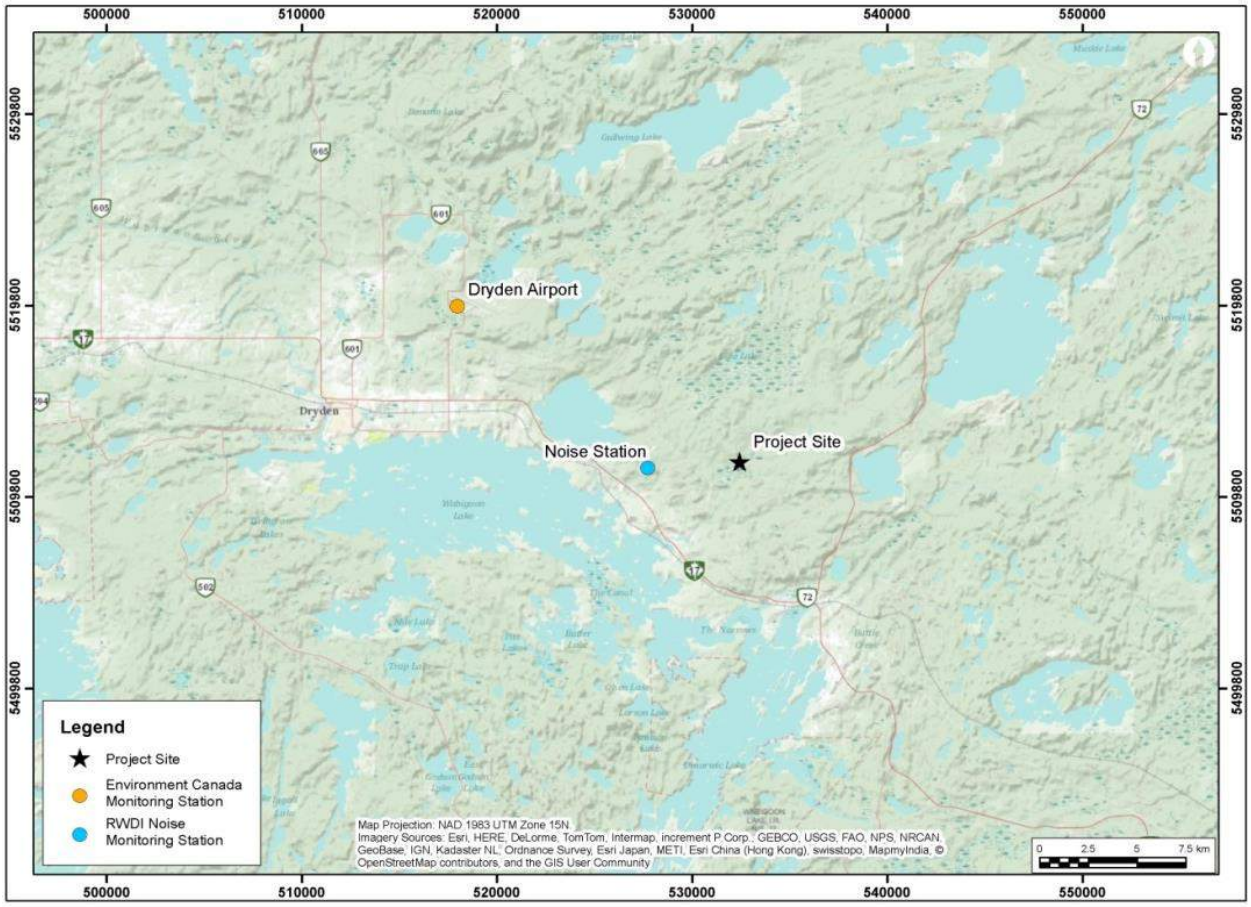

Figure 2: Baseline Monitoring Locations, Winter 2011

Additional monitoring at three representative locations to the west of the site was conducted from July 3 to July 9, 2013. The locations of baseline monitoring stations are shown in Figure 3.

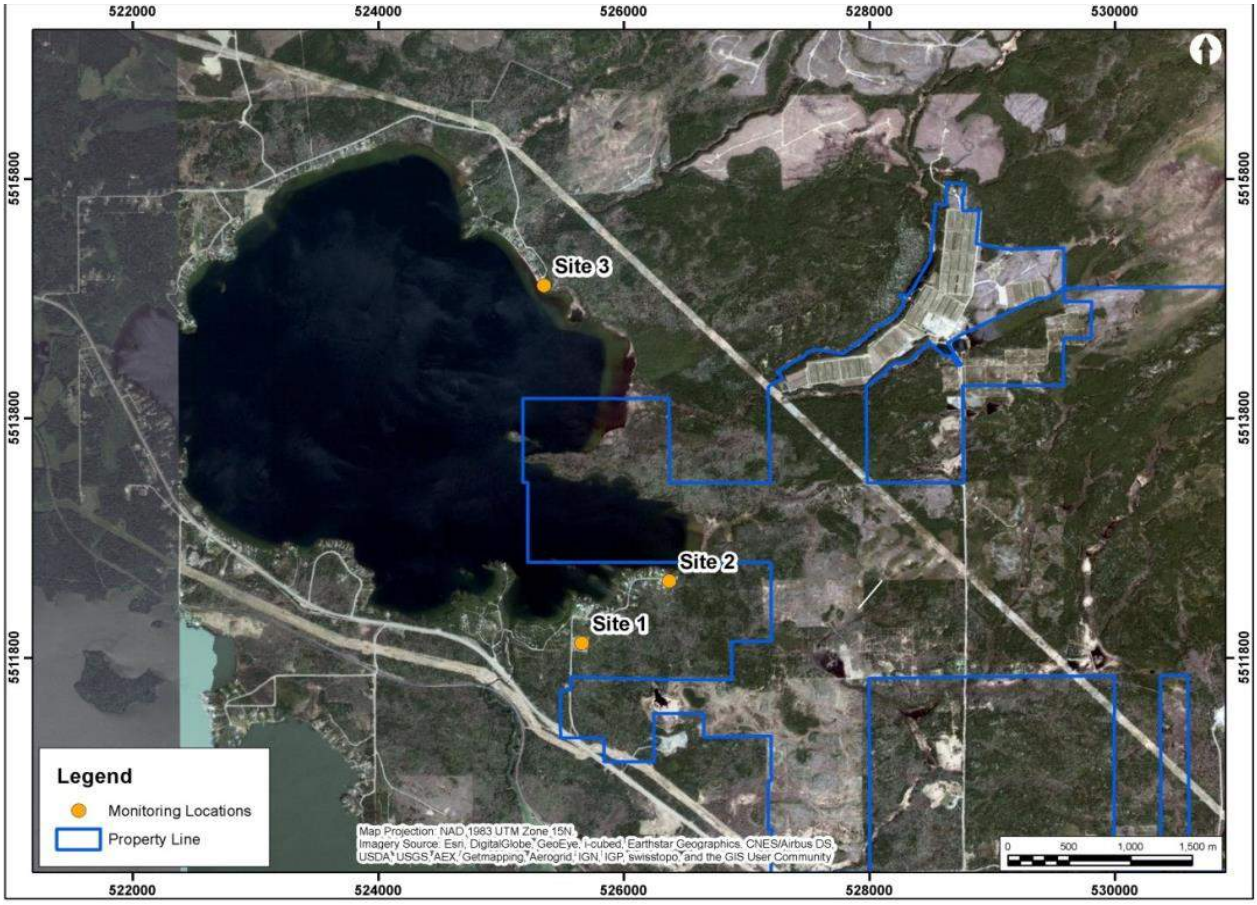

Figure 3: Baseline Monitoring Locations, Summer 2013

5.2 Noise Environment

The study area is in a rural location outside a small northern community with low levels of human activity. Noise observed during the study consisted of mostly wind, small animals, bird noise and noise from the TransCanada Highway which runs in near proximity to the study area.

Background ambient sound levels in remote areas are typically low, ranging from about 25 to 40 dBA. These values are similar to those measured for the Project. At these levels, noise would be described as faint.

Table 4: Baseline Study Results

Location	Lowest Hourly L_{EQ} (dBA)			L_D (Day, 15h) (dBA)	L_N (Night, 9h) (dBA)	L_{DN} (dBA)
	Daytime[1]	Evening[1]	Nighttime[1]			
Site 1	39	38	35	49	46	48
Site 2	38	37	32	44	43	44
Site 3	32	35	28	45	41	44
Site 4 [2]	28	34	30	-	-	-

Notes:

1. Daytime refers to 0700-1900h;
   Evening refers to 1900-2300h; and
   Nighttime refers to 2300-0700h.
2. The LD and LN, and LDN have not been calculated for the 2011 field program, as the monitoring location is not representative of receptor locations.

5.2.1 Temporal Variation

The difference between daytime and nighttime sound levels were generally small, and are attributed mainly to very low level of noise from human activity which could not be screened out.

5.3 Applicability

The measured ambient sound levels will be used in the Percent Highly Annoyed analysis, and the determination of background levels for evaluation in the MOECC guidelines.

The measurement sites that are of most interest are those which most closely represent the sound levels at the noise sensitive receptors. Of the four measurements, the measurement at Site 2 is most representative of the acoustical environment of the noise sensitive receptors. The sound environment at site 1 is mainly dominated by noise from the Trans-Canada Highway, whereas site 3 has very little influence from the highway both of which are not representative for the worst case receptors assessed. Site 2 data will be used in the assessment for all receptors.

6. CONSTRUCTION AND SITE PREPARATION PHASE

6.1 Description of Continuous Operations

Construction and Site Preparation phases will include tree clearing, grubbing, stripping of overburden, crushing of aggregate for road construction, blasting, and construction of project facilities. Many of these activities have the potential for local noise impacts. The duration of the Site Preparation and the Construction phase is estimated to be 3 years. HC guidelines suggest that for construction operation with durations greater than 1 year, noise should be assessed in the same way as operational noise, and thus entailing quantitative assessment. It is conservatively assumed in the assessment of Construction and Site Preparation that these activities would occur 24-hours per day, with no change in the nature of the operations during daytime, evening, or nighttime.

6.2 Noise Source Summary

6.2.1 Continuous Sources

For the most part, details regarding specific equipment to be used during the Construction and Site Preparation Phase were not yet available at the time of this assessment. It was assumed that, where possible, Treasury Metals would attempt to secure heavy equipment that would later be used in the Operations Phase. The heavy equipment modelled for the Construction and Site Preparation phase is therefore a subset of the equipment that was modelled for the operations phase, with a portable rock crusher added as an additional piece of equipment. Table 5 shows the sources that were modelled in this phase, including quantity of each type of source, and respective sound power levels.

Table 5: Modelled Noise Sources for the Construction and Site Preparation Phase

Equipment	Qty	Octave Band Sound Power Level (dB)									Overall dBA
		31.5	63	125	250	500	1000	2000	4000	8000	
Drill	1	101	96	103	103	100	102	101	97	89	107
Excavator	1	95	118	110	100	97	93	94	90	85	101
Haul Truck	6	100	96	102	104	103	103	102	95	90	107
Bulldozer	2	96	96	101	94	95	95	94	88	79	100
Front end loader	1	98	97	105	102	97	94	91	88	82	100
Dewatering Pump	1	78	79	80	82	83	85	83	79	72	89
Portable Crusher	1	113	122	116	108	109	107	105	103	99	113

Sound power levels for all mobile equipment were obtained from representative sound power data on file. The sound power level for the dewatering pump was calculated based on typical specifications.

During the construction phase, work is expected to progress simultaneously across most areas of the site. To account for this, the modelling approach used was to average the cumulative sound power level of all Construction and Site Preparation sources across the entire site area. This accounts for the very mobile nature of the sources, and provides a good indication of average sound levels in the absence of a detailed construction plan. Figure 4 shows the location of the area source used for the prediction of sound levels from this phase.

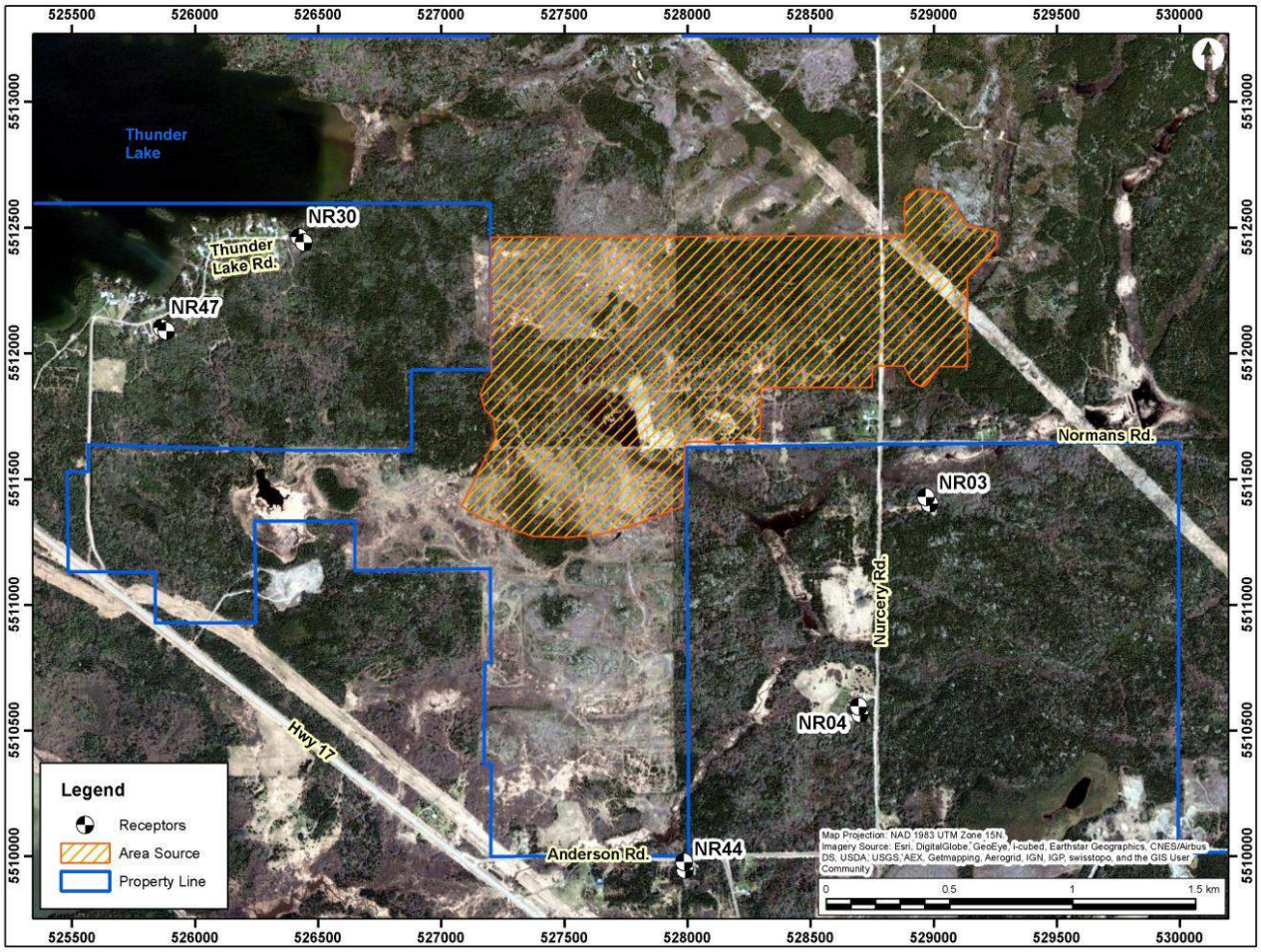

Figure 4: Source Locations, Construction and Site Preparation Phase

6.2.2 Blasting

Blasting during the Construction and Site Preparation phase is expected to take place once per day in the area of the open pit mine during construction. Sound levels from blasting were calculated as described in section 3.3.2.

In order to accurately assess sound levels from blasting, the blast is assumed to happen at the edge of the pit closest to each receptor. That is, for each receptor location, the worst-case blast location is chosen.

At the time of the assessment, limited details regarding the expected blast configurations were available, therefore the modelling assumed a maximum charge per delay of 100 kg.

6.3 Predicted Sound Levels

Sound contours (isopleths of equal sound level) resulting from the Construction and Site Preparation phase are presented in Figure 5. A modelling output file showing the details of a sample calculation at NR03 is included in Appendix B.

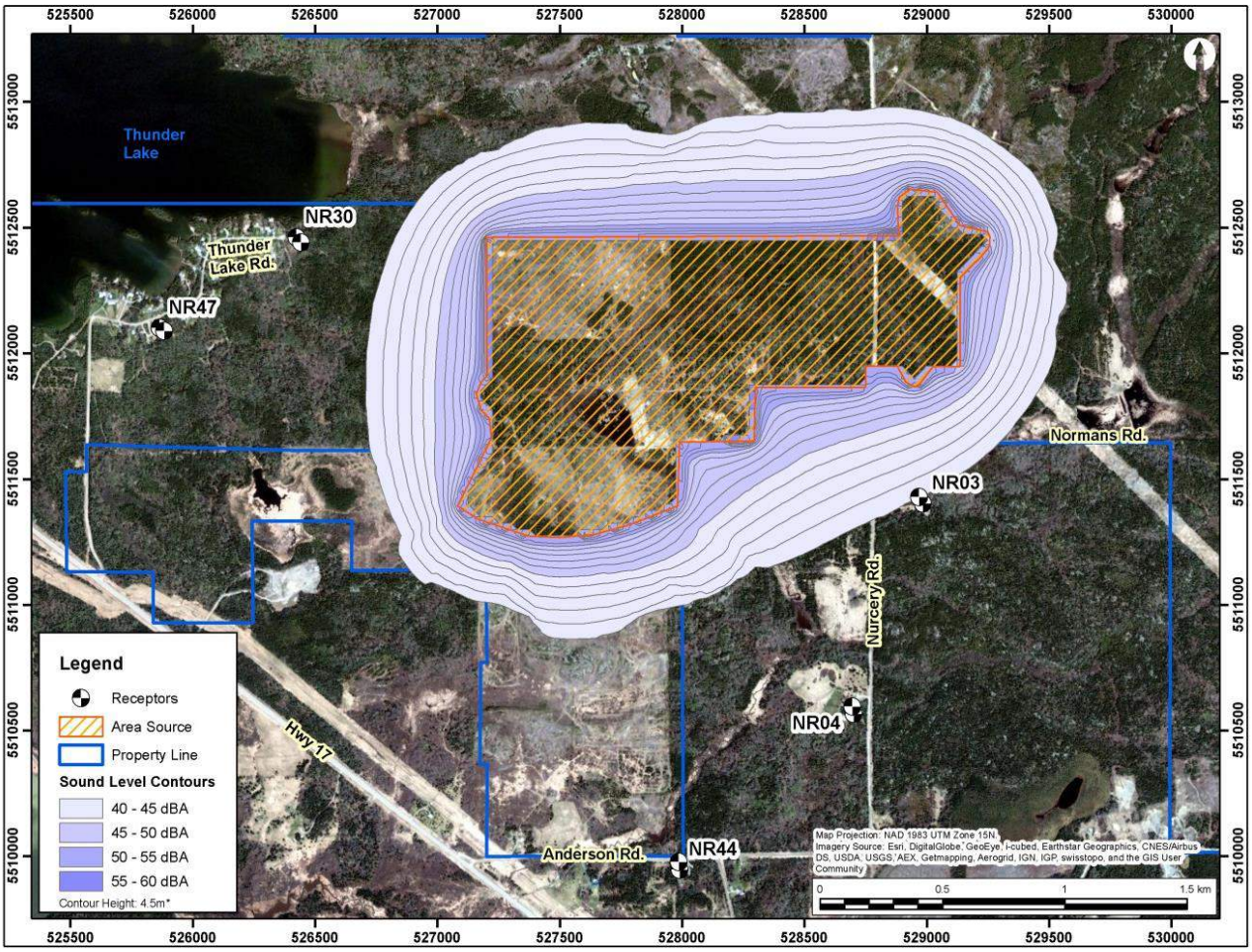

Figure 5: Predicted Sound Levels, Construction and Site Preparation Phase

6.3.1 Assessment to MOECC Guidelines

6.3.1.1 Continuous Sources

Sound levels were assessed at the five worst-case receptors as discussed in section 4.1.1.1. All levels are predicted to be in compliance with the NPC-300 (MOE, 2013) minimum sound level limits for a class 3 area. Table 6 shows the predicted sound levels and applicable limits.

Table 6: Assessment of Construction and Site Preparation Noise to MOECC Guidelines

Receptor		Limits			Sound Level at Receptor L_{EQ} (dBA)
ID	Description	Daytime	Evening	Nighttime	
NR03	House - owned by Mcleish	45	45	40	40
NR03_O	Outdoor receptor- Mcleish	45	40	-	39
NR04	House - owned by Nystroms	45	45	40	33
NR04_O	Outdoor receptor- Nystroms	45	40	-	32
NR30	House - East Thunder Lake Road	45	45	40	33
NR30_O	Outdoor receptor - East Thunder Lake Road	45	40	-	32
NR44	House - Near Trans-Canada Highway	45	45	40	29
NR44_O	Outdoor receptor - Near Trans-Canada Highway	45	45	-	28
NR47	House - East Thunder Lake Road	45	45	40	29
NR47_O	Outdoor receptor - East Thunder Lake Road	45	40	-	28

6.3.1.2 Blasting

Sound levels from blasting were evaluated separately from sounds due to continuous noise sources as per the guidance. Levels were assessed at the five worst-case receptors as discussed in section 4.1.1.1. A radius of influence was also determined, which is the distance from a blast where the sound levels will fall off to the precautionary limit. The radius of influence is 95 m in all directions from the blasting. Any receptor further than 95 m from a blast will therefore experience effects lower than the NPC-119 precautionary limit.

All levels at receptors are predicted to be in compliance with the NPC-300 minimum sound level limits for a class 3 area. Table 7 shows the predicted sound levels and applicable limits.

Table 7: Predicted Sound Levels from Blasting

Receptor	Distance (m)	Peak Sound Pressure Level (dB)
Cautionary Limit	95	120
NR03	1813	78
NR04	3000	71
NR30	2373	75
NR44	3734	68
NR47	3187	70

6.3.2 Assessment to Health Canada Guidelines

Change in Percent Highly Annoyed was assessed at the five worst-case receptors as discussed in section 4.1.1.1. Site 2 from the 2013 baseline study was used as the basis for the ambient noise data as it best represents the acoustic environment at all receptor locations. 10 dB penalties were applied to both the baseline and project noise levels to account for the rural nature of the site location.

The change in Percent Highly Annoyed at each receptor is predicted to be below the 6.5% threshold, and absolute sound levels are predicted to be below the 75 dBA threshold. Table 8 shows the predicted sounds levels and change in Percent Highly Annoyed.

Blasting at the site is to take place no more than once per day, during daytime hours only. Since the Health Canada guidelines average sound levels over a 24-hour period, with additional penalty for the nighttime period, a single blast per day was considered to be infrequent and was not further assessed against these guidelines.

Table 8: Assessment of Construction and Site Preparation Noise to HC Guidelines

Receptor	L_{DN} (dBA)	Change in Percent Highly Annoyed	Complies with HC Guidelines?
NR03	56	1.6	Yes
NR03_O	56	1.4	Yes
NR04	49	0.4	Yes
NR04_O	48	0.3	Yes
NR30	49	0.3	Yes
NR30_O	48	0.3	Yes
NR44	45	0.1	Yes
NR44_O	44	0.1	Yes
NR47	45	0.1	Yes
NR47_O	44	0.1	Yes

Details of the L_{DN} and Percent Highly Annoyed calculations are included in Appendix B.

6.4 Mitigation

In order to achieve compliance at all receptors, the sound power levels of equipment were limited in some cases. The limited power levels are still within the accepted range of power levels from this type of equipment from different manufacturers and of different ages, but are quieter than average. The sound power levels presented in Table 5 reflect these reduced levels. Treasury Metals has committed to ensuring that sound levels from these pieces of equipment meet these requirements.

Treasury metals will ensure that best practices are followed during the Construction and Site Preparation phase to ensure that sound levels are minimized. These best practices will include:

- Conduct heavy construction activity between the hours of 07:00 and 22:00 if possible to reduce the potential impact of construction noise;
- Advise nearby residents of significant noise-causing activities such as mine blasts and schedule these events to reduce disruption to them;
- Ensure that all internal combustion engines are fitted with appropriate muffler systems; and
- Employ controlled blasting methods such as penetrating cone fracture.

6.5 Residual Effects

Residual effects are those that remain when all mitigation options have been incorporated into the project design and operation. As all sound levels are predicted to comply with the applicable criteria, it is not anticipated that there will be residual effects for this site.

6.6 Conclusions

The results of the noise assessment for the Construction and Site Preparation Phase can be summarized as follows:

- Predicted worst case hourly noise levels range from 28 to 40 dBA at worst-case receptors;
- Predicted L_{DN} levels range from 44 to 56 dBA at worst-case receptors;
- Predicted increase in Percent Highly Annoyed range from 0.1 to 1.6 at worst-case receptors; and
- Predicted radius of influence from blasting is 95 m in all directions from the blasting site which is predicted to comply with the exclusionary limit at any receptor.

Predicted sound levels are shown to be below the guideline limits at each of the receptors for the Construction and Site Preparation phase. The Construction and Site Preparation phase is predicted to comply with the requirements of Health Canada and the MOECC guidelines.

7. OPERATIONS PHASE

The assessment of noise from the operation phase focuses on the predictable worst-case year, which includes both open pit and underground mining. Other activities that may take place during the operating life of the mine, such as remediation of the open pit, are anticipated to generate lesser noise, and are not explicitly assessed.

7.1 Description of Continuous Operations

The operations phases will include both underground and open face mining activities. The open face mining activities include drilling, blasting, dozing, excavating and the transportation of rock material around site. The underground activities include the operation of intake and exhaust vent raises and the transportation of rock material to the surface. Emergency power generation occurs on site and testing of emergency generators occurs only during the daytime hours. Many of these activities have the potential for local noise impacts. The duration of the operations phase is estimated to be 10 years. It is

conservatively assumed in the assessment of operations that these activities would occur 24-hours per day, with no change in the nature of the operations during daytime, evening, or nighttime, other than the generator testing.

7.2 Noise Source Summary

7.2.1 Continuous Sources

For the most part, limited details regarding types of equipment used during the operations phase were available at the time of this assessment. Sound power levels for all mobile equipment were obtained from representative sound power data on file. The sound power level for the dewatering pump and aeration tank blower were conservatively calculated based on typical specifications. The sound power level for the exhaust louvers on the mill building were calculated assuming an indoor sound power level of 85 dB within the mill facility. This is a typical objective for indoor sound levels in order to comply with occupational health and safety regulations. The calculations are based on 3.0 m/s air velocities and six air changes per hour within the building. Where appropriate, source emissions were time-weighted based on typical operating assumptions. Table 9 shows the sources that were modelled in this phase, including number each type of source, and sound power levels. Power levels shown in Table 9 do not account for time weighting.

Table 9: Modelled Noise Sources for the Operations Phase

Equipment	Qty.	Octave Band Sound Power Level (dB)									Overall dBA
		31.5	63	125	250	500	1000	2000	4000	8000	
150 kW Emergency Generator	1	-	102	95	98	108	107	106	102	100	112
600 kW Emergency Generator	1	-	83	95	103	108	109	107	103	99	113
Aeration Tank Blower	1	109	104	99	94	89	84	79	74	69	91
Jaw Crusher	1	89	87	88	91	94	95	94	90	83	99
Exhaust Louver for Mill	14	-	-	-	-	64	-	-	-	-	61
Furnace Exhaust	1	-	85	85	75	70	68	63	58	53	74
Kiln Fan	1	-	95	93	93	93	90	85	79	72	94
Front End Loader	1	98	97	105	102	97	94	91	88	82	100
Rock Drop at Crusher	1	114	116	121	122	113	114	111	106	100	119
Dewatering Pump	1	90	90	92	94	96	97	95	91	84	101
Drill	2	101	96	103	103	100	102	101	97	89	107
Bulldozer	3	96	96	101	94	95	95	94	88	79	100
Hydraulic Excavator	2	95	118	110	100	97	93	94	90	85	101
Rock Drop at Stockpiles	3	100	106	116	107	109	103	104	103	103	112
Exhaust Vent Raise	2	-	117	117	114	108	105	100	94	87	111
Fresh Air Intake Vent Raise	1	-	117	117	114	108	105	100	94	87	111
50 Ton Haul Truck	14	100	96	102	104	103	103	102	95	90	107

All sources other than haul truck noise were modelled as point sources. Haul truck noise was modelling using line sources. Noise source locations were chosen to represent a predictable worst-case level of impacts. As an example of this, the majority of haul truck traffic is modelled on the longest haul route. All open pit mine sources were modelled at ground level, to represent the beginning of a new pit, or the remediation afterwards.

In the operating phase, ground contours have been modelled accounting for a 2 m high berm around the perimeter of the pit, a minimum height of 3 m at the low grade stockpile, and a minimum height of 10 m at the overburden pile.

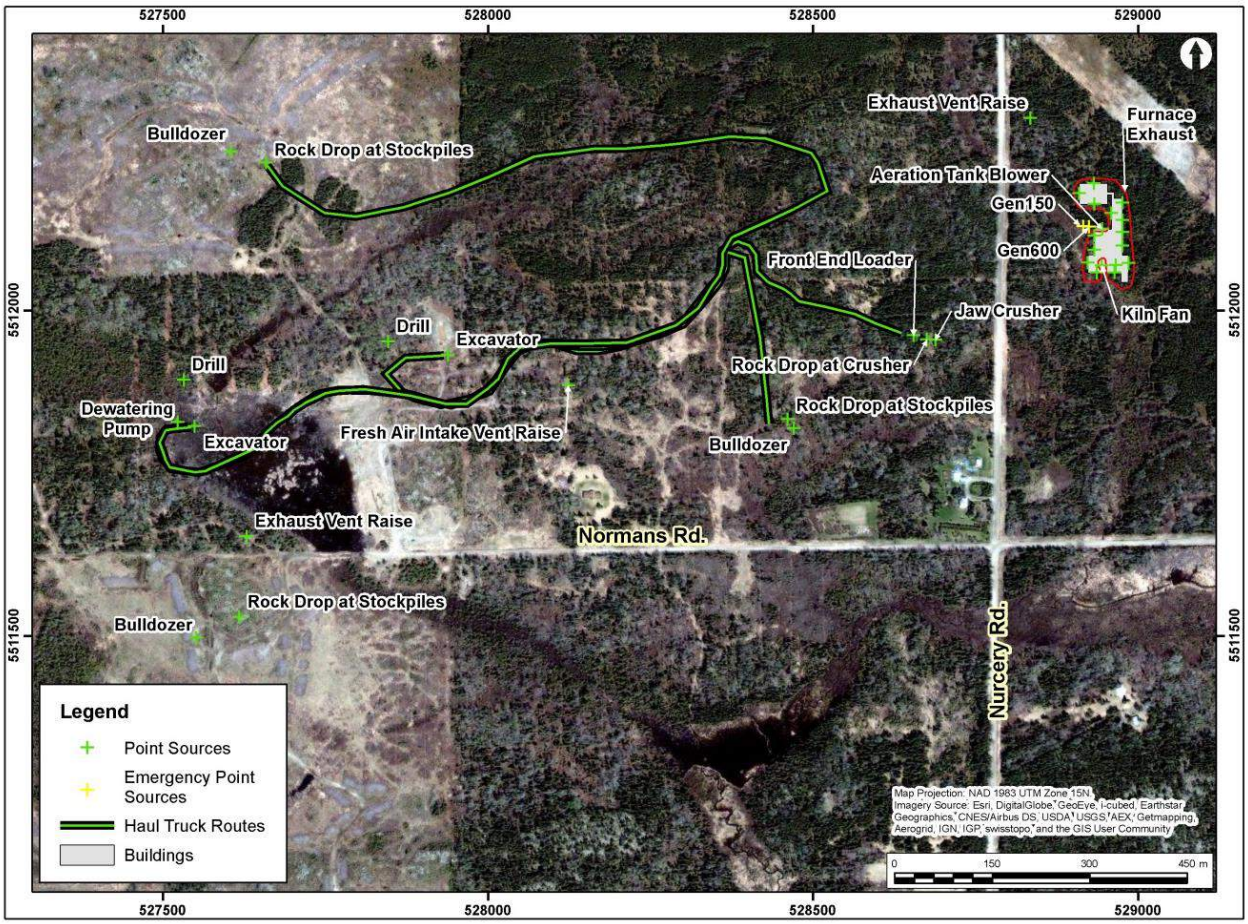

Figure 6: Source Locations, Operations Phase

7.2.2 Blasting

Blasting during the operations phase is expected to take place once per day in the area of the open pit mine. Sound levels from blasting were calculated as described in section 3.3.2.

In order to accurately assess sound levels from blasting, the blast is assumed to happen at the edge of the pit closest to each receptor. That is, for each receptor location, the worst-case blast location is chosen.

At the time of the assessment, limited details regarding the expected blast configurations were available, therefore the modelling assumed a maximum charge per delay of 100 kg.

7.3 Predicted Sound Levels

Sound contours (isopleths of equal sound level) resulting from the Operation phase are presented in Figure 7. These contours include the effects of all continuous noise sources except for emergency generator testing. A modelling output file showing the details of a sample calculation at NR03 is included in Appendix B.

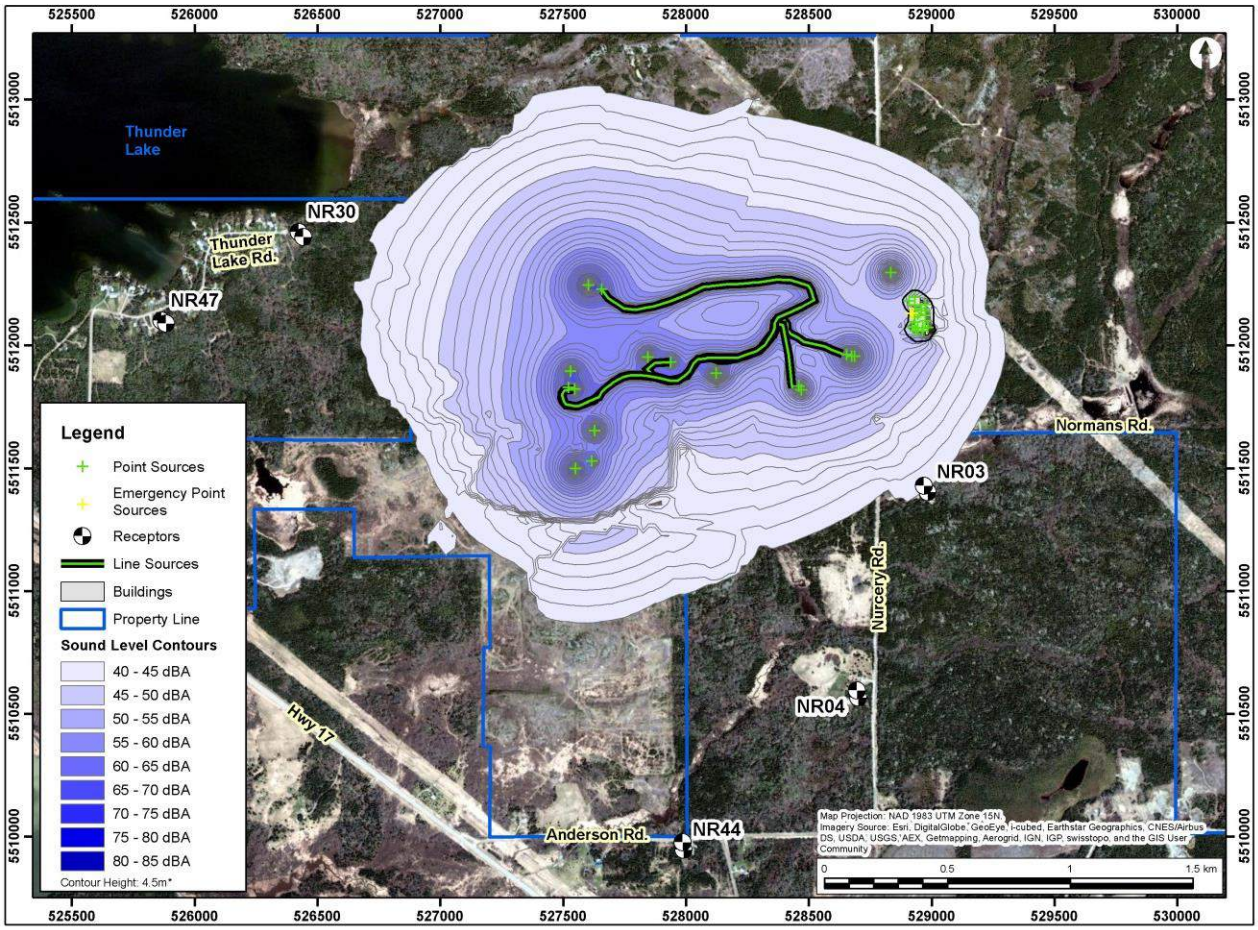

Figure 7: Predicted Sound Levels, Operations Phase

7.3.1 Assessment to MOECC Guidelines

7.3.1.1 Continuous Sources

Sound levels were assessed at the five worst-case receptors as discussed in section 4.1.1.1. All levels are predicted to be in compliance with the NPC-300 (MOE, 2013) minimum sound level limits for a class 3 area. Table 10 shows the predicted sound levels and applicable limits for continuous sources except for generator testing. Generator testing is assessed separately, and the results of that assessment are shown in Table 11.

Table 10: Assessment of Operating Phase Noise to MOECC Guidelines

Receptor		Limits			Sound Level at Receptor L_{EQ} (dBA)
ID	Description	Daytime	Evening	Nighttime	
NR03	House - owned by Mcleish	45	45	40	40
NR03_O	Outdoor receptor- Mcleish	45	40	-	38
NR04	House - owned by Nystroms	45	45	40	34
NR04_O	Outdoor receptor- Nystroms	45	40	-	33
NR30	House - East Thunder Lake Road	45	45	40	34
NR30_O	Outdoor receptor - East Thunder Lake Road	45	40	-	33
NR44	House - Near Trans-Canada Highway	45	45	40	30
NR44_O	Outdoor receptor - Near Trans-Canada Highway	45	45	-	30
NR47	House - East Thunder Lake Road	45	45	40	31
NR47_O	Outdoor receptor - East Thunder Lake Road	45	40	-	30

Table 11: Assessment of Operating Phase Generator Testing Noise to MOECC Guidelines

Receptor		Limits			Sound Level at Receptor L_{EQ} (dBA)
ID	Description	Daytime	Evening	Nighttime	
NR03	House - owned by Mcleish	50	-	-	43
NR03_O	Outdoor receptor- Mcleish	50	-	-	43
NR04	House - owned by Nystroms	50	-	-	36
NR04_O	Outdoor receptor- Nystroms	50	-	-	33
NR30	House - East Thunder Lake Road	50	-	-	28
NR30_O	Outdoor receptor - East Thunder Lake Road	50	-	-	27
NR44	House - Near Trans-Canada Highway	50	-	-	31
NR44_O	Outdoor receptor - Near Trans-Canada Highway	50	-	-	28
NR47	House - East Thunder Lake Road	50	-	-	25
NR47_O	Outdoor receptor - East Thunder Lake Road	50	-	-	25

7.3.1.2 Blasting

Sound levels from blasting were evaluated separately from sound from continuous noise sources. Levels were assessed at the five worst-case receptors as discussed in section 4.1.1.1. A radius of influence was also determined, which is the distance from a blast where the sound levels will fall off to the precautionary limit. The radius of influence is 95 m in all directions from the blasting. Any receptor further than 95 m from a blast will therefore experience effects lower than the NPC-119 precautionary limit.

All levels at receptors are predicted to be in compliance with the NPC-300 minimum sound level limits for a class 3 area. Table 12 shows the predicted sound levels and applicable limits.

Table 12: Predicted Sound Levels from Blasting

Receptor	Distance (m)	Peak Sound Pressure Level (dB)
Cautionary Limit	95	120
NR03	1813	78
NR04	3000	71
NR30	2373	75
NR44	3734	68
NR47	3187	70

7.3.2 Assessment to Health Canada Guidelines

Change in Percent Highly Annoyed was assessed at the five worst-case receptors as discussed in section 4.1.1.1. Site 2 from the 2013 baseline study was used as the basis for the ambient noise data as it best represents the acoustic environment at all receptor locations. 10 dB penalties were applied to both the baseline and project noise levels to account for the rural nature of the site location.

The change in Percent Highly Annoyed at each receptor is predicted to be below the 6.5% threshold, and absolute sound levels are predicted to be below the 75 dBA threshold. Table 9 shows the predicted sounds levels and change in Percent Highly Annoyed.

Blasting at the site is to take place no more than once per day, during daytime hours only. Since the Health Canada guidelines average sound levels over a 24-hour period, with additional penalty for the nighttime period, a single blast per day was considered to be infrequent and was not further assessed against these guidelines.

Table 13: Assessment of Operating Noise to HC Guidelines

Receptor	L_{DN} (dBA)	Change in Percent Highly Annoyed	Complies with HC Guidelines?
NR03	57	1.8	Yes
NR03_O	55	1.4	Yes
NR04	51	0.5	Yes
NR04_O	50	0.4	Yes
NR30	50	0.4	Yes
NR30_O	50	0.4	Yes
NR44	47	0.2	Yes
NR44_O	46	0.2	Yes
NR47	47	0.2	Yes
NR47_O	46	0.2	Yes

Details of the L_{DN} and Percent Highly Annoyed calculations are included in Appendix B.

7.4 Mitigation

In order to achieve compliance at all receptors, the sound power levels of equipment were limited in some cases. The limited power levels are still within the accepted range of power levels from these types of equipment from different manufacturers and of different ages, but are quieter than average. The sound power levels presented in Table 9 reflect these reduced levels. Treasury Metals has committed to ensuring that sound levels from these pieces of equipment meet these requirements.

Treasury metals will ensure that best practices are followed during the Operations phase to ensure that sound levels are minimized. These best practices will include:

- Conduct heavy construction activity between the hours of 07:00 and 22:00 if possible to reduce the potential impact of construction noise;
- Advise nearby residents of significant noise-causing activities such as mine blasts and schedule these events to reduce disruption to them;
- Ensure that all internal combustion engines are fitted with appropriate muffler systems; and
- Employ controlled blasting methods such as penetrating cone fracture.

7.5 Residual Effects

Residual effects are those that remain when all mitigation options have been incorporated into the project design and operation. As all sound levels are predicted to comply with the applicable criteria, it is not anticipated that there will be residual effects for this site.

7.6 Conclusions

The results of the noise assessment for the operations phase can be summarized as follows:

- Predicted worst case hourly noise levels range from 30 to 40 dBA at worst-case receptors; and
- Predicted worst case hourly noise levels during generator testing range from 25 to 43 dBA at worst-case receptors; and
- Predicted L_{DN} levels range from 46 to 57 dBA at worst-case receptors; and
- Predicted increase in Percent Highly Annoyed range from 0.2 to 1.8 at worst-case receptors.
- Predicted radius of influence from blasting is 95 m in all directions from the blasting site which is predicted to comply with the exclusionary limit at any receptor.

Predicted sound levels are shown to be below the guideline limits at each of the receptors for the operations. The operations phase is predicted to comply with the requirements of Health Canada and the MOECC guidelines.

8. CLOSURE, DECOMMISSIONING AND RESTORATION PHASE

Activities directly related to closure of mining operations on site, as well as any ongoing remediation activities are assessed together in the closure phase.

8.1 Description of Continuous Operations

Closure, Decommissioning and Restoration phases will include backfilling and flooding of the open pits and underground mine area, disassembling of infrastructure and equipment as well as overall site maintenance. Many of these activities have the potential for local noise impacts. The duration of the Closure, Decommissioning and Restoration phase is estimated to be 2 years. It is conservatively assumed in the assessment of Closure, Decommissioning and Restoration that these activities would occur 24-hours per day, with no change in the nature of the operations during daytime, evening, and nighttime. No blasting would take place during this phase.

8.2 Noise Source Summary

Details regarding types of equipment used during the closure phase were not yet available at the time of this assessment. It was assumed that Treasury Metals would use the same types of equipment used in both the previous phases. The heavy equipment modelled for the Closure, Decommissioning and Restoration phase is therefore a subset of the equipment that was modelled for the operations phase. Table 14 shows the sources that were modelled in this phase, including number of sources, and sound power levels.

Table 14: Modelled Noise Sources for the Closure, Decommissioning and Restoration Phase

Equipment	Qty	Octave Band Sound Power Level (dB)									Overall dBA
		31.5	63	125	250	500	1000	2000	4000	8000	
Excavator	2	95	118	110	100	97	93	94	90	85	101
Haul Truck	6	100	96	102	104	103	103	102	95	90	107
Bulldozer	2	96	96	101	94	95	95	94	88	79	100
Front end loader	1	98	97	105	102	97	94	91	88	82	100
Dewatering Pump	1	90	90	92	94	96	97	96	91	84	102

Sound power levels for all mobile equipment were obtained from representative sound power data on file. The sound power level for the dewatering pump was calculated based on typical specifications.

During the closure phase, work is expected to progress simultaneously across most areas of the site. To account for this, the modelling approached used was to average the cumulative sound power level of all closure sources across the entire site area. This accounts for the very mobile nature of the sources, and provides a good indication of average sound levels in the absence of a detailed closure plan. Figure 8 shows the location of the area source used for the prediction of sound levels from this phase.

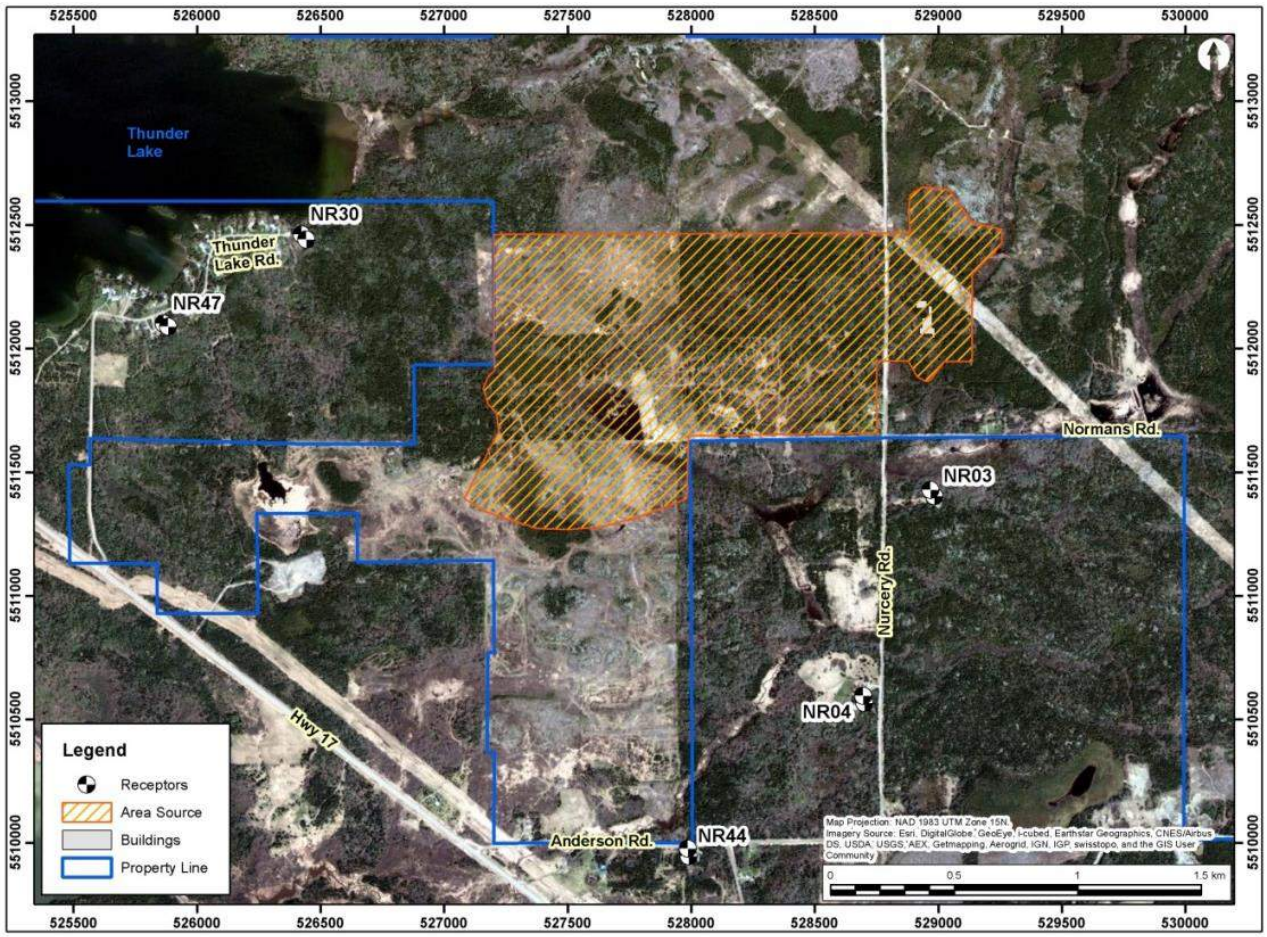

Figure 8: Source Locations, Decommissioning and Restoration Phase

8.3 Predicted Sound Levels

Sound contours (isopleths of equal sound level) resulting from the Closure, Decommissioning and Restoration Phase are presented in Figure 9. A modelling output file showing the details of a sample calculation at NR03 is included in Appendix B.

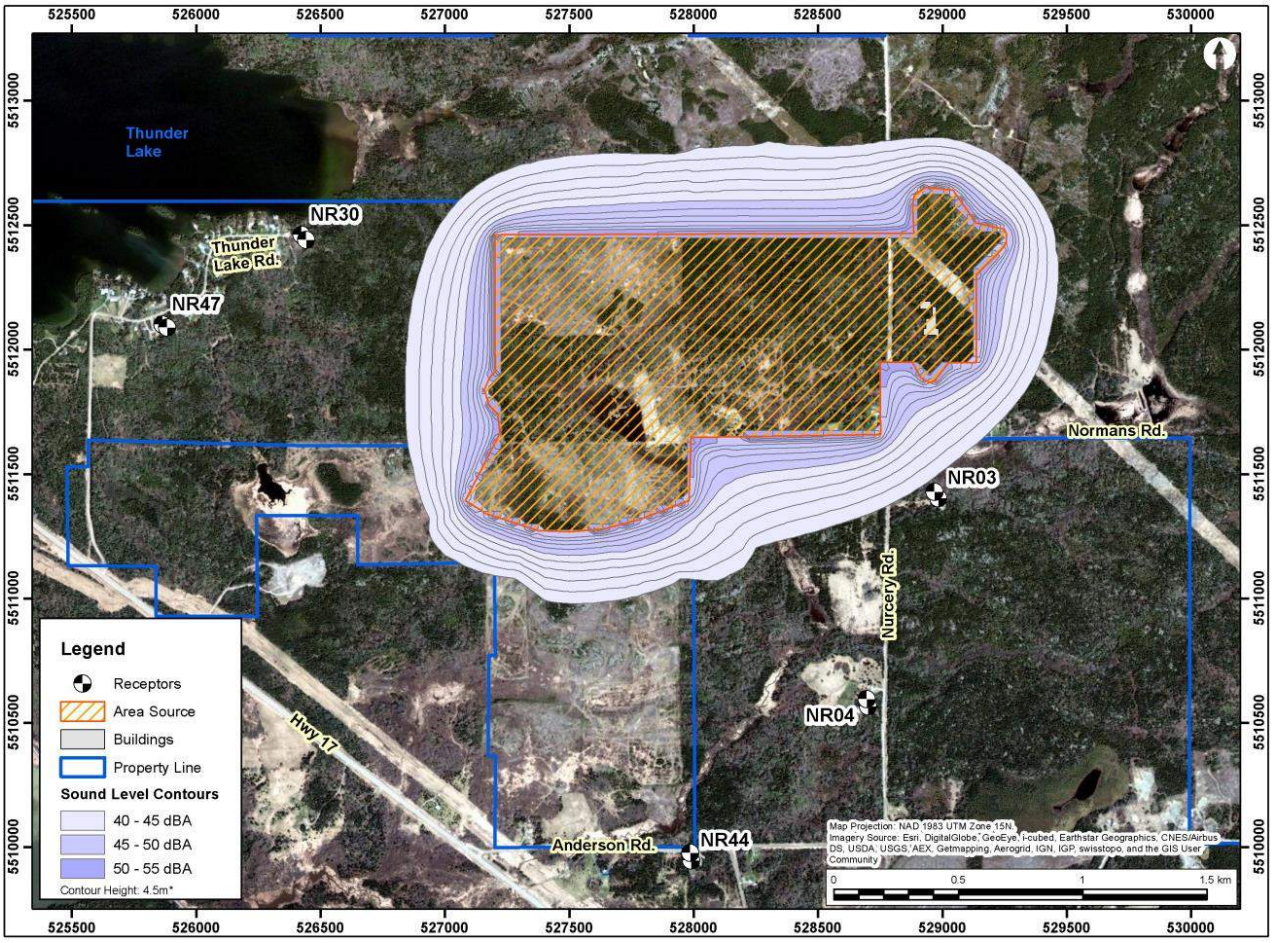

Figure 9: Predicted Sound Levels, Closure, Decommissioning and Restoration Phase

8.3.1 Assessment to MOECC Guidelines

Sound levels were assessed at the five worst-case receptors as discussed in section 4.1.1.1. All levels are predicted to be in compliance with the NPC-300 (MOE, 2013) minimum sound level limits for a class 3 area. Table 15 shows the predicted sound levels and applicable limits.

Table 15: Assessment of Closure, Decommissioning and Restoration Noise to MOECC Guidelines

Receptor		Limits			Sound Level at Receptor L_{EQ} (dBA)
ID	Description	Daytime	Evening	Nighttime	
NR03	House - owned by Mcleish	45	45	40	39
NR03_O	Outdoor receptor- Mcleish	45	40	-	39
NR04	House - owned by Nystroms	45	45	40	31
NR04_O	Outdoor receptor- Nystroms	45	40	-	31
NR30	House - East Thunder Lake Road	45	45	40	31
NR30_O	Outdoor receptor - East Thunder Lake Road	45	40	-	30
NR44	House - Near Trans-Canada Highway	45	45	40	27
NR44_O	Outdoor receptor - Near Trans-Canada Highway	45	45	-	25
NR47	House - East Thunder Lake Road	45	45	40	27
NR47_O	Outdoor receptor - East Thunder Lake Road	45	40	-	26

8.3.2 Assessment to Health Canada Guidelines

Change in Percent Highly Annoyed was assessed at the five worst-case receptors as discussed in section 4.1.1.1. Site 2 from the 2013 baseline study was used as the basis for the ambient noise data as it best represents the acoustic environment at all receptor locations. 10 dB penalties were applied to both the baseline and project noise levels to account for the rural nature of the site location.

The change in Percent Highly Annoyed at each receptor is predicted to be below the 6.5% threshold, and absolute sound levels are predicted to be below the 75 dBA threshold. Table 16 shows the predicted sounds levels and change in Percent Highly Annoyed.

Table 16: Assessment of Closure, Decommissioning and Restoration Noise to HC Guidelines

Receptor	L_{DN} (dBA)	Change in Percent Highly Annoyed	Complies with HC Guidelines?
NR03	55	1.3	Yes
NR03_O	55	1.2	Yes
NR04	48	0.3	Yes
NR04_O	47	0.2	Yes
NR30	47	0.2	Yes
NR30_O	46	0.2	Yes
NR44	43	0.1	Yes
NR44_O	42	0.1	Yes
NR47	43	0.1	Yes
NR47_O	42	0.1	Yes

Details of the L_{DN} and Percent Highly Annoyed calculations are included in Appendix B.

8.4 Mitigation

In order to achieve compliance at all receptors, the sound power levels of equipment were limited in some cases. The limited power levels are still within the accepted range of power levels from these type of equipment from different manufacturers and of different ages, but are quieter than average. The sound power levels presented in Table 5 reflect these reduced levels. Treasury Metals has committed to ensuring that sound levels from these pieces of equipment meet these requirements.

Treasury metals will ensure that best practices are followed during the Closure, Decommissioning and Restoration phase to ensure that sound levels are minimized. These best practices will include:

- Conduct heavy construction activity between the hours of 07:00 and 22:00 if possible to reduce the potential impact of construction noise;
- Advise nearby residents of significant noise-causing activities and schedule these events to reduce disruption to them; and
- Ensure that all internal combustion engines are fitted with appropriate muffler systems.

8.5 Residual Effects

Residual effects are those that remain when all mitigation options have been incorporated into the project design and operation. As all sound levels are predicted to comply with the applicable criteria, it is not anticipated that there will be residual effects for this site.

8.6 Conclusions

The results of the noise assessment for the Closure, Decommissioning and Restoration phase can be summarized as follows:

- Predicted worst case hourly noise levels range from 26 to 39 dBA at worst-case receptors; and
- Predicted L_{DN} levels range from 42 to 55 dBA at worst-case receptors; and
- Predicted increase in Percent Highly Annoyed range from 0.1 to 1.3 at worst-case receptors.

Predicted sound levels are shown to be below the guideline limits at each of the receptors for the Closure, Decommissioning and Restoration phase. The Closure, Decommissioning and Restoration phase is predicted to comply with the requirements of Health Canada and the MOECC guidelines.

9. UNCERTAINTY

The modelling used in this assessment has an overall prediction accuracy that is dependent on two factors: the accuracy of the acoustical source data, and the accuracy of the noise propagation model.

The sound level data used in this assessment is based on manufacturers data, engineering calculations, or data from similar equipment, and would be expected to have a high degree of accuracy. Efforts should be made when procuring equipment for the Project to verify that equipment sound levels are similar to those modelled.

The ISO 9613 propagation algorithms have a published accuracy of + 3 dBA over source-receiver distances between 100 and 1000 m. A similar degree of accuracy would be expected over the distances considered in this assessment. This is considered to be an excellent agreement for an environmental noise model over such a large distance. A 3 dBA increase or decrease would be considered imperceptible to humans.

In addition, the ISO 9613 model produces results that are representative of meteorological conditions favouring sound propagation (e.g., downwind and/or inversion conditions). These conditions do not occur all the time, and therefore, the model predictions will be conservative, and actual sound levels at the receptors may be less than indicated for much of the time.

Based on the above, the overall model prediction confidence is expected to be high.

10. MONITORING

Health Canada recommends monitoring when predicted noise levels verge upon the level where adverse human health effects can potentially occur. Since the predicted levels are well below that point, monitoring is not recommended under the Health Canada guidelines.

Monitoring and follow up studies are not required by NPC-300 (MOE, 2013), but may be requested by the MOECC as part of an Environmental Compliance Approval. Details of this monitoring would be determined in the Environmental Compliance Approval application process.

Monitoring of blasting sound levels is required only where sound levels are predicted to be above the NPC-119 precautionary limits. Since impacts are not anticipated to exceed the precautionary limits, no blast monitoring is required.

No ongoing monitoring is recommended. However, in the event that noise complaints are received during the life of the Project, it is recommended that actions are taken promptly to monitor sound levels. Sound levels must be monitored for a sufficient length of time as to determine the validity and cause of the complaint. Details of a monitoring program in the case of a complaint will be determined on case-by-case basis, as the location of the complainant and status of the Project will influence the best practices in monitoring.

11. SUMMARY AND CONCLUSIONS

A systematic approach was adopted to identify potential noise sources and quantify the emissions due to Project activities at the Goliath Gold site. Best-available data regarding future construction, operations, and decommissioning were collected from Treasury Metals, and used to predict sound levels for the Project. Sound levels from blasting were evaluated separately from sound from continuous noise sources.

This assessment concentrates on comparisons with guideline limits and impacts on human receptors. The effects of potential noise impacts on other biophysical components, including wildlife, vegetation and human health are addressed separately by the appropriate disciplines.

The results of the noise assessment for the Project can be summarized as follows:

- Predicted worst case hourly noise levels range from 26 to 40 dBA at worst-case receptors; and
- Predicted L_{DN} levels range from 42 to 57 dBA at worst-case receptors; and
- Predicted increase in Percent Highly Annoyed range from 0.1 to 1.8 at worst-case receptors.
- Predicted radius of influence from blasting is 95 m in all directions from the blasting site which is predicted to comply with the exclusionary limit at any receptor.

Predicted sound levels are shown to be below the guideline limits at each of the receptors for all phases. The Project is predicted to comply with the requirements of Health Canada guidelines (HC, 2011)and the NPC-300 (MOE, 2013) guuidelines.

12. REFERENCES

Health Canada (HC), 2011, *Guidance for Evaluating Human Health Impacts in Environmental Assessment: Noise*. Draft, January 2011.

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Ontario Ministry of the Environment (MOE), 1978, *Model Municipal Noise Control Bylaw,* which includes *Publication NPC-103 – Procedures*, *Publication NPC-104 – Sound Level Adjustments, and NPC-119 – Blasting.*

Ontario Ministry of the Environment (MOE), 1985, *Guidelines on Information Required for the Assessment of Blasting Noise and Vibration*

Ontario Ministry of the Environment (MOE), August 2013, Publication NPC-300, *Environmental Noise Guideline Stationary and Transportation Sources – Approval and Planning*

Treasury Metals Incorporated (Treasury), November 26, 2012. *Project Description, Goliath Gold Project*

RWDI AIR Inc, January 2014, *Treasury Metals Inc. - Goliath Gold Project – Noise Baseline Study*

APPENDIX H-5

RWDI MEMORANDUM

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MEMORANDUM

DATE:	2018-03-12	**RWDI Reference No.:** 1602163
TO:	Mark Wheeler	**EMAIL:** mark@treasurymetals.com
FROM:	Melissa Annett	**EMAIL:** melissa.annett@rwdi.com
RE:	**Treasury Metals Inc. – Goliath Gold Project** **Acoustic Environment** **Technical Memorandum**	

As part of the assessment of the sound levels associated with the Goliath Gold project (i.e., the "Project") in northwestern Ontario, several information requests were submitted by the Canadian Environmental Assessment Agency. This memorandum is provided to address the technical details in support of the responses to those information requests, specifically:

- TMI_183-AE(1)-21 … Definition of the regional and local study areas;
- TMI_186-AE(1)-24 … Inclusion of noise due to offsite project vehicle traffic;
- TMI_190-AE(1)-28 … Assessment of blasting;
- TMI_191-AE(1)-29 … Inclusion of adjustments for sound character.

This memorandum forms part of the environmental noise and vibration technical assessment contained in Appendix H of the project's revised Environmental Impact Statement (EIS).

1 STUDY AREAS

Information request TMI_183-AE(1)-21 requested a clearer definition of the regional study area (i.e., "RSA") and local study area (i.e., "LSA") in relation to noise, using quantitative factors as a rationale.

Sound and vibration from a source decay with distance. Additional factors can attenuate levels as a sound or vibration wave travels from the source to receiver, such as ground and air absorption, but distance is a primary factor that is linked to the geometrical spreading and attenuation of the wave. Ground-borne vibration attenuates at a much faster rate than sound in air, and thus any study area defined for sound would also include vibration.

On the above basis, most industrial sources decay to a low sound level at distances greater than 3000m from a source. For example, a source sound power level of 100 dBA (i.e., typical of the sound emission from a project of this type) conservatively results in a sound pressure level of 22 dBA at a distance of 3000m based on distance attenuation alone. Ten such sources would result in a combined sound level of 32 dBA which is still well-below typical regulatory limits of 40 dBA; in other words, ten similar projects/sources would result in a combined influence well below standard regulatory limits.

The RSA for sound can thus be defined as a 3000m setback from the nearest active project area, with sources beyond this range not contributing significantly to total sound levels as noted above. This buffer was reviewed for major sources of stationary sound unrelated to the project that could contribute to total sound. No sources were identified; hence, no combined effects from other sources were considered.

The LSA was defined within the RSA for detailed acoustic assessment based on a setback of 1500m (i.e., see blue line Figure 1). At this setback distance, sound sources such as those given in the above example would result in sound levels on the order of 28 dBA. These levels could reasonably begin to influence the local background conditions in a rural area which are commonly in the 30-35 dBA range. This distance also aligns to the valid range of most sound propagation algorithms used in detailed assessment, including the ISO 9613-2 "Attenuation of Sound During Propagation Outdoors" algorithm used in this assessment, which also reflects industry-standard practice.

Key sensitive receptors were identified within the LSA in each cardinal compass direction from the nearest active project area for the detailed acoustic assessment. These receptors would represent the limiting case for sound as receptors located further away would experience lower sound levels (i.e., based on the principle of geometric spreading). A total of 42 noise-sensitive receptors were identified. As no receptors were identified to the north of the project, the region of acoustical focus that includes all of these receptors (i.e., an "acoustic study area", see red line in Figure 1) extends in a rectangular area approximately 500m away from the mine site at its nearest point to the north (i.e., sound levels of 39 dBA near inaccessible vacant lands) and approximately 2500m to the southwest at its furthest point (i.e., sound levels of 24 dBA).

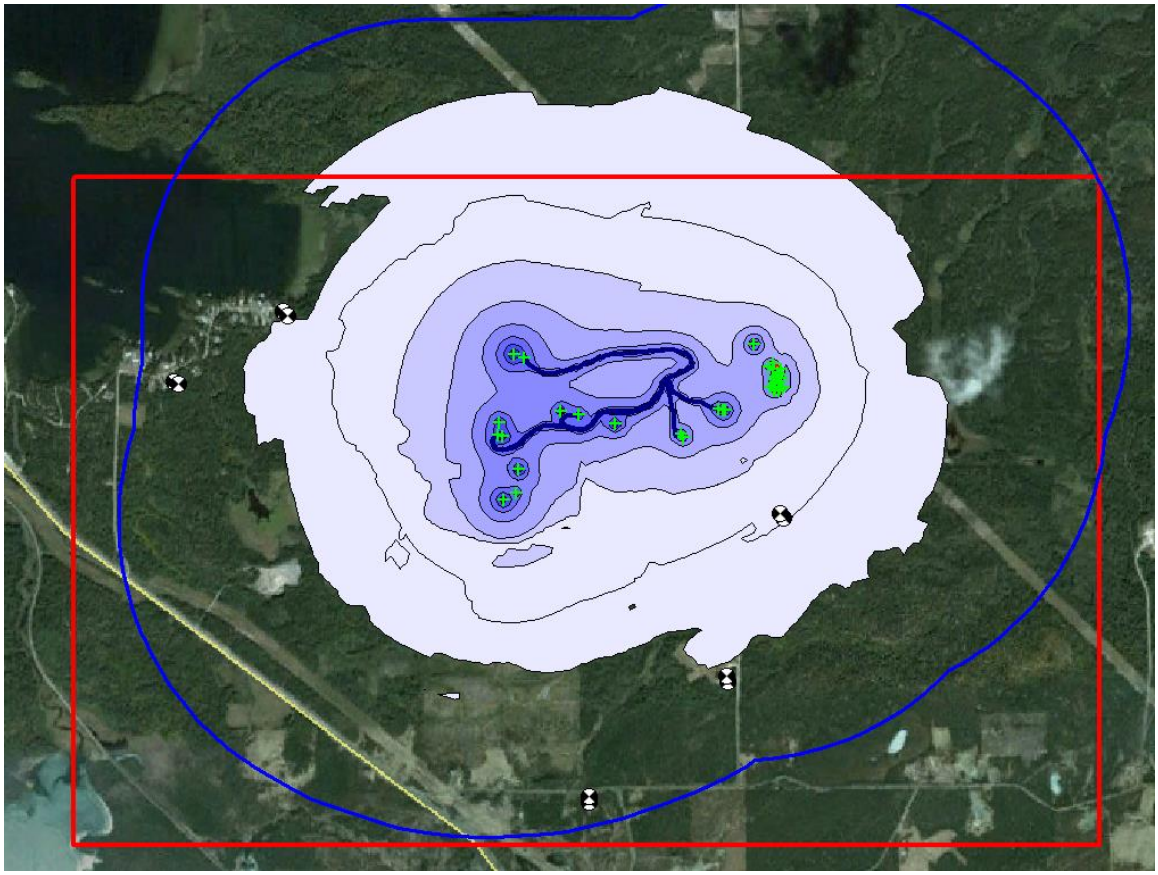

Figure 1: Outline of Local Study Area (blue) and Acoustic Study Area (red)

2 OFFSITE VEHICLE TRAFFIC

Information request TMI_186-AE(1)-24 requested that offsite vehicle traffic be quantitatively considered in the environmental noise assessment. The noise from vehicle traffic to and from the Project site (i.e., offsite traffic) during the operation of the Project was considered to be minor, but has been assessed quantitatively as requested.

Access to and from the site will be from Highway 17, along Anderson Road, and then along Nursery Road. There are three worst-case sensitive receptors along this route that would be most affected by changes in the local traffic for noise; these are receptors NR03, NR04, and NR44 as shown in Figure 1 (and also in Figure 4 of Appendix H of the revised EIS).

A noise analysis was conducted of the offsite vehicle movements for the construction and operations phases using traffic modelling methodology. Traffic information was extracted from the Goliath Gold Traffic Impact Study (i.e., "TIS") to obtain the estimated daily traffic volumes on Highway 17 and Anderson Road / Nursery Road both with and without the Project. Traffic noise modelling was conducted using the Ontario Ministry of the Environment and Climate Change's ORNAMENT roadway model.

Table 2-1 gives the traffic volumes used in the assessment. Highway 17 traffic volumes were estimated based on the peak hour turning movements from the TIS scaled up to an estimated annual average daily traffic value. Highway 17 volumes were assumed to be split 85%/15% between day/night and used truck percentages of 5% medium and 8% heavy trucks consistent with Ontario Ministry of Transport recommendations for provincial highways. The Project traffic was based on the daily volumes in Table 9 of the TIS. This table also provides the Project peak hour traffic and average non-peak hour traffic, which were used to estimate the amount of traffic in the day and night periods.

Given the projected vehicle route, Anderson Road and Nursery Road traffic volumes were assumed to be equal. Speed limits along Anderson and Nursery Road were assumed to be 60 km/hr and 80 km/hr along Highway 17.

The TIS identifies that the local traffic distribution will be modified with the presence of the mine, with a secondary morning (5-6am) and afternoon (6-7pm) peak hour in addition to the existing Highway 17 morning (11am-12pm) and afternoon (5-6pm) peak hours. Due to the early morning shift arrival for the mine (5am), there are two hours of mine traffic over the night-time (10pm-7am) period with the rest of the mine traffic predominantly occurring during the daytime (7am-10pm).

Table 2-1: Estimated Daily Traffic Volumes Used in Offsite Traffic Modelling

Phase	Road Segment [a]	AM/PM Peak Hour Volume [b]	Total Average Daily Volume	Total Daytime (0700h-2200h) Volume [f]	Total Nighttime (2200h-0700h) Volume [f]
Baseline	Anderson / Nursery Rd.	2/8	80 [c]	68	12
	Hwy 17 East of Anderson Rd.	339/359	3590 [c]	3052	539
	Hwy 17 West of Anderson Rd.	341/367	3670 [c]	3120	551
Construction	Anderson / Nursery Rd.	200/200	469 [d]	235	234
	Hwy 17 East of Anderson Rd.	110/332	2987 [e]	2822	165
	Hwy 17 West of Anderson Rd.	230/452	4187 [e]	3842	345
Operation	Anderson / Nursery Rd.	119/119	275 [d]	138	138
	Hwy 17 East of Anderson Rd.	95/322	2880 [e]	2737	143
	Hwy 17 West of Anderson Rd.	166/393	3590 [e]	3341	249

Notes: [a] Anderson Rd. and Nursery Rd. assumed to have same volumes due to route layout.
[b] Peak hour values determined from turning movement volumes in Traffic Impact Study (Appendix E of the revised EIS).
[c] Average daily traffic (ADT) determined by assuming PM peak hour is 10% of total.
[d] ADT determined from Table 9 of Traffic Impact Study for trips associated with Project.
[e] ADT determined using combination of mine AM peak (5am, nighttime) and mine PM peak (6pm, daytime).
[f] Day/Night split assumed to be 85%/15% based on typical MTO value for provincial highways. Similar truck splits assumed to be 5% medium and 8% heavy trucks per MTO for provincial highways.

During the construction phase, approximately 200 vehicles are expected to arrive during the mine's morning peak hour and then leave during the mine's afternoon peak hour. In between these peak hours, traffic is expected to be minimal. During the operations phase, a similar pattern exists although volumes are lower at 119 vehicles in the peak hour.

The Goliath Gold Traffic Impact Study (Appendix E of the EIS) indicates the vehicle traffic to and from the site will predominately be small vehicle traffic (94-96% of the annual trips are employee traffic & office supply trips), with larger vehicles larger vehicles accounting for 4-6% of the total annual traffic, which is approximately 15-19 trips per 24-hour period. The finished product leaving the mine site is infrequent (i.e., less than once daily).

To properly assess the influence of the relative change in traffic due to the Project, a baseline condition was established based on modelled traffic volumes to ensure consistent methodology for comparison purposes, as opposed to being based on ambient measurements in the original assessment. This approach is necessary since the traffic volumes that occurred during the measurements are unknown.

The results of the assessment are shown in Table 2-2. These results include the contributions due to blasting and steady-state source operations during both construction/site preparation and operations phases.

Table 2-2: Predicted Results including Offsite Traffic for Most-affected Receptors

Phase	Receptor [a]	L_{DN} without Project (dBA) [b]	L_{DN} with Project (dBA) [b]	Change in Percent Highly Annoyed	Meets Guideline?
Construction/ Site Preparation	NR03	58	60	2.2%	Yes
	NR04	60	61	0.9%	Yes
	NR44	64	65	1.3%	Yes
Operations	NR03	58	60	1.8%	Yes
	NR04	60	61	0.7%	Yes
	NR44	64	65	1.1%	Yes

Notes: [a] Receptors in LSA most-affected by access road traffic.
[b] LDN after 10 dB adjustment for quiet rural area.
Results include contribution from blasting and steady-state sources during either phase.

Compared to the number of vehicles on Highway 17, the vehicles associated with the Project are not predicted to measurably change the background noise levels from existing traffic which is dominated by Highway 17. The change in percent highly annoyed is predicted to meet the guideline with the inclusion of traffic noise, blasting, and steady-state sources for each Project phase.

Although the guideline is predicted to be met, it is acknowledged that the shift change during construction / site preparation or operations phase will produce a notable change in local vehicle traffic, particularly along Anderson Road and Nursery Road. This change will lead to a short-term increase in noise for local residents during an hour where noise is not notable under the existing conditions (e.g., particularly during vehicle arrivals in the early morning hours for the shift start).

To assist with mitigating this effect, it is recommended that some consideration be given to managing the traffic flow. For example, staggered shift starts could be considered so vehicles do not all arrive in a single hour; bussing workers to the site during construction phases; carpooling could be encouraged.

3 ASSESSMENT OF BLASTING

Information request TMI_190-AE(1)-28 outlined recommended adjustments to the analysis of blasting in the environmental noise assessment and requested that the analysis be modified to include the adjustments.

Blasting produces a sound and vibration wave that rapidly decays as the blast energy disperses, and thus has only a short-term influence (i.e., less than 5-10 seconds) on local sound levels. Repeated blasting events within a single day could contribute to sound levels to create a notable change in longer-term sound exposures (e.g., 15-hour day, 9-hour night, or 24-hour levels). This project only anticipates one blast per day, hence the most critical effects are expected to be during short-term sound exposures such as one-hour levels (i.e., consistent with provincial guidelines). Over longer-term averaging periods, blasting is expected to be insignificant, but has been evaluated further.

According to the standard ISO 1996-1:2003 cited in the information request, blasting is identified as a "high-energy impulsive sound source" in accordance with Section 3.5.1 (i.e., "any explosive source where the equivalent mass of TNT exceeds 50 g", with examples that include quarry and mining explosions, sonic booms, demolition or industrial sources that use high explosives). This source category is different from the "highly impulsive sound source" defined in ISO 1996-1:2003 (i.e., the one that would apply the 12 dB adjustment identified in Table A.1) and is also consistent with provincial guidelines that exclude blasting as an impulsive source (i.e., NPC-103). Section 4.2.2 of the environmental noise assessment contained in Appendix H of the revised EIS incorrectly references the inclusion of a 12 dB penalty on this type of source. High-energy impulse sounds are assessed per the methods outlined in Annex B of ISO 1996-1:2003.

Annex B outlines how to determine the adjusted sound exposure level for high-energy impulse sounds based on its C-weighted sound exposure level. For blast-related sound exposures less than 61 dBC, the adjusted sound exposure level in dB is unchanged or less than the blast-related sound exposure.

As a result, blast-related sound exposures less than 61 dBC could conservatively be included in an acoustic assessment without adjustment.

Peak sound pressure levels of 78 dB have been predicted at the most affected receptor for this project. As shown in Figure 2, a typical blast lasts less than 0.1 seconds based on the image taken from Figure 14-7 of Construction Vibrations (2000) by Charles H. Dowding.

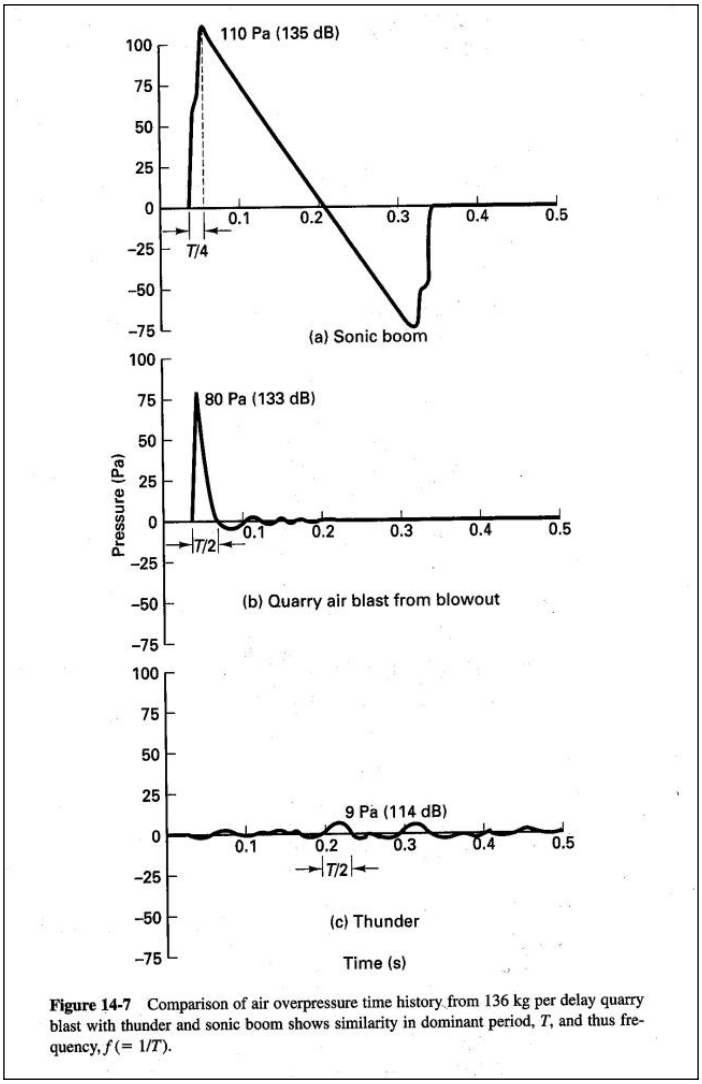

Figure 14-7 Comparison of air overpressure time history from 136 kg per delay quarry blast with thunder and sonic boom shows similarity in dominant period, T, and thus frequency, $f\ (= 1/T)$.

Figure 2: Excerpt from Construction Vibrations (Dowding, 2000) Showing Typical Blast Duration

If the blast event was conservatively assumed to release energy for 5 seconds at a sustained sound pressure of 78 dB, the resulting 15-hour sound exposure level would be 38 dB. It would be further conservative to assume this broadband sound to be A or C-weighted without changing its magnitude, i.e., giving 38 dBA or dBC. This sound exposure level would see no increase per the methods of ISO 1996-1, Annex B. Assuming it would be A-weighted and additive to the other construction noise would add further conservatism.

Based on the above, the peak sound pressure levels due to blasting at each receptor were converted to sound exposure levels and added to the predicted contributions of the other steady-state construction or operational noise levels. The resulting day-night sound exposures (LDN) changed by 1 dB or less with the addition of blasting, and resulted in minor increases to the change in percent highly annoyed. No conclusions were altered.

The predicted results with blasting included assessed to Health Canada guidelines for the construction and operations phases are presented in Tables 3-1 and 3-2 below. Details of the calculations are provided in Tables 3-3 and 3-4.

Table 3-1: Assessment of Construction and Site Preparation Noise to Health Canada Guidelines

Receptor	L_{DN} (dBA)	Change in Percent Highly Annoyed	Complies with Guideline? *
NR03	57	1.7	Yes
NR03_O	56	1.6	Yes
NR04	50	0.4	Yes
NR04_O	49	0.3	Yes
NR30	50	0.4	Yes
NR30_O	49	0.3	Yes
NR44	46	0.2	Yes
NR44_O	45	0.1	Yes
NR47	46	0.2	Yes
NR47_O	45	0.1	Yes

* Health Canada guidelines are a maximum LDN of 75 dBA or a maximum change in % highly annoyed of 6.5%.

Table 3-2: Assessment of Operations Noise to Health Canada Guidelines

Receptor	L_{DN} (dBA)	Change in Percent Highly Annoyed	Complies with Guideline? *
NR03	57	2.0	Yes
NR03_O	56	1.5	Yes
NR04	51	0.5	Yes
NR04_O	50	0.4	Yes
NR30	51	0.5	Yes
NR30_O	50	0.4	Yes
NR44	47	0.2	Yes
NR44_O	46	0.2	Yes
NR47	48	0.2	Yes
NR47_O	47	0.2	Yes

* Health Canada guidelines are a maximum LDN of 75 dBA or a maximum change in % highly annoyed of 6.5%.

Table 3-3: Calculation of Percent Highly Annoyed for the Construction and Site Preparation Phase

Noise Receptor	Adjusted Baseline L_{EQ} (0700-2200) (dBA) (L_D)	Adjusted Baseline L_{EQ} (2200-0700) (dBA) (L_N)	Adjusted Baseline L_{DN} (dBA)	Quiet Rural Area (y/n)	Adjusted Baseline L_{DN} (RL) (dBA)	% HA Baseline (Eqn. D5)	Adjusted Const. L_{EQ} (0700-2200) (dBA) (L_D)	Adjusted Const. L_{EQ} (2200-0700) (dBA) (L_N)	Adjusted Const. L_{DN} (dBA)	Adjusted Const. L_{DN} (RL) (dBA)	Adjusted Const. (RL) + Baseline (RL) (Eqn. D4)	% HA Const. + Baseline (Eqn. D5)	% HA Const. + Baseline minus % HA Baseline	Exceeds 6.5% increase in % HA (y/n)	Complies with Guidelines?
NR03	44	43	50	Yes	60	7.47	41.9	40	47	57	61	9.17	1.70	No	Yes
NR03_O	44	43	50	Yes	60	7.47	41.7	39	46	56	61	9.04	1.58	No	Yes
NR04	44	43	50	Yes	60	7.47	35.1	33	40	50	60	7.86	0.39	No	Yes
NR04_O	44	43	50	Yes	60	7.47	34.5	32	39	49	60	7.79	0.32	No	Yes
NR30	44	43	50	Yes	60	7.47	36.5	33	40	50	60	7.88	0.41	No	Yes
NR30_O	44	43	50	Yes	60	7.47	36.2	32	39	49	60	7.81	0.35	No	Yes
NR44	44	43	50	Yes	60	7.47	31.4	29	36	46	60	7.63	0.16	No	Yes
NR44_O	44	43	50	Yes	60	7.47	30.7	28	35	45	60	7.59	0.12	No	Yes
NR47	44	43	50	Yes	60	7.47	32.6	29	36	46	60	7.64	0.17	No	Yes
NR47_O	44	43	50	Yes	60	7.47	32.1	28	35	45	60	7.61	0.14	No	Yes

Table 3-4: Calculation of Percent Highly Annoyed for the Operations Phase

Noise Receptor	Adjusted Baseline L_{EQ} (0700-2200) (dBA) (L_D)	Adjusted Baseline L_{EQ} (2200-0700) (dBA) (L_N)	Adjusted Baseline L_{DN} (dBA)	Quiet Rural Area (y/n)	Adjusted Baseline L_{DN} (RL) (dBA)	% HA Baseline (Eqn. D5)	Adjusted Oper. L_{EQ} (0700-2200) (dBA) (L_D)	Adjusted Oper. L_{EQ} (2200-0700) (dBA) (L_N)	Adjusted Oper. L_{DN} (dBA)	Adjusted Oper. L_{DN} (RL) (dBA)	Adjusted Oper. (RL) + Baseline (RL) (Eqn. D4)	% HA Oper. + Baseline (Eqn. D5)	% HA Oper. + Baseline minus % HA Baseline	Exceeds 6.5% increase in % HA (y/n)	Complies with Guidelines?
NR03	44	43	50	Yes	60	7.47	42	40	47	57	62	9.44	1.97	No	Yes
NR03_O	44	43	50	Yes	60	7.47	42	39	46	56	61	8.97	1.50	No	Yes
NR04	44	43	50	Yes	60	7.47	36	35	41	51	60	8.01	0.54	No	Yes
NR04_O	44	43	50	Yes	60	7.47	35	33	40	50	60	7.87	0.40	No	Yes
NR30	44	43	50	Yes	60	7.47	37	34	41	51	60	7.98	0.51	No	Yes
NR30_O	44	43	50	Yes	60	7.47	37	33	40	50	60	7.92	0.45	No	Yes
NR44	44	43	50	Yes	60	7.47	33	31	37	47	60	7.70	0.23	No	Yes
NR44_O	44	43	50	Yes	60	7.47	32	30	36	46	60	7.65	0.19	No	Yes
NR47	44	43	50	Yes	60	7.47	33	31	38	48	60	7.71	0.24	No	Yes
NR47_O	44	43	50	Yes	60	7.47	33	30	37	47	60	7.67	0.20	No	Yes

4 SOUND LEVEL ADJUSTMENTS

Information request TMI_193-AE(1)-29 expressed concern that sound level adjustments for tonal, cyclic or quasi-steady impulsive sounds were not applied to the source data or receiver limits. It specifically refers to Ontario Ministry of the Environment and Climate Change (MOECC) document, NPC-104 Sound Level Adjustments, which outlines when source sound levels should be modified to account for particularly annoying qualities in the sound character.

The sound level adjustments outlined in NPC-104 include:

- An increase of 5 dB to source levels that exhibit an audible tonal quality, such as a whine, screech or buzz. According to MOECC guidance, a tone is a sound that exhibits a single dominant frequency. Examples of these sources include circular and chain saws (whine or screech), transformers (buzz), or sirens.
- An increase of 5 dB to source levels that exhibit an audible cyclical variation such as beating or other amplitude modulation. According to MOECC guidance, beating is the cyclical pulsation of sound that occurs with two tones at almost the same frequency. An example of beating noise sources would be two machines operating at almost the same speed.
- An increase of 10 dB to source levels where the source is considered to be quasi-steady impulsive. According to MOECC guidance, examples of these sources would include pavement breakers, riveting guns, and ineffectively muffled air compressors.

The above sound level adjustments are applied to the ***source level*** to account for the more annoying characteristics of the sound and are not used to adjust receiver limits, or otherwise. The adjustments are not cumulative and only one is applied per source. The information request appears to suggest that adjustments be made to the source levels or to lower the allowable receiver limits. Even if a source warranted an adjustment, it would only be made to that specific source in the analysis; it would be incorrect to adjust the receiver limit.

Per MOECC document NPC-103, the application of the NPC-104 adjustments is to be made based on the ***observed, audible*** character of a source ***as perceived*** at a receiver location; in other words, not based on the sound character as heard near the source, but as heard at the receiver. This distinction is important since a source's sound characteristics alter as it propagates through air to the receiver, so what is heard near the source is different once it reaches the receiver. Both atmospheric absorption and ground attenuation act to attenuate sound at varying rates by frequency which will alter the

audible qualities of the sound once it reaches a receiver. Furthermore, at increasing distance a source's volume diminishes and begins to blend in and be masked by the background sounds in an area. In practice this means many potentially annoying source characteristics dissipate and are no longer audible in the same way once they reach a receiver location.

Since the above adjustments are applied based on the observed qualities of sound, they are not typically applied to general broadband sources of noise, except where known to be a concern. Large electrical transformers, for example, are known to produce a buzz/tonal characteristic that is linked to resonance of its magnetic core and a 5 dB adjustment may be anticipated for receivers near the source. At large distances of several hundred meters however, even a transformer's unique tonal quality is no longer audible so the 5 dB adjustment would not apply if not observed.

As a result, it would be highly uncommon to apply sound level adjustments to a source's character without observed evidence. The sources in this assessment (i.e., including ventilation equipment, generators, building exhausts, on site vehicle traffic, and rock crushing equipment) were reviewed and are not known to exhibit the annoying characteristics outlined in NPC-104, and since no evidence exists in the reference sound data, no adjustments were applied to the source levels. This approach is consistent with industry practice and MOECC guidance.

Warning devices such as backup beepers and alarms, can be tonal but are exempt from evaluation per MOECC guidance as it is necessary they are heard for safety purposes. The noise source summary tables for each of the Project phases are provided in the respective sections (6.2: site preparation and construction; 7.2: operations; 8.2:" closure) of the Environmental Noise Assessment (included as part of Appendix H to the revised EIS).