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June 3, 2016

Ms. Areta Zouvas, President
Kirkland Mining Company
3200 Fourth Ave, Suite 101A
San Diego, CA. 92103

Dear Ms. Zouvas:

At your request, I examined the drill logs, analyses, geological reports and other data to quantify the resource of the volcanic tuff deposit on the Kirkland Mining Company (KMC) Capital claim group located near Kirkland, Arizona. Analyses of surface and core samples identified the tuff as a high-quality pozzolan (HQP).

My conclusion is that the resources on the claim group conservatively total 39 million tons, 15 million tons indicated and 24 million tons inferred.

Discussion of Resource Calculation

Ninyo & Moore conducted a geological site reconnaissance in May, 2015. Their work indicated that the deposit covers the claim group except for a small area overlain by basalt. They identified three tuff beds, differing primarily in hardness, color and size of the contained non-tuff rock fragments. They did not map the different beds.

Ten exploration borings were made by KMC in February-March 2016. To draw cross sections of the deposit, I plotted the boring sites on the topographic map produced by AeroTech Mapping dated August 16, 2013. The location of these borings is shown in Figure 1. Boring collar coordinates were provided by Mr. Karl Sandwell-Weiss, consulting geologist. These coordinates were obtained using a hand-held GPS receiver with x-y accuracy of about 10 feet. The z coordinate (elevation) was known to be less accurate due to the characteristics of the GPS receiver. Boring collar elevations were established by reading the elevation from the topographic map, so that collar elevations match the topography on the cross sections.

I drew two cross sections through the deposit, sections A and B. The cross section cut lines are shown on Figure 2 Sheet 1 and the sections themselves on Figure 2 Sheet 2. The sections show undifferentiated tuff from surface to total depth of the borings. The bottom of the tuff is not known to outcrop anywhere on the Capital claims. In his geological report of May 2016, Mr. Sandwell-Weiss speculates that from the geologic type section for the area, the thickness might be 230 feet or more. In addition, a water

well drilled in 1981 on the western edge of the Capital claims by Unzicker & Wells Drilling Co. reported tuff from a collar elevation of about 3030 feet to well bottom at 200 feet.

Mr. Sandwell-Weiss provided considerable geological detail in the boring logs. Bed correlation between drill holes, however, was not possible because there is very little difference in the tuff observed in the drill cores from the 10 borings. The borings are (on average) about 400 feet apart which also makes correlation uncertain. The main differences between beds in the borings are subtle differences in color, and the size and mineralogy of fragments of other rock contained within the tuff. According to Mr. Sandwell-Weiss, the quantity of these rock fragments averages about 10% of the cores regardless of the size of the fragments.

Fifteen samples of selected boring intervals were analyzed by Mineral Lab, Inc., using XRF, XRD and bulk clay analysis. Eleven duplicate samples were checked by Hazen Research using XRF, XRD and Grind Curve analysis, and were found to be in good agreement. All samples, with the exception of KMC 6-37, were very similar in chemical composition and loss-on-ignition, and meet ASTM specifications for HQP. Boring KMC 6, from which sample KMC 6-37 was taken, is located along a wash in the far southeast corner of the pattern of borings. The wash may be along a fault which might account for the difference of this sample from the rest.

The geologic map in the Ninyo & Moore geologic site reconnaissance shows that the eight Capital claims are entirely covered by tuff except for about 3 acres of the Capital 1 claim and about 2 acres of the Capital 5 claim, which are overlain by basalt. The total acreage of the eight Capital claims is about 146 acres; therefore, about 131 acres of the claim group is covered by tuff.

The specific gravity of the tuff was measured at 2.2 - 2.3 by Dr. Barzin Mobasher, giving an average weight of 140 lbs. per cubic foot, which I used in the tonnage calculations.

I used The SME Guide for Reporting Exploration Results, Mineral Resources and Mineral Reserves (The 2014 SME Guide) to categorize the resources. Because of the uniformity of the tuff seen in outcrop and the borings, I estimate that tuff within an "envelope" surrounding the borings as shown in Figure I, and to a depth of 100 feet constitutes an indicated resource. The 2014 SME Guide states *"An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation."* The area within this envelope is approximately 52 acres. Due to the continuity of the tuff over the surface of the deposit, a thickness of the deposit in outcrop greater than 140 feet, the fact that all borings bottomed in tuff, and that the well drilled near the low point of the property penetrated 200 feet of tuff I believe that an average depth of 100 feet is

justified for calculation of the indicated resource. The indicated resource to a depth of 100 feet, assuming the uppermost two feet of surface material is waste, is approximately 15 million tons.

The 2014 SME Guide defines an Inferred Mineral Resource as *“that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.”* I estimate that the inferred resource on the Capital claims to an average depth of 100 feet, less the upper two feet as waste, is about 24 million tons.

The total resource is therefore:

Indicated:	15 million tons
Inferred:	<u>24 million tons</u>
Total	39 million tons

This is a very conservative number since the average thickness of the deposit is likely to be greater than the 100 feet used in the calculations.

References

The following sources were used to gather information for cross sections and resource calculations:

Chemical and Physical Analysis of Natural Pozzolan Developed for Kirkland Mining Co. a report for KMC by Barzin Mobasher, Ph. D., P.E., Arizona State University, March 19, 2015

Geologic Site Reconnaissance Capital and Homestead Claims, Kirkland, Yavapai County, Arizona by Ninyo & Moore, May 29, 2015

Topographic map by AeroTech Mapping, titled Kirkland Mining, flight date August 16, 2013

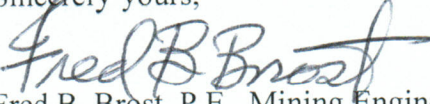
Geology of the Capital Claims, Kirkland, Arizona, by Karl Sandwell-Weiss, 6 May 2016.

Letter report by Mineral Lab, March 29, 2016

Letter report by Hazen Research, April 26, 2016

The SME Guide for Reporting Exploration Results, Mineral Resources and Mineral Reserves (The 2014 SME Guide), prepared by the Resources and Reserves Committee of the Society for Mining, Metallurgy and Exploration, Inc.

Sincerely yours,


Fred B. Brost, P.E., Mining Engineer



Legend	
SYMBOLS	DESCRIPTIONS
	CACTUS
	FLAG
	GRID TICK
	AERIAL PANELS
	PALM TREE
	SINGLE TREE
	PEDESTRIAN SIGNAL
	CULVERT
	POST- MISC
	SPOT ELEVATION
	BILLBOARD
	TRANSMISSION
	BRIDGE SIGNS
	CATCH BASIN
	FIRE HYDRANT
	METER / UTILITY
	MAN HOLE
	STREET LIGHT
	LIGHT POLE
	UTILITY POLE
	SIGNS
	SIGNS
	TV DISH
	STREET SIGN
	GATE
	TRAFFIC SIGNAL
	VALVE
	ARROW / STRAIGHT
	ARROW / TURNS
	ARROWS / TURNS
	BIKE LANE
	HANDICAP
	TRAFFIC PAINT
	TRAFFIC PAINT
	MINE
	BUILDING
	BRIDGE
	CANOPY
	CENTER LINE PAINT
	CONCRETE
	ELEVATION TEXT
	CURB / GUTTER
	DIRT ROAD / TRAIL
	GOLF FAIRWAY
	FENCE
	GRID TEXT
	INDEX CONTOUR
	INTER CONTOUR
	ASPHALT PAVEMENT
	SWIMMING POOL
	RETAINING WALL
	PAVED ROAD
	RAILROAD
	VEGETATION LINE
	GUARD RAIL
	PARKING STRIPES
	WASH

Project:
Kirkland Mining

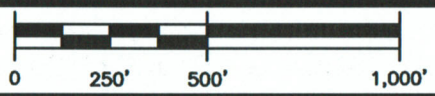
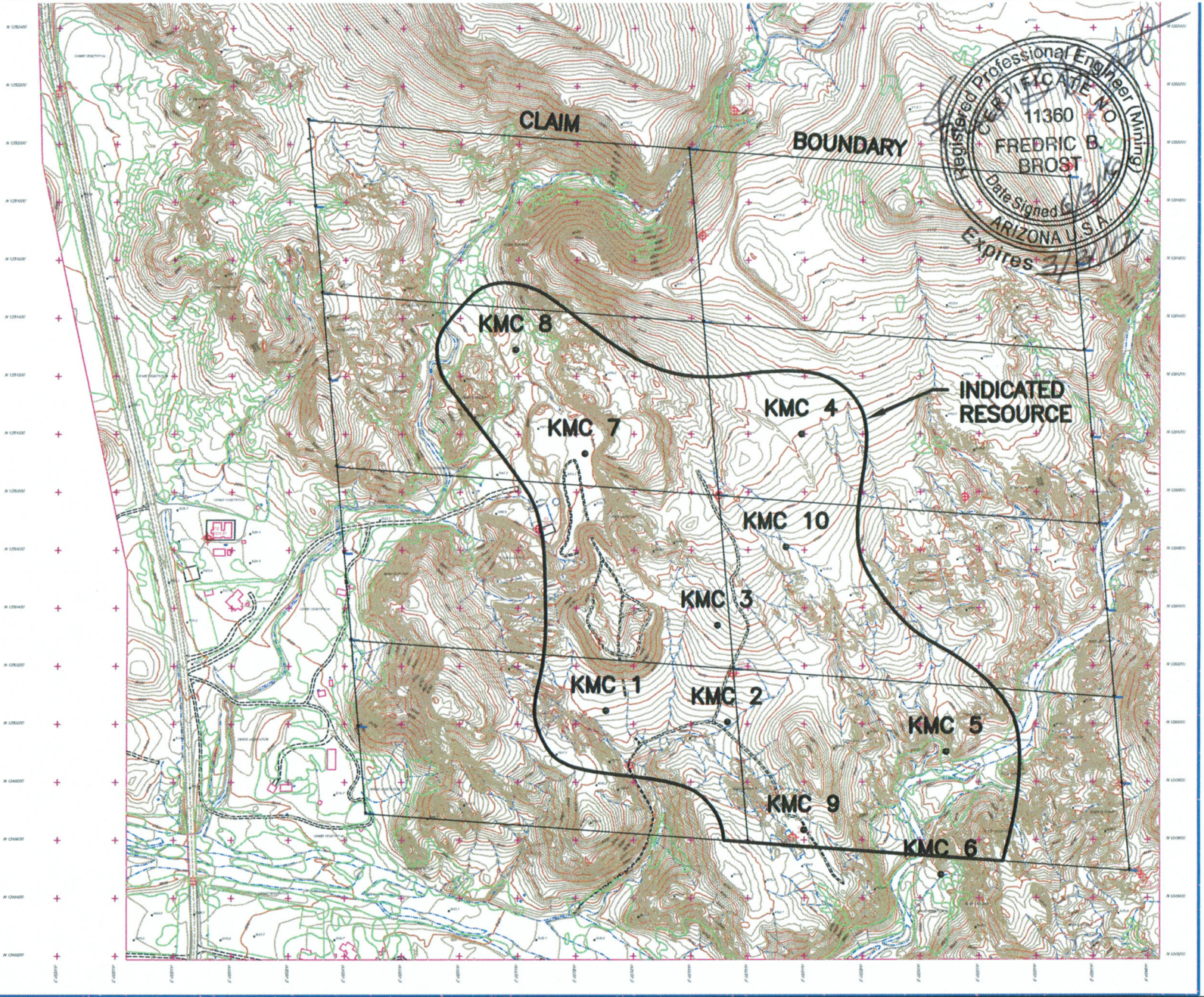
Client:
Kirkland Mining

Flight Date:
August 16, 2013

ATM #P0813-034

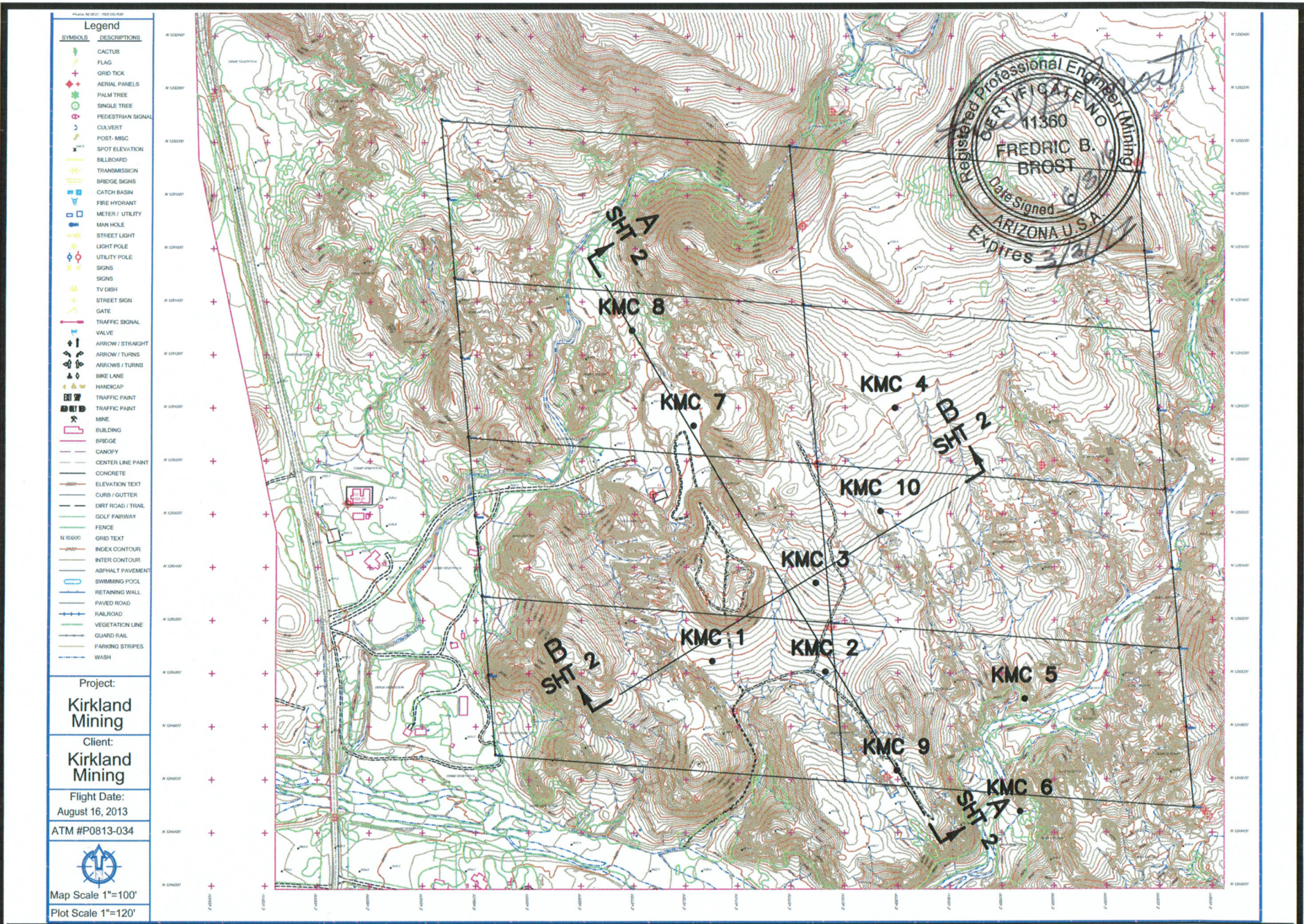


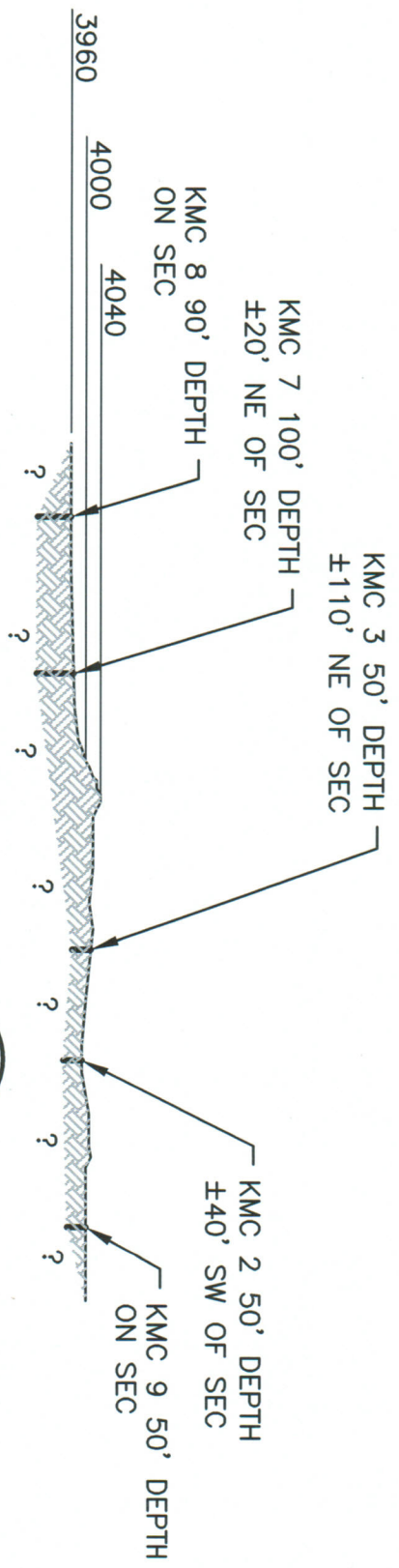
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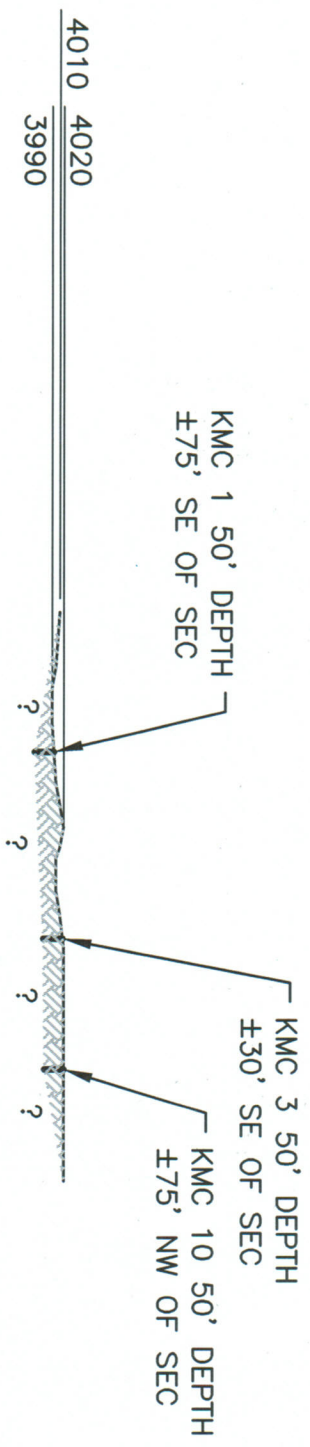
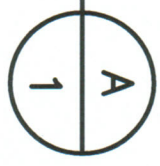
KIRKLAND MINING COMPANY
BORING SITES FEBRUARY & MARCH 2016

FIGURE
1

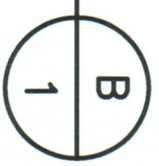




SCALE: N.T.S.



SCALE: N.T.S.



LEGEND

 UNDIFFERENTIATED TUFF



KIRKLAND MINING COMPANY
 SECTIONS A & B



FIGURE 2
 2 OF 2