REPORT ON A TEST PIT PROGRAM AND UPDATED PUMICE RESOURCE ESTIMATE

Vulcan-Salal Mineral Claims
Mine #0700166
Lillooet Mining Division

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Summary

The Vulcan-Salal mineral claims and lease are located approximately 75 km northwest of Pemberton, BC in the Lillooet Mining Division. The claims and lease total 1065 and 246 hectares, respectively and are owned and operated by Garibaldi Pumice Ltd. (FMC #145571).

The Mt. Meager volcanic complex eruption at 2350 BP produced the Bridge River Assemblage. At least three primary volcanic lithology units occur. Airfall from five eruptive cycles are the oldest and comprise early phreatomagmatic to magmatic pyroclastic rocks. Pyroclastic block and ashflow containing charred logs and pumice occur up to seven kilometres from the vent area and is the second eruption. Hard weathering lava of dacite composition occurs in the Lillooet valley and is the third eruptive phase.

On the Vulcan-Salal claims, dacite pumice between 4 to 8 metres and locally up to 10 metres apparent thickness is recorded. Blacked soil containing charred material occurs at the contact with the original forest floor. Silt, volcanic ash, and organic rich soil overlie the pumice, locally containing heterolithic rock slide and avalanche debris.

A test pit investigation was carried out on the property on November 1, 2011 and between mid-August and mid-September 2012 by Garibaldi Pumice Ltd. A total of 31 test pits approximately 6 to 10 metres in depth were completed. The test pit geology profiles consist of four primary lithology units: 1) a thin organic surface layer, 2) a fine grained clastic and silty layer comprised of pumicite with variable heterolithic and transported material, 3) a predominantly sand-sized pumicite layer, and 4) medium to coarse clastic dacite pumice to the original pre-eruption surface.

Experience gained from previous test pit programs and subsequent mining on the adjacent lease, support the presence of a very large scale, uniform, blanket-like deposition of pumice and pumicite material. The current program of test pits has expanded the pumice deposit outward from the mined area for a distance of approximately 2.35 kilometres in length and over 1.0 kilometre in width. With the consistent nature of the deposit in all current and previous test pits programs, its orientation, and mining experience nearby, the polygonal method is thought to provide a reasonable and valid resource estimate that conforms to Canadian Institute of Mining, Metallurgy and Petroleum, in the Standards of Mineral Resources and Reserves Definitions and Guidelines adopted by CIM Council, August 20, 2000.

In summary, the current investigation indicates there is approximately, in the measured + indicated and inferred category, respectively:

- 8.2 million m^3 and 6.8 million m^3 of coarse pumice,
- 2.0 million m^3 and 1.4 million m^3 of pumicite,
- 350,000 m^3 and 550,000 m^3 of fine grained, silt sized pumicite, and
- 590,000 m^3 and 570,000 m^3 of overburden.

Additional test pits within the area investigated are thought likely to move much of the indicated resource into measured resource. The resource remains open in extent, and additional test pits have potential to increase the resource.

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Introduction

Standard Metals Exploration Ltd. completed two prior resource estimates in 1999 and 2006 (Matheson, 2000; Blann, 2006) and was engaged by Garibaldi Pumice Ltd. (Garibaldi) to complete an updated resource estimate based on the results of a test pit program carried out by Garibaldi during 2011 and 2012. The following report presents and updates the information contained in Blann, 2006.

Location and Access

The Vulcan-Salal property is located approximately 75 km northwest of Pemberton, BC and is easily reached by paved and gravel logging roads (Figure 1). Access from Pemberton is via Pemberton Meadows road for approximately 30 km and the Lillooet Forest Service Road to km 45.5. The claims are generally situated north and east of the confluence of Salal Creek and the Lillooet River.

Most of the claim area occurs between 700 and 1200 metres elevation with a gentle to moderately steep southwest facing slope (5 to 20%). Elevations range from approximately 600 metres in the Upper Lillooet River valley to 1600 metres in higher elevations areas to the northeast and north where steep slopes and rock prevail. Nearby peaks include Mt. Job, Mt. Athelstan and Mt. Meager and approach 2900 metres elevation. The area has seen some logging activity however much of the property is forested.

Claim status

The Vulcan-Salal property is comprised of seven mineral claims that total 1065 hectares in area and one mining lease that totals 246 hectares in area (Table 1, Figure 2). The tenures are owned and operated by Garibaldi Pumice Ltd. (formerly Garibaldi Aggregates Ltd.), FMC #145571. The mining lease was obtained in July of 2009.

Table 1 – Garibaldi Pumice Ltd. Mineral Tenures

Tenure #	Tenure Name	Tenure Type	Area (ha)	Expiry*
510043	Salal 1	Mineral Claim	266.1	2015/Nov/01
510044	Salal 2	Mineral Claim	245.6	2015/Nov/01
510183	Vulcan 8	Mineral Claim	40.9	2015/Nov/01
560524	Vulcan 12	Mineral Claim	20.5	2019/Oct/01
564674	Vulcan 13	Mineral Claim	41.0	2015/Nov/01
564946	Vulcan 3	Mineral Claim	389.0	2015/Nov/01
565007	Vulcan 15	Mineral Claim	61.4	2015/Nov/01
606990	Vulcan1,7	Mineral Lease	246.0	2013/Jun/30

*Pending assessment report approval

History

The first documented report of the Mt. Meager pumice deposit was in the early 1900s (Robertson, 1911). Some mining of pumice above the confluence of Salal Creek and the Lillooet River was conducted by Mr. W.H. Willis in the early 1980s, however this production ceased and the mineral lease abandoned when a bridge across the Lillooet River used to access the quarry washed out in the mid 1980s (Schmok, 2000).

Ten two-post claims, over the deposit southwest of the Lillooet River, were staked for Mr. L.C. Bustin in 1988. In 1990, Mr. G. Carefoot acquired 53 claims, and in 1991 the historical deposit was staked for Great Pacific Pumice Inc. (a company affiliated with Mr. Carefoot) when the Bustin claims were abandoned (Seabrook and Church, 1991; Schmok, 2000). In 1992, a new bridge across the Lillooet River below its confluence with Salal Creek improved access to the Great Pacific deposit (Shearer, 1992). Subsequent work programs involved geological mapping, bulk sampling, petrographic analysis and commercial evaluation of the pumice (Seabrook and Church, 1991: Shearer, 1992; Wares 1992). In 1995, Great Pacific Pumice Inc. obtained a Mine Development Certificate, a 60 hectare Mineral Lease (No. 333937) and a Mine Permit (Q-202). Seasonal commercial production has been carried out since the late 1990s to present and the extent of the pumice deposit has been further investigated using Ground Penetrating Radar (Schmok, 2000).

In 1991, R. G. Matheson purchased the Vulcan claim (tenure #228980), situated east of the Great Pacific claims. Subsequently, claim staking and claim conversions completed by Garibaldi Aggregates Ltd. and International Fibre-Crete Inc. resulted in a 1364 hectare claim group (the Vulcan-Salal mineral claims). Work on the mineral claims includes preliminary mapping and test pitting in 1999 (Blann, 1999). That investigation indicated potential for a 6.3 million cubic metre resource of pumice in an area approximately 2000 by 750 metres in dimension on the northeast side of the Lillooet River (Matheson, 2000). Additional test pitting in 2005 was completed on the eastern portion of the claim block (the location of the current mine lease). A subsequent resource evaluation based on that work identified a measured and indicated resource of approximately 1.4 million cubic metres of pumice in the area (Blann, 2006). Between 2002 and 2008, Garibaldi completed a number of bulk samples and constructed a screening plant on site. In addition, a legal survey, mine permit application and water licence application for Truckwash Creek were completed between the fall of 2007 and the spring of 2009. A mine lease for 246 hectares of the eastern portion of the claim block was obtained in July of 2009. Garibaldi Pumice Ltd. has been seasonally mining pumice since 2009 with production ranging from approximately 15,000 to 35,000 cubic metres of pumice annually. Pumice is screened to separate a coarse fraction (3 to ½ inch material) for use as lightweight geotechnical fill material and a finer fraction (½ inch minus) for use in horticulture and concrete applications. Other uses for dacite pumice include fireproof or thermal insulating panels and bricks, paint and plastic fillers, grinding compounds, filtration systems and cosmetics.

Regional Geology

The Mt. Meager volcanic complex is situated at the northern end of the Garibaldi Volcanic Belt. Mt. Meager erupted and formed a volcanic complex in 2350 BP to produce the Bridge River Assemblage (Strasiuk and Russel, 1990). At least three primary volcanic lithologies occur. Pyroclastic airfall from five eruptive cycles are the oldest and comprise early phreatomagmatic and magmatic pyroclastic rocks. Pyroclastic block and ashflow containing charred logs and pumice occur up to seven kilometres from the vent area and is the second eruption. Hard weathering lava of dacite composition occurs in the Lillooet valley and is the third eruptive phase.

The following regional subdivision of the Meager Creek Volcanic Complex is from Read, 1977.

1) Basal Breccia: Locally preserved remnants of breccias up to 300 m thick overlie basement on the south side of the complex. Clasts of granite, grey or green aphanite volcanic, and minor metamorphic rocks lie in a Tuffaceous matrix. South of Pylon Peak, where the breccias is thickest, clasts less than 0.5 m long increase in size downwards to jumbled blocks of quartz diorite up to 20 m long with less than 10 percent matrix. This area, where basement is lowest, may represent a partly exhumed vent.
2) Porphyritic Quartz Dacite: In the southwest corner of the map-area, a grey-green dacite with sparse phenocrysts of quartz, plagioclase and horneblende forms a remnant of subhorizonal flows up to 200 m thick. Gently dipping acid tuff and breccias overlap the older dacite along a subvertical eastern contact.
3) Acid Tuff and Breccia: On the south and west flanks of Pylon Peak and the Devastator is a cream to yellow ochre weathering assemblage up to 500 m thick of acid volcanic rocks. They are hydrothermally altered quartz latite with locally preserved quartz, plagioclase and biotite phenocrysts. Silicication, pyritization and the development of ubiquitous clay minerals and sporadic carbonates characterize this unit. Here the quartz latite is massive and may represent either flows and/or hypabyssal intrusions of a partly preserved vent.
4) Aphanitic Flows and Minor Intrusions: Medium to dark grey aphanitic flows here and there overlie the basal breccias and acid volcanic units and a few dykes less than 50 m thick cut both units. On the south-southeast ridge of the Devastator, a lens of conglomerate composed of subrounded pebbles and cobbles of this lithology overlies that acid volcanic unit.
5) Porphyrtic Plagioclase Andesite: Porphyritic plagioclase andesite, the most extensive unit of the complex, forms most of the southern and western parts of the complex. Best outcrops are on Pylon Peak and the Devastator. Gently dipping flows are more extensive than basal and intercalated breccias and tuff, and dykes and plugs are restricted to the Devastator and possibly Peak 7927' at the head of Job Glacier. The maximum thickness may exceed 1,200 m of flows south of Capricorn Creek. Flows are commonly flow-layered or have a subparallel platy jointing and thin reddened breccias and tuff lenses may separate flows up to 20 m thick. Monomictic breccias up to a few hundred metres thick of porphyritic plagioclase andesite clasts lie at or within a hundred metres thick of the base of this sequence. The monomictic composition and differential weathering of clasts distinguish this breccia from the basal breccia unit. Close to the

Devastator, angular clasts up to several metres long are common in breccia. The concentration of hypabyssal intrusions and coarse volcanic breccia in the vicinity of the Devastator favour it as a major andesite vent. Potassium argon dates of 4.2 +/- 0.3 m.y. and 2.1 +/- m.y. (Anderson, 1975) indicated a long period of andesite volcanism spanned by this unit.

6) Horneblende-Biotite Rhyodacite: Surrounding Mt. Job in the centre of the complex is ochre-yellow weathering flows of porphyritic horneblende-biotite quartz rhyodacite. They are prominently flow-layered and locally have columnar jointing. At the head of Affliction Glacier, the unit attains a maximum thickness of 500 m. On the east side of the glacier, it unconformably overlies porphyritic andesite and at the head of Affliction and Capricorn glaciers it is truncated by porphyritic biotite dacite of Mt. Capricorn.
7) Porphyritic Biotite Dacite of Mounts Capricorn and Job: The final 600 vertical metres of Mounts Capricorn and Job are brick-red to maroon-grey weathering dacite. Coarse phenocrysts (5 mm) of plagioclase, quartz and biotite characterize this vesicular dacite. Angular clasts of dacite up to 2 m long form a basal breccia up to 100 m thick. Similar breccia is interspersed throughout the dacite. On Mount Job, local platy and columnar jointing and layering suggest that flows form the bulk of the massif, but their absence on Mount Capricorn may favour this as a source of the eruptive rocks.
8) Porphyritic Dacite of Plinth and Meager Mountains: The top 600 m of Meager Mountain and the bulk of Plinth consist of light grey porphyritic dacite with medium-grained (2-4mm) phenocrysts of plagioclase, quartz, minor biotite and rare horneblende. The dacite is commonly vesicular, has a glassy matrix and is distinguished from other dacites by scattered, rounded inclusions of fine-grained horneblende andesite. On Meager Mountain, the absence of flows or breccia, and the development of steeply inclined flow layering suggest that it is a plug or lava dome. In contrast, Plinth Mountain consists of prominent columnar- or platy-jointed flows and widespread breccia and ash on its northern flank. The Bridge River ash (which in part composes the pumice deposit) incompletely blankets the area between the north and east ridges of Plinth. Within this area, crudely stratified breccia and ash deposits are up to 20 m deep on some ridges. Over 90 percent of the clasts are cream weathering, porphyritic (plagioclase, horneblende, pyroxene) dacite pumice. They range in maximum size from 100 mm on the summit of Plinth Mountain (Nasmith et al., 1967) through 1 m at the 6,500-foot level on the north ridge crest to 4 m blocks on the north side of the creek crossing the Fall Property at 4965'. Two percent of the clasts are subrounded pebbles and cobbles of a porphyritic quartz monzonite exposed along the creek. These data strongly indicate the lower part of the valley as the source of the Bridge River ash. Fall Creek flows down the southern margin of the scoriaceous dacite flow, which floors the present valley. Because Bridge River ash is absent, the flow must be younger than the ash and probably covers the ash vent. Much of the edifice of Plinth Mountain is probably postglacial and that of Meager Mountain may be as well.
9) Olivine Basalt: A sparsely porphyritic plagioclase and olivine basalt underlies part of the ridge separating Job and Mosaic creeks. Flat-lying to southeasterly dipping flows parallel the present topography. On the northwest side of the ridge, basalt scoria and bombs comprise a breccia, which overlies the flows, and till.

Local Geology

On the Vulcan-Salal pumice claims, the Bridge River Assemblage consists of airfall pumice, pyroclastic block and ash flow, and dacite lavas. The eruption is believed to have originated from the northeastern shoulder of Plinth Peak at an elevation of approximately 1500 metres, and directed northeast at approximately 63 degrees azimuth.

The local geology profiles consist of four primary lithology units: 1) a thin organic surface layer, 2) a fine grained clastic and silty layer comprised of pumicite with variable heterolithic and transported material, 3) a predominantly sand-sized pumicite layer, and 4) medium to coarse clastic dacite pumice to the original pre-eruption surface.

1) At surface, a thin veneer of organic material occurs. Topsoil depth ranges from less than 10 cm to approximately one metre locally and less than 0.4 metres on average.
2) Predominantly fine grained pumicite (sometimes referred to as volcanic ash) is locally orange-brown stained and in some areas contains heterolithic rock slide and avalanche debris. In test pit logs, this material is assigned to the overburden unit, resulting in low or zero fine grained pumice recorded. Some test pits have additional fine grained pumicite that is “clean” and uniform in composition and can be 0.15 to 4.1 metres in apparent thickness.
3) Pumicite herein is defined as dominantly pumice 5 mm or less (sand sized) in dimension and occurs as a layer ranging from near zero to 6.9 metres in apparent thickness.
4) Pumice ranges from 0.5 to 15 centimetres in diameter. A weak stratification of finer and coarse clast and several thin heterogeneous layers occur in the upper portion of the unit. The pumice is clast supported, with steep angle of repose and hydraulically extremely porous and permeable. Clear glass comprises 80 to 90 percent of the dacite pumice with subordinate plagioclase orthopyroxene, amphibole, and biotite. The dacite pumice is dominantly porous and vuggy however fibrous or breadcrust textures occur. The colour is generally pale cream to grey-white with oxidizing biotite creating a pale red-orange stain locally.

In total an apparent thickness of between 4 to 8 metres of dacite pumice and pumicite occurs with locally up to 10 metres in apparent thickness recorded. Thickening appears at the base of steep slopes, proximal to ravines or the base of a topographic bench. Thickening in these areas may reflect post-eruption avalanche, slides or hydraulic movement.

Beneath the pyroclastic pumice deposit, blacked soil containing charred material occurs at the contact with the original ground surface.

Test Pit Investigation and Resource Estimate

A test pit investigation was carried out on the property on November 1, 2011 and throughout mid-August to mid-September of 2012. Garibaldi Pumice Ltd. used a Hitatchi ZX330 Excavator to complete a

total of 31 test pits. This work was performed on mineral claim #564946 and 510044 with a single test pit also completed on the west perimeter of mining lease #606990. This work was filed online on September 19, 2012 and is represented by event #5406052.

Test pits were completed by first removing topsoil and organic material to one side and excavating vertical sided pits down through the pumice layer to the original forest floor surface, or a maximum 10 metres total depth. Test pits were logged with two people using measuring chain, photographed and backfilled. Test pit coordinates were obtained using a Garmin hand-held GPS receiving generally 5 satellite input signals, with errors ranging from around 3-4 metres. A summary of the test pit locations and apparent thickness of the strata encountered is provided in Table 2 below. Data was plotted onto a base map NAD 83 Trim 1:20,000 scale with 20 metre elevation contours (Figure 3).

Table 2 – Test Pit Summary

Test Pit Number	Area m^2	Easting	Northing	Error (+/-) (m)	Total Depth (m)	Open at Depth	Apparent Thickness (m)			
							Overburden	Pumicite-fg	Pumicite	Pumice
TP11-01	24487	466774	5615849	4	7.2		0.3	0.15	0.45	6.3
TP11-02	36484	466713	5615911	3	6.2		0.3	0.15	0.4	5.35
TP12-A	36848	466921	5615582	6	7.5		0.5	0.6	0.4	6.0
TP12-B	19535	466891	5615849	4	6.9		0.4	0.3	1.0	5.2
TP12-C	11940	466895	5615969	6	9.5	yes	0.9	4.1	1.0	3.5
TP12-D	67162	466922	5616183	6	8.3		1.0	1.9	0.3	5.1
TP12-E	50980	466786	5616049	3	6.7		0.5	0.3	0.4	5.5
TP12-F	10323	466821	5615971	6	6.8		0.4	0.2	0.25	5.95
TP12-G	133161	466431	5615895	3	7.0		0.4	2.2	0.4	4.0
TP12-H	56509	466497	5615815	3	6.2		0.5	0.0	0.0	5.7
TP12-I	63776	466587	5615546	3	7.5		0.5	0.3	0.7	6.0
TP12-J	33576	466651	5615442	5	7.2		0.7	0.3	0.7	5.5
TP12-K	40532	466795	5615455	3	7.4		0.6	0.4	0.6	5.8
TP12-L	69432	466987	5615971	3	8.4	yes	0.6	0.0	6.9	0.9
TP12-M	223043	466407	5615189	3	8.2		0.6	0.0	0.5	7.1
TP12-N	112164	466591	5614947	3	9.5		0.4	0.0	0.5	8.6
TP12-O	78159	466710	5614859	3	9.0		0.4	0.0	0.2	8.4
TP12-P	93265	466812	5614751	3	10.1		0.4	0.0	1.4	8.3
TP12-Q	120402	466972	5614607	3	8.3	yes	0.6	0.0	4.9	2.8
TP12-R	103338	467153	5614415	3	6.5	yes	0.5	0.0	2.8	3.2
TP12-S	78567	467266	5614241	3	10.3	yes	0.7	0.0	5.9	3.7
TP12-T	101112	467336	5614137	3	8.6		0.6	0.0	0.0	8.0
TP12-U	135297	467749	5614543	3	7.2		0.5	0.0	0.3	6.4
TP12-V	60312	467508	5614510	3	6.7		0.3	0.0	1.2	5.2
TP12-W	78175	467449	5614660	3	8.4		0.3	0.0	1.6	6.5
TP12-X	154394	467439	5614869	5	7.8		0.3	0.3	1.2	6.0
TP12-Y	183979	467193	5615012	3	7.3		0.4	0.4	0.8	5.7
TP12-Z	195872	467101	5615447	4	8.4		0.3	0.3	0.7	7.1
TP12-J2	97309	466713	5615299	4	6.9		0.3	0.0	0.4	6.2
TP12-A2	32214	466849	5615627	3	7.2		0.3	0.2	0.6	6.1
TP12-A3	51553	466896	5615735	4	9.0	yes	0.4	3.2	5.4	0.0

Resource Estimate Procedure and Assumptions

Test pits were plotted using x, y coordinates and draping onto the 20 metre contour map. Elevation sections for three slices of the 2.4 kilometre long test pit area were made perpendicular to the general slope through the area containing test pits (Figure 4). The slope angle for each of the three slices was estimated from the sections (Figure 5). The test pits were segregated into three "topographic/strata slope angle" areas, Section 4, Section 14 and Section 21 that reflect the local terrain.

One limitation to the extent of the pumice appears to the northeast where a topographically sharp break in slope and steepening occurs up the mountain side to the northeast.

For test pits in which the complete thickness of the coarse pumice was not obtained, the apparent thickness were assumed to be 4 metres, which is less than other test pits surrounding them. As the pumice has a very high angle of repose, the test pit walls are vertical and the measured apparent thickness of the layers is thought to be reasonably accurate.

In plan view, test pits were plotted and polygons constructed to outline areas around each test pit (Figure 6). A slope correction for the topographic/strata layer was made to all test pit polygons giving a calculated true thickness of strata. Constructed polygon areas were not corrected for slope resulting in the dip slope length component being approximately 98% of their true length, and are thought to add a conservative factor to the resource estimate. Measured blocks contain a test pit that is surrounded by other test pits. Indicated blocks contain a test pit in which other test pits lie beside it on at least two sides. Inferred blocks are located around the periphery of the resource area and generally un-bounded on three sides. The volume of a block is calculated by multiplying the block area in plan by the calculated true thickness.

Results and Conclusions

As described, the test pit geology profiles consist of four primary lithology units: 1) a thin organic surface layer, 2) a fine grained clastic and silty layer comprised of pumicite with variable heterolithic and transported material, 3) a predominantly sand-sized pumicite layer, and 4) medium to coarse clastic dacite pumice to the original pre-eruption surface.

In the area of the mining lease, located to the east of the current test pits, the pumicite and pumice horizon is between 4 to 6 metres in thickness whereas in the area of the current investigation, it is between 6 to 10 metres in apparent thickness. It is thought that this increased thickness may reflect proximity to the central blast zone of the main volcanic eruption. Historical test pit results followed by mining extraction indicate generally good correlation to the predicted thickness of pumice. During mining, it was found that local topographic variation can increase or decrease the pumice thickness by around 1 to 1.5 metres. It is thought the net volume of pumice remains constant however, it has just been locally remobilized.

The test pit investigation outlined over 10 million cubic metres of dacite pumice and pumicite in the measured + indicated resource and 8 million cubic metres in the inferred resource (Table 3). In addition, there are approximately 900,000 cubic metres of fine grained pumicite. These will require removal and stockpile of approximately 1.16 million cubic metres of dominantly organic and overburden material.

Table 3 – Resource Estimate Summary

	Overburden X (1,000,000) (m^3)	**Pumicite fg X (1,000,000)** (m^3)	**Pumicite X (1,000,000)** (m^3)	**Pumice X (1,000,000)** (m^3)
Measured	0.13	0.20	0.31	1.89
Indicated	0.46	0.15	1.64	6.36
Subtotal	0.59	0.35	1.95	8.24
Inferred	0.57	0.55	1.42	6.79
(Total)	1.16	0.90	3.37	15.03

Experience gained from previous test pit programs and subsequent mining on the adjacent lease, support the presence of a very large scale, uniform, blanket-like deposition of pumice and pumicite material. The current program of test pits has expanded the pumice deposit outward from the mined area for a distance of approximately 2.35 kilometres in length and over 1.0 kilometre in width. With the consistent nature of the deposit in all current and previous test pits programs, its orientation, and mining experience nearby, the polygonal method is thought to provide a reasonable and valid resource estimate that conforms to Canadian Institute of Mining, Metallurgy and Petroleum, in the Standards of Mineral Resources and Reserves Definitions and Guidelines adopted by CIM Council, August 20, 2000.

Additional fill-in test pits could move a substantial amount of indicated resources into the measured resources category, and move inferred into the indicated category. Step out test pits to the northeast, northwest and southwest could add to the resource and move inferred resources to the indicated category.

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Statement of Costs

Wages	#days	$/day	Total
R. G. Matheson (planning, GPS mapping)	2	$350	$700
C. A. Blann, MSc. (test pit logs, reclamation)	4	$350	$1,400
Disbursements			
Excavator Hitatchi ZX330 (man & machine 10 hr/day)	9.4	$1,500	$14,100
Machine Mob and Demob			$500
Room and Board (9 + 6 days)	15	$100	$1,500
Field Vehicle (4X4)	9	$100	$900
Mileage (Vanc. to claims rtn. (240km X 2 X $0.45)			$216
Communications, Survey and Field Supplies			$400
Reclamation (Seed and Fertilizer)			$300
Geological Consulting, Supervision & Report (Standard Metals)			$3,500
Total			$23,516

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Statement of Qualifications

I, David E. Blann, of Squamish, British Columbia, do hereby certify:

That I am a Professional Engineer registered in the Province of British Columbia.

That I am a graduate of Geological Engineering from the Montana College of Mineral Science and Technology, Butte, Montana, 1987.

That I am a graduate in Mining Engineering Technology from the B.C. Institute of Technology, Burnaby, British Columbia, 1984.

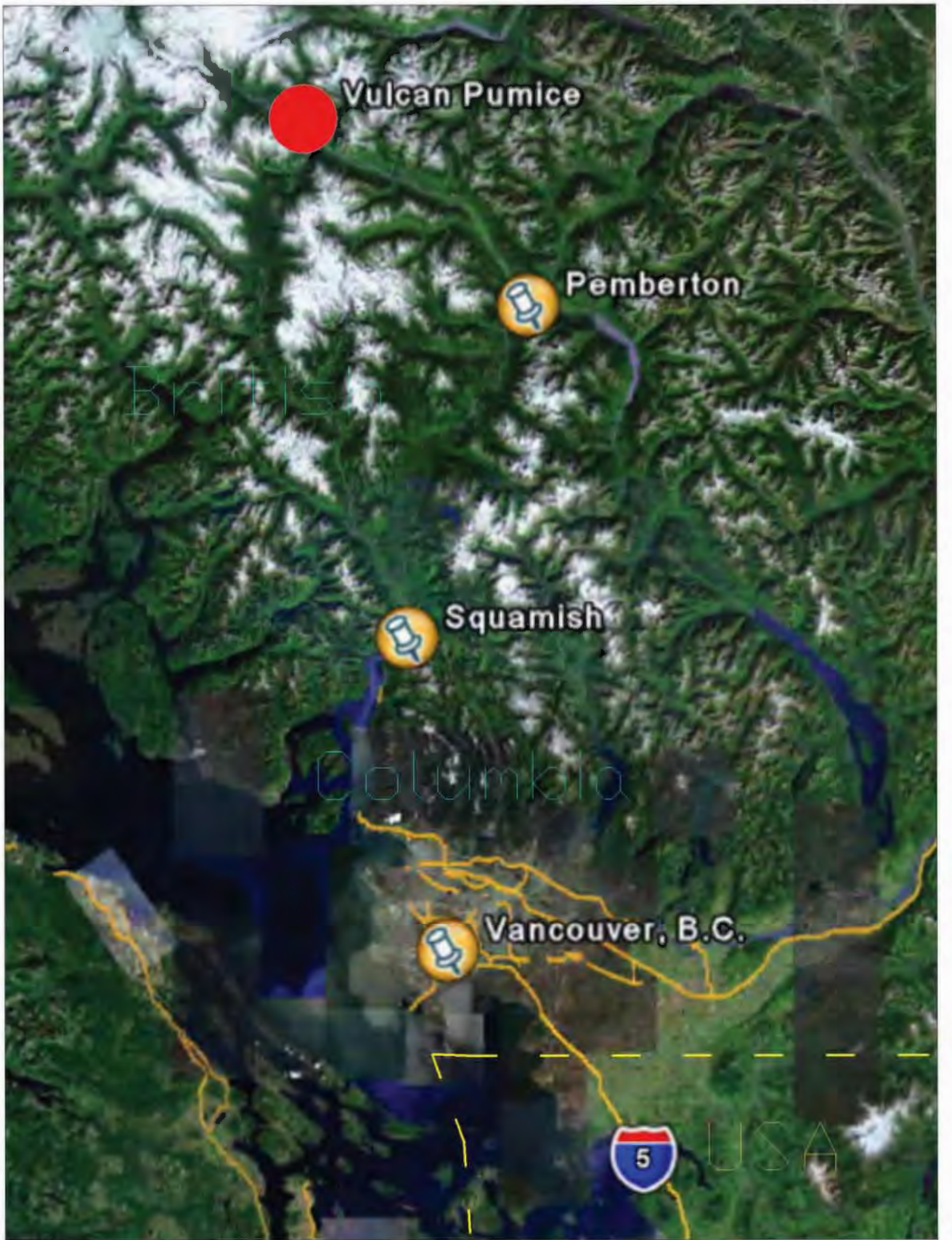
That I have been actively engaged in the mining and mineral exploration industry since 1984, and conclusions/recommendations within this report are based on property field work conducted and supervised in 1999, 2005 and 2012, and a review of pertinent literature.

Dated in Squamish, BC, November 30, 2012.

"David E. Blann"

David E. Blann, P. Eng.

Figures



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0 25 50

Scale: Kilometres

Lillooet Mining Division

NTS Mapsheet *092J.063*

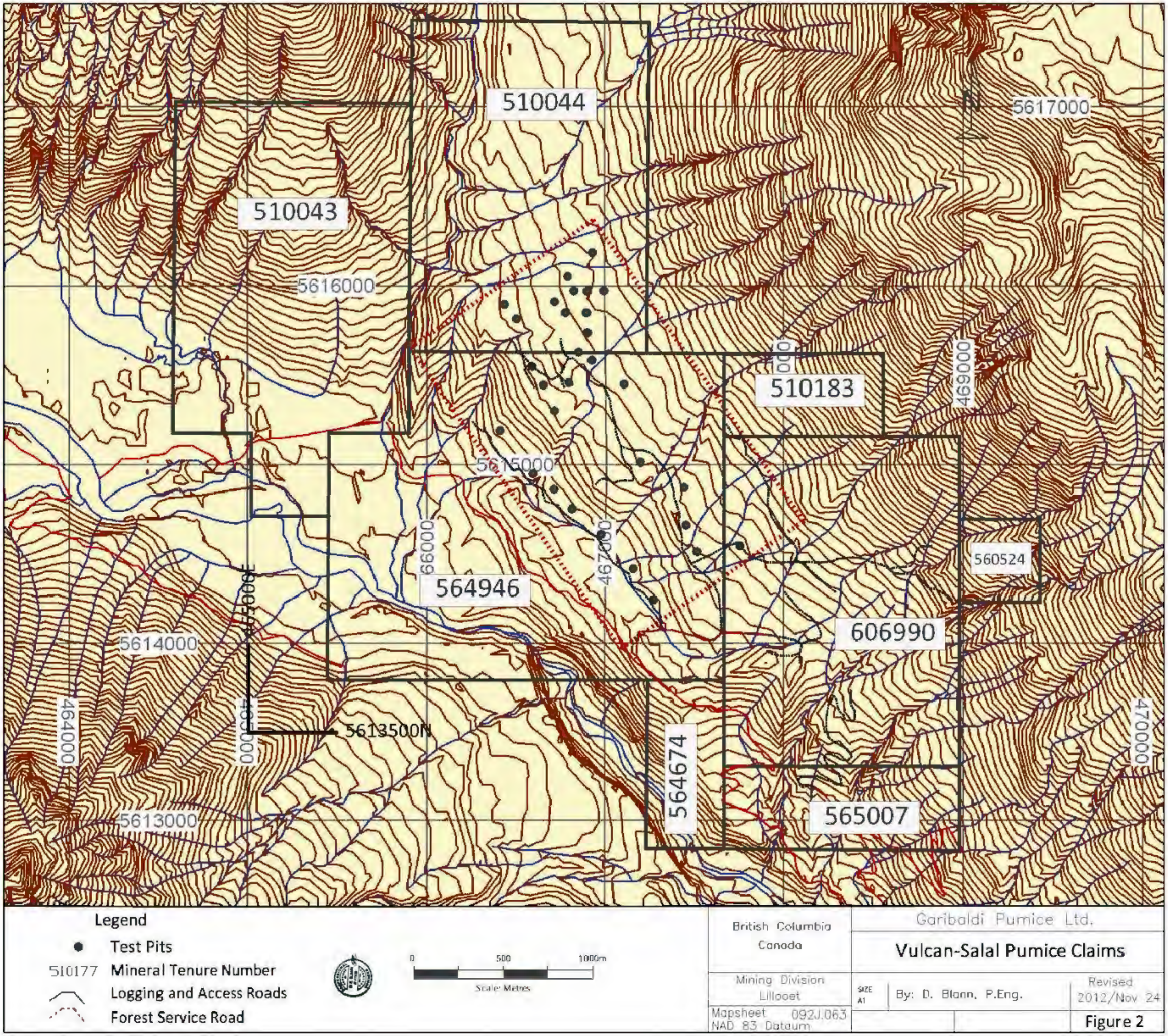
Garibaldi Pumice Ltd.

Vulcan-Salal Claims

Property Location

British Columbia, Canada

Figure 1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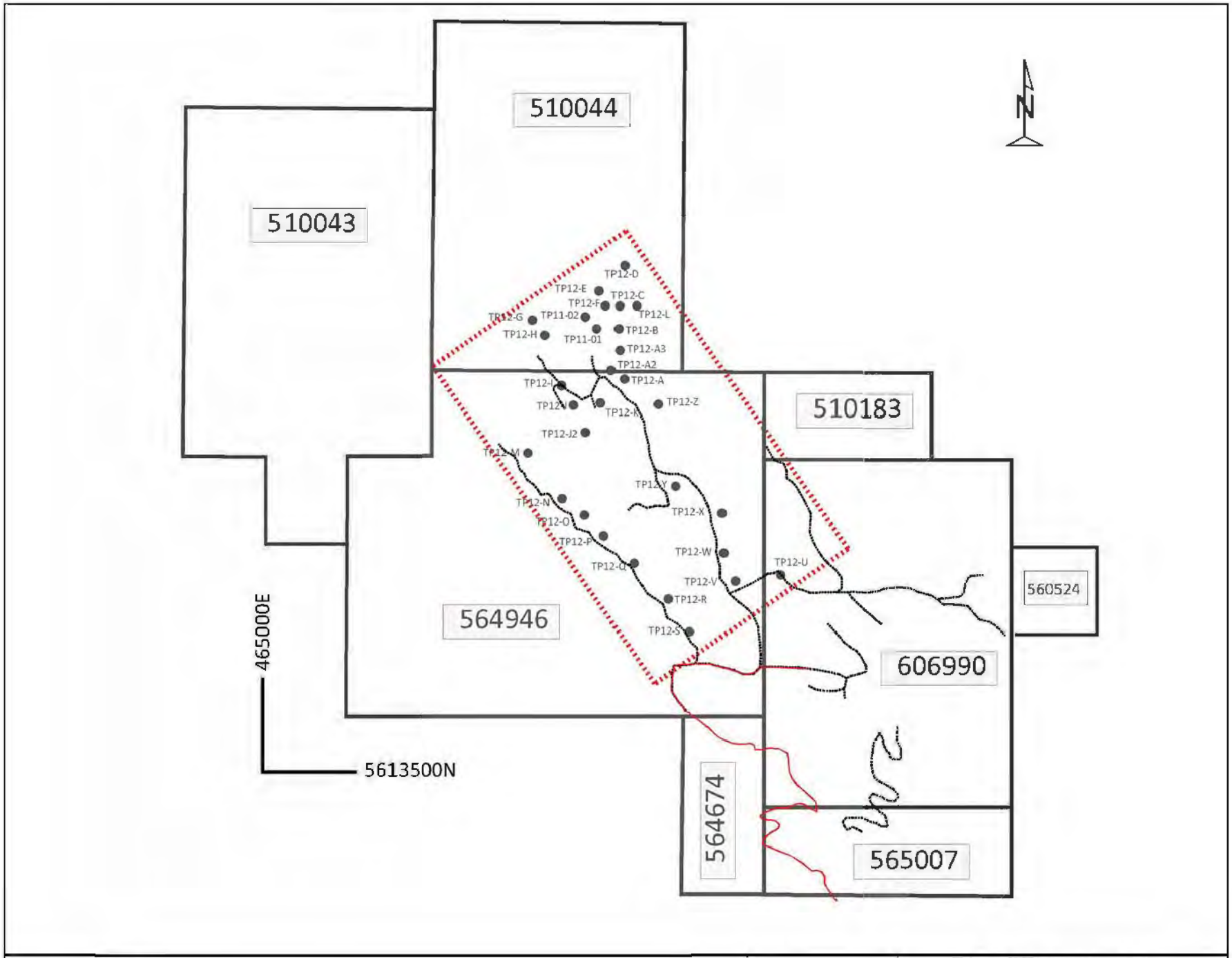
464000
465000
466000
467000
469000
470000
N
Legend
Test Pits
510177 Mineral Tenure Number
Logging and Access Roads
Forest Service Road
0 500 1000m
Scale: Metres
British Columbia
Canada
Mining Division
Lillooet
Mapsheet 092J.063
NAD 83 Datum
Garibaldi Pumice Ltd.
Vulcan-Salal Pumice Claims
SIZE A1
By: D. Blann, P.Eng.
Revised
2012/Nov 24
Figure 2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TP12-E
TP12-C
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TP12-L
TP12-G
TP11-02
TP12-H
TP11-01
TP12-B
TP12-A3
TP12-A2
TP12-A
TP12-Z
TP12-J2
TP12-N
TP12-O
TP12-P
TP12-X
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Legend
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510177 Mineral Tenure Number
Logging and Access Roads
Forest Service Road
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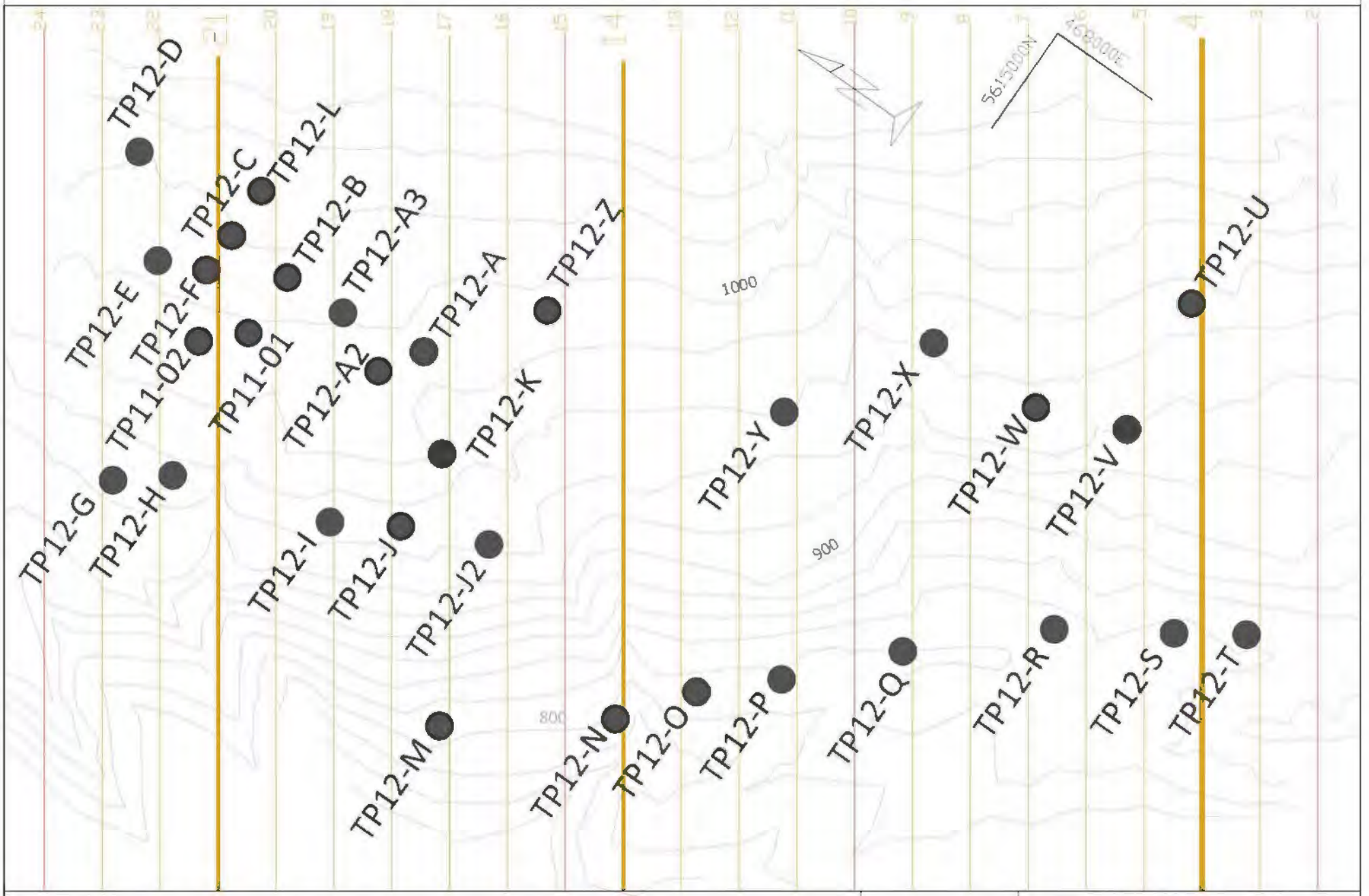
500
1,000m
Scale: Metres
British Columbia
Canada
Mining Division
Lillooet
Mapsheet 092J.063
NAD 83 Datum
Garibaldi Pumice Ltd.
Test Pit Locations
SIZE A1
By: D. Blonn, P.Eng.
Revised
2012/Nov/24
Figure 3



Legend

Topographic profile sections

4, 14, 21 Refer to Figure 5

Contour Interval = 20 metres

0 250 500m

Scale: Metres

British Columbia
Canada

Garibaldi Pumice Ltd.

Vulcan–Salal Claims

Topographic Profile Plan

Mining Division
Lillooet

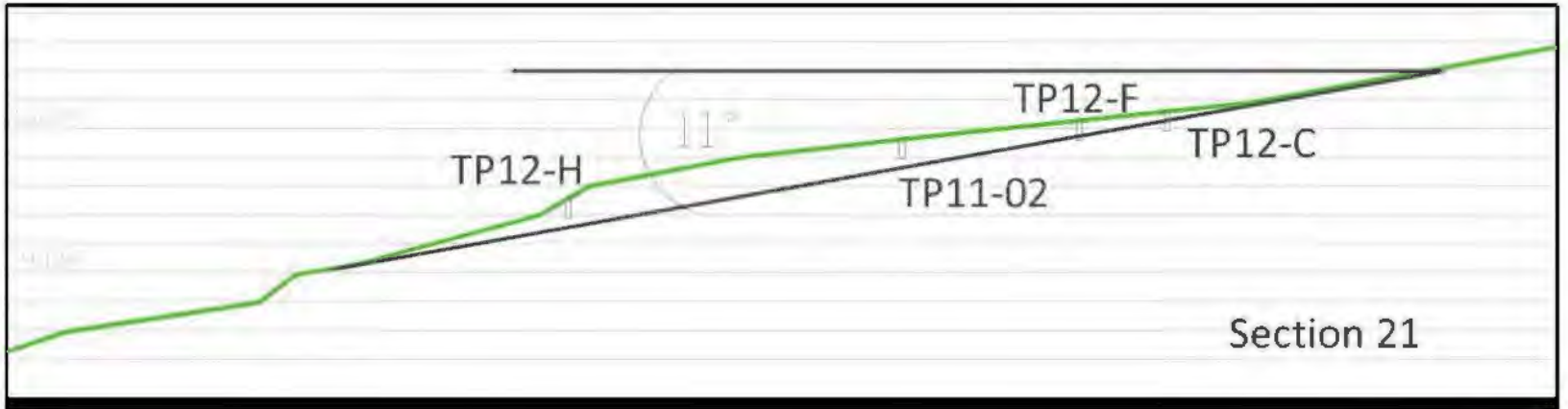
SIZE A1

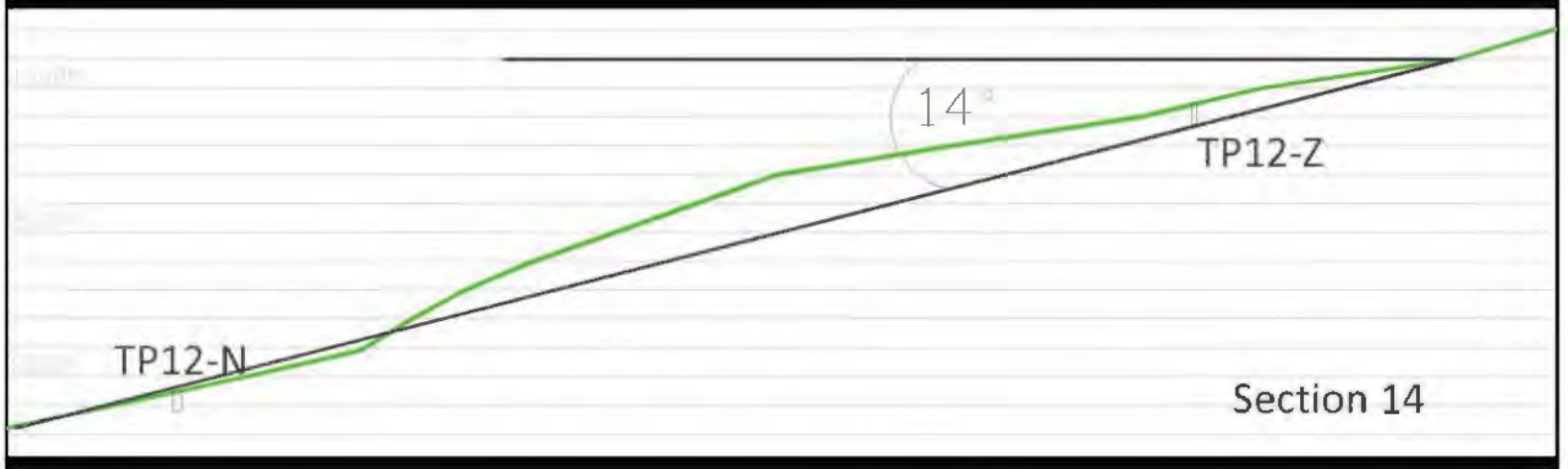
By: D. Blann, P.Eng.

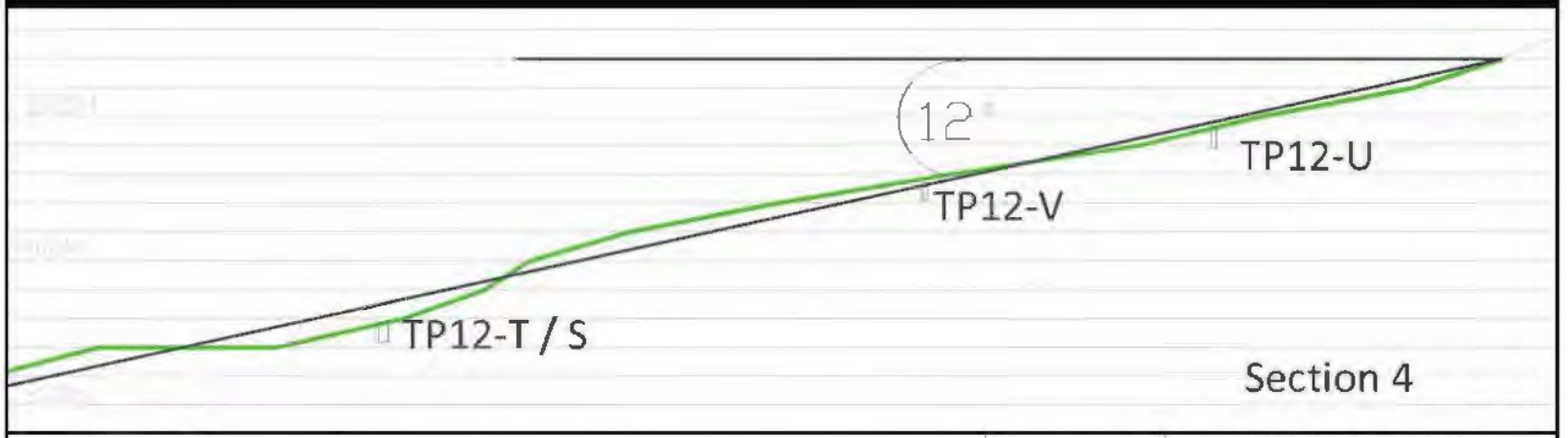
Revised
Nov 27 2012

Mapsheet 092J.063
NAD 83 Datum

Figure 4







Legend

Topographic slope

Estimated average slope

TP12-T Test Pit Number

0 125 250 m

Scale: Metres

British Columbia
Canada

Mining Division
Lillooet

Mapsheet 092J.063
NAD 83 Datum

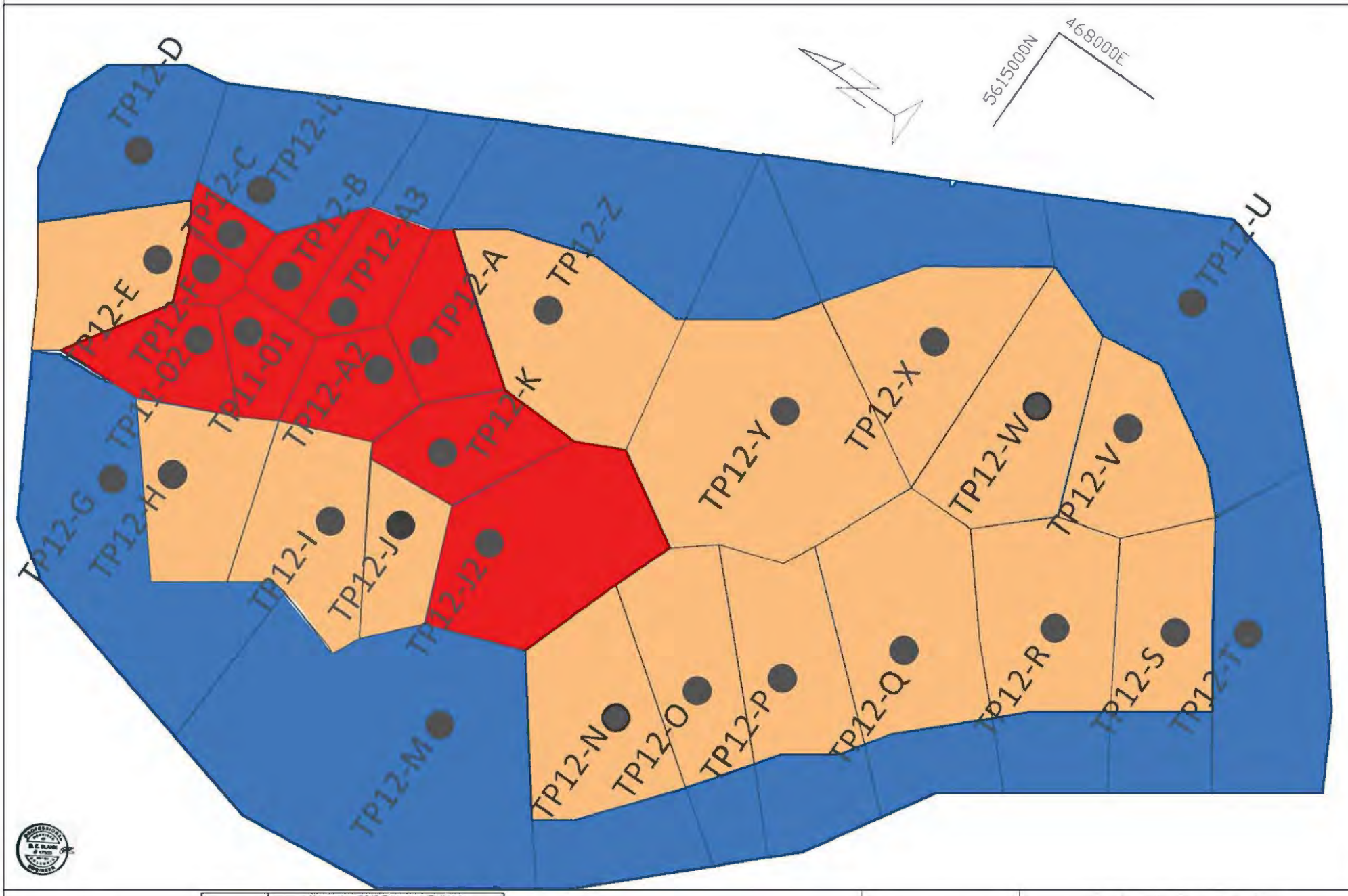
Garibaldi Pumice Ltd.
Vulcan-Salal Claims
Topographic Profiles

SIZE A1

By: D. Blann, P.Eng.

Revised
Nov 26 2012

Figure 5



Legend

Resource Category

- Measured
- Indicated
- Inferred

	November 2012 Resource Estimate			
	Overburden x (1,000,000) (m^3)	Pumicite fg x (1,000,000) (m^3)	Pumicite x (1,000,000) (m^3)	Pumice x (1,000,000) (m^3)
Measured	0.13	0.20	0.31	1.89
Indicated	0.46	0.15	1.64	6.36
Subtotal	0.59	0.35	1.95	8.24
Inferred	0.57	0.56	1.42	6.79
(Total)	1.16	0.90	3.37	15.03

0 250 500m

Scale: Metres

British Columbia
Canada

Mining Division
Lillooet

Mapsheet 092J.063
NAD 83 Datum

Garibaldi Pumice Ltd.

Vulcan–Salal Claims

Resource Blocks

SIZE A1

By: O. Blann, P.Eng.

Revised Nov 27 2012

Figure 6

Appendix 1

Test Pit Logs and Photographs

Pumice with a particle size of less than 2 or 3 mm is typically termed pumicite however for the purposes of these test pit logs all sand size particles (i.e. less than 5 mm) were considered pumicite. A strata was designated as pumicite if the majority of the material in the strata was sand size. There was no free water in the test pits completed with the exception of TP11-01 and 02. All pumice particles were angular unless otherwise specified.

Test Pit 11-01

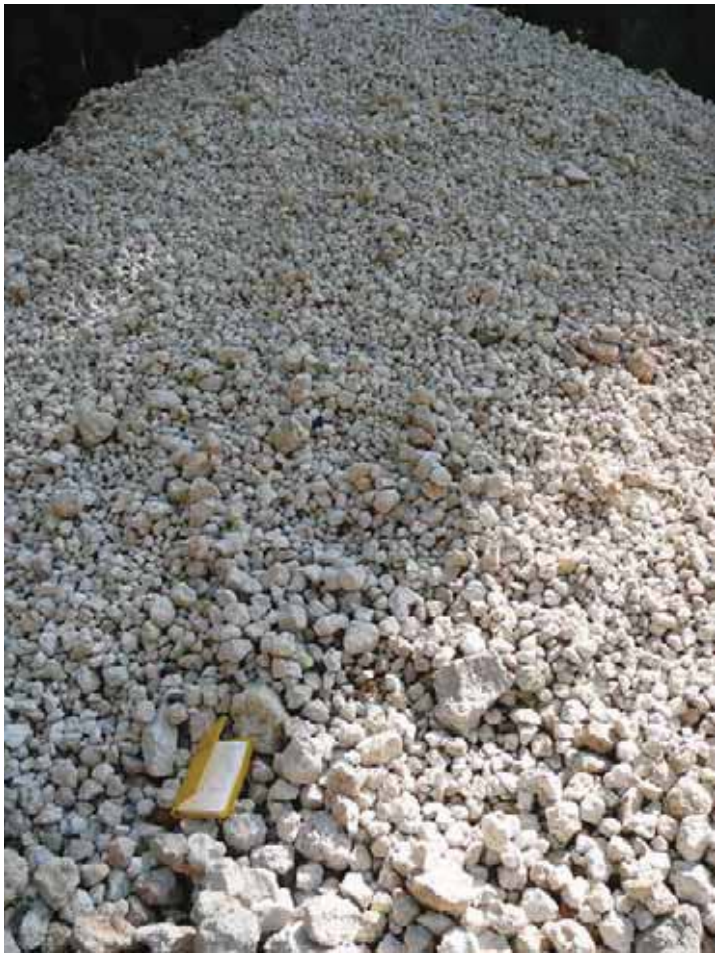
0.0 to 0.3 m	TOP SOIL – light brown, sandy silt and organics
0.3 to 0.45 m	Fine grained PUMICITE – grey silt
0.45 – 0.9 m	PUMICITE – grey brown to grey, fine to coarse sand with some fine gravel
0.9 to 1.5 m	PUMICE – grey fine to coarse gravel with some sand in layers and throughout
1.5 – 7.2 m	PUMICE – grey, coarse gravel with trace sand, cobble and black basalt/scoria (<1%)
7.2 m +	SOIL – brown, silt or sand, groundwater in base of test pit

Test Pit 11-02

0.0 – 0.3 m	TOP SOIL – light brown silty sand and organics
0.3 – 0.45 m	Fine grained PUMICITE – grey silt
0.45 – 0.85 m	PUMICITE grey brown to grey, fine to coarse sand, trace fine gravel
0.85 – 1.9 m	PUMICE grey brown fine to coarse gravel and sand, some layers
1.9 – 6.2 m	PUMICE– grey with trace orange brown staining, coarse gravel with trace sand, cobble and black basalt/scoria (<1%)
6.2 m +	SOIL – red brown sandy silt, groundwater in base of test pit

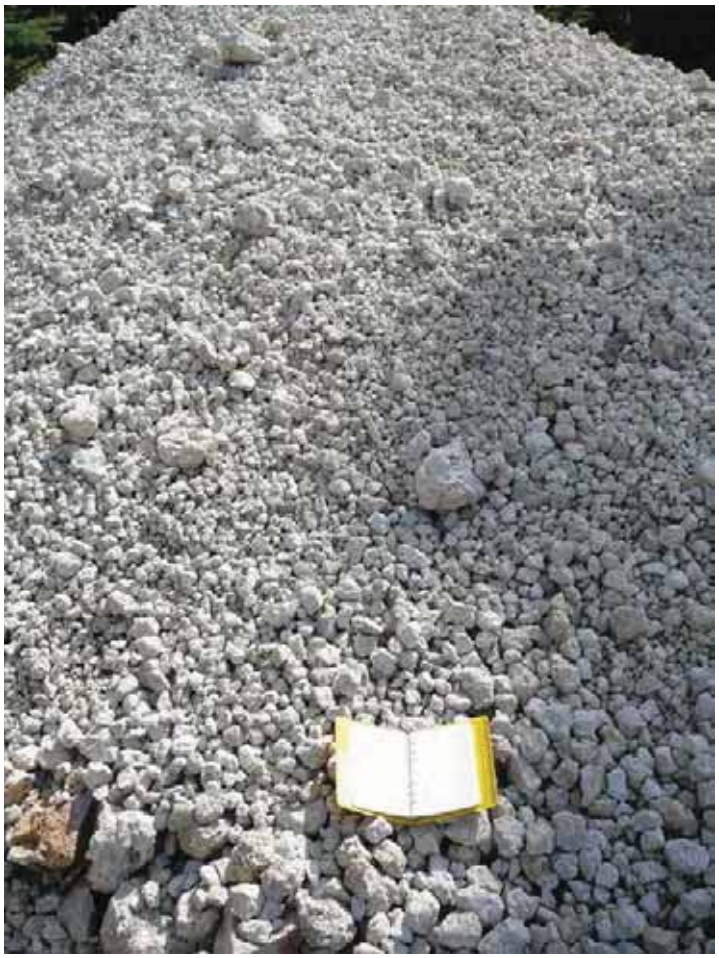
Test Pit 12 – A

0.0 – 0.2 m	TOP SOIL – dark brown silt and organics (also thin grey white layer)
0.2 – 0.5 m	Fine grained PUMICITE – orange brown silt (overburden)
0.5 – 1.1 m	Fine grained PUMICITE – grey silt with some coarse sand layers
1.1 – 1.5 m	PUMICITE – grey coarse sand, trace gravel
1.5 – 7.5 m	PUMICE – grey, coarse gravel, trace sand, cobble, very little black basalt/scoria (<0.1%)
7.5 m +	SOIL – brown black silt



Test Pit 12 – B

0.0 – 0.2 m	TOP SOIL – dark brown silt and organics (also thin grey pumicite layer)
0.2 – 0.4 m	Fine grained PUMICITE – orange brown silt (overburden)
0.4 – 0.7 m	Fine grained PUMICITE – grey silt
0.7 – 1.1 m	PUMICITE – grey sand
1.1 – 1.7 m	PUMICITE – grey coarse sand with some fine gravel
1.7 – 2.6 m	PUMICE – grey gravel and some coarse sand
2.6 – 6.9 m	PUMICE – grey coarse gravel, trace cobble, sand, and rock in last metre, no black basalt/scoria observed
6.9 m +	SOIL – orange brown silty sand



Test Pit 12 – C

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.15	PUMICITE – grey white pumice sand and gravel
0.15 – 0.9 m	MIXED PUMICITE – light orange brown mixed layer of silt, sand and rounded gravel (overburden)
0.9 – 1.2 m	Fine grained PUMICITE – grey brown fine sand and silt
1.2 – 1.6 m	PUMICE – grey, coarse, rounded gravel
1.6 – 5.0 m	Fine grained PUMICITE – grey brown fine sand and silt
5.0 – 6.0 m	PUMICITE – grey, coarse sand, trace gravel
6.0 – 9.5 m	PUMICE – grey, medium gravel
9.5 m +	PUMICE – did not reach bottom of pumice

Upper strata – including rounded gravel (1.2- 1.6 m) that is thought to indicate material was transported post-eruption.

Test Pit 12-C Fine grained PUMICITE (1.6 – 5.0 m) – stockpiled, grey after drying of material

Test Pit C Lower strata – Coarse pumice (6.0 – 9.5 m+) below thick layer of Pumicite

Test Pit 12 – D

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 1.0 m	MIXED PUMICE – light brown to orange brown with some layers of dark brown staining, mixed coarse gravel, silt and fine sand (overburden)
1.0 – 2.5 m	MIXED PUMICITE – grey brown gravely silt and sand with veins of coarse rounded gravel with orange red stained silt
2.5 – 2.9 m	Fine grained PUMICITE – grey brown sandy silt layers
2.9 – 3.2 m	PUMICITE – grey brown sand and fine gravel layers
3.2 – 8.3 m	PUMICE – grey coarse gravel with trace to some sand
8.3 m +	SOIL – brown black silt

Pumice stockpile from Test Pit 12-D

Test Pit 12 – E

0.0 – 0.1 m	TOP SOIL – brown black silt and organics
0.0 – 0.13 m	Fine grained PUMICITE – grey white silty fine sand
0.13 – 0.5 m	Fine grained PUMICITE – orange brown to light brown silt and fine sand (overburden)
0.5 – 0.8 m	Fine grained PUMICITE – light grey silt
0.8 – 1.2 m	PUMICITE – light grey brown sand and fine gravel, trace black basalt/scoria
1.2 – 2.5 m	PUMICE – light grey brown gravel and sand, trace black basalt/scoria
2.5 – 6.7 m	PUMICE – grey coarse gravel, trace sand, cobble, and rock cobble at bottom of pit
6.7 m +	SOIL – red brown silt

Pumice stockpile from Test Pit 12-E

Test Pit 12 – F

0.0 – 0.1 m	TOP SOIL – brown black silt and organics
0.1 – 0.15 m	Fine grained PUMICITE – grey white silty fine sand
0.15 – 0.4 m	Fine grained PUMICITE – orange brown to light brown silt and fine sand (overburden)
0.4 – 0.6 m	Fine grained PUMICITE – light grey silt
0.6 – 0.85 m	PUMICITE – light grey brown sand and fine gravel, trace black basalt/scoria
0.85 – 2.15 m	PUMICE – light grey brown gravel and sand, trace black basalt/scoria
2.15 – 6.8 m	PUMICE – grey coarse gravel, trace sand, cobble, and rock cobble at bottom of pit

Test Pit 12 – G

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.15 m	Fine grained PUMICITE – grey white silty fine sand
0.15 – 0.4 m	Fine grained PUMICITE – orange brown to light brown silt and fine sand (overburden)
0.4 – 2.6 m	Fine grained PUMICITE – grey brown with some orange staining silty fine sand, trace layers of coarser sand intermittently
2.6 – 3.0 m	PUMICITE – grey brown to grey, coarse sand and fine gravel
3.0 – 7.0 m	PUMICE – grey coarse gravel and some sand in upper portion, no black basalt/scoria observed

Test Pit 12 – H

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.15 m	Fine grained PUMICITE – grey white silty fine sand
0.15 – 0.5 m	PUMICITE – orange brown to light brown silty sand, trace gravel (overburden)
0.5 – 1.7 m	PUMICE – light orange brown medium to coarse gravel with sand and trace silt, trace black basalt/scoria
1.7 – 6.2 m	PUMICE – grey coarse gravel, trace cobble and sand, no black basalt/scoria observed
6.2 m +	SOIL – brown black silty sand

Pumice stockpile from Test Pit 12-H

Test Pit 12 – I

0.0 – 0.25 m	TOP SOIL – dark brown silt and organics
0.25 – 0.3 m	Fine grained PUMICITE – grey white silty fine sand
0.3 – 0.5 m	Fine grained PUMICITE – orange brown fine sandy silt (overburden)
0.5 – 0.8 m	Fine grained PUMICITE –grey brown fine sandy silt
0.8 – 1.5 m	PUMICITE – grey brown fine gravelly sand
1.5 – 2.7 m	PUMICE – grey brown, fine to coarse gravel with sand and trace silt, trace black basalt/scoria
2.7 – 7.5 m	PUMICE – grey coarse gravel, some sand, trace boulder and cobble, trace black basalt/scoria (<1%)

Test Pit 12 – J

0.0 – 0.2 m	TOP SOIL – dark brown silt and organics
0.2 – 0.3 m	Fine grained PUMICITE – grey white silty fine sand
0.3 – 0.7 m	Fine grained PUMICITE – orange brown fine silty sand (overburden)
0.7 – 1.0 m	Fine grained PUMICITE –grey brown fine silty sand
1.0 – 1.7 m	PUMICITE – grey brown gravelly sand, some silt
1.7 – 2.9 m	PUMICE – grey brown fine to coarse gravel and sand, trace silt
2.9 – 7.2 m	PUMICE - grey coarse gravel, trace cobble.

Pumice stockpile from Test Pit 12-J

Test Pit 12 – K

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.2 m	Fine grained PUMICITE – grey white silty fine sand
0.2 – 0.6 m	Fine grained PUMICITE – orange brown to grey brown fine silty sand (overburden)
0.6 – 1.0 m	Fine grained PUMICITE – grey brown fine silty sand
1.0 – 1.6 m	PUMICITE – layered grey brown coarse sand with some fine gravel
1.6 – 2.7 m	PUMICE – grey brown fine to coarse gravel, some sand
2.7 – 7.4 m	PUMICE - grey coarse gravel, trace cobble, boulder, sand, trace black basalt/scoria (<1%)

Pumice stockpile from Test Pit 12-K

Test Pit 12 – L

0.0 – 0.2 m	TOP SOIL – dark brown silt and organics
0.2 – 0.22 m	Fine grained PUMICITE – grey white silty fine sand
0.22 – 0.6 m	MIXED PUMICITE – orange brown coarse gravel, silt and sand (overburden)
0.6 – 7.0 m	PUMICITE – grey brown thick layers up to 1 m width of fine sand, some silt with coarse gravel in 0.2 to 0.4 m layers throughout
7.0 – 7.5 m	PUMICITE – grey medium to coarse sand and fine gravel
7.5 – 8.4 m	PUMICE – grey fine to medium gravel with some sand (as typically seen above coarse strata),
8.4 m +	PUMICE - did not reach base of pumice strata

Test Pit 12 – M

0.0 – 0.2 m	TOP SOIL – dark brown silt and organics
0.2 – 0.3 m	PUMICITE – grey white silty fine sand and gravel
0.3 – 0.6 m	Fine grained PUMICITE – orange brown to grey brown silt, some sand (overburden)
0.6 – 1.1 m	PUMICITE – layered grey brown silty sand with some fine to medium gravel layers
1.1 – 2.5 m	PUMICE – grey brown medium gravel, some sand, trace layers of silt and sand
2.5 – 8.2 m	PUMICE - grey coarse gravel, trace sand cobble, trace black basalt/scoria (<1%)
8.2 m +	SOIL – brown with black staining, silt

Test Pit 12 – N

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.12 m	PUMICITE – grey white silty fine sand and gravel
0.12 – 0.4 m	Fine grained PUMICITE – orange brown to grey brown silt, some sand (overburden)
0.4 – 0.9 m	PUMICITE – layered grey brown sand with some fine to medium gravel
0.9 – 2.1 m	PUMICE – grey brown medium to coarse gravel, trace layers of silt and sand
2.1 – 9.5 m	PUMICE - grey coarse gravel, trace sand and cobble, trace black basalt/scoria (<1%)
9.5 m +	SOIL – orange brown silt, some sand, trace gravel

Test Pit 12 – O

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.15 m	PUMICITE – grey white silty fine sand and gravel
0.15 – 0.4 m	PUMICITE – orange brown sand, trace fine gravel and silt (overburden)
0.4 – 0.6 m	PUMICITE – grey brown sand, trace fine gravel and silt
0.6 – 2.1 m	PUMICE – orange to grey brown fine to coarse gravel, some sand, trace layers of silt and sand
2.1 – 9.0 m	PUMICE - grey coarse gravel, trace cobble, trace black basalt/scoria (<1%)
9.0 m +	SOIL –brown silt, some sand, trace gravel and cobbles

Test Pit 12 – P

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.15 m	PUMICITE – grey white silty fine sand
0.15 – 0.4 m	PUMICITE – orange brown silty sand (overburden)
0.4 – 0.8 m	PUMICITE – grey brown silty sand
0.8 – 1.8 m	PUMICITE – layered grey brown fine gravel and sand, trace medium gravel and layers of silt and sand
1.8 – 2.5 m	PUMICE – grey brown coarse gravel and some sand, trace black basalt/scoria
2.5 – 10.1 m +	PUMICE - grey coarse gravel, trace cobble, trace black basalt/scoria (<1%), did not reach pumice base but appears to be near base due to increasing pumice cobbles

Pumice stockpile from Test Pit 12-P

Test Pit 12 – Q

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.2 m	PUMICITE – grey white silty fine sand
0.2 – 0.6 m	PUMICITE – orange brown sand with trace gravel in layers (overburden)
0.6 – 1.7 m	PUMICITE – grey brown sand with trace gravel in layers
1.7 – 5.5 m	PUMICITE – grey brown to grey sand, some gravel in layers, log (at 4 – 5 m depth, first ever observed)
5.5 – 8.3 m	PUMICE – grey brown coarse gravel, trace cobble, trace black basalt/scoria (<1%)
8.3 m +	PUMICE – did not reach base of pumice strata

Test Pit 12 – R

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.2 m	MIXED PUMICITE – grey white silty fine sand and medium gravel pumice
0.2 – 0.5 m	PUMICITE – orange brown sand and gravel with trace sand in layers (overburden)
0.5 – 3.3 m	PUMICITE –grey brown sand and gravel with trace sand in layers
3.3 – 6.5 m	PUMICE – grey brown layers of coarse gravel and sand
6.5 m +	PUMICE – did not reach base of pumice strata

Test Pit 12 – S

0.0 – 0.15 m	TOP SOIL – dark brown silt and organics
0.15 – 0.2 m	MIXED PUMICITE – grey white silty fine sand with coarse rounded gravel pumice
0.2 – 0.7 m	PUMICITE – orange brown, some silt and with trace rounded gravel and trace rock cobbles (overburden)
0.7 – 1.3 m	PUMICITE – grey brown sand, some silt and with trace rounded gravel and trace rock cobbles
1.3 – 2.5 m	PUMICITE – grey brown sand and medium gravel, trace silt and orange staining
2.5 – 5.4 m	PUMICITE – grey to grey brown sand, some silt, trace gravel in layers
5.4 – 6.6 m	PUMICITE – grey brown coarse sand and fine gravel in layers
6.6 – 10.3 m	PUMICE – grey, medium to coarse pumice, trace sand, trace black basalt/scoria (<1%)
10.3 m +	PUMICE – did not reach base of pumice strata

Test Pit 12 – T

0.0 – 0.2 m	TOP SOIL – brown black silt and organics
0.2 – 0.25 m	PUMICITE – grey sand with trace fine gravel
0.25 – 0.6 m	PUMICITE – orange brown to grey brown sand, some silt and with trace rounded gravel (overburden)
0.6 – 0.9 m	PUMICE – orange brown sandy gravel
0.9 – 8.6 m	PUMICE – orange brown to grey brown, medium to coarse gravel, trace sand in layers, trace black basalt/scoria (<1%)
	Note: Finer material is thicker toward front of test pit, i.e coarse layers plunge toward front of pit

Test Pit 12 – U

0.0 – 0.15 m	TOP SOIL – dark brown silt and organics
0.15 – 0.2 m	MIXED PUMICE – grey silty sand and gravel pumice
0.2 – 0.5 m	PUMICITE – orange brown sand, some silt and gravel (overburden)
0.5 – 0.8 m	PUMICITE –grey brown sand, some silt and gravel
0.8 – 7.2 m	PUMICE – grey brown coarse gravel, trace vertical orange brown staining, trace sand, cobble and trace black basalt/scoria (<1%)
7.2 m +	SOIL – grey brown silt

Test Pit 12 – V

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.13 m	PUMICITE – grey white silty sand
0.13 – 0.3 m	Fine Grained PUMICITE – orange brown silt, some sand (overburden)
0.3 – 0.5 m	PUMICITE – grey brown silty sand
0.5 – 1.5 m	PUMICITE – grey brown coarse sand and fine to medium gravel
1.5 – 6.7 m	PUMICE – grey brown to grey coarse gravel, trace cobble, sand, trace black basalt/scoria
6.7 m +	SOIL – black silt and charcoal, boulders present

Test Pit 12 – W

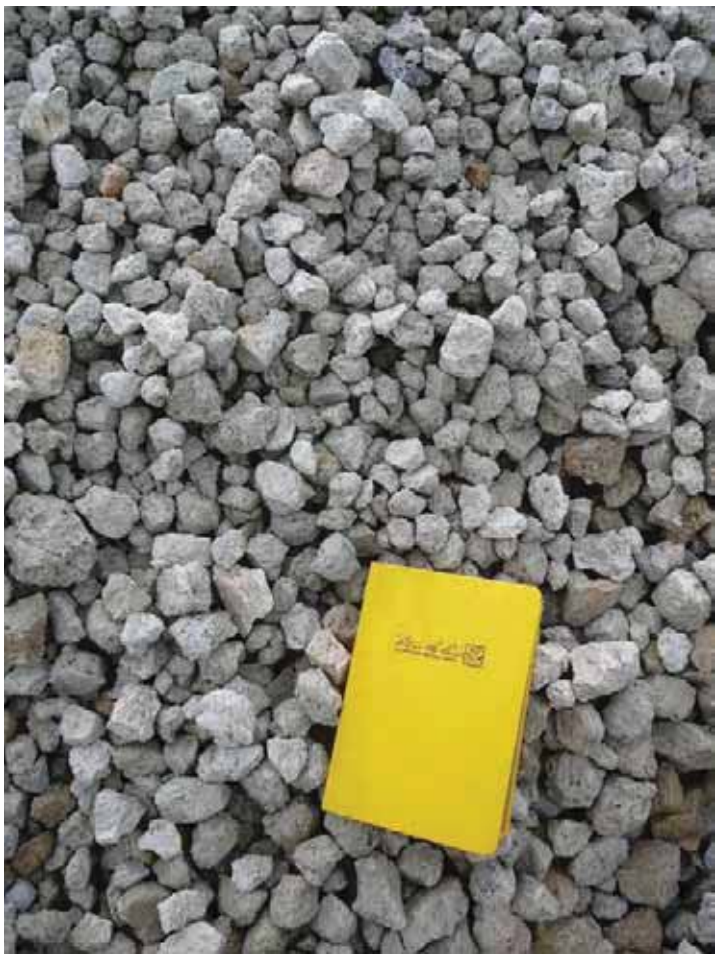
0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.12 m	PUMICITE – grey white silty sand
0.12 – 0.3 m	Fine Grained PUMICITE – orange brown sandy silt (overburden)
0.3 – 0.8 m	Fine Grained PUMICITE – grey brown sandy silt
0.8 – 1.9 m	PUMICITE – layered grey brown coarse sand and fine to medium gravel in layers
1.9 – 8.4 m	PUMICE – grey brown to grey coarse gravel, trace sand, cobble, black basalt/scoria (<1%)
8.4 m +	SOIL – orange brown silt with angular rock cobbles and boulders

Test Pit 12 – X

0.0 – 0.03 m	TOP SOIL – dark brown silt and organics
0.03 – 0.1 m	PUMICITE – grey white silty sand
0.1 – 0.3 m	Fine Grained PUMICITE – orange brown sandy silt (overburden)
0.3 – 0.6 m	Fine Grained PUMICITE –grey brown sandy silt
0.6 – 1.8 m	PUMICITE – layered grey brown sand and fine to medium gravel in layers
1.8 – 7.8 m +	PUMICE – grey brown to grey coarse gravel, trace sand, cobble, black basalt/scoria (<1%), did not reach pumice base but appears to be near base due to increasing pumice cobbles

Test Pit 12 – Y

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.12 m	PUMICITE – grey white silty sand
0.12 – 0.4 m	Fine Grained PUMICITE – orange brown sandy silt (overburden)
0.4 – 0.8 m	Fine Grained PUMICITE – grey brown sandy silt
0.8 – 1.6 m	PUMICITE – layered grey brown coarse sand and fine to medium gravel in layers
1.6 – 3.0 m	PUMICE – grey brown medium gravel and some sand
3.0 – 7.3 m	PUMICE – grey coarse gravel, trace sand, cobble, black basalt/scoria, did not reach pumice base but appears to be near base due to increasing pumice cobbles



Test Pit 12 – Z

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.12 m	PUMICITE – grey white silty sand
0.12 – 0.3 m	Fine Grained PUMICITE – orange brown sandy silt (overburden)
0.3 – 0.6 m	Fine Grained PUMICITE –grey brown sandy silt
0.6 – 1.3 m	PUMICITE – grey brown coarse sand and fine to medium gravel
1.3 – 2.7 m	PUMICE – grey brown medium gravel and some sand
2.7 – 8.4 m	PUMICE – grey medium to coarse gravel, trace sand, cobble, black basalt/scoria
8.4 m +	SOIL – red brown silt with black staining

Test Pit 12 – J2

0.0 – 0.1 m	TOP SOIL – dark brown silt and organics
0.1 – 0.15 m	Fine grained PUMICITE – grey white silty fine sand
0.15 – 0.3 m	Fine grained PUMICITE – orange brown sandy silt (overburden)
0.3 – 0.7 m	PUMICITE – layers of grey brown coarse sand and fine to medium gravel
0.7 – 2.7 m	PUMICE – grey brown medium to coarse gravel with some sand
2.7 – 6.9 m	PUMICE - grey coarse gravel, trace cobble
6.9 m +	SOIL – brown black silt

Test Pit 12 – A2

0.0 – 0.05 m	TOP SOIL – brown black silt and organics
0.05 – 0.1 m	PUMICITE – grey silty sand
0.1 – 0.3 m	Fine grained PUMICITE – orange brown sandy silt (overburden)
0.3 – 0.5 m	Fine grained PUMICITE – grey brown sandy silt
0.5 – 1.1 m	PUMICITE – grey brown coarse sand and fine to medium gravel
1.1 – 2.5 m	PUMICE – grey brown, medium to coarse gravel and some sand
2.5 – 7.2 m	PUMICE – grey, coarse gravel, trace sand, cobble, black basalt/scoria (<1%)

Test Pit 12 – A3

0.0 – 0.2 m	TOP SOIL – red brown and brown silt and organics
0.2 – 0.23 m	MIXED PUMICITE – grey sandy silt and gravel pumice
0.23 – 0.4 m	PUMICITE – orange brown sand and silt with trace fine to medium gravel (overburden)
0.4 – 5.3 m	PUMICITE – grey brown sand and silt with trace fine to medium gravel
5.3 – 8.5 m	Fine grained PUMICITE – grey brown sandy silt
8.5 – 9.0 m	PUMICITE – grey, coarse sand and fine gravel
9.0 m +	PUMICE? – did not reach base of pumice strata

Photo unavailable