MAR 20040008: CROWSNEST PASS

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SUMMIT NATURAL ROCK INC.
ASSESSMENT WORK
METALLIC AND INDUSTRIAL MINERAL
PERMIT NO. 9302060002

Submitted to: Summit Natural Rock Inc.

Submitted by: Terracon Geotechnique Ltd.

Date: June 4, 2004

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EXECUTIVE SUMMARY

- Metallic and Industrial Mineral Permit No. 9302060002 (" the Permit") was acquired to cover an area with building stone potential in the Crowsnest Pass Area of southwestern Alberta. The Commencement Date of the Permit is June 4, 2002.

- Title to the Permit was issued in the name of Kirsten Silcox (100.00000%), private citizen, Calgary. Subsequently, on September 21, 2003, title to the Permit was transferred by Kirsten Silcox to Summit Natural Rock Inc. (100.00000%).

- The claims occupy the lower, west-facing slopes of the Flathead Mountains. Two of three access routes to the claims are provided by creeks which cut these northwest trending mountains. The area of the Permit, informally called the Crowsnest Claims, covers 707 hectares extending southerly from an area southwest of Summit Lake to Ptolmy Pass.

- The infrastructure of the claims is excellent, particularly at the north end of the claims from whence Highway 3 is 2 km and the CPR siding at Summit is 5 km. Work was restricted to the north end of the Property.

- The following work was done during the period covered by this report, June 4, 2002, to June 4, 2004:

    - Relevant provincial boundary and land survey monuments were located in the field and the Alberta / British Columbia border was flagged.

    - A small grid was established at the north end of the property.

    - A Archaeological and Historical Impact Assessment study was conducted on the grid and the north end of the property.

    - The grid was prospected and mapped.

    - Four trenches were mechanically dug at the north end of the property.

    - The following are the results of this work.

- The grid was established manually by chain and compass methods as control for exploration work. The base line is about 700 m long and is coincident with the east boundary of Section 11. East-west grid lines were established at 100 metre intervals on the base line. The lines are less than 1.5 m wide, and no trees were felled. Mapping was conducted at 1:2,500 scale.

- Based on the results of the Historical Impact Assessment study, approval for the project from Alberta Community Development was obtained in January of 2003.

- The base line of the grid lies along a west sloping ridge about 60 metres high. Outcrop is sparse and occurs mainly at the north end of the grid where Phroso Member and Vega Member siltstones of the Sulphur Mountain Formation are exposed. Bedding strikes northerly and dips about 32 degrees west. The contact between the Phroso and Vega Members is tentatively assigned to one small outcrop on the property. At the north end of the grid the contact between the Sulphur Mountain Formation and the overlying Fernie Formation is placed at the break in slope of the ridge and swampy ground to the west.

- In December of 2003, 252 lineal metres were dug in four trenches at the northern extremity of the Property using an excavator and D3 bulldozer. The trenches extend for a strike length of about 100 metres and were mapped at 1:250 scale. In the trenched area the Vega Member has been divided into three sub-units. The Middle Vega Unit consists of thick, 2.5 m beds of siltstone. The Lower and Upper Vega Units contain flagstone beds composed of siliceous, dolomitic and calcareous siltstone. Bedding strikes northerly and dips are to the west, steepening from west to east in the trenches.

- No fossils were seen either in outcrop or in the trenches.

- A strongly fractured zone cuts the two northern trenches, and the thickness of overburden is thicker than anticipated.

- Expenditures of $28,415.92 are claimed for assessment work on the property during the period covered by this report.

- Additional work is required to obtain completely fresh (unweathered) samples for market appraisal.

1.0 INTRODUCTION

Based on prospecting in the Crowsnest Pass, the area is considered to have potential for hosting an economic deposit of building stone. Accordingly, application was made for a Metallic and Industrial Mineral Permit covering the prospective lands and the permit was subsequently granted as Permit No. 9302060002. The Commencement Date of Permit No. 9302060002 is June 4, 2002, and the area covered by the permit is informally known as the Crowsnest Claims.

To evaluate the potential of the Crowsnest claims, work has been performed on the property subsequent to the commencement date of Permit No. 9302060002 and prior to June 4, 2004, as follows:

- Relevant Federal and Provincial Legal Land Survey Monuments at the north end of the Crowsnest Claims were located in the field.
- A grid was established at the north end of the Crowsnest Claims.
- An Archaeological and Historical Impact Assessment Study was conducted of the grid area and north part of the claims.
- The grid area was prospected and the bedrock geology was mapped.
- A mechanical work program comprising 252 lineal metres of trenching was conducted in December of 2003.

Work was concentrated at the north end of the Crowsnest Claims due to the presence of flagstone at several localities, and because of favourable access and topography.

2.0 PHYSICAL SETTING

2.1 Location and Access

The property is situated in the Crowsnest Pass area of southwestern Alberta in NTS 82G10. The property trends southerly across a salient in the Alberta/British Columbia border which extends from Summit Lake in the north to Ptolemy Pass in the south. The claims are, for the most part, situated on the lower, west-facing slopes of mountains of the Flathead Range. The mountains trend northwesterly and have been breached by two creeks, Crowsnest Creek near the center of the claims and Island Creek in the northern part of the property, and about 500 metres south of Summit Lake.

The claims are accessible from Highway 3 via three roads:

- The Inn on the Border road which utilizes the Island Creek gap;
- Tent Mountain road which follows Crowsnest Creek and which is accessed from Highway 3 opposite Island Lake Park;
- Well-maintained logging roads on land privately held by Tembec Inc. of Cranbrook, British Columbia. Tembec's roads are accessed via the compressor station on Highway 3.

The shortest route to the Crowsnest Claims from Highway 3, approximately 1km, is via a gravel road passing across land owned by the Inn on the Border at Crowsnest Siding. Immediately west of the Inn on the Border property the road also crosses land owned by McGillivray Development Corp. ("MDC"). From the west boundary of the MDC land the road heads roughly north northwest and connects with Tembec's logging road system at the Alberta/British Columbia border.

Tent Mountain Road; the first 2.3 km (approximately) of the road from Highway 3 is held under a License of Occupation by a local logging company. At Crowsnest Creek a branch road runs north from the Tent Mountain Road, parallel to and west of Island Ridge until it meets the Inn on the Border road. The northern 0.5 km of this road also cuts across the western portion of the private land held by McGillivray Development Corp.

Tembec logging roads; access to Tembec's land is across the CPR level crossing at the turnoff to the compressor station, located opposite the provincial weigh scales on Highway 3. The compressor station turnoff is 2.9 km west of the Alberta/British Columbia border on Highway 3. From the CPR level crossing it is 0.7 km to the T-junction with Tembec's Branch Road A and then 1.3 km south to the gate at the Alberta/British Columbia border. The provincial boundary in this area and also marks the northern limit of the Crowsnest Claims (see Figure 2).

The trenching area is on the top of a small hill about 200 metres easterly from the gate at the provincial boundary. Access for all work conducted in connection with the December 2003 mechanical work (trenching) program was via British Columbia and Tembec's logging roads.

Access to the north part of the Crowsnest Claims for all non-mechanical work was gained via:

- Tembec's logging roads in British Columbia;

- The Tent Mountain and north branch road; in this case vehicles were parked at the southeast corner of Section 11 to avoid crossing onto private land. Personnel accessed the grid area by walking along the east boundary of Section 11 where it has been previously cut out by legal land surveyors, and by skirting the creek along a flagged trail.

2.2 Topography and Vegetation

Work during the reporting period was restricted to the north end of the property, that is, north of Island Creek. In this area the claims cover a small ridge and its west facing slopes. The ridge has an average elevation of approximately 1433 m (4,700 feet) above sea level, and has maximum relief of 50 metres in the south and about 70 metres at its northern extremity, in vicinity of the Alberta/British Columbia border.

Approximately 40% of the ridge has been logged and reforested with pine estimated to be seven to ten years old. The forested areas of the ridge are treed mainly with open stands of lodgepole pine. A small, narrow swamp occupies the valley floor west of the break in slope at the north end of the property (See Figures 4 and 5).

The small rounded hill which was the site of the December 2003 mechanical trenching program consists of one-third open meadow and two-thirds trees, mainly aspen (poplar) with lesser lodgepole pine, jack pine and occasional yellow pine. The area is covered by overburden, but some frost-heaved thinly bedded rock fragments occur in the vicinity of the border, near the local boundary monument.

3.0 PERMIT TABULATION

The Crowsnest Claims are held through Metallic and Industrial Mineral Permit No. 9302060002, the Commencement Date of which is June 4, 2002.

The legal description of the Crowsnest Claims is:

West of the 5th Meridian
Range 5, Township 7: Section 18, Lsd 2W, Lsd 3, Lsd 4F, Lsd 5 , Lsd 6 P, Lsd 13 P

Portion(s) lying outside Livingstone- Porcupine Hills Integrated Resource Plan:

Range 6, Township 7:	Section 13, Lsd 16 P; Section 24, Lsd 1 P, Lsd 2, Lsd 7 P, Lsd 8 P, Lsd 10 P, Lsd 11, Lsd 14, Lsd 15 P; Section 25, Lsd 2 P, Lsd 3 P, Lsd 5 P, Lsd 6 P, Lsd 11 P, Lsd 12 P, Lsd 13, Lsd 14 P, Lsd 15 P; Section 36SE, Lsd 3, Lsd 6, Lsd 10, Lsd 11, Lsd 12E, Lsd 13E, Lsd 14, Lsd 15

Portion(s) lying outside Livingston- Porcupine Hills Integrated Resource Plan:

Range 6, Township 8:	Section 1 West, Lsd 2 West, Lsd 7 West, Section 11, Lsd 1, Lsd 8, Lsd 9 F, Lsd 16 F Section 12, Lsd 3, Lsd 4, Lsd 5F, Lsd 12 F, Lsd 13 F

Conditions: For terms and conditions attached to the Permit, see Notice to Permitee given in Appendix B.

Metallic and Industrial Mineral Permit No. 9302060002 was originally issued on June 4, 2002, in the name of Kirsten Kimberley Silcox resident of Calgary (100.00000%). Subsequently, on October 21, 2003, title (100.00000%) was transferred by Kirsten Silcox to Summit Natural Rock Inc. of Calgary, Alberta.

Official notice of the transfer of title was received by the owner on January 22, 2004. The Crowsnest Claims comprise 707 hectares and are about 9 km long.

Terracon Geotechnique Ltd., located at 140, 2723 - 37 Avenue NE, Calgary, Alberta T1Y 5R8, together with Schindler Exploration Consultants Ltd. of Calgary, prepared the report on the work conducted during the period June 4, 2002, and June 4, 2004, on Metallic and Industrial Minerals Permit No. 9302060002.

4.0 WORK PERFORMED AND RESULTS

4.1 Previous Work

4.1.1 Regional Geology

4.1.1.1 General

1. Gibson (1968, 1974) has described the Triassic stratigraphy of the region, and Hamilton et al, 1998, have compiled the geology of the Crowsnest Pass area.

The permit area is situated in the Rocky Mountain Fold and Thrust Belt of southwestern Alberta. The region is underlain by deformed rocks of the Western Canadian Sedimentary Basin (WCSB) ranging from Devonian to Cretaceous Age, and is characterized by numerous southwesterly dipping thrust sheets.

During late Devonian and Carboniferous Time the area formed part of the Prophet Trough which extended from southern Alberta and British Columbia to the Yukon, and is one of the principal tectonic elements of the WCSB (Richards et al, 1999). The Prophet Trough is characterized mainly by carbonate and lesser siliciclastic rocks in which sea level fluctuations are manifested by lithologic, textural and faunal variations. During the Permian Age siliclastic and carbonate deposition in the region occurred under quiescent, low energy conditions, and sea level changes resulted in a number of unconformities (Butrenchuk, 1987). A major unconformity separates rocks of Permian and Triassic Ages.

Triassic seas transgressed Permian and Mississippian sandstones and carbonates on a surface of low relief, and sediments comprising the Sulphur Mountain Formation were deposited under shallow water shelf conditions.

In the Crowsnest Pass area a major unconformity separates the Sulphur Mountain Formation from deposition of moderately deep water Jurassic shale of the Fernie Formation. Towards the end of Jurassic Time fresh water sedimentation became dominant and continued through to the Cretaceous, giving rise to non-marine sediments which now host extensive coal deposits.

The table of formations for the claim area is presented on Table 1 below.

Table 1: Table of Formations, Crowsnest Pass Area
Source: Telfer, 1933 (Modified)

AGE	FORMATION/THICKNESS (M)	DESCRIPTION
Cretaceous	Kootenay Formation	Sandstone, shale, coal
Jurassic	Fernie Formation/284	Mainly marine, Black and grey shale, sandstone
	Unconformity	
Triassic	Spray River Group/231	Rusty brown, buff, thin bedded shale and siltstone
	Unconformity	
Permian	Ishbel Group	
Pennsylvanian	Rocky Mountain Quartzite/275	Sandstone, quartzite, chert
Mississippian	Rundle Group/853 Banff/405	Grey limestones Limestone, chert, black shale,

The Spray River Group is subdivided into two main stratigraphic units, namely, the basal Sulphur Mountain Formation and the overlying Whitehorse Formation (Gibson, 1968). Four lithologic units comprise the Sulphur Mountain Formation (see Table 2 below).

Table 2: Stratigraphic Units of the Spray River Group
Source: Gibson (1968) Slightly Modified

AGE	FORMATION	MEMBER/THICKNESS IN METRES	LITHOLOGY
Jurassic	Fernie Formation		
	Unconformity		
Upper or Middle Triassic	Whitehorse Formation	Undivided	Calcareous to dolomitic sandstone & siltstone; minor sandy quartzose dolomite, limestone and collapse breccia
Middle Triassic		Llama Member/ 0 to 64	Well-indurated dolomitic, quartz siltstone, and very fine-grained sandstone
		Whistler Member/0 to 14	Shaley to flaggy-weathering dolomitic quartz siltstone
Lower Triassic	Sulphur Mountain Formation	Vega Siltstone Member/*115	Dolomitic to calcareous quartz siltstone silty limestone, and shale; locally dolomitic sandstone, sandy to silty quartzose dolomite
		Phroso Siltstone Member/ * 29 to 60	Calcareous and dolomitic siltstone, silty shale, and minor quartz sandstone
	Unconformity		
Permian	Ishbel Group		

* Thicknesses in the Permit Area

In the permit area, the Whitehorse Formation has been completely eroded by, and the Whistler and Llama Members subjected to, pre-Jurassic and post Laramide erosion. In the Banff area the Vega Siltstone Member is overlain by the Whistler Member, whereas in the permit area the Whistler Member has been eroded from the section (Gibson 1974). Gibson

further states that south of the Bow River identification of the Whistler and Llama Members is further complicated by facies changes in these units.

4.1.1.2 Phroso Siltstone Member

The basal unit of the Sulphur Mountain Formation is the Phroso Siltstone Member. It is composed (Gibson, 1968) of dark grey, calcareous, dolomitic, shaley siltstone, sandstone and minor quantities of shale which are generally thinly bedded and finely laminated. The basal 1.5 m (5 feet) of the Phroso Member is characterized by dense fine-grained quartz sandstone beds up to 0.3 m (1 foot) thick. In some western areas intervals up to 2.4 m (8 feet) contain dense non-laminated siltstone beds from 15 - 38 cm (6 to 15 inches) thick, which are similar to siltstones of the overlying Vega Member. In the project area the upper half of the Phroso is generally notable for its high calcite content.

The Phroso Siltstone Member, is characterized by a high ferruginous-organic carbon content, and was deposited under restricted marine conditions.

4.1.1.3 Vega Siltstone Member

The Vega Siltstone Member conformably overlies the Phroso Siltstone Member. The contact is generally distinct and is placed at the first occurrence of resistant dolomitic and calcareous beds (Gibson, 1968). The Vega Siltstone Member consists of rusty weathering, well-indurated, argillaceous-carbonaceous siltstone, silty limestone characterized by shell fragments and shale. The siltstones are medium to dark grey/black on fresh surfaces and are composed of carbonaceous-argillaceous material, dolomite, calcite and quartz. Locally interbedded with the siltstones are dolomitic quartz sandstone and sandy or silty dolomite.

Bedding thickness varies from thin to medium bedded, average 5 cm (2 inches) in the lower half to one-third of the unit, to thick bedded, 0.9 m to 1.5 m, (3 feet to 5 feet) in the top half. The lower siltstones are characterized by wavy bedding planes and lenticular laminations, and frequently contain thin zones of dark grey shale exhibiting shaley to flaggy weathering. The thicker siltstones in the top half of the unit are generally lenticular exhibit cyclical bedding and are, at most, only faintly laminated. The lower half of the Vega Siltstone Member has a relatively high calcite content, manifest as cement and as finely crystalline and bioclastic interbeds.

The Vega Siltstone Member formed under conditions generally similar to, but slightly more regressive than, the Phroso Siltstone. The notably lower ferruginous-carbonaceous content of the Vega rocks suggests sedimentation in a less restricted, more oxygenated environment than the Phroso sedimentation (Gibson, 1974).

Based on lithologic descriptions of the Spray River Formation (sic) in the Crowsnest Pass Area (Telfer, 1933) the Vega Member is estimated to be 115.8 m (380 feet) thick in the permit area.

4.1.2 Property Work

4.1.2.1 Previous Work

Two small prospecting pits occur on the property. Both pits are situated along the base line where it cuts a north trending scarp underlain by rocks of the Phroso Member. One pit is situated on the base line (work boundary) approximately16m south of the Alberta/British Columbia border monument (see Figure 4). The other pit is situated at 97+36N on the base line (see Figure 5). Both pits are overgrown with moss and are approximately 1.5 m wide, 2.0 m long and 0.75 m deep. The pits are thought to be 50 to 60 years old.

4.1.2.2 Summary of Current Work Performed

The following table summarizes the work done on the property between the commencement date of June 4, 2002, and June 4, 2004.

Table 3: Summary Of Work Done, Contractor And Date of Work

CONTRACTOR	WORK DONE	DATE OF WORK
Matai Surveys Ltd., Calgary, AB	On site identification of relevant land survey monuments at northern end of permit area	August 17, 2002
Schindler Exploration Consultants Ltd., Calgary, AB	Establish base line. Flag BC/Alberta border. Chain slope-corrected base line. Establish & prospect grid lines. Tie in geology. Report Preparation	September 12, 2002 September 14, 2002 September 25 & 26, 2002 May 2 & 4, 2004 May 2004
Daryl Calder, Cranbrook, BC	Establish slope-corrected stations on grid lines.	October 8, 2002
Lifeways Canada Ltd., Calgary, AB	Archaeological and historical impact assessment study. Field survey of north end of property and grid area. Report	November 4, 2002 December, 2002
Drain Brothers, General Contractors, Blairmore, AB	Mechanically trench four trenches at north end of property.	December 18 to 21, 2003
Terracon Geotechnique Ltd., Calgary	Orientation of property and geology of grid area. Planning. Mechanical work permit application. Supervise mechanical trenching of four trenches at north end of property. Geological mapping and surveying of four trenches. Report preparation.	September 13, 2003 September 30, 2003 December 18 to 23, 2003 May & June, 2004

4.2 Current Work Performed

4.2.1 Land Survey Monuments

Date of Work: August 17, 2002

Work Done: The field locations of Federal Land Survey Monuments marking the Alberta/British Columbia Border on the north border of the Crowsnest Claims were identified in the field by Steve Nichol (Alberta Land Surveyor) Matai Surveys Ltd., Calgary, Alberta. At the same time, Provincial survey monuments on the east boundary of Section 11 (Range 6, Township 8) were identified in the field by Matai Surveys Ltd.

The Alberta/British Columbia Border marks the northern boundary of the Crowsnest Claims.

The location of the east boundary of Section 11 is important because it marks, in part, the west boundary of the Municipality of Crowsnest Pass. Lands within the municipality are excluded from exploration activity without the consent of the municipality. Consequently, no exploration was conducted east of the east boundary of Section 11 (Range 6, Township 8). The east boundary of Section 11 is also important because it forms, in part, the west boundary of private land held by McGillivray Land Development Corp. No work was conducted on any privately held lands.

The locations of survey monuments at the north end of the Crowsnest Claims are presented in Figure 5.

4.2.2 Grid

Date of Work: September 12, 14, 25 and 26, 2002
May 2 and 4, 2004

Work Done: Schindler Exploration Consultants Ltd., Calgary, conducted the following work. The Alberta/British Columbia Border at north end of Crowsnest Claims was flagged. Using chain and compass methods a base line and grid was established to provide control for exploration activities.

The grid has been assigned northings and eastings so as to be situated in the northeast quadrant using the Cartesian Coordinate System. The east boundary of Section 11 (Range 6, Township 8) forms the base line for the grid and has an assigned grid value of 500 metres east. The northernmost station on the base line is 9,850 metres north. Several sections of the east boundary of Section 11 had previously been cut out by land surveyors, and

the intervening intervals were joined by blazing a compass line. No trees were felled.

Along the base line (azimuth 000 degrees) stations were established at 50m intervals by chaining with a cloth tape and breaking chain as dictated by topography. The base line is approximately 700 metres long (91+47N to 98+50N).

Westerly cross lines were established at 100 m intervals on the base line. About one third of the grid area has been logged (estimated at 7 to 10 years ago), and reforested with pine. The remaining forest is mainly open lodge pole pine with very little undergrowth.

In treed areas the grid was established using small painted blazes and flagging, and essentially, by clearing deadfall and minor underbrush. The width of grid lines is less than 1.5 m.

Date of Work: October 28, 2002

Work Done: Daryl Calder, professional line cutter of Cranbrook, British Columbia, established stations at 25 horizontal metre intervals on the grid lines. All grid stations were marked using aluminum tags stapled to commercial lathes or pickets. No trees were cut for pickets or to establish the grid lines.

The grid lines extend west from the base line and are terminated by a disused logging road running roughly parallel with the grain of the topography (north-northwesterly). The road runs from the Inn on the Border to the Alberta/British Columbia Border at the north end of the claims (see Figures 2, 4 and 5).

4.2.3 Archaeological and Historic Impact Assessment Study

Alberta Community Development ("ACD") required that a Historic Resources Impact Assessment ("HRIA") be implemented in the area of proposed development (ACD File Number 4650-S-026). Accordingly, Lifeways of Canada Limited, Calgary, ("Lifeways") was retained to conduct the required study.

Date of Work: Fieldwork conducted November 4, 2002

Work Done: The results of Lifeways' study for the HRIA is contained in a separate report by Dr. Daniel A. Meyer and Dr. Brian O.K. Reeves. Their report is dated December 2002 and titled, Historical Resources Impact Assessment Crowsnest Claims Summit Area Quarry and Access Road Metallic and Industrial Mineral Permit No. 9302060002 Final Report (Permit 02-264)

The report was submitted to Alberta Community Development and concludes, in part, under Summary and Conclusions, page 17, "...a Historical Resources Impact Assessment of the Crowsnest Claims Summit Area quarry and access road (Metallic and Industrial Mineral Permit No. 9302060002) resulted in the discovery and recording of no archaeological, palaeontological, or historic resources in the area. The generally low archaeological potential of the terrain on which development is to be located indicated the probability of discovering archaeological sites in the specific areas to be minimal".

The report continues, "...Construction of the Crowsnest Claims Summit Area quarry and access road project (Metallic and Industrial Mineral Permit No.93020600020) will impact no known historical resources. Given the negative results of the HRIA, we recommend that Historical Resources Act clearance be granted to Kirsten Silcox for the development of the proposed quarry and access road".

Based on Lifeways HRIA report of December, 2002, Alberta Community Development (File No(s). 4650-S-026, 2002-264) in a letter dated January 28, 2003, granted the permit holder Historic Resources Act clearance to proceed with development of the project.

4.2.4 Grid Area Prospecting and Geological Mapping

Date of Work: September 25 and 26, 2002
May 2, 4, 2004

Work Done: The grid was prospected by Schindler Exploration Consultants Ltd., and the geology was subsequently referenced to the grid. Scattered outcrops were noted along the north part of the base line, and frost-heaved flagstone occurs along the north boundary of the claims on a small rounded hill in the area of the survey monument on the Alberta/British Columbia border. Flagstone talus occurs in several areas along the southern part of the base line (see Figure 5).

4.2.5 Mechanical Trenching Program

Date of Work: December 18 to 23, 2002

Work Done: Terracon Geotechnique Ltd.("Terracon") supervised the trenching program. In this context:

- Orientation of the property and geology of the grid area was conducted by Terracon on September 13, 2003.

- Permit application to conduct mechanical work (trenching) was filed by Terracon on September 30, 2003, and approved under MME-030004.

The trenching area lies at the north end of the Crowsnest Claims and is situated wholly in Alberta in Township 8, Range 6, Section 11, Legal Subdivisions 9 and 16. The trenched area is bounded in the north, northwest and northeast by the British Columbia - Alberta border (see Figures 4 and 5).

Equipment for the mechanical trenching program, an Ex 70 Excavator and a D3C L6P bulldozer, together with the equipment operators, were supplied by Drain Brothers, General Contractors of Blairmore.

Mobilization of equipment onto the property was completed on December 18, 2003. The trenching area was accessed via Highway 3 in British Columbia and logging roads located on land owned by Tembec Industries Inc, Cranbrook, British Columbia (see Figure 2). Drain Brothers' D-3 bulldozer and excavator were walked on Tembec's roads from the CPR level crossing to the base of the hill to be trenched. The bulldozer and excavator operators were oriented with respect to location of the trenches and the parameters of the project, notably the location of the British Columbia/Alberta boundary and the need not to transgress into British Columbia. The lower section of the access road from the base of the hill to the trenching area was upgraded to allow safe passage of equipment.

On December 19, 2003, the crew was given safety instructions and actual trenching started on Trench 1 (see Figure 4). Clearing snow and where necessary, clearing timber, was done by the bulldozer. The trenching was done by excavator, with a 0.61 m (2 feet) bucket along the cleared line. After about 15 m of the first trench had been dug, a line marking the exact location of each of the remaining trenches was painted on the ground as guide for the excavator operator.

Four trenches (see Figures 4 and 5) totaling about 252 lineal metres were completed along their respective cleared lines in the course of the program as follows:

Table 4: Orientation and Lengths of Trenches

TRENCH NO.	AZIMUTH (degrees)*	LENGTH (metres)
1 (Eastern Section)	266	12
1 (Western Section)	264	32
2	266	68
3	264	77
4	289	63

* Measured from east end of the trench/section

Three hazard signs for the trenching area were erected on trails into the area giving advance notice of the trenching site.

The depth of overburden and the variability of overburden depth was greater than expected. In the middle of Trenches 2 and 3 overburden is only a few centimetres deep. However, in the east part of Trench 1, due to a small depression in the bedrock surface, the overburden suddenly deepened from 0.5 metres to 2.5 metres. Due to the small size of the bucket, 0.61 metres (two feet), it was decided for safety reasons, to limit the depth of the trenches to one metre. Consequently, where overburden exceeded one metre in depth, trenching was not extended to bedrock, as for example, in the central east parts of Trenches 3 and 4.

The uneven nature of the bedrock surface at the base of the overburden resulted in rock debris being left in the bottom of the trenches by the excavator. Consequently, the bottoms of the trenches had to be mucked out (hand cleaned using picks and shovels) in order to expose the outcrop for mapping purposes. This work was conducted by personnel supplied by Drain Brothers.

In preparation for mapping each trench was marked with paint at 5 metre intervals along its entire length. These 5 metre markings were used as control for geological mapping. Geological mapping on a scale of 1:250 was conducted by Virginia Trapnell and Vassil Valchev of Terracon in the cleaned out trenches. Overburden thickness was also measured at each 5 metre interval in all four trenches. In addition, GPS readings were taken to locate the trenches.

In the course of the geological mapping the following determinations were made and variously recorded at known locations in each trench:

- The composition and thickness of the sedimentary beds;
- The orientation of the bedding was determined by recording the angle and direction of maximum dip, and then calculating the strike of the bedding;
- The degree of fracturing and the orientation of fracture sets was noted, particularly in respect of the resulting quality of rock;
- The presence of veinlets, including orientation, thickness and composition;
- The locations of hand specimens retained from each trench for post fieldwork examination and testing.

All four trenches were back-filled immediately after completion of the geological mapping. In the course of reclamation, each trench was leveled and contoured to its original contours. All felled timber was placed over the trenched areas where it was bucked into five-foot lengths.

Demobilization of personnel and equipment from the property was completed by approximately 5:15 pm on December 22, 2003.

4.2.6 Post Fieldwork Procedures

Representative hand specimens were described and tested using standard methods. For example, cold dilute (10%) HCl was used to test for the presence of calcite, and selected samples were examined by binocular microscope and further tested for calcite with Alazarin Red.

GPS data obtained in the field has been used to plot computer generated maps, on which is indicated topography, locations of trenches and geological information, such as bedding orientations and contacts.

Detailed rock descriptions and logs of the trench mapping are presented in Appendix C.

4.3 Results of Current Work

4.3.1 Geology

Rock exposure on the grid area is very low, and is estimated to be less than 1%.

Most outcrop occurs along, or close to, the crest of the ridge in the vicinity of the base line between 95+00N and 98+00N (see Figure 5).

Thinly bedded siltstones of the Phroso Member are exposed in several small outcrops along the scarp which is manifest along the northern part of the base line. For example at 95+00N, 5+00E; 96+25N, 4+85E; and 97+80N,4+95E. The most extensive outcrop of Phroso Member siltstone is a long narrow exposure which underlies the base line from 95+75N to 96+45N. Beds are generally from 0.3cm (1/8th inch) to 0.6cm (1/4 inch) thick and occasionally 2.5 cm (1 inch) thick. Weathered surfaces are reddish-brown to pink - buff and fracture surfaces are buff grey to dark grey. The rocks are composed of fine-grained sandstone and siliceous, calcareous siltstone. The sandstone contains 15% to 20% very fine-grained quartz grains that weather in positive relief. Bedding in this area strikes 335 degrees and dips 32 degrees west. At the north end of the outcrop there is a small reverse fault.

Due to the poor exposure the contact between the Phroso and Vega Members has not been clearly identified in outcrop. Accordingly, the contact between the Phroso and Vega Members has been placed slightly west of the crest of the escarpment, which is known to be underlain by rocks of the Phroso Member. One small outcrop tentatively classified as being transition from Phroso to Vega Member was noted at 95+85N, 4+90E (see Figure 5).
Just west of the base line, in the vicinity of 95+00N, 4+20E outcrops of Vega Member siltstone occur at the top of a steep, logged slope and give rise to a 50 m x 50 m talus slope. The outcrops are characterized by beds ranging from 1.25 cm (1/2 inch) to15.25 cm (6 inches) thick, and are composed of siliceous siltstone containing approximately 20% calcite. Weathered surfaces are pinkish buff, and fracture surfaces are light to medium grey. Bedding in this area strikes 157 degrees and dips 32 degrees west. Vega Member siltstone is also exposed in a small outcrop on the base line at 95+50N. Frost-heaved, buff-weathering Vega Member siltstone was noted along the north boundary of the claims in the area of the trenches.

The south end of the grid is notable for several localities with Vega Member siltstone talus as flagstone fragments. Scattered talus occurs on the westerly slope south of the stone survey monument on the base line, and along the base line between 92+80N and 93+00N. A prominent, well-developed talus fan of Vega Member siltstone occurs in an area between 91+85N and 92+50N on the base line and extends for about 40 m down slope from the base line (see Figure 5).

Only one exposure of the Fernie Formation has been noted in the grid area. In the vicinity of line 93+40N,3+30E an outcrop of grey shale is exposed in a road cut at the west end of the grid. Consequently, the contact between the Fernie Formation and the Vega Member has been placed, in the north part of the grid area, at the break in slope where the base of the ridge underlain by rocks of the Sulphur Mountain Formation abruptly meets the swampy area of the valley floor. However, due to overburden thickness south of line 95+00N the location of the contact is only very poorly known.

4.3.2 Trenching Program

All four trenches in the current trenching program on the Crowsnest Claims are exposed only the Vega Member rocks (see Figure 5). Neither the lower/footwall contact nor the upper/hangingwall contact of the Vega Member were exposed in any of the trenches (see Figure 6). Two flagstone units, separated by an interval characterized by massive beds up to three feet thick, were mapped in the trenched area. One flagstone unit is at the base of the section and the other is at the top of the section. In this report the basal flagstone unit is referred to as Lower Vega ("LV"), the flagstone unit at the top of the section is referred to as Upper Vega ("UV"), and the unit separating the two is the Middle Vega ("MV") (see Figure 6). The flagstone units are notable for their bedding thickness varying from 2.5 cm (1 inch) to 5cm (2 inches) up to15.25 cm (6 inches).

The former presence of ice in the trenching area is indicated by a large scour mark on the bedrock at its interface with the overlying till in the center of the area.

4.3.3 Structure

Bedding in the rocks of the trenched area generally strikes northerly with westerly dips ranging from 15^0 to 54^0. Towards the east end of all four trenches, in the vicinity of the basal contact of the Vega Member, bedding dips are generally steeper than in the west end of the trenches (see Figure 7). This suggests the presence of a thrust fault in the vicinity of the contact between the Vega and Phroso Members in this area.

With the exception of one small amplitude anticline in the east section of Trench 1, no folds were noted during the geological program of the trenches.

A small breccia zone at the west end of Trench 4 and a strongly fractured zone in the center of Trench 2 may be manifestations of aerial photograph lineaments interpreted to be southeasterly trending faults.

There is a general absence of fracture vein fillings, though some narrow and hairline fractures were noted.

4.3.4 Economic Geology

Completely fresh bedrock samples were not obtained in the current trenching program due to the degree of weathering in the trenched area. Good quality weathered flagstone occurs at the east end and west end of Trenches 1, 2 and 3. The best flagstone samples were obtained from the middle and eastern sections of Trench 4. Here the middle one third of 5 cm (2 inch) thick flagstone is much fresher, but is still bounded by weathered rinds along its margins. The fresher surface varies from light to dark grey. Siltstones in the trenched area exhibit beds up to 0.6 cm (1/4 inch) thick as well as thin 1 mm (1/32 inch), dark grey beds or micro-laminations, but it is not known at this time if the fresher surface is completely free of

weathering effects. The flagstones often tend to break cleanly with an even fracture along bedding planes. The flagstones are composed of quartzitic, calcareous, dolomitic siltstones, but due to their fine-grained nature accurate estimation of the mineral content is difficult to determine in hand specimens. In the flagstone sequences siltstones are generally interbedded with shale beds.

The UV beds were delineated in Trenches 1, 2, 3 and 4, for a strike distance of about 100 m. In Trench 1 the unit is about 12 m wide and in Trench 4 it is 30 m wide.

Assuming the UV flagstones are marketable, the beds of the Upper Vega Member appear to present an attractive quarrying situation due to their low westerly dips, and the fact that they are situated on a moderate, west facing slope. The LV flagstones are a less attractive target due to the overlying MV beds but, given the valley to the east, could possibly be quarried using an east-facing quarry. The LV unit is exposed across 15 m from Trench 1 to Trench 4, a distance of 100 m (see Figure 5).

Due to the fact that no completely fresh rock was obtained from the December 2003 trenching program, no marketing studies resulted from the program.

5.0 CONCLUSIONS

- The infrastructure of the area is excellent.
- The project has received clearance from Alberta Community Development.
- The grid area is underlain in part by rocks of the Vega Member of the Sulphur Mountain Formation manifest as flagstones in outcrop and talus. The flagstones are composed of quartzitic, dolomitic calcareous, siltstone.
- The 2003 trenches are wholly underlain by Vega Member rocks, but the thickness of the unit is not known. In the trenched area the Vega Member has been subdivided into three units. The Lower and Upper Vega units are characterized by the presence flagstone beds, and the Middle Vega unit is characterized by 1.5 m (5 feet) thick siltstone beds.
- Completely fresh bedrock samples of flagstone were not obtained in the program due to the degree and depth of weathering encountered. In the trenched area these weathering effects are interpreted to result from a combination of low topographic relief, fracturing and or faulting, and the former presence of ice.
- Fracturing in the center of the trenched area and a breccia at the west end of Trench 4 may be manifestations of southeast trending aerial photograph lineaments.

- Additional trenching is warranted to establish the quality of unweathered, fresh flagstones in the grid area.

- No fossils were seen during the current exploration program.

6.0 REFERENCES

Butrenchuk, S.B., 1987, Phosphate in southeastern British Columbia, Mineral Resources Division, British Columbia Ministry of Energy, Mines and Petroleum Resources.

Gibson, D.W. 1968, Triassic Stratigraphy of the Bow River- Crowsnest Pass Region, Rocky Mountains of Alberta and British Columbia. Geological Survey of Canada, Paper 68-29

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Hamilton, W.N. et al 1998, Geology of the Crowsnest Corridor, Alberta Geological Survey Map 235A.

Meyer, Daniel A. and Reeves, Brian O. K., 2002, Historical Resources Impact Assessment Crowsnest Claims Summit Area Quarry and Access Road, Metallic and Industrial Mineral Permit No. 9302060002, Final Report (Permit 02-264), Lifeways of Canada Ltd., Calgary, Alberta.

Richards, B.C., Mamet B.L. and Bamber E.W. 1999, Uppermost Devonian and Carboniferous Sequence Stratigraphy, Biostratigraphy and Basin Development, Banff Region, Southwestern Alberta, X1V International Congress on the Carboniferous and Permian, Calgary, Alberta, Field Trips 4-7 and 17. Geological Survey of Canada.
Geological Survey Map 235A.

Telfer, L. 1933, Phosphate in the Canadian Rockies. The Canadian Institute of Mining and Metallurgy, pp.566-605.

7.0 QUALIFICATIONS

Schindler Exploration Consultants Ltd. is licensed to practice in the Province of Alberta and has been in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA), permit number P03437, and practicing mineral exploration and development continuously since 1982.

Terracon Geotechnique Ltd. has extensive previous experience in exploration and development of industrial minerals. The field program was supervised by senior Terracon

personnel. Terracon Geotechnique Ltd. has no vested interested in the aforementioned property.

Terracon Geotechnique Ltd. is licensed to practice in the Province of Alberta and is in good standing with the Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGGA), permit number P3407.

8.0 STATEMENT OF EXPENDITURES

The following table lists the expenditures made on the Crowsnest Claims in the period June 4, 2002, to June 4, 2004.

Table 5: Statement Of Expenditures

CONTRACTOR	WORK DONE	COST
Matai Surveys Ltd., Calgary	On site identification of relevant land survey monuments at northern end of permit area.	$428.00
Schindler Exploration Consultants Ltd., Calgary	Establish base line and flag BC/Alberta border. Chain slope-corrected base line Establish & prospect grid lines. Tie in geology. Report Preparation	$848.34
Daryl Calder, Cranbrook, BC	Establish slope-corrected stations on grid lines.	$470.80
Lifeways Canada Ltd., Calgary, AB	Archaeological and historical impact assessment study. Field survey of north end of property and grid area. Report.	$5,427.01
Drain Brothers, General Contractors, Blairmore, Alberta	Mechanically trench four trenches at north end of property.	$7,147.23
Terracon Geotechnique Ltd., Calgary, Alberta	Orientation and mapping of grid area and planning. Mechanical work permit application. Supervise mechanical trenching of four trenches at north end of property. Geological mapping and surveying of four trenches. Report preparation.	$11,511.27
	SUBTOTAL	**$25,832.65**
General Administration (10%)	Includes comprehensive and third party liability insurance	$2,583.27
	TOTAL	**$28,415.92**

9.0 DECLARATION

The Statement of Declaration follows.

DECLARATION

Metallic and Industrial Mineral Permit No. 9302060002 ("The Permit").

I, Kirsten Kimberley Silcox, 4061 Garrison Blvd., SW., Calgary, Alberta, declare that in the period extending from the Commencement Date of The Permit, June 4, 2002, to June 4, 2004, expenditures totaling $28, 832.65 were made on the area covered by The Permit. The total expenditures consist of $25,832.65 direct expenditures and $2,583.27 indirect expenditures.

Signed this 25 day of June, 2004 in the City of Calgary, Alberta

[redacted]

Kirsten Kimberley Silcox
President,
Summit Natural Rock Inc.

GILLAIN A. MALFAIR
BARRISTER & SOLICITOR
BORDEN LADNER GERVAIS LLP
1000 - 400 - 3 AVE S.W.
CALGARY, AB T2P 4H2

10.0 CERTIFICATION

Yours sincerely,
TERRACON GEOTECHNIQUE LTD.

John Schindler
Schindler Exploration Consultants Ltd.

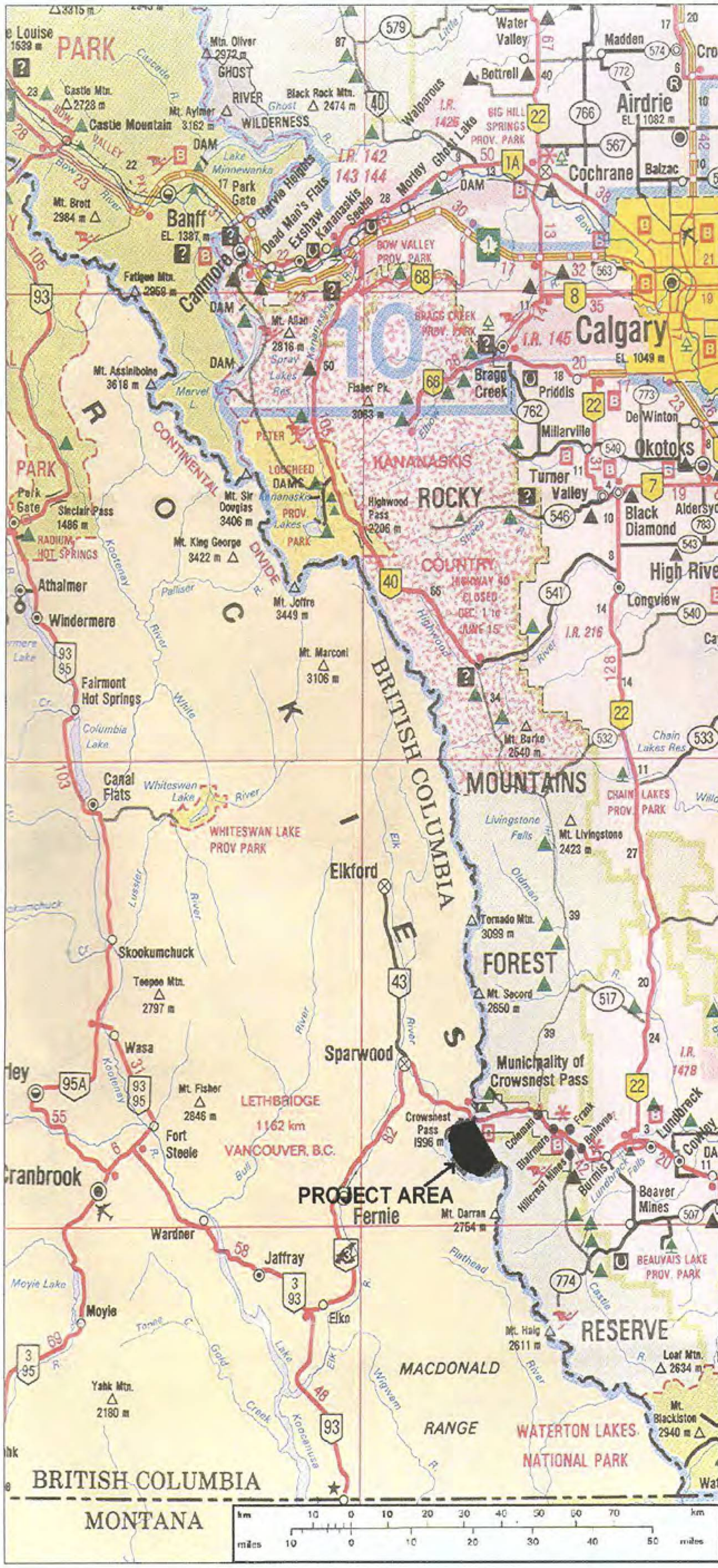
Vassil Valchev, M.Sc., P. Geol.
Senior Geologist

Emmett J. Horne, P. Geol.
Principal

PERMIT TO PRACTICE
TERRACON GEOTECHNIQUE LTD.
Signature
Date 24th JUNE 200X
PERMIT NUMBER: P 3407
The Association of Professional Engineers,
Geologists and Geophysicists of Alberta

APPENDIX A

Figures

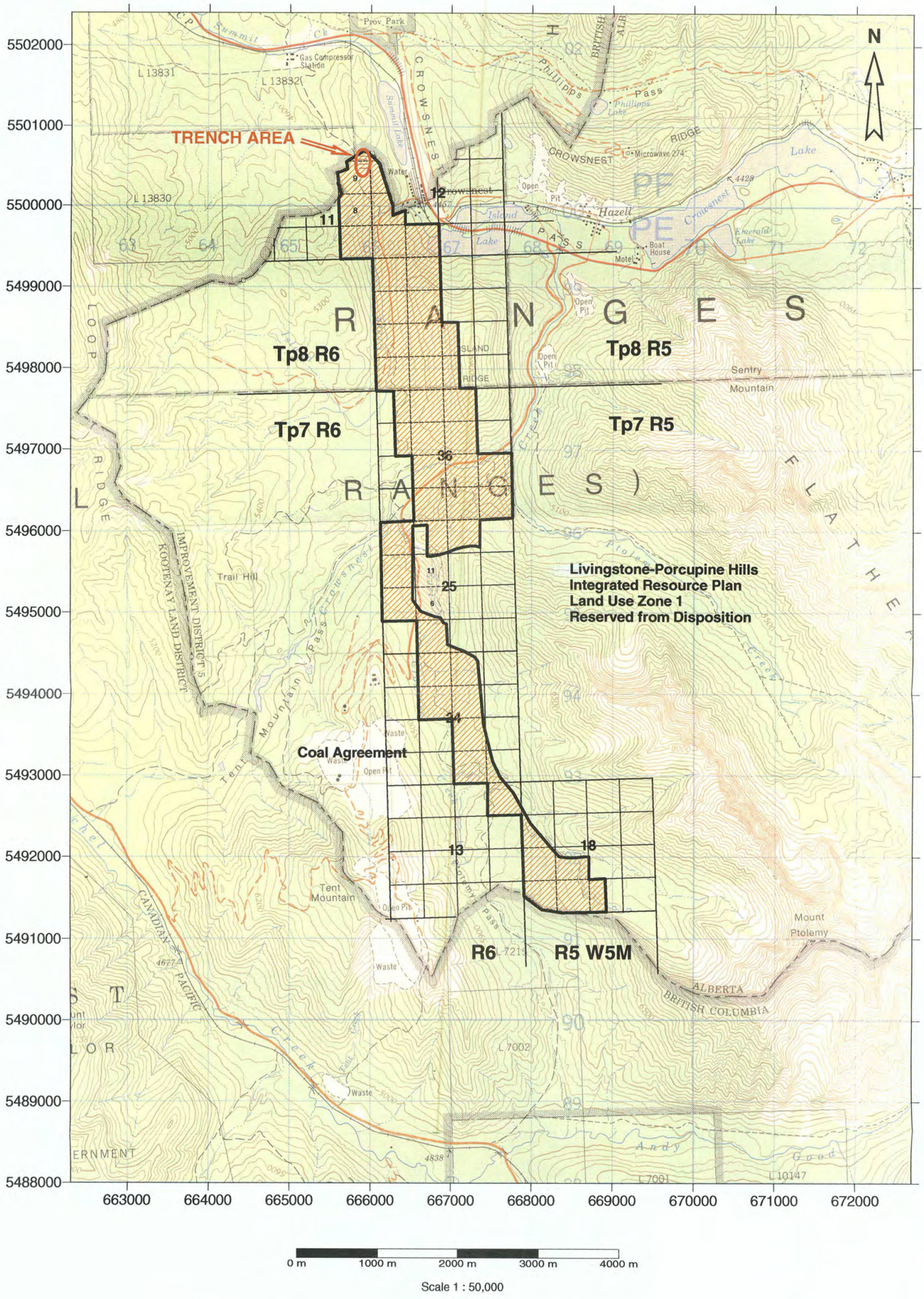


SUMMIT NATURAL ROCK INC.

TERRACON GEOTECHNIQUE LTD.

Figure 1
PROJECT LOCATION MAP

DATE: JUNE 2004	PERMIT NUMBER:
SCALE: 1: 1,500,000	9302060002



LEGEND

Metallic Permit

Area of Pit Trenching in Section 11, Tp 8, R6 W5M*

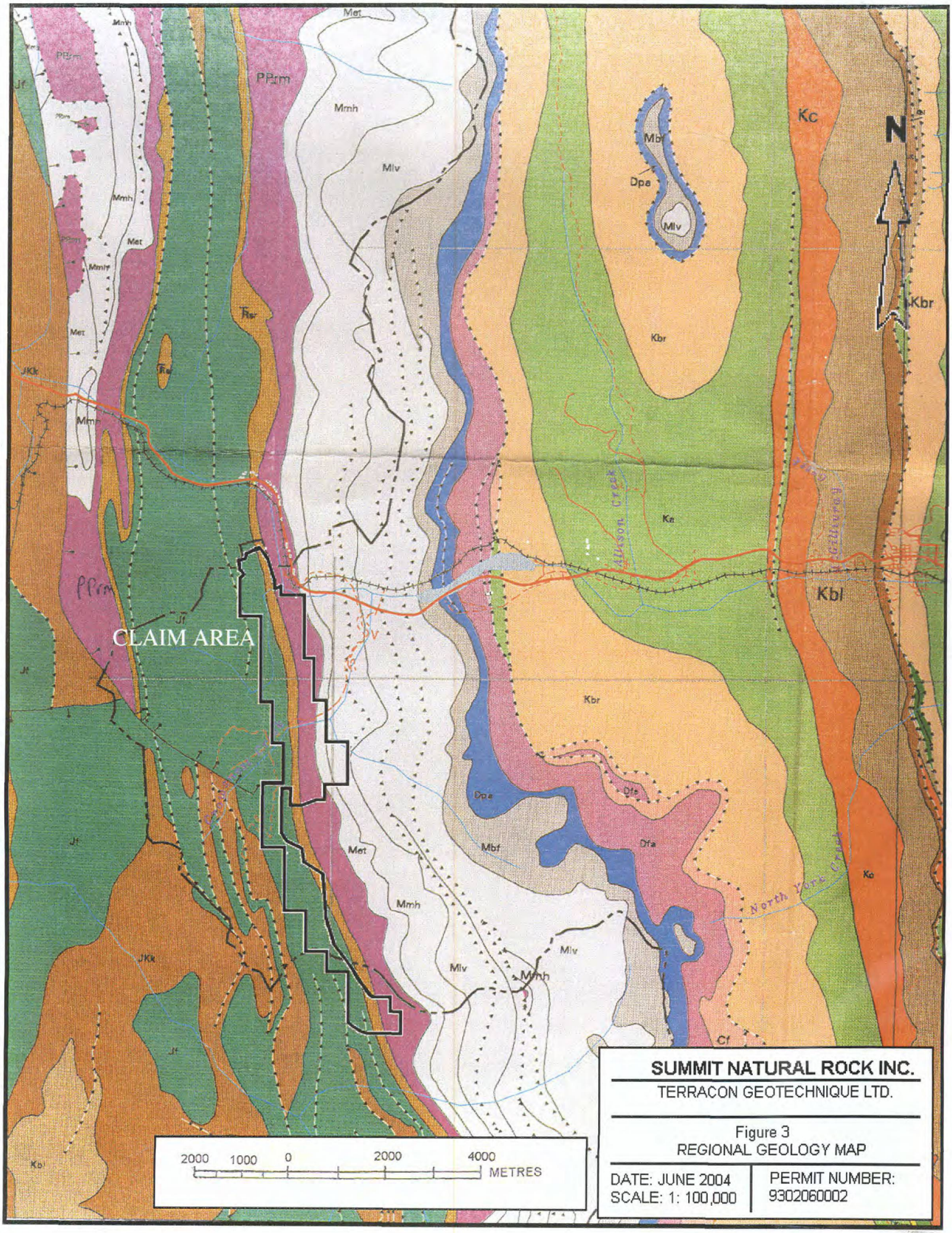
*Trenches in areas of thin soil cover. Depth of trenches approximately 1.0 m

SUMMIT NATURAL ROCK INC.

TERRACON GEOTECHNIQUE LTD.

DETAILED PERMIT LOCATION MAP

Scale 1 : 50,000		Permit No: 9302060002			
		Drawn	V.V.		Figure 2
Date	June-2004	Checked	E.H.		



SUMMIT NATURAL ROCK INC.

TERRACON GEOTECHNIQUE LTD.

Figure 3
REGIONAL GEOLOGY MAP

DATE: JUNE 2004
SCALE: 1: 100,000

PERMIT NUMBER:
9302060002

LEGEND

PALEOCENE

Tph — Porcupine Hills Formation

UPPER CRETACEOUS AND PALEOCENE

TKw — Willow Creek Formation

UPPER CRETACEOUS

Ksm — St. Mary River Formation

Kbp — Bearpaw Formation

Kbr — Belly River Formation

Kwp — Wapiabi Formation

Kca — Cardium Formation

Kbk — Blackstone Formation

LOWER CRETACEOUS

Kc — Crowsnest Formation

Kbl — Blairmore Group

JURASSIC AND CRETACEOUS

JKk — Kootenay Formation

JURASSIC

Jf — Fernie Group

TRIASSIC

Tsr — Spray River Group

Ka — Alberta Group

PENNSYLVANIAN AND PERMIAN

PPrm — Rocky Mountain Group

MISSISSIPPIAN

Met — Etherington Formation

Mmh — Mount Head Formation

Mlv — Livingstone Formation

Mbf — Banff and Exshaw Formations

DEVONIAN

Dpa — Palliser Formation

Dfa — Fairholme Group and Alexo Formation

CAMBRIAN

Cf — Flathead Formation

HELIKIAN

Hsh — Sheppard Formation

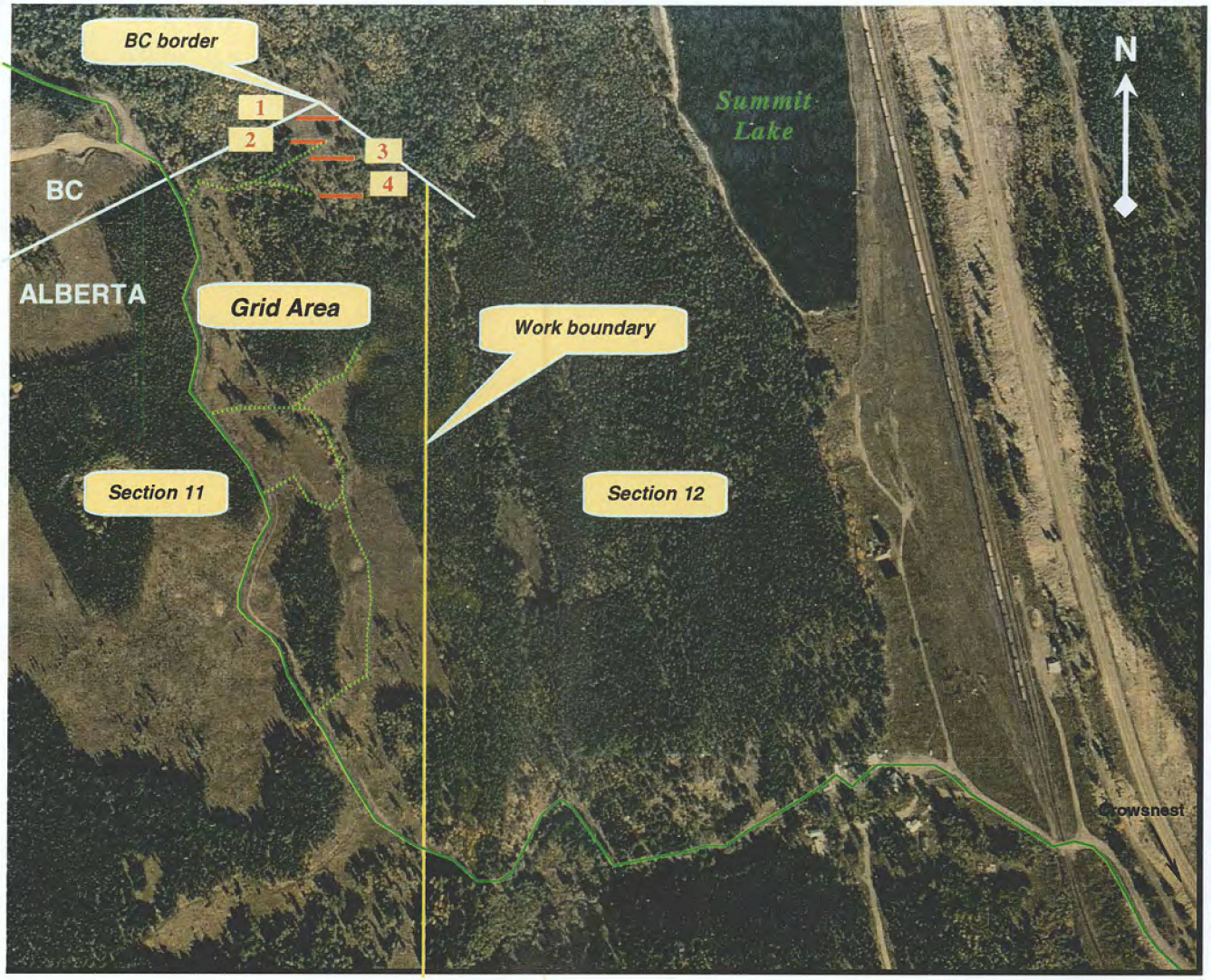
Hpv — Purcell Lava

X1 Outcrop & Number

FAULTS

Thrust fault (teeth indicate upthrust side)

Normal fault (dot indicates downthrown side)



LEGEND

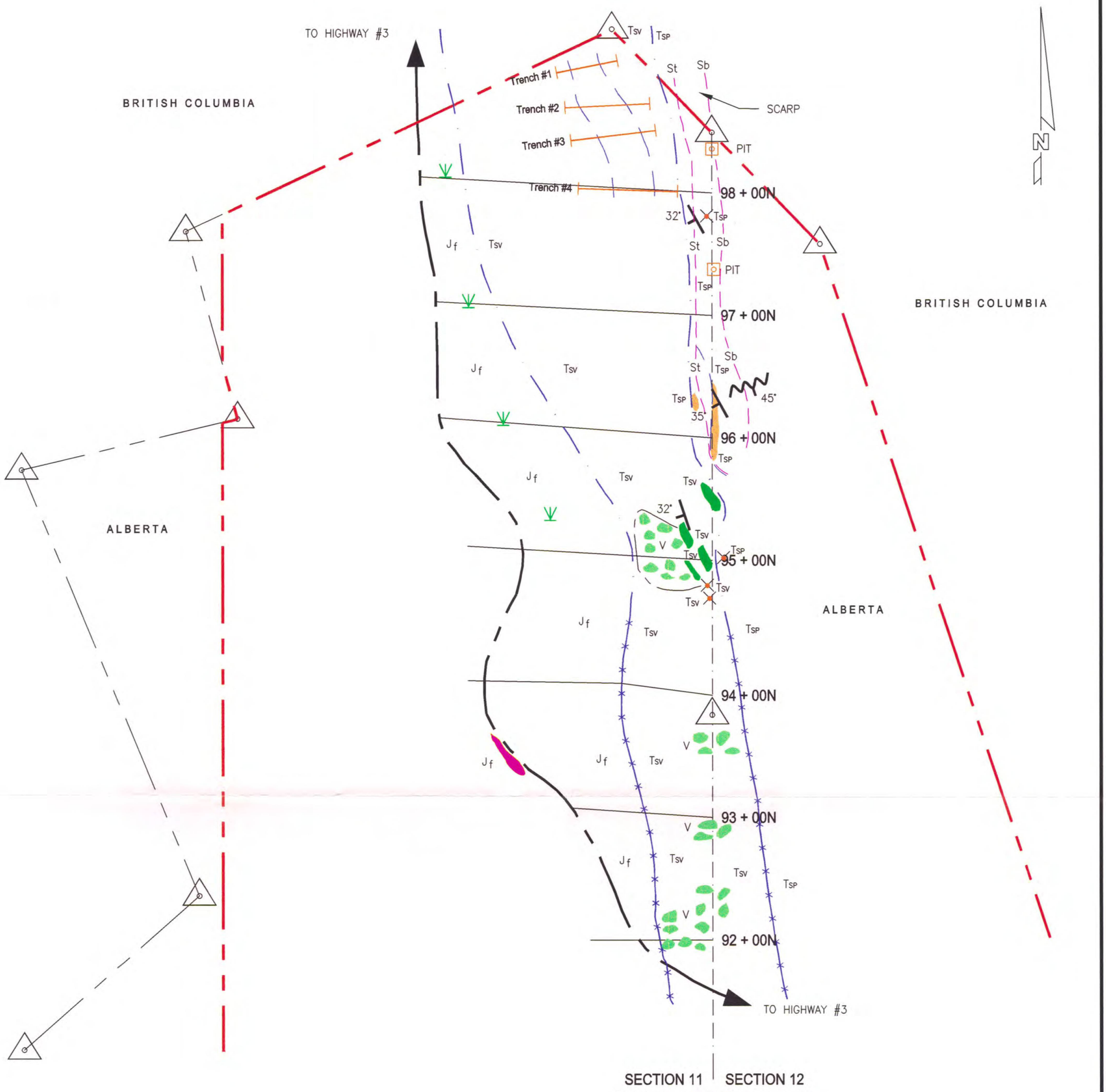
Trenches.

1 Trench Number with LSD Identifier. All Trenches are in Section 11, Tp 8, R6 W5M.

Access Roads

Existing Trails Used for Access

SUMMIT NATURAL ROCK INC.					
TERRACON GEOTECHNIQUE LTD.					
AIRPHOTO MAP OF GRID AREA					
Scale approx. 1 : 7,000		Permit No: 9302060002			
		Drawn	V.V.		Figure 4
Date	June-2004	Checked	E.H.		



LEGEND:

JURASSIC AGE

Jf — Fernie Formation, Grey Shales

TRIASSIC AGE

Tsv — Sulphur Mountain Formation, Vega Member, Dolomitic Siliceous Carbonaceous, Calcareous Siltstone, Thin dark Shale beds

Tsp — Sulphur Mountain Formation, Phoso Member, Very thinly bedded dark grey Dolomitic Calcareous Siltstone

Old Prospecting Pit

Survey Monument

32° — Strike of Bedding. Dip Given

45° — Fault. Dip Given

V — Talus. Vega Fragments

Tsv — Vega Member Outcrop

Tsp — Phroso Member Outcrop

Jf — Outcrop

Outcrop

Geological Contact - Observed

Geological Contact - Inferred

Geological Contact - Assumed

Boundary Permit (39302060002)

St — Scarp (top)

Sb — Scarp (base)

2003 Trench with Number

Old Logging Road

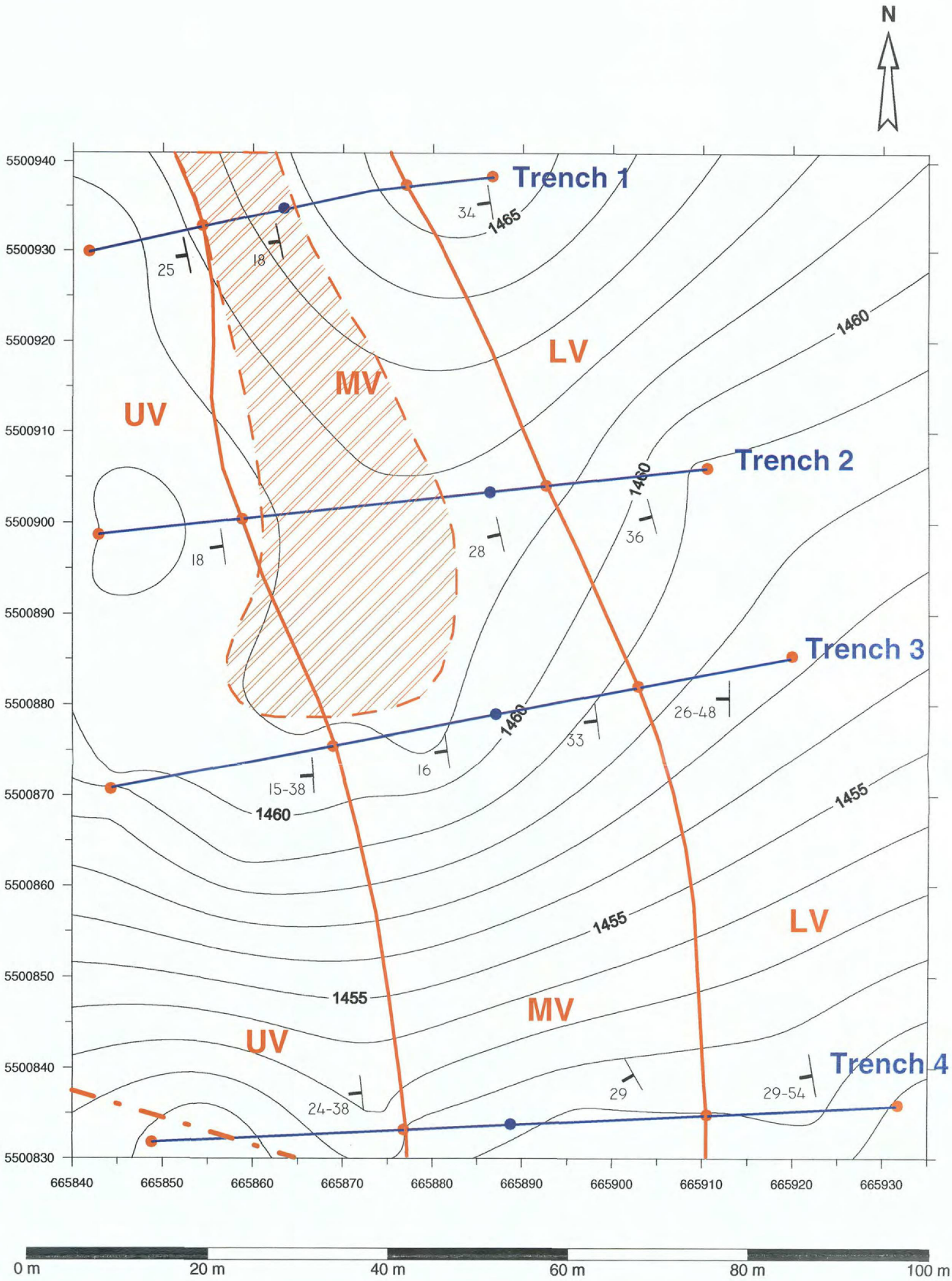
0m 25 50 75 100 125

1:2500

SUMMIT NATURAL ROCK INC.	
TERRACON GEOTECHNIQUE LTD.	
GRID AREA GEOLOGY MAP	

SCALE:	AS SHOWN	PERMIT No.:	9302060002
PROJECT No.:	3949	DRAWN BY:	TGL / Bb
DATE:	JUNE 2004	CHECKED BY:	E.H.

FIGURE 5



Scale 1 : 500

Trench 2 Cross Section See Figure 7.

LEGEND

29 — Measured Dip Angle and Strike of Bedding

UV - Upper Vega Member. Mainly thin-bedded siltstone.
MV - Middle Vega Member. Mainly thick-bedded siltstone.
LV - Lower Vega Member. Mainly thin-bedded siltstone.

Strongly Fractured Zone

Fault. Orientation unknown.

SUMMIT NATURAL ROCK INC.

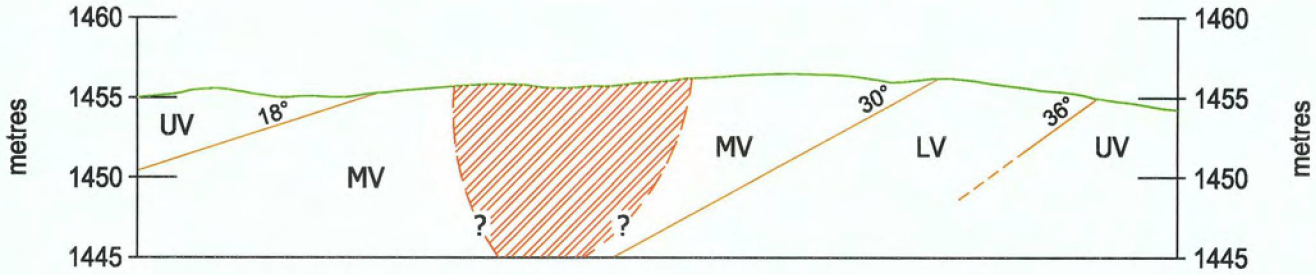
TERRACON GEOTECHNIQUE LTD.

GEOLOGY MAP OF 2003 TRENCHES

Scale 1 : 500		Permit No: 9302060002			
		Drawn	V.V.		Figure 6
Date	June-2004	Checked	E.H.		

TRENCH # 2

CROSS - SECTION LOOKING NORTH



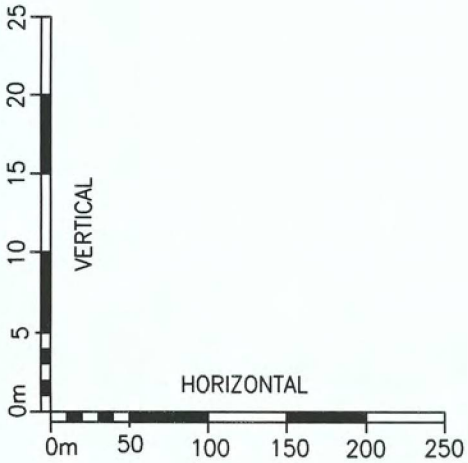
Legend.

UV - Upper Vega Member. Mainly thin - bedded Siltstone

MV - Middle Vega Member. Mainly thick - bedded Siltstone

LV - Lower Vega Member. Mainly thin - bedded Siltstone

- Strongly Fractured Zone



Note:
TRENCH #2 LOCATION. SEE FIGURE 6

SUMMIT NATURAL ROCK INC.

TERRACON GEOTECHNIQUE LTD.

TRENCH #2
CROSS SECTION

SCALE:	AS SHOWN	PERMIT No.:	9302060002
PROJECT No.:	3949	DRAWN BY:	JNS/Bb
DATE:	JUNE, 2004	CHECKED BY:	E.H.

FIGURE 7

APPENDIX B

APPENDIX B

Notice to Permit Holder (Permit Conditions)

Alberta
ENERGY

METALLIC AND INDUSTRIAL MINERALS PERMIT

NO. 9302060002

Term Commencement Date: June 04, 2002

Permittee:

KIRSTEN KIMBERLEY SILCOX	100.0000000%

METALLIC AND INDUSTRIAL MINERALS PERMIT NO. 9302060002

NOTICE TO PERMITTEE

ONE OF THREE

LAND DESCRIPTION

5-06-007: 24L11

IS/ARE WITHIN A PERMIT TO DEVELOP A COAL MINE, GRANTED UNDER THE COAL CONSERVATION ACT. PROSPECTIVE PURCHASERS ARE ADVISED THAT LAND USE PROBLEMS RELATING TO THE MINE OPERATIONS MAY ARISE.

SURFACE ACCESS IS SUBJECT TO SPECIFIC RESTRICTIONS

FOR FURTHER INFORMATION, PLEASE CONTACT:

MARY BOYLES
ADMINISTRATOR - LAND & LEGAL
LUSCAR LTD.
LEASE/LAND ADMINISTRATOR
OXFORD TOWER
10235 101 ST NW SUITE 1600
EDMONTON AB T5J 3G1 (780) 420-5868

TWO OF THREE

LAND DESCRIPTION

5-06-008: 1L14P;12L3P

IS/ARE WITHIN ZONE 4 (GENERAL RECREATION) OF THE CROWSNEST CORRIDOR LOCAL INTEGRATED RESOURCE PLAN.

SURFACE ACCESS IS SUBJECT TO SPECIFIC RESTRICTIONS

FOR FURTHER INFORMATION, PLEASE CONTACT:

LOWELL CALDER
LCRC MEMBER
DEPT. OF SUSTAINABLE RESOURCE DEV.
LETHBRIDGE NORTH OFFICE - PUBLIC LANDS
5401 1 AVE S SUITE 100
LETHBRIDGE AB T1J 4V6 (403) 381-5486

Continued...

WHEREAS Her Majesty is the owner of the minerals in respect of which rights are granted under this Permit;

THEREFORE, subject to the terms and conditions of this Permit, Her Majesty hereby grants to the Permit Holder, insofar as Her Majesty has the right to grant the same, the exclusive right to explore for Permitted Substances within the Location for the purposes set forth in the Mines and Minerals Act for the term of ten (10) years, computed from the Term Commencement Date;

1 (1) In this Permit, a reference to the Mines and Minerals Act or to any other Act of the Legislature of Alberta referred to in section 2(1)(b) of this Permit shall be construed as a reference to

(a) that Act, as amended from time to time,

(b) any replacement of all or part of that Act from time to time enacted by the Legislature, as amended from time to time, and

(c) any regulations, orders, directives or other subordinate legislation from time to time made under any enactment referred to in clause (a) or (b), as amended from time to time.

(2) In this Permit,

(a) "Her Majesty" means Her Majesty in right of Alberta, as represented by the Minister of Energy of the Province of Alberta;

(b) "Location' means the subsurface area or areas underlying the surface area of the Tract and described in the Appendix to this Permit under the heading "Description of Location and Permitted Substances";

(c) "Permitted Substances" means the metallic and industrial minerals described under the heading "Description of Location and Permitted Substances" in the Appendix to this Permit;

(d) "Term Commencement Date" means the date shown on the first page of this Permit as the Term Commencement Date;

(e) "Tract" means the tract or tracts of land described under the heading "Description of Location and Permitted Substances" in the Appendix to this Permit.

2. This Permit is granted upon the following conditions:

(1) The Permit Holder shall comply with the provisions of

(a) the Mines and Minerals Act, and

(b) any other Acts of the Legislature of Alberta that prescribe, apply to or affect the rights and obligations of holders of metallic and industrial minerals rights that are the property of Her Majesty, or that relate to, apply to or affect the Permit Holder in the conduct of its operations or activities under this Permit.

(2) The provisions of the Acts referred to in subsection (1) of this section are deemed to be incorporated into and to form part of this Permit.

(3) In the event of conflict between a provision of this Permit and a provision referred to in subsection (1) of this section, the latter provision prevails.

(4) The Permit Holder shall not claim or purport to exercise any rights, prerogatives, privileges or immunities that would otherwise exempt the Permit Holder from compliance with any of the provisions of the Mines and Minerals Act or of any other Act of the Legislature of Alberta referred to in subsection (1)(b) of this section.

(5) The Permit Holder shall take all reasonable steps to prevent and control the escape or release of any oil, gas, water or any other substance that may cause an adverse impact upon the environment which may be encountered during the conduct of any of its operations or activities under this Permit.

(6) The Permit Holder shall keep Her Majesty indemnified against

(a) all actions, claims and demands brought or made against Her Majesty by reason of anything done or omitted to be done, whether negligently or otherwise, by the Permit Holder or any other person in the exercise or purported exercise of the rights granted and duties imposed under this Permit, and

(b) all losses, damages, costs, charges and expenses that Her Majesty sustains or incurs in connection with any action, claim or demand referred to in clause (a),

(7) This Permit is also subject to the special provisions, if any, contained in the Appendix to this Permit.

EXECUTED on behalf of the Minister of Energy of the Province of Alberta at Edmonton, Alberta.

For Minister of Energy
on behalf of Her Majesty

APPENDIX

TO

METALLIC AND INDUSTRIAL MINERALS PERMIT NO. 9302060002

TERM COMMENCEMENT DATE:

JUNE 04, 2002

AGGREGATE AREA:

707 HECTARES

DESCRIPTION OF LOCATION AND PERMITTED SUBSTANCES:

5-05-007: 18L2W,L3,L4F,L5,L6P,L12P,L13P
PORTION(S) LYING OUTSIDE LIVINGSTONE-PORCUPINE HILLS INTERGRATED RESOURCE PLAN.
5-06-007: 13L16P;24L1P,L2,L7P,L8P,L10P,L11,L14,L15P;25L2P,L3P,
L5P,L6P,L11P,L12P,L13,L14P,L15P;36SE,L3,L6,L10,L11,
L12E,L13E,L14,L15
PORTION(S) LYING OUTSIDE LIVINGSTONE-PORCUPINE HILLS INTERGRATED RESOURCE PLAN.
5-06-008: 1W,L2W,L7W;11L1,L8,L9F,L16F;12L3-L4,L5F,L12F,L13F

METALLIC AND INDUSTRIAL MINERALS

SPECIAL PROVISIONS:

NIL

Alberta

DEPARTMENT OF ENERGY
Mineral Development Division
Coal & Mineral Development
Business Unit

7TH Floor
North Tower, Petroleum Plaza
9945 – 108 Street
Edmonton, Alberta T5K 2G6

Telephone (780) 427-7707
Fax (780) 422-5447

June 05, 2002

KIRSTEN KIMBERLEY SILCOX
4061 GARRISON BLVD SW
CALGARY AB T2T 6J8

Attention: KIRSTEN SILCOX

Re: METALLIC AND INDUSTRIAL MINERALS PERMIT NO. 9302060002

I am enclosing your executed copy of the above permit, which conveys the rights to explore for metallic and industrial minerals within the location described therein.

The lands you applied for were reviewed by the Crown Mineral Disposition Review Committee and, while the Committee had no objections in principle, it recommended mineral rights can be issued on the understanding that exploration activity must comply with all applicable provincial legislation and regulations.

Your attention is drawn to the "**Notice to Permittee**" page attached to the permit document for information relating to terms and conditions pertaining to the permit.

Any lands contained in your application which are not available for disposition, have not been granted in your permit.

Note that any exploration causing surface disturbance will require an exploration approval, in accordance with the Metallic & Industrial Minerals Exploration Regulation, prior to exploration being conducted. This approval is obtained from: Mr. Ralph Jamieson, Industrial Land Co-ordinator, Land Administration Division, Alberta Environment, 3rd Floor, South Petroleum Plaza, 9915 – 108th Street, Edmonton, Alberta, T5K 2C9; telephone: (780) 427-3570.

Continued...

Mineral rights can be issued for the requested lands on the understanding that exploration and any proposed development activity must comply with all applicable provincial legislation and regulations. You should be advised that:

1. Environmental concerns will be associated with rivers, creeks, lakes, and any sensitive terrain in the mineral permit area. Surface access will normally be available for exploration. However, topographic and ground conditions, as well as natural resource values, may restrict access in terms of erosion control, slope stabilization, access control, buffer zones, timing constraints, equipment restrictions, and other operational measures.

2. Any exploration causing surface disturbance (e.g., motorized ground equipment, line cutting, drilling) will require a Metallic Mineral Exploration Approval pursuant to the *Metallic and Industrial Minerals Exploration Regulation*, prior to exploration. This requirement applies to public and non-public land.

   In addition, the appropriate consent for surface access must be obtained from existing landowners or occupants, prior to entry for exploration. On public land, surface access for any exploration causing a surface disturbance is granted through the Metallic Mineral Exploration Approval.

   Environmental reservations may exist on some of the lands for the purpose of protecting environmentally sensitive areas. In addition, *Integrated Resource Plans Crowsnest Corridor and Livingstone-Porcupine Hills* are in effect for the area will provide guidance on land use zoning, land management and potential access restrictions on public land. Areas of potential concern include, but are not limited to, fish and wildlife habitat, topography, soil and ground conditions, buffer zones, watershed protection, slope stability, erosion control, natural areas and recreation sites. Surface access will be restricted depending on the location and nature of exploration. Any restrictions that are considered appropriate by the public land manager will appear as conditions of the Metallic Mineral Exploration Approval. Surface access for development of mineral resources may not be available in some areas due to land use zoning in any applicable Integrated Resource Plan. It is the responsibility of the mineral rights holder to seek clarification from the appropriate public land management agency as to any land use or environmental concerns that may restrict surface access for exploration and potential future development.

   To apply for a Metallic Mineral Exploration Approval and to obtain the name of the regional public land manager, please contact Mr. Ralph Jamieson, Exploration Resource Technologist, Land Administration, Public Land Division, Alberta Sustainable Resource Development, 5th Floor, South Petroleum Plaza, 9915 - 108 Street, Edmonton, Alberta, T5K 2C9; telephone: (780) 427-3570.

3. Alberta Community Development's concerns and regulatory requirements can be satisfactorily addressed through Sections 27 and 33(2) of the *Historical Resources Act*. Depending on the location and extent of mineral exploration and the nature of the historical, archaeological, and paleontological resources, there may be restrictions as well as the need

Continued...

for an Historical Resources Impact Assessment (HRIA). Please contact Mr. Dean Wetzel, Resource Management Planner, Historic Sites Service, Alberta Community Development, Old St. Stephen's College, 8820 - 112 Street, Edmonton, Alberta, T6G 2P8; telephone: (780) 431-2332.

The commencement date is June 04, 2002. Kindly pay particular attention to your assessment work requirements pursuant to section 14 of the Metallic and Industrial Minerals Regulation.

If you require further information regarding transfers, please contact Ms. Brenda Ponde, Director, Sales, Oil Development, 2nd Floor, Petroleum Plaza, North Tower, 9945 – 108th Street, Edmonton, Alberta, T5K 2G8; telephone: (780) 422-9394.

The Department acknowledges receipt of your payment in the amount of $535.00.

If you have any questions or concerns, you can call me at 427-9075 or our main number at 427-7707.

Yours truly,

Hazel Henson

Hazel Henson
Team Lead
Coal & Mineral Development
Encl.

MA# 2196

cc: Dean Wetzel, Alberta Community Development

APPENDIX C

Detailed Geological Logs, December 2003 Trenches

Trench 1

W-E in TRENCH m	Overburden Depth	Length W-E From	To	m	Zone	Overburden Depth	Sample #	Description	Bed Thickness (Typical) Inches	Dips Angle	Direction	Strike	Fracture Orientation Direction	Dip Angle
0	0.1													
2	0.2	0	5	5	UV	0.3	T1-1.0, 5.0	Strongly fractured brownish-grey to grey, very fine-grained dolomitic calcareous siltstone with weak magnetic properties. Very fine-grained shiny steel-grey metallic minerals observed with 10X magnification(<3.0%). Possible metallic minerals are detrital magnetite, rutile, .	0.75-4.0	25	259	349		
4	0.2	5	6.3	1.3	UV	0.3	T1-6.3	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, rutile, .	massive	28	257	347	288	80
6	0.4	6.3	7	0.7	UV	0.5	no sample	Same as above	massive	14.5	283	13	288	80
8	0.9	7	13	6	UV	0.5	T1-13.4	Same as above	massive	17	270	0	288	80
10	0.7	13	14.9	1.9	MV	0.5	no sample	Same as above	massive	16-25	272	2	No M.	No M.
12	0.65	14.9	16	1.1	MV	0.4	no sample	Same as above	massive	17.5	263	353	283-169	80
14	0.5	16	17.5	1.5	MV	0.4	no sample	Same as above	massive	35	252	342	347	80
16	0.4	17.5	22.3	4.8	MV	0.4	T1-21.0	strongly fractured brownish-grey to grey massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, rutile, .	fractured, massive	No M.	No M.	No M.	chaotic	No M.
18	0.4													
20	0.3													
22	0.6	22.3	36	13.7	LV	1	T1-36.0	Same as above	fractured, massive	34	261	351	98	80
24	1	36	42.8	6.8	LV	0.3	T1-42.7	Fractured brownish-grey to grey massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, rutile, .	fractured, massive	34	261	351	102	80
26	1													
28	1													
30	1	42.8	45.7	2.9	LV	0.1	T1-45.0	Strongly fractured brownish-grey to grey massive weakly magnetic dolomitic calcareous siliceous siltstone slabs vary in thickness from 1.0" to 6.0" with very fine-grained metallic minerals observed with 10X magnification (<1.0%) Possible metallic minerals are detrital magnetite, rutile, .	0.75-6.0	No M.	No M.	No M.	No M.	No M.
32	1													
34	1													

Note: UV - Upper Vega, MV - Middle Vega, LV - Lower Vega

Trench 2

W-E in TRENCH m	Overburden Depth	Length W-E in trench From	To	m	Zone	Overburden Depth	Sample #	Description	Bed Thickness (Typical) Inches	Dips Angle	Direction	Strike	Fracture Orientation Direction	Dip Angle
0	0.1	0	5	5	UV	0.4	T2-5.0	Strongly fractured brownish-grey to grey, very fine-grained dolomitic calcareous siltstone with weak magnetic properties. Very fine-grained shiny steel-grey metallic minerals were observed with 10X magnification(<3.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0" to 5.0"	26	272	2	280-290	80
2	0.6													
4	1													
6	0.4													
8	0.6	5	9.7	4.7	UV	0.5	T2-9.7	Brownish-grey to grey, very fine-grained dolomitic calcareous siltstone with weak magnetic properties. Very fine-grained shiny steel-grey metallic minerals were observed with 10X magnification(<3.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0" to 2.0"	17.5	275	5	280	80
10	0.45													
12	0.55													
14	0.3	9.7	16	6.3	UV	0.3	T2-15.8	Fractured Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	>10"	16	272	2	285	>80
16	0.3						T2-16.0							
18	0.4													
20	0.3	16	20	4	MV	0.3	T2-19.8	Strongly fractured massive dark reddish brown with limonitic patches, very fine-grained dolomitic calcareous magnetic siltstone, no definite bedding plane observed Possible metallic minerals are detrital magnetite, and rutile.	massive	No M.	No M.	No M.	268	No M.
22	0.3													
24	0.3	20	29.7	9.7	MV	0.4	no sample	same as above	massive	No M.	No M.	No M.	No M.	No M.
26	0.5	29.7	32.5	2.8	MV	0.4	T2-30.1	same as above	massive	33.5	283	13	No M.	No M.
28	0.5	32.5	34.5	2	MV	0.5	T2-32.5	Fractured Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	2,3,31/4,6"	26	257	347	No M.	No M.
30	0.25													
32	0.4													
34	0.3	34.5	35	0.5	MV	0.6	T2-34.2	Bedded very fine-grained dolomitic calcareous weakly magnetic siltstone with very fine-grained metallic minerals observed with 10X magnification (<3.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0-3.0"	31.5	278	8	286	80
36	0.2						T2-35.0							
38	0.35								1.5, 2.0, 6.0"	28	278	8	No M.	No M.
40	0.5	35	36.7	1.7	MV	0.45	T2-36.7	same as above	1.0-6.0"	39	257	347	No M.	No M.
42	1	36.7	37.3	0.6	MV	0.45	T2-37.4	Fractured Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	massive	31.5	266	356	No M.	No M.
44	0.2													
46	0.8													
48	0.8	37.3	39.1	1.8	MV	0.45	T2-39.2	Disturbed float sample - brownish grey to grey very fine-grained weakly magnetic dolomitic calcareous siliceous siltstone slab with very fine-grained metallic minerals observed with 10X magnification (<1.0%)	1.0"	No M.	No M.	No M.	No M.	No M.
50	0.5													
52	0.8	39.1	43.8	4.7				No outcrop						
54	0.65	43.8	44.5	0.7	LV	0.25	T2-44.5	Fractured Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile. P.S. Sample # T2-44.5 - slab parting due to fracturing orientation	massive	41	315	45	262	80
56	0.3													
58	0.2													
60	0.5													
62	0.3	44.5	50.1	5.6	LV	0.5	no sample	same as above but massive and less fractures	14.5"	30	265	355	No M.	No M.
64	0.7	50.1	50.7	0.6	LV	0.75	T2-50.4	Brownish-grey to grey weakly magnetic very fine-grained siltstone with dark-grey laminations(1.0-2.0 mm) in thickness shaly laminated fine-grained siltstone Very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	0.5-2.5"	30	265	355	No M.	No M.
66	1						T2-50.8							
68	0.1													
		50.7	50.9	0.2	LV	0.5	no sample	Very hard Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile. *P. S.* 50.9 - contact between laminated shaly siltstone with massive siltstone	massive	36	257	347	No M.	No M.

Trench 2

W-E in TRENCH m	Overburden Depth	Length W-E in trench From	To	m	Zone	Overburden Depth	Sample #	Description	Bed Thickness (Typical) Inches	Dips Angle	Dips Direction	Strike	Fracture Orientation Direction	Fracture Orientation Dip Angle
		50.9	51.6	0.7	LV	0.5	no sample	*P. S.* 51.6 - contact between massive siltstone and laminated shaly siltstone	9.0"	37	257	347	No M.	No M.
		51.6	54	2.4	LV	0.25	T2-53.1	*P. S.* 52.0 - contact between laminated shaly siltstone with massive siltstone	9.0"	30	250	340	No M.	No M.
		54	55.5	1.5	LV			no outcrop with deep overburden						
		55.5	56.1	0.6	LV	0.5	T2-56.1	Interval of thinly bedded laminated dolomitic calcareous shaly siltstone	0.5-0.75"	39	259	349	No M.	No M.
		56.1	56.3	0.2	LV	0.4	no sample	Very hard Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile. *P. S.* 56.2 - contact between laminated shaly siltstone with massive siltstone	5"	36	264	354	No M.	No M.
		56.3	56.8	0.5	LV	0.3	no sample	brownish grey to dark grey, clayey, friable shaly siltstone *P. S.* 56.8 - contact between friable laminated shaly siltstone with massive siltstone	0.1-3.0"	36	255	345	No M.	No M.
		56.8	57	0.2	LV	0.3	no sample	Very hard Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	18"	36	255	345	No M.	No M.
		57	59.3	2.3	LV	0.6	T2-57.3	Brownish grey to dark grey, clayey, friable shaly siltstone *P. S.* 57.45 - contact between friable laminated shaly siltstone with massive siltstone	0.1-6.0"	34	266	356	No M.	No M.
		59.3	59.55	0.25	LV	0.5	no sample	Very hard Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	12"	No M.	No M.	No M.	No M.	No M.
		59.55	61.05	1.5	LV	0.3	no sample	Interval of thinly bedded laminated dolomitic calcareous shaly siltstone	<1.0"	35	262	352	No M.	No M.
		61.05	61.2	0.15	LV	0.3	no sample	Interval of finely grained dolomitic calcareous siltstone with thicknesses vary from 3-5" thick separated by Interval of thinly bedded laminated dolomitic calcareous shaly siltstone	3-5"	No M.	No M.	No M.	No M.	No M.
		61.2	61.75	0.55	LV	0.5	no sample	10" thick interval of brownish grey to dark grey, clayey, friable shaly siltstone		45	253	343	No M.	No M.
		61.75	63.1	1.35	LV	0.3	T2-62.8	Brownish-grey to grey weakly magnetic very fine-grained siltstone with dark-grey laminations(1.0-2.0 mm) in thickness shaly laminated fine-grained siltstone	0.5-3.5	37	259	349	No M.	No M.
		63.1	63.5	0.4	LV	0.5	T2-63.3	Very friable , shaly calcareous beds intercalated with competent very fine-grained grey to greyish brown weakly magnetic dolomitic calcareous siltstone	0.25-1.0	No M.	No M.	No M.	No M.	No M.
		63.5	64.7	1.2	LV	0.6	T2-63.9	Soft, fine-grained, laminated, calcareous siliceous weathered siltstone intercalated with friable shaly siltstone		44	267	357	No M.	No M.
		64.7	68	3.3	LV	0.2	no sample	Strongly fractured brownish-grey to grey massive weakly magnetic dolomitic calcareous siliceous siltstone slabs vary in thickness from 0.75" to 6.0" with very fine-grained metallic minerals observed with 10X magnification (<1.0%) Possible metallic minerals are detrital magnetite, and rutile.	0.75-6.0	No M.	No M.	No M.	No M.	No M.

Note: UV - Upper Vega, MV - Middle Vega, LV - Lower Vega

Trench 3

W-E in TRENCH m	Overburden Depth	Length W-E From	To	m	Zone	Overburden Depth	Sample #	Description	Bed Thickness (Typical) Inches	Dips Angle	Dips Direction	Strike	Fracture Orientation Direction	Fracture Orientation Dip Angle
0	0.1	0	2.5	2.5	UV			No outcrop						
2	0.9													
4	0.1	2.5	6.9	4.4	UV	0.45	T3-4.8	Fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	5, 7 to 9"	15,22,24 30,34,38	266	356	266	80
6	0													
8	0.1													
10	0	6.9	25.2	18.3	UV	1.1	T3-21.8 T3-25.2	Strongly fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile. Possible fault zone?	1.0 to 8.0"	No M.	No M.	No M.	No M.	No M.
12	0.1													
14	0.1													
16	0.2	25.2	31	5.8	MV	0.8	T3-31.0	Fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0 to 8.0"	16 to 27	297	27	281	80
18	0.1													
20	0.2													
22	0.2	31	35	4	MV	0.6	T3-35.0	Same as above	1.0 to 8.0"	33	270	0	294	80
24	0.3	35	36.9	1.9	MV	0.55	no sample	Strongly fractured Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0 to 8.0"	33.5	257	347	182	80
26	0.7													
28	0.3													
30	0.15	36.9	43.8	6.9	MV	0.4	T3-38.2 T3-39.5 T3-43.0	Fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone to occasionally thinly laminated dark grey siltstone to very thin shaly beds. Very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile. At 43.8 m., there is an elevation drop of 1.2 m.	0.2 to 4.0"	34	280	10	No M.	No M.
32	1.4			0										
34	0.5	43.8	60	16.2	LV	0.8		No outcrop, the trench consists of mostly rounded small boulders < 5" in diameter with clay, silt and sand mix - Glacial till?						
36	0.5													
38	0.1	60	60.5	0.5	LV	0.7	T3-60.3	Finely laminated brownish grey weakly magnetic calcareous siltstone Very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0 to 8.0"	26	268	358	No M.	No M.
40	0.2													
42	0													
44	1.1	60.5	67	6.5	LV			No outcrop, the trench consists of mostly rounded small boulders < 5" in diameter with clay, silt and sand mix - Glacial till?						
46	1													
48	1	67	70	3	LV			Bridge for tractor, no outcrop						
50	1	70	77	7	LV	0.2	T3-73.4 T3-74.4 T3-76.0	Brownish-grey to grey, very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone to thinly and finely laminated dark grey siltstone. Very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0,1.2 & 1.25	48	272	2	No M.	No M.
52	1													
54	1													
56	1													
58	1													
60	0.7													
62	0.7													
64	0.9													
66	0.9													
68	0.1													
70	0.1													
72	0.3													
74	0.2													
76	0.2													
77	0.1													

Note: UV - Upper Vega, MV - Middle Vega, LV - Lower Vega

Trench 4

W-E in TRENCH m	Overburden Depth	Length W-E From	To	m	Zone	Overburden Depth	Sample #	Description	Bed Thickness (Typical) Inches	Dips Angle	Direction	Strike	Fracture Orientation Direction	Dip Angle
0	0.1	0	4	4	UV	1	no sample	Strongly fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile. Possible fault zone?		38	274	4	274	4
2	0.2													
4	0.3													
6	0													
8	0.5													
10	1	4	5.6	1.6	UV	0.7-0.9	T4-4.6	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.5 to 2.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.5 to 2.0"	24	238	328	No M.	No M.
12	0.8						T4-5.7			33	238	328		
14	1.2													
16	0.9	5.6	7	1.4	UV	0.5	no sample	Interval of thinly bedded laminated dolomitic calcareous siltstone	1.0 to 4.0"	No M.	No M.	No M.	360	No M.
18	0.8	7	9	2	UV	0.5	T4-8.0	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.5 to 2.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.		25	238	328	No M.	No M.
20	0.8													
22	0.9													
24	0.8	9	10.5	1.5	UV	0.9	T4-10.7	One massive bed with the same description as above	8	27	248	338	No M.	No M.
26	0.9	10.5	12	1.5	UV	1	T4-12.0	Fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.5 to 2.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	massive	No M.	No M.	No M.	282	77
28	0.6												174	71
30	1													
		12	28	16	UV			No outcrop						
32	0.9	28	28.7	0.7	MV	0.5			14	34	237	327	No M.	No M.
34	0.1	28.7	32	3.3	MV			No outcrop						
36	0.8	32	35	3	MV	1.0 to 0.5	T4-33.7	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.5 to 2.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	3.0 to 16.0"	29	242	332	No M.	No M.
38	0.9													
40	0.5													
42	0.1	35	37	2	MV			No outcrop						
44	0.2	37	38	1	MV	0.9	T4-37.7	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.5 to 2.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	massive	No M.	No M.	No M.	No M.	No M.
46	0.7													
48	0.8													
50	0.8	38	40	2	MV			No outcrop						
52	0.8	40	44	4	LV	0.2	T4-42.8	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.0 to 16.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	1.0 to 16.0"	31	228	318	No M.	No M.
54	0.8						T4-43.8			31	268	358	No M.	No M.
56	0.3						T4-43.9							
58	0.2	44	46	2	LV	0.7	no sample	Same as above	4.0 to 15.0"	No M.	No M.	No M.	No M.	No M.
60	0.8	46	55.5	9.5	LV			No outcrop						
62	0.2	55.5	56.5	1	LV	0.3	no sample	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses from 1.0 to 16.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	massive	27	262	352	No M.	No M.
64	0.3													
66	0.5													
68	0.9	56.5	58.7	2.2	LV	0.2	T4-56.8	Fractured brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with very fine-grained metallic minerals observed with 10X magnification (<1.0%)						
70	0.2													
72	0.1							Possible metallic minerals are detrital magnetite, and rutile.						
74	0.1							Possible fault?						

Trench 4

W-E in TRENCH m	Overburden Depth	Length W-E From	To	m	Zone	Overburden Depth	Sample #	Description	Bed Thickness (Typical) Inches	Dips Angle	Dips Direction	Strike	Fracture Orientation Direction	Fracture Orientation Dip Angle
76 78 80	0.2 0.8 0.8	58.7	59.2	0.5	LV	0.5	no sample	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone with bedding thicknesses up to 10.0" and with very fine-grained metallic minerals observed with 10x magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	10.0"	29	308	38	No M.	No M.
82 83	0.7 0.7	59.2	61.8	2.6	LV	0.2	T4-61.4	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone to thinly laminated dark grey siltstone and to very thin shaly clayey beds. Very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	12.0"	37	241	331	No M.	No M.
		61.8	68.5	6.7	LV	0.3	T4-63.5 T4-65.9 T4-67.5	same as above	1.0 to 8.0	48	246	336	No M.	No M.
		68.5	78	9.5	LV	0.8	T4-69.5 70 T4-70.8 T4-71.9 T4-73.1 T4-74.0 T4-74.9 T4-75.0 T4-75.7 T4-76.4 T4-77.3 T4-77.8	Brownish-grey to grey very fine-grained massive weakly magnetic dolomitic calcareous siliceous siltstone to thinly and finely laminated dark grey siltstone. Cross-cutting fractures vary from 3.0 to 8.0" apart Very fine-grained metallic minerals were observed with 10X magnification (<1.0%). Possible metallic minerals are detrital magnetite, and rutile.	0.75 to 6.0"	47 54 44 39 39 No M. 38 38 No M. 38 No M. 38	259 79 261 256 273 No M. 245 245 No M. 244 No M. 248	349 169 351 346 3 No M. 335 335 No M. 334 No M. 338	260 260 260 260 260 260 260 260 260 260 260 260	80 80 80 80 80 80 80 80 80 80 80 80
		78	83	5	LV			No outcrop						

Note: UV - Upper Vega, MV - Middle Vega, LV - Lower Vega

APPENDIX D

APPENDIX D

Exploration Permit

GEO 39 (1999 10 28)

Alberta
ENVIRONMENT
Land and Forest Service
Land Administration Division

EXPLORATION LICENCE N^{O} 5310

Licence is hereby granted to **Terracon Geotechnique Ltd**

of **1000, 706 - 7 Avenue SW, Calgary, Alberta T2P 0Z1**

for Metallic and Industrial Minerals Exploration to conduct exploration in the Province of Alberta

---

This licence is issued subject to the provisions of The Mines and Minerals Act, and The Metallic and Industrial Minerals Exploration Regulation.

Dated at Edmonton, this **7th** day of **September** 2000

Fee $50.00 Paid

Ralph Jamieson

GEO 41 (1999 10 28)

Alberta
ENVIRONMENT
Land and Forest Service
Land Administration Division

PERMIT TO OPERATE EXPLORATION EQUIPMENT N^{O} 736

Permission is hereby granted to **Terracon Geotechnique Ltd**

of **1000, 706 - 7 Avenue SW, Calgary, Alberta T2P 0Z1**

to operate exploration equipment in the Province of Alberta subject to Part 10 of The Mines and Minerals Act, and The Metallic and Industrial Minerals Exploration Regulation.

Dated at Edmonton, this **7th** day of **September** 2000

Fee $50.00 Paid

Ralph Jamieson

APPENDIX E

APPENDIX E

Related Correspondence

Alberta
COMMUNITY DEVELOPMENT

Premier's Award of Excellence

Cultural Facilities and
Historical Resources Division

Office of the Assistant
Deputy Minister

Old St. Stephen's College
8820 - 112 Street
Edmonton, Alberta
Canada T6G 2P8

Telephone 780/431-2300
Fax 780/427-5598

September 23, 2002

Our File(s): 4650-S-026

Received: Sept. 27/02
Friday June 18/02 initial
Reply to letter of

Ms. Kirsten Silcox
4061 Garrison Blvd. S.W.
Calgary, Alberta
T2T 6J8

Dear Ms. Silcox:

SUBJECT: METALLIC & INDUSTRIAL PERMIT NO. 9302060002
PROPOSED QUARRY OPERATIONS LSD 11, 12, 13-1-8-6-W5M
LSD 8, 9, 16-11-8-6-W5M; LSD 10, 11, 14, 15-36-7-6-W5M
HISTORICAL RESOURCES ACT REQUIREMENTS

Thank you for providing staff of the Heritage Resource Management Branch of Alberta Community Development with a copy of the plans for the captioned proposed quarry sources. All agencies have completed their review of this project.

Historical Resources Potential Evaluation

Archaeological Resources: The proposed development area contains a prominent hill with a flat top, a valley pass and level areas near a lake. Previous research in the general area has demonstrated that such features have very high potential for the occurrence of historical resources. The potential of development to impact historical resource sites is considered to be very high. On this basis staff of the Heritage Resource Management Branch have recommended that an Historical Resources Impact Assessment for archaeological resources be required for this project. I agree with this recommendation.

Palaeontological Resources: Staff of the Royal Tyrrell Museum of Palaeontology have reviewed this proposal and have indicated that it is uncertain as to whether or not palaeontological resources could be impacted by development. On this basis they have recommended that an Historical Resources Impact Assessment is not necessary for this project, but rather any geological studies of the quarry area along with the proposed excavation schedule should be sent to the Royal Tyrrell Museum so that staff can periodically monitor excavations. I agree with these recommendations.

***HISTORICAL RESOURCES ACT* REQUIREMENTS**

It has been determined that, pursuant to Section 37(2) of the *Historical Resources Act*, your clients are required to conduct an Historical Resources Impact Assessment for archaeological

...cont.

resources on this project prior to development proceeding. In addition any geological studies, as well as the proposed excavation schedule, are to be sent to the Royal Tyrrell Museum of Palaeontology. The Historical Resources Impact Assessment and mitigative studies as well as the Palaeontological requirements are to be prepared in accordance with the instructions outlined in Schedule A (attached).

Should you require additional information or have any questions regarding our Department's review of this project, please contact either Barry Newton of the Heritage Resource Management Branch, (780-431-2330), or Dan Spivak of the Royal Tyrrell Museum of Palaeontology (403-823-7707).

On behalf of Alberta Community Development, I would like to thank you for your co-operation in our endeavour to conserve Alberta's past.

Sincerely,

Mark Rasmussen
Assistant Deputy Minister
Cultural Facilities and
Historical Resources Division

cc: Dan Spivak, Royal Tyrrell Museum of Palaeontology
Barry Newton, Heritage Resource Management Branch, 4650-S-026

Alberta
COMMUNITY DEVELOPMENT

Cultural Facilities and
Historical Resources Division

Office of the
Assistant Deputy Minister

Old St. Stephen's College
8820 - 112 Street
Edmonton, Alberta
Canada T6G 2P8

Telephone 780/431-2300
Fax 780/427-5598

January 28, 2003

Our File(s): 4650-S-026, 2002-264

Ms. Kirsten Silcox
4061 Garrison Blvd. S.W.
Calgary, Alberta
T2T 6J8

Dear Ms. Silcox:

SUBJECT: METALLIC & INDUSTRIAL PERMIT NO. 9302060002
PROPOSED QUARRY OPERATIONS LSD 11, 12, 13-1-8-6-W5M
LSD 8, 9, 16-11-8-6-W5M; LSD 10, 11, 14, 15-36-7-6-W5M
HISTORICAL RESOURCES IMPACT ASSESSMENT, PERMIT 2002-264

The Cultural Facilities and Historical Resources Division (CFHRD) of Alberta Community Development have recently reviewed a copy of a Final Report from Lifeways of Canada Ltd. regarding the results of the Historical Resources Impact Assessment (HRIA) that they conducted for the captioned project.

HISTORICAL RESOURCES IMPACT ASSESSMENT (PERMIT 2002-264)

Terms of Reference

Under Mitigative Research Permit 2002-264, Lifeways of Canada Ltd. conducted an Historical Resources Impact Assessment on a ca 1-hectare quarry and access road located on a bedrock ridge west of Summit Lake. The consultant used foot traverses and visual inspections to assess the area.

HISTORICAL RESOURCES ACT REQUIREMENTS/CLEARANCE

No historical resource sites were recorded during the course of this assessment. Based on these results you are granted *Historical Resources Act* clearance to proceed with this development. However as stated in my previous letter to you, any geological studies of the quarry area along with the proposed excavation schedule are to be sent to the Royal Tyrrell Museum so that staff can periodically monitor excavations at the quarries.

Should you require additional information or have any questions regarding our Department's review of this project, please contact Barry Newton of the Heritage Resource Management Branch, (780-431-2330, Cultural Facilities and Historical Resources Division, Alberta Community Development, 8820 - 112 Street, Edmonton, Alberta, T6G 2P8; or Fax 780-427-3956).

...cont.

DEPARTMENTAL CONTACTS

Dan Spivak
Resource Management Program
Royal Tyrrell Museum of Palaeontology
Box 7500
Drumheller, Alberta
T0J 0Y0

Tel. 403-823-7707
Fax. 403-823-7131

Eric Damkjar
Eastern Slopes Archaeologist
Heritage Resource Management Branch
Cultural Facilities and Historical Resources Division
Alberta Community Development
8820 - 112 Street
Edmonton, Alberta
T6G 2P8

Tel. 780-431-2346
Fax. 780-427-3956

Barry Newton
Resource Management Planner
Heritage Resource Management Branch
Cultural Facilities and Historical Resources Division
Alberta Community Development
8820 - 112 Street
Edmonton, Alberta
T6G 2P8

Tel. 780-431-2330
Fax. 780-427-3956

TERRACON GEOTECHNIQUE LTD.

140, 2723 - 37 Avenue NE
Calgary, Alberta Canada T1Y 5V7 5R8
Phone: (403) 266-1150 Fax: (403) 233-0841
Email: terracon@terracon.ca
Web Site: www.terracon.ca

September 30, 2003

Land Administration Division
Alberta Environment
3rd Floor, 9915 - 108 Street
Edmonton AB
T5K 2C9

ATTENTION: Mr. Ralph Jamieson
Industrial Land Coordinator

Dear Mr. Jamieson:

As per our recent conversation, please find attached four copies of the application for physical work on the Crowsnest claims (Metallic and industrial permit # 9302060002). We include the following documents:

1. Application Form MME 14
2. Map 1: 50,000
3. Aerial photograph blowout of the work area with Trench and Test Pit Proposed Outlines
4. Copy of Terracon's Exploration License No. 5310
5. Copy of Terracon's Permit to Operate Exploration Equipment No. 736
6. Cheque in the amount of $100 for the application fee

Please note that we do not anticipate trenching any deeper than one metre and that no merchantable timber will be cut. Some light timber clearing, however, is anticipated in areas of heavy brush and small aspen tree cover. Areas disturbed will be documented for timber charges.

Should you have any questions, please do not hesitate to contact either Emmett Horne or Vassil Valchev at (403) 266-1150.

Sincerely yours,
TERRACON GEOTECHNIQUE LTD.

[redacted]

Emmett J. Horne, P. Geol.
Principal

ENCLOSURES

Alberta
SUSTAINABLE RESOURCE DEVELOPMENT

Land and Forest Service
Land Administration Division

MME 14 (REV. 03/2001)

METALLIC, QUARRIABLE AND PLACER MINERALS PRELIMINARY GEOPHYSICAL APPLICATION

☒ New Program ☐ Revised Program

APPLICATION FEE IN THE AMOUNT OF $100.00 MUST BE SUBMITTED WITH PRELIMINARY PLAN

Prospect Name CROWSNEST CLAIMS **Geophysical File Number**

Twp. EIGHT **Rge.** SIX **W** 5 **M**

Contact Person EMMETT HORNE **Phone Number** 403-266-1150

Licensee Name TERRACON GEOTECHIQUE LTD. **Licence Number** 5310

Licensee Address Suite 140, 2723 - 37th Avenue NE, Calgary, Alberta, T1Y 5R8

Permittee Name KIRSTEN SILCOX **Permit Number** 9302060002

Permittee Address 4061 Garrison Blvd. SW, Calgary, Alberta, T2T 6J8

Commencement Date (YY/MM/DD) 03/10/10 **Completion Date (YY/MM/DD)** 04/04/30

Energy Source (Dynamite, Vibroseis, etc) none

Equipment (Wheeled, Tracked, Portable Wheeled and/or tracked small backhoe or bulldozer

Device Used for Plugging Drillholes: N/A, Trenches will be backfilled

Mineral(s) Explored for: Building Stone and Decorative Rock

Type of Permit Tag: **Metallic and Industrial Mineral Permit**

Comments: See attached figures

Copies Sent To

Green Area — Forest _____
District _____
FMA _____
Other _____

White Area — District _____
_____
Other _____

Information Required on Map Legend

a *Scale 1:50,000 (4 copies)*
b *Location of Cut Lines*
c *Location of Drillholes*
d *Immediate Access (Roads, Trails, New/Existing Cut Lines)*
e *Campsites and/or Landing Strips*
f *Green/White Area Boundaries*
g *If Surveyed, Location by Reference to Section, Township, Range and Meridian*
If Unsurveyed, By Reference to NTS Grid
h *Location of Pits, Excavations and Workings*

OFFICE USE ONLY

File Number _____

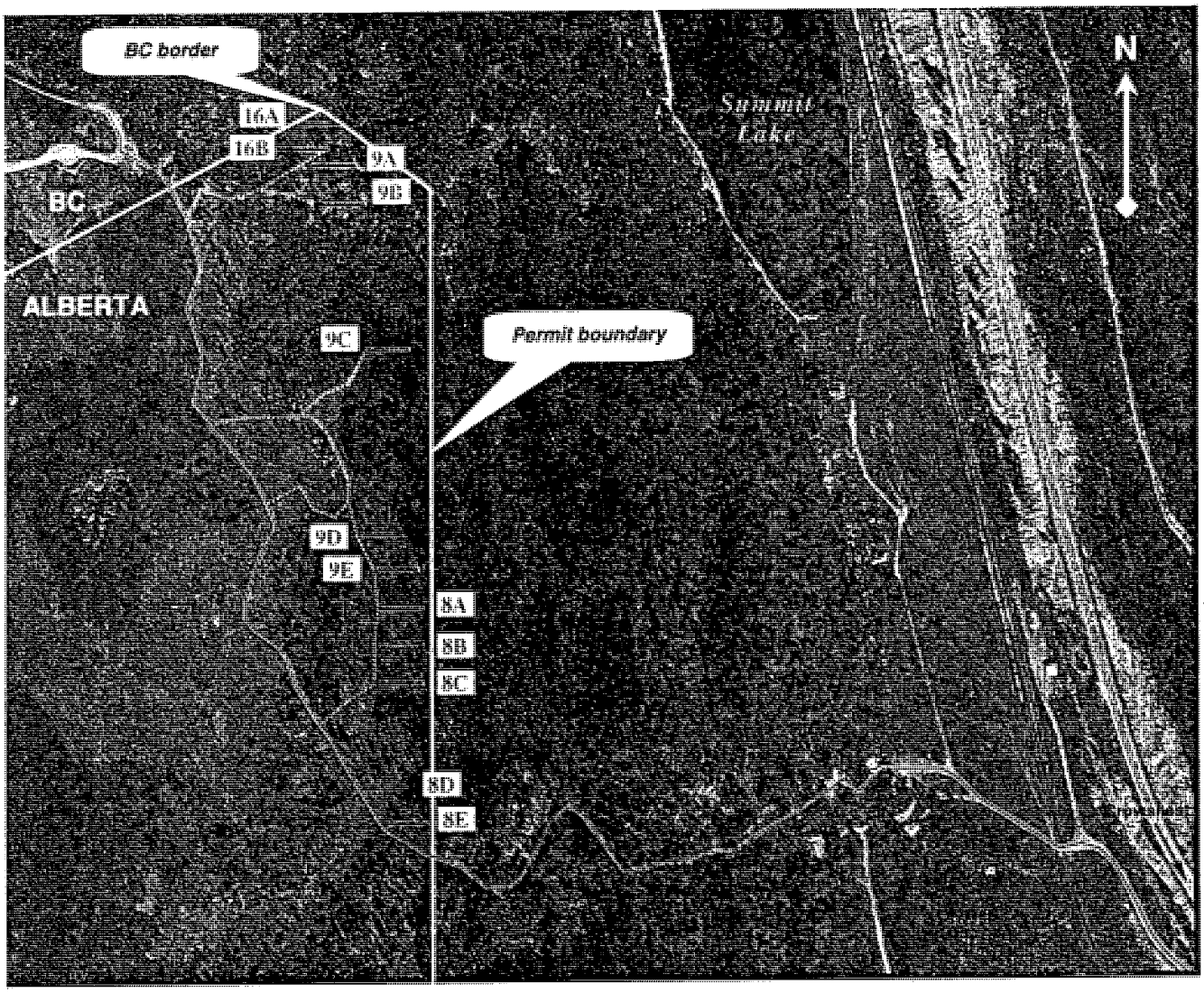
☐ White ☐ Green

Map _____
Forest _____
District _____
P.L. District _____
Field Date _____
Due Date _____

Referrals F&W _____
FMA _____
Parks _____
Lakes _____
Culture _____
Zone 1 _____

Comments (OFFICE USE ONLY)

AERO PHOTO BLOWOUT OF WORK AREA



Metallic and Industrial Mineral Permit 9302060002
Trench and Test Pit Proposed Outlines

LEGEND **Scale Approx. 1: 7,000**

———	Trenches – anticipated total length approximately 500 to 600 m.
8D	Trench Number with LSD Identifier. All Trenches are in Section 11, Tp 8, R6 W5M.
———	Access Roads
.....	Existing Trails To Be Used for Access

Note: Trenches in areas of thin soil cover. Depth of trenches approximately 1.0 m. Spacing in areas of shallow soil cover and favourable rock quality will be reduced from 50 to 25 m.

No merchantable timber will be cut; some light timber clearing is anticipated in areas of heavy brush and small aspen tree cover. Areas disturbed will be documented for timber charges.

Metallic and Industrial Mineral Permit 9302060002

WORK AREA

Tp8 R6

Tp8 R5

Tp7 R6

Tp7 R5

R6 W5M

R5 W5M

Livingstone-Porcupine Hills
Integrated Resource Plan
Land Use Zone 1
Reserved from Disposition

Coal Agreement

Scale 1 : 50,000

0 m 1000 m 2000 m 3000 m 4000 m

LEGEND

Metallic Permit

Area Considered for Pit Trenching in Section 11, Tp 8, R6 W5M*

*Trenches in areas of thin soil cover. Depth of trenches approximately 1.0 m. Spacing in areas of shallow soil cover and favourable rock quality will be reduced from 50 to 25 m.

No merchantable timber will be cut; some light timber clearing is anticipated in areas of heavy brush and small aspen tree cover. Areas disturbed will be documented for timber charges.

TERRACON GEOTECHNIQUE LTD.

140, 2723 - 37 Avenue NE
Calgary, Alberta Canada T1Y 5V7 5R8
Phone: (403) 266-1150 Fax: (403) 233-0841
Email: terracon@terracon.ca
Web Site: www.terracon.ca

FAXED May 13/04

May 11, 2004

Alberta Sustainable Resource Development
5 Floor, 9915 - 108 Street
Edmonton, Alberta
T5K 2G8

ATTENTION: Mr. Ralph Jamieson
Exploration Technologist, Disposition Services Section

RE: EXPLORATION PERMIT MME 030004 AND NEW EXPLORATION PERMIT

Dear Mr. Jamieson:

Further to our April telephone conversation I am writing to you to apply for an extension to MME 030004 to September 30, 2004.

The status of this permit is as follows:

A mechanical trenching program was conducted on the property in December 2003. Prior to the commencement of the December trenching program Sustainable Resources, Blairmore, indicated it was preferable to conduct reclamation during the summer months. Accordingly, based on this view, and the fact that results of the trenching program were not definitive and additional work is necessary, final reclamation was deferred to the summer of 2004.

On February 6, 2004, Sustainable Resources, Blairmore, granted Terracon approval in the form of a Temporary Field Authorization, to conduct additional prospect trenching lines using heavy equipment. In anticipation of better field conditions, Summit Natural Rock Inc., owner of the property, deferred this work to the summer of 2004.

I understand from his email of April 21, 2004, that Cory Wojtowicz, Forest Officer, Sustainable Resources (Southern Rockies Area), who is based in Blairmore, has discussed the situation with you with respect to MME 030004, and that approval was given to extend the permit to September 30, 2004.

We would much appreciate receiving formal approval of this extension.

At this time we would also like to make application for a further disposition of our New Exploration Permit to include mechanical work including blasting and hand-held diamond drilling to obtain fresh rock samples.

Five or six trenches totaling 25 fifty lineal metres would be blasted to a maximum depth of 2.5 metres in areas mechanically trenched in December 2003 and areas approved under MME 030004 for bulldozer trenching.

Likewise, hand-held diamond drilling (Winkie Drill) to a maximum depth of 6 metres would be conducted in areas mechanically trenched in December 2003 and areas previously approved under MME for bulldozer trenching.

All work conducted under the new disposition would be undertaken in the areas indicated for trenching in Terracon's September 30, 2003, application for approval for exploration as per the 1:50,000 topographic map and aerial photo enlargement (1:7,000 scale, approximately) which accompanied that application, and which was authorized under MME 030004.

If you should have any questions, please do not hesitate to contact me at (403) 266-1150.

Sincerely yours,
TERRACON GEOTECHNIQUE LTD.

[redacted]

Emmett J. Horne, P.Geol.
Principal

TERRACON GEOTECHNIQUE LTD.

140, 2723 - 37 Avenue NE
Calgary, Alberta Canada T1Y 5V7 5R8
Phone: (403) 266-1150 Fax: (403) 233-0841
Email: terracon@terracon.ca
Web Site: www.terracon.ca

June 30, 2004

Alberta Sustainable Resource Development
5 Floor, 9915 - 108 Street
Edmonton, Alberta
T5K 2G8

To Whom It May Concern:

RE: SUMMIT NATURAL ROCK INC. ASSESSMENT WORK REPORT FOR METALLIC AND INDUSTRIAL MINERAL PERMIT NO. 9302060002

Terracon Geotechnique Ltd. hereby authorizes Alberta Sustainable Resources Development to publish or reproduce the abovementioned Assessment Report.

Please return the two Assessment Work Draft Reports sent in error on June 28, 2004.

Yours sincerely,
TERRACON GEOTECHNIQUE LTD.

[redacted]

Emmett J. Horne, P.Geol.
Principal

CC J. Schindler
K. Silcox

ENCLOSURES

4061 Garrison Blvd. SW.,
Calgary,
Alberta.
T2T 6J8
June 30th, 2004

Ms. Shelly Hollands,
Alberta Department of Energy,
Mineral Development Division,
Coal and Mineral Development Business Unit,
7th Floor, North Tower, Petroleum Plaza,
9945-108th Street,
Edmonton,
Alberta.
T5K 2G6

Re: Metallic and Industrial Mineral Permit No: 9302060002(" Permit 9302060002")
Authorization to Copy

Dear Ms. Hollands,

Summit Natural Rock Inc. hereby authorizes Alberta Energy to copy, subject to Section 15(2) of The Mines and Minerals Act, Metallic and Industrial Minerals Regulation of the Province of Alberta, the report by Terracon Geotechnique Ltd. dated June 4, 2004, titled,

Summit Natural Rock Inc.
Assessment Work
Metallic and Industrial Mineral
Permit NO. 9302060002

Summit Natural Rock Inc. is the registered title holder (100.00000%) of Metallic and Industrial Mineral Permit No. 9302060002, and Summit Natural Rock Inc. has retained Terracon Geotechnique Ltd., 2723 - 37th Avenue NE., Calgary, Alberta, T1Y 5R8, as its technical advisors.

Yours truly

[redacted]

Kirsten Silcox
President
Summit Natural Rock Inc.

4061 Garrison Blvd. SW.,
Calgary,
Alberta.
T2T 6J8
June 30th, 2004

Ms. Shelly Hollands,
Alberta Department of Energy,
Mineral Development Division,
Coal and Mineral Development Business Unit,
7th Floor, North Tower, Petroleum Plaza,
9945-108th Street,
Edmonton,
Alberta.
T5K 2G6

Re: Metallic and Industrial Mineral Permit No: 9302060002(" Permit 9302060002")
Authorization to File Assessment Work.

Dear Ms. Hollands,

Summit Natural Rock Inc. hereby authorizes Terracon Geotechnique Ltd., 2723 - 37th Avenue NE, Calgary, Alberta, T1Y 5R8, to file on behalf of Summit Natural Rock Inc., the assessment work report covering the period June 4th, 2002 to June 4th, 2004, with respect to Permit 9302060002,

Terracon Geotechnique Ltd. held the original Exploration Permit MME - 030004, dated November 6th, 2003, to conduct mechanical work on the area covered by Permit 9302060002 when title was held by Kirsten Silcox. Title was subsequently transferred by Kirsten Silcox to Summit Natural Rock Inc.

Summit Natural Rock Inc. has retained Terracon Geotechnique Ltd. as its technical consultants with respect to Metallic and Industrial Minerals Permit No: 9302060002 together with continued utilization of MME-030004.

Yours truly,

[redacted]

Kirsten Silcox
President
Summit Natural Rock Inc.

4061 Garrison Blvd. SW.,
Calgary,
Alberta.
T2T 6J8
February 4th, 2004

Terracon Geotechnique Ltd.,
2723 37th Avenue NW.,
Calgary,
Alberta.
T1Y 5V7
("Terracon")

ATTENTION: Emmett Horne, Principal

RE: Metallic and Industrial Minerals Permit No: 9302060002
(" The Permit")

Dear Mr. Horne,

Please be advised as follows:

1. Title to The Permit was transferred from Kirsten Silcox to Summit Natural Rock Inc. (100.00000%) on October 21, 2003, but notification of the transfer was only received January 22, 2004. Summit is a newly formed company of which I am president.

2. Lands in the Crowsnest Pass area covered by The Permit are unofficially referred to as the Crowsnest Claims. Mechanical work on the Crowsnest Claims conducted under Exploration Permit No: MME-030004, is in the name of Terracon as agent for Kirsten Silcox.

3. Following your conversation on February 4th, 2004, with John Schindler, Summit Natural Rock Inc. as the registered owner of The Permit, hereby retains, effectively immediately, Terracon as its technical advisors with respect to The Permit.

4. Terms and conditions of Terracon's contract with Summit are the same as those under which the work was conducted for Kirsten Silcox.

Yours truly,

[redacted]

Kirsten Silcox, President

4061 Garrison Blvd. SW.,
Calgary,
Alberta.
T2T 6J8
June 30th, 2004

Ms. Shelly Hollands,
Alberta Department of Energy,
Mineral Development Division,
Coal and Mineral Development Business Unit,
7th Floor, North Tower, Petroleum Plaza,
9945-108th Street,
Edmonton,
Alberta.
T5K 2G6

Re: Metallic and Industrial Mineral Permit No: 9302060002(" Permit 9302060002")
Authorization Letters

Dear Ms. Hollands,

Thank you for your telephone call of June 30, 2004.

With respect to the assessment report dated June 4th, 2004 by Terracon Geotechnique Ltd. Calgary, Alberta, ("Terracon") and titled,

Summit Natural Rock Inc.
Assessment Work
Metallic and Industrial Mineral
Permit NO. 9302060002

Summit Natural Rock Inc. has provided Terracon with the following letters for inclusion in the assessment report

1. A letter authorizing Terracon Geotechnique Ltd.("Terracon") to file, on behalf of Summit Natural Rock Inc., the assessment report by Terracon covering the period June 4th, 2002 to June 4th, 2004.
2. A letter authorizing Alberta Energy, subject to the legal statutory confidentiality period, to copy Terracon's said assessment report.

These letters have been included in Appendix E, Related Correspondence.

If you have any further questions concerning submittal of the assessment report please telephone me at 403-241-4617 (Business).

Yours truly,

[redacted]

Kirsten Silcox
President
Summit Natural Rock Inc.