MINE BRANER	REMICAL ASSESSMENT REPORT
Rec 4	ON THE
JUL 2 3 2001	WK GROUP
File. KA	MLOOPS MINING DIVISION BRITISH COLUMBIA
Covering:	WK Chrome 1 (20 units) WK 1-12 (12 units)
Location:	NTS Map 92 I/14 50°57'N , 121°23'W 13 km north of Cache Creek
Work Performed:	September 17, 2000 to October 18, 2000

REPORT PREPARED BY: ØM

W. Kovacevic for Tilava Mining Corporation

July 15, 2001



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INTRODUCTION

This report presents the results of a 2000 exploration program, conducted by Tilava Mining Corporation on the WK Group of Claims in Kamloops Mining Division. The exploration target for this program was the outcroppings of bentonite on the south side of Ferguson Creek on the Logging Road # 5100. During the program, the property was expanded by staking of two new claims (two units) along the south-western border.

This report describes physical and geochemical program undertaken on the WK Group of claims during 2000. The work was financed by Tilava Mining Corporation and was supervised by W. Kovacevic, the president of the Company. The total cost of the program, excluding staking cost, is \$6,862 and the amount was filed for assessment credit.

LOCATION AND ACCESS

The property is located on Ferguson Creek, approximately 15 kilometers north-north west of the town of Cache Creek in south-central British Columbia. (Figure 1) The Geographic coordinates of the claim are 50°57'N. latitude by 121°23'W. longitude; N.T.S. 92 I/14W. Access is via Highway 97 from Cache Creek to Ferguson Creek; thence 3 kilometers east on a good logging road which branches of Highway 97.

PROPERTY AND OWNERSHIP

The WK Group described in this report consists of one 4 post mineral claim, plus twelve 2 post mineral claims totalling 800 ha located in Kamloops Mining Division (NTS 92 I/14) and shown in Figure 2. The claims are 100% owned by Tilava Mining Corporation and are described as follows:

Cla	im Name	Units	Tenure Number	Expiry Date	Hectares
		~~~			
WK.	Chrome 1	20	317307	May 6, 2002	500
WK	1	1	351764	May 6, 2003	25
WK.	2	1	351765	May 6, 2003	25
WK	3	1	351766	May 6, 2003	25
WK	<b>4</b> .	1	351767	May 6, 2003	25
WK.	5	1	351768	May 6, 2003	25
WK	6	1	351769	May 6, 2003	25
WK	7	1	364645	August 10, 20	003 25
WK	8	1	364646	August 10, 20	003 25



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WK.	9	1	364647	August 10, 2003	25
WK	10	1	364648	August 10, 2003	25
WK	11	1	380908	September 23, 2003	25
WK.	12	- 1	380909	September 23, 2003	25

# TOPOGRAPHY AND PHYSICAL ENVIRONMENT

The claims straddle Ferguson Creek , approximately 3 kilometers northeast of its confluence with Bonaparte River. Relief within the Ferguson Creek Valley is high, elevation range from 1,250 m in the north to less than 900 m in the southwest. The climate is semi-arid with temperatures ranging between -25° and +30°. The snowfall is moderate and the property is open for exploration from April to November. There is a sparse to moderate growth of pine, fir, aspen and low underbrush within the claim. Past logging operations, both north and south of Ferguson Creek, have harvested the larger ponderous pine and jackpine in the area, providing road access but little bedrock exposure. Outcrop is rare and is mainly confined to the cliffs along the creek valley and the rest of the claim is covered with glacial drift.

#### PREVIOUS WORK

The Ferguson Creek showings were first staked in 1939 as Henry Joe and Joe Henry. The Consolidated Mining and Smelting Company of Canada, Limited drove the adit in the bluff in 1931, probably in association with the testing of Scottie Creek showings which company also held at that time. The property was examined by H.M.A. Rice of the Geological Survey in 1942 and several samples were taken for analysis. The results are as follows:

Sample		% Cr ₂ 0 ₃	% Fe ₂ 0 ₃	Cr/Fe
Ferguson	West	50	15	2.25 to 1
Ferguson	East	44	15	2 to 1

A resource potential of 18,000 tones of "reasonably assured" material with 15% chromite and further 18,000 tones of equivalent material was estimated by Rice.

In 1977 the showings were staked as TIK 1 claim group and a ground magnetometer survey was done. The claims were allowed to lapse. The ground was staked by R. Lodmell as Chrome Hawk in 1983 and was sold to Qume Resources Ltd.. Qume cut a short grid over the shoving with intention to conduct an IP survey and, rock sampling of the shoving was done by J.D. Blanchflower, F.G.A.C. Geologist .The best sample (84-18-2) assayed 18.27 % Cr, 1,160 p.p.m. Ni). The ground was restaked by Equinox Resources Ltd. A soil geochemical survey was done for nickel, chromium and platinum group of metals but the results were not encouraging. In 1987 the ground was restaked by R.J. Nethery, P.Eng., as Ferg Claim, who geologically mapped the claim and sampled the shoving for Ni, Cr, Pt and Pd .The average grade of three samples was 21.5 % Cr and the assays for nickel, platinum and palladium were insignificant. The ground was held in 1991/92 by Michael Dickens as LIL 1 who recorded no work on the claims held.

In 1993 the ground was restaked as WK Chrome 1 by the author of this report W. Kovacevic. A grid, consisting of 1 km baseline and 2 km of grid lines was cut, slop corrected, chained and picketed to IP standard. Subsequently, The claims were acquired by Tilava Mining Corporation ("Tilava).

All previous works were concentrated on chromium and platinum group of metals ignoring the potential of the ground for other industrial minerals. The tertiary volcanic tuffs which outcrop along the upper area of Ferguson Creek are also of economic interest. During the 1994 exploration program carried by Tilava, these substantial deposits of volcanic ashes have been subjected to preliminary test to determine the potential of the material as the source for natural pozzolan and zeolites. All samples were delivered to B.C Research Inc., Industrial Mineral Section, and assayed under the supervision of Tim O'Hearn, P.Eng.

All samples, collected from the WK Chrome 1 claim during 1994 exploration program, satisfy the chemical requirement for use as an admixture to Portland Cement as laid out in ASTM Designation: C618-89-a. The results of the CEC (cation exchange capacity) indicated presence of zeolitic constituents however, the samples have low CEC.

During the 1996 exploration program carried by Tilava, the 1993 grid was extended by adding 500 m of base line and 3.8 km of east-west trending survey lines. A total of 28 pozzolan samples were collected from various outcrops and layers of volcanic ash.

All samples, assayed for pozzolan, satisfy the chemical requirement for natural pozzolan for use as an admixture to Portland cement. Further testing by Levelton Engineering of Richmond, B.C. indicate that natural pozzolan from the property readily complies with the physical requirements of ASTM C618-96.

During the 1997 exploration program carried by Tilava, a new grid was established on WK 1-6 claims consisting of 1000 m of baseline and 3.9 km of east-west trending survey grid lines cut, chained and picketed to IP standard. These survey lines are used during the geochemical rock (trench and pit) sampling. A total of 166.5 meters (13 trenches) approximately 1.2 meters wide (benched and hand-trenched) and 4 small pits were cut and escavated. The trenches were cut in general east-west direction following the configuration of a large, south facing, pozzolan exposure. A total of 64 rock samples were collected using the grid line for control. Whole rock ICP analysis by ACME Lab in Vancouver, B.C. and further test by Levelton Engineering or Richmond, B.C. indicated that natural pozzolan from the property readily complies with the physical requirements of ASTM C618-96.

In October of 1998 one diamond drill hole was drilled to a total of 46.32 meters vertically immediately north of the area trenched in 1987. The drilling was successful in proving that the pozzolan deposit, exposed at the area trenched, continues north under light overburden. The pozzolan was present throughout the section drilled with some small fragments or boulder present. The best section appears to be from 5.18 meters to 23.46 meters (17.68 meters) with only .60 meters of impure section. The geochem (WRA) results were consistent to previous sampling.

#### GEOLOGY

The claims are underlain by volcanic and marine sedimentary rocks of the Permian-age Cache Creek Group. These rocks have been intruded by sill-like ultramafic bodies which host the Ferguson Creek and nearby Scottie Creek chromite mineralization. Both older rock types are uncomfortably overlain by an extensive cover of volcanic flows and breccias belonging to the Eocene-age Kamloops Group.

Outcrop on the property is generally restricted to the Ferguson Creek gorge. The chrome-bearing ultrabasics form rugged "hoodoo" like outcrops for over 400 meters along the north side of Ferguson Creek. Serpentinized dunite and harzburgite are exposed in outcrop and workings but the prospect is largely covered by a thick mantle of till and alluvium. The serpentinized dunite is massive and locally may have granular texture.

Chromite occurs as parallel layers of grains in the dunitic rocks. The dunite trends northerly and has a steep eastward dip. It has been traced across the creek and is inferred to continue further north and south.

## 2000 WORK PROGRAM COMPLETED

The 2000 exploration program on the WK Group was conducted by Tilava Mining Corporation of Clinton, B.C.. This work was completed between September 17, and October 18, 2000. The 2000 program was designed to trench and sample outcropings of bentonite located south of Ferguson Creek on logging road #5100. It included grid preparation, hand trenching, rock geochemical



LEGEND

## TERTIARY

Miocene and/or Pliocene

13 Plateau lava; olivine basalt, basalt andesite, related ash and breccia beds; basaltic arenite.

Miocene

12 Deadman River Formation: shale, sandstone, tuff, diatomite, conglomerate, breccia.

Ologocene

11 Andesite, dacite, felsite, related tuff and breccia; greywacke, shale; minor lignite and conglomerate.

Eocene and (?) Ologocene

Kamloops Group

10 Skull Hill Formation: datite, trachyte, basalt, andesite, rhyolite, related breccias.

Eocene

Coldwater Beds

9 Conglomerate, sandy shale, arkose, coal,

JURASSIC

Middle Jurassic

- 8 Shale, grit,
- 7 Chert-pebble conglomerate, greywacke.

Mount Lytton Batholith

6 Granodiorite, quartz diorite.

# TRIASSIC

Upper Triassic

Guichon Creek Batholith

- 5 Granodiorite, quartz monzonite, quartz diorite. Nicola Group
- 9 Augite andesite flows and breccia, tuff, argillite, greywacke, grey limestone.

## PERMIAN AND/OR TREASSIC

3 Serpentinice and serpentinized peridotite.

PERMIAN

Cache Creek Group

• 2

- 2 Marble Canyon Formation: massive limestone, limestone breccia and chert, minor argillite, tuff, andesitic and basaltic flows.
- l Basic volcanic flows, tuff, chert, limestone, argillite.

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and mapping. Project supervision was by Willy Kovacevic, President of Tilava Mining Corporation and author of this report.

## Grid Preparation

Grid preparation on the property consisted of 1000 meters of Base Line and 4000 meters of grid lines cut, chained and picketed to IP standard.

The 2000 grid is shown in Figure 4 and consist of 1 km of Base Line trending Az 45° N and 4 km of perpendicular southeast-northwest trending, 100 meters spaced, survey grid lines.

# Trenching

A total of 51 meters (two trenches) approximately 1.2 meters wide (benched and hand trenched) were cut and excavated. In additional to trenching, in area were bentonite was partly exposed (trench # 1) all 35 meters were hand stripped and cleaned above the trench leaving the face exposed between 1 and 4 meters high. The trenches were cut in general east-west direction following the road cut and are described as follows:

# Trench #1

Located 3.6 km on the logging road #5100 (which road branches of Highway 97 approximately 13 km north of Cache Creek) at an elevation of 3000 feet. Total length of 35 meters (Fig. 4 ).

#### Trench #2

Located 4.7 km on the logging road #5100 at an elevation of 3200 feet. Total length of 16 meters (Fig. 4 ).

The rock samples in Trench #1 were taken at approximately 1 meter intervals and grouped in five composite samples and in Trench #2 fifteen samples are grouped in one composite sample as follows:

TRENCH NO.	LENGTH	NO OF SAMPLES	COMPOSITE ASSAY SAMPLE
TR #1	5 meters	5	TR#1-0-5
	10 meters	10	TR#1-0-10
•	10 meters	10	TR#1-10-20
	15 meters	15	TR#1-20-35
	35 meters	35	TR#1-0-35
TR #2	16 meters	15	TR#2-0-16

The color of the bentonite exposed in Trench #1 varies from white in interval 0-10 meters to light to buff in interval 20-35 meters. An effort was made to hand pick the whiter material from interval 0-5 meters and sample TR#1-W-0-5 was assayed separately. No significant chemical differences were detected between the sample TR#-W-0-5 and TR#1-0-10 except for a small increase in Al203 and CaO. Analytical results are available in Appendix I.

The sample TR#1-W-05 is further analyzed for cation exchange capacity (CEC) by B.C. Research Inc. and for x-ray diffraction (XRD) by Cominco Research Lab. Relatively high CEC of 86 meg/100g indicated that significant content of zeolite is present in the sample (Appendix II) . Cominco's x-ray diffraction test indicated that the sample is composed of abundant smectite clay (montmorillonite) with minor plagioclas feldspar and very minor quartz. Expected zeolite minerals were not present (Appendix III).

# ECONOMIC IMPLICATION FOR THE FERGUSON CREEK INDUSTRIAL MINERAL DEPOSITS

#### Chromite

Chromite is the sole commercial source of chromium. It is essential to many sectors of the defense and manufacturing industries. Because of its importance, it is classified as a strategic mineral and many countries stockpile chromite ore and ferochrome as a strategic reserve. About 90% of the world's high-grade chromite reserves in large stratiform deposits are in Africa- largely in South Africa and Zimbabwe. This, combined with the fact that almost one third of the world's podiform reserves are in the former USSR has made chromite a politically sensitive mineral. Canada and U.S. are almost entirely dependent upon imports for its chromium needs.

For military purposes chrome is used primarily in alloys associated with ordinance, missiles, armor plate and motor components. In industry it is used in superalloys, commonly light weight and heat resistant, such jet turbine components, as well as in the making of stainless steel. Three-quarters of the chromium goes into ferrochrome used in manufacturing of stainless and other alloy steels. The remainder of chromite is used in number of nonmetallurgical industries, including chemicals, pigments, refractories, and foundry sands.

The Ferguson Creek deposit chromite concentrates to 50%  $Cr_2$  O₃ and a Cr/Fe ratio of 2.25:1 which is satisfactory for

metallurgical grade (stainless and other chromium bearing steel alloys) with estimated price in the range of 75-120/t. The mineralization concentrates readily on Wilfley table to 50% Cr₂0₃ and 15% Fe at grinds of -28 to 1 35 mesh, yielding a chrome-iron ratio of 2.25 to 1. Additional tests must be performed on the chromite mineralization to determine if its sulfur, phosphorus, SiO etc. content are satisfactory.

# Pozzolan

The term "pozzolan" has been defined by the American Society for Testing Materials (ASTM) as " a siliceous or siliceous and aluminous material which itself possesses little or no cementitious value but will, in finely divided form and in presence of moisture, chemically react with calcium hydroxide at ordinary temperatures to form compounds possessing cementitious properties".

Pozzolanic material is mixed with standard Portland cement, generally in the proportion of 10 - 40% by weight. Pumice and pumicite are the most important pozzolans, but opaline shale and diatomite are also used as the source for natural pozzolan. A major use of portland-pozzolan cement is in construction of large-mass concrete dams. Among the advantages claimed for pozzolan-portland cement are generally cheaper cost; lowering of heat of hydration; earlier development of maximum rate of heat development; improved workability; increased plasticity; decrease in segregation of the concrete ingredients; decrease in bleeding of water; improved water tightness of concrete; greater sulphate resistance; improved tensile strength; elimination of retardation of alkali-aggregate reaction.

Pozzolan is sold by itself and also pre-mixed with portland cement with an estimated price in the range of \$100/t.

#### Zeolites

The tertiary volcanic tuffs, which outcrop along the upper area of Ferguson Creek, are also of economic interest as a potential source for natural zeolite. Preliminary tests indicate that most tuffs and sandstones in the area contain zeolites.

The most profitable applications of zeolites utilize their adsorption, ion exchange and molecular sieve properties. Present applications are in the following fields: construction industry as pozzolan; agriculture as soil conditioners, fertilizer regulators, deodorizers and feed supplements, aqua-culture in filtering systems; treatments of heavy metals and waste water, oxygen separators, solar energy storage; and domestic use as deodorizers and pet litter.

# Bentonite

Bentonite is a group of clays made up chiefly of smectite mineral montmorillonite or attapulgite commonly named "bentonite" after Benton Group of Wyoming, USA. Sodium bentonite (swelling bentonite) swells when immersed in water. Calcium montmorillonite does not swell in water (non swelling bentonite). The major use for bentonitic swelling clays is in oil-well drilling, non drip paint, liquid fertilizer suspension and animal feed, agricurtural limestone and gipsum suspension, joint and spackle compounds, and bitumen emulsion. Calcium bentonite is mainly used for its soptive properties to decolorize, deodorize, dehydrate, and/or neutralize various mineral, vegetable, and animal oils. In dry state these clays may be used as pet litter, in materials used to clean oil spills, as an anti-caking agent, in pharmaceuticals, or carrier for fertilizers, pesticides, or hazardous chemicals as and many other uses such as value in grouting and in lining ponds and canals ; and plasticity, in putty, adhesive, and ceramic bodies. Product derived from montmorillonite clay such as organic clays and most recently nanoclay are gaining popularity (in polymer compounds supplementing or substituting for polymer) from industry-rubber to plastics.

#### SUMMARY AND CONCLUSIONS

The ground, presently covered by WK Chrome I claim, has been known and partially explored by numerous operators since 1927. However, the poor outcrop exposure and the volcanic and alluvial cover has thwarted past exploration. Numerous sampling of the same showing and meaningless geochem/geophysic surveys have done little to improve the knowledge of the existing chromite mineralization. Since significant chromite mineralization occurs within the subject claim and nearby Scottie Creek and further north on Mika claim (presently covered by AW Group of claims ) it is reasonably to assume that the chromite lenses in the NE showing could continue for some distance both north and south under the cover.

Potential for other industrial minerals, mainly pozzolan ... zeolite and bentonite, do exist. The preliminary examination indicate that these minerals may by of substantial and possibly of enormous potential. Proximity to major transportation highway, render these minerals commercially valuable.

The test results, both chemical and physical, indicate that the pozzolan from the property readily complies with the requirements of ASTM C618-96 for use as mineral admixture in concrete.

## REFERENCES

Blanchflower J.D. (1984) - Report on Chrome Hawk Claim, Kamloops Mining Division, British Columbia for Qume Resources Ltd..

Blanchflower J.D. (1994) - Personal communication

- Nethery R.J. (1989) Geological Report Ferg Claim, Kamloops Mining Division, British Columbia (Assessment Report).
- Hancock K.D. Ultramafic associated Chromite and Nickel Occurrences in British Columbia (Open File 1900-27 (Chrome Ridge, Scottie Creek, Mika & Ferguson Creek occurrences p. 21-23)

Hancock K.D. Personal communication (1990-1993).

Harben P.W. (1990) - Industrial Minerals Geology and World Bates R.L. Deposits -(Chromite p. 52-61, Diatomite p. 102-105, Pumice & Scoria p. 217-219).

Harben P.W. (1992) - The Industrial Minerals Handy Book -A Guide to Markets, Specifications, & Prices (Chromite p. 21-22, Pumice & Scoria p. 67, Zeolites p. 94-95)

John Quarmley Nanoclays - Opportunities in polymer compounds & Al Rossi Industrial Minerals January 2001

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# STATEMENT OF EXPENDITURES

	Total 2000 Exploration Co	st	\$6,862.84
	Total Contractors \$1,656.08	_	\$1,656.08
	ACME Analytical Lab.\$ 235.83B.C. Research Inc.190.00Cominco Lab.80.25RVB Enterprises(E. Baresford P.Eng)1,150.00		
(D)	Contractors		
	Total \$217.87		\$ 217.87
(D)	Field supplies \$ 66.47 Air photo @ maps 151.40		
(C)	Groceries		\$ 151.56
	Total Transportation $\overline{\$1,262.33}$ .		\$1,262.33
	Truck 4x4 13 days @ \$75 p.d \$ 975 Fuel 287.33		
(B)	Transportation		
	Total Personnel \$3,57	5	\$3,575
Will Ferd Lorr Clen	ly Kovacevic - 13 days @ \$175 pd. \$2,27 dinand Schoming - 6 days @ 100 pd. 60 ne Hilstrom - 6 days @ 100 pd. 60 mence Mallet - 1 day @ 100 pd. 10	5 0 0 0	
Sept	cember 17, 2000 to October 18, 2000		
(A)	Personnel		

#### STATEMENT OF QUALIFICATIONS

I, Willy Kovacevic, of the Village of Clinton, Province of British Columbia, DO HEREBY CERTIFY THAT I have the following prospecting and related experience:

- 1971 Completed The Canadian Securities Course (The Investment Dealers Association of Canada).
- 1972 Attended a prospecting course (hard rock) organized by The B.C. & Yukon Chamber of Mines.
- 1975-1976 Developed and shipped polymetalic ore from Adams Plateau, B.C. to Cominco (Borex Mining Ltd. Spar I and Spar II claims).
- 1976 Attended a prospecting course (placer gold recovery) organized by B.C. & Yukon Chamber of Mines.
- 1977-1978 As the President of Lorcan Resources Ltd. (VSE public company) supervised and participated in gephysical and diamond drilling (Lost Cabin Mine, California). Worked as diamond driller helper.
- 1977-1979 Prospected and gechemically surveyed group of claims owned by Mineta Resources Ltd. (VSE public company) in Monashee Range, B.C.. Prospected and geochemically surveyed in south-central B.C. for Tilava Mining Corporation (as owner).
- 1980-1983 Explored for oil and gas in USA, produced and marketed oil in Clinton County, Kentucky for Robico Investment Ltd. (as owner) and for group of VSE public companies, Mineta Resources Ltd., Westam Oil Ltd. and Boram Oil Ltd. (as principal).
- 1983-1990 Supervised and participated in various phases of exploration on the properties owned by Star of Mineta Ltd. as principal (Kirkland Lake, Ontario, Adams Plateau, B.C., Golden Loon claims Little Fort, B.C..
- 1993-2000 Prospected and geochemically surveyed WK Chrome I industrial mineral prospect (chromium, pozzolan, zeolite and bentonite Clinton, B.C. and Golden Loon gold claims Little Forth, B.C. M.

Innan

Willy Kovacevic Prospector APPENDIX I

ACME ANALYTICAL LABORAT	CORIES LT	D. 85	2 E. HAS	TINGS ST.	VANCOUVER 1	BC V6A 1R6	PHONE (604	)253-3158 FAX	(604) 253-1716
			WI	IOLE ROCI	K ICP ANA	LYSIS			AA
		Tilava	. Minind	I Explora	ation Fi	le # A0046	35		
		Box 372, 30	7 McDonald /	lve, Clinton B	BC VOK 1KO Sul	bmitted by: Willy	Kovacevic		
SAMPLE#	SiO2 A1203 % . %	Fe203 Mg0 % %	CaO Na2O K % %	20 TiO2 P2O5 % % %	MnO Cr2O3 Ba % % ppr	a Ni Sr Zr m ppm ppm ppm	Y Nb Sc LC ppm ppm ppm	I TOT/C TOT/S % % %	SUM %
TR#1-0-5	53.92 12.74	5.33 5.00	1.15 .63 .	.66 .69 .05	.03 .003 245	5 83 162 160	17 <10 17 19.	7 .03 <.01 99	.99
TR#1-0-10	53.18 13.43	5.39 4.57	1.61 .83 .	57 .70 .13	.03 .004 228	8 54 195 143	22 <10 17 19.	5 .05 <.01 100	.02
TR#1-20-35	54.47 15.21	5.92 3.03	2.28 1.35	.71 .73 .04	.09 .008 292	2 41 262 139	18 <10 14 15.	1 .04 .01 100	.03
TR#1-0-35	53.99 14.24	5.59 3.69	1.93 1.05	.68 .71 .08	.06 .001 27	3 48 228 145	20 <10 15 17.	8 .04 <.01 99	.91
TR#1-W-0-5	53.65 12.72	5.27 4.96	1.13 .62 .	.68 .69 .09	.03 .001 280	0 69 160 154	16 <10 17 20.	1 .02 <.01 100	.03
TR#2-0-16	58.40 16.06	5.40 2.22	4.28 1.91 1.	51 .60 .34	.10 <.001 439	9 31 332 115	23 <10 13 9.	0 .05 .04 99	.93
S-00	82.24 9.13	1.0526	.85 2.56 2.	15 .08 .01	.01 .001 65	1 <20 235 35	<10 <10 2 1.	3 .03 <.01 99	.75
RE S-00	82.37 9.11	1.04 .25	.84 2.48 2.	15 .07 .05	.01 <.001 648	8 <20 233 38	<10 <10 2 1.	3 .01 .01 99	.78
STANDARD SU-15/USB	49.15 12.36	1.22 1.21	2.00 2.30 1.	.00 1.73 2.72	1.41 1.075 1994	4 18 398 982	22 23 12 5.	9 2.38 5.36 99	.51
	GROUP TOTAL - SAMP <u>Sample</u>	4A - 0.200 G C & S BY LEC LE TYPE: ROC <u>s beginning</u>	M SAMPLE BY O. (NOT INCL K R150 60C <u>'RE' are Rer</u>	LIBO2 FUSION, UDED IN THE S	, ANALYSIS BY 10 SUM) <u>are Reject Re</u>	CP-ES. LOI BY LOSS	ON IGNITION.		
DATE RECEIVED: NUV 16 20	UU DATE I	REPORT MA		50 29 00	SIGNED I	BI. <del>T</del> /. <b>T</b>	TD. TOYE, C.LEON	3, J. WANG; CERIIFI	ED B.C. ASSAYERS
		RIBS LTD. 852 R. HASTINGS ST. VANCOUVER BC VGA 1R6 PHONE (604) 253-3158 PAX (604) 253-1716   ICG.) WHOLE ROCK ICP ANALYSIS   Tilava Mining Exploration Box 372, 307 McDonald Ave, Clinton BC VOK 1KD Submitted by: Willy Kovacevic   Submitted by: Wilby Kovacevic							

Pare considered the confidential property of the client. Acme assum ne liabilities for actual cost of the analysis only. All resu

APPENDIX II

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BC Research Inc., BC Research and Innovation Complex, 3650 Wesbrook Mall, Vancouver, BC, Canada V6S 2L2 Telephone: (604) 224-4331 • Facsimile: (604) 224-0540 • Email: bcri@bcr.bc.ca • Website: http://www.bcr.bc.ca

File No: 2-21-900 February 1, 2001

SAMPLE TR#1-0-5 CEC 86 ME9/100 GRAM

Mr. Willy Kovacevic Tilava Mining Corporation Box 372 Clinton, BC Canada V0K 1K0

Dear Willy:

Subject: CEC Result

The cation exchange capacity (CEC) of the rock sample received January 26, 2000 was measured to be 86 meq/100g.

This result indicates there to be significant zeolite content in the sample. The cost for this testing is \$40.00. Thank you for your advance payment of \$40.00 to cover this work. Thank you for using BC Research.

Sincerely,

Tim O'Heath, P.Eng. Industrial Mineral Group Process & analysis Division

APPENDIX III



Mr. W. Kovacevic Tilava Mining Exploration Box 372 Clinton, B.C. VOK 1K0

6 February, 2001

Dear Sir:

# RE: X-Ray Diffractions / E.R.L. Job V01-0027R

Three samples were submitted for x-ray diffraction. The results are as follows:

SAMPLE R01:00154 (AW-01) is essentially magnesite with possible minor calcite.

X SAMPLE R01:00155 (TR #1-W-05) is composed of abundant smectite clay (montmorillonite) with minor plagioclase feldspar and very minor quartz. Expected zeolite minerals are not present.

**SAMPLE R01:00156 (AW-04)** contains both a light coloured phase which is hydromagnesite and a dark coloured mineral which appears to be a mixture of hydrotalcite and antigorite.

Appended are the x-ray diffractograms

Yours truly,

J. C. m. Lon

J.A. McLeod, M.A.Sc., P.Eng. Manager, Exploration Technical Services JAM/skw

App. (diffractograms)



Scan F	Parameters: Ra	ange = 5.0-65.0	)/0.05, Dweli = 1	(sec), Max-I = 24	141, Anod	e = CU				Date: 01-22-	01@15
Search	h Parameters:	Filter = 11(pts),	, Threshold = 3.0	(esd), Peak-Cut	off = 0.5%,	2-Theta Z	ero Offset	= 0.0(deg	¢.		
Note:	Intensity data f	rom raw counts	, Summit peak k	ocation, Waveler	ngth for co	nputing d-s	pacing = 1	.540562<	CU, K-alph	na1>	
#	2-Theta	d(A)	h k	i BG	Peak	۳%:	Arca	<b>R%</b>	PWIM	Siz:#(A)	
1	5.802	15.2190		1228	1213	100,0	917	100.0	0.604	142	
2	19,759	4.4895		671	538	<b>44</b> .4	238	25.9	0.353-	268	
3	22.011	4.0350	والمراجب والمراجع المراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع والمراجع	690	160	13.2	19	2.0	0.092	>1000	
4	23.700	3,7510		656	95	7.8	11	1.2	0.090	>1000	
5	24.444	3.6385		662	117	9.6	15	1.6	0.099	>1000	
6	26.662	3.3407		629	226	18.6	37	4.0	0.128	>1000	
7	27.770	3.2099	<b></b>	616	174	14.3	32	3.5	0.147	>1000	
8	29.803	2.9954		576	80	6.6	12	1.2	0.115	>1000	
9	34.851	2.5722		538	137	11.3	53	5.7	0.304	316	
10	34.995	2.5620		549	157	12.9	29	3.1	0.146	>1000	
11	35.397	2.5337		550	139	11.5	57	6.2	0.328	286	
12	35.646	2.5166		582	81	6.7	19	2.0	0.182	819	
13	54.111	1.6935		365	71	5.9	8	0.8	0.079	>1000	
14	61.749	1.5011		358	115	9.5	51	5.5	0.350	280	
<u>10</u>	62.049	1,4945		308	115	9.5	30	3.9	0.249	421	
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APPENDIX IV

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