

GEOCHEMICAL ASSESSMENT REPORT

for the

WK GROUP

WK CHROME 1 CLAIM WK 1 TO 6 CLAIMS (INC)

Kamloops Mining Division

NTS Map 92 I/14 Lat. 50°57' Long. 121°23'W

REPORT PREPARED BY: 1 Howarn

W. Kovacevic for Tilava Mining Corporation

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June 2, 19

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INTRODUCTION

This report presents the results of a 1996 exploration program, conducted by Tilava Mining Corporation on the WK Group in Kamloops Mining Division.

The report is based on examinations and geochemical rock sampling of the WK Chrome 1 claim by the President of Tilava Mining Corporation W. Kovacevic during the exploration program, conducted by the Company in September, 1996, as well as on data from various published reports and personal communication.

LOCATION AND ACCESS

The property is located on Ferguson Creek, approximately 15 kilometers north-north west of the town of Cache Creek in southcentral 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 six 2 post mineral claims totalling 650 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 8, 1997	500
WK	1	1	351764	October 16,	1997 25
WK	2	1	351765	October 16,	1997 25
WK	3	1	351766	October 16,	1997 25
WK	4	1	351767	October 16,	1997 25
WK	5	1	351768	October 16,	1997 25
WK	6	1	351769	October 16,	1997 25



TOPOGRAPHY AND PHYSICAL ENVIRONMENT

The claims straddle Ferguson Creek , approximately 3 kilometers northeast of its confluence with Bonapart 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 paladium 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 (Figure 4). 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.

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 unconformably 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.



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.

Eccene and (?) Ologocene

Kamloops Group

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

Eccene

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 TRIASSIC

3 Serpentinite and serpentinized peridotite.

PERMIAN

Cache Creek Group

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

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.

1996 WORK PROGRAM COMPLETED

The 1996 exploration program on the WK Chrome 1 Claim was conducted by Tilava Mining Corporation of Vancouver, B.C.. This work was completed between September 17 and 25, 1996. The 1996 program was designed to sample and map all major outcropings of potential source of natural pozzolan. It included grid preparation, rock geochemical and mapping. Project supervision was by Willy Kovacevic, President of Tilava Mining Corporation and the author of this report. As the result of 1996 program additional 6 claims were staked immediately to the west and grouped to form WK Group.

Grid Preparation

Grid preparation on the property consisted of 500 m of south trending Base Line (south extension of Tilava's 1993 grid) and 3.8 km of east-west trending survey grid lines cut, chained and picketed to IP standard.

The grid (including 1993 grid) is shown in Figure 3 and consists of 1.5 km of Base Line trending Az 135° N and 5.8 km east-west trending, 100 m irregularly spaced, survey grid lines. These survey lines are used during the geochemical rock sampling and sample location are also shown in Figure 3.

Geochemical Rock Survey

A total of 30 rock samples, were collected during the survey using the grid lines for control. Two samples were from ultramafic outcrops from the south side of Ferguson Creek and the rest of the samples are from various outcrops and layers of volcanic ash (pozzolan samples). The samples were assayed by ACME Analytical Laboratories Ltd. in Vancouver, B.C. and run for WRA (Geochem Whole Rock ICP analysis - 18 samples) and 30 element ICP (2 samples). Analytical results are available in Appendix I.

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. Laboratory results are available in Appendix II.



Two ultramafic samples returned elevated values in chromium (up to 668 ppm) and nickel (up to 3090 ppm) .

ROCK SAMPLE DESCRIPTION

Sample NO.	Sample Location	Description
96-1	200 N + 250 W	Small outcrops on grid line.
96-2	200 N + 340 W	Small outcrops on grid line.
96-3	300 N + 187 W 300 N + 187 W + 3 m NW 300 N + 187 W +10 m NW 300 N + 187 W +16 m NW	Taken at intervals from a 3 m high layer of relatively clean and uniform pozzolan on the NW cliff of a massive outcrops.
96-4	300 N + 200 W + 2 m SW 300 N + 200 W + 8 m SW	Large outcrops from clean to sandy pozzolan
96-5	700 N + 128 W + 5 m S	From the north face of a massive outcrop, impure pozzolan mixed with small rock debris.
96-6	700 N + 128 W +15 m S	From the south face of the massive outcrop, app. 5 m layer, upper 2-3 m mixed with rock fragments, sample taken from bottom 2 m of clean pozzolan.
96-7	700 N + 128 W +25 m S	From the south face of the massive outcrop, app. 10 m high and 30 m long layer of partly impure and harder pozzolan material.
96-8	700 N + 200 N +20 m N	South faced outcrop, app. 5 m high and up to 60 m long, sample taken from clean layer app. 3 m high.
96-9	700 N + 310 W	From the east face of a cliff app. 12 m high mixed with rock fragments (5 to 30 cm), sample from app. 1 m of better grade pozzolan.

96-10	00 N + 350 W + 15 (vertical high) top fragments layer fro pozzolan small roo tion foll section o Sample ta section o	west face of cliff exposure app. 20 m o 3 m mixed with rock s (3 to 30 cm) next om 3 to 6 m of clean followed by 10 m of ck fragment contamina- lowed by a better of clean pozzolan. aken from upper 3-6 m of better grade.
96-11	00 N + 400 W Sample ta the cliff	aken from the top of E.
96-12	00 N + 450 W Outcrops	on grid line.
96-13	00 N + 595 W Outcrops 00 N + 610 W material	on grid line, coarse partly with sand.
<u>900 N + 60</u>	W (200 m W control line)	
96-14	19 W Outcrops of a the control of	clean pozzolan on grid line.
96-15	65 WOutcrops on 6 $65 W + 5 m N$ North trendin $65 W + 15 m N$ North trendin $65 W + 20 m N$ North trendin $65 W + 25 m N$ North trendin	grid line (as above). ng - clean pozzolan. ng - clean pozzolan ng - clean pozzolan ng - clean pozzolan
96-16	00 W Large outcrop cliff, app. Sample taken	p on grid line (8 m 5 m of clean pozzolan) from better grade.
96-17	00 W + 20 m N Above cliff,	clean pozzolan
96- 18	25 W + 25 m N Above cliff,	clean pozzolan.
Ultramafic	Samples	
UB 96-19	00 N + 300 W Outcrops of 3 m N pale green c altered to t	dunite (peridotite) olor, partly alc.
UB 96-20	00 N + 480 W Outcrops of peridotite, minor talc-c	partly serpentinized pale brown color, arbonate veining.

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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% $Cr_2 O_3$ 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% Cr_2O_3 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 \$20-30/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.

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, 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.

According to the conclusion of the previous examiners an IP geophysical survey may be useful since IP responds to certain chromite deposits, covered under volcanic, providing that they are large enough and are not masked by sulphides present in volcanics. Further exploration of the known showings should be tested by drilling.

Potential for other industrial minerals, mainly pozzolan and zeolite, do exist. The preliminary examination indicate that these minerals may by of substantial and possibly of enormous potential. Proximity to major transportation routes and, the cement plant in Marble Canyon which is located only a $\frac{1}{2}$ hour drive on a paved highway, render these minerals commercially valuable. The cement plant may be both consumer of pozzolan and supplier of cement for ready mix.

The test results, both chemical and physical, indicate that the pozollan 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 Oume 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)

STATEMENT OF EXPENDITURES

FIELD PERSONEL: Willy Kovacevic, Prospector Septembr 17, 18, 19, 20, 21, 23, 24 and 25 8 days @ \$175 p.d. \$1,400.00 Ryan Bolster, Field Assistant September 17, 18, 20, 23, 24 and 25 6 days @ \$100 p.d. 600.00 Total Labor \$2,000.00 \$2,000.00 LODGING AND MEALS: Groceries \$ 348.09 TRANSPORTATION: Truck 4x4 11 days @ \$75 p.d. \$ 825.00 Fuel & Tolls 343.86 Total Transportation \$1,168.86 \$1,168.86 DRAFTING AND FIELD SUPPLIES: Maps & Photos \$ 55.48 Drafting/copying 97.00 Field supplies 125.78 Total Drafting & Supplies \$ 279.06 \$ 279.06 ANALYTICAL COST: Ackme Analytical Laboratories Ltd. Vamcouver, B.C. \$ 374.30 \$ 374.39 Total 1996 Exploration Cost \$4,750.90 ========

96/ASS.1

STATEMENT OF QUALIFICATIONS

I, Willy Kovacevic, of the City of Vancouver, 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 southcentral 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..
- 1993-1996 Prospected and geochemically surveyed WK Chrome I industrial mineral prospect (chromium, pozzolan and zeolite) Clinton, B.C. and Golden Loon claims (gold).

Willy Kovacevic Prospector APPENDIX I

*ACME ANALYTICAL LAB	ORATORIES	LTD.		852	Е.	HAS	ring	s si	:. Vi	ANCO	UVER	BC	V62	A 1R	6	P	HONE	2(60	4)25	53-31	58 1	FAX (604)253-1716
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SAMPLE#	sio2	Al203 %	Fe203 %	MgO %	CaO %	Na20 %	к20 %	Ti02 %	P205 %	MnO %	Сг203 %	Ba ppm	N î ppm	Sr ppm	Zr ppm	Y	Nb ppm	Sc ppm	LOI %	C/TOT %	S/TOT %	SUM %	
									·	·												100 (7	
96-1	57.44	16.87	7.55	1.79	4.34	2.41	.80	.73	.12	.04	.002	462	35	461	149	12	10	11	8.4	.07	.01	100.65	
96-2	59.79	15.71	3.83	2.65	2.99	2.04	1.89	.92	.41	.05	.022	1447	72	826	213	20	24	11	9.7	.1/	.01	100.31	
96-3	59.04	15.90	5.20	2.22	3.83	2.33	1.45	.72	.22	-09	.008	685	27	407	151	18	<10	15	8.2	.05	.01	99.36	
96-4	59.18	15.40	5.22	1.93	4.07	2.27	1.70	.67	.52	.19	.002	836	32	389	152	19	10	12	7.9	.05	.01	99.22	
96-5	55.26	15.16	7.54	4.09	4.27	2.97	.81	.86	.19	.06	.010	398	51	315	140	13	<10	19	8.7	.02	.01	100.03	
96-6	60.34	15.29	5.67	1.77	3.75	2.25	1.53	.70	. 16	.07	.003	726	24	345	142	18	<10	12	7.8	.02	.01	99.48	
96-7	58.85	15.85	5.92	1.91	4.15	2.68	1.43	.81	. 19	.16	.007	3116	30	447	134	18	<10	13	7.2	.04	.01	99.58	
96-8	58.67	16.62	5.06	2.79	3.85	2.02	1.13	.69	. 19	.06	.008	584	61	350	140	27	<10	13	8.9	.01	.01	100.13	
96-9	60.34	16.73	5.23	1.60	3.61	2.34	1.35	.76	.07	.07	.002	685	40	382	268	<10	10	12	7.8	.02	.01	100.07	
96-10	63.15	15.07	4.16	1.73	3.10	2.29	1.80	.64	.12	.06	. 003	748	24	325	137	19	11	12	7.8	.03	.01	100.07	
96-11	60.09	16.53	4.69	2.05	4.79	3.11	1.66	.85	.34	.06	.007	805	47	541	135	17	11	12	5.5	.03	.01	99.86	
96-12	57.30	16.44	5.79	2.65	4.75	2.23	.89	.79	.31	.07	.005	470	38	399	120	18	<10	15	7.9	. 04	.01	99.25	
RF 96-12	58,13	16.59	5.83	2.69	4.79	2.22	.89	.80	.33	.07	.006	477	36	402	133	18	12	15	7.7	.04	.01	100.18	
96-13	57 15	16.69	6.33	3.26	5.05	2.79	.88	.69	.20	.10	.006	464	44	406	96	16	10	16	6.9	. 11	.01	100.17	
96-14	59.10	16.41	5.93	2.26	3.78	1.90	.95	.69	.11	.05	.004	516	<20	337	147	13	12	15	8.9	. 10	.01	100.21	
96-15	58.82	15.90	5.48	2.36	3.92	2.35	1.37	.71	.36	.08	.008	639	41	384	238	17	14	14	8.1	.05	.01	99.62	
96-16	60.51	15.26	5.02	1.85	3.86	2.16	1.85	.63	.24	.10	.004	655	41	339	151	19	11	11	7.6	. 10	.02	99.23	
96-17	57 76	15 32	6 93	2 27	4 22	2.49	1.33	75	.42	.05	.006	610	38	456	138	16	10	11	7.5	.08	.01	99.20	

.200 GRAM SAMPLES ARE FUSED WITH 1.5 GRAM OF LIBO2 AND ARE DISSOLVED IN 100 MLS 5% HNO3. OTHER METALS ARE SUM AS OXIDES. TOTAL C & S BY LECO (NOT INCLUDED IN THE SUM). Samples beginning 'RE' are Reruns and 'RRE' are Reject Rerups. - SAMPLE TYPE: ROCK

60.39 17.16 4.48 2.12 5.00 2.87 1.02 .64 .15 .10 .001 550 20 417 103 12 <10 12 5.5

DATE RECEIVED: APR 1 1997

STANDARD S0-15/CSA-20X 49.70 12.68 7.25 7.30 5.98 2.46 1.77 1.60 2.52 1.34 1.065 2213

96-18

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						<u>1</u>	<u>'ila</u>	va	Min	ing 1	Ex 03 -	<u>plo</u> 1412	<u>rat</u> 1. 14	ion th Ave	F e, Vai	'ile ncouv	= # er BC	97- V6H	147 1r3	76	Pa	ge	2								
SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe X	As ppn	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	ti %	B PPM	Al %	Na %	К %	W ppm	
UB96-19 UB96-20 RE UB96-20	<1 <1 <1	5 1 1	ব ব ব	8 17 17	<.3 <.3 <.3	2277 3090 3039	96 140 137	804 1233 1212	4.31 4.16 4.14	5 9 8	8 5 <5	<2 <2 <2	<2 <2 <2	19 6 6	.8 .7 .5	<2 <2 <2	<2 <2 <2	79 45 44	.52 .10 .10	.008 .004 .004	2 2 1	668 109 107	18.59 18.77 18.54	54 149 147	<.01 <.01 <.01	14 15 14	.18 .07 .07	<.01 <.01 <.01	.01 <.01 <.01	<2 <2 <2	

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HN03-H20 AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.

THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB - SAMPLE TYPE: ROCK <u>Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.</u>

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APPENDIX II

June 2, 1997 File: 197-788

Tilava Mining Corporation 103 - 1412 West 14th Avenue Vancouver, B.C. V6H 1R3

Attention: Mr. Willy Kovacevic

Levelton Engineering Ltd.

150-12791 Clarke Place Richmond, B.C. Canada V6V 2H9

Tel: 604 278-1411 Fax: 604 278-1042 E-Mail: levelton@unixg.ubc.ca

Construction Materials Building Science Geotechnical Metallurgy and Corrosion Environmental lytical Chemistry Physical Testing Dear Sir:

RE: Clinton Natural Pozzolan Final Report

On April 28, 1997, twenty 200 gm+ packets of Clinton Natural Pozzolan were received in our laboratory for qualification testing. Nine of the packets were combined and tested according to the requirements of ASTM C618-96, "Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete". The final results are presented in the attached table and indicate this tested pozzolan readily complies with the physical requirements of ASTM C618-96.

We trust this meets your report requirements. Thank you for this opportunity to be of service.

Yours very truly,

LEVELTON ENGINEERING LTD.

Herry

W.J. Gerry, C. Tech. Laboratory Supervisor

ll 1for

N.A. Cumming, P.Eng. Vice President Manager Construction Materials Division

Enclosures: c;\CMD\197-788\WJG*khw





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PROPERTIES OF FLY ASH

PROJECT:	Tilava Mining Corporation	FILE:	197-788
SAMPLE LOCATION:	Site	REPORT NO .:	1
SAMPLE DATE:	Clinton, B.C.	DATE:	June 2, 1997

Property	Sample	ASTM C618-96 Requirements Type N
Physical - ASTM C618-96		
Soundness, Autoclave, % Expansion or Contraction	-0.027	<u>+</u> 0.8 max
Fineness: Retained 45 µm, % Blaine, cm²/gm	28.4 5120	34 max ~
Relative Density	2.457	-
Strength Activity Index With Cement: @ 7 days, % Control @ 27 days, % Control Water Requirement, % Control	76.5 88.5 99	75 min 75 min 115 max



APPENDIX III



