S. B. BUTRENCHUK

CONSULTING GEOLOGIST

GEOLOGICAL EVALUATION

OF THE

CRO MINERAL CLAIMS

situated at:

Latitude: 49°39'45" Longitude: 114°42'30"

NTS 82G/10E

in the

Fort Steele Mining Division

Report Prepared For:
Douglas Allan
11-38349 Range Road 270
Red Deer, Alberta
T4E 1A2

October 22, 2002

Stephen B. Butrenchuk
P. Geol.

34 Temple Cres. W., Lethbridge, Alberta, T1K 4T4 • (403) 381-0561 • Fax (403) 328-4481

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SUMMARY

Phosphate was first discovered on the CRO property in the Crowsnest Pass area in the early 1900's. Since that time the region and property have been intermittently explored to the present day. Early underground exploration by Cominco Ltd. established the presence of a substantial phosphate resource. This resource was located in an area where there had been thickening of the phosphate beds due to thrust faulting and has been the focus of recent exploration.

The present CRO property was acquired in the mid-1990's by Doug Allan. Exploration of these claims has consisted of a small diamond drill program and bulk sampling for marketing studies. A small phosphate quarry at the south end of Cominco's working was the source of the bulk sampling. This quarry is estimated to have a resource of approximately 2500 tonnes that can readily be extracted. A small stockpile of approximately 40 tonnes is also present. Average grade of this phosphate resource is approximately 23% P_2O_5.

The present quarry is insufficient to sustain any long term exploitation. Ongoing exploration is required to delineate the phosphate resource at the quarry itself and to the north in the vicinity of Cominco's workings. Those locations previously identified as being thickened offer the best potential for economic sustainability.

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S. B. BUTRENCHUK

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GEOLOGICAL EVALUATION OF THE CRO MINERAL CLAIMS

INTRODUCTION:

In August, 2002, the author was asked by Doug Allan to prepare a geological evaluation and mine plan for the CRO mineral claims. The purpose of this report is to satisfy assessment requirements to maintain the claims in good standing for one year and to make recommendations for future exploration and development of the property. Data for this report was obtained from on-site mapping in September, 2002, from government data bases and reports and from oral communication with Tembec personnel. Field mapping was done during the period September 17-25, 2002. This report summarizes the data and makes recommendations for ongoing exploration and development.

LOCATION, ACCESS AND PHYSIOGRAPHY:

Alexander Creek occupies a broad valley east of the High Rock Range in southeastern British Columbia. The valley has a relatively subdued topography due to the recessive nature of the underlying geological formations.

The CRO claims are located near the mouth of Alexander Creek at an elevation of 1400-1800 metres (Figure 1). They are situated in the Fort Steele Mining Division on NTS sheet 82G/10E and Mineral Titles Reference Map MO82G067 at:

Latitude:	49°39'45"
Longitude:	114°42'30"

Access to the property is via logging roads north from highway 3. These roads are suitable for all weather conditions but may be closed periodically for environmental reasons. The nearest community is Sparwood, located approximately 16 kilometres to the west on Highway 3.

The CRO claims are located below treeline in an area of relatively gentle topography. Portions of the property have been recently logged.

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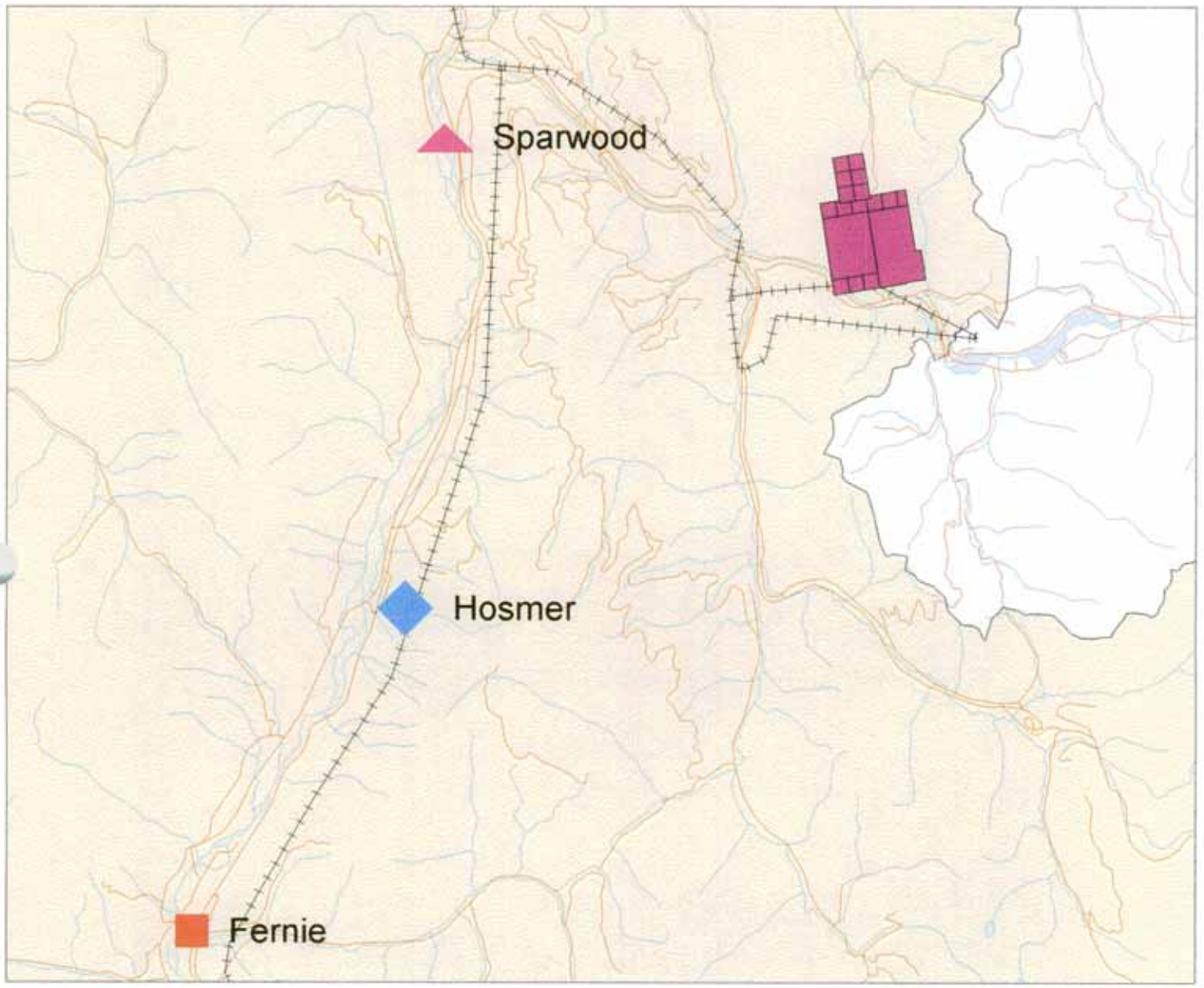
FIGURE 1: LOCATION MAP



PROPERTY:

The CRO property, located approximately 16 kilometres east of Sparwood, B.C. consists of 17 mineral claims (42 units). Claim boundaries are shown on Mineral Titles Reference Map MO82G067 (Figure 2). Details pertaining to these claims are summarized in Table 1.

The registered owner of the CRO mineral claims is Douglas Allan (100%) of Red Deer, Alberta. These claims are located on private land owned by Tembec. They are also located within a forest management region and therefore subject to certain restrictions that may be imposed by the land owner.

Table 1: Tenure Details

Claim Name	Tenure Number	Date Acquired	Due Date*	Mining Division	Units	Tag Number
CRO1	383735	2001/01/21	2004/01/21	Fort Steele	15	234648
CRO 5	383736	2001/01/27	2004/01/22	Fort Steele	12	234649
CRO 2	383738	2001/01/21	2004/01/21	Fort Steele	1	702702M
CRO 3	383739	2001/01/21	2004/01/21	Fort Steele	1	702703M
CRO 4	383740	2001/01/21	2004/01/21	Fort Steele	1	702704M
CRO 6	383741	2001/01/21	2004/01/21	Fort Steele	1	702706M
CRO 7	383742	2001/01/21	2004/01/21	Fort Steele	1	702707M
CRO 8	383743	2001/01/21	2004/01/21	Fort Steele	1	702708M
CRO 9	383744	2001/01/21	2004/01/21	Fort Steele	1	702709M
CRO 10	383745	2001/01/21	2004/01/21	Fort Steele	1	702710M
CRO 11	383746	2001/01/21	2004/01/21	Fort Steele	1	702711M
CRO 12	383747	2001/01/21	2004/01/21	Fort Steele	1	702712M
CRO 13	383748	2001/01/21	2004/01/21	Fort Steele	1	702713M
CRO 14	383749	2001/01/21	2004/01/21	Fort Steele	1	702714M
CRO 15	383750	2001/01/21	2004/01/21	Fort Steele	1	702715M
CRO 16	383751	2001/01/21	2004/01/21	Fort Steele	1	702716M
CRO 17	383752	2001/01/21	2004/01/21	Fort Steele	1	702717M

*Pending acceptance of this report

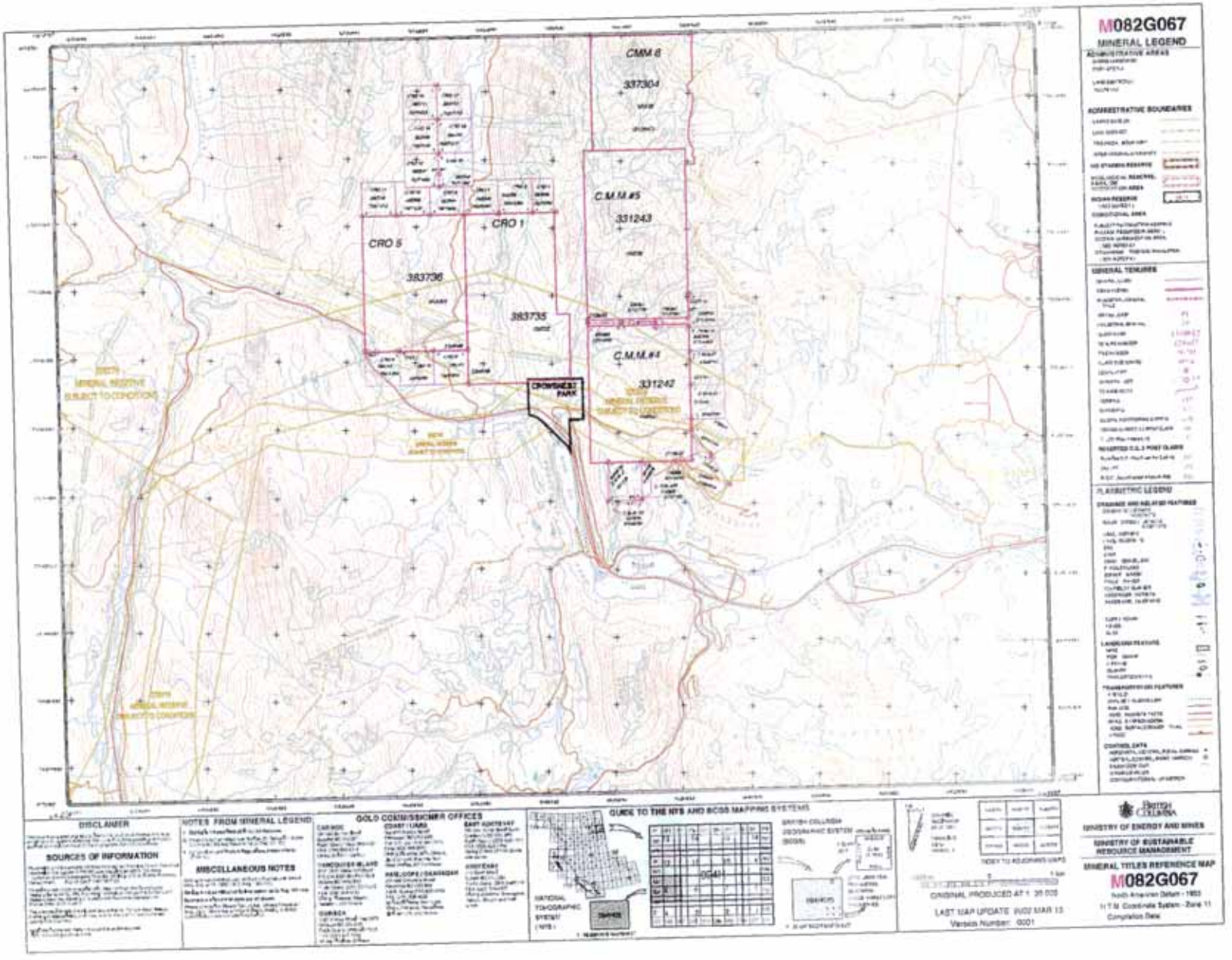


Figure 2: Tenure Map

HISTORY:

Phosphate was first discovered in the early 1900's by Cominco personnel. Exploration continued intermittently until the mid-1970's by Cominco Ltd. In 1931 they completed 600 metres of underground work and shipped an 1800-tonne sample to Trail for metallurgical testing. Further exploration and testing was done in the mid-1960's (Telfer, 1933; Butrenchuk, 1996).

Doug Allan first acquired the CRO claims in 1996. Since that time he has maintained the claims by either re-staking or by paying cash in lieu. In 1997 a small diamond drill program was completed in the vicinity of Cominco's adit (Plate 1); in 1998 a bulk sample was taken from a phosphate showing approximately 500 metres south of the adit (Plate 2). None of this work was recorded for assessment purposes. Some metallurgical work was also completed.

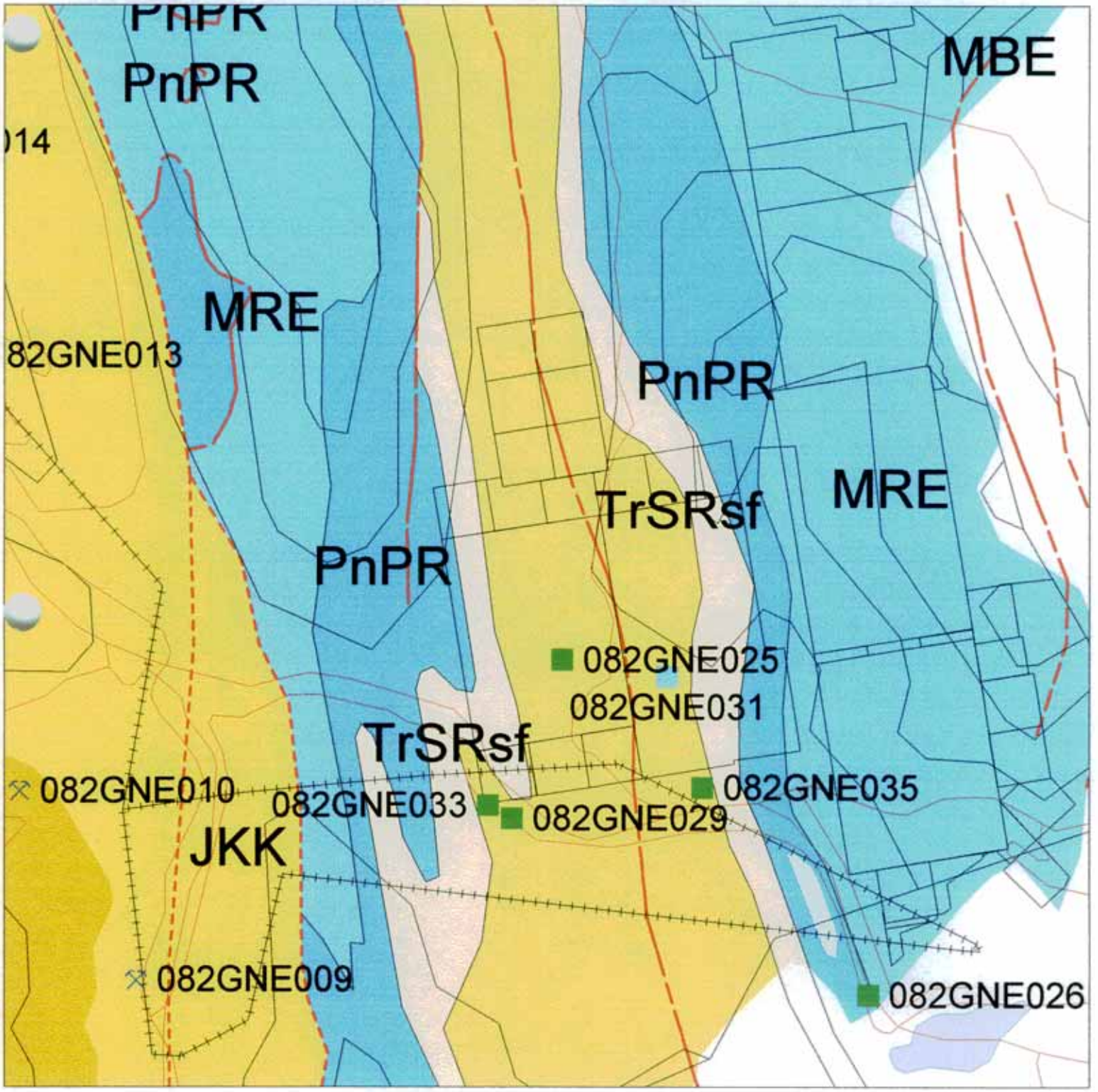
REGIONAL GEOLOGY:

The region in the vicinity of Alexander Creek is underlain by carbonate rocks of the Pennsylvanian-Permian Rocky Mountain River Group; siltstone, shale and mudstone of the Triassic Spray River Group and shale, siltstone and phosphate of the Jurassic Fernie Group. Carbonate rocks of the Mississippian Rundle Group occur on either side of the Alexander Creek valley (Figure 3).

Triassic strata are unconformably overlain by dark grey to black shales, phosphate and minor limestone of the Jurassic Fernie Group. In southeastern British Columbia this unit occupies a broad canoe-shaped synclinal structure covering an area of approximately 2000 square kilometres and attains thicknesses of up to 376 metres with a general thickening westward. A persistent pelletal phosphorite bed, 1 to 2 metres thick and generally containing greater than 15% P_2O_5 was deposited in a transgressive sequence at the base of the Fernie Group in strata of Sinemurian age. It rests either directly on Triassic strata or is separated from the underlying rocks by a thin phosphatic conglomerate. The phosphatic interval may also be represented by two phosphate beds separated by phosphatic shale. Thicknesses in excess of 2 metres due to structural thickening are attained locally, as at Mount Lyne and at the Crow deposit. Phosphatic shales of variable thickness, generally less than 3 metres, overlie the phosphate (Butrenchuk, 1996).

In southeastern British Columbia beds of Triassic or older age generally have gentle to moderate dips. Along the eastern edge of the Fernie Basin, bedding tends to dip westerly. The Jurassic Fernie Group, being less competent, has absorbed much of the structural deformation and beds may have gentle to vertical dips. In many places beds of all ages are overturned and truncated by thrust faults. Elsewhere, especially in Fernie

FIGURE 3: REGIONAL GEOLOGY



Group rocks, thrusting has caused a repetition of beds as at the Crow deposit, resulting in a thickening of the phosphate section. Areas where phosphate beds have been thickened by repetitive thrust faulting are of particular economic significance.

PROPERTY GEOLOGY:

Most of the central region of the CRO property is underlain by shales of the Jurassic Fernie Group. Because of the recessive nature of this unit there is a paucity of exposures. Where observed, bedding tends north-south with gentle to moderate dips to the west. The basal phosphorite is present at only three locations.

Underlying the Fernie shales unconformably is the Triassic Spray River Group. This unit consists of rusty brown weathering fine sandstand and siltstone. It occurs in a narrow band on either side of the property.

The oldest unit exposed on the property is the Pennsylvanian-Permian Rocky Mountain Group. Exposures consist of creamy-white silty dolomite. Locally, chert nodules may be present. Along the eastern edge of the property phosphate nodules are present at or near the top of this unit.

North-south trending, westerly dipping thrust faults occur within the Fernie Group shales. East-west trending block faulting may also be present although evidence for these structures is lacking.

ECONOMIC GEOLOGY:

Much of the CRO property is underlain by the Jurassic Fernie Group which contains a basal phosphorite unit. Exposures of the phosphorite are restricted to two localities in the southwest corner of the property and at the quarry location approximately 1 kilometre north of the Weigh Station on Highway 3 (Figure 4). In the southwest corner phosphorite is exposed in a road cut on the south side of Highway 3 as well as in the bank of Alexander Creek just below this site.

At the Highway 3 locality near Alexander Creek the phosphorite bed is 1.2 metres thick and contains 27.28%P_2O_5. The phosphorite consists of brown to dark brown, subangular to subrounded, structureless pellets 0.1 to 0.3 millimetres in diameter. Approximately 5% of the pellets have nuclei of either quartz or calcite. The matrix consists of quartz and calcite in equal amounts, with minor dolomite, albite, potassium, feldspar and trace illite and sericite (Butrenchuk, 1996). At this location bedding trends north-south with a moderate dip to the west.

At the Alexander Creek location the phosphorite bed is 1 metre thick and contains 23.80% P_2O_5. The phosphatic section is 5.5 metres thick, its upper limit marked by a yellowish-

orange weathering limestone bed 3 centimetres thick. Shale cut by numerous minor faults overlies the phosphate sequence.

The area with the best economic potential is located in the vicinity of the adit. This is where Cominco did the majority of their exploration. The adit (Plate 1) and underground workings are now inaccessible. Only the quarry area is available for evaluation. Telfer (1933) describes the phosphate horizon as consisting of three beds: a lower oolitic high-grade phosphorite, a shale parting and an upper nodular phosphorite with a yellow marker bed at the top. The high-grade phosphorite bed consists of structureless pellets and rare pellets with an oolitic texture. The beds average approximately 1 metre in thickness but are repeated as many as four or five times by easterly directed thrusting.

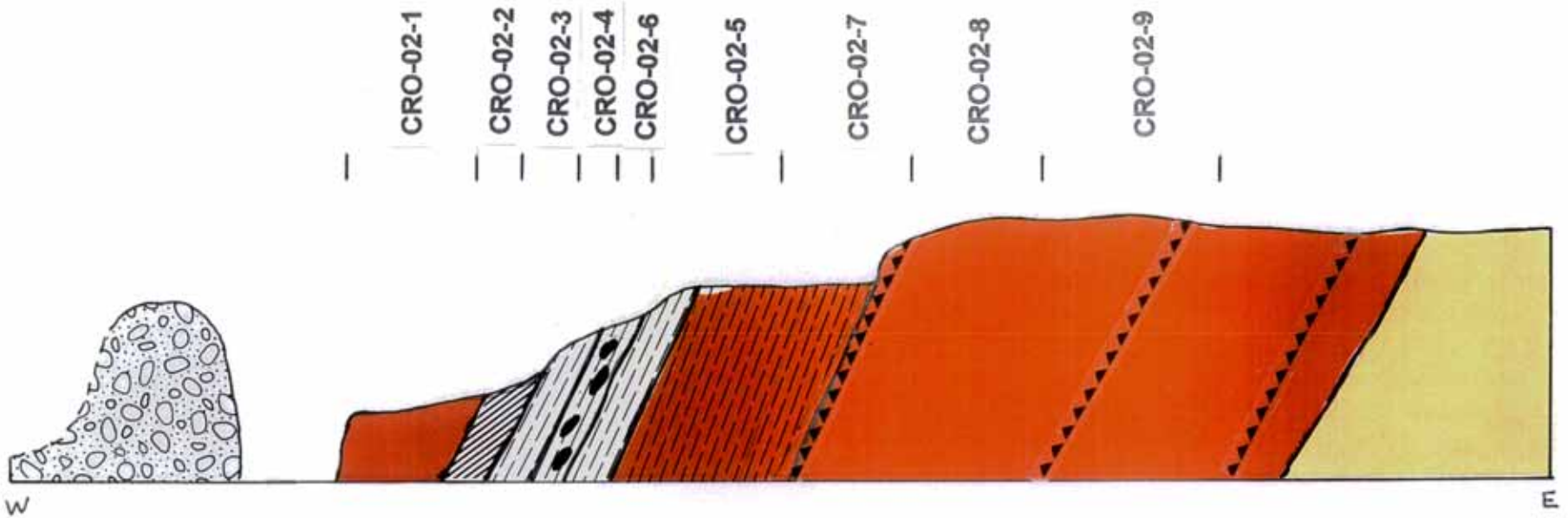
At the quarry location (Plate 2) the phosphate horizon varies from 15 to 19 metres in thickness over a strike length of 75 metres. A cross-section through the centre of the quarry indicates a phosphate section in excess of 15 metres wide with an average grade of 23.62% P_2O_5 (Table 2). Thrust faulting is common in the eastern portion of the section. At the north end of the quarry in an old trench, the phosphate interval is 19 metres wide. Here, a phosphorite bed 1 metre thick is repeated four times. Previous sampling (Butrenchuk, 1996) indicates the average phosphate content of this bed is 26.20% P_2O_5. Similar structural thickening occurs at the northern end of the Cominco workings and midway along the workings (Telfer, 1933; Butrenchuk, 1996).

At the quarry location previous work had excavated an area measuring approximately 20 x 15 metres. A small stockpile of this material remains at the north end of the excavation in front of the working face. Approximately 42.0 tonnes of phosphorite containing 22.30% P_2O_5 is available. An additional 2500 tonnes averaging 23.6% P_2O_5 (based on cross-section samples) may be available to the north of the quarry face to a depth of the present quarry floor. The shale content of the phosphate section increases northerly. Therefore, the overall grade will decrease slightly to the north.

To the north of the quarry, the phosphorite horizon disappears under overburden and beds abruptly to the east. This trend has been traced by previous Cominco underground exploration. Because of the inaccessibility of these workings the author was unable to substantiate Cominco's findings.

Plate 1: View of Crow Adit.

Plate 2: CRO Quarry, looking north.



Overburden

Nodular phosphate

Pelletal phosphate; minor shale

Shale

Pelletal phosphorite & shale

Pelletal phosphorite

Triassic : sandstone

Thrust fault

0 1 2 Metres

SBB Oct 22/02

CRO PROPERTY

SCALE: 1: 100	APPROVED BY:	DRAWN BY SBB
DATE: Oct., 2002		REVISED

CROSS SECTION:CRO QUARRY

DRAWING NUMBER 5

8½ X 11 PRINTED ON NO. 1000H CLEARPRINT

Table 2: Quarry Phosphate Analyses

Sample Number	Sample		Length	%	Weight
	From	To	Metres	P_2O_5	Percent
CRO-02-1	1.5	3.6	2.1	26.36	55.356
CRO-02-2	3.6	4.3	0.7	18.46	12.922
CRO-02-3	4.3	5.2	0.9	12.86	11.574
CRO-02-4	5.2	5.8	0.6	25.88	15.528
CRO-02-6	5.8	6.3	0.5	21.59	10.795
CRO-02-5	6.3	8.3	2	24.82	49.64
CRO-02-7	8.3	10.3	2	25.46	50.92
CRO-02-8	10.3	12.3	2	24.07	48.14
CRO-02-9	12.3	15.0	2.7	23.70	63.99
		TOTAL:	13.5		318.865
Weighted	AVERAGE P_2O_5:	23.62%			
CRO-02-10	stockpile			22.30	

CONCLUSIONS:

Previous work done by Cominco and work recently completed by the author has identified a phosphate resource on the CRO property. It has also been established that the best potential for future exploration of this resource is located along strike, north and south of Cominco's adit.

At the quarry a small resource of approximately 2000 tonnes may be available for extraction with a minimum of disturbance. Additional material may be available below the present quarry floor although the amount and grade are unknown. Previous drilling indicates that below this level, the phosphate interval will thin and dip under overburden and shale to the west.

Claims at the northern end of the property do not appear to cover the projected trend of the phosphorite unit. In part, this area appears to be underlain by Pennsylvanian-Permian strata.

RECOMMENDATIONS:

Before any more material is removed, the quarry should be property tested to determine the grade and extent of the phosphate that may be readily extractable. This testing can be done using a small drill.

To the north of the adit drilling is required to verify the trace of the phosphorite and identify any near surface thickened intervals that may be amenable to surface extraction with a minimum of disturbance. This drilling will also be required to aid in any potential underground development that may be anticipated in the future.

Some upgrading of the access road is also recommended. This work could easily be done by a grader.

Report by:

Stephen B. Butrenchuk

Stephen B. Butrenchuk, P. Geol.

REFERENCES

Butrenchuk, S.B. (1996): Phosphate Deposits in British Columbia, Ministry of Employment and Investment, Bulletin 98, 126 pages.

Telfer, L (1933): Phosphate in the Canadian Rockies, Canadian Institute of Mining and Metallurgy, Transactions, Volume 36, pages 566-605.

STATEMENT OF QUALIFICATIONS

I, Stephen B. Butrenchuk, of 34 Temple Crescent West, Lethbridge, Alberta, Canada T1K 4T4, do hereby certify that:

1. I am a Professional Geologist registered in the Province of Alberta.

2. I am a graduate of the University of Manitoba with a B.Sc. in Geology (1966) and a M.Sc. In Geology (1970).

3. I have been practicing my profession in Alberta, British Columbia, Quebec, Labrador, northwestern United States, Yukon and Northwest Territories since graduation. Since 1986 I have specialized in Industrial Minerals.

4. I am a Fellow of the Geological Association of Canada.

5. I have no beneficial interest, either directly or indirectly, in the CRO property.

6. This report is based upon knowledge of the CRO property gained from evaluation of private and public documents and from personal knowledge gained from field mapping on the property.

Stephen B. Butrenchuk

Stephen B. Butrenchuk
P. Geol.

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STATEMENT OF EXPENDITURES

Salaries:	S.B. Butrenchuk	7 days @ $400/day	$	2,800.00
Truck:	966 km @ $0.50/km			483.00
Domicile:	3 days @ $50/day			150.00
Analyses:				445.23
Expenses:				100.61
Drafting and reproduction:				500.00
		TOTAL:	$	4,478.84

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APPENDIX 1:

CHEMICAL ANALYSES

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

WHOLE ROCK ICP ANALYSIS

Butrenchuk, Stephen B. File # A204116
34 Temple Crescent W., Lethbridge AB T1K 4T4 Submitted by: Stephen B. Butrenchuk

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ba ppm	Ni ppm	Sc ppm	LOI %	TOT/C %	TOT/S %	SUM %
CRO-02-1	15.01	2.75	.92	.83	42.80	.32	1.07	.20	26.34	.01	.021	1947	46	37	9.0	3.48	.36	99.50
CRO-02-2	27.92	4.34	1.55	1.06	33.59	.53	1.33	.29	18.46	.02	.013	766	69	27	10.5	3.42	.26	99.70
CRO-02-3	35.73	5.98	2.50	1.39	25.59	.64	1.81	.40	12.86	.02	.015	1668	82	19	12.5	4.47	.29	99.63
CRO-02-4	15.22	2.95	.87	.63	42.96	.28	1.24	.18	25.88	.01	.019	1157	48	44	9.2	3.56	.40	99.58
CRO-02-5	17.62	3.34	.98	.73	41.55	.27	1.24	.21	24.82	.01	.020	1258	49	40	8.7	3.39	.26	99.64
CRO-02-6	23.88	4.36	1.50	1.01	36.10	.34	1.40	.30	21.59	.02	.025	1267	68	30	9.0	3.39	.32	99.68
CRO-02-7	17.08	3.48	1.01	.68	41.69	.24	1.13	.22	25.46	.01	.022	812	46	40	8.4	3.14	.30	99.52
CRO-02-8	15.54	3.01	.79	.63	42.98	.19	1.31	.18	24.07	.01	.020	1621	48	40	10.7	3.74	.28	99.62
CRO-02-9	16.85	3.22	.84	.59	42.34	.25	1.33	.19	23.70	.01	.021	434	66	43	10.1	3.64	.20	99.50
CRO-02-10	22.10	4.10	1.41	.91	37.86	.30	1.26	.28	22.30	.02	.017	950	82	31	9.0	3.59	.31	99.67
RE CRO-02-10	22.09	4.12	1.43	.92	37.90	.31	1.28	.28	22.18	.02	.022	974	90	31	8.9	3.55	.33	99.57
STANDARD SO-17/CSB	61.59	13.92	5.74	2.36	4.63	4.08	1.42	.60	.99	.53	.420	384	31	23	3.4	2.42	5.32	99.73

GROUP 4A - 0.200 GM SAMPLE BY LIBO2 FUSION, ANALYSIS BY ICP-ES. LOI BY LOSS ON IGNITION.
TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)
- SAMPLE TYPE: ROCK CHIP P150
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 27 2002 DATE REPORT MAILED: Oct 8/02 SIGNED BY: .....D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data K FA ___

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GEOCHEMICAL ANALYSIS CERTIFICATE

Butrenchuk, Stephen B. File # A204116

34 Temple Crescent W., Lethbridge AB T1K 4T4 Submitted by: Stephen B. Butrenchuk

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Ag ppm	Au ppb	Hg ppm	Tl ppm	S.G. -
CRO-02-1	13.2	35.6	29.7	224	47.4	15.9	1.8	.9	.1	.1	<.5	.10	.4	2.77
CRO-02-2	17.4	32.5	9.7	208	65.1	20.5	1.5	.7	.1	.1	<.5	.09	.6	-
CRO-02-3	20.1	48.4	14.5	226	77.2	19.4	1.7	.8	.1	.2	<.5	.08	.3	2.68
CRO-02-4	10.2	36.4	8.5	232	45.2	14.5	1.3	.7	.1	.1	<.5	.09	.3	-
CRO-02-5	10.9	35.5	6.9	178	43.7	15.0	1.1	.9	.1	.1	<.5	.10	.5	-
CRO-02-6	14.2	45.0	8.2	150	59.0	18.1	1.3	.9	.1	.1	2.7	.11	.4	-
CRO-02-7	11.4	39.3	7.4	161	49.3	17.1	1.8	1.0	.1	.1	1.0	.13	.4	-
CRO-02-8	7.8	33.1	6.4	144	36.6	13.0	1.1	.7	.1	.1	1.3	.09	.4	-
CRO-02-9	9.0	34.7	6.1	186	43.6	14.6	2.0	.7	.1	.1	1.4	.09	.4	2.88
CRO-02-10	19.9	43.8	7.6	218	70.5	19.2	1.9	.9	.1	.1	1.9	.10	.4	2.78
RE CRO-02-10	20.7	42.2	7.7	233	68.7	19.8	1.8	.9	.1	.1	3.8	.10	.5	2.78
STANDARD DS4/SIO2	6.4	122.0	31.0	156	34.0	24.1	5.6	4.6	5.0	.3	30.0	.25	1.1	2.56

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
S.G. - SPECIFIC GRAVITY.
- SAMPLE TYPE: ROCK CHIP P150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 27 2002 **DATE REPORT MAILED:** Oct 8/02 **SIGNED BY.** D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data FA

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GEOCHEMICAL ANALYSIS CERTIFICATE

Butrenchuk, Stephen B. File # A204116 (a)

34 Temple Crescent W., Lethbridge AB T1K 4T4 Submitted by: Stephen B. Butrenchuk

SAMPLE#	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm
CRO-02-1	1.5	1.0	4.4	3.4	2.1	19.7	<1	1276.5	<.1	9.9	54.1	76	.7	181.2	758.5	330.8	186.0	62.78	273.0	58.3	14.22	66.04	10.26	62.68	15.35	46.08	6.67	42.24	6.63
CRO-02-2	2.7	1.3	5.7	5.1	4.2	30.7	<1	990.1	.3	11.5	44.6	62	.9	205.1	550.5	258.6	181.6	52.46	229.6	50.7	11.57	55.65	8.31	48.81	11.81	34.43	5.16	31.05	5.00
CRO-02-3	4.6	2.1	10.0	5.6	7.0	47.9	3	875.6	.5	8.3	32.4	76	2.5	231.5	212.4	115.6	95.2	20.85	85.3	17.8	4.05	20.22	3.16	18.50	4.63	13.57	2.11	12.68	2.17
CRO-02-4	1.5	1.0	4.5	3.4	2.1	21.3	2	1294.2	.1	13.8	52.9	74	.7	173.4	935.4	421.2	259.3	82.82	356.9	79.2	18.44	90.48	13.98	84.03	19.86	58.43	8.58	52.65	8.06
CRO-02-5	1.3	.9	4.6	3.6	2.5	23.3	4	1211.0	.2	12.3	45.1	77	.5	181.7	769.0	343.5	206.4	65.27	292.2	62.4	14.65	72.28	11.13	66.57	15.97	48.95	7.07	43.14	6.66
CRO-02-6	2.3	1.6	6.5	4.5	4.0	34.1	<1	1083.1	.3	9.2	57.0	83	1.4	195.7	558.4	247.9	146.5	44.47	192.0	43.8	9.71	48.60	7.35	45.87	11.33	34.43	5.20	31.87	4.97
CRO-02-7	1.8	1.1	4.6	4.0	2.6	26.3	<1	1277.2	.2	11.4	65.4	82	1.1	193.1	765.9	348.7	210.3	64.67	280.9	60.9	14.34	69.40	10.78	67.10	16.15	48.29	6.99	43.23	6.85
CRO-02-8	1.3	.9	3.1	2.6	2.0	21.9	<1	1255.9	<.1	13.7	49.3	73	.3	163.2	832.3	383.1	234.4	75.23	323.2	72.2	16.46	82.62	12.50	75.24	17.45	52.41	7.45	47.13	7.36
CRO-02-9	1.3	1.0	4.7	3.3	2.1	22.1	<1	1260.2	.1	12.4	47.9	70	.3	179.9	816.9	379.8	231.9	71.94	319.9	70.1	16.68	79.46	12.36	73.95	17.14	53.19	7.57	45.83	7.32
CRO-02-10	2.3	1.5	6.0	3.8	3.8	30.9	<1	1163.4	.1	9.3	50.6	81	.5	212.5	612.7	264.7	165.7	50.47	216.4	46.5	10.83	53.29	7.89	50.96	12.19	36.30	5.32	33.04	5.15
RE CRO-02-10	2.9	1.6	6.6	4.8	4.0	31.8	<1	1177.4	.1	9.3	50.4	84	.6	213.3	607.2	266.4	164.6	49.74	218.4	48.5	11.37	55.01	8.39	51.36	12.08	36.47	5.39	33.26	5.48
STANDARD SO-17	18.4	3.6	20.4	12.0	25.9	24.9	12	305.9	4.6	12.6	11.2	138	10.5	353.3	27.8	12.7	24.3	3.00	14.3	3.3	1.09	3.77	.69	4.22	.96	2.85	.41	2.86	.44

GROUP 4B - REE - LiBO2 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK CHIP P150
Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: SEP 27 2002 **DATE REPORT MAILED:** Oct 8/02 **SIGNED BY** ..... D. TOYE, C.LEONG, J. WANG; CERTIFIED B.C. ASSAYERS

Data A FA ___

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716
(ISO 9002 Accredited Co.)

GEOCHEMICAL ANALYSIS CERTIFICATE

Butrenchuk, Stephen B. File # A204116 (b)
34 Temple Crescent W., Lethbridge AB T1K 4T4 Submitted by: Stephen B. Butrenchuk

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Ag ppm	Au ppb	Hg ppm	Tl ppm	S.G. -
CRO-02-1	13.2	35.6	29.7	224	47.4	15.9	1.8	.9	.1	.1	<.5	.10	.4	2.77
CRO-02-2	17.4	32.5	9.7	208	65.1	20.5	1.5	.7	.1	.1	<.5	.09	.6	-
CRO-02-3	20.1	48.4	14.5	226	77.2	19.4	1.7	.8	.1	.2	<.5	.08	.3	2.68
CRO-02-4	10.2	36.4	8.5	232	45.2	14.5	1.3	.7	.1	.1	<.5	.09	.3	-
CRO-02-5	10.9	35.5	6.9	178	43.7	15.0	1.1	.9	.1	.1	<.5	.10	.5	-
CRO-02-6	14.2	45.0	8.2	150	59.0	18.1	1.3	.9	.1	.1	2.7	.11	.4	-
CRO-02-7	11.4	39.3	7.4	161	49.3	17.1	1.8	1.0	.1	.1	1.0	.13	.4	-
CRO-02-8	7.8	33.1	6.4	144	36.6	13.0	1.1	.7	.1	.1	1.3	.09	.4	-
CRO-02-9	9.0	34.7	6.1	186	43.6	14.6	2.0	.7	.1	.1	1.4	.09	.4	2.88
CRO-02-10	19.9	43.8	7.6	218	70.5	19.2	1.9	.9	.1	.1	1.9	.10	.4	2.78
RE CRO-02-10	20.7	42.2	7.7	233	68.7	19.8	1.8	.9	.1	.1	3.8	.10	.5	2.78
STANDARD DS4/SIO2	6.4	122.0	31.0	156	34.0	24.1	5.6	4.6	5.0	.3	30.0	.25	1.1	2.56

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.
UPPER LIMITS - AG, AU, HG, W = 100 PPM; MO, CO, CD, SB, BI, TH, U & B = 2,000 PPM; CU, PB, ZN, NI, MN, AS, V, LA, CR = 10,000 PPM.
S.G. - SPECIFIC GRAVITY.
- SAMPLE TYPE: ROCK CHIP P150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

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 Data___ FA ___

PnPr
TrSRsf
Jf
Jfp
1500
1600
1700
1400
664 000
5504000

LEGEND

JURASSIC

- Jf — FERNIE GROUP:shale, siltstone, phosphatic shale
- Jfp — FERNIE GROUP: phosphorite, phosphate

TRIASSIC

- TrSRsf — SPRAY RIVER GROUP: siltstone, shale, mudstone

PENNSYLVANIAN-PERMIAN

- PnPr — ROCKY MOUNTAIN GROUP: carbonate rocks, minor phosphate

SYMBOLS

- Outcrop
- Bedding (inclined)
- Thrust fault
- Normal fault
- Geological boundary (known, approximate)
- Adit
- Quarry
- Diamond Drill Hole
- Anticline (overturned)
- Syncline (overturned)

SBB
Oct. 22/02

SCALE 1 : 10,000

200 0 200 400 600
METERS

CRO PROPERTY

SCALE: 1: 10000	APPROVED BY:	DRAWN BY SBB
DATE: OCT.,2002		

GEOLOGY MAP

DRAWING NUMBER 4