# SUMMARY REPORT ON A PROGRAM OF IP GEOPHYSICS AND EXCAVATOR TRENCHING ON THE P4 (WOLFE CK EAST) ZONE AT THE SIMILCO MINE PROPERTY

Mining Division: NTS Map Sheet: Latitude: Longitude: Owners:

Operator:

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Similkameen 92H/SE 49 Deg., 20 Min. 120 Deg., 32 Min. Similco Mines Ltd/Westmin Resources Ltd Similco Mines Ltd. ∕ıc.

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February 15, 1996

REG FEB 2 7 1996 EXPLORE B.C. PROGRAM MEMPR

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#### SUMMARY

The P4 zone is a geological and geophysical target on the Similco Mine property that includes the former Wolfe Creek East zone and a strip of claims immediately south of this area that were recently acquired from Westmin Resources.

Geologically, the area is underlain by Nicola Gp. andesites and is located at the southern end of the 150° trending Alabama-Virginia zone of mineralization. This trend is parallel to and approximately 2000' east of the Main fault zone. The Main fault localizes roughly 70% of the ore mined to date in the camp. Therefore parallel mineralized structures represent excellent exploration targets. The P4 area has been partially covered with previous IP surveys that defined large chargeability anomalies beneath extensive till cover. These anomalies were largely untested before 1995.

Work in 1995 extended the IP coverage to the south and tested this area and adjacent previously defined anomalies with 14 backhoe trenches.

The IP anomaly was extended to the south by the 1995 survey, however the trenching uncovered only pyritic Nicola Gp. andesites. Poor copper geochemistry results combined with a lack of Potassic or Sodic alteration and a lack of Lost Horse - type intrusive rocks indicate that the area is distal to an economic body of copper mineralization. No further work is recommended for the area.

#### **1. INTRODUCTION**

This report summarizes an exploration program of IP geophysics and backhoe trenching conducted on the P4 zone in 1995. It outlines the work performed, results and gives recommendations for further work. The report has been written to fulfill the requirements for payment of an Explore B.C. AMEP grant awarded to Similco Mines Ltd. by the B.C. Ministry of Energy, Mines and Petroleum Resources and also to aid future explorationists at Copper Mountain.

#### **1.1 Location and Access**

The mineral deposits of the Copper Mountain Camp are located 15 km south of the town of Princeton, B.C., 30 km north of the Canada-U.S.A. border and 180 km east of Vancouver (Fig. 1.1). The Similkameen River flows northerly through the camp, separating the Copper Mountain side to the east - where the P4 zone is located, from the Ingerbelle side to the west. The Copper Mountain side is accessed by the paved Copper Mountain Road which runs south from Princeton. The property is located on NTS map sheets 92H/8E and 92H/7W.

#### 1.2 Physiography

Copper Mountain is located in a region of gentle to moderate topography with locally rugged relief adjacent to the Similkameen River canyon. Elevations range from a high of 1500 m near the summit of Copper Mountain to a low of 750 m in the Similkameen River.

The climate in the area is typical of the southern interior of British Columbia with hot dry summers and cool winters. A majority of the average annual precipitation of 50 cm falls during the spring and fall. Vegetation consists of grass lands and ponderosa pine in valleys and lower elevations with dense forests of lodgepole pine, Engelmann spruce and some Douglas fir at higher elevations.



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#### 1.3 Property and Claim Status

Similco's Copper Mountain property consists of 127 Crown Granted mineral claims, 155 located mineral claims, and 15 mining leases (derived from 52 original claims) covering an area of 12,409 hectares. Claims are all owned or under option to Similco Mines Ltd. Additionally, approximately 3,000 hectares of surface rights are owned by Similco. Approximately 20% of the claims have some form of Royalty agreement. Claims and land status are shown on Map #1.

#### 1.4 Production and Exploration History

The first mineral claims in the Copper Mountain area were staked in 1892 by R.A.("Volcanic") Brown. During the next thirty years several attempts were made to achieve commercial production. A branch line of the Kettle Valley railway was extended from Princeton up along the Similkameen River and the Sunset Copper Company drove a haulage tunnel from the rail terminus into Copper Mountain to intersect the ore zone 1000' below the main showings. Milling difficulties and a drop in the price of copper forced the operation to close before any copper had been produced (Fahrni, 1950). Exploration during this period likely consisted of extensive prospecting and small physical workings by numerous individuals as evidenced by claim staking and the small pits, trenches and adits that are widespread over the area. It appears that much of the exploration was near to the Similkameen River where outcrop was in relative abundance.

In 1923, the Granby Consolidated Mining, Smelting and Power Company took over the property and commenced production in 1925. The mine operated continuously until 1957, except for the period between 1930 and 1937. A majority of the production came from underground workings on the Contact deposit, where up until 1949 a little over 21 million short tons grading 1.23% copper had been extracted (Fahrni, 1950). During the later years of operation, ore was also mined from a number of small open pits. Total production is estimated at 35 million tons with an average grade of 1.08% copper (Macauley, 1970). Most of the exploration during the "underground era" took place adjacent to the mine, particularly along the northwest-trending main fault. However, a minor amount of work, including some diamond drilling was conducted in a few outlying areas.

Very little exploration or development work was carried out during the years between 1957 and 1965. However, in 1966, exploration was being conducted by Granby, Cumont Mines Limited, and Newmont Mining Corporation of Canada. Granby explored adjacent to the underground workings and tested within an area that would latter become Pit 2 (Figure 2.1). Cumont conducted geological mapping, geophysical and geochemical surveys, trenching and diamond drilling on its ground located peripheral to Granby's claims. Newmont optioned a block of Granby claims on the west side of the Similkameen River and carried out extensive geological, geophysical, trenching and

diamond drill programs which resulted in the discovery and, ultimately, the delineation of the Ingerbelle deposit in 1969. Newmont purchased all of Granby's claims in late 1967, which allowed a unified, large-scale exploration program to be carried out. In addition to the Ingerbelle deposit, Newmont continued drilling where Granby had left off, and defined two large "bulk-tonnage", open-pitable zones of mineralization surrounding the previous workings on Copper Mountain. Mill and concentrator facilities were constructed and production commenced from the Ingerbelle deposit in 1972 at the rate of 15,000 tons/day. Total drilling within the Ingerbelle area amounted to 243,140 feet (74,109 m) in 542 holes. Following start-up at Ingerbelle, exploration was again curtailed.

In 1980 Newmont carried out a fourteen hole diamond drill program on the area immediately to the east of the Ingerbelle deposit, where earlier drilling (during the Ingerbelle exploration) had identified mineralization. In spite of reasonably positive drill results, no further work was performed and in 1980, when the Ingerbelle pit was completed, Newmont dismantled the crusher adjacent to the concentrator and completed construction of a new crusher and conveying system in order to bring ore from Copper Mountain across the Similkameen River to the mill complex. Mining of Pit 2 commenced in early 1980 and was completed in 1985. Production from Pit 3 began in the spring of 1983. In 1986, Newmont carried out an exploration program, which consisted of geochemical and geophysical surveys, to the north and east of Pit 2. A rising gold price and the attractive gold grades led to a detailed mapping and diamond drill program being carried out on the Voigt Zone, a narrow east-trending zone of mineralization located 1.5 km northeast of Pit 2. Similco Mines Ltd. and the entire Copper Mountain Property was sold to Cassiar Mining Corporation (later to become Princeton Mining Corp.) by Newmont in June of 1988.

Princeton initiated a property scale exploration program which soon became focused in the Lost Horse Gulch area (immediately north of Pit 2) and culminated in the discovery and delineation of the Virginia Deposit in 1990, after which exploration was curtailed. Production during this time came from Pit 3 and Pit 1. Mining of Pit 1 was completed at the end of 1992 and was subsequently backfilled with waste from Pit 3. Limited mining from the Virginia Pit was carried out in 1991 and 1993. Due to low copper prices, mining operations were suspended in November, 1993.

Mining resumed in mid 1994 as the price of copper rose dramatically. Currently, Similco is processing ore from the Phase I expansion of the Ingerbelle Pit (12 million tons @ 0.32% Cu).

#### 2. GEOLOGY

#### 2.1 Regional Geological Setting

Copper-gold deposits of the Copper Mountain area are hosted by volcanic and related intrusive rocks of the Late Triassic Nicola Group (Dolmage, 1934; Preto, 1972). The Nicola Group consists primarily of a submarine island-arc assemblage of andesitic volcanic rocks and derived sedimentary rocks which are exposed in a 40 km wide northtrending belt that extends from the Canada-U.S.A. border in the south, to Kamloops Lake in the north (Fig. 2.0). Age correlative and compositionally similar belts of volcanic rocks extend along the length of British Columbia and into the Yukon Territory. The Nicola Group, with a stratigraphic thickness of up to 7.5 km is the main unit within Quesnellia, a northerly trending allocthonous tectonostratigraphic terrane in central British Columbia (Monger, et al., 1992). Quesnellia was likely accreted onto North America in mid-Mesozoic time.

The Nicola Group is divided into three, compositionally distinct, linear belts (referred to as the 'western, central and eastern volcanic belts') by north-trending fault systems; a fourth grouping, referred to as the eastern sedimentary assemblage is also recognized (Monger et.al., 1992). Copper Mountain occurs in the 'eastern volcanic belt'. Nicola Group rocks are intruded by Late Triassic to Early Jurassic alkalic and calc-alkalic plutonic rocks, some of which are demonstrably co-magmatic with their host volcanic rocks. In general, the alkalic intrusions are small and restricted to the eastern and central volcanic belts, whereas the calc-alkalic intrusions are larger plutons and are evenly spread throughout the Nicola Group (Preto, 1979).







Figure 2.0 Regional Geology (Stanley et al., 1996)

#### 2.2 Property Geology

#### 2.2.1 Lithology

There are three main rock types in the P4 area - diorite of the Voight Stock, andesite of the Nicola Gp., and Tertiary felsite dykes (figure 3).

The northern portion of the area is dominated by the Voight Stock - a Lower Jurassic body of equigranular, fine to medium grained diorite with a diameter of roughly two kilometers. The Voight Stock belongs to the Copper Mountain suite of intrusions that have been described as coeval with or slightly later than the Nicola Gp. volcanics. Mineralization is relatively rare within the stock, with the exception of the Voight zone a hematite, magnetite, sulphide vein 1-30 feet wide and >2000 feet long. The Voight zone is located north of the P4 area.

In the south, Upper Triassic to Lower Jurassic Nicola Gp. andesites predominate. They are usually dark green to black, rusty weathering augite phyric lithic lapilli tuffs. Massive andesite flows are also present. Nicola Gp. volcanics are the dominant ore host in the Copper Mountain camp.

All of the units described above are cut by numerous post-mineral Tertiary quartz and feldspar porphyry (felsite) dykes. These dykes usually strike north-south with sub-vertical to vertical dips and have widths of 3-100 feet.





#### 2.2.2 Alteration and Mineralization

Alteration at the Copper Mountain camp consists of three main types: potassic, sodic and propylitic. Potassic (biotite, k-feldspar) and sodic (albite) assemblages are often proximal to economic copper mineralization. Here they usually form structurally controlled zones of pervasive alteration, grading outward into veins with alteration envelopes. Propylitic (epidote, chlorite, calcite and pyrite) alteration is ubiquitous and especially well developed 500-5000' from a copper orebody.

Most of the alteration and mineralization at the Similco mine property is strongly structurally controlled. Mineralization is often localized along major NW trending fault zones (such as the Main fault in Pit 3, Pit 1, and Ingerbelle). The most significant mineralization occurs where these fault zones are intersected by NE trending faults (such as the "Breaks" in Pit 3). Because these sets of faults are sub-vertical, orebodies tend to have high grade pipe-like cores.

At the P4 zone, propylitic alteration dominates. Lithic lapilli tuffs generally contain 1-3% fine grained, disseminated pyrite and are commonly cut by calcite veins with pervasive chlorite and epidote mineralization. No potassic or sodic alteration was recognized.

No significant copper mineralization was encountered at the P4 zone. Traces of chalcopyrite were witnessed in several trenches, with malachite staining also rarely present.

#### 3. WORK PERFORMED

#### 3.1 IP Geophysics

Geophysical work consisted of 32,200' of IP surveying on north-south grid lines spaced 400 feet apart. These lines are an extension (to the south) of the original Wolfe Creek East grid. The survey was of the pole-dipole array type (n=1 to 4). The work was contracted to Lloyd Geophysics, Inc. of Vancouver, B.C. and was supervised by John Cornock.

#### **3.2 Excavator Trenching**

Fourteen trenches were dug with a cumulative length of 1130 feet. The trenches were all 4 feet wide and varied between 3 and 20 feet deep. All of the work was completed with a Cat 225 excavator supplied by Tri-Valley Construction of Princeton. At the end of the program, all of the trenches were backfilled.

#### 4. RESULTS

Figure 3.0 shows the contoured IP data (8 pt. triangular filter). See figure 2.1 for the location of this map. Figure 3.0 is a compilation of all of the recent IP data from the Copper Mountain property and therefore the area surveyed during 1995 occupies only a portion of the map.

A total of 45 rock chip samples were collected from seven trenches that uncovered Nicola Gp. strata. The other seven trenches encountered an impenetrable thickness (>20 feet) of till overburden or uncovered only post-ore dykes that were not sampled. Maps showing the detailed geology and geochemical data for each trench are located in Appendix 1.

Each of the trench rock samples was analyzed by ICP for 30 elements plus Au (Geochemical A.A. analysis). Appendix 2 lists the complete analytical results for each trench sample. Copper values ranged from 651 ppm to 19 ppm, while Au values ranged from 51 ppb to 4 ppb. The trench locations are shown on figure 3.0.



#### 5. CONCLUSIONS AND RECOMMENDATIONS

The strong IP anomaly that trends 150-160 degrees through the P4 area is caused by 1-3% fine to very fine grained pyrite in primarily Nicola Gp. andesitic lithic lapilli tuffs. Only traces of chalcopyrite or malachite were uncovered during the trenching program. The volcanics are propylitically altered (calcite, epidote, chlorite and pyrite) and there is no evidence of potassic or sodic alteration. Overall the rock is relatively competent with only minor fracturing or veining.

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These features, combined with a lack of Lost Horse type intrusive (and porphyritic) rocks suggest that the P4 zone does not contain an economic copper orebody. In fact, it probably represents a portion of a pyritic halo that surrounds the Copper Mountain camp. It is probable that the Alabama-Virginia fault zone extends into this area and controls the location of the pyrite.

All of the above features suggest that the P4 zone is distal to an economic copper orebody (ie: Pit 3, Pit 2, and Virginia). Therefore no further work is recommended on the P4 zone.

#### 6. REFERENCES

- Dolmage, V., 1934. Geology and Ore Deposits of Copper Mountain, British Columbia. Geological Survey of Canada, Mem. 171.
- Preto, V.A.G., 1972. Geology of Copper Mountain. British Columbia Department of Energy, Mines and Petroleum Resources, Bulletin 59, 87 pages.
- Preto, V.A.G., 1979. Geology of the Nicola Group Between Merritt and Princeton. BCMEMPR Bulletin No. 69.
- Stanley, C.R., Holbek, P.M., Huyck, H.L.O., Lang, J.R., Preto, V.A.G., Blower, S.J. and Bottaro, J.C., 1996. Geology of the Copper Mountain Alkalic Copper-Gold Porphyry Deposits, Princeton, B.C., CIM Special Volume 46.

# Appendix 1

# Trench Geology and Geochemistry

LIHOOU 48+005 OVF (PPn)/A. (PPB) 92 PPMG / 15 PPBAN TRAS PY -RUSTY 15 REDD'SH, V. V 50/SU min of 20 19. /21 TR9584-1 -25 A) - 50. GRANDO 15-FELD. O W V 15 RHEMOS IN A MED- GREEN (NKOLA?) B) FIRE TO MED GRANTED WEALL EAGACTIC C-LINGTITIC (7.) TWC FELOSPACE 30 98/18 TR95P4-1 4 V over VOLC. ? S. BLOWER 1995 PU TRÊNCHING 10 SCALE BAR : TRENCH # TR95 F4-1

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Trench Sampling Analytical Results

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P4-2 20-34	2	97	9	66	٦,	22	12	716	3.75	6	5	ND	6	66	،2	2	2	78	1.01	.081	14	80	.81	112	. 15	3	1.77	.06	.17	2	10
14-2 34-40	4	381	7	57	'2 ,	21	21	738	4.49	7	5	ND	2	53	,2	2	2	106	1.57	.117	1	64	1.46	30	.11	4	2.37	.07	.10	2	25
ipu-2 40-50	2	278	5	42	.3	26	21	537	3.57	4	5	ND	2	55	.2	2	Z	66	1.64	.121	1	68	1,53	15	, 10	3	2.26	.06	,06	2	24
iP4-2 50-60	2	347	12	43	.3	21	18	920	3.48	4	5	٨D	2	56	.2	2	2	88	1,85	.118	1	49	1.53	40	.09	4	2.42	.05	.06	2	15
Py-3 110-120	1	116	3	55	.3	12	21	798	4.49	2	5	ND	2	83	.2	2	2	102	2.03	.110	2	33	2.04	19	.11	3	2.28	. 04	.07	2	Î
F4-3 120-130	1	100	3	29	.3	14	25	576	4.06	6	5	ND	2	61	.2	2	2	108	1.28	108	2	45	1.83	25	.11	3	2.01	.08	.12	2	9
P4-3 130-140	1	1)6	3	32	.3	14	17	652	3,86	12	5	ND	2	58	.2	2	2	97	1.52	.113	3	42	1.74	19	.11	3	1.79	.05	.06	2	18
PY-3 140-150	L	110	3	26	.3	12	15	625	3.64	3	5	ND	2	89	,2	2	2	98	3.15	106	2	47	1.45	28	.11	3	1.76	.08	.10	2	19
PK-3 150-160	2	108	3	21	, 3	18	19	440	3.22	8	5	ND	2	46	.2	2	2	98	2.35	.108	1	54	1.32	31	. 10	6	1,82	,06	.14	2	15
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PH-3 170-180	2	87	,	32	د.	17	10	4/6	3.43	8	5	ND	2	43	.2	2	2	115	2.79	.100	3	61	1.32	28	.11	5	2.07	.07	.15	2	12
291-081 6 <sup>4</sup>	2	.82	4	26	.5	15	17	571	3.96	17	2	ND	۷	45	.2	2	2	120	1.02	.110	3	48	1.69	43	,12	2	2,56	.07	.11	2	JZ,
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5P4 5 0-20	2	173	4	27	.3	15	23	422	4.68	15	5	ND	2	46	. 2	3	Z	108	1.34	. 114	2	48	1.38	32	.11	3	2.07	.07	.13	2	18
PH-5 20-40	2	146	6	29	3،	19	25	470	4.51	18	5	ND	2	61	.2	4	Z	115	1.75	.115	3	62	1.63	27	, 13	3	2.11	.09	.20	2	8
5P 4-5 40-60	1	137	3	38	.3	14	35	498	4.11	8	5	ND	2	47	.2	2	2	101	1.22	.121	2	44	1,67	13	.11	3	1.89	_05	.10	2	10
5P4-5 60-80	2	154	5	36	.3	14	22	560	4.12	35	5	ND	2	26	.2	2	2	115	1.03	.105	3	54	1.63	12	. 10	3	2,05	.06	,08	2	6
500-5 80-100	2	130	5	43	τ	15	18	720	6 02	30	5	ND	2	15	2	2	2	144	1 27	125	2	1.7	2 00	21		٦	2 40	<u>۸</u>	n	2	10
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SPH-5 120-140	2	200	3	54		22	15	772	4 41	28	5	NO	2	74	2	2	2	127	1.50	125	1	87	2 04	15	.12	7	2 54	00	20	2	11
SPN-5 140-144	ī	180	3	36		23	16	583	3 87	17	5	ND	2	41	.2	2	2	127	(.52	125	-	84	1 80	50	17	7	2 70	40. 90		2	17
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5PH 5 196-220	4	52	11	<b>9</b> 1	.3	22	12	828	3.13	41	5	ND	2	36	.2	3	2	66	1.49	. 085	11	117	.99	70	.05	5	1.79	.07	. 26	2	8
5P4-5 220-240	2	126	4	39	.3	15	20	562	4.67	9	5	ND	2	50	. 2	2	2	130	1.88	.117	2	54	1,68	26	. 16	7	2.69	.12	.21	2	20
5P4-5 240-260	2	128	3	31	.4	18	20	502	4.26	10	5	ŇD	2	39	.2	2	2	131	1.94	.117	2	61	1.65	14	. 14	8	2.61	.10	.11	2	16
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S.	ANPLE	P	w bbw	ppm	ppm	<b>pp</b> ti	pm	ppm	ppm	x	ppm	ppm	ppri	pbu	<b>P</b> pn	ppm	ppm	ppm	ppm '	x	%	ppm	ppm	*	<b>pp</b> (t	*	<b>P</b> Pn	n <b>%</b>	z	x	<b>bb</b> w	bbp	ROM .
9	5P4-10 5-20	់ខ	17	3	19	.3	19	26	464	3.76	7	5	ND	2	93	.2	3	2	107	1.13	. 125	3	28	1.73	13	. 14	3	2.00	.04	.07	2	21	••
9	5P4-10 20-40	<b>)</b> 3	24	4	26	.3	20	33	<b>S</b> 04	4.90	6	5	ND	2	98	.2	2	2	131	1.19	. 151	3	37	2.06	16	. 12	3	2.49	.05	.09	2	<b>25</b> ·	р
9	5P4-10 40-60	) <sup>'</sup> 2	31	4	25	.3	19	23	429	4.45	4	5	ND	2	81	.2	2	2	103	. 93	. 123	3	34	1.73	13	.11	3	2,03	. 03	.05	2	16	Ę
9	594-10 60-80	) <sup>'</sup> 2	166	7	30	. 3	15	23	393	4.33	5	5	ND	2	106	.2	3	2	105	, 85	. 108	5	45	1.56	19	. 12	3	1.83	.06	.10	2	16	ក្ត
9	594-10 80-10	00 <b>´3</b>	96	7	39	.3	13	19	361	4.47	3	5	ND	2	75	.2	4	2	129	.87	. 128	4	44	1.37	22	. 13	3	1.80	.06	.10	2	17	Ϋ́
. 92	SP4-10 100-1	20'3	76	6	65	.3	8	18	596	4.35	3	5	ND	2	64	.2	3	2	122	- 99	.153	5	19	1.13	22	. 09	3	1.78	.03	.09	s	17	Lab
9	SP4-10 155-1	180 4	107	7	37	.3	8	17	512	5.84	4	5	ND	2	<b>68</b>	<b>.</b> 2 ·	2	2	133	.60	.130	8	23	1.16	32	. 05	3	1.81	.04	.15	2	15	9
9	5P4-10 180-2	200´3	71	8	40	.3	12	19	509	4.43	3	5	ND	2	57	.2	4	2	112	.77	.10 <b>9</b>	3	40	1.40	25	.11	3	1.90	.06	. 12	2	15	ator
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Sample numbers have prefix TR

IMILCO MIN roject: ampla Type: Pu	ES lps	LTD.				G 15 * d 8 * f	O C Aulti Biluto Au Ar Au Ar	HB elennen ad to f i, 8, 1 nalysis ce AA f	M I Int ICP 10 ml 4 and 5- 10 1 inish	C A Analy with F limit gram s ed to	L /sis later ted for tamplo 1 pp	J - ,50 . Th or M e fs b det	A N DO gr his l Na, K dige tecti	A C am s each an sted on.	i <b>Y S</b> ample i is pa id Al. I with	IS is dig rtial Dete aque r	for cilo egia	C E d wit Mn, F n Lia , MIB	CR 1 In 3 m Ie, Ca, Iît foi IK exti	E I F ( of m , P, L r Au racted	Y I ( qua r a, Cr a, Cr {s 3 , gra	C A regia, , Kg, i ppm. nphite	TE		Ana Rep Dat	{yst ort e: 0	No. 95	2011 91481 20,	1995			
LEMENT	Mo	Cu	Pb	Zn	Ag ppm	NÎ	Co	Min Ippin	Fe %	As ppm	U	Au	Th ppm	Sr ppm	Cd	Sb ppm	0 i	V	Ca X	P X	La	Cr 1 ppm	Mg %	8a ppm	Tí %	8 ppm	A( 1 %	Na X	K X	W	Au*. ppb	
R95 P4-3 10-20 R95 P4-3 20-30 R95 P4-3 30-40	2 2 2	149 239 65 t	7 7 10	31 44 71	.; ;; ;;	16 14 16	14 14 11	637 644 717	4.94 5.17 4.50	10 15 7	5 5 5	ND ND ND	2 2 2	80 60 62	.2 .2 .2	2 2 2	2 2 2 2	158 167 160	3.04 2.76 4.92	.113 .107 .119	3 4	53 44 44	1.87 2.19 1.97	67 47 27	.09 .10 .07	3 3 3	2,42 2,43 2,33	. 11 . 07 . 08	.41 .23 .34	2 2 2	24 24 51	
R95 P4-3 40-50	z (j	355 164	4 7	60 47	 .3	12 13	15 15	/12 637	5.69 6.40	10 17	5 5	ND ND	2 2	82 82	.2 ,5	2	2	182 189	3.72	.119	3 6	34 36	2.07	40 48	.09	3	2.54	.05	.52	2	23 31	
1895 P4-1 5-15 1895 P4-1 15-25 1895 P4-1 25-35	1	92 19 98	4 6 4	30 26 25	.3 .3 .3	23 22 19	25 11 20	539 351 581	4.96 5.61 4.44	27 14 18	5 5 5	ND ND NO	2 2 2	73 63 61	.2 .2 .2	2 2 2	3 2 2	147 211 1 <b>33</b>	1.32 1.16 1.30	. 150 , 165 , 149	3 6 3	53 60 46	1.84 1.27 1.24	46 75 61	, 13 , 16 , 11	333	2.53 1.81 2.10	.04 .03 .04	. 16 .21 . 12	2 2 2	15 21 18	
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